

# Three Waters Servicing Report for Ryans Road Development

✦ Prepared for

Carter Group Limited

✦ March 2025



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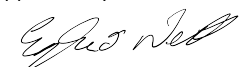
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## 1.0 Introduction

Carter Group Ltd (CG or “the applicant”) is seeking resource consent for the construction of an industrial subdivision at 104 Ryans Road (“the site”). The subdivision will involve the development of:

- ✧ Approximately 126 lots (of varying size).
- ✧ Construction of public roading, footpath and berm areas.
- ✧ Three waters infrastructure to service proposed lots.

The proposed development is to provide land suitable for the establishment of logistics, warehousing, light manufacturing, and other airport-related businesses capable of providing significant regional/ national economic benefit.

This technical report assesses and makes recommendations for the most appropriate options for the servicing of the proposed development for wastewater, water supply and stormwater infrastructure.

## 2.0 Site and Surrounding Environment

The site of proposed works found at 104 Ryans Road is split across three lots, known legally as:

- ✧ Lot 4 DP 22679
- ✧ Part Lot 3 DP 22679
- ✧ Part Lot 1 DP 2837

The site borders the southern boundary of Christchurch International Airport and is primarily bound by Ryans Road to the south and Grays Road to the south-east. The site is 55.55 hectares in area and is presently zoned as Rural Urban Fringe by the Christchurch City District Plan with a single residential dwelling and associated infrastructure (shed structures, tanks) is located on the south-east corner of the property. The site is used for grazing. Figure 1 below shows the site location.

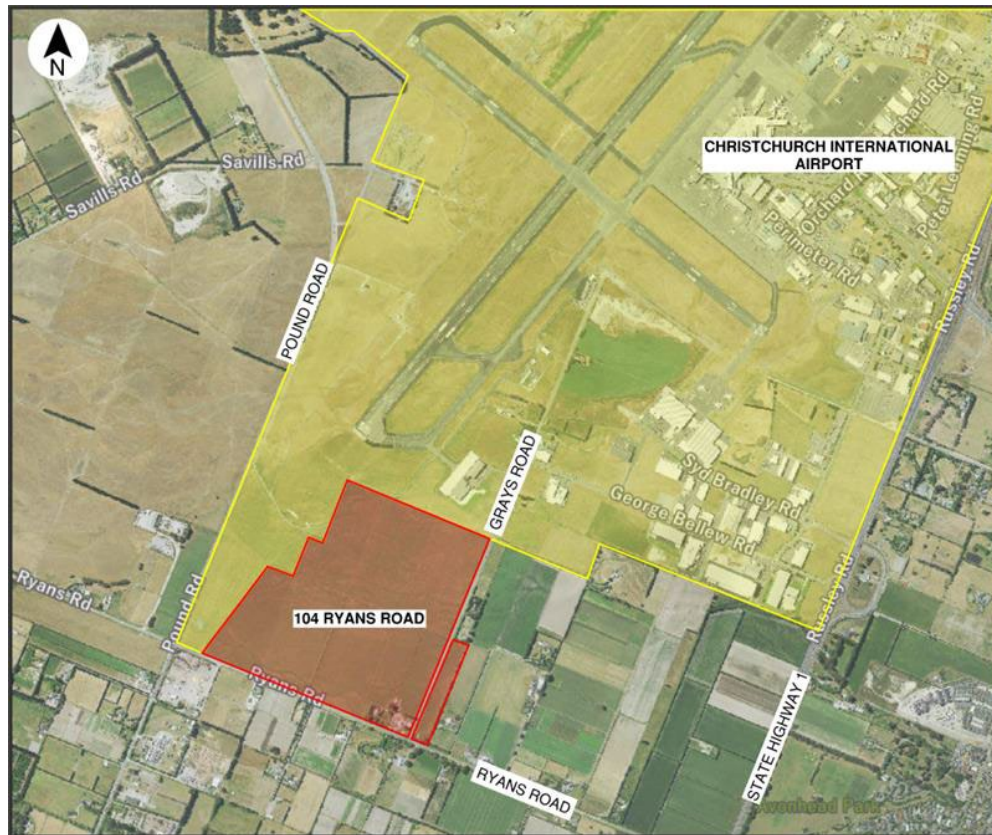


Figure 1: 104 Ryans Road site location (aerial courtesy of 'Canterbury Maps')

## 2.1 Topography and Soil

### 2.1.1 Topography and Geotechnical Investigation

The topography of the site is generally flat, sloping from northwest to southeast at an average gradient of 1:200.

A geotechnical assessment of the application site was conducted by Tetra Tech Coffey (9 December 2024), and is attached to the application, which found the following subsurface profile:

- ✧ 0-300 mm Topsoil,
- ✧ 300 – 4000 mm Sand; and
- ✧ 4000 mm – unknown depth, sandy gravel.

Silty lenses were observed within the sand layer, and it is expected that silt content is variable through this layer across the site. A borehole located immediately next to the northeast corner of the site indicates gravels to extend to at least 15.6 mbgl.

### 2.1.2 Contamination

Environment Canterbury's (ECan) Listed Land Use Register (LLUR) does not find any registered HAIL activities and the site is therefore not considered to be contaminated.

It is noted that Tetra Coffey completed an environmental investigation given the proposed subdivision development further information is provided in the Tetra Coffey DSI report which is attached to the application. The soil sampling at the site indicated that the majority of the site returned results which were considered to be below, at or slightly above background concentrations for the contaminants tested. The only exception to this is the small area surrounding the existing farm buildings. These soils surrounding the existing farm buildings will be remediated prior to or at the beginning of subdivision works and managed via a Remedial Action Plan. Furthermore, a Site Validation Report will be completed once remediation works are undertaken. No proposed soakpits will be located within an area of contamination.

## 3.0 Wastewater Servicing

### 3.1 Wastewater Flows from Development

It is proposed to develop the industrial subdivision to service primarily "dry" industry for the establishment of logistics and warehousing activities which require proximity to the airport. The development will be serviced for wastewater via a low-pressure sewer (LPS) system. This will involve the establishment of private pump stations on individual lots which pump to a common pressure sewer pipe network. This type of system has been used previously for dry industry developments of a similar scale in Christchurch with examples including subdivision developments at Sir James Wattie Drive, the Mānia development on Shands Road and Stage 4 of the Hornby Quadrant development.

The proposed LPS system at 104 Ryans Rd has been conceptually sized to cater for the development of approximately 126 lots. This is the maximum anticipated subdivision yield, however it is anticipated that a number of the smaller lots will likely amalgamate into larger ones, resulting in a lesser number of established businesses in the final development.

Each lot is anticipated to be serviced by a duplex pump station containing two progressive cavity LPS pumps. Conceptual design for pipe sizing has been based on the E-One probability method for simultaneous pump operations, as outlined in the E-One Pressure Sewer System Design Manual<sup>1</sup>. The E-One probability method has been developed by E-One Ltd to determine peak flow rates in

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<sup>1</sup> <https://eone.com/sewer-systems/design-center>

pressure sewer systems. It has been developed specifically for the E-One semi-positive displacement pump operating characteristics. This system has been accepted for use in industrial development in Christchurch.

The E-One probability method has been applied to this development assuming 252 individual pumps will be located within the development i.e. 126 duplex pump units. Each pump is assumed to receive approximately 675 litres of wastewater per day, this is residential equivalent wastewater volume which is consistent with dry industry zoned areas in Christchurch. This is considered a conservative approach as, in reality, there will be a maximum of 126 duplex pump sets operating in a duty-standby arrangement. Hence, there will be half the assumed number of pumps receiving wastewater and operating on a duty basis. The output of the E-One probability method is that up to 13 pumps are likely to be operating simultaneously at any time.

This suggests that the maximum flow expected from the development, assuming 252 pumps in the network, is the flow associated with 13 no. pumps operating simultaneously. The individual pumps operate at a flow of approximately 0.7 L/s, therefore the maximum wastewater flow for the development is calculated to be 9.1 L/s.

Highest groundwater at the site is assessed more than 10m deep, therefore the risk of infiltration of groundwater into the private gravity wastewater network and pump chambers is considered to be negligible.

### 3.2 Connection to CCC Wastewater Network

It is proposed that wastewater from the proposed development will be pumped to the Christchurch City Council (CCC) wastewater network on Russley Rd. There is an existing 225mm diameter gravity sewer on Russley Rd which is part of the greater Southern Relief trunk sewer network. The local network sewer progressively increases to 375mm and 450mm diameter along Yaldhurst Rd and connects to the 900mm diameter Southern Relief trunk sewer in the railway corridor, south of Blenheim Rd, at Cable St.

The DN110 PE100 rising main from the proposed development will connect to the existing sewer manhole located opposite 74 Russley Rd, see wastewater plans in Appendix A. The rising main will be designed and constructed in accordance with the requirements of the CCC Infrastructure Design Standards (IDS) and the CCC Construction Standards Specifications (CSS). Odour management at the connection point will be by way of the installation a McBerns GM300 Ground Mount Odour Filter, or similar approved device. This filter utilises mixed media with granulated activated carbon to filter odorous compounds from the vented air. The receiving connection manhole (WWMH ID24959) and the next three manholes downstream of this manhole will also be treated with a corrosion resistant coating as per Section 6.13.6 of the IDS.

### 3.3 Available Capacity in CCC Network

CCC, using WSP as their modelling consultant, has undertaken wastewater modelling of the impact of the proposed Ryans Rd development within their wastewater network. The modelling was undertaken using their “Growth Intensification Model” which incorporates additional greenfield and infill development anticipated in the District Plan. The modelling report for wastewater is included in Appendix B of this report.

The specific scenarios directly applicable to the proposed wastewater connection and design for Ryans Rd are Scenarios 3a and 3b, which are detailed in the WSP report in Appendix B. These scenarios involved the discharge of 25 L/s maximum flow at manhole locations WWMH ID24959 and WWMH ID1807, located on Russley Rd and Yaldhurst Rd respectively. The modelling concluded that existing capacity exists at WWMF ID 1807 on Yaldhurst Rd for the connection of an additional 25 L/s. However, the outputs indicated that the existing 225mm sewer on Russley Rd and Yaldhurst Rd did not have the capacity to convey the 25 L/s without surcharging.

The maximum flow used in the CCC modelling simulations (MF = 25 L/s) was derived from an IDS calculation of the proposed development. This calculation assumed it was to be serviced by a gravity wastewater system, with the incorporation of appropriate inflow and infiltration allowance factors. As noted above, it is proposed to service the development via an LPS system which has a significantly reduced maximum flow potential (MF = 9.1 L/s) due to the buffering provided by the individual pumps and the negligible infiltration risk.

The existing 225mm sewer along Russley Rd to Yaldhurst Rd has an estimated full pipe flow capacity of approximately 20 L/s and currently receives very little flow. It receives wastewater from approximately 38 lots along its length, with a predicted current Maximum Flow at Yaldhurst Rd of 1.3 L/s. The 225mm sewer along Yaldhurst Rd also has a capacity of approximately 20 L/s from Russley Rd to WWMH ID1807. It collects wastewater from a further 51 lots along its length and as well as the flow from the Z-Energy Fuel Station. This is estimated to be an additional maximum flow of approximately 1.3 L/s from the lots along Yaldhurst Rd and 1.5 L/s from the fuel station. This equates to a total estimated existing Maximum Flow of 4.1 L/s along the 225 mm gravity sewer, upstream of WWMH ID1807. This is consistent with the outputs of the modelling report (Figure 3-5 of modelling report), which indicates that the modelled peak flow upstream of WWMH ID1807 was 4.05 L/s.

### 3.4 Summary

In summary, the estimated wastewater maximum flow from the proposed 104 Ryans Rd development is 9.1 L/s. The WSP modelling report indicates that

there is sufficient capacity for at least 25 L/s in the wastewater network downstream of WWMH ID1807 on Yaldhurst Rd.

The existing 225 mm diameter sewer, from the proposed connection point at WWMH ID24959 on Russley Rd to WWMH ID1807 on Yaldhurst Rd has a full pipe flow capacity of approximately 20 L/s. The estimated current maximum flow upstream of WWMH ID1807 is 4.1 L/s.

In conclusion, there is ample capacity in wastewater network, downstream of the proposed connection point, to receive the estimated maximum flow of 9.1 L/s from the proposed 104 Ryans Rd development.

## 4.0 Water Supply Servicing

### 4.1 Water Supply Demand from Development

Water supply demand for the proposed development has been calculated based on a proposed maximum development scenario of 126 no. light industrial lots. A peak design flow of 58 L/s is estimated based on a per lot design usage of 0.46 L/s/connection, as per Chart 2 of IDS Part 7. The IDS requires that this flow must be provided with a minimum of 25m of available pressure at the boundary of a lot.

The New Zealand Fire Service Firefighting Water Supplies Code of Practice (SNZ PAS 4509:2008) outlines the requirements for firefighting supplies and fire classification of developments in New Zealand. It is anticipated that a fire classification of FW2 or FW3 will be required for the 104 Ryans Rd development.

A fire classification of FW2 requires each site to be fitted with compliant sprinkler protection for their building with supplementary firefighting water storage provided at each site if required. If sprinklers are in place, a FW2 classification requires a minimum fire flow of 25 L/s to be available from a combination of up to two hydrants within 270m of the building, with at least 12.5 L/s of this being available within 135m of the building. There must be a minimum residual pressure of 10m at the hydrant.

A FW3 classification requires that 50 L/s of fire flow is available from up to three hydrants with 25 L/s of this being available within 135 m of the building and the additional 25 L/s being available within 270m of the building. There must be a minimum residual pressure of 10m at the hydrants. An FW3 classification also requires that the largest firecell within a building has a floor area of no more than 599m<sup>2</sup>.

The above fire flows also need to be considered in addition to operational demand within the development. The firefighting code stipulated that firefighting supplies for the developments must be considered alongside 60% of peak operational demand. In this case, a FW2 compliant fireflow would require a



total flow to the development of 60 L/s and a FW3 compliant fireflow would require a total flow to the development of 85 L/s.

#### **4.2 Connection to CCC Water Supply Network**

It is proposed to connect to the CCC water supply network at the existing 375mm diameter watermain outside no.50 Russley Rd. This main is located in the North West water supply zone and is well serviced by the nearby Avonhead Rd and Crosbie Rd water supply pump stations. From this connection, a DN355 PE100 water main will be extended north along Russley Rd to Ryans Rd and along Ryans Rd to service the development.

Water supply modelling of the proposed development was undertaken by WSP, on behalf of CCC, and this is discussed in further detail below in Section 4.3. The modelling indicates that, at times, the site will require a booster station in order to meet the minimum operational pressures of 25m at the boundary of some lots. It is intended that the developer will construct a booster station on Ryans Rd at the entry to the development. This will be in an “offline” configuration, allowing the development to be serviced directly by the North West water supply zone pressure during low demand periods when zone pressures are higher. The North West water supply zone pressure can vary by 10m or more across the day as demands in the zone increase and decrease. The pumps will be programmed to operate as required based on pressure at the booster station and flow through the flow meter. However, it is anticipated that the pumps will generally be in operation from approximately 7am through to 10pm each day. The proposed pumps are an array of 3 no. Lowara 92SVX3G220 vertical multistage pumps with integrated motors and Hydrovar VSD controllers. The technical data sheets for the proposed pumps are included in Appendix C. The proposed pumps are capable of boosting flows in excess of 100 L/s at a target supply pressure of 45m.

The water supply infrastructure plans and proposed pump station layout plan are provided in Appendix C. All water supply infrastructure will be designed and constructed in accordance with the requirements of the CCC IDS and CSS.

#### **4.3 Available Capacity in CCC Water Supply Network**

As indicated above the proposed development has been modelled by WSP Ltd, on behalf of CCC. The WSP modelling report for water supply is included in Appendix D.

The modelling indicated that, at the more elevated parts of the proposed development, the required peak demand flows cannot be supplied at the minimum operational pressures of 25m at the boundary, as stipulated by the IDS. The modelled operational pressure varies between 23 and 26m at the site. A booster station is therefore required in order to meet the requirements of the development. This has been included in the proposed subdivision design and is detailed above.

The modelling indicates that the development can be serviced to FW3 standard fire classification from the existing flows and pressures in the North West water supply zone. While not strictly necessary, the water supply booster station has been sized to boost fire flows as part of its design.

#### 4.4 Summary

In summary, the proposed development can be serviced for water supply via a connection to the North West water supply zone. A booster station on Ryans Rd at the entrance to the development will be required in order to meet minimum operational pressures across the whole development which the applicant is proposing to build and install.

### 5.0 Stormwater Management

#### 5.1 Proposed System Overview

The operational stormwater management plan proposes to provide treatment, attenuation and disposal to ground of all site run-off. The proposed stormwater system has been developed to isolate clean and contaminated run-off to efficiently manage, treat and dispose run-off to ground. The methods proposed have been chosen to reduce the size of attenuation/ infiltration basins required for this development given proximity to the airport and corresponding risk of bird strike.

The system will operate as follows:

- ✧ All run-off from roofed areas on each lot will be collected and be disposed to ground with no treatment by onsite soak pit(s) sized to accommodate the critical design event (identified to be the 3hr 2% annual exceedance probability (AEP) event).
- ✧ All other stormwater generated on the individual lots from hardstand areas will be directed to an onsite proprietary treatment device for treatment of the “first flush” flow prior to disposal too ground via a soak pit(s) sized to accommodate the critical design event. The first flush flow is the flow generated by up to a 5mm/hr rainfall intensity on the catchment area.
- ✧ Run-off generated from road, footpath and berm areas will be collected in sumps and conveyed via a reticulated network for treatment in a first flush infiltration basin/ soak pit system sized to accommodate 2% AEP flows.

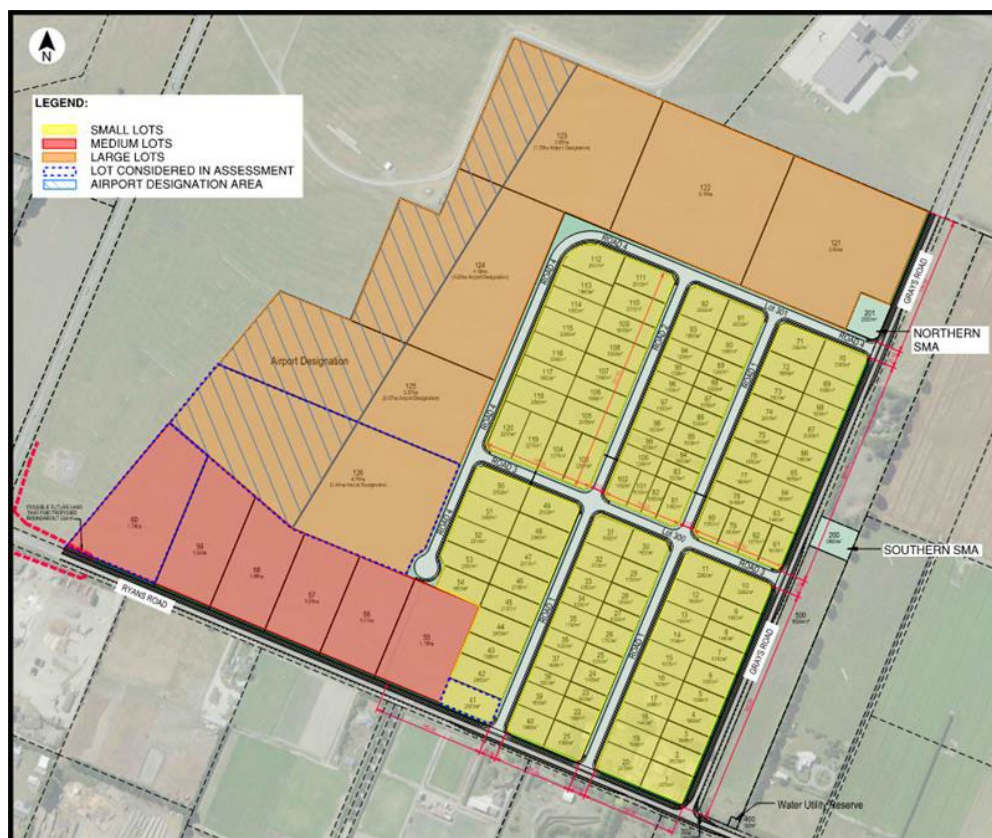
The basis of this design approach has been developed to remove potentially significant contaminants (e.g. heavy metals and hydrocarbons) expected to be within the operational-phase stormwater runoff from trafficable areas. The basis



of design aligns with the CCC Wetlands, Waterways and Drainage Guide (WWDG) and the New Zealand Building Code Clause E1.

## 5.2 Individual Lot Stormwater

Noting the site layout provided in Figure 2, the proposed development is formed of different sized lots. To assess operational stormwater treatment and disposal, lots were grouped into three categories (small, medium and large) with sizing undertaken for the largest lot size in each of these categories, refer Figure 2 below. The purpose of the sizing per category is to indicate that sizing of appropriate soakage systems can be achieved for lots in each of the lot categories. Individual soakpit sizing and design for each lot will be undertaken at the time of building consent.



**Figure 2: Lot designation for purpose of operational stormwater assessment (background layout plan courtesy of 'Capture Land Development Consultants')**

As illustrated in Figure 2, the following maximum lot sizes were found and have been used to size the required operational stormwater infrastructure.

Small Lot: 2,600 m<sup>2</sup>

Medium Lot: 17,400 m<sup>2</sup>

Large Lot: 46,700 m<sup>2</sup>

This method was undertaken as it ensures required treatment and/or disposal sizing is sufficient to manage run-off from all proposed lots within the development. It is noted that four of the large lots are affected by the Airport Designation (refer Figure 2), within this zone there are restrictions on vertical development. Therefore, the largest lot site, used for calculation “large” category below, has assumed slightly different development configurations for the ratio of building area to hardstand and greenspace areas.

#### 5.2.1 Roof Water Disposal

The required infiltration area for roof water disposal to ground has been sized for the three typical lot sizes outlined in Section 5.2 assuming the following parameters and assumptions.

- ✧ An in-situ infiltration rate of 600mm/hr (refer Tetra Coffey Geotechnical Investigation). It is noted from the geotechnical report that there was a range of infiltration rates recorded at the site, up to 6000 mm/hr in one test and 125mm/hr in another. It is clear from the test pits results that gravel depth varies across the site and some of the slower infiltration tests were potentially not conducted sufficiently deep into the gravel layers. An infiltration rate of 600 mm/hr is considered a conservative design infiltration rate for the site. However, each soakpit location will require individual testing to confirm final sizing at Building Consent stage. If higher design rates are encountered, then the appropriate soakage areas may be smaller than indicated below.
- ✧ Soakpits will be constructed to a minimum of 1 m depth into free draining gravels.
- ✧ A void ratio of 0.38 which represents a clean rock filled soak-pit.
- ✧ No treatment of run-off prior to disposal as roof water is considered clean.
- ✧ Roof area assumed to have 50% coverage of lot sizes for small and medium lot categories. For the large lot category, a roof area coverage of 41% has been assumed.
- ✧ A weighted site run-off coefficient assuming 40% hardstand ( $C = 0.85$ ), 10% green space ( $C = 0.25$ ) area (excluding roof area contributions).
- ✧ The roof water soak pit is sized for a 2% AEP rainfall event following CCC design standards.

- ∴ Rainfall data for this event was taken from HIRDS Version 4, for the RCP8.5 scenario, for 2081-2100 for a 180 min duration with an interpolated average rainfall intensity of 22.8 mm/hr.

Using the above parameters, Table 1 identifies the minimum total infiltration area per lot and soak pit operational depth required for the lot sizes identified:

Table 1: Roof Water. Soak Pit Sizing		
Lot Category	Base Area (m <sup>2</sup> )	Soak Pit Operational Depth (m)
Small	30	3
Medium	204	3
Large	462	3

It is important to note that this sizing is the total minimum required base area for assumed operational depth. For the medium and large lot categories, it is expected numerous soak pits will be developed and positioned strategically throughout each developed lot. Stormwater calculations are detailed in Appendix F.

#### 5.2.2 Individual Lot Hardstand Treatment and Disposal

It is proposed that all run-off from non-roofed areas within individual lots will be treated and disposed on each particular site. The use of proprietary treatment has been considered for this development to maximise available hardstand and undertake all stormwater management/ disposal below ground.

Characteristics of the proposed stormwater system are outlined by the following.

- ∴ Primary flows to be captured by kerbs, channels and sumps and conveyed to a proprietary treatment device.
- ∴ Treatment of the first flush flow is to be undertaken within the proprietary device (i.e., a Stormwater360 StormFilter™ or equivalent). Flows in excess of the first flush flow will by-pass the treatment device via an internal bypass in the treatment device and, along with the treated stormwater flow, discharge will be disposed to ground via an on-site soak pit(s).
- ∴ Secondary flows, in excess of the stormwater pipe capacity will be directed via kerbs, channels and overland flow towards a scruffy dome entry to the soakpit and disposed to ground via on-site soakage.

Considering the typical lot areas identified in Section 5.2, required infrastructure for onsite treatment and disposal has been designed assuming the following parameters.

- ✧ First flush flow is derived from a rainfall intensity of 5mm/hr.
- ✧ A weighted site run-off coefficient assuming 40% hardstand ( $C = 0.85$ ), 10% green space ( $C = 0.25$ ) area (excluding roof area contributions) for small and medium category lots. For large lots, a weighted site run-off coefficient assuming 53% hardstand ( $C = 0.85$ ), and 5% green space ( $C = 0.25$ ) area (excluding roof area contributions) has been used.
- ✧ Primary conveyance system (i.e. pipe network) sized to accommodate flows corresponding to a 60 min 10% AEP RCP8.5 rainfall event.
- ✧ Secondary flow network (i.e. overland flow paths) and soak pit for disposal to ground sized to accommodate the critical duration 2% AEP rainfall event.
- ✧ Stormwater360 StormFilter™ proprietary treatment device has been selected for the purpose of this investigation (Cartridge height: 69cm, Media: Perlite). A number of other media filtration devices on the market also provide a comparable level of treatment.
- ✧ A soakage rate of 600mm/hr (refer Tetra Coffey Geotechnical Report)
- ✧ Soakpits will be constructed to a minimum of 1 m depth into free draining gravels at a depth of approximately 5 to 6m.

Using the above parameters, Table 3 shows minimum proprietary treatment and soakage dimensions required per lot to manage first flush treatment and run-off up to the 2% AEP rainfall event.

Table 2: Proprietary treatment and soak pit sizing for lots				
	First Flush Run-off and WQ Treatment Flows		Minimum Soak Pit Area Per Lot (2% AEP RCP8.5)	
Lot Category	FF flow (L/s)	StormFilter™ Max Treatment Flow (L/s)	Infiltration Area (m <sup>2</sup> )	Soak Pit Operational Depth (m)
Small	1.30	1.42	23	3
Medium	8.82	9.94	152	3
Large	30.93	31.24	580	3

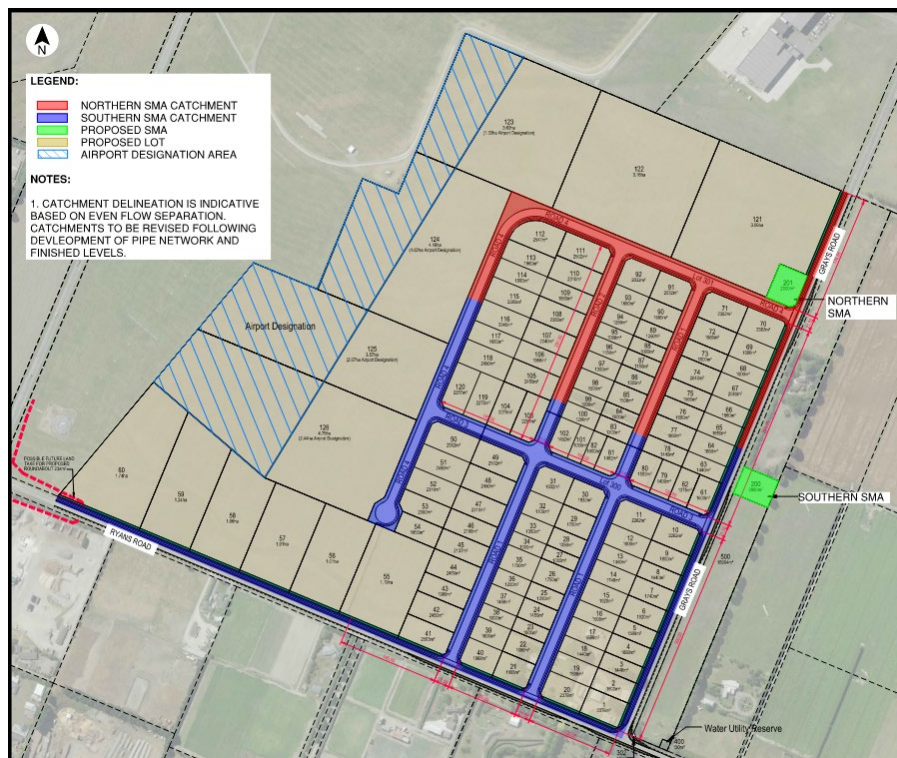
Assuming a Stormwater360 StormFilter™ device, the number of filtration cartridges needed to service the water quality flow (WQ) for each lot size is as follows.

- ✧ Small lot: 1 cartridge to provide treatment for WQ of 1.30 L/s.
- ✧ Medium lot: 7 cartridges to provide treatment for WQ flow of 8.82 L/s.
- ✧ Large lot: 22 cartridges to provide treatment for WQ flow of 30.93 L/s.

For medium and larger category lot sizes, it is assumed that the required number of filtration cartridges may be split across multiple manhole chambers rather than utilising a single large chamber to house a large number of filtration cartridges. Furthermore, it is expected numerous appropriately sized soak pits totalling the requirements of Table 2 will be developed and positioned strategically throughout each developed lot.

### 5.3 Road Reserve Stormwater

The proposed stormwater servicing plan is attached in Appendix E of this Report. Stormwater is to be collected from the road reserve via a network of kerb and channel, sumps and pipework which discharge to two stormwater management areas (SMA's). Figure 3 below shows the proposed catchment areas for each SMA. The two SMA sites are proposed to treat first flush run-off, attenuate and dispose run-off for the catchment areas during the critical design event. Each SMA will include an infiltration basin and overflow soak pit. Indicative locations of the two stormwater management areas are shown in Figure 3 below.



**Figure 3: Proposed catchment delineation (background layout and catchment delineation courtesy of 'Capture Land Development Consultants')**



Assuming the catchments in Figure 3, sizing of proposed infiltration basins and overflow soak pits have been governed by the following parameters.

- ✧ Total contributing catchment area  
Northern SMA Catchment: 28,000 m<sup>2</sup> (red hatch)  
Southern SMA Catchment: 45,500 m<sup>2</sup> (blue hatch)
- ✧ First flush rainfall depth of 25 mm
- ✧ First flush basin infiltration rate of 75mm/hr CCC WWDG.
- ✧ The overflow soak pit and associated detention volume is sized for a 2% AEP rainfall event following CCC design standards.
- ✧ Overall basin volumes are sized for minimum storage volume determined from catchment run-off corresponding to 10% AEP, 18-hour storm.
- ✧ A soak pit soakage rate of 600mm/hr (refer Tetra Tech Coffey Geotechnical Assessment Report)
- ✧ A void ratio of 0.38 which represents a clean rock filled soak-pit.

Refer to Table 4 for indicative infiltration basin and soak pit sizing for both Northern and Southern SMA areas.

Table 3: Infiltration basin and soak pit sizing for critical storm						
Infiltration Basin					Overflow Soak Pit	
SMA	Top Length (m)	Top Width (m)	Top Area (m <sup>2</sup> )	Maximum Water Surface Area (m <sup>2</sup> )	Infiltration Area (m <sup>2</sup> )	Soak pit Operational Depth (m)
Northern	37	37	1369	1200	125	3
Southern	44	43	1892	1690	190	3

Proposed infiltration basins for both northern and southern SMA areas have been sized in accordance with the requirements of the WWDG. Stormwater calculations are detailed in Appendix F. They will mitigate potential water surface area by balancing attenuation storage between the basin and overflow soak pit during the critical 2 % AEP event whilst ensuring that the minimum basin volume provided is at least the equivalent runoff volume from the 10% AEP 18-hour event assuming climate change scenario RCP8.5. Noting the site is located adjacent to Christchurch International Airport, the CCC District Plan Rule 6.7.4.3 P3 for the creation of new stormwater basins in the Bird strike Management Area specifies that;

*"The combined area of all stormwater basins and/or water bodies, that are wholly or partly within 0.5km of the proposed water body or stormwater basin's edge, shall not exceed 1,000m<sup>2</sup>."*

As shown in Table 3, both basins would exceed the maximum 1000 m<sup>2</sup> and are currently within 0.5km of each other. Therefore, resource consent is required for construction and operation of both basins as currently sized.

#### 5.4 Summary

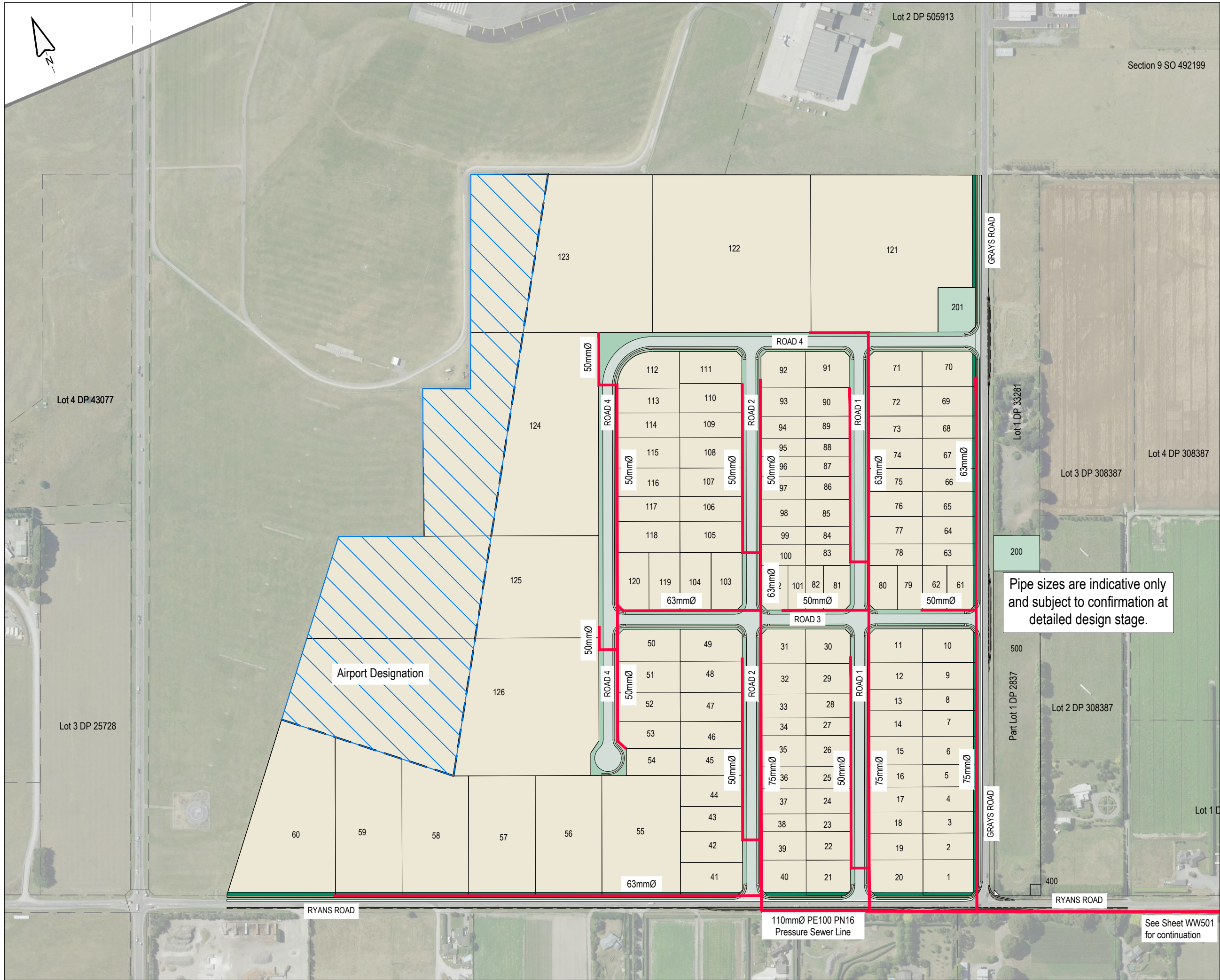
It is proposed that stormwater runoff within each proposed lot will be managed/ treated and disposed independently on each lot. Run off from roofed areas will be collected by gutters/ downpipes and disposed to ground by onsite soak pit(s). Stormwater generated from hardstand and pervious areas within lots will be treated by a proprietary treatment device prior to disposal to ground via onsite soak pit(s) for the critical design event. The stormwater management for the site has been designed so that the post-development flows for the site are equivalent to or lower than the pre-development flows up to the 50 -year ARI flood event, including climate change considerations of Scenario RCP 8.5 for 2081-2100.

Stormwater run-off within the road reserve area is to be collected by kerb and channel via sumps and conveyed via a reticulated network for treatment/ disposal in a first flush infiltration basin/soak pit system. The development has been divided into two stormwater catchment areas to manage road reserve runoff. Two SMA areas containing a first flush infiltration basin/ soak pit systems have been proposed, one servicing the northern catchment and one servicing the southern catchment area. All stormwater infrastructure shall be designed and constructed in accordance with the CCC IDS and CSS.

Sizing investigations revealed the surface water area of both infiltration basins would exceed the maximum 1000 m<sup>2</sup> combined water surface area requirements of the Christchurch District Plan. As such, consent is sought for construction and operation of both basins as currently sized and located. A global stormwater discharge consent is also sought from Environment Canterbury as part of this application.







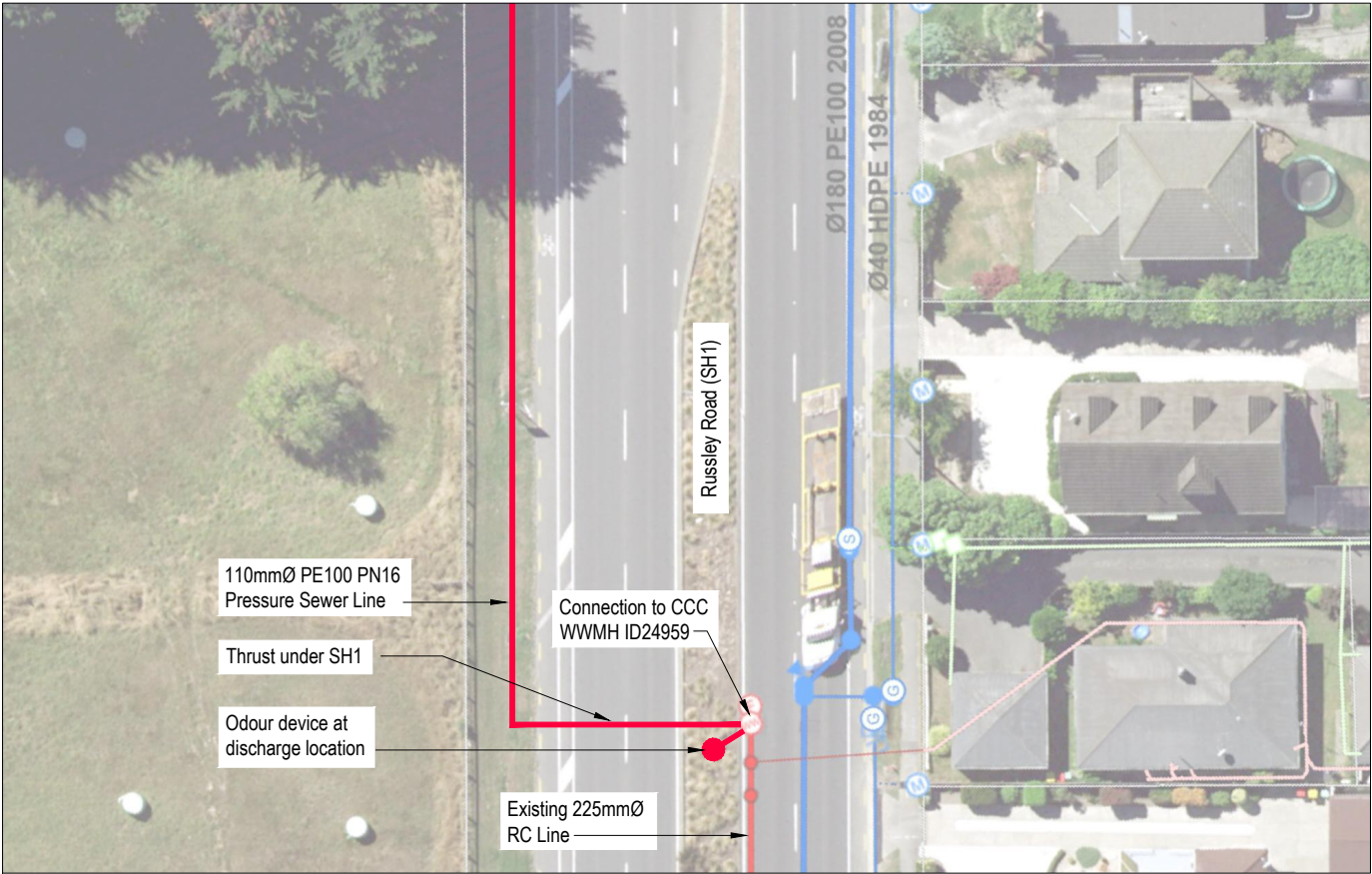
A

Pipe sizes are indicative only  
and subject to confirmation at  
detailed design stage.





Scale 1:4000 (A3)



Scale 1:500 (A3)

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- NOTES: LOW PRESSURE SEWER
1. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH CCC IDS AND CSS PARTS 1-7.
  2. MINIMUM CLEARANCE TO OTHER SERVICES TO BE AS PER IDS PART 9: UTILITIES TABLE 1.
  3. MINIMUM COVER FOR MAINS WITHIN CARRIAGEWAY TO BE 750mm, AND TO COMPLY WITH "CODE OF PRACTICE FOR WORKING ON THE ROAD".
  4. WASTEWATER TEES, VALVES, FLUSHING POINTS, BOUNDARY KITS etc. TO BE INSTALLED IN ACCORDANCE WITH CCC IDS AND CSS REQUIREMENTS. NOT SHOWN ON PLANS.
  5. PIPE SIZING TO BE DETERMINED AT DETAILED ENGINEERING STAGE.
  6. LOCATION OF EXISTING SERVICES TO BE CONFIRMED BY RELEVANT SERVICE PROVIDERS ON SITE, PRIOR TO UNDERTAKING ANY EXCAVATIONS.

REV	DATE	REVISION DETAILS	ISSUED
A	25/02/25	FOR APPROVAL	TL

CLIENT

CARTER GROUP LIMITED

PROJECT

104 RYANS ROAD, HAREWOOD

DRAWING TITLE

PROPOSED WASTEWATER  
SERVICING - LOW PRESSURE  
SEWER (SHEET 2 OF 2)

STATUS	SCALE	SIZE
FOR APPROVAL	AS SHOWN	A3

PROJECT	DRAWING NO	REVISION
1252	RC-WW501	A

## **Appendix B: Wastewater Modelling Report**





## Memorandum

To	Michele McDonald, David Ripley
Copy	Sue Harrison (WSP)
From	Kelsey van der Schyff, Charlotte Mills
Office	Christchurch
Date	23 October 2024
File/Ref	3-CHDM1.05 / 00008
Subject	Plan Change Query – 104 Ryans Road

## 1 Introduction

Christchurch City Council (Council) engaged WSP to model the effect of a proposed development at 104 Ryans Road on the wastewater network. Council had the following requirements for this investigation:

- The development at 104 Ryans Road is to undergo a plan change to Industrial Park zoning. The development could be serviced as a local pressure sewer system (LPSS). Council have suggested three options for the development flows (applied as a constant discharge):
  - 10 L/s
  - 20 L/s
  - 25 L/s
- There are four discharge location options:
  - WwAccess1741
  - WwAccess46143
  - WwAccess24959
  - WwAccess46704
- A new growth model with additional intensification and greenfield development from the Greater Christchurch Spatial Plan (GCSP) is to be developed when assessing this query.
- The new growth scenario is to include provision for 523 residential households at 42 Roberts Road.

## 2 Modelling

### 2.1 Assumptions, Uncertainties, and Limitations

#### General

- This assessment was performed using InfoWorks ICM v2024.5.1, using the existing 2020 wastewater model<sup>1</sup>. Only the existing model (2020 Model – Version 900-912) was used. It is assumed that this model is suitable for this assessment.

More details with regards to this model can be found in the *Christchurch City Wastewater Model: Model Update and Calibration Report* (WSP, 2020)

The model is predominantly a trunk main model. Hence, pipes smaller than DN 225 are generally not included in the model, unless this would cause connectivity issues. Additionally, subcatchments in this model can be quite large and are not split up by each manhole. If required during development queries, pipes smaller than DN 225 can be added to the model and large subcatchments can be split up to better reflect the flow distributions in the area.

- Pump stations are modelled using a “screw pump”. The modelled pump operates continuously with the discharge rate matching the incoming flow up to the maximum possible pump rate, as opposed to start-stop operation. This method reduces model run times but may lead to under predictions of peak flows downstream.
- The wastewater network model has both a Base Model and a Growth Model. The base model represents the current network and flow inputs. The Growth Model has committed network and growth changes included in addition to the Base Model.

More information on the creation of the Growth Model can be found in *Christchurch City Wastewater Model - Updated Growth Model Report* (WSP, 2020). In summary, the Growth Model differs from the Base Model through the inclusion of the following:

- City wide population uplift using Stats NZ 2013 Meshblocks with Council calculated 2041 populations, adjusted to a 2068 population.
- Identified population growth areas from 2016 with either lot density or number of lots.
- Large industrial / commercial areas:
  - Christchurch Airport
  - Dakota Park, Memorial Avenue Investments Ltd (MAIL) and North West Review Area 3 (NWRA3)
  - Ravensdown
  - East Frame (mixed use)
  - Riccarton Park (mixed use)
- Additional industrial / commercial areas modelling using the *Christchurch City Council Infrastructure Design Standard, Part 6* (CCC, April 2022).

#### Scenario Specific

- Prior to this assessment, we completed an update of model pump rates based on the latest information provided by Council, which was sent in an email from David Ripley on 9 October 2024.

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<sup>1</sup> WSP model reference: dcapa500app57:40000/CCC 2019 InfoNet

- The development scenarios were assessed using the new 2024 design storm generated from the Long Time Series (LTS) analysis. See the report *Christchurch City Council 2024 Design Storm Review* (WCS, August 2024) for more information.
- The impact of the development was assessed using the 2024 design event. However, a variety of storm events would be necessary to fully understand the impact of WWF on the network. Variables to consider include the annual exceedance probability (AEP), intensity, duration, and timing of the event with respect to flow patterns in the network.
- For this query, the discharge options for the development either go to the Riccarton Interceptor or the Southern Relief:
  - The nearest flow monitor for discharge options to the Southern Relief is Annex, a long-term flow monitor installed in manhole WwAccess6455. A good level of calibration was achieved against data between February 2018 and June 2019, although the model in this area can over-predict slow response for large summer rainfall events. See the 2020 calibration report *Christchurch City Wastewater Model: Model Update and Calibration Report* (WSP, 2020).
  - The nearest flow monitor for discharge options to the Riccarton Interceptor is WAIMAIRIUNI, a short-term flow monitor installed in the manhole WwAccess4865 for the 2023 Ilam-Fendalton calibration. A good level of calibration was achieved against data between August 2022 and December 2022, although the model overpredicted the peak depth during smaller storm events that had minimal observed depth responses. See the Ilam-Fendalton calibration report *Ilam-Fendalton WW Model Calibration Report v1.0* (WSP, 15 May 2024).
- The development scenarios were created using a new Growth Intensification scenario. The growth provisions in this scenario for the study area shown in Figure 2-1 are summarised in Table 2-1—the growth details for every subcatchment in the study area are in the Appendix. The Growth Intensification scenario is made up of:
  - Trade growth subcatchments from the current Growth model.
  - Growth from the Christchurch Women's Prison and Christchurch Men's Prison subcatchments as trade flow rather than population. This was applied as a trade flow of 5.61 L/s for the Christchurch Women's Prison, and 15.26 L/s for the Christchurch Men's Prison.
  - Provision made for 523 residential households at 42 Roberts Road.
  - Residential populations from the Compact GCSP scenario. This information was provided from Council as a shapefile which specifies the population and the population per hectare in case subcatchment areas have changed.
  - Greenfield growth subcatchments, provided by Council as a shapefile with specified populations. Runoff parameters were assumed from the IDS—see the *Christchurch City Council Infrastructure Design Standard, Part 6* (CCC, April 2022).

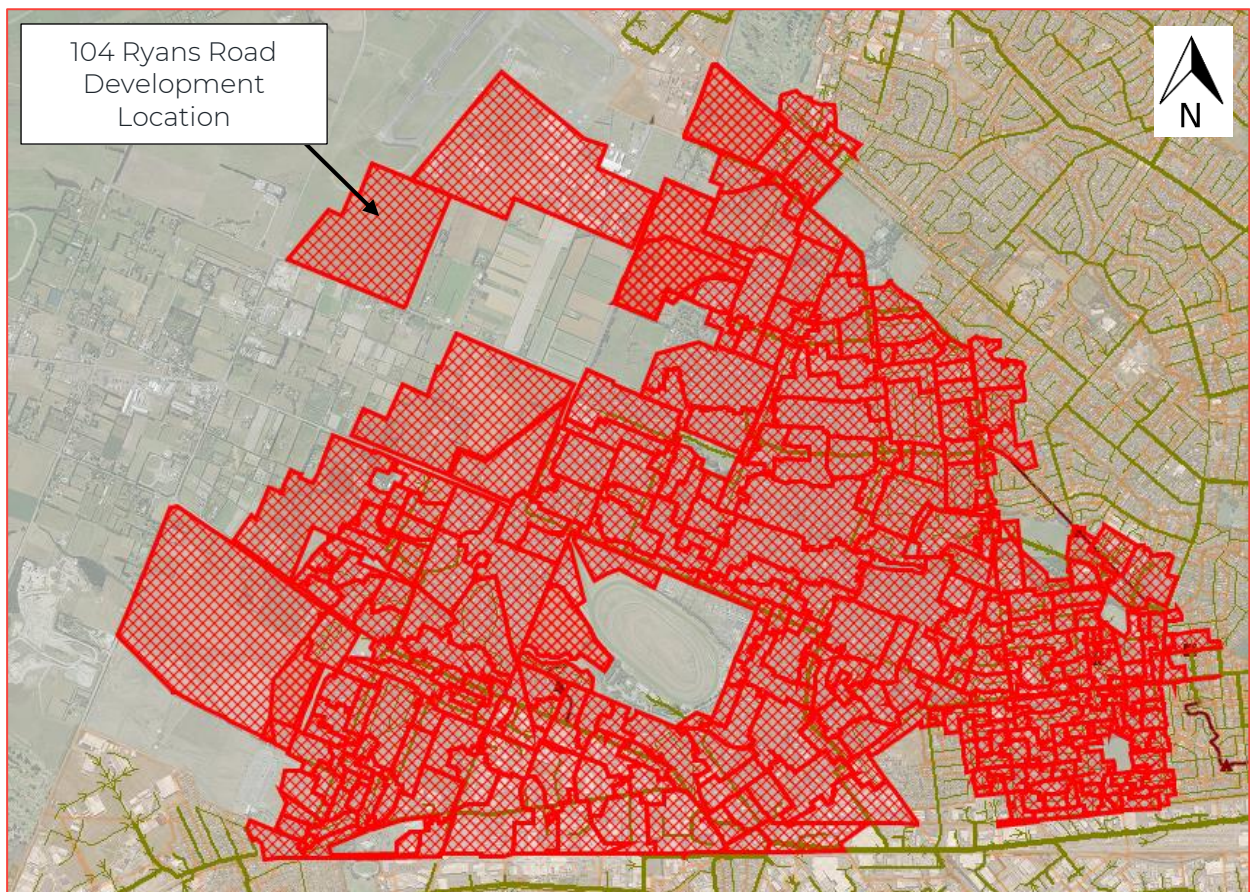


Figure 2-1: General catchment study area indicated in red.

Table 2-1: Summarised growth provisions for the study area.

Model	Total Population in Study Area	Total Trade Flow in Study Area (L/s)	Total ASF in Study Area (L/s)	Total MF in Study Area (L/s)
Base Model	39626	34	166	717
Growth Intensification Model	53039	58	215	914

## 2.2 Methodology

The development location and potential discharge options are shown in Figure 2-2. Discharge options 1 and 2 are conveyed through the Riccarton Interceptor, and discharge options 3 and 4 are conveyed through the Southern Relief.



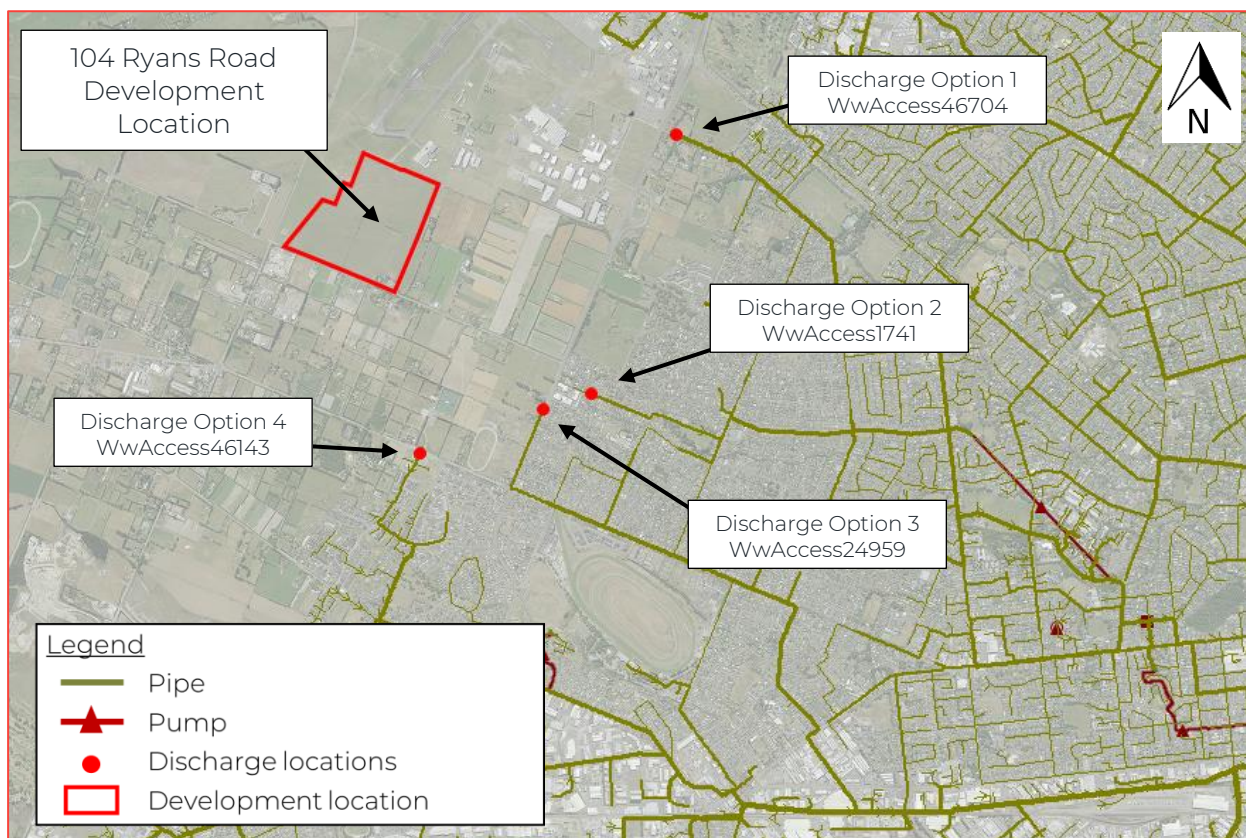


Figure 2-2: Development and discharge locations.

The following methodology was undertaken:

- 1 We ran the Growth Intensification scenario during wet weather flow (WWF).
- 2 From the Growth Intensification results, we selected four initial development options to model in agreement with Council during a meeting on 14 October 2024. Our general method was to:
  - (a) Test the lowest flow option (10 L/s) at discharge locations that appeared to have insufficient capacity. If the capacity turns out to be sufficient for 10 L/s, increase the flow in increments to 20 L/s and then 25 L/s until there is insufficient capacity (new or increased overflows).
  - (b) Test the highest flow option (25 L/s) at discharge locations that appeared to have sufficient capacity. If the 25 L/s flow options causes overflows to occur or increase, reduce the flow until there is sufficient capacity.
- 3 The development scenarios were created by:
  - (a) Creating a copy of the Growth Intensification scenario.
  - (b) Adding the development as a subcatchment.
  - (c) Applying a constant discharge trade flow to the development subcatchment according to the modelled scenario.
  - (d) Selecting the manhole discharge location according to the modelled scenario.



- 4 After running some initial results in WWF, we agreed to model two further scenarios for discharge options 3 and 4 to confirm what would happen if local capacity issues were resolved. We modelled this by moving the discharge locations further down in the long sections to where the pipe diameters increased. This is illustrated in Figure 2-3.
- For discharge option 3, we moved the discharge location from WwAccess24959 to WwAccess1807.
  - For discharge option 4, we moved the discharge location from WwAccess46143 to WwAccess37136.

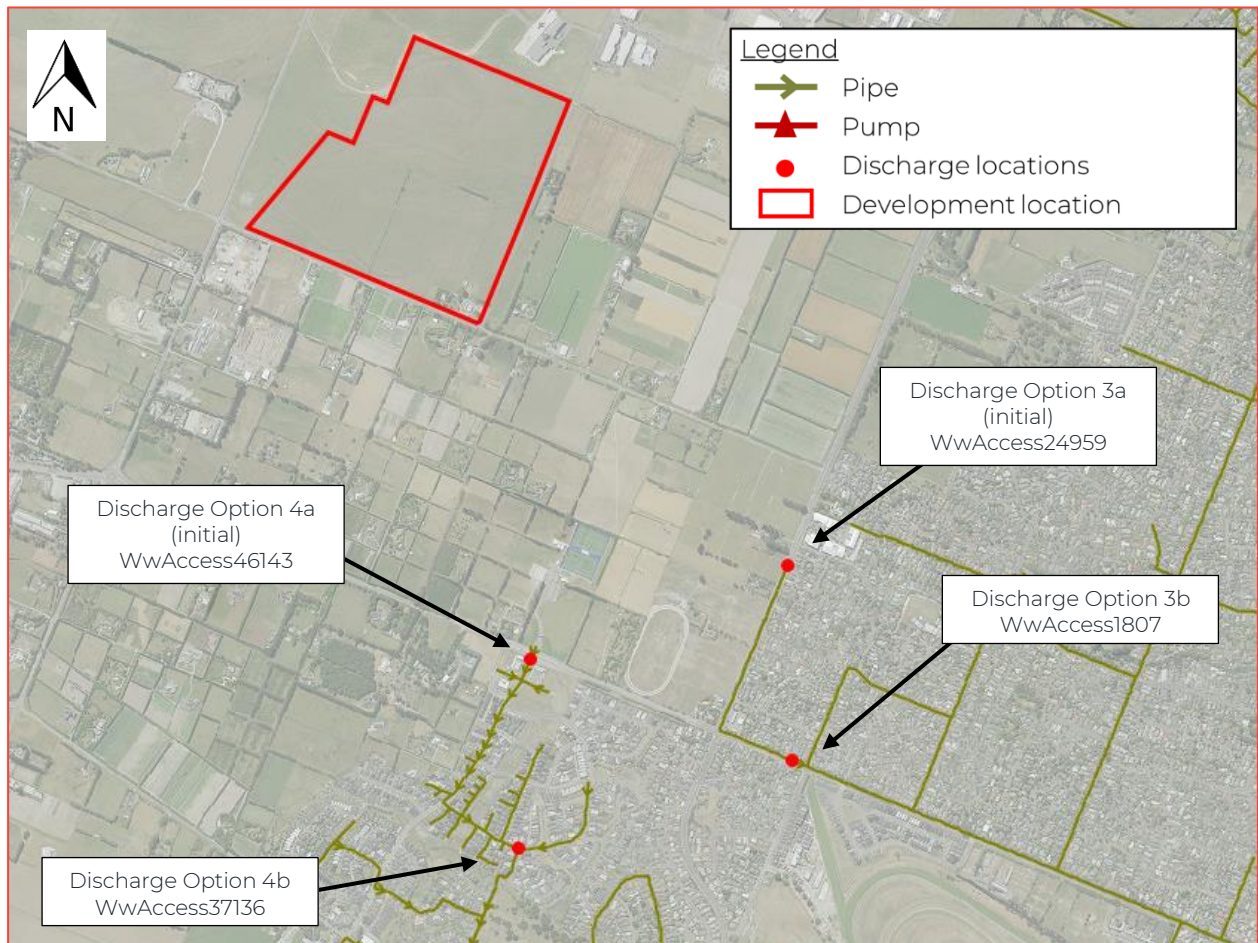


Figure 2-3: Updated discharge locations for options 3 and 4.

The final development scenarios are summarised in Table 2-2. We ran each of these scenarios in WWF—see the results in section 3.

Table 2-2: Development scenarios.

Option	Manhole	Development Flow (L/s)	Reasoning
1	WwAccess46704	10	Conveys to the Riccarton Interceptor—our initial results indicated that capacity is insufficient on this line. Hence, we tested the lowest flow option of 10 L/s to confirm this.
2	WwAccess1741	10	

Option	Manhole	Development Flow (L/s)	Reasoning
3a	WwAccess24959	25	Conveys to the Riccarton Interceptor—our initial results indicated that capacity is sufficient on this line. Hence, we tested if capacity is sufficient for the full 25 L/s.
4a	WwAccess46143	25	
3b	WwAccess1807	25	To confirm what would happen if local capacity issues for options 3 and 4 were resolved.
4b	WwAccess37136	25	

## 3 Results

### 3.1 Discharge Options 1 and 2

The results indicate that there are predicted capacity issues for both discharge option 1 and discharge option 2 during the 2024 design storm. Because of this, no increased flow increments were modelled for either of these discharge locations.

The development exacerbates eight existing manhole spills for both discharge locations. The locations of these increased spills and surcharge for each spill locations are shown side-by-side in Figure 3-1. Table 3-1 quantifies the increases in spill volumes as compared to the Growth Intensification scenario results for both discharge locations. Long sections of discharge options 1 and 2 are shown in Figure 3-2 and Figure 3-3 respectively.

As is shown in the long sections, the predicted capacity issues are a result of existing predicted capacity issues downstream for both discharge options.

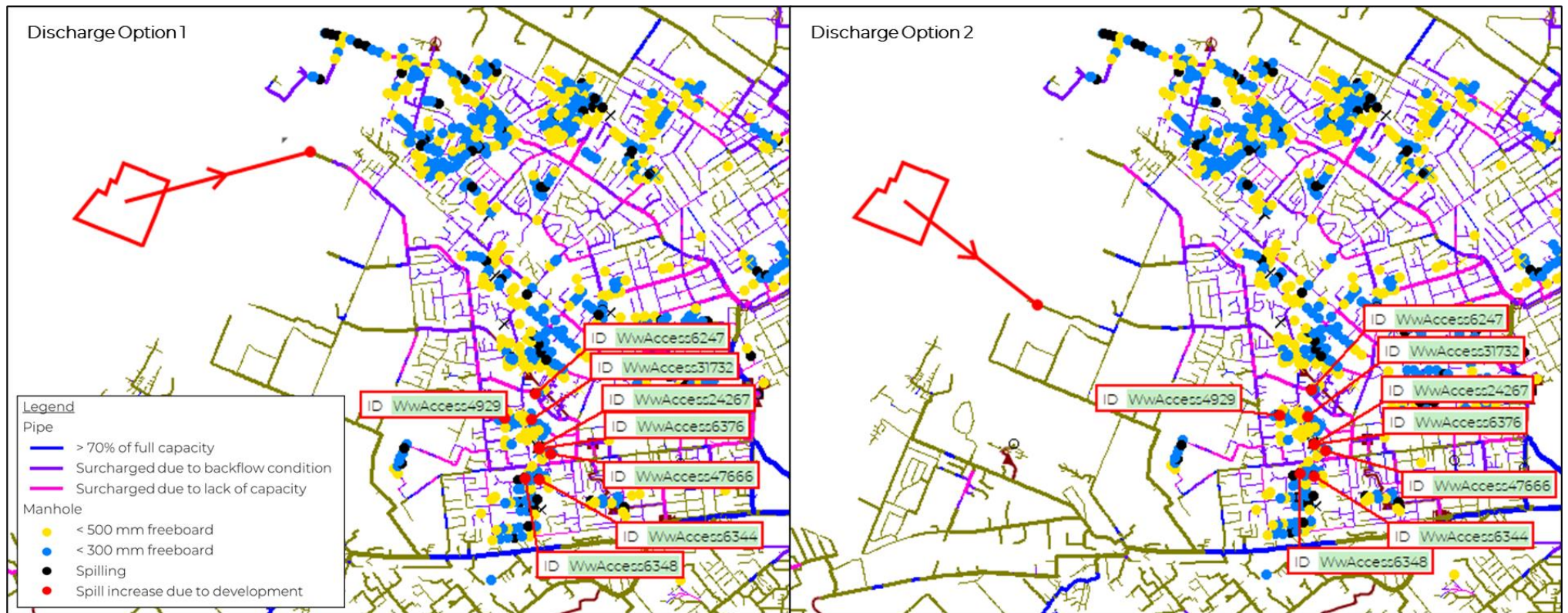
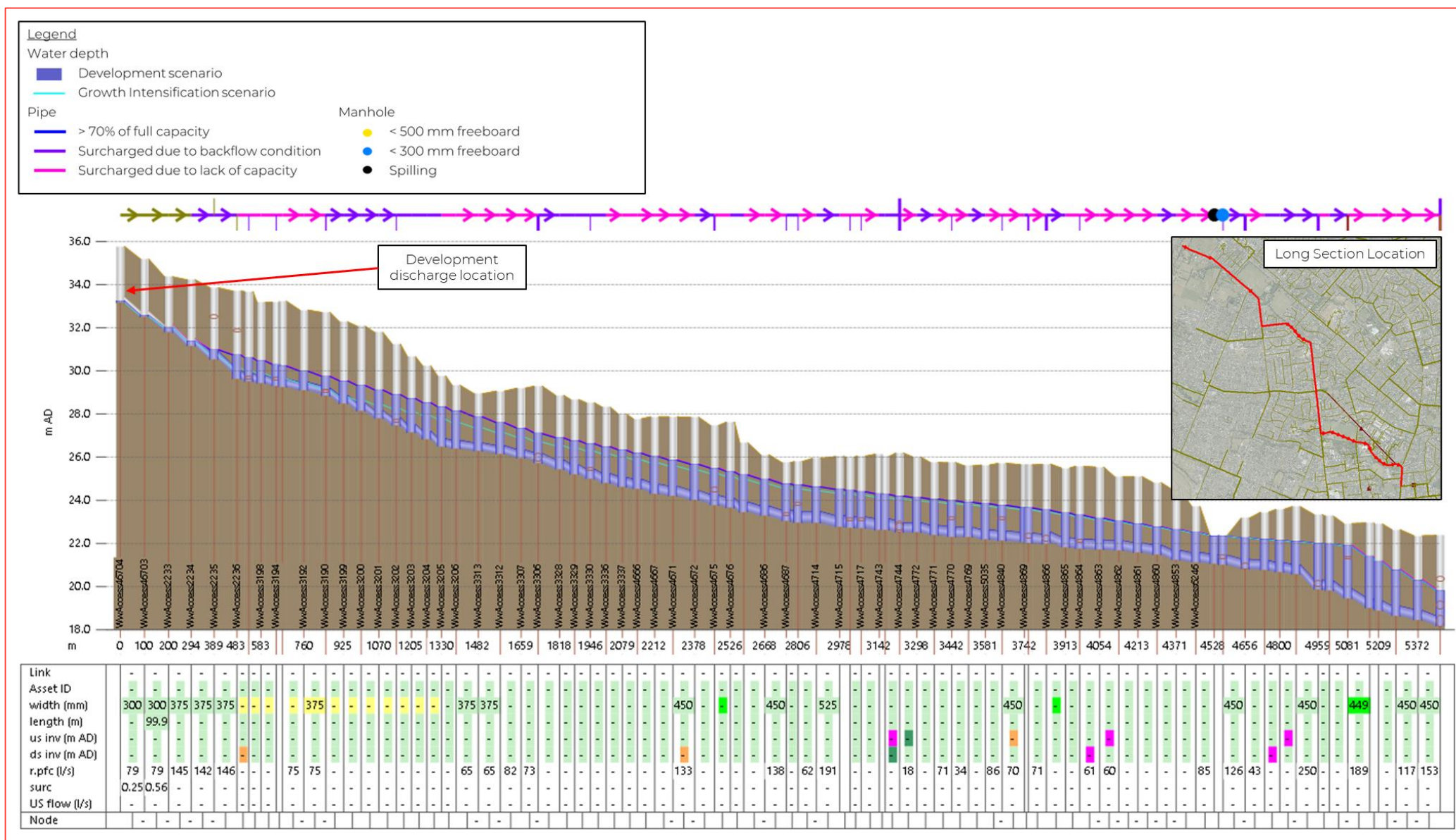


Figure 3-1: Increased spill locations for discharge options 1 and 2.

Table 3-1: Increased spill table for discharge options 1 and 2, as compared to the Growth Intensification scenario.

Manhole ID / Constructed Overflow ID	Growth Intensification Spill Volume (m <sup>3</sup> )	Discharge Option 1			Discharge Option 2		
		Development Spill Volume (m <sup>3</sup> )	Increase in Spill Volume (m <sup>3</sup> )	Percentage Increase in Spill Volume	Development Spill Volume (m <sup>3</sup> )	Increase in Spill Volume (m <sup>3</sup> )	Percentage Increase in Spill Volume
WwAccess6247	418	796	377	90%	801	382	91%
WwAccess47666	68	80	12	17%	80	11	16%
WwAccess4929	102	106	5	5%	106	5	5%
WwAccess31732	87	91	4	4%	91	4	4%
WwAccess6376	61	63	1	2%	63	1	2%
WwAccess24267	55	56	1	2%	56	1	2%
WwAccess6344	482	489	7	1%	489	7	1%
WwAccess6348	675	680	6	1%	680	5	1%





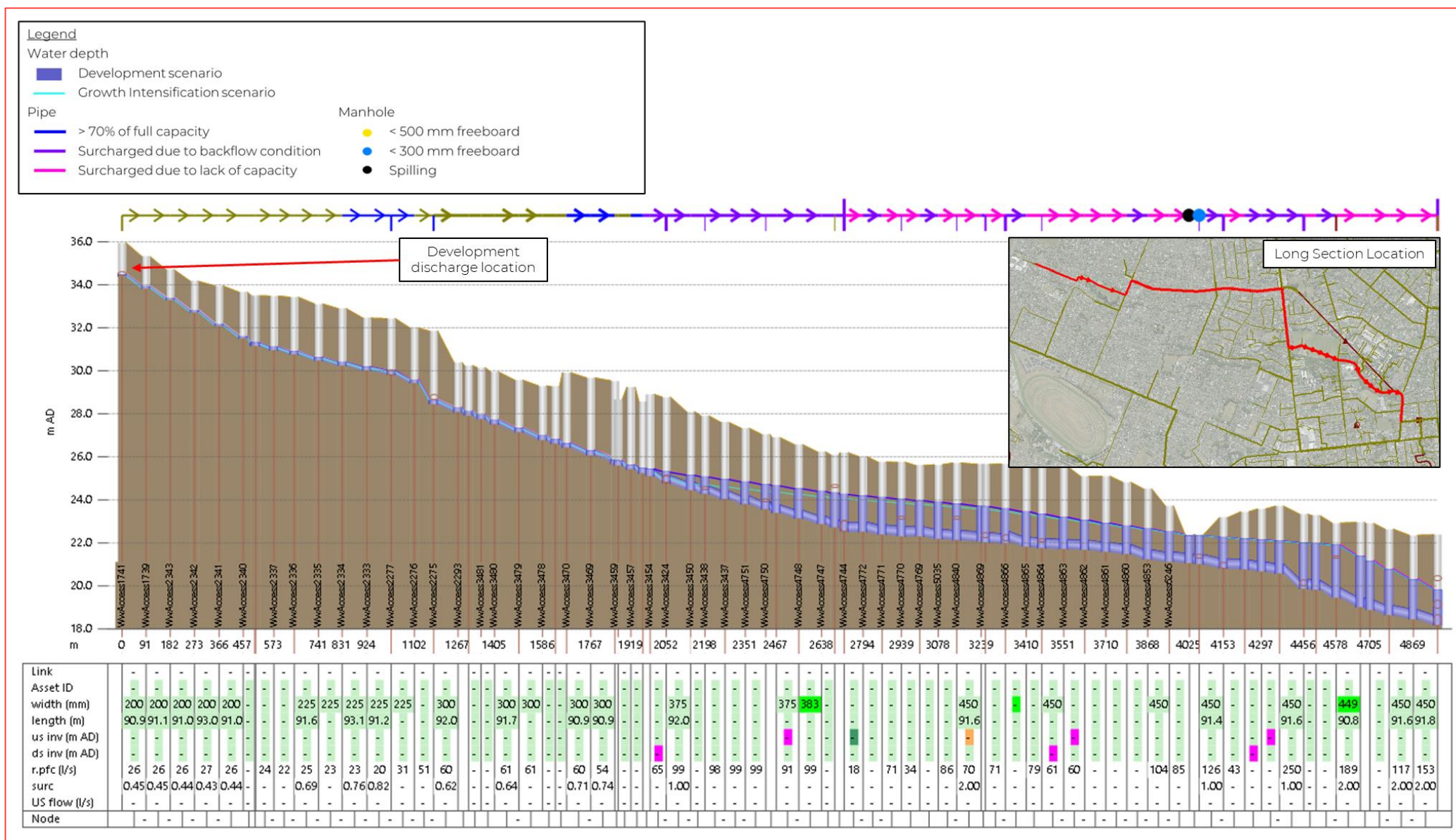


Figure 3-3: Long section for discharge option 2 compared to the Growth Intensification results.



### 3.2 Discharge Option 3

There are some local capacity issues for discharge option 3a (WwAccess24959) due to the development, but no manhole or constructed overflow spills. Figure 3-4 shows the long section for this option.

To confirm if there would be sufficient capacity if these local capacity issues were resolved, we moved the discharge location 864 m downstream to WwAccess1807 where the pipe diameter increases from 225 mm to 375 mm. The long section for this is shown in Figure 3-5. As is shown, there are no capacity issues if the discharge location is moved further downstream.

There are some minor existing capacity issues in both scenarios at the downstream end of the long section in the Southern Relief. However, this is mostly unaffected by the development, and the hydraulic grade line is approximately 1.9 m below the ground level.









### 3.3 Discharge Option 4

There are some local capacity issues for discharge option 4a (WwAccess46143) due to the development, but no manhole or constructed overflow spills. Figure 3-6 shows the long section for this option.

To confirm if there would be sufficient capacity if these local capacity issues were resolved, we moved the discharge location 870 m downstream to WwAccess37136 where the pipe diameter increases from 225 mm to 300 mm. The long section for this is shown in Figure 3-7. As is shown, there are some minor capacity issues caused by the development flows in the 300 mm pipes regardless of if the development discharges to WwAccess46143 or WwAccess37136.

In the 300 mm diameter pipe section, the pipe with the least spare capacity has 11 L/s of spare capacity in the Growth Intensification scenario, but the average spare capacity is 20 L/s. Hence, there is minor surcharge predicted with the development. Downstream the pipe diameter increases to 375 mm, where there is an average of 26 L/s of spare capacity in the Growth Intensification scenario.

There are some minor existing capacity issues in both scenarios at the downstream end of the long section in the Southern Relief. However, this is mostly unaffected by the development, and the hydraulic grade line is approximately 1.9 m below the ground level.



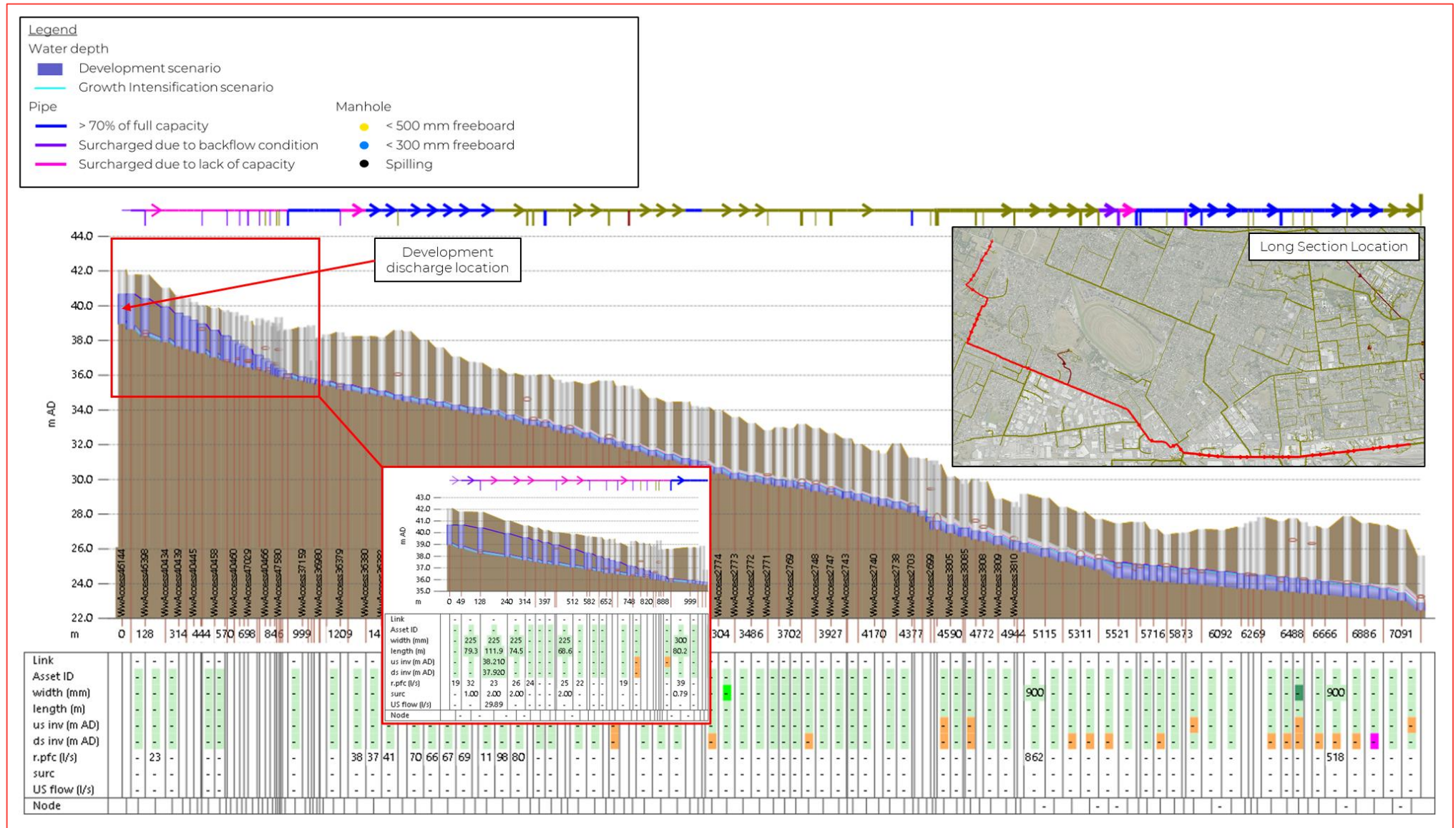


Figure 3-6: Long section for discharge option 4a compared to the Growth Intensification results.

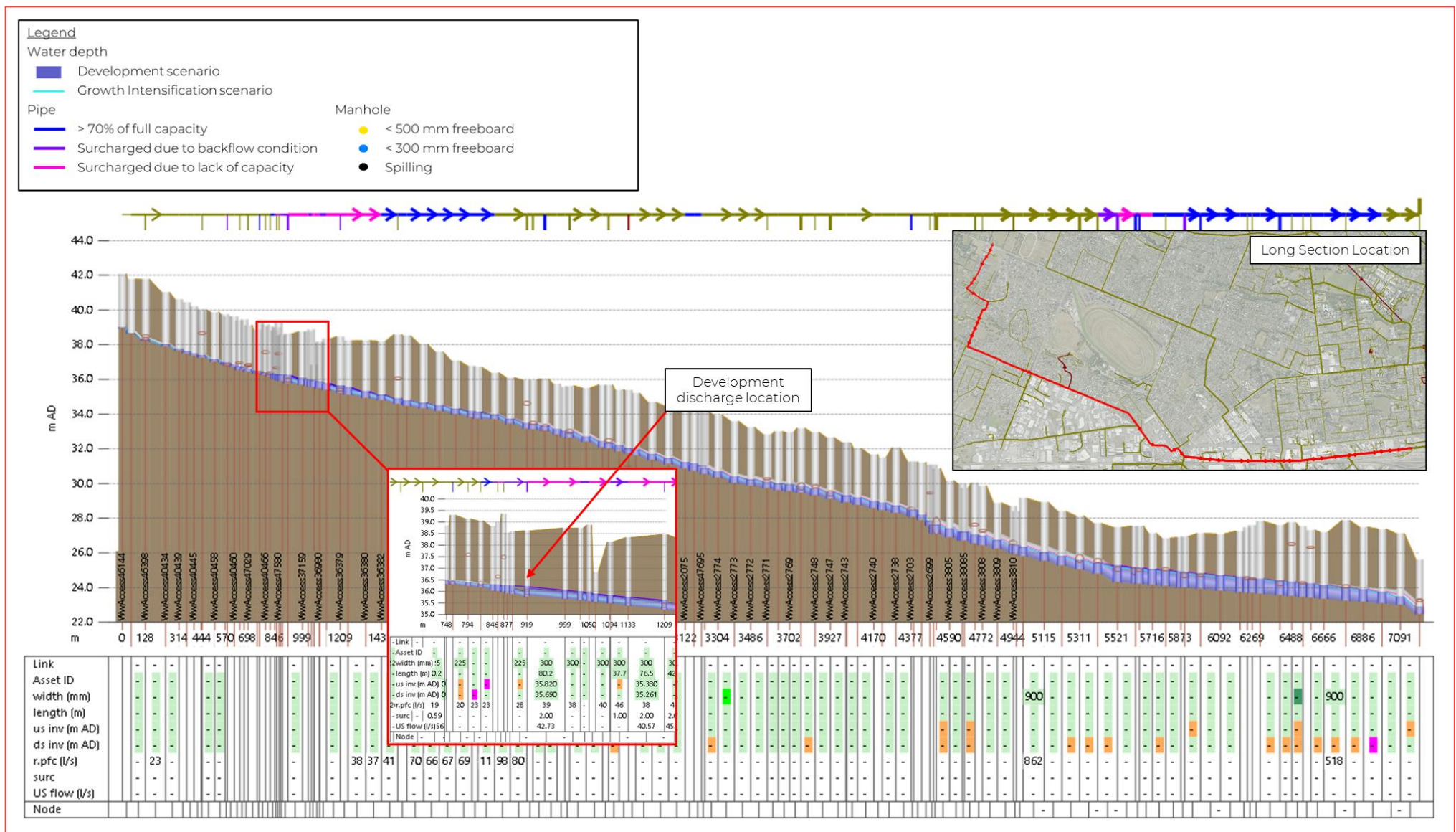


Figure 3-7: Long section for discharge option 4b compared to the Growth Intensification results.

## 4 Conclusions

For discharge options 1 and 2 the development (10 L/s applied) is predicted to increase the spill volumes due to existing predicted capacity issues around the Riccarton. However, there are no new manhole or constructed overflow spills caused by the development flow.

Discharge options 3 and 4 result in local capacity issues with a development flow of 25 L/s, although there is more capacity downstream. If the discharge locations are moved further downstream to where the pipes increase in diameter, the model predicts that the local capacity issues are improved for discharge location 4 and resolved for discharge location 3. There are some minor existing capacity issues further downstream on the Southern Relief, however this is mostly unaffected by the development flows and the hydraulic grade line is approximately 1.9 m below the ground level.

A summary of the available capacity in the Growth Intensification scenario for discharge options 3 and 4 is provided in Table 4-1.

*Table 4-1: Summary of available capacity for discharge options 3 and 4, using Growth Intensification flows.*

Discharge Option	Pipe Section Diameter (mm)	Pipe Section Length (m)	Pipe Section Upstream / Downstream Manhole ID	Average Available Capacity in Pipe Section (L/s)	Minimum Available Capacity in Pipe Section (L/s)
3	225	864	WwAccess24959 to WwAccess1807	19	15
	375	1778	WwAccess1807 to WwAccess3508	79	6
4	225	870	WwAccess46143 to WwAccess37136	15	4
	300	610	WwAccess37136 to WwAccess36381	20	11

## 5 References

CCC. (April 2022). *Christchurch City Council Infrastructure Design Standard, Part 6*.

WCS. (August 2024). *Christchurch City Council 2024 Design Storm Review*. WSP Reference: 3-CHDM2.05.

WSP. (15 May 2024). *Ilam-Fendalton WW Model Calibration Report v1.0*. WSP reference: 3-CHCH5.47: Council reference: TRIM 23/1160701.

WSP. (2020). *Christchurch City Wastewater Model - Updated Growth Model Report Council Ref CPMS#51866*.

WSP. (2020). *Christchurch City Wastewater Model: Model Update and Calibration Report*. Council Reference: CPMS#51866/TRIM 20/197253 CCC: WSP Reference: 3-CHCH3.28.



# Appendix

## Growth Intensification Details for Study Area



			Base Model		Growth Intensification Model	
Subcatchment	Population increase	Trade flow increase	ASF (l/s)	MF (l/s)	ASF (l/s)	MF (l/s)
Subcatchment10004	30.04	0	0.66	4.90	0.72	4.99
Subcatchment10073	74.42	0	0.28	2.02	0.42	2.23
Subcatchment10091	15.82	0	0.42	3.11	0.45	3.15
Subcatchment10123	4.33	0	0.19	1.60	0.20	1.61
Subcatchment10123_1	3.44	0	0.25	1.43	0.26	1.44
Subcatchment10123_2	5.23	0	0.28	2.00	0.29	2.02
Subcatchment10140	2.15	0	0.17	1.73	0.18	1.74
Subcatchment10140_1_1	3.61	0	0.22	2.80	0.23	2.81
Subcatchment10242	0.18	0	0.01	0.26	0.01	0.26
Subcatchment10254	5.78	0	0.10	0.68	0.11	0.70
Subcatchment10254_1	2.15	0	0.05	0.73	0.05	0.73
Subcatchment10254_2	3.13	0	0.07	1.06	0.08	1.07
Subcatchment10254_3	12.14	0	0.21	1.62	0.23	1.65
Subcatchment10254_4	0.89	0	0.05	0.35	0.05	0.35
Subcatchment10332	0.88	0	0.04	0.33	0.04	0.33
Subcatchment10332_1	12.49	0	0.23	1.43	0.26	1.46
Subcatchment10332_1_1	3.26	0	0.21	1.30	0.21	1.31
Subcatchment10337	2.1	0	0.13	1.82	0.13	1.82
Subcatchment10337_1	1.36	0	0.06	1.14	0.06	1.15
Subcatchment10337_2	1.31	0	0.08	1.15	0.09	1.15
Subcatchment10337_3	3.58	0	0.24	3.13	0.25	3.14
Subcatchment10369	20.38	0	0.39	4.06	0.42	4.12
Subcatchment10497	25.32	0	0.03	0.39	0.08	0.45
Subcatchment10558	15.66	0	0.09	0.62	0.12	0.66
Subcatchment10558_1	69.72	0	0.48	2.87	0.61	3.06
Subcatchment6575	22.33	0	0.50	4.39	0.55	4.45

			Base Model		Growth Intensification Model	
Subcatchment	Population increase	Trade flow increase	ASF (l/s)	MF (l/s)	ASF (l/s)	MF (l/s)
Subcatchment6827	14.88	0	0.28	2.50	0.31	2.55
Subcatchment6827_1	0.81	0	0.04	0.32	0.05	0.32
Subcatchment6827_2	1	0	0.04	0.36	0.04	0.36
Subcatchment6835	84.96	0	0.41	3.30	0.58	3.54
Subcatchment6883	10.32	0	0.61	7.99	0.63	8.02
Subcatchment6883_1	1.04	0	0.05	0.79	0.05	0.79
Subcatchment6883_2	1.83	0	0.11	1.42	0.12	1.43
Subcatchment6883_3	0.98	0	0.07	0.77	0.07	0.78
Subcatchment6926	3.83	0	0.12	1.94	0.13	1.95
Subcatchment6926_1	0.71	0	0.03	0.53	0.03	0.54
Subcatchment6926_2	0.59	0	0.04	0.46	0.04	0.46
Subcatchment6926_3	2.36	0	0.13	1.82	0.14	1.82
Subcatchment6926_5	4.87	0	0.31	3.79	0.32	3.81
Subcatchment7187	32.44	0	0.05	2.34	0.11	2.43
Subcatchment7464	17.18	0	0.03	0.28	0.06	0.31
Subcatchment7583	2.43	0	0.11	2.51	0.12	2.51
Subcatchment7611	0.6	0	0.03	0.23	0.03	0.23
Subcatchment7611_1	1.54	0	0.10	0.62	0.10	0.62
Subcatchment7611_2	2.28	0	0.13	0.89	0.13	0.90
Subcatchment7611_3	0.97	0	0.09	0.43	0.09	0.43
Subcatchment7611_4	2.04	0	0.11	0.79	0.12	0.80
Subcatchment7611_4_1	1.77	0	0.12	0.72	0.13	0.73
Subcatchment7611_4_2	2.4	0	0.10	0.89	0.11	0.89
Subcatchment7611_4_2_1	9.06	0	0.23	1.48	0.25	1.51
Subcatchment7660	8.17	0	0.05	0.61	0.06	0.63
Subcatchment7660_1	3.29	0	0.05	0.98	0.06	0.99

			Base Model		Growth Intensification Model	
Subcatchment	Population increase	Trade flow increase	ASF (l/s)	MF (l/s)	ASF (l/s)	MF (l/s)
Subcatchment7914	24.55	0	0.13	1.91	0.18	1.98
Subcatchment8102	60.38	0	0.42	5.67	0.54	5.84
Subcatchment8208	30.45	0	0.15	1.61	0.21	1.70
Subcatchment8208_1	33.17	0	0.06	1.88	0.12	1.97
Subcatchment8310	9.46	0	0.53	7.26	0.55	7.28
Subcatchment8310_1	1.68	0	0.09	1.29	0.10	1.30
Subcatchment8310_3	3.28	0	0.18	2.51	0.19	2.52
Subcatchment8313	169.9	0	1.56	11.75	1.88	12.23
Subcatchment8333_1	18.85	0	0.06	1.10	0.10	1.15
Subcatchment8543_1	0.96	0	0.06	0.84	0.06	0.84
Subcatchment8543_2	1.86	0	0.13	1.63	0.13	1.64
Subcatchment8543_3	1.86	0	0.14	1.66	0.14	1.66
Subcatchment8543_3_1	2.35	0	0.15	2.04	0.15	2.05
Subcatchment8574	7.1	0	0.18	1.46	0.19	1.48
Subcatchment8580	5.05	0	0.07	1.65	0.08	1.66
Subcatchment8780	2.75	0	0.20	1.62	0.21	1.62
Subcatchment8913	0.37	0	0.02	0.14	0.02	0.14
Subcatchment9069_3	7.95	0	0.10	0.87	0.12	0.90
Subcatchment9078	32.61	0	0.18	1.15	0.24	1.24
Subcatchment9173	62.13	0	0.36	2.44	0.48	2.62
Subcatchment9290	3.27	0	0.18	2.51	0.19	2.52
Subcatchment9290_1	2.2	0	0.13	1.70	0.13	1.70
Subcatchment9469_1	0.74	0	0.01	0.42	0.01	0.42
Subcatchment9503	18.47	0	0.12	1.45	0.15	1.50
Subcatchment9503_1	18.04	0	0.11	1.41	0.15	1.46
Subcatchment9534_1	25.57	0	0.15	2.01	0.20	2.08

			Base Model		Growth Intensification Model	
Subcatchment	Population increase	Trade flow increase	ASF (l/s)	MF (l/s)	ASF (l/s)	MF (l/s)
Subcatchment9582	6.06	0	0.21	3.86	0.22	3.88
Subcatchment9582_1	3.1	0	0.15	2.24	0.16	2.25
Subcatchment9582_2	3.57	0	0.21	2.65	0.22	2.66
Subcatchment9755_1	3.36	0	0.21	2.92	0.22	2.93
Subcatchment9763	7.79	0	0.16	1.08	0.17	1.10
Subcatchment9901	80.9	0	0.45	6.66	0.61	6.89
Dakota Park	0.88	14.2	0.00	0.00	14.20	67.72
NWRA3	209.8	0	0.10	0.25	0.59	1.41
Russley	31.56	0	0.01	1.46	0.09	3.29
Subcatchment10038	7.3	0	0.30	1.23	0.31	1.27
Subcatchment10100	8.11	0	0.23	1.20	0.25	1.24
Subcatchment10100_1	1.84	0	0.07	0.29	0.07	0.30
Subcatchment10112	91.08	0	0.14	0.60	0.35	1.04
Subcatchment10349	18.49	0	0.36	1.78	0.40	1.87
Subcatchment10400	13.02	0	0.21	1.20	0.24	1.26
Subcatchment10487	82.74	0	0.46	1.48	0.58	1.74
Subcatchment6627	111.84	0	0.45	1.54	0.62	1.88
Subcatchment6637	56.86	0	0.50	1.67	0.59	1.85
Subcatchment6640	47.35	0	0.51	1.61	0.58	1.76
Subcatchment6699	45.15	0	1.43	2.97	1.53	3.14
Subcatchment6704	73.14	0	0.50	1.65	0.61	1.88
Subcatchment6710	31.13	0	0.11	0.32	0.18	0.47
Subcatchment6992	22.37	0	0.93	1.43	0.96	1.48
Subcatchment7006	22.89	0	0.55	2.32	0.61	2.43
Subcatchment7065	1.09	0	0.04	0.16	0.04	0.17
Subcatchment7084	22.15	0	0.97	1.50	1.00	1.55

			Base Model		Growth Intensification Model	
Subcatchment	Population increase	Trade flow increase	ASF (l/s)	MF (l/s)	ASF (l/s)	MF (l/s)
Subcatchment7095	0	0	0.24	3.49	0.24	3.49
Subcatchment7099	14.2	0	0.62	0.96	0.63	1.00
Subcatchment7229	9.16	0	0.50	1.66	0.51	1.69
Subcatchment7251	148.29	0	0.58	1.94	0.80	2.40
Subcatchment7320	26.03	0	1.11	1.70	1.15	1.76
Subcatchment7331	2.6	0	0.49	2.62	0.50	2.63
Subcatchment7332	78.76	0	1.16	2.85	1.26	3.04
Subcatchment7344	26.5	0	0.50	0.76	0.53	0.82
Subcatchment7344_1	25.59	0	0.39	1.22	0.43	1.30
Subcatchment7347	32.14	0	0.69	2.94	0.76	3.10
Subcatchment7348	36.39	0	0.75	2.40	0.80	2.51
Subcatchment7396	0.94	0	0.10	0.45	0.11	0.46
Subcatchment7406	31.58	0	0.76	3.13	0.84	3.28
Subcatchment7420	92.43	0	1.21	1.85	1.33	2.08
Subcatchment7471	13.83	0	0.22	0.33	0.24	0.37
Subcatchment7508	60.1	0	0.64	2.86	0.78	3.15
Subcatchment7539	54.73	0	0.68	2.21	0.77	2.38
Subcatchment7582	7.76	0	0.25	0.53	0.27	0.56
Subcatchment7594	66.2	0	0.84	2.74	0.94	2.95
Subcatchment7596	26.3	0	0.49	2.56	0.55	2.69
Subcatchment7601	33.79	0	1.38	2.10	1.42	2.18
Subcatchment7881	20.32	0	0.85	3.46	0.90	3.56
Subcatchment7953	87.67	0	1.45	6.67	1.56	6.88
Subcatchment8014	0.9	0	0.35	2.38	0.35	2.38
Subcatchment8075	96.76	0	3.07	6.44	3.29	6.81
Subcatchment8084	39.23	0	1.25	2.63	1.34	2.78

			Base Model		Growth Intensification Model	
Subcatchment	Population increase	Trade flow increase	ASF (l/s)	MF (l/s)	ASF (l/s)	MF (l/s)
Subcatchment8098	9.17	0	0.16	0.27	0.17	0.30
Subcatchment8206	84.49	0	1.03	3.39	1.16	3.65
Subcatchment8260	17.11	0	0.43	1.74	0.47	1.83
Subcatchment8363	57.94	0	2.47	3.77	2.54	3.91
Subcatchment8364	178.11	0	2.66	4.13	2.88	4.59
Subcatchment8368	88.15	0	1.97	3.02	2.08	3.24
Subcatchment8378	3.24	0	0.09	0.54	0.10	0.56
Subcatchment8391	5.49	0	0.44	0.87	0.45	0.89
Subcatchment8646	1.89	0	0.13	0.39	0.13	0.39
Subcatchment8661	0	0	0.95	3.14	0.95	3.14
Subcatchment8835	121.33	0	1.52	4.99	1.70	5.37
Subcatchment8896	2.08	0	0.04	0.12	0.05	0.12
Subcatchment9047	6.83	0	0.33	0.51	0.34	0.53
Subcatchment9116	30.37	0	0.18	0.65	0.23	0.74
Subcatchment9157	3.45	0	0.08	0.41	0.09	0.43
Subcatchment9163	21.51	0	0.19	0.65	0.22	0.71
Subcatchment9193	11.51	0	0.18	0.59	0.19	0.63
Subcatchment9301	11.42	0	0.31	1.23	0.33	1.29
Subcatchment9341	2.4	0	0.04	0.16	0.04	0.17
Subcatchment9404	20.48	0	0.20	0.75	0.24	0.82
Subcatchment9440	19.3	0	0.62	0.86	0.64	0.91
Subcatchment9518	12.39	0	0.08	0.78	0.11	0.84
Subcatchment9565	584.96	0	2.10	10.07	2.99	11.90
Subcatchment9628	9.43	0	0.24	0.81	0.26	0.84
Subcatchment9633	65.02	0	0.25	0.84	0.35	1.05
Subcatchment9635	21.93	0	1.46	3.07	1.48	3.13

			Base Model		Growth Intensification Model	
Subcatchment	Population increase	Trade flow increase	ASF (l/s)	MF (l/s)	ASF (l/s)	MF (l/s)
Subcatchment9668	5.03	0	0.23	0.97	0.24	1.00
Subcatchment9795	532.3	0	2.94	9.81	3.75	11.47
Subcatchment9801	9.89	0	0.36	1.46	0.38	1.51
Subcatchment9889	0.04	0	0.10	1.88	0.10	1.88
South of Masham	1397.05	0	0.04	1.28	3.60	14.99
Subcatchment10037	11.72	0	0.32	0.82	0.34	0.86
Subcatchment10047	38.45	0	0.19	0.70	0.25	0.83
Subcatchment10052	38.23	0	0.14	0.61	0.20	0.74
Subcatchment10075	39.25	0	0.21	0.76	0.28	0.90
Subcatchment10106	53.64	0	0.58	2.12	0.67	2.29
Subcatchment10138	41.93	0	0.20	0.75	0.27	0.89
Subcatchment10338	44.93	0	0.28	0.94	0.35	1.10
Subcatchment10363	18.68	0	0.18	0.82	0.21	0.88
Subcatchment10363b	6.17	0	0.10	0.37	0.11	0.39
Subcatchment10363c	6.1	0	0.07	0.30	0.07	0.32
Subcatchment10363d	10.99	0	0.16	0.63	0.18	0.67
Subcatchment10363f	19.37	0	0.23	0.98	0.26	1.04
Subcatchment10377	33.7	0	0.22	0.62	0.28	0.74
Subcatchment10459	23.9	0	0.51	1.64	0.55	1.72
Subcatchment10519	22.56	0	0.10	0.76	0.14	0.84
Subcatchment10540	49.8	0	0.25	0.93	0.33	1.10
Subcatchment10559	16.92	0	0.51	1.66	0.56	1.84
Subcatchment10581	11.77	0	0.30	7.07	0.33	7.10
Subcatchment6574	18.7	0	0.49	1.49	0.53	1.55
Subcatchment6604	54.64	0	0.00	0.61	0.09	0.80
Subcatchment6604a	62.04	0	0.27	1.25	0.37	1.46

			Base Model		Growth Intensification Model	
Subcatchment	Population increase	Trade flow increase	ASF (l/s)	MF (l/s)	ASF (l/s)	MF (l/s)
Subcatchment6604e	103.93	0	0.48	2.16	0.65	2.52
Subcatchment6604g	127.53	0	0.94	3.39	1.14	3.82
Subcatchment6604h	77.69	0	0.64	2.21	0.77	2.48
Subcatchment6658	30.97	0	0.15	0.61	0.20	0.71
Subcatchment6683	21.88	0	0.25	1.02	0.29	1.09
Subcatchment6725	88.15	0	0.34	1.21	0.49	1.50
Subcatchment6786	83.96	0	0.29	0.95	0.44	1.23
Subcatchment6790	51.74	0	0.29	1.06	0.38	1.24
Subcatchment6792	58.2	0	0.31	1.12	0.40	1.32
Subcatchment6884	22.12	0	0.61	8.61	0.65	8.67
Subcatchment6892	40.42	0	0.43	1.49	0.50	1.62
Subcatchment6979	1.09	0	0.11	1.27	0.11	1.27
Subcatchment7088	39.12	0	0.38	1.23	0.45	1.35
Subcatchment7093	20.99	0	0.91	3.11	0.98	3.34
Subcatchment7098	18.34	0	0.04	0.65	0.07	0.71
Subcatchment7112	0.22	0	0.16	1.74	0.16	1.74
Subcatchment7244	6.69	0	0.43	1.87	0.46	1.94
Subcatchment7296	5.71	0	0.03	0.13	0.04	0.15
Subcatchment7323	128.58	0	0.46	1.50	0.68	1.92
Subcatchment7436	87.36	0	0.44	1.62	0.59	1.91
Subcatchment7439	22.87	0	0.13	0.50	0.17	0.58
Subcatchment7439a	21.92	0	0.12	0.46	0.15	0.54
Subcatchment7477	4.11	0	21.02	67.22	21.02	67.23
Subcatchment7494	11.91	0	0.01	0.14	0.03	0.18
Subcatchment7531	32.38	0	1.22	4.06	1.32	4.40
Subcatchment7534	154.79	0	0.52	1.74	0.79	2.25



			Base Model		Growth Intensification Model	
Subcatchment	Population increase	Trade flow increase	ASF (l/s)	MF (l/s)	ASF (l/s)	MF (l/s)
Subcatchment7672	101.88	0	0.43	1.67	0.59	2.02
Subcatchment7683	0.32	0	0.23	2.27	0.23	2.27
Subcatchment7877	12.44	0	0.79	3.22	0.83	3.36
Subcatchment7890	125.25	0	0.58	1.82	0.80	2.23
Subcatchment7897	37.89	0	0.81	2.64	0.87	2.76
Subcatchment7904	32.04	0	1.11	3.83	1.21	4.17
Subcatchment7905	24.44	0	0.16	0.85	0.20	0.94
Subcatchment7938	35.07	0	0.19	0.74	0.25	0.86
Subcatchment7938a	20.24	0	0.12	0.46	0.16	0.53
Subcatchment8148	24.99	0	0.80	1.34	0.84	1.42
Subcatchment8156	64.28	0	0.61	1.47	0.72	1.68
Subcatchment8198	44.21	0	0.71	2.36	0.78	2.51
Subcatchment8204	0.73	0	7.61	15.26	7.61	15.26
Subcatchment8214	234.4	0	0.82	2.69	1.23	3.46
Subcatchment8229	10.25	0	0.24	0.68	0.25	0.72
Subcatchment8269	0.45	0	0.32	3.15	0.32	3.15
Subcatchment8321	54.65	0	0.92	2.99	1.02	3.17
Subcatchment8373	169.3	0	0.67	2.44	0.95	3.01
Subcatchment8616	114.08	0	0.86	2.74	1.05	3.12
Subcatchment8643	5.88	0	0.23	0.78	0.25	0.84
Subcatchment8644	55.71	0	0.73	2.44	0.82	2.63
Subcatchment8658	0.58	0	0.42	3.64	0.42	3.64
Subcatchment8694	33.37	0	0.52	3.25	0.58	3.36
Subcatchment8696	0.6	0	0.42	3.83	0.42	3.83
Subcatchment8752	18.84	0	0.09	0.35	0.13	0.42
Subcatchment8772	64.09	0	0.97	3.73	1.08	3.94

			Base Model		Growth Intensification Model	
Subcatchment	Population increase	Trade flow increase	ASF (l/s)	MF (l/s)	ASF (l/s)	MF (l/s)
Subcatchment8783	19.46	0	0.09	0.35	0.12	0.41
Subcatchment8795	0.61	0	0.43	4.11	0.43	4.11
Subcatchment8831	20.09	0	0.12	0.41	0.15	0.48
Subcatchment9106	23.17	0	0.12	0.43	0.15	0.51
Subcatchment9153	0.75	0	0.98	5.57	0.98	5.57
Subcatchment9190	24.54	0	0.14	0.50	0.18	0.58
Subcatchment9220	8.77	0	0.16	0.57	0.18	0.6
Subcatchment9463	6.7	0	0.08	0.37	0.09	0.39
Subcatchment9499	4.66	0	0.15	0.55	0.16	0.56
Subcatchment9569	0.96	0	3.81	9.68	3.81	9.68
Subcatchment9655	10.56	0	0.21	0.73	0.23	0.76
Subcatchment9676	44.03	0	0.23	0.87	0.3	1.02
Subcatchment9676_1	25.5	0	0.14	0.46	0.18	0.55
Subcatchment9791	32.54	0	0.19	0.65	0.24	0.76
Subcatchment9892	35.03	0	0.20	0.70	0.25	0.82
Subcatchment9910	2.77	0	0.39	1.38	0.39	1.38
Subcatchment9912	70.77	0	0.21	0.81	0.33	1.04
Subcatchment9925	19.38	0	0.25	0.81	0.29	0.87
Subcatchment9944	1.19	0	1.41	8.43	1.41	8.43
Yaldhurst ODP 1	12.05	0	0.10	0.47	0.13	0.73
Yaldhurst ODP 1a	5.59	0	0.02	0.16	0.04	0.66
Yaldhurst ODP 1b	6.02	0	0.03	0.19	0.04	0.67
Yaldhurst ODP 1c	14.01	0	0.31	0.92	0.35	0.99
Yaldhurst ODP 2	17.21	0	0.02	0.42	0.06	2.16
Yaldhurst ODP 2a	12.11	0	0.05	0.37	0.08	1.23
Yaldhurst ODP 2b	17.09	0	0.02	0.43	0.06	2.1

			Base Model		Growth Intensification Model	
Subcatchment	Population increase	Trade flow increase	ASF (l/s)	MF (l/s)	ASF (l/s)	MF (l/s)
Yaldhurst ODP Business	21.01	0.51	0.00	0.00	0.51	3.27
Subcatchment10363a	10.18	0	0.14	0.56	0.16	0.59
Subcatchment10363e	14.89	0	0.21	0.84	0.24	0.89
Riccarton Park Area A	28.38	0	0.08	0.17	0.15	1.36
Riccarton Park Area B	16.6	0	0.00	0.00	0.04	1.34
Riccarton Park Area C+D	55.81	0	0.00	0.00	0.14	3.35
Riccarton Park Area E	17.18	0	0.00	0.00	0.04	1.98
Subcatchment10514_1	27.07	0	0.56	0.93	0.63	1.06
Subcatchment10514_1_1	4.53	0	0.06	0.11	0.08	0.13
Subcatchment7413_1_1	5.37	0	0.11	0.23	0.13	0.26
Subcatchment9420	27.52	0	0.30	0.63	0.36	0.76
Subcatchment9420_1	25.38	0	0.28	0.51	0.34	0.63
Subcatchment9481_1	21.49	0	0.37	0.53	0.42	0.64
MAIL	0	0	1.17	3.16	0.46	2.45
Subcatchment10146	55.84	0	0.40	1.26	0.52	1.46
Subcatchment10372	36.46	0	0.06	0.99	0.14	1.1
Subcatchment7588	26.04	0	0.05	0.61	0.11	0.69
Subcatchment8586	16.47	0	0.06	0.23	0.1	0.29
Subcatchment8586_1	11.45	0	0.11	0.27	0.13	0.31
Subcatchment8586_2	9.41	0	0.06	0.16	0.08	0.2
Subcatchment9052	29.29	0	0.25	0.72	0.31	0.83
Subcatchment9435	21.25	0	0.04	0.54	0.09	0.61
Subcatchment9447	58.88	0	0.35	1.05	0.48	1.27
Subcatchment9534	40.88	0	0.24	0.73	0.33	0.88
Subcatchment7447	127.71	0	0.99	4.26	1.26	4.76
Subcatchment9488	6.3	0	0.05	0.22	0.07	0.24

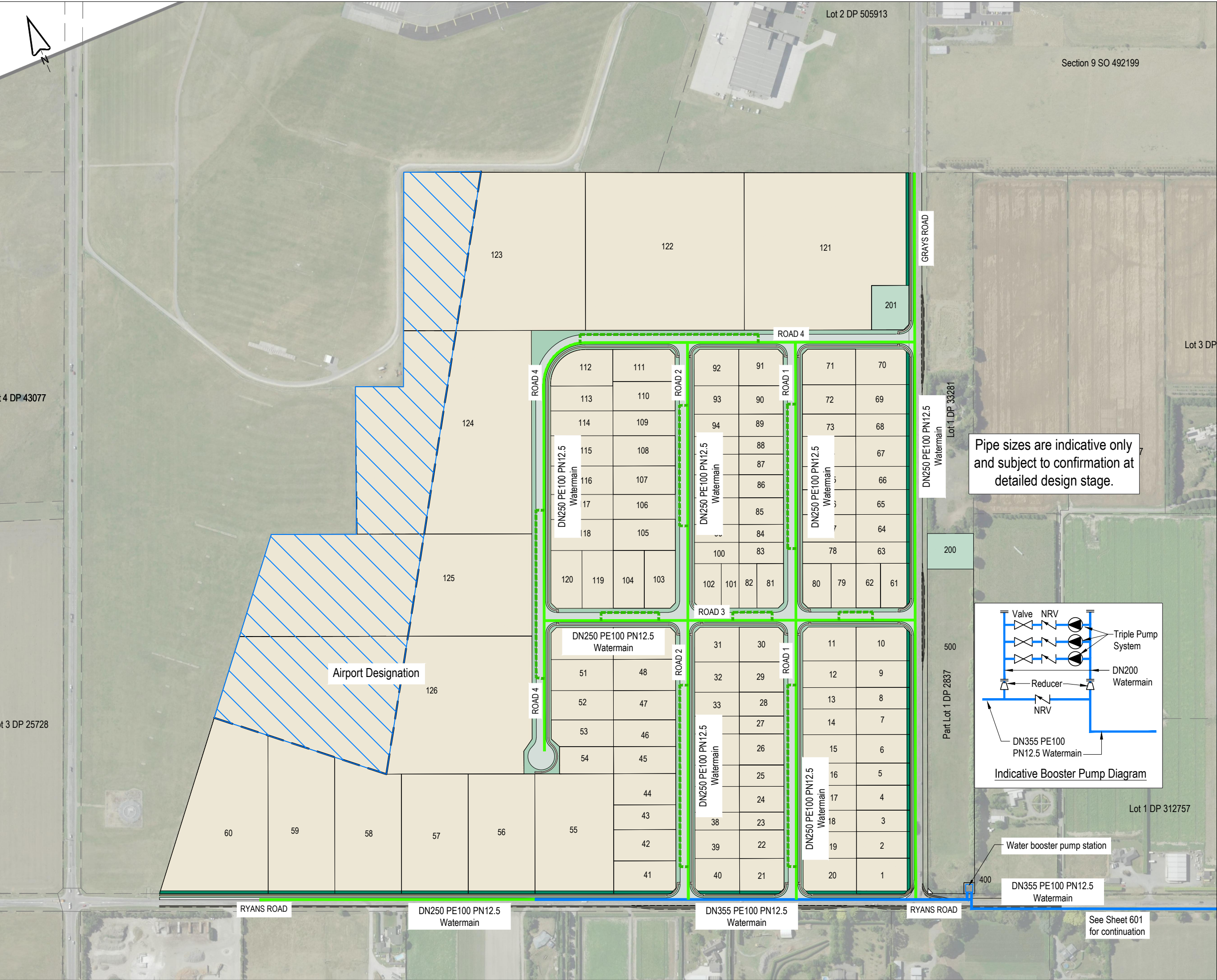
			Base Model		Growth Intensification Model	
Subcatchment	Population increase	Trade flow increase	ASF (l/s)	MF (l/s)	ASF (l/s)	MF (l/s)
Subcatchment9488_1	45.33	0	0.32	1.63	0.41	1.81
merged_WWAccess5006	102.06	0	0.64	8.05	0.83	8.34
merged_WWAccess1547	20.31	0	0.08	0.32	0.11	0.39
merged_WWAccess4872	46.95	0	1.12	2.70	1.18	2.81
merged_WwAccess1889	197.79	0	1.08	4.64	1.4	5.31
merged_WWAccess2257	32.76	0	1.48	4.58	1.56	4.74
merged_WWAccess1554	25.6	0	0.13	0.47	0.17	0.56
merged_WWAccess4998	100.74	0	0.61	5.81	0.81	6.09
merged_WWAccess2703	1.09	0	0.49	4.66	0.49	4.66
merged_WWAccess5127	4.4	0	0.20	1.77	0.21	1.78
merged_WWAccess6531	7.23	0	0.18	1.94	0.19	1.96
merged_WWAccess2748	44.54	0	2.03	6.75	2.17	7.22
merged_WWAccess1908	8.43	0	0.16	2.05	0.17	2.08
merged_WWAccess1907	6.27	0	0.08	0.68	0.09	0.7
merged_WWAccess4907	381.67	0	4.59	11.07	5.08	11.98
merged_WWAccess2772	4	0	1.38	2.49	1.39	2.53
merged_WWAccess4902	81.06	0	0.09	0.91	0.26	1.17
merged_WWAccess4912	36.77	0	0.23	0.64	0.28	0.73
merged_WWAccess4925	37.31	0	0.39	1.35	0.47	1.49
merged_WWAccess4934	45.29	0	0.22	0.88	0.32	1.05
merged_WWAccess24972	45.91	0	0.74	3.35	0.8	3.46
merged_WWAccess3830	1.1	0	0.35	5.42	0.35	5.42
merged_WWAccess5013	27.29	0	0.30	3.60	0.35	3.68
merged_WWAccess3003 2	19.27	0	0.06	0.72	0.1	0.77
merged_WWAccess1454	0.27	0	0.20	1.73	0.2	1.73

			Base Model		Growth Intensification Model	
Subcatchment	Population increase	Trade flow increase	ASF (l/s)	MF (l/s)	ASF (l/s)	MF (l/s)
merged_WWAccess1335	65.36	0	0.28	1.13	0.39	1.35
merged_WWAccess1460	32.64	0	0.50	2.98	0.6	3.06
merged_WWAccess5134	4.09	0	0.14	3.11	0.15	3.12
merged_WWAccess2391	0.26	0	2.51	8.36	2.51	8.36
merged_WWAccess5144	4.86	0	0.13	3.53	0.14	3.54
merged_WWAccess1487	125.82	0	0.55	2.26	0.94	3.08
merged_WWAccess5163	7.7	0	0.23	5.63	0.25	5.66
merged_WWAccess2077	14.16	0	0.42	1.21	0.45	1.26
merged_WWAccess2076	4.1	0	0.33	1.87	0.34	1.89
merged_WWAccess2078	13.6	0	0.52	2.06	0.54	2.11
merged_WWAccess5172	4.24	0	0.24	3.67	0.25	3.69
merged_WWAccess6351	10.21	0	0.35	7.00	0.37	7.03
merged_WWAccess3287	9.08	0	0.66	2.84	0.68	2.88
merged_WWAccess6489	1.79	0	0.07	0.70	0.07	0.7
merged_WWAccess6399	29.48	0	0.20	0.32	0.29	0.5
merged_WWAccess2698	0.23	0	0.09	0.42	0.09	0.42
merged_WWAccess6394	71.34	0	0.14	0.92	0.29	1.15
merged_WWAccess6491	4.42	0	0.13	1.63	0.13	1.64
merged_WWAccess2339	97.63	0	1.75	5.99	1.9	6.3
merged_WWAccess28542	3.41	0	0.11	1.17	0.12	1.17
NWRA3 Trade	0	6.06	–	–	6.06	30.05
MAIL Trade	0	3.41	–	–	3.41	17.45
Riccarton Park Area C+D_trade	0	0.04	–	–	0.04	0.3
CC-Avonhead West	0	0	–	–	0	0
CC-Yaldhurst Block B	238	0	–	–	0.61	3.65

			Base Model		Growth Intensification Model	
Subcatchment	Population increase	Trade flow increase	ASF (l/s)	MF (l/s)	ASF (l/s)	MF (l/s)
CC-Yaldhurst West	154	0	–	–	0.39	2.37
CC- Yaldhurst Block A	68	0	–	–	0.17	1.05
CC-Islington West	333	0	–	–	0.85	5.06
Total	13413	24	166	717	215	914



## **Appendix C: Water Supply Plans and Technical Data**



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NOTES: WATER RETICULATION

1. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH CCC IDS AND CSS PARTS 1-7.
2. MINIMUM CLEARANCE TO OTHER SERVICES TO BE AS PER IDS PART 9: UTILITIES TABLE 1.
3. LOCATION OF EXISTING SERVICES TO BE CONFIRMED BY RELEVANT SERVICE PROVIDERS ON SITE, PRIOR TO UNDERTAKING ANY EXCAVATIONS.
4. MINIMUM COVER FOR MAINS WITHIN CARRIAGEWAY TO BE 750mm, AND TO COMPLY WITH "CODE OF PRACTICE FOR WORKING ON THE ROAD ".
5. ANY LAYING OF PIPE MAINS OR CONNECTIONS TO THE EXISTING COUNCIL WATER RETICULATION SHALL BE MADE BY A CCC AUTHORISED WATER SUPPLY INSTALLER.
6. INDICATIVE PIPE MATERIALS
  - PRINCIPAL MAINS - PE100 PN12.5
  - SUBMAINS - 630D MDPE 80B PN 12.5 (NOT SHOWN)
7. WATER TEES, VALVES, HYDRANTS ETC. TO BE INSTALLED IN ACCORDANCE WITH CCC IDS, CSS AND SNZ PAS 4509:2008 REQUIREMENTS. NOT SHOWN ON PLANS.
8. PIPE SIZING AND BOOSTER PUMP REQUIREMENTS TO BE DETERMINED AT DETAILED ENGINEERING STAGE.

LEGEND:

	DN355mm dia PE100 PN125 WATERMAIN
	DN250mm dia PE100 PN12.5 WATERMAIN
	DN63mm DIA PE100 PN12.5 WATER SUBMAIN

REV	DATE	REVISION DETAILS	ISSUED
A	25/02/25	FOR APPROVAL	TL



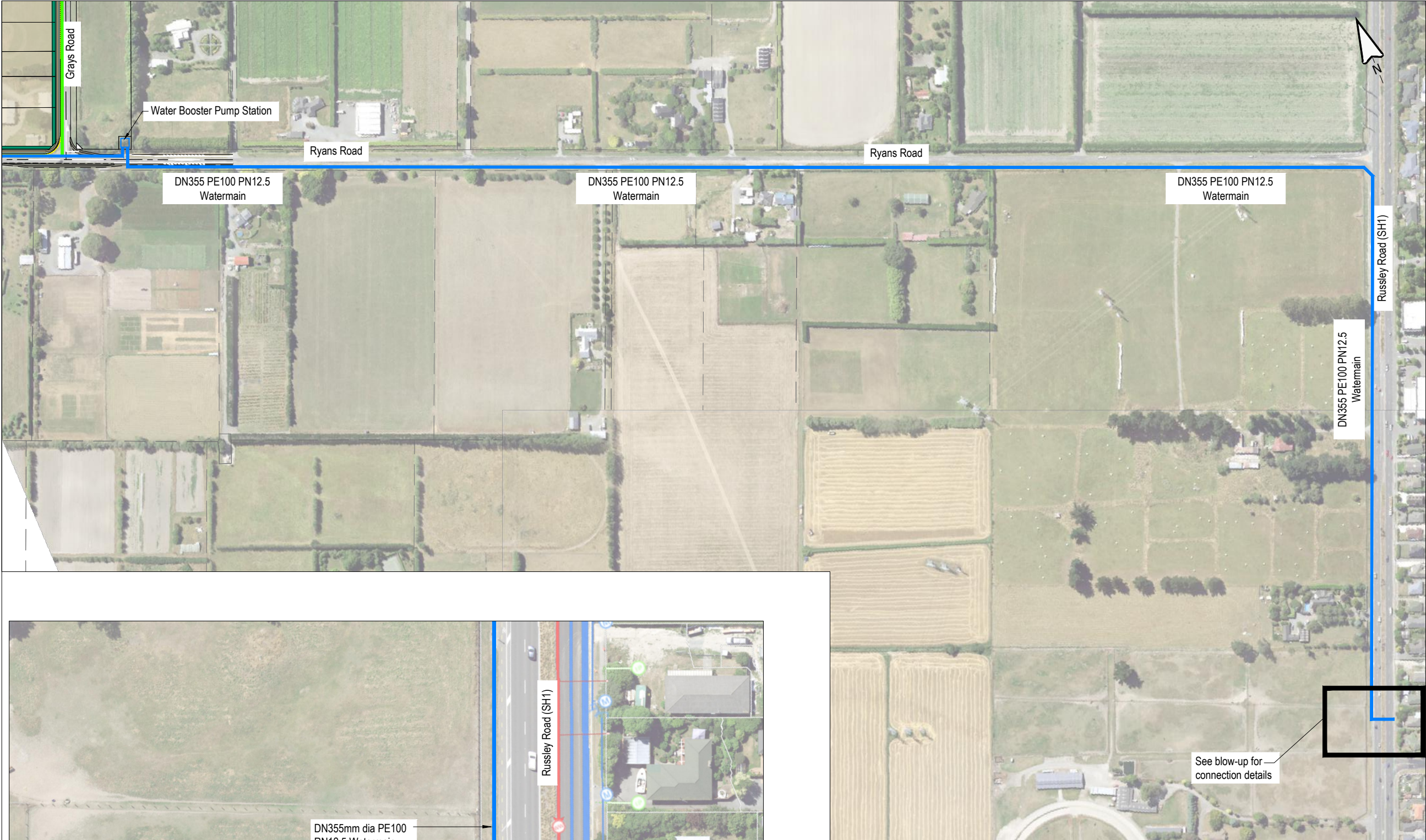
CLIENT  
CARTER GROUP LIMITED

PROJECT  
104 RYANS ROAD, HAREWOOD

DRAWING TITLE  
PROPOSED WATER SERVICING  
(SHEET 1 OF 2)

STATUS	SCALE	SIZE
FOR APPROVAL	1:4000	A3
PROJECT	DRAWING NO	REVISION
1252	RC-WS600	A





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**NOTES: WATER RETICULATION**

- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH CCC IDS AND CSS PARTS 1-7.
- MINIMUM CLEARANCE TO OTHER SERVICES TO BE AS PER IDS PART 9: UTILITIES TABLE 1.
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  - PRINCIPAL MAINS - PE100 PN12.5
  - SUBMAINS - 630D MDPE 80B PN 12.5 (NOT SHOWN)
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- PIPE SIZING AND BOOSTER PUMP REQUIREMENTS TO BE DETERMINED AT DETAILED ENGINEERING STAGE.

**LEGEND:**

- DN355mm dia PE100 PN125 WATERMAIN
- DN250mm dia PE100 PN12.5 WATERMAIN

REV	DATE	REVISION DETAILS	ISSUED
A	25/02/25	FOR APPROVAL	TL

**CAPTURE**  
Land Development Consultants

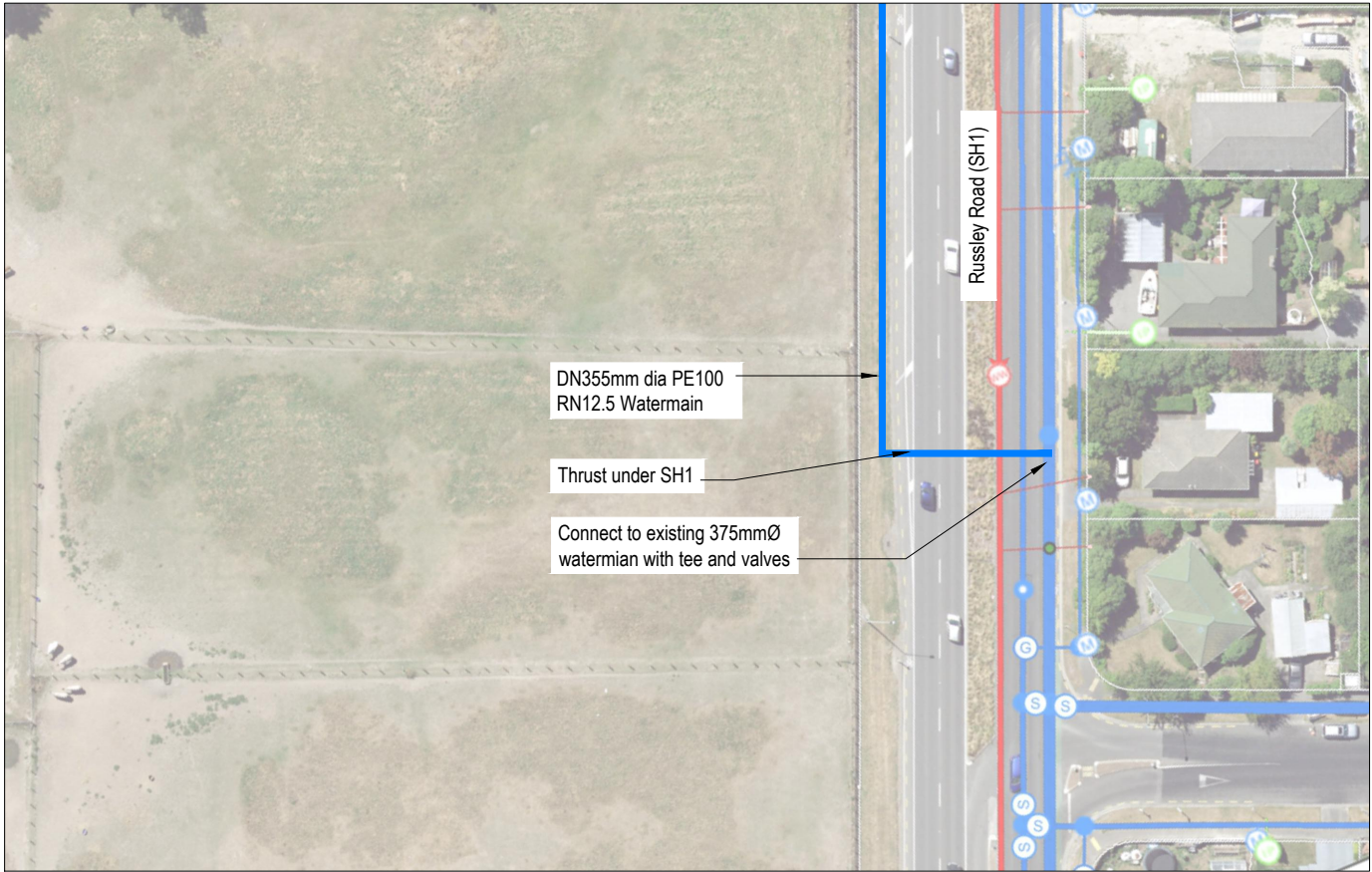
**CLIENT**  
CARTER GROUP LIMITED

**PROJECT**  
104 RYANS ROAD, HAREWOOD

**DRAWING TITLE**  
PROPOSED WATER SERVICING  
(SHEET 2 OF 2)

STATUS	SCALE	SIZE
FOR APPROVAL	AS SHOWN	A3

PROJECT	DRAWING NO	REVISION
1252	RC-WS601	A



See blow-up for connection details

Scale 1:4000 (A3)

Scale 1:1000 (A3)

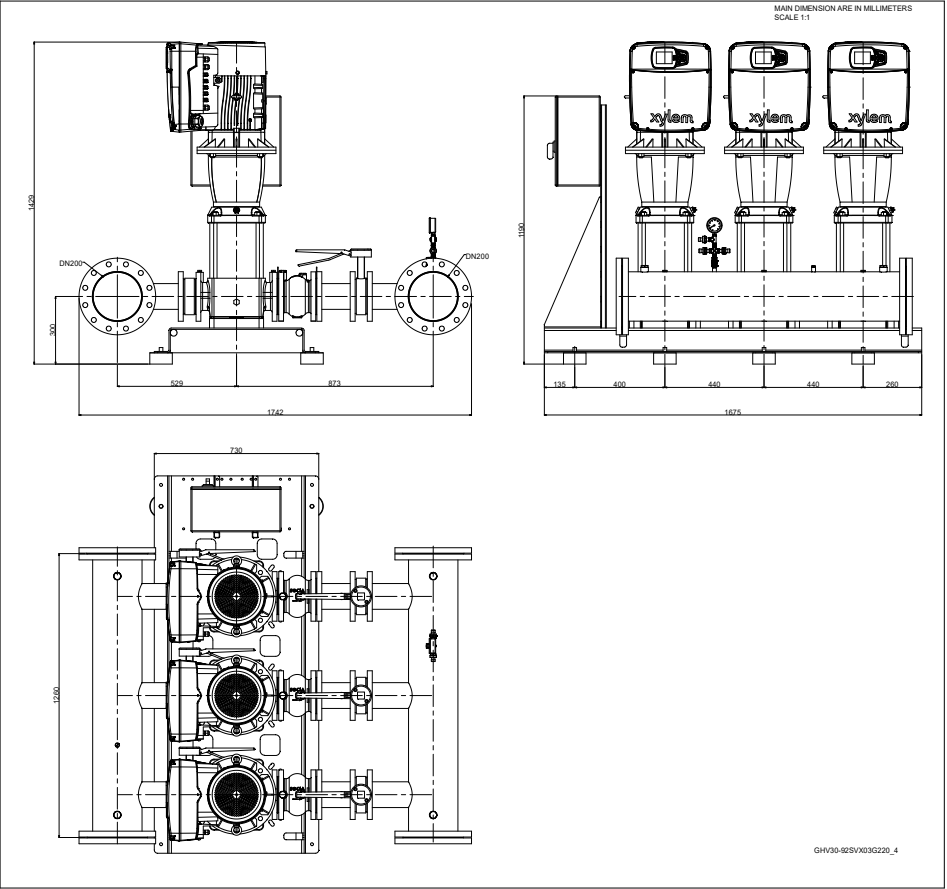


GHV30/92SVX03G220/4

Dimensions

Company name  
Contact  
Phone number  
e-mail address

[X] - Hydrovar X+  
EXM180B5/4.220DH2



Dimensions and weight without obligation

Project		Created by		Last update	
Block	Artikel	Created on	17/01/2025		

## 92SVX03G220PT04QBE

### Technical data

Company name  
Contact  
Phone number  
e-mail address

#### Operating data

1	Pumpe type	vertical		Fluid	Water, pure	
2	No. of pumps		3	Operating temperature t A	°C	4
3	Nominal flow	l/s	100	pH-value at t A		7
4	Nominal head	m	35	Density at t A	kg/dm³	1
5	Static head	m	0	Vapor pressure at t A	kPa	0.789
6	Inlet pressure	kPa	9.8	Kin. viscosity at t A	mm²/s	1.569
7	Environmental temperature	°C	20	Altitude		0
8	Available system NPSH	m	0			

#### Pump data

9	Product version	[X] - Hydrovar X+	
10	Operating speed	2794 rpm	
11	Stages	3	
12	Max. working pressure	kPa	1188.8
13	Head H(Q=0)	m	120
14	Power input P1(max)	kW	71.5
15	Total weight	kg	169.1
16	Power input	kW	20.4
17	Overall efficiency	%	54.4
18	Shaft power	kW	18.8
19	Pump efficiency	%	59
20	NPSH 3%	m	8.3
21			

#### Materials

22		Pump			Shaft Seal
23	Pump body	Cast iron		Mechanical seal	
24	Lower support	Cast iron		Uniten (-30 / +120 °C)	
25	Impeller	Stainless steel / AISI 316L			
26	Diffuser	Stainless steel / AISI 304		1 - Rotating part	Silicon Carbide
27	Outer sleeve	Stainless steel / AISI 304		2 - Stationary part	Resin impregnated carbon
28	Shaft	Stainless steel / AISI 431		3 - Elastomers	EPDM
29	Adapter	Cast iron		4 - Springs	AISI 316
30	Wear ring	Technopolymer PPS		5 - Other components	AISI 316
31	Coupling	Cast iron			
32	Upper head	Cast iron			
33	SEAL HOUSING	Cast iron			
34	Coupling protection	Stainless steel / AISI 304			
35	Shaft sleeve and bushing	Tungsten carbide			
36	Bushing for diffuser	Carbon			
37	Fill / drain plugs	Stainless steel / AISI 316			
38	Tie rods	Galvanized steel			
39					
40					
41					

#### Motor data

42	Manufacturer	Xylem	Rated voltage	380-480V
43	Specific design	IE5 Three phase motor	Rated current	38,9-32,4 A
44	Type	EXM180B5/4.220DH2	Motor efficiency @400V %	4/4: 92.6 3/4: 92.1 2/4: 91
45	Rated power	22 kW	Power factor @400V	0.93
46	Nominal speed	3600 rpm	Weight	kg 82.1
47	Frame size	180		
48	Size	D		

#### Remarks

49	
50	
50	
52	



## 92SVX03G220PT04QBE

### Performance curve

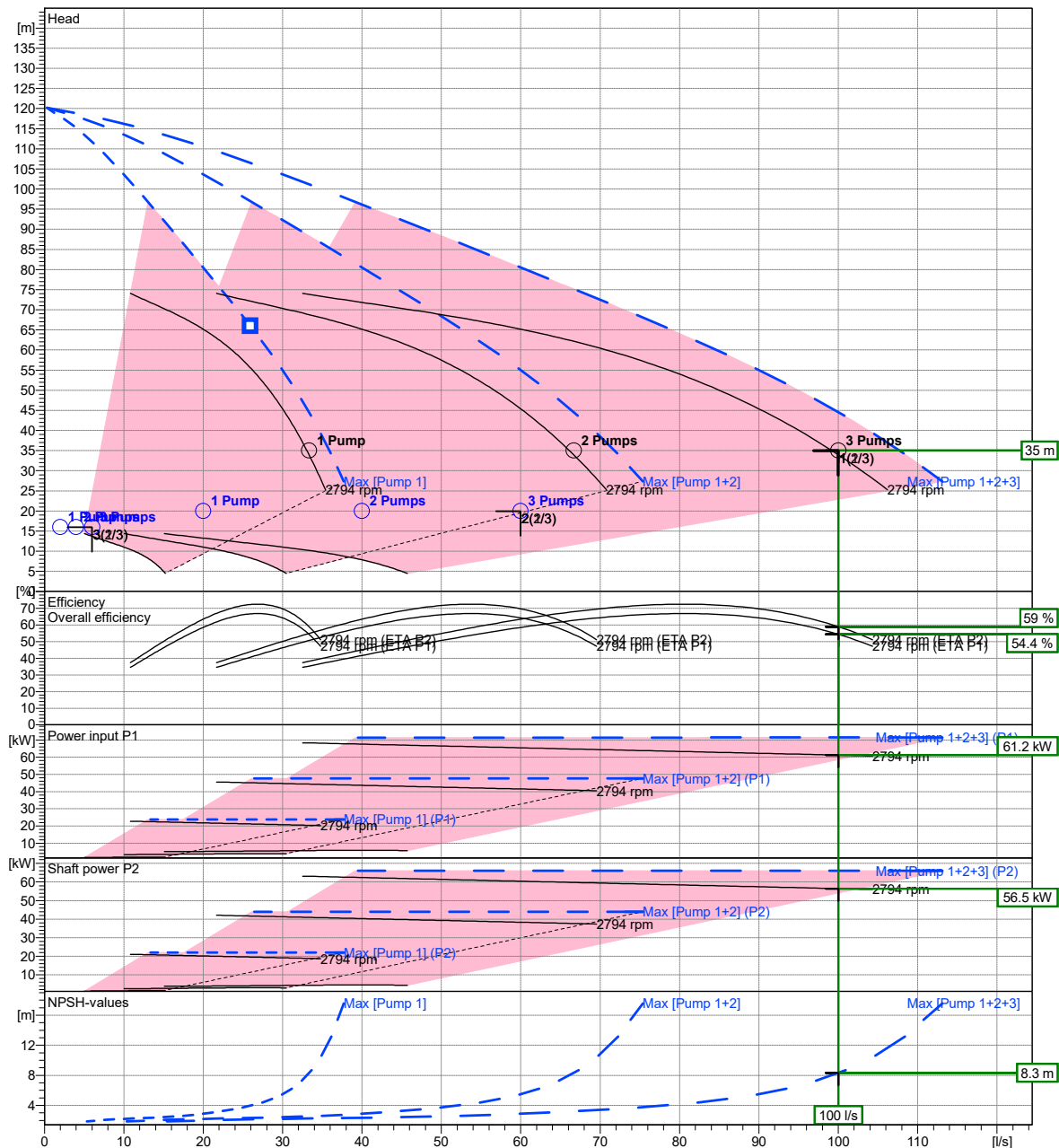
Company name  
Contact  
Phone number  
e-mail address

Ø	Pump capacity			Pump head		Frequency	Hz	50/60
	Operating range	Min.	Max.	H(Q=0)	η Max.			
	l/s	l/s	l/s	m	m			
Max.	13.1	37.7	25.9	120	66.1			
						Operating speed	rpm	2794
						Nominal flow	l/s	100
						Nominal head	m	35
						Inlet pressure	kPa	9.8
						Static head	m	0

#### Power datas referred to:

hydr. Performance acceptance acc. To EN ISO 9906 Class

Water, pure [100%]; 4°C; 1kg/dm³; 1.57mm²/s

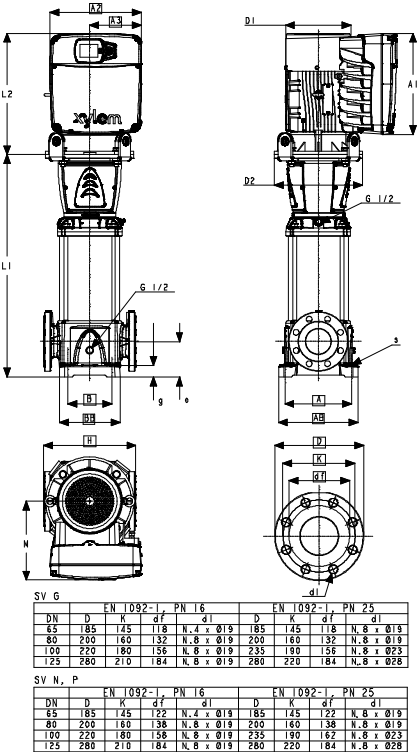


92SVX03G220PT04QBE

Dimensions

Company name  
Contact  
Phone number  
e-mail address

[X] - Hydrovar X+  
EXM180B5/4.220DH2



Dimensions		[ mm ]
A	265	
A1	400	
A2	205	
A3	362	
AB	315	
B	190	
BB	240	
D1	260	
D2	350	
DN	100	
e	140	
g	45	
H	365	
L1	789	
L2	480	
M	312	
s	4xØ15	

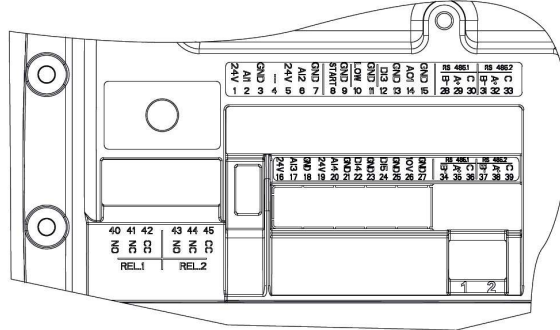
Weight	
Total weight	169.1 kg

Dimensions and weight without obligation

Project		Created by		Last update	
Block	Artikel	Created on	17/01/2025		

Technical data

Company name  
Contact  
Phone number  
e-mail address



REF.	ITEM	DESCRIPTION	DEFAULT
1	Analog Input 1	Power supply +24 VDC, max. 60mA (total, terminals 1 + 5)	Pressure Sensor 1
2		Configurable Analog Input 1	
3		Electronic GND	
4	Not used	Internal use - Do not connect	
5	Analog Input 2	Power supply +24 VDC, max. 60mA (total, terminals 1 + 5)	Not used
6		Configurable Analog Input 2	
7		Electronic GND	
8	External Start/Stop	Start/Stop digital input, +24 VDC internal pull-up, 6mA contact current	-
9		Electronic GND	
10	External Lack of Water	Low water digital input, +24 VDC internal pull-up, 6mA contact current	-
11		Electronic GND	
12	Digital Input 3	Configurable Digital Input 3, +24 VDC internal pull-up, 6mA contact current	Solo Run
13		Electronic GND	
14	Analog Output	Configurable Analog Output	Motor Speed
15		Electronic GND	
16	Analog Input 3	Power supply +24 VDC, max. 60mA (total, terminals 16 and 19)	Not used
17		Configurable Analog Input 3	
18		Electronic GND	
19	Analog Input 4	Power supply +24 VDC, max. 60mA (total, terminals 16 and 19)	Not used
20		Configurable Analog Input 4	
21		Electronic GND	
22	Digital Input 4	Configurable Digital Input 4, +24 VDC internal pull-up, 6mA contact current	Not used
23		Electronic GND	
24	Digital Input 5	Configurable Digital Input 5, +24 VDC internal pull-up, 6mA contact current	Not used
25		Electronic GND	
26	10 VDC supply	Power supply +10 VDC, max. 3mA	-
27		Electronic GND	
28	Communication bus 1	RS485 port 1: RS485-1B N (-)	Multipump
29		RS485 port 1: RS485-1A P (+)	
30		RS485 port 1: RS485-COM	
31	Communication bus 2	RS485 port 2: RS485-2B N (-)	Modbus
32		RS485 port 2: RS485-2A P (+)	
33		RS485 port 2: RS485-COM	
34	Communication bus 1	RS485 port 1: RS485-1B N (-)	Multipump
35		RS485 port 1: RS485-1A P (+)	
36		RS485 port 1: RS485-COM	
37	Communication bus 2	RS485 port 2: RS485-2B N (-)	Modbus
38		RS485 port 2: RS485-2A P (+)	
39		RS485 port 2: RS485-COM	
40	Relay 1	Configurable relay 1: Normally Open	Running
41		Configurable relay 1: Normally Closed	
42		Configurable relay 1: Common Contact	
43	Relay 2	Configurable relay 2: Normally Open	Error
44		Configurable relay 2: Normally Closed	
45		Configurable relay 2: Common Contact	

## **Appendix D: Water Supply Modelling Report**

Christchurch City Council

# RYANS ROAD INDUSTRIAL PARK - DEVELOPMENT WATER SUPPLY MODELLING ASSESSMENT

3-CHDM1.06

CONFIDENTIAL







RYANS ROAD INDUSTRIAL PARK DEVELOPMENT  
WATER SUPPLY ASSESSMENT

Christchurch City Council

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Christchurch  
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Christchurch, 8011  
New Zealand  
+64 3 363 5570  
wsp.com/nz

REV	DATE	DETAILS
1.0	09/01/2025	Report for client review
1.1	15/01/2025	Final

	NAME	DATE	SIGNATURE
Prepared by:	Dan Johnson	15/01/2025	D. Johnson
Reviewed by:	Gail Cooper	15/01/2025	G. Cooper
Approved by:	Sue Harrison	15/01/2025	S. Harrison

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# EXECUTIVE SUMMARY

WSP has carried out a water supply development assessment for the proposed industrial development park at 104 Ryans Road. The purpose of this assessment was to investigate if the development meets the Level of Services (LoS) criteria and fire flow requirements.

The following scenarios have been conducted in this assessment:

MODEL	SCENARIO	DESCRIPTION
Base Model	LoS assessment	The network was tested for minimum pressure and maximum headloss criteria.
Base Model + Proposed Development at Ryans Road	LoS assessment	The network was tested for minimum pressure and maximum headloss criteria for a connection at Russley Road, from the Northwest Zone and the West Zone.
	FW3 fire flow assessment	Two to three hydrants were tested for available fire flow against FW3 fire flow criteria.

The results of the modelling assessment are summarised in the table below.

MODEL	SCENARIO	SUMMARY
Base Model	LoS assessment Pass	Minimum pressure and maximum headloss and velocity criteria are generally met.
Base Model + Proposed Development at Ryans Road	LoS assessment Fail	<p>Pressure LoS is not met at the Ryans Road industrial park development, with a minimum pressure of less than 25 m at the elevated areas of the site, with a connection from the Northwest Zone.</p> <p>The network pressure is less than 25 m across the entire development, based on a connection from the West Zone.</p> <p>Therefore, the development fails to meet the LoS performance criteria, due to the minimum pressure at the boundary not being achieved.</p>
	FW3 fire flow assessment Pass	<p>Hydrants can maintain a minimum residual pressure of 10 m at the required fire flow based on a connection from the Northwest Zone.</p> <p>The West Zone supply will not meet the FW3 fire flow requirements.</p>

MODEL	SCENARIO	SUMMARY
	Maximum available fire flow	The maximum available fire flow to the site is 50 L/s, or FW3 based on the current network with a connection from the Northwest Zone.

In summary, the existing water supply network cannot service the Ryans Road Industrial Park Development without a localised booster pump to address low pressure in the elevated areas of the development site. FW3 fire flow requirements are met based on the current network infrastructure.

It is recommended that the development is supplied from the Northwest Zone, subject to pressure LoS design criteria being met.

# 1 PROJECT BACKGROUND

## 1.1 INTRODUCTION

Christchurch City Council (Council) engaged WSP to carry out a demand and fire flow assessment of a proposed industrial park development located at 104 Ryans Road.

The proposed development contains 129 industrial sites with a peak demand of 60 L/s within a total area of approximately 56 ha. An overview of the proposed development and water supply network is shown in Figure 1-1.

The proposed development can be serviced from the Northwest Zone via an existing connection off the DN 375 main in Russley Road (SH1), or from the West Zone via the DN 300 pipe in Russley Road (SH1) which terminates adjacent to Avonhead Station (there is a closed boundary valve separating the West and North West networks).

Figure 1-2 shows the proposed connection points to the existing water supply network.



Figure 1-1: Layout of the Ryans Road industrial park development



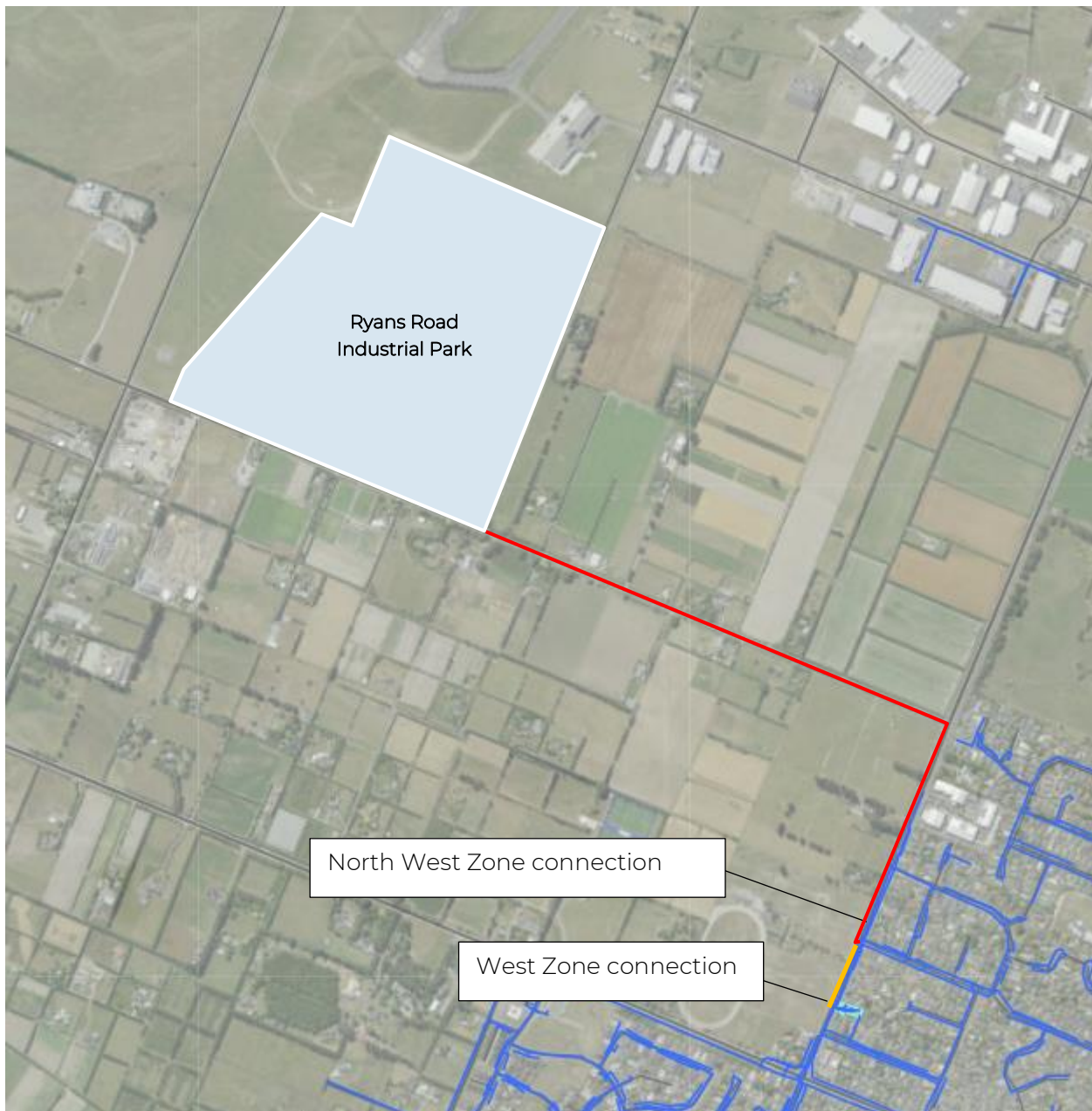


Figure 1-2: Location of the Ryans Road industrial development and supply connection points

## 1.2 OBJECTIVES

The objective of this study is to assess the Level of Services (LoS) and available fire flow to the proposed industrial network and to review the available source capacity versus demand.

Fire flow assessments for FW2 (25 L/s) and FW3 (50 L/s) are to be carried out to determine the available fire flow to hydrants within the development, as per the New Zealand Fire Service Code of Practice (CoP).

The locations of the hydrants within the proposed industrial park developments are currently not available. Therefore, for this assessment, we have allocated hydrants to the proposed network

based on the Road Layout. This is to measure the available fire flow to the proposed Ryans Road industrial park development. Hydrant elevations have been assigned in line with the Lidar data provided.

## 2 INFORMATION / DATA PROVIDED TO THE CONSULTANT

This section summarises the information received from the Council and the assumptions applied for this assessment.

### 2.1 PROPOSED INDUSTRIAL PARK DEMANDS

A summary of information related to the proposed industrial park development site received from the Council and the developer's Consultant (PDP) is shown in Table 2-1.

No growth scenarios or additional growth outside the master plan has been included in this modelling assessment.

Table 2-1: Summary of proposed industrial park demand

DEVELOPMENT	DEMAND CATEGORY	BUSINESS SITES	PEAK DEMAND (L/s)	WATER SUPPLY SOURCE
Ryans Road Industrial Park Development	Commercial-10 Hours	0.46 L/s x 129	60	Avonhead WS PS

### 2.2 PERFORMANCE CRITERIA

The following performance criteria were used for the hydraulic assessment:

- **Level of Service (LoS) – Minimum pressure:** 250 kPa (25 m) pressure at boundary of industrial connection (IDS – Part 7: Table 2).
- **Pipe Performance** – Maximum pipe headloss of 10 m/km under normal conditions and maximum pipe headloss of 5 m/km for trunk mains; and maximum velocity  $\leq 1.5$  m/s for normal conditions,  $< 3.0$  m/s for emergency conditions.
- **Fire Flow Assessment New Zealand Fire Service Code of Practice** - SNZ PAS 4509:2008 and subsequent amendments, to the satisfaction of the New Zealand Fire Service. Table 2-2 lists the minimum fire flow requirements for the development sites.

Table 2-2: Fire flow requirements as per Fire Fighting Water Supply Code of Practice

CODE	DESCRIPTION	MAX. NUMBER OF HYDRANTS TO PROVIDE FLOW	REQUIREMENTS	
			Required Fire Flow (L/s)	Residual Pressure at Required Fire Flow (m)
FW2	Industrial + sprinkler/storage	2	25	10
FW3	Industrial	3	50	10

---

## 2.3 ASSUMPTIONS, UNCERTAINTIES, AND LIMITATIONS

The following assumptions have been applied for this modelling assessment:

### 2.3.1 GENERAL

- WSP has used the InfoWorks WS Pro 2020 peak day demand (PDD) model version 2024.5.2 for this assessment:
  - Model Name: CCC Peak Day Demand Model:
    - Network: Peak Day Model – Ryans Road - Network
    - Control: Peak Day Model – Ryans Road - Control
    - Demand Diagram: Peak Day Demand 02/02/2020
  - Scenarios:
    - Base: 2020 Peak Day
    - Ryans Road – NW Zone Connection
    - Ryans Road – West Zone Connection
- Run Files: Ryans Road Scenarios - Run Group

### 2.3.2 SCENARIO SPECIFIC

- WSP has used elevation data from Lidar contours to allocate ground levels to the proposed development. Elevations in the model are to Christchurch Drainage Datum.
- Modelled demand is based on the 2020 Peak Day Demand.
- No allowance for additional growth or developments within the localised area, or the Northwest and West water supply zones.

# 3 MODELLING ASSESSMENT

## 3.1 STATION PLANNING CAPACITY

Council's water supply master plan (2023) has identified the need for additional wells and pumps to support future growth based on the existing growth projections. The Northwest and West Zones have limited well/pump capacity to accommodate further growth that has not previously been identified within the master plan.

New wells/pumps will be required to service new development areas outside of the current master plan. The increase in household densities and intensification requires detailed assessment to confirm the staging of infrastructure to service future growth and meet the timing of new developments.

The network pressures for Avonhead Station (Northwest Zone) and Denton Station (West Zone) are presented in Figure 3-1.

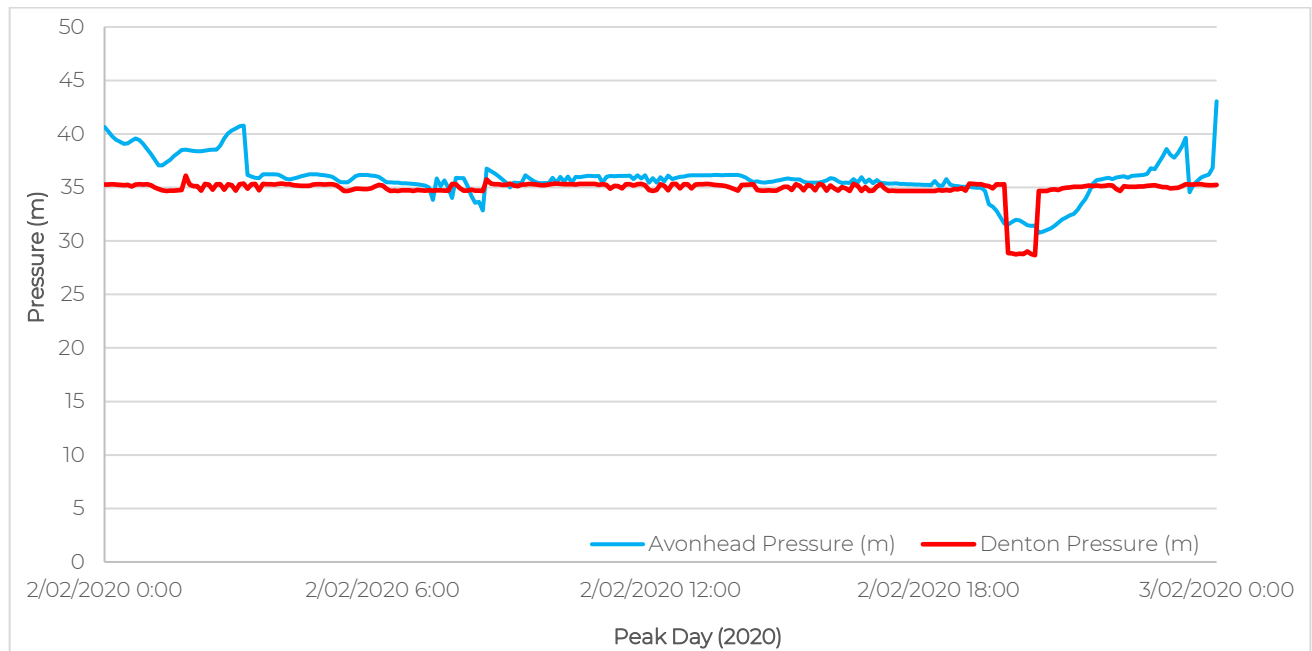


Figure 3-1: Avonhead Station and Denton Station network pressures

## 3.2 BASE MODEL RESULTS

This section presents the base model outcomes of the network before adding the proposed industrial demand. Figure 3-2 shows the minimum pressure and maximum unit headloss results in the base model.



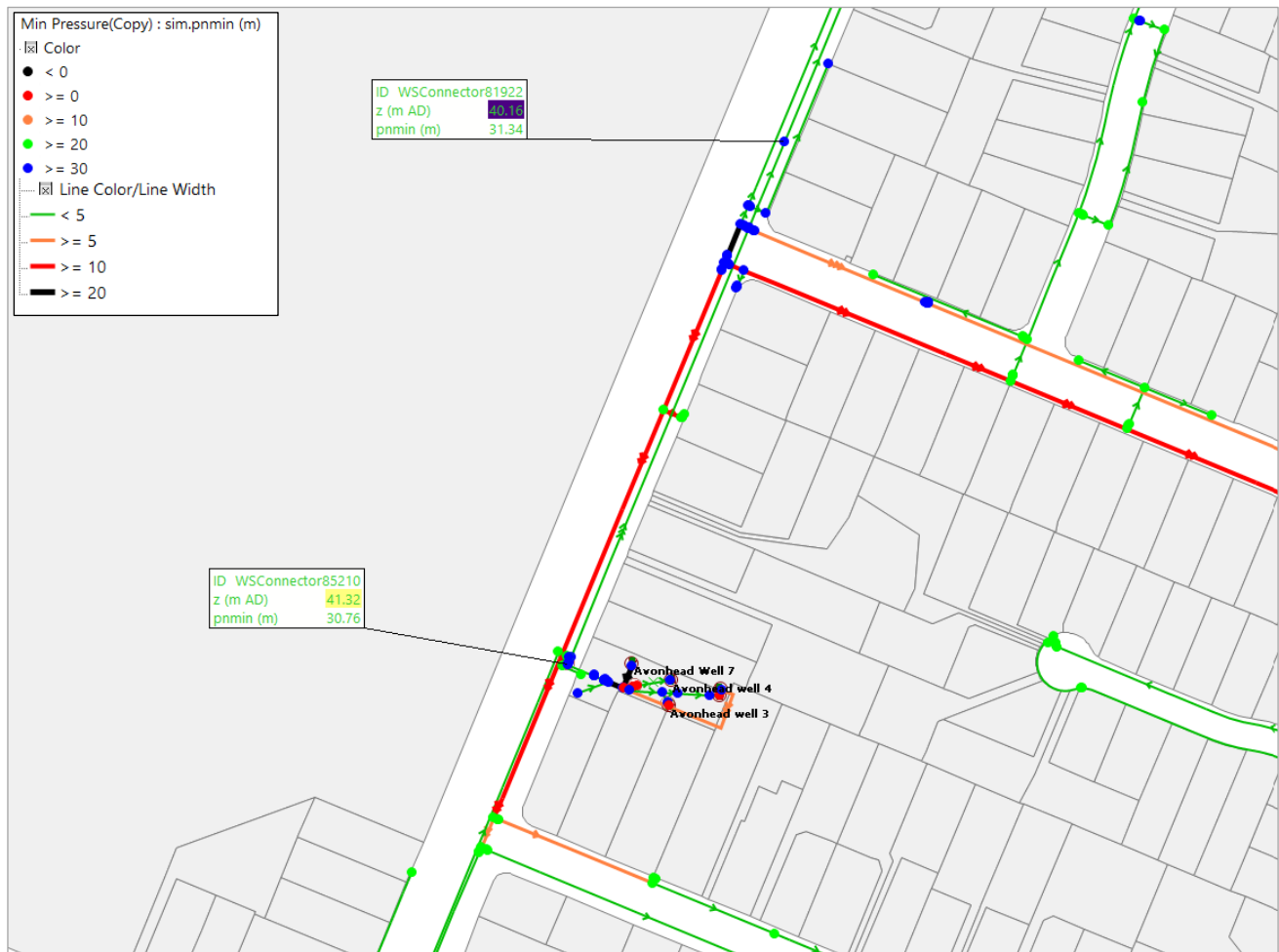


Figure 3-2: LoS results of the base model

As shown in Figure 3-2 and Figure 3-3, the minimum and average pressure in the existing water supply network at the proposed connection points on Russley Road from:

- The Northwest Zone minimum pressure is 31 m, and the average pressure is 37 m
- The West Zone minimum pressure is 31 m, and the average pressure is 35 m

The model indicates that the existing trunk mains that would service the new development have available capacity based on current peak day demand, however, this does not consider future growth identified in the master plan.

The model predicts maximum unit headloss exceeding 10 m/km in the local reticulation around Avonhead Station.

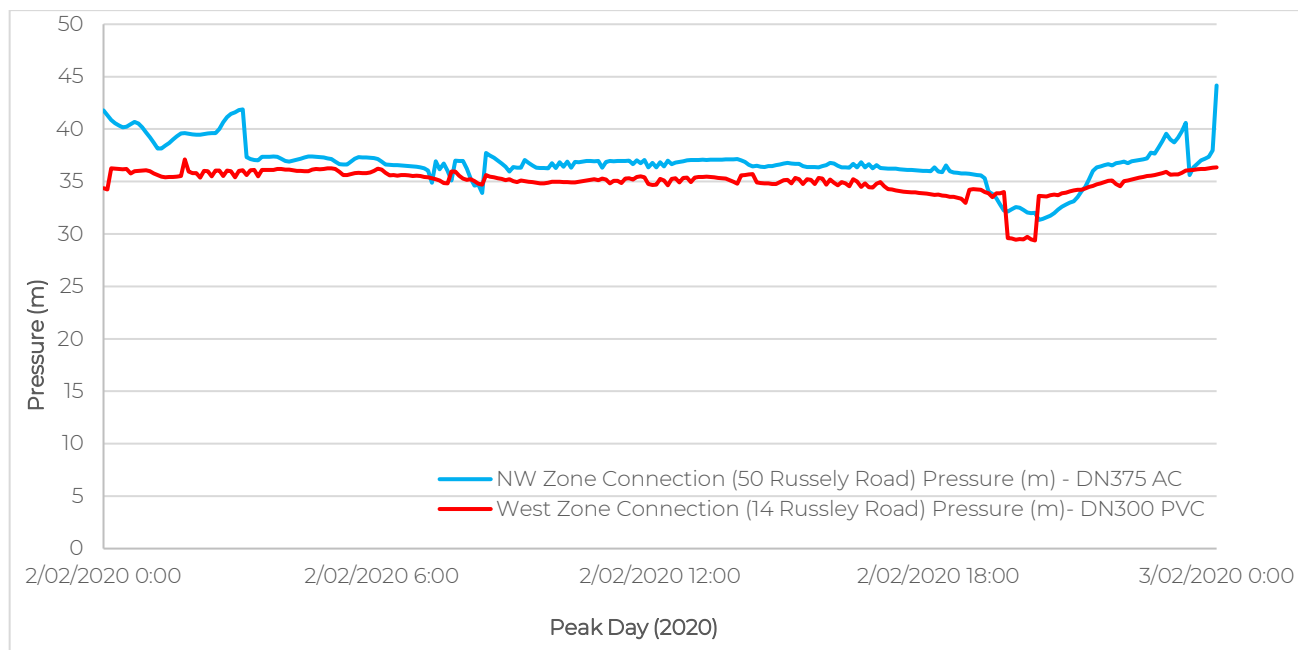


Figure 3-3: Proposed connection points to service the Ryans Road Industrial Development

### 3.3 RYANS ROAD INDUSTRIAL PARK DEVELOPMENT

This section discusses the modelling results after adding the demands of the proposed Ryans Road industrial park development to the base model.

The proposed industrial peak demand of 60 L/s for the 129 industrial blocks was added to the base model. The supply pressure to the development based on a connection from the Northwest Zone is shown in Figure 3-4 and from the West Zone in Figure 3-7.

A DN 355 PE100 PN 12.5 has been modelled to supply the development and restrict headlosses to 2 m/km and to maximise the available pressure to the site. For the reticulation within the development, DN 250 PE100 PN 12.5 has been modelled based on CCC's IDS Part 7 Table 3: Minimum size of the principal main.



Figure 3-4: Northwest Zone Supply - LoS with the proposed Ryans Road industrial development demand

To service the development from the Northwest Zone, additional wells/pumps have been turned on at Crosbie and Burnside Stations.

The modelled pressure within the development from the Northwest Zone ranges from 23 – 26 m, as shown in Figure 3-4. Where the pressure is less than 25 m this does not meet the design parameters minimum residual pressure at the boundary. Due to the elevation of the site, pressure in the north-west of the site does not achieve the minimum pressure criteria. Pipe headlosses within the development range from 0.4 to 4 m/km and meet the headloss performance criteria.

The increase in pipe headloss in the local reticulation around Avonhead PS is minimal, and pipe headloss remains below 5 m/km in the DN 375 main in Russley Road.

The modelled pressure at the critical point (highest elevation within the site) is shown in Figure 3-5.

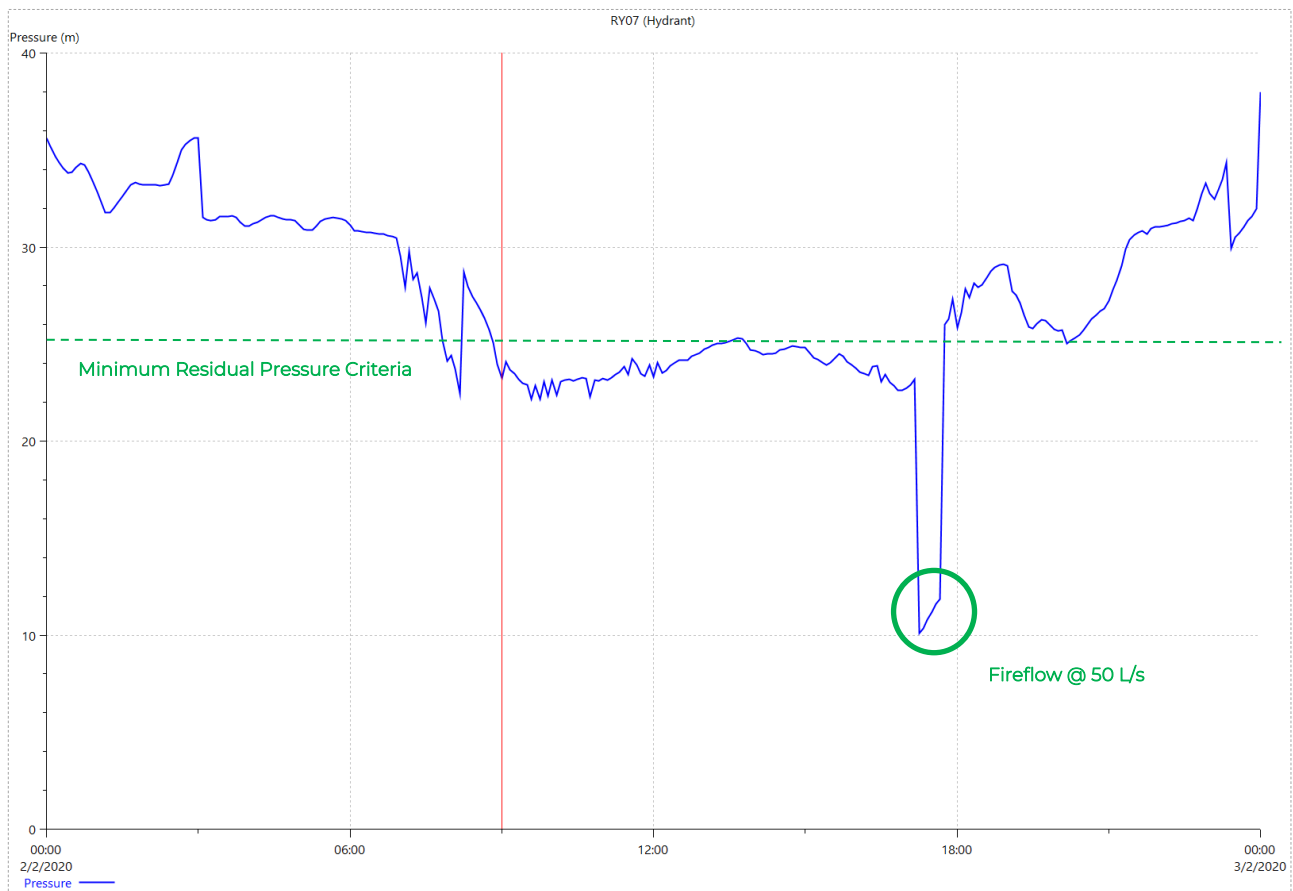


Figure 3-5: Northwest Zone Supply – Critical Point LoS

To service the development from the West Zone, additional wells/pumps have been turned on at the Denton Station.

The modelled pressure within the development from the West Zone ranges from 18 – 21 m, as shown in Figure 3-7. The pressure is less than 25 m and therefore does not meet the design parameters - minimum residual pressure at the boundary. Due to the elevation of the site, and the delivery pressure from the West Zone, the minimum pressure criteria is not met. Pipe headlosses within the development range from 0.4 to 4 m/km and meet the headloss performance criteria.

The pipe headloss issue in the local reticulation around Avonhead PS does not change. However headloss > 5m/km and velocities close to and > 1.5 m/s are predicted in the pipework downstream of the Denton suction tank and pump station (see Figure 3-6).

The pipe headloss issue in the local reticulation around Avonhead PS does not change. However headloss > 5m/km and velocities close to / > 1.5 m/s is predicted in the pipework downstream of the Denton suction tank and pump station (see Figure 3-6).

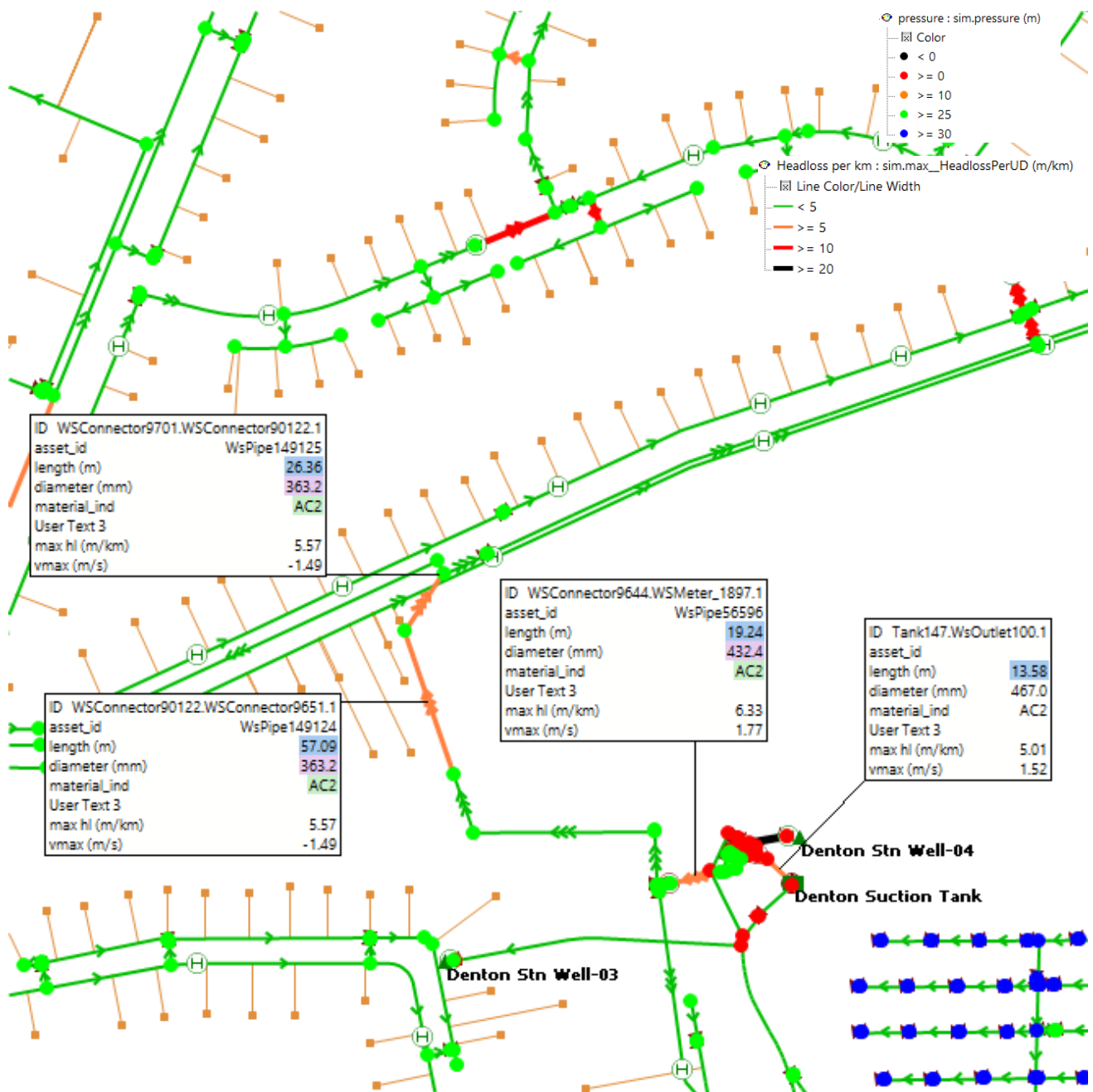


Figure 3-6: Pipe headloss > 5 m/km and velocity > 1.5 m/s in pipework at Denton Station

The modelled pressure at the critical point (highest elevation within the site) is shown in Figure 3-8.





Figure 3-7: West Zone Supply - LoS with the proposed Ryans Road industrial development demand

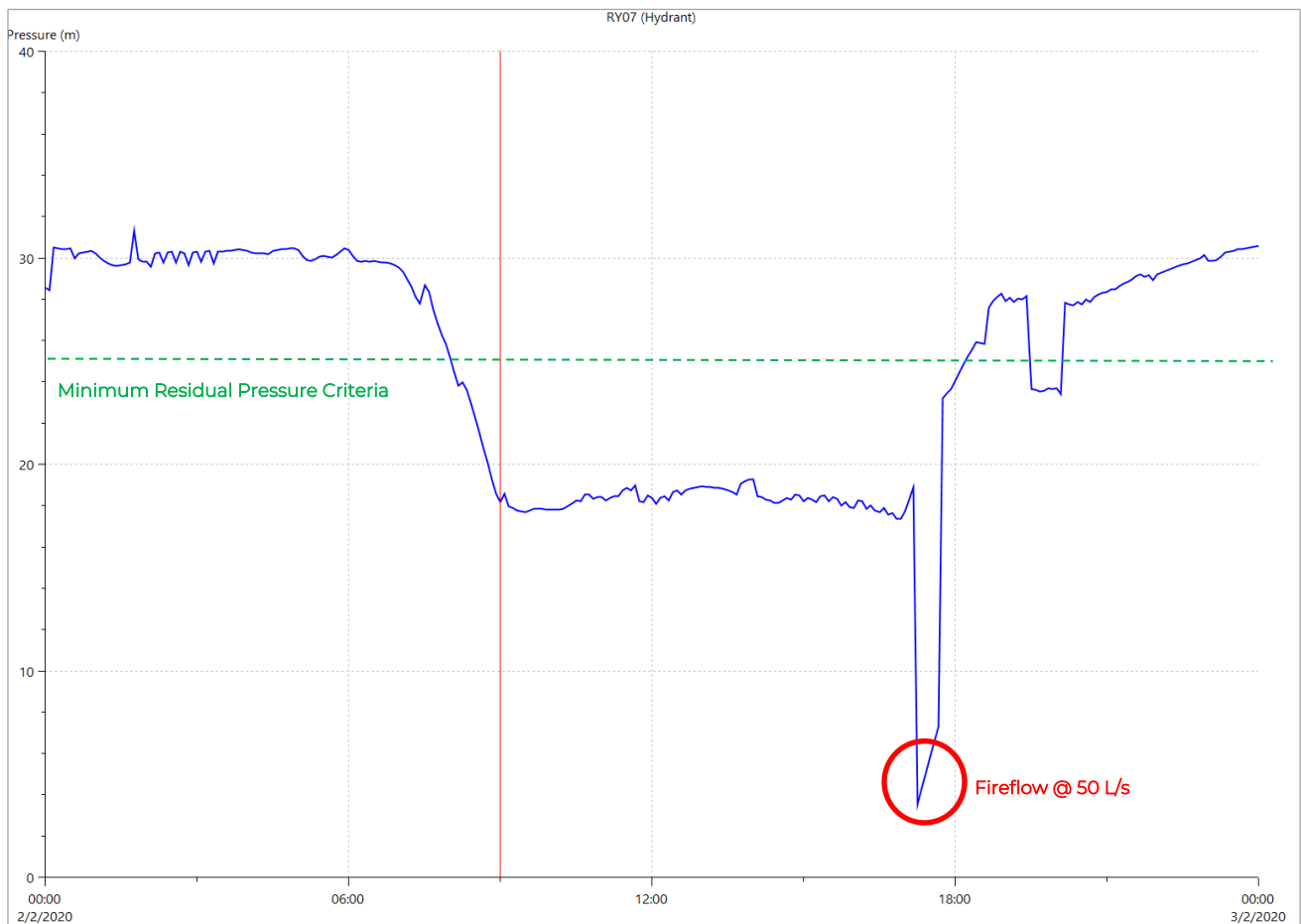


Figure 3-8: West Zone Supply – Critical Point LoS

The recommended service connection to the development is from the Northwest Zone via the Russley Road DN 375 AC main. The minimum pressure to the Ryans Road industrial development cannot be achieved for the entire site without additional boosting or reducing the LoS criteria for the site.

### 3.3.1 FIRE FLOW ASSESSMENT

Fire flow tests were run to investigate the available fire flow to the proposed Ryans Road industrial development.

An FW3 (50 L/s) fire flow assessment was modelled following the CoP to determine the available fire flow for the development site. Hydrants were applied to the model within the Ryans Road ring main for the fire flow assessment. No hydrant location information was provided for the development of the existing network.

An exceptional flow of 25 L/s was allocated to two hydrants for 30 minutes at the 60% peak day demand, to supply a total flow of 50 L/s. The fire flow results are summarised in Table 3-1 and Table 3-2.

For the Northwest Zone connection the two selected hydrants can achieve a residual pressure greater than 10 m when providing 50 L/s, therefore they will meet the FW3 fire flow criteria.

Table 3-1: Summary of fire flow results – Northwest Zone

HYDRANT	FIRE FLOW ACHIEVED (L/S)	RESIDUAL PRESSURE AT REQUIRED FIRE FLOW (M)	GROUND ELEVATION (M)
1 – Ry07	25	10.5	45.9
2- RY13	25	11.7	44.9

As shown in Table 3-2 for the West Zone connection the two selected hydrants are not able to meet a residual pressure greater than 10 m when providing 50 L/s, therefore they do not meet the FW3 fire flow criteria.

Table 3-2: Summary of fire flow results – West Zone

HYDRANT	FIRE FLOW ACHIEVED (L/S)	RESIDUAL PRESSURE AT REQUIRED FIRE FLOW (M)	GROUND ELEVATION (M)
1 – Ry07	25	3.5	45.9
2- RY13	25	7.1	44.9

In summary, the available fire flow to the proposed Ryans Road industrial development site does meet the FW3 criteria based on a connection from the Northwest zone. To supply from the West Zone and achieve the FW3 fire flow criteria, additional boosting at the development would be required.

An FW2 fire flow assessment has not been carried out as the FW3 rating can be achieved based on the Northwest Zone connection only.

# 4 CONCLUSIONS AND RECOMMENDATIONS

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## 4.1 CONCLUSIONS

Council engaged WSP on behalf of the plan change applicant to carry out a modelling assessment for the proposed industrial development on Ryans Road. The key findings from this modelling assessment are summarised below.

- The base scenario (current peak day demand - 2020) was carried out for the existing Northwest and West Zones. The existing localised area maintained a minimum pressure between 30-40 m.
- Parts of the existing pipe network around Avonhead PS does not meet the headloss or velocity criteria for the base scenario. However, the impact of the additional demand from the Ryans Road development is negligible.
- The proposed development peak demand of 60 L/s was added to the base model to investigate the LoS results:
  - For the Northwest Zone connection - the minimum pressure criteria were not met, with the pressure less than 25 m at the elevated areas of the site, and the modelled pressure varies between 23-26 m.
  - For the West Zone connection - the minimum pressure criteria were not met, with the pressure less than 25 m across the entire site, and the modelled pressure varies between 18-21 m.
- Fire flow model runs were carried out to determine the available fire flow to the proposed industrial development site on Ryans Road:
  - FW3 criteria can be achieved as the selected hydrants were able to provide 50 L/s and maintain a residual pressure of 10 m at the hydrant and the surrounding network based on the Northwest zone connection.
  - FW3 cannot be achieved via a connection from the West Zone without boosting the network pressure.
- This modelling assessment does not consider the planned growth identified in the master plan. Therefore new wells/pumps will be required to service this development area, in addition to those already proposed in the current master plan.

---

## 4.2 RECOMMENDATIONS

The following recommendations are made:

- Investigate options to increase network pressure to the development to meet the LoS design criteria. This could include a localised booster station at the development or to the elevated areas of the site. Other options that could be considered are:

- A reduced LoS, in agreement with the Council. This may not be a viable option when considering backflow prevention, and the likelihood of low pressure on the customer side.
- Increasing the zonal network pressure. This may not be achievable at an operational level, as this would require all Stations in the Northwest Zone to operate with an increased outlet pressure.
- Consider the option to supply directly from the Christchurch Airport which may allow LoS design criteria to be met without additional upgrades to increase network pressure to the development.



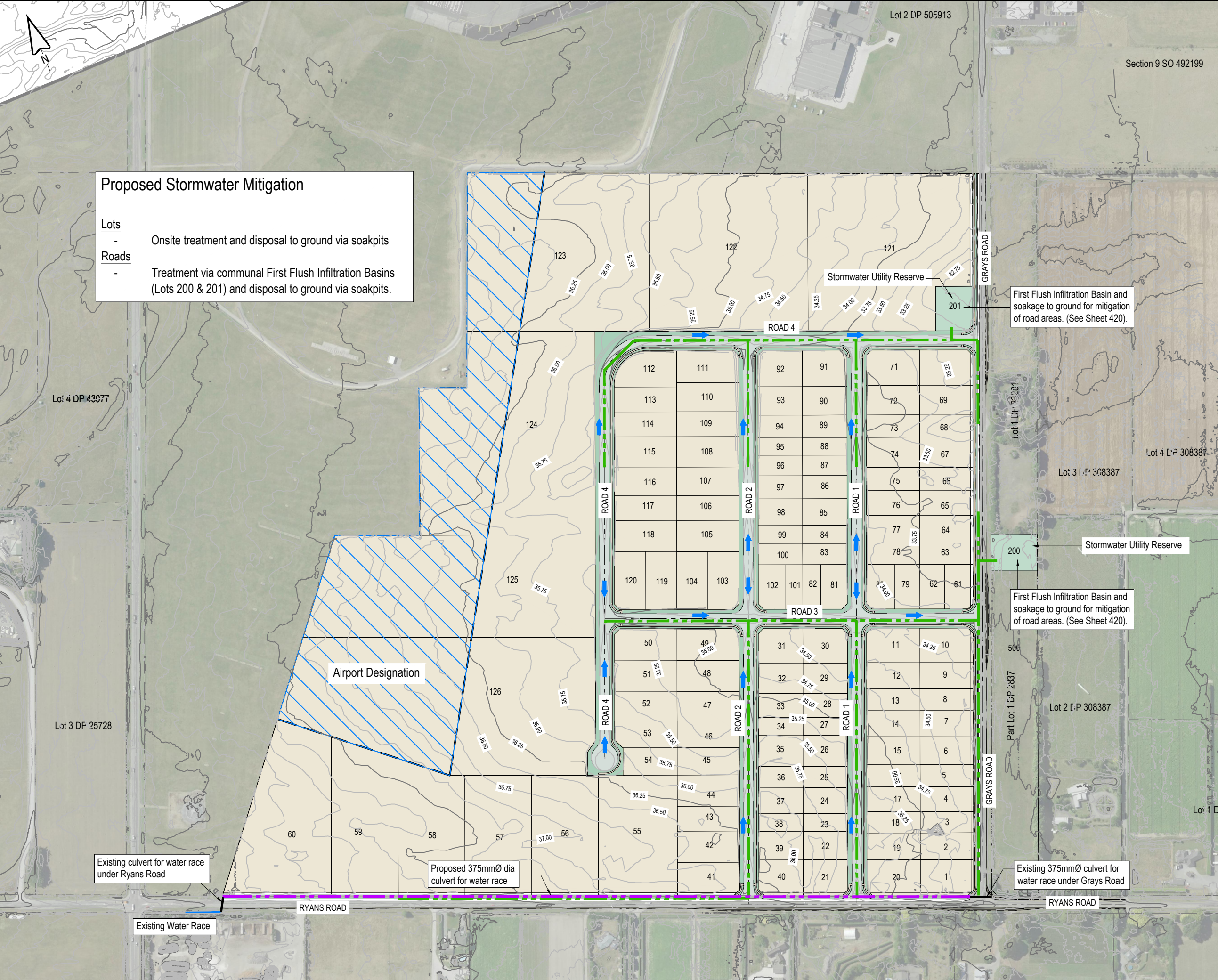
## 5 LIMITATIONS

This report ('Report') has been prepared by WSP New Zealand Limited ('WSP') exclusively for Christchurch City Council ('Client') in relation to Ryans Road Industrial Park Development – Modelling Assessment ('Purpose') and in accordance with the Short Form Agreement – WS Model Query Request – Water Supply at 104 Ryans Road with the Client dated 14 November 2023 ('Agreement'). The findings in this Report are based on and are subject to the assumptions specified in the Report. WSP accepts no liability whatsoever for any use or reliance on this Report, in whole or in part, for any purpose other than the Purpose or for any use or reliance on this Report by any third party.

In preparing this Report, WSP has relied upon data, surveys, analyses, designs, plans and other information ('Client Data') provided by or on behalf of the Client. Except as otherwise stated in this Report, WSP has not verified the accuracy or completeness of the Client Data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in this Report are based in whole or part on the Client Data, those conclusions are contingent upon the accuracy and completeness of the Client Data. WSP will not be liable for any incorrect conclusions or findings in the Report should any Client Data be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to WSP.







**Proposed Stormwater Mitigation**

Lots

- Onsite treatment and disposal to ground via soakpits

Roads

- Treatment via communal First Flush Infiltration Basins (Lots 200 & 201) and disposal to ground via soakpits.

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**NOTES: STORMWATER**

1. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH CCC IDS AND CSS PARTS 1-7.
2. MINIMUM CLEARANCE TO OTHER SERVICES TO BE AS PER IDS PART 9: UTILITIES TABLE 1.
3. PIPE SIZES AND DEVICES TO BE CONFIRMED AT DETAILED DESIGN STAGE.
4. PIPE MATERIALS AS PER CCC SUBDIVISION BULLETIN 25. 225Ø-300Ø TO BE uPVC, 375Ø UPWARDS TO BE CONCRETE RCRRJ C4 UNLESS OTHERWISE STATED.
5. LOCATION OF EXISTING SERVICES TO BE CONFIRMED BY RELEVANT SERVICE PROVIDERS ON SITE, PRIOR TO UNDERTAKING ANY EXCAVATIONS.
6. BACKFILLING AND BEDDING REQUIREMENTS AS PER CCC CODE OF PRACTICE.

**LEGEND:**

- WATER RACE CULVERT
- INDICATIVE STORMWATER LINES
- DIRECTION OF OVERLAND FLOW

REV	DATE	REVISION DETAILS	ISSUED
A	25/02/25	FOR APPROVAL	TL

**CAPTURE**  
Land Development Consultants

**CLIENT**

CARTER GROUP LIMITED

**PROJECT**

104 RYANS ROAD, HAREWOOD

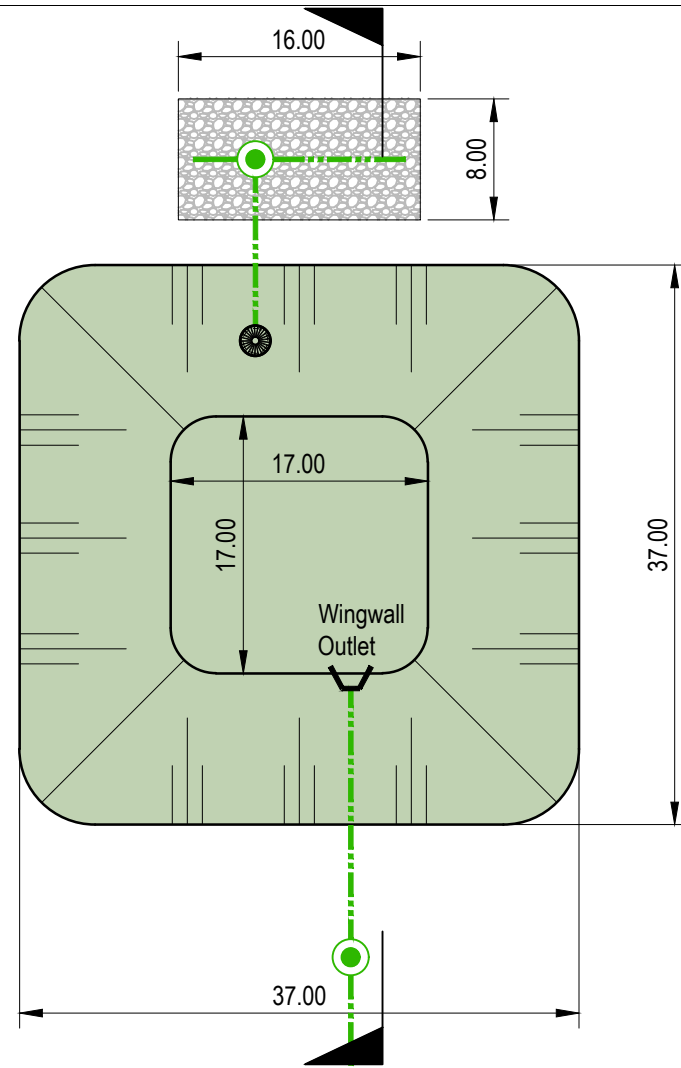
**DRAWING TITLE**

PROPOSED STORMWATER SERVICING

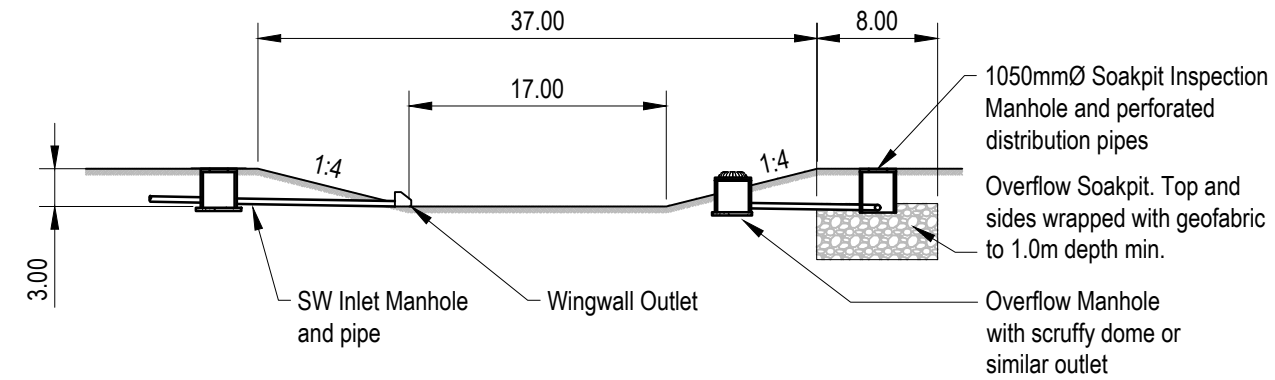
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FOR APPROVAL	1:4000	A3

PROJECT	DRAWING NO	REVISION
1252	RC-SW400	A

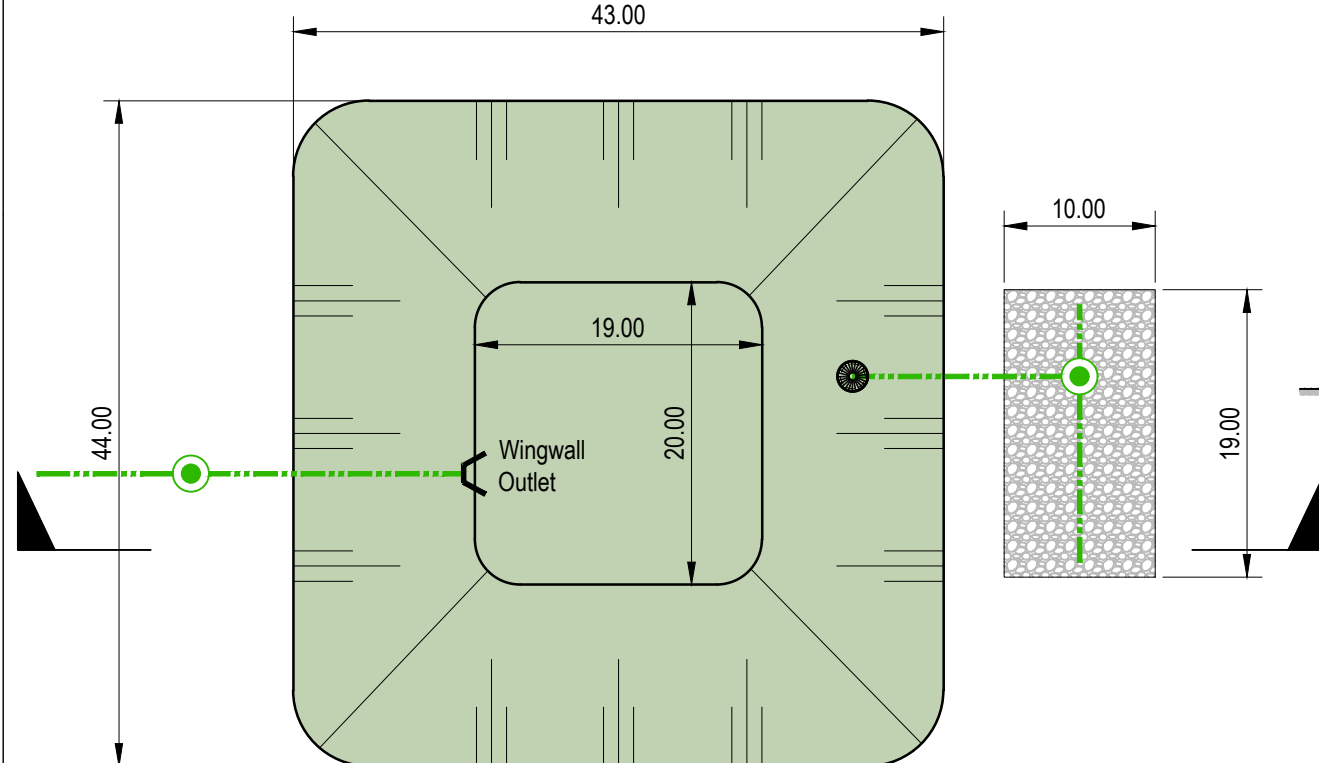




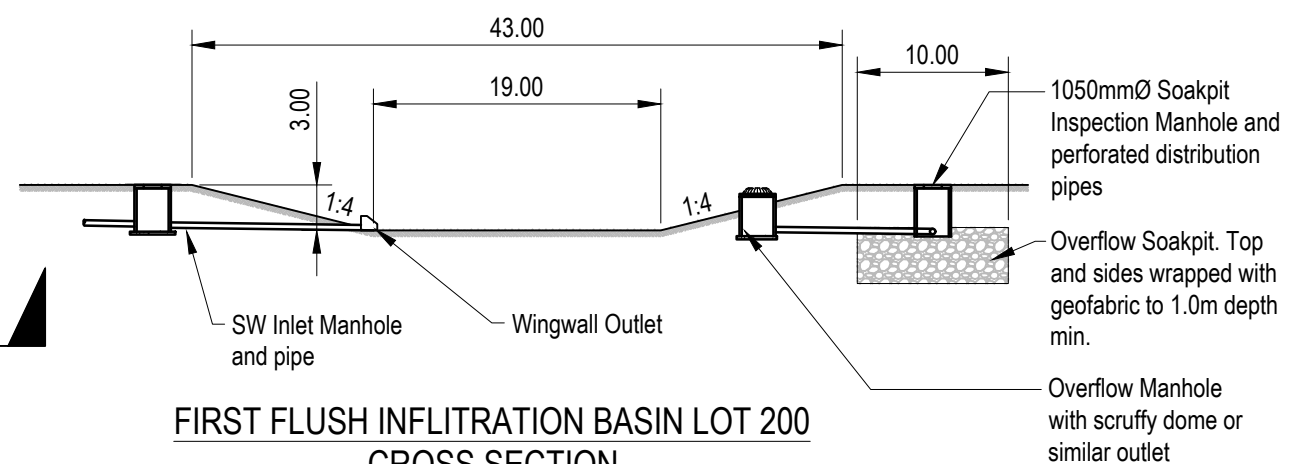
FIRST FLUSH INFILTRATION BASIN LOT 201  
PLAN



FIRST FLUSH INFILTRATION BASIN LOT 201  
CROSS SECTION



FIRST FLUSH INFILTRATION BASIN LOT 200  
PLAN



FIRST FLUSH INFILTRATION BASIN LOT 200  
CROSS SECTION

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REV	DATE	REVISION DETAILS	ISSUED
A	25/02/25	FOR APPROVAL	TL



CLIENT  
CARTER GROUP LIMITED

PROJECT  
104 RYANS ROAD, HAREWOOD

DRAWING TITLE  
TYPICAL STORMWATER  
BASIN DETAILS

STATUS  
FOR APPROVAL

SCALE  
1:500

SIZE  
A3

PROJECT  
1252

DRAWING NO  
RC-SW420

REVISION  
A





## Roof Soakpits

Small Lot			Medium Lot			Large Lot		
Critical Storm Event			Critical Storm Event			Critical Storm Event		
Storm Duration	180	min	Storm Duration	180	min	Storm Duration	180	min
Average Intensity	22.8	mm/hr	Average Intensity	22.8	mm/hr	Average Intensity	22.8	mm/hr
Catchment Impervious Area			Catchment Impervious Area			Catchment Impervious Area		
Area	1282	m <sup>2</sup>	Area	8700	m <sup>2</sup>	Area	19720	m <sup>2</sup>
Runoff Coefficient (C)	0.9	#	Runoff Coefficient (C)	0.9	#	Runoff Coefficient (C)	0.9	#
Soakpit - Dimensions			Soakpit - Dimensions			Soakpit - Dimensions		
Depth of Fill	3.0	m	Depth of Fill	3.0	m	Depth of Fill	3.0	m
Void Ratio	0.38	#	Void Ratio	0.38	#	Void Ratio	0.38	#
Area	30.0	m <sup>2</sup>	Area	203.5	m <sup>2</sup>	Area	461.5	m <sup>2</sup>
Volume	34.2	m <sup>3</sup>	Volume	232.0	m <sup>3</sup>	Volume	526.1	m <sup>3</sup>
Soakpit - Infiltration			Soakpit - Infiltration			Soakpit - Infiltration		
Infiltration Rate	0.6	m/hr	Infiltration Rate	0.6	m/hr	Infiltration Rate	0.6	m/hr
Discharge Rate	5.0	L/s	Discharge Rate	33.9	L/s	Discharge Rate	76.9	L/s
Discharge Rate	0.30	m <sup>3</sup> /min	Discharge Rate	2.04	m <sup>3</sup> /min	Discharge Rate	4.62	m <sup>3</sup> /min
Soakpit - Capacity Check			Soakpit - Capacity Check			Soakpit - Capacity Check		
Capacity Available	34.20	m <sup>3</sup>	Capacity Available	231.99	m <sup>3</sup>	Capacity Available	526.11	m <sup>3</sup>
Required Capacity	34.16	m <sup>3</sup>	Required Capacity	231.92	m <sup>3</sup>	Required Capacity	525.41	m <sup>3</sup>

Site Run-off Soakpits

Small Lot			Medium Lot			Large Lot		
Critical Storm Event			Critical Storm Event			Critical Storm Event		
Storm Duration	180	min	Storm Duration	180	min	Storm Duration	180	min
Average Intensity	22.8	mm/hr	Average Intensity	22.8	mm/hr	Average Intensity	22.8	mm/hr
Catchment Impervious Area			Catchment Impervious Area			Catchment Impervious Area		
Area	1282	m <sup>2</sup>	Area	8700	m <sup>2</sup>	Area	27880	m <sup>2</sup>
Runoff Coefficient (C)	0.67	#	Runoff Coefficient (C)	0.67	#	Runoff Coefficient (C)	0.8	#
Soakpit - Dimensions			Soakpit - Dimensions			Soakpit - Dimensions		
Depth of Fill	3.0	m	Depth of Fill	3.0	m	Depth of Fill	3.0	m
Void Ratio	0.38	#	Void Ratio	0.38	#	Void Ratio	0.38	#
Area	22.5	m <sup>2</sup>	Area	151.5	m <sup>2</sup>	Area	580.0	m <sup>2</sup>
Volume	25.7	m <sup>3</sup>	Volume	172.7	m <sup>3</sup>	Volume	661.2	m <sup>3</sup>
Soakpit - Infiltration			Soakpit - Infiltration			Soakpit - Infiltration		
Infiltration Rate	0.6	m/hr	Infiltration Rate	0.6	m/hr	Infiltration Rate	0.6	m/hr
Discharge Rate	3.8	L/s	Discharge Rate	25.3	L/s	Discharge Rate	96.7	L/s
Discharge Rate	0.23	m <sup>3</sup> /min	Discharge Rate	1.52	m <sup>3</sup> /min	Discharge Rate	5.80	m <sup>3</sup> /min
Soakpit - Capacity Check			Soakpit - Capacity Check			Soakpit - Capacity Check		
Capacity Available	25.65	m <sup>3</sup>	Capacity Available	172.71	m <sup>3</sup>	Capacity Available	661.20	m <sup>3</sup>
Required Capacity	25.23	m <sup>3</sup>	Required Capacity	172.64	m <sup>3</sup>	Required Capacity	660.25	m <sup>3</sup>

Stormwater Infrastructure Design

Client Name:

Carter Group Limited

Job Name:

104 Ryans Road

Scenario / Description:

Northern SMA: Infiltration Basin and Soak Pit Sizing

Date:

21/01/2025

Job Number:

C052850001

Prepared By:

Cameron Swales and Oliver Saunders

Checked By:

Eoghan O'Neill

Version No.

1

Site Characteristics		
Hardstand & Greenspace Areas - Route to FF Basin		
Site Area	28060	m²
Composite First Flush Coefficient (Cff)	0.64	#

First Flush Basin Size		
First Flush Design Event		
Rainfall Depth	25	mm
First Flush Runoff Volume (WQV)	452.3	m³

FF Basin Dimensions		
Top Length	37	m
Top Width	37	m

Total Depth	2.5	m
Freeboard Depth	0.3	m
Depth to Overflow	2.2	m
Side Slopes	4	H : V

Total Volume	1905.8	m³
Basin Volume (total less freeboard)	1521.2	m³
Available Volume	1068.9	m³

FF Basin Infiltration		
Infiltration Rate	75	mm/hr
Base Infiltration	0.361	m³/min
Base Area	289	m²
Drain Time (full use of available WQV)	70.2	hrs

Basin Overflow Soakpit Size		
Depth	3	m
Base Area	125	m²
Void Ratio	0.38	#
Soakpit Volume	142.5	m³

Basin Soakpit Infiltration		
Infiltration Rate	600	mm/hr
Discharge Rate	1.299	m³/min

Basin Soakpit Design Event											
Scenario	Rainfall Intensities (mm/hr) :: RCP8.5 for the period 2081-2100										
ARI	50										
	10m	20m	30m	1h	2h	6h	12h	24h	48h	72h	Critical Event
							CRITICAL				
Storm Duration (min):	10	20	30	60	120	360	720	1440	2880	4320	0
Average Intensity (mm/hr):	98.80	66.90	53.70	37.30	25.80	13.80	9.06	5.73	3.51	2.58	13.80
[Output] Peak Basin Volume (m³):	294.64	396.56	452.27	488.83	690.41	1014.50	1123.72	980.08	483.52	452.27	1123.72
[Output] Misc. Checks Error Log:	None	None	None	None	None	None	None	None	None	None	No Errors Found

Summary:		
Critical Storm Summary		
TOTAL RAINFALL VOLUME	1966.82	m³
Excess volume peak	671.46	m³
WQV - spare	397.47	m³

FF Basin Drain Down Time	51.84	hrs
--------------------------	-------	-----

## Inputs Summary

<b>Storm Duration:</b>	720	min
<b>Average Intensity:</b>	9.06	mm/hr
<b>Peak Volume:</b>	1123.72	m <sup>3</sup>
<b>Desired Accuracy:</b>	2	# of dp's

Date: 21/01/2025  
By: Cameron Swales & Oliver Saunders  
Reviewed: Eoghan O'Neill

Set up Design Storm			Routing through FF Basin					Routing through Basin Soakpits		
Checks Summary	720.00	108.72	Final FF Basin Volume:		1071.595			Final Basin Soakpit Volume:		142.500
	2.00	108.72	1521.20	1966.82	254.26		142.50	498.47		
Time (min)	Distribution Curve	Rainfall (mm)	1123.72	1966.82	845.61		142.50	1121.21	671.46	
			Volume at start of timestep (m³)	Site Runoff (m³/min)	Soakage (m³/min)	Overflow (m³/min)	Volume at start of timestep (m³)	Soakage (m³)	Excess (m³)	
0	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000	
1	0.00	0.00	0.000	0.01	0.01	0.00	0.000	0.000	0.000	
2	0.01	0.00	0.000	0.02	0.02	0.00	0.000	0.000	0.000	
3	0.01	0.00	0.000	0.03	0.03	0.00	0.000	0.000	0.000	
4	0.02	0.00	0.000	0.04	0.04	0.00	0.000	0.000	0.000	
5	0.02	0.00	0.000	0.05	0.05	0.00	0.000	0.000	0.000	
6	0.02	0.00	0.000	0.07	0.07	0.00	0.000	0.000	0.000	
7	0.03	0.00	0.000	0.08	0.08	0.00	0.000	0.000	0.000	
8	0.03	0.00	0.000	0.09	0.09	0.00	0.000	0.000	0.000	
9	0.04	0.01	0.000	0.10	0.10	0.00	0.000	0.000	0.000	
10	0.04	0.01	0.000	0.11	0.11	0.00	0.000	0.000	0.000	
11	0.04	0.01	0.000	0.12	0.12	0.00	0.000	0.000	0.000	
12	0.05	0.01	0.000	0.13	0.13	0.00	0.000	0.000	0.000	
13	0.05	0.01	0.000	0.14	0.14	0.00	0.000	0.000	0.000	
14	0.06	0.01	0.000	0.15	0.15	0.00	0.000	0.000	0.000	
15	0.06	0.01	0.000	0.16	0.16	0.00	0.000	0.000	0.000	
16	0.06	0.01	0.000	0.17	0.17	0.00	0.000	0.000	0.000	
17	0.07	0.01	0.000	0.18	0.18	0.00	0.000	0.000	0.000	
18	0.07	0.01	0.000	0.20	0.20	0.00	0.000	0.000	0.000	
19	0.08	0.01	0.000	0.21	0.21	0.00	0.000	0.000	0.000	
20	0.08	0.01	0.000	0.22	0.22	0.00	0.000	0.000	0.000	
21	0.08	0.01	0.000	0.23	0.23	0.00	0.000	0.000	0.000	
22	0.09	0.01	0.000	0.24	0.24	0.00	0.000	0.000	0.000	
23	0.09	0.01	0.000	0.25	0.25	0.00	0.000	0.000	0.000	
24	0.10	0.01	0.000	0.26	0.26	0.00	0.000	0.000	0.000	
25	0.10	0.01	0.000	0.27	0.27	0.00	0.000	0.000	0.000	
26	0.10	0.02	0.000	0.28	0.28	0.00	0.000	0.000	0.000	
27	0.11	0.02	0.000	0.29	0.29	0.00	0.000	0.000	0.000	
28	0.11	0.02	0.000	0.30	0.30	0.00	0.000	0.000	0.000	
29	0.12	0.02	0.000	0.31	0.31	0.00	0.000	0.000	0.000	
30	0.12	0.02	0.000	0.33	0.33	0.00	0.000	0.000	0.000	
31	0.12	0.02	0.000	0.34	0.34	0.00	0.000	0.000	0.000	
32	0.13	0.02	0.000	0.35	0.35	0.00	0.000	0.000	0.000	
33	0.13	0.02	0.000	0.36	0.36	0.00	0.000	0.000	0.000	
34	0.13	0.02	0.000	0.37	0.36	0.00	0.000	0.000	0.000	
35	0.14	0.02	0.007	0.38	0.36	0.00	0.000	0.000	0.000	
36	0.14	0.02	0.025	0.39	0.36	0.00	0.000	0.000	0.000	
37	0.15	0.02	0.054	0.40	0.36	0.00	0.000	0.000	0.000	
38	0.15	0.02	0.094	0.41	0.36	0.00	0.000	0.000	0.000	
39	0.15	0.02	0.145	0.42	0.36	0.00	0.000	0.000	0.000	
40	0.16	0.02	0.206	0.43	0.36	0.00	0.000	0.000	0.000	
41	0.16	0.02	0.279	0.44	0.36	0.00	0.000	0.000	0.000	
42	0.17	0.03	0.362	0.46	0.36	0.00	0.000	0.000	0.000	
43	0.17	0.03	0.456	0.47	0.36	0.00	0.000	0.000	0.000	
44	0.17	0.03	0.561	0.48	0.36	0.00	0.000	0.000	0.000	
45	0.18	0.03	0.677	0.49	0.36	0.00	0.000	0.000	0.000	
46	0.18	0.03	0.803	0.50	0.36	0.00	0.000	0.000	0.000	
47	0.19	0.03	0.941	0.51	0.36	0.00	0.000	0.000	0.000	
48	0.19	0.03	1.089	0.52	0.36	0.00	0.000	0.000	0.000	
49	0.19	0.03	1.248	0.53	0.36	0.00	0.000	0.000	0.000	
50	0.20	0.03	1.418	0.54	0.36	0.00	0.000	0.000	0.000	
51	0.20	0.03	1.599	0.55	0.36	0.00	0.000	0.000	0.000	
52	0.21	0.03	1.790	0.56	0.36	0.00	0.000	0.000	0.000	
53	0.21	0.03	1.993	0.57	0.36	0.00	0.000	0.000	0.000	
54	0.21	0.03	2.206	0.59	0.36	0.00	0.000	0.000	0.000	
55	0.22	0.03	2.430	0.60	0.36	0.00	0.000	0.000	0.000	
56	0.22	0.03	2.665	0.61	0.36	0.00	0.000	0.000	0.000	
57	0.23	0.03	2.911	0.62	0.36	0.00	0.000	0.000	0.000	
58	0.23	0.03	3.167	0.63	0.36	0.00	0.000	0.000	0.000	
59	0.23	0.04	3.435	0.64	0.36	0.00	0.000	0.000	0.000	
60	0.24	0.04	3.713	0.65	0.36	0.00	0.000	0.000	0.000	
61	0.24	0.04	4.002	0.66	0.36	0.00	0.000	0.000	0.000	
62	0.25	0.04	4.302	0.67	0.36	0.00	0.000	0.000	0.000	
63	0.25	0.04	4.613	0.68	0.36	0.00	0.000	0.000	0.000	
64	0.25	0.04	4.935	0.69	0.36	0.00	0.000	0.000	0.000	
65	0.26	0.04	5.267	0.70	0.36	0.00	0.000	0.000	0.000	
66	0.26	0.04	5.611	0.72	0.36	0.00	0.000	0.000	0.000	
67	0.27	0.04	5.965	0.73	0.36	0.00	0.000	0.000	0.000	
68	0.27	0.04	6.330	0.74	0.36	0.00	0.000	0.000	0.000	
69	0.27	0.04	6.706	0.75	0.36	0.00	0.000	0.000	0.000	
70	0.28	0.04	7.092	0.76	0.36	0.00	0.000	0.000	0.000	
71	0.28	0.04	7.490	0.77	0.36	0.00	0.000	0.000	0.000	
72	0.29	0.04	7.898	0.78	0.36	0.00	0.000	0.000	0.000	
73	0.29	0.04	8.318	0.79	0.36	0.00	0.000	0.000	0.000	
74	0.29	0.04	8.748	0.80	0.36	0.00	0.000	0.000	0.000	
75	0.30	0.04	9.189	0.81	0.36	0.00	0.000	0.000	0.000	
76	0.30	0.05	9.640	0.82	0.36	0.00	0.000	0.000	0.000	
77	0.31	0.05	10.103	0.83	0.36	0.00	0.000	0.000	0.000	
78	0.31	0.05	10.576	0.85	0.36	0.00	0.000	0.000	0.000	
79	0.31	0.05	11.061	0.86	0.36	0.00	0.000	0.000	0.000	
80	0.32	0.05	11.556	0.87	0.36	0.00	0.000	0.000	0.000	
81	0.32	0.05	12.062	0.88	0.36	0.00	0.000	0.000	0.000	
82	0.33	0.05	12.579	0.89	0.36	0.00	0.000	0.000	0.000	
83	0.33	0.05	13.106	0.90	0.36	0.00	0.000	0.000	0.000	
84	0.33	0.05	13.645	0.91	0.36	0.00	0.000	0.000	0.000	
85	0.34	0.05	14.194	0.92	0.36	0.00	0.000	0.000	0.000	
86	0.34	0.05	14.754	0.93	0.36	0.00	0.000	0.000	0.000	
87	0.35	0.05	15.325	0.94	0.36	0.00	0.000	0.000	0.000	
88	0.35	0.05	15.907	0.95	0.36	0.00	0.000	0.000	0.000	
89	0.35	0.05	16.500	0.96	0.36	0.00	0.000	0.000	0.000	
90	0.36	0.05	17.103	0.98	0.36	0.00	0.000	0.000	0.000	
91	0.36	0.05	17.718	0.99	0.36	0.00	0.000	0.000	0.000	
92	0.37	0.06	18.343	1.00	0.36	0.00	0.000	0.000	0.000	
93	0.37	0.06	18.979	1.01	0.36	0.00	0.000	0.000	0.000	
94	0.37	0.06	19.626	1.02	0.36	0.00	0.000	0.000	0.000	
95	0.38	0.06	20.283	1.03	0.36	0.00	0.000	0.000	0.000	

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	720.00	108.72	Final FF Basin Volume: 1071.595				Final Basin Soakpit Volume: 142.500		
Summary	2.00	108.72	1521.20	1966.82	254.26		142.50	498.47	
Time (min)	Distribution Curve	Rainfall (mm)	1123.72	1966.82	845.61		142.50	1121.21	671.46
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
96	0.38	0.06	20.952	1.04	0.36	0.00	0.000	0.000	0.000
97	0.38	0.06	21.631	1.05	0.36	0.00	0.000	0.000	0.000
98	0.39	0.06	22.322	1.06	0.36	0.00	0.000	0.000	0.000
99	0.39	0.06	23.023	1.07	0.36	0.00	0.000	0.000	0.000
100	0.40	0.06	23.735	1.08	0.36	0.00	0.000	0.000	0.000
101	0.40	0.06	24.457	1.09	0.36	0.00	0.000	0.000	0.000
102	0.40	0.06	25.191	1.11	0.36	0.00	0.000	0.000	0.000
103	0.41	0.06	25.935	1.12	0.36	0.00	0.000	0.000	0.000
104	0.41	0.06	26.691	1.13	0.36	0.00	0.000	0.000	0.000
105	0.42	0.06	27.457	1.14	0.36	0.00	0.000	0.000	0.000
106	0.42	0.06	28.234	1.15	0.36	0.00	0.000	0.000	0.000
107	0.42	0.06	29.021	1.16	0.36	0.00	0.000	0.000	0.000
108	0.43	0.06	29.820	1.17	0.36	0.00	0.000	0.000	0.000
109	0.43	0.07	30.630	1.18	0.36	0.00	0.000	0.000	0.000
110	0.44	0.07	31.450	1.19	0.36	0.00	0.000	0.000	0.000
111	0.44	0.07	32.281	1.20	0.36	0.00	0.000	0.000	0.000
112	0.44	0.07	33.123	1.21	0.36	0.00	0.000	0.000	0.000
113	0.45	0.07	33.976	1.22	0.36	0.00	0.000	0.000	0.000
114	0.45	0.07	34.840	1.24	0.36	0.00	0.000	0.000	0.000
115	0.46	0.07	35.714	1.25	0.36	0.00	0.000	0.000	0.000
116	0.46	0.07	36.599	1.26	0.36	0.00	0.000	0.000	0.000
117	0.46	0.07	37.496	1.27	0.36	0.00	0.000	0.000	0.000
118	0.47	0.07	38.403	1.28	0.36	0.00	0.000	0.000	0.000
119	0.47	0.07	39.321	1.29	0.36	0.00	0.000	0.000	0.000
120	0.48	0.07	40.249	1.30	0.36	0.00	0.000	0.000	0.000
121	0.48	0.07	41.189	1.31	0.36	0.00	0.000	0.000	0.000
122	0.48	0.07	42.139	1.32	0.36	0.00	0.000	0.000	0.000
123	0.49	0.07	43.100	1.33	0.36	0.00	0.000	0.000	0.000
124	0.49	0.07	44.073	1.34	0.36	0.00	0.000	0.000	0.000
125	0.50	0.07	45.055	1.36	0.36	0.00	0.000	0.000	0.000
126	0.50	0.08	46.049	1.37	0.36	0.00	0.000	0.000	0.000
127	0.50	0.08	47.054	1.38	0.36	0.00	0.000	0.000	0.000
128	0.51	0.08	48.069	1.39	0.36	0.00	0.000	0.000	0.000
129	0.51	0.08	49.096	1.40	0.36	0.00	0.000	0.000	0.000
130	0.52	0.08	50.133	1.41	0.36	0.00	0.000	0.000	0.000
131	0.52	0.08	51.181	1.42	0.36	0.00	0.000	0.000	0.000
132	0.52	0.08	52.239	1.43	0.36	0.00	0.000	0.000	0.000
133	0.53	0.08	53.309	1.44	0.36	0.00	0.000	0.000	0.000
134	0.53	0.08	54.390	1.45	0.36	0.00	0.000	0.000	0.000
135	0.54	0.08	55.481	1.46	0.36	0.00	0.000	0.000	0.000
136	0.54	0.08	56.583	1.47	0.36	0.00	0.000	0.000	0.000
137	0.54	0.08	57.696	1.49	0.36	0.00	0.000	0.000	0.000
138	0.55	0.08	58.820	1.50	0.36	0.00	0.000	0.000	0.000
139	0.55	0.08	59.955	1.51	0.36	0.00	0.000	0.000	0.000
140	0.56	0.08	61.100	1.52	0.36	0.00	0.000	0.000	0.000
141	0.56	0.08	62.256	1.53	0.36	0.00	0.000	0.000	0.000
142	0.56	0.09	63.424	1.54	0.36	0.00	0.000	0.000	0.000
143	0.57	0.09	64.602	1.55	0.36	0.00	0.000	0.000	0.000
144	0.57	0.09	65.791	1.56	0.36	0.00	0.000	0.000	0.000
145	0.58	0.09	66.990	1.57	0.36	0.00	0.000	0.000	0.000
146	0.58	0.09	68.201	1.58	0.36	0.00	0.000	0.000	0.000
147	0.58	0.09	69.422	1.59	0.36	0.00	0.000	0.000	0.000
148	0.59	0.09	70.654	1.60	0.36	0.00	0.000	0.000	0.000
149	0.59	0.09	71.898	1.62	0.36	0.00	0.000	0.000	0.000
150	0.60	0.09	73.151	1.63	0.36	0.00	0.000	0.000	0.000
151	0.60	0.09	74.416	1.64	0.36	0.00	0.000	0.000	0.000
152	0.60	0.09	75.692	1.65	0.36	0.00	0.000	0.000	0.000
153	0.61	0.09	76.978	1.66	0.36	0.00	0.000	0.000	0.000
154	0.61	0.09	78.275	1.67	0.36	0.00	0.000	0.000	0.000
155	0.62	0.09	79.584	1.68	0.36	0.00	0.000	0.000	0.000
156	0.62	0.09	80.903	1.69	0.36	0.00	0.000	0.000	0.000
157	0.62	0.09	82.232	1.70	0.36	0.00	0.000	0.000	0.000
158	0.63	0.09	83.573	1.71	0.36	0.00	0.000	0.000	0.000
159	0.63	0.10	84.924	1.72	0.36	0.00	0.000	0.000	0.000
160	0.63	0.10	86.287	1.73	0.36	0.00	0.000	0.000	0.000
161	0.64	0.10	87.660	1.75	0.36	0.00	0.000	0.000	0.000
162	0.64	0.10	89.044	1.76	0.36	0.00	0.000	0.000	0.000
163	0.65	0.10	90.439	1.77	0.36	0.00	0.000	0.000	0.000
164	0.65	0.10	91.844	1.78	0.36	0.00	0.000	0.000	0.000
165	0.65	0.10	93.261	1.79	0.36	0.00	0.000	0.000	0.000
166	0.66	0.10	94.688	1.80	0.36	0.00	0.000	0.000	0.000
167	0.66	0.10	96.127	1.81	0.36	0.00	0.000	0.000	0.000
168	0.67	0.10	97.576	1.82	0.36	0.00	0.000	0.000	0.000
169	0.67	0.10	99.035	1.83	0.36	0.00	0.000	0.000	0.000
170	0.67	0.10	100.506	1.84	0.36	0.00	0.000	0.000	0.000
171	0.68	0.10	101.988	1.85	0.36	0.00	0.000	0.000	0.000
172	0.68	0.10	103.480	1.86	0.36	0.00	0.000	0.000	0.000
173	0.69	0.10	104.983	1.88	0.36	0.00	0.000	0.000	0.000
174	0.69	0.10	106.498	1.89	0.36	0.00	0.000	0.000	0.000
175	0.69	0.10	108.022	1.90	0.36	0.00	0.000	0.000	0.000
176	0.70	0.11	109.558	1.91	0.36	0.00	0.000	0.000	0.000
177	0.70	0.11	111.105	1.92	0.36	0.00	0.000	0.000	0.000
178	0.71	0.11	112.662	1.93	0.36	0.00	0.000	0.000	0.000
179	0.71	0.11	114.231	1.94	0.36	0.00	0.000	0.000	0.000
180	0.71	0.11	115.810	1.95	0.36	0.00	0.000	0.000	0.000
181	0.72	0.11	117.400	1.96	0.36	0.00	0.000	0.000	0.000
182	0.72	0.11	119.000	1.97	0.36	0.00	0.000	0.000	0.000
183	0.73	0.11	120.612	1.98	0.36	0.00	0.000	0.000	0.000
184	0.73	0.11	122.235	1.99	0.36	0.00	0.000	0.000	0.000
185	0.73	0.11	123.868	2.01	0.36	0.00	0.000	0.000	0.000
186	0.74	0.11	125.512	2.02	0.36	0.00	0.000	0.000	0.000
187	0.74	0.11	127.167	2.03	0.36	0.00	0.000	0.000	0.000
188	0.75	0.11	128.833	2.04	0.36	0.00	0.000	0.000	0.000
189	0.75	0.11	130.510	2.05	0.36	0.00	0.000	0.000	0.000
190	0.75	0.11	132.197	2.06	0.36	0.00	0.000	0.000	0.000
191	0.76	0.11	133.895	2.07	0.36	0.00	0.000	0.000	0.000
192	0.76	0.12	135.605	2.08	0.36	0.00	0.000	0.000	0.000
193	0.77	0.12	137.325	2.09	0.36	0.00	0.000	0.000	0.000
194	0.77	0.12	139.056	2.10	0.36	0.00	0.000	0.000	0.000
195	0.77	0.12	140.797	2.11	0.36	0.00	0.000	0.000	0.000
196	0.78	0.12	142.550	2.12	0.36	0.00	0.000	0.000	0.000
197	0.78	0.12	144.313	2.14	0.36	0.00	0.000	0.000	0.000
198	0.79	0.12	146.087	2.15	0.36	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	720.00	108.72	Final FF Basin Volume:		1071.595		Final Basin Soakpit Volume:		142.500
Summary	2.00	108.72	1521.20	1966.82	254.26		142.50	498.47	
Time (min)	Distribution Curve	Rainfall (mm)	1123.72	1966.82	845.61		142.50	1121.21	671.46
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
199	0.79	0.12	147.873	2.16	0.36	0.00	0.000	0.000	0.000
200	0.79	0.12	149.668	2.17	0.36	0.00	0.000	0.000	0.000
201	0.80	0.12	151.475	2.18	0.36	0.00	0.000	0.000	0.000
202	0.80	0.12	153.293	2.19	0.36	0.00	0.000	0.000	0.000
203	0.81	0.12	155.121	2.20	0.36	0.00	0.000	0.000	0.000
204	0.81	0.12	156.961	2.21	0.36	0.00	0.000	0.000	0.000
205	0.81	0.12	158.811	2.22	0.36	0.00	0.000	0.000	0.000
206	0.82	0.12	160.672	2.23	0.36	0.00	0.000	0.000	0.000
207	0.82	0.12	162.543	2.24	0.36	0.00	0.000	0.000	0.000
208	0.83	0.12	164.426	2.25	0.36	0.00	0.000	0.000	0.000
209	0.83	0.13	166.320	2.27	0.36	0.00	0.000	0.000	0.000
210	0.83	0.13	168.224	2.28	0.36	0.00	0.000	0.000	0.000
211	0.84	0.13	170.139	2.29	0.36	0.00	0.000	0.000	0.000
212	0.84	0.13	172.065	2.30	0.36	0.00	0.000	0.000	0.000
213	0.85	0.13	174.002	2.31	0.36	0.00	0.000	0.000	0.000
214	0.85	0.13	175.950	2.32	0.36	0.00	0.000	0.000	0.000
215	0.85	0.13	177.908	2.33	0.36	0.00	0.000	0.000	0.000
216	0.86	0.13	179.877	2.34	0.36	0.00	0.000	0.000	0.000
217	0.86	0.13	181.858	2.35	0.36	0.00	0.000	0.000	0.000
218	0.87	0.13	183.849	2.36	0.36	0.00	0.000	0.000	0.000
219	0.87	0.13	185.851	2.37	0.36	0.00	0.000	0.000	0.000
220	0.87	0.13	187.863	2.38	0.36	0.00	0.000	0.000	0.000
221	0.88	0.13	189.887	2.40	0.36	0.00	0.000	0.000	0.000
222	0.88	0.13	191.921	2.41	0.36	0.00	0.000	0.000	0.000
223	0.88	0.13	193.967	2.42	0.36	0.00	0.000	0.000	0.000
224	0.89	0.13	196.023	2.43	0.36	0.00	0.000	0.000	0.000
225	0.89	0.13	198.090	2.44	0.36	0.00	0.000	0.000	0.000
226	0.90	0.14	200.167	2.45	0.36	0.00	0.000	0.000	0.000
227	0.90	0.14	202.256	2.46	0.36	0.00	0.000	0.000	0.000
228	0.90	0.14	204.355	2.47	0.36	0.00	0.000	0.000	0.000
229	0.91	0.14	206.466	2.48	0.36	0.00	0.000	0.000	0.000
230	0.91	0.14	208.587	2.49	0.36	0.00	0.000	0.000	0.000
231	0.92	0.14	210.719	2.50	0.36	0.00	0.000	0.000	0.000
232	0.92	0.14	212.862	2.51	0.36	0.00	0.000	0.000	0.000
233	0.92	0.14	215.015	2.53	0.36	0.00	0.000	0.000	0.000
234	0.93	0.14	217.180	2.54	0.36	0.00	0.000	0.000	0.000
235	0.93	0.14	219.355	2.55	0.36	0.00	0.000	0.000	0.000
236	0.94	0.14	221.541	2.56	0.36	0.00	0.000	0.000	0.000
237	0.94	0.14	223.738	2.57	0.36	0.00	0.000	0.000	0.000
238	0.94	0.14	225.946	2.58	0.36	0.00	0.000	0.000	0.000
239	0.95	0.14	228.165	2.59	0.36	0.00	0.000	0.000	0.000
240	0.95	0.14	230.394	2.60	0.36	0.00	0.000	0.000	0.000
241	0.96	0.14	232.635	2.61	0.36	0.00	0.000	0.000	0.000
242	0.96	0.15	234.886	2.62	0.36	0.00	0.000	0.000	0.000
243	0.96	0.15	237.148	2.63	0.36	0.00	0.000	0.000	0.000
244	0.97	0.15	239.421	2.64	0.36	0.00	0.000	0.000	0.000
245	0.97	0.15	241.704	2.66	0.36	0.00	0.000	0.000	0.000
246	0.98	0.15	243.999	2.67	0.36	0.00	0.000	0.000	0.000
247	0.98	0.15	246.304	2.68	0.36	0.00	0.000	0.000	0.000
248	0.98	0.15	248.621	2.69	0.36	0.00	0.000	0.000	0.000
249	0.99	0.15	250.948	2.70	0.36	0.00	0.000	0.000	0.000
250	0.99	0.15	253.286	2.71	0.36	0.00	0.000	0.000	0.000
251	1.00	0.15	255.634	2.72	0.36	0.00	0.000	0.000	0.000
252	1.00	0.15	257.994	2.73	0.36	0.00	0.000	0.000	0.000
253	1.00	0.15	260.364	2.74	0.36	0.00	0.000	0.000	0.000
254	1.01	0.15	262.746	2.75	0.36	0.00	0.000	0.000	0.000
255	1.01	0.15	265.138	2.76	0.36	0.00	0.000	0.000	0.000
256	1.02	0.15	267.541	2.78	0.36	0.00	0.000	0.000	0.000
257	1.02	0.15	269.955	2.79	0.36	0.00	0.000	0.000	0.000
258	1.02	0.15	272.379	2.80	0.36	0.00	0.000	0.000	0.000
259	1.03	0.16	274.815	2.81	0.36	0.00	0.000	0.000	0.000
260	1.03	0.16	277.261	2.82	0.36	0.00	0.000	0.000	0.000
261	1.04	0.16	279.718	2.83	0.36	0.00	0.000	0.000	0.000
262	1.04	0.16	282.186	2.84	0.36	0.00	0.000	0.000	0.000
263	1.04	0.16	284.665	2.85	0.36	0.00	0.000	0.000	0.000
264	1.05	0.16	287.155	2.86	0.36	0.00	0.000	0.000	0.000
265	1.05	0.16	289.655	2.87	0.36	0.00	0.000	0.000	0.000
266	1.06	0.16	292.167	2.88	0.36	0.00	0.000	0.000	0.000
267	1.06	0.16	294.689	2.89	0.36	0.00	0.000	0.000	0.000
268	1.06	0.16	297.222	2.91	0.36	0.00	0.000	0.000	0.000
269	1.07	0.16	299.766	2.92	0.36	0.00	0.000	0.000	0.000
270	1.07	0.16	302.321	2.93	0.36	0.00	0.000	0.000	0.000
271	1.08	0.16	304.886	2.94	0.36	0.00	0.000	0.000	0.000
272	1.08	0.16	307.463	2.95	0.36	0.00	0.000	0.000	0.000
273	1.08	0.16	310.050	2.96	0.36	0.00	0.000	0.000	0.000
274	1.09	0.16	312.648	2.97	0.36	0.00	0.000	0.000	0.000
275	1.09	0.16	315.257	2.98	0.36	0.00	0.000	0.000	0.000
276	1.10	0.17	317.877	2.99	0.36	0.00	0.000	0.000	0.000
277	1.10	0.17	320.507	3.00	0.36	0.00	0.000	0.000	0.000
278	1.10	0.17	323.149	3.01	0.36	0.00	0.000	0.000	0.000
279	1.11	0.17	325.801	3.02	0.36	0.00	0.000	0.000	0.000
280	1.11	0.17	328.464	3.04	0.36	0.00	0.000	0.000	0.000
281	1.12	0.17	331.138	3.05	0.36	0.00	0.000	0.000	0.000
282	1.12	0.17	333.823	3.06	0.36	0.00	0.000	0.000	0.000
283	1.12	0.17	336.518	3.07	0.36	0.00	0.000	0.000	0.000
284	1.13	0.17	339.225	3.08	0.36	0.00	0.000	0.000	0.000
285	1.13	0.17	341.942	3.09	0.36	0.00	0.000	0.000	0.000
286	1.13	0.17	344.670	3.10	0.36	0.00	0.000	0.000	0.000
287	1.14	0.17	347.409	3.11	0.36	0.00	0.000	0.000	0.000
288	1.14	0.17	350.159	3.12	0.36	0.00	0.000	0.000	0.000
289	1.15	0.17	352.920	3.13	0.36	0.00	0.000	0.000	0.000
290	1.15	0.17	355.692	3.14	0.36	0.00	0.000	0.000	0.000
291	1.15	0.17	358.474	3.15	0.36	0.00	0.000	0.000	0.000
292	1.16	0.17	361.267	3.17	0.36	0.00	0.000	0.000	0.000
293	1.16	0.18	364.071	3.18	0.36	0.00	0.000	0.000	0.000
294	1.17	0.18	366.886	3.19	0.36	0.00	0.000	0.000	0.000
295	1.17	0.18	369.712	3.20	0.36	0.00	0.000	0.000	0.000
296	1.17	0.18	372.548	3.21	0.36	0.00	0.000	0.000	0.000
297	1.18	0.18	375.396	3.22	0.36	0.00	0.000	0.000	0.000
298	1.18	0.18	378.254	3.23	0.36	0.00	0.000	0.000	0.000
299	1.19	0.18	381.123	3.24	0.36	0.00	0.000	0.000	0.000
300	1.19	0.18	384.003	3.25	0.36	0.00	0.000	0.000	0.000
301	1.19	0.18	386.894	3.26	0.36	0.00	0.000	0.000	0.000



Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks Summary	720.00	108.72	Final FF Basin Volume:		1071.595	254.26	Final Basin Soakpit Volume:		142.500
	2.00	108.72	1521.20	1966.82	1966.82		142.50	498.47	
Time (min)	Distribution Curve	Rainfall (mm)	1123.72	845.61	845.61		142.50	1121.21	671.46
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min )	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
302	1.20	0.18	389.795	3.27	0.36	0.00	0.000	0.000	0.000
303	1.20	0.18	392.708	3.28	0.36	0.00	0.000	0.000	0.000
304	1.21	0.18	395.631	3.30	0.36	0.00	0.000	0.000	0.000
305	1.21	0.18	398.565	3.31	0.36	0.00	0.000	0.000	0.000
306	1.21	0.18	401.510	3.32	0.36	0.00	0.000	0.000	0.000
307	1.22	0.18	404.466	3.33	0.36	0.00	0.000	0.000	0.000
308	1.22	0.18	407.433	3.34	0.36	0.00	0.000	0.000	0.000
309	1.23	0.19	410.410	3.35	0.36	0.00	0.000	0.000	0.000
310	1.23	0.19	413.399	3.36	0.36	0.00	0.000	0.000	0.000
311	1.23	0.19	416.398	3.37	0.36	0.00	0.000	0.000	0.000
312	1.24	0.19	419.408	3.38	0.36	0.00	0.000	0.000	0.000
313	1.24	0.19	422.429	3.39	0.36	0.00	0.000	0.000	0.000
314	1.25	0.19	425.460	3.40	0.36	0.00	0.000	0.000	0.000
315	1.25	0.19	428.503	3.41	0.36	0.00	0.000	0.000	0.000
316	1.25	0.19	431.556	3.43	0.36	0.00	0.000	0.000	0.000
317	1.26	0.19	434.620	3.44	0.36	0.00	0.000	0.000	0.000
318	1.26	0.19	437.695	3.45	0.36	0.00	0.000	0.000	0.000
319	1.27	0.19	440.781	3.46	0.36	0.00	0.000	0.000	0.000
320	1.27	0.19	443.878	3.47	0.36	0.00	0.000	0.000	0.000
321	1.27	0.19	446.986	3.48	0.36	0.00	0.000	0.000	0.000
322	1.28	0.19	450.104	3.49	0.36	0.97	0.000	0.966	0.000
323	1.28	0.19	452.268	3.50	0.36	3.14	0.000	1.250	0.000
324	1.29	0.19	452.268	3.51	0.36	3.15	1.890	1.250	0.000
325	1.29	0.19	452.268	3.52	0.36	3.16	3.791	1.250	0.000
326	1.29	0.20	452.268	3.53	0.36	3.17	5.703	1.250	0.000
327	1.30	0.20	452.268	3.54	0.36	3.18	7.625	1.250	0.000
328	1.30	0.20	452.268	3.56	0.36	3.19	9.559	1.250	0.000
329	1.31	0.20	452.268	3.57	0.36	3.21	11.503	1.250	0.000
330	1.31	0.20	452.268	3.58	0.36	3.22	13.458	1.250	0.000
331	1.31	0.20	452.268	3.59	0.36	3.23	15.424	1.250	0.000
332	1.32	0.20	452.268	3.60	0.36	3.24	17.401	1.250	0.000
333	1.32	0.20	452.268	3.61	0.36	3.25	19.389	1.250	0.000
334	1.33	0.20	452.268	3.62	0.36	3.26	21.387	1.250	0.000
335	1.33	0.20	452.268	3.63	0.36	3.27	23.397	1.250	0.000
336	1.33	0.20	452.268	3.64	0.36	3.28	25.417	1.250	0.000
337	1.34	0.20	452.268	3.65	0.36	3.29	27.448	1.250	0.000
338	1.34	0.20	452.268	3.66	0.36	3.30	29.490	1.250	0.000
339	1.35	0.20	452.268	3.67	0.36	3.31	31.542	1.250	0.000
340	1.35	0.20	452.268	3.69	0.36	3.32	33.606	1.250	0.000
341	1.35	0.20	452.268	3.70	0.36	3.34	35.680	1.250	0.000
342	1.36	0.20	452.268	3.71	0.36	3.35	37.765	1.250	0.000
343	1.36	0.21	452.268	3.72	0.36	3.36	39.861	1.250	0.000
344	1.37	0.21	452.268	3.73	0.36	3.37	41.968	1.250	0.000
345	1.37	0.21	452.268	3.74	0.36	3.38	44.086	1.250	0.000
346	1.37	0.21	452.268	3.75	0.36	3.39	46.215	1.250	0.000
347	1.38	0.21	452.268	3.76	0.36	3.40	48.354	1.250	0.000
348	1.38	0.21	452.268	3.77	0.36	3.41	50.504	1.250	0.000
349	1.38	0.21	452.268	3.78	0.36	3.42	52.665	1.250	0.000
350	1.39	0.21	452.268	3.79	0.36	3.43	54.837	1.250	0.000
351	1.39	0.21	452.268	3.80	0.36	3.44	57.020	1.250	0.000
352	1.40	0.21	452.268	3.82	0.36	3.45	59.214	1.250	0.000
353	1.40	0.21	452.268	3.83	0.36	3.47	61.418	1.250	0.000
354	1.40	0.21	452.268	3.84	0.36	3.48	63.633	1.250	0.000
355	1.41	0.21	452.268	3.85	0.36	3.49	65.860	1.250	0.000
356	1.41	0.21	452.268	3.86	0.36	3.50	68.097	1.250	0.000
357	1.42	0.21	452.268	3.87	0.36	3.51	70.344	1.250	0.000
358	1.42	0.21	452.268	3.88	0.36	3.52	72.603	1.250	0.000
359	1.42	0.22	452.268	3.89	0.36	3.53	74.872	1.250	0.000
360	1.43	0.22	452.268	3.90	0.36	3.54	77.153	1.250	0.000
361	1.43	0.22	452.268	3.91	0.36	3.55	79.444	1.250	0.000
362	1.44	0.22	452.268	3.92	0.36	3.56	81.746	1.250	0.000
363	1.44	0.22	452.268	3.93	0.36	3.57	84.059	1.250	0.000
364	1.44	0.22	452.268	3.95	0.36	3.58	86.383	1.250	0.000
365	1.45	0.22	452.268	3.96	0.36	3.60	88.717	1.250	0.000
366	1.45	0.22	452.268	3.97	0.36	3.61	91.062	1.250	0.000
367	1.46	0.22	452.268	3.98	0.36	3.62	93.419	1.250	0.000
368	1.46	0.22	452.268	3.99	0.36	3.63	95.786	1.250	0.000
369	1.46	0.22	452.268	4.00	0.36	3.64	98.164	1.250	0.000
370	1.47	0.22	452.268	4.01	0.36	3.65	100.552	1.250	0.000
371	1.47	0.22	452.268	4.02	0.36	3.66	102.952	1.250	0.000
372	1.48	0.22	452.268	4.03	0.36	3.67	105.362	1.250	0.000
373	1.48	0.22	452.268	4.04	0.36	3.68	107.784	1.250	0.000
374	1.48	0.22	452.268	4.05	0.36	3.69	110.216	1.250	0.000
375	1.49	0.22	452.268	4.07	0.36	3.70	112.659	1.250	0.000
376	1.49	0.23	452.268	4.08	0.36	3.71	115.112	1.250	0.000
377	1.50	0.23	452.268	4.09	0.36	3.73	117.577	1.250	0.000
378	1.50	0.23	452.268	4.10	0.36	3.74	120.052	1.250	0.000
379	1.50	0.23	452.268	4.11	0.36	3.75	122.539	1.250	0.000
380	1.51	0.23	452.268	4.12	0.36	3.76	125.036	1.250	0.000
381	1.51	0.23	452.268	4.13	0.36	3.77	127.544	1.250	0.000
382	1.52	0.23	452.268	4.14	0.36	3.78	130.063	1.250	0.000
383	1.52	0.23	452.268	4.15	0.36	3.79	132.592	1.250	0.000
384	1.52	0.23	452.268	4.16	0.36	3.80	135.133	1.250	0.000
385	1.53	0.23	452.268	4.17	0.36	3.81	137.684	1.250	0.000
386	1.53	0.23	452.268	4.18	0.36	3.82	140.246	1.250	0.319
387	1.54	0.23	452.587	4.20	0.36	4.15	142.500	1.250	2.903
388	1.54	0.23	455.171	4.21	0.36	6.75	142.500	1.250	5.498
389	1.54	0.23	457.765	4.22	0.36	9.35	142.500	1.250	8.103
390	1.55	0.23	460.371	4.23	0.36	11.97	142.500	1.250	10.720
391	1.55	0.23	462.987	4.24	0.36	14.60	142.500	1.250	13.347
392	1.56	0.23	465.615	4.25	0.36	17.24	142.500	1.250	15.985
393	1.56	0.24	468.253	4.26	0.36	19.88	142.500	1.250	18.634
394	1.56	0.24	470.901	4.27	0.36	22.54	142.500	1.250	21.294
395	1.57	0.24	473.561	4.28	0.36	25.21	142.500	1.250	23.964
396	1.57	0.24	476.232	4.29	0.36	27.90	142.500	1.250	26.646
397	1.58	0.24	478.913	4.30	0.36	30.59	142.500	1.250	29.338
398	1.58	0.24	481.605	4.31	0.36	33.29	142.500	1.250	32.041
399	1.58	0.24	484.309	4.33	0.36	36.00	142.500	1.250	34.755
400	1.59	0.24	487.022	4.34	0.36	38.73	142.500	1.250	37.480
401	1.59	0.24	489.747	4.35	0.36	41.47	142.500	1.250	40.215
402	1.60	0.24	492.483	4.36	0.36	44.21	142.500	1.250	42.962
403	1.60	0.24	495.229	4.37	0.36	46.97	142.500	1.250	45.719
404	1.60	0.24	497.987	4.38	0.36	49.74	142.500	1.250	48.487

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks Summary	720.00	108.72	Final FF Basin Volume: 1071.595				Final Basin Soakpit Volume: 142.500		
	2.00	108.72	1521.20	1966.82	254.26		142.50	498.47	
Time (min)	Distribution Curve	Rainfall (mm)	1123.72	1966.82	845.61		142.50	1121.21	671.46
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min )	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
405	1.61	0.24	500.755	4.39	0.36	52.52	142.500	1.250	51.266
406	1.61	0.24	503.534	4.40	0.36	55.31	142.500	1.250	54.056
407	1.62	0.24	506.324	4.41	0.36	58.11	142.500	1.250	56.857
408	1.62	0.24	509.124	4.42	0.36	60.92	142.500	1.250	59.668
409	1.62	0.25	511.936	4.43	0.36	63.74	142.500	1.250	62.491
410	1.63	0.25	514.758	4.44	0.36	66.57	142.500	1.250	65.324
411	1.63	0.25	517.591	4.46	0.36	69.42	142.500	1.250	68.168
412	1.63	0.25	520.435	4.47	0.36	72.27	142.500	1.250	71.023
413	1.64	0.25	523.290	4.48	0.36	75.14	142.500	1.250	73.888
414	1.64	0.25	526.156	4.49	0.36	78.01	142.500	1.250	76.765
415	1.65	0.25	529.032	4.50	0.36	80.90	142.500	1.250	79.652
416	1.65	0.25	531.920	4.51	0.36	83.80	142.500	1.250	82.550
417	1.65	0.25	534.818	4.52	0.36	86.71	142.500	1.250	85.459
418	1.66	0.25	537.727	4.53	0.36	89.63	142.500	1.250	88.379
419	1.66	0.25	540.647	4.54	0.36	92.56	142.500	1.250	91.310
420	1.67	0.25	543.578	4.55	0.36	95.50	142.500	1.250	94.252
421	1.67	0.25	546.519	4.56	0.36	98.45	142.500	1.250	97.204
422	1.67	0.25	549.472	4.57	0.36	101.42	142.500	1.250	100.167
423	1.68	0.25	552.435	4.59	0.36	104.39	142.500	1.250	103.141
424	1.68	0.25	555.409	4.60	0.36	107.38	142.500	1.250	106.126
425	1.69	0.25	558.394	4.61	0.36	110.37	142.500	1.250	109.122
426	1.69	0.26	561.390	4.62	0.36	113.38	142.500	1.250	112.129
427	1.69	0.26	564.396	4.63	0.36	116.40	142.500	1.250	115.146
428	1.70	0.26	567.414	4.64	0.36	119.42	142.500	1.250	118.174
429	1.70	0.26	570.442	4.65	0.36	122.46	142.500	1.250	121.214
430	1.71	0.26	573.481	4.66	0.36	125.51	142.500	1.250	124.264
431	1.71	0.26	576.531	4.67	0.36	128.57	142.500	1.250	127.324
432	1.71	0.26	579.592	4.68	0.36	131.65	142.500	1.250	130.396
433	1.72	0.26	582.664	4.69	0.36	134.73	142.500	1.250	133.479
434	1.72	0.26	585.746	4.70	0.36	137.82	142.500	1.250	136.572
435	1.73	0.26	588.839	4.72	0.36	140.93	142.500	1.250	139.676
436	1.73	0.26	591.944	4.73	0.36	144.04	142.500	1.250	142.791
437	1.73	0.26	595.059	4.74	0.36	147.17	142.500	1.250	145.917
438	1.74	0.26	598.184	4.75	0.36	150.30	142.500	1.250	149.054
439	1.74	0.26	601.321	4.76	0.36	153.45	142.500	1.250	152.201
440	1.75	0.26	604.469	4.77	0.36	156.61	142.500	1.250	155.360
441	1.75	0.26	607.627	4.78	0.36	159.78	142.500	1.250	158.529
442	1.75	0.26	610.796	4.79	0.36	162.96	142.500	1.250	161.709
443	1.76	0.27	613.976	4.80	0.36	166.15	142.500	1.250	164.900
444	1.76	0.27	617.167	4.81	0.36	169.35	142.500	1.250	168.101
445	1.77	0.27	620.369	4.82	0.36	172.56	142.500	1.250	171.314
446	1.77	0.27	623.582	4.83	0.36	175.79	142.500	1.250	174.537
447	1.77	0.27	626.805	4.85	0.36	179.02	142.500	1.250	177.772
448	1.78	0.27	630.039	4.86	0.36	182.27	142.500	1.250	181.017
449	1.78	0.27	633.284	4.87	0.36	185.52	142.500	1.250	184.273
450	1.79	0.27	636.540	4.88	0.36	188.79	142.500	1.250	187.540
451	1.79	0.27	639.807	4.89	0.36	192.07	142.500	1.250	190.817
452	1.79	0.27	643.085	4.90	0.36	195.36	142.500	1.250	194.106
453	1.80	0.27	646.373	4.91	0.36	198.65	142.500	1.250	197.405
454	1.80	0.27	649.672	4.92	0.36	201.97	142.500	1.250	200.715
455	1.81	0.27	652.983	4.93	0.36	205.29	142.500	1.250	204.036
456	1.81	0.27	656.304	4.94	0.36	208.62	142.500	1.250	207.368
457	1.81	0.27	659.635	4.95	0.36	211.96	142.500	1.250	210.711
458	1.82	0.27	662.978	4.96	0.36	215.31	142.500	1.250	214.064
459	1.82	0.28	666.332	4.98	0.36	218.68	142.500	1.250	217.428
460	1.83	0.28	669.696	4.99	0.36	222.05	142.500	1.250	220.804
461	1.83	0.28	673.071	5.00	0.36	225.44	142.500	1.250	224.190
462	1.83	0.28	676.457	5.01	0.36	228.84	142.500	1.250	227.586
463	1.84	0.28	679.854	5.02	0.36	232.24	142.500	1.250	230.994
464	1.84	0.28	683.262	5.03	0.36	235.66	142.500	1.250	234.413
465	1.85	0.28	686.680	5.04	0.36	239.09	142.500	1.250	237.842
466	1.85	0.28	690.110	5.05	0.36	242.53	142.500	1.250	241.282
467	1.85	0.28	693.550	5.06	0.36	245.98	142.500	1.250	244.733
468	1.86	0.28	697.001	5.07	0.36	249.45	142.500	1.250	248.195
469	1.86	0.28	700.463	5.08	0.36	252.92	142.500	1.250	251.668
470	1.87	0.28	703.935	5.09	0.36	256.40	142.500	1.250	255.152
471	1.87	0.28	707.419	5.11	0.36	259.90	142.500	1.250	258.646
472	1.87	0.28	710.913	5.12	0.36	263.40	142.500	1.250	262.151
473	1.88	0.28	714.419	5.13	0.36	266.92	142.500	1.250	265.667
474	1.88	0.28	717.935	5.14	0.36	270.44	142.500	1.250	269.194
475	1.88	0.28	721.462	5.15	0.36	273.98	142.500	1.250	272.732
476	1.89	0.29	725.000	5.16	0.36	277.53	142.500	1.250	276.281
477	1.89	0.29	728.548	5.17	0.36	281.09	142.500	1.250	279.840
478	1.90	0.29	732.108	5.18	0.36	284.66	142.500	1.250	283.410
479	1.90	0.29	735.678	5.19	0.36	288.24	142.500	1.250	286.992
480	1.90	0.29	739.259	5.20	0.36	291.83	142.500	1.250	290.584
481	1.91	0.29	742.851	5.21	0.36	295.44	142.500	1.250	294.186
482	1.91	0.29	746.454	5.22	0.36	299.05	142.500	1.250	297.800
483	1.92	0.29	750.068	5.24	0.36	302.67	142.500	1.250	301.425
484	1.92	0.29	753.692	5.25	0.36	306.31	142.500	1.250	305.060
485	1.92	0.29	757.327	5.26	0.36	309.96	142.500	1.250	308.706
486	1.93	0.29	760.974	5.27	0.36	313.61	142.500	1.250	312.363
487	1.93	0.29	764.631	5.28	0.36	317.28	142.500	1.250	316.031
488	1.94	0.29	768.298	5.29	0.36	320.96	142.500	1.250	319.710
489	1.94	0.29	771.977	5.30	0.36	324.65	142.500	1.250	323.399
490	1.94	0.29	775.667	5.31	0.36	328.35	142.500	1.250	327.100
491	1.95	0.29	779.367	5.32	0.36	332.06	142.500	1.250	330.811
492	1.95	0.29	783.078	5.33	0.36	335.78	142.500	1.250	334.533
493	1.96	0.30	786.800	5.34	0.36	339.52	142.500	1.250	338.266
494	1.96	0.30	790.533	5.35	0.36	343.26	142.500	1.250	342.009
495	1.96	0.30	794.277	5.37	0.36	347.01	142.500	1.250	345.764
496	1.97	0.30	798.032	5.38	0.36	350.78	142.500	1.250	349.529
497	1.97	0.30	801.797	5.39	0.36	354.56	142.500	1.250	353.306
498	1.98	0.30	805.573	5.40	0.36	358.34	142.500	1.250	357.093
499	1.98	0.30	809.360	5.41	0.36	362.14	142.500	1.250	360.891
500	1.98	0.30	813.158	5.42	0.36	365.95	142.500	1.250	364.700
501	1.99	0.30	816.967	5.43	0.36	369.77	142.500	1.250	368.519
502	1.99	0.30	820.787	5.44	0.36	373.60	142.500	1.250	372.350
503	2.00	0.30	824.617	5.45	0.36	377.44	142.500	1.250	376.191
504	2.00	0.30	828.458	5.46	0.36	381.29	142.500	1.250	380.043
505	1.99	0.30	832.311	5.44	0.36	385.12	142.500	1.250	383.870
506	1.98	0.30	836.137	5.41	0.36	388.92	142.500	1.250	387.671
507	1.97	0.30	839.939	5.39	0.36	392.70	142.500	1.250	391.448

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks Summary	720.00	108.72	Final FF Basin Volume:		1071.595	254.26	Final Basin Soakpit Volume:		142.500
	2.00	108.72	1521.20	1966.82	845.61		142.50	498.47	671.46
Time (min)	Distribution Curve	Rainfall (mm)	Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
508	1.96	0.30	843.715	5.36	0.36	396.45	142.500	1.250	395.199
509	1.95	0.30	847.466	5.34	0.36	400.17	142.500	1.250	398.924
510	1.94	0.29	851.192	5.31	0.36	403.87	142.500	1.250	402.625
511	1.94	0.29	854.892	5.29	0.36	407.55	142.500	1.250	406.300
512	1.93	0.29	858.567	5.26	0.36	411.20	142.500	1.250	409.950
513	1.92	0.29	862.217	5.24	0.36	414.82	142.500	1.250	413.574
514	1.91	0.29	865.842	5.21	0.36	418.42	142.500	1.250	417.173
515	1.90	0.29	869.441	5.19	0.36	422.00	142.500	1.250	420.747
516	1.89	0.29	873.015	5.16	0.36	425.55	142.500	1.250	424.296
517	1.88	0.28	876.563	5.13	0.36	429.07	142.500	1.250	427.819
518	1.87	0.28	880.087	5.11	0.36	432.57	142.500	1.250	431.317
519	1.86	0.28	883.585	5.08	0.36	436.04	142.500	1.250	434.790
520	1.85	0.28	887.057	5.06	0.36	439.49	142.500	1.250	438.237
521	1.84	0.28	890.505	5.03	0.36	442.91	142.500	1.250	441.660
522	1.83	0.28	893.927	5.01	0.36	446.31	142.500	1.250	445.056
523	1.82	0.28	897.324	4.98	0.36	449.68	142.500	1.250	448.428
524	1.81	0.27	900.695	4.96	0.36	453.02	142.500	1.250	451.774
525	1.81	0.27	904.042	4.93	0.36	456.35	142.500	1.250	455.095
526	1.80	0.27	907.363	4.91	0.36	459.64	142.500	1.250	458.391
527	1.79	0.27	910.658	4.88	0.36	462.91	142.500	1.250	461.661
528	1.78	0.27	913.929	4.86	0.36	466.16	142.500	1.250	464.906
529	1.77	0.27	917.174	4.83	0.36	469.38	142.500	1.250	468.126
530	1.76	0.27	920.394	4.81	0.36	472.57	142.500	1.250	471.321
531	1.75	0.26	923.588	4.78	0.36	475.74	142.500	1.250	474.490
532	1.74	0.26	926.757	4.76	0.36	478.88	142.500	1.250	477.634
533	1.73	0.26	929.901	4.73	0.36	482.00	142.500	1.250	480.753
534	1.72	0.26	933.020	4.70	0.36	485.10	142.500	1.250	483.846
535	1.71	0.26	936.113	4.68	0.36	488.16	142.500	1.250	486.914
536	1.70	0.26	939.181	4.65	0.36	491.21	142.500	1.250	489.957
537	1.69	0.26	942.224	4.63	0.36	494.22	142.500	1.250	492.974
538	1.69	0.25	945.242	4.60	0.36	497.22	142.500	1.250	495.966
539	1.68	0.25	948.234	4.58	0.36	500.18	142.500	1.250	498.933
540	1.67	0.25	951.201	4.55	0.36	503.12	142.500	1.250	501.875
541	1.66	0.25	954.142	4.53	0.36	506.04	142.500	1.250	504.791
542	1.65	0.25	957.058	4.50	0.36	508.93	142.500	1.250	507.682
543	1.64	0.25	959.949	4.48	0.36	511.80	142.500	1.250	510.548
544	1.63	0.25	962.815	4.45	0.36	514.64	142.500	1.250	513.388
545	1.62	0.24	965.656	4.43	0.36	517.45	142.500	1.250	516.203
546	1.61	0.24	968.471	4.40	0.36	520.24	142.500	1.250	518.993
547	1.60	0.24	971.260	4.38	0.36	523.01	142.500	1.250	521.758
548	1.59	0.24	974.025	4.35	0.36	525.75	142.500	1.250	524.497
549	1.58	0.24	976.764	4.33	0.36	528.46	142.500	1.250	527.211
550	1.57	0.24	979.478	4.30	0.36	531.15	142.500	1.250	529.899
551	1.56	0.24	982.167	4.27	0.36	533.81	142.500	1.250	532.563
552	1.56	0.23	984.830	4.25	0.36	536.45	142.500	1.250	535.201
553	1.55	0.23	987.468	4.22	0.36	539.06	142.500	1.250	537.813
554	1.54	0.23	990.081	4.20	0.36	541.65	142.500	1.250	540.401
555	1.53	0.23	992.668	4.17	0.36	544.21	142.500	1.250	542.963
556	1.52	0.23	995.231	4.15	0.36	546.75	142.500	1.250	545.500
557	1.51	0.23	997.768	4.12	0.36	549.26	142.500	1.250	548.012
558	1.50	0.23	1000.279	4.10	0.36	551.75	142.500	1.250	550.498
559	1.49	0.23	1002.765	4.07	0.36	554.21	142.500	1.250	552.959
560	1.48	0.22	1005.226	4.05	0.36	556.64	142.500	1.250	555.395
561	1.47	0.22	1007.662	4.02	0.36	559.06	142.500	1.250	557.805
562	1.46	0.22	1010.073	4.00	0.36	561.44	142.500	1.250	560.190
563	1.45	0.22	1012.458	3.97	0.36	563.80	142.500	1.250	562.550
564	1.44	0.22	1014.817	3.95	0.36	566.13	142.500	1.250	564.884
565	1.44	0.22	1017.152	3.92	0.36	568.44	142.500	1.250	567.194
566	1.43	0.22	1019.461	3.90	0.36	570.73	142.500	1.250	569.478
567	1.42	0.21	1021.745	3.87	0.36	572.99	142.500	1.250	571.736
568	1.41	0.21	1024.004	3.84	0.36	575.22	142.500	1.250	573.970
569	1.40	0.21	1026.237	3.82	0.36	577.43	142.500	1.250	576.178
570	1.39	0.21	1028.445	3.79	0.36	579.61	142.500	1.250	578.361
571	1.38	0.21	1030.628	3.77	0.36	581.77	142.500	1.250	580.518
572	1.37	0.21	1032.785	3.74	0.36	583.90	142.500	1.250	582.650
573	1.36	0.21	1034.918	3.72	0.36	586.01	142.500	1.250	584.757
574	1.35	0.20	1037.025	3.69	0.36	588.09	142.500	1.250	586.839
575	1.34	0.20	1039.106	3.67	0.36	590.14	142.500	1.250	588.895
576	1.33	0.20	1041.162	3.64	0.36	592.18	142.500	1.250	590.926
577	1.32	0.20	1043.193	3.62	0.36	594.18	142.500	1.250	592.932
578	1.31	0.20	1045.199	3.59	0.36	596.16	142.500	1.250	594.912
579	1.31	0.20	1047.180	3.57	0.36	598.12	142.500	1.250	596.867
580	1.30	0.20	1049.135	3.54	0.36	600.05	142.500	1.250	598.797
581	1.29	0.19	1051.065	3.52	0.36	601.95	142.500	1.250	600.702
582	1.28	0.19	1052.969	3.49	0.36	603.83	142.500	1.250	602.581
583	1.27	0.19	1054.848	3.47	0.36	605.68	142.500	1.250	604.435
584	1.26	0.19	1056.702	3.44	0.36	607.51	142.500	1.250	606.264
585	1.25	0.19	1058.531	3.41	0.36	609.32	142.500	1.250	608.067
586	1.24	0.19	1060.334	3.39	0.36	611.09	142.500	1.250	609.845
587	1.23	0.19	1062.112	3.36	0.36	612.85	142.500	1.250	611.598
588	1.22	0.18	1063.865	3.34	0.36	614.58	142.500	1.250	613.325
589	1.21	0.18	1065.593	3.31	0.36	616.28	142.500	1.250	615.027
590	1.20	0.18	1067.295	3.29	0.36	617.95	142.500	1.250	616.704
591	1.19	0.18	1068.972	3.26	0.36	619.61	142.500	1.250	618.356
592	1.19	0.18	1070.623	3.24	0.36	621.23	142.500	1.250	619.982
593	1.18	0.18	1072.250	3.21	0.36	622.83	142.500	1.250	621.583
594	1.17	0.18	1073.851	3.19	0.36	624.41	142.500	1.250	623.159
595	1.16	0.17	1075.426	3.16	0.36	625.96	142.500	1.250	624.709
596	1.15	0.17	1076.977	3.14	0.36	627.48	142.500	1.250	626.235
597	1.14	0.17	1078.502	3.11	0.36	628.98	142.500	1.250	627.734
598	1.13	0.17	1080.002	3.09	0.36	630.46	142.500	1.250	629.209
599	1.12	0.17	1081.476	3.06	0.36	631.91	142.500	1.250	630.658
600	1.11	0.17	1082.926	3.04	0.36	633.33	142.500	1.250	632.082
601	1.10	0.17	1084.350	3.01	0.36	634.73	142.500	1.250	633.481
602	1.09	0.16	1085.748	2.98	0.36	636.10	142.500	1.250	634.854
603	1.08	0.16	1087.122	2.96	0.36	637.45	142.500	1.250	636.202
604	1.07	0.16	1088.470	2.93	0.36	638.78	142.500	1.250	637.525
605	1.06	0.16	1089.793	2.91	0.36	640.07	142.500	1.250	638.823
606	1.06	0.16	1091.090	2.88	0.36	641.34	142.500	1.250	640.095
607	1.05	0.16	1092.362	2.86	0.36	642.59	142.500	1.250	641.342
608	1.04	0.16	1093.609	2.83	0.36	643.81	142.500	1.250	642.563
609	1.03	0.16	1094.831	2.81	0.36	645.01	142.500	1.250	643.760
610	1.02	0.15	1096.027	2.78	0.36	646.18	142.500	1.250	644.931

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks Summary	720.00	108.72	Final FF Basin Volume: 1071.595				Final Basin Soakpit Volume: 142.500		
	2.00	108.72	1521.20	1966.82	254.26		142.50	498.47	
Time (min)	Distribution Curve	Rainfall (mm)	1123.72	1966.82	845.61		142.50	1121.21	671.46
611	1.01	0.15	Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min )	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
612	1.00	0.15	1097.198	2.76	0.36	647.33	142.500	1.250	646.076
613	0.99	0.15	1098.344	2.73	0.36	648.45	142.500	1.250	647.197
614	0.98	0.15	1099.464	2.71	0.36	649.54	142.500	1.250	648.292
615	0.97	0.15	1100.560	2.68	0.36	650.61	142.500	1.250	649.362
616	0.96	0.15	1101.629	2.66	0.36	651.66	142.500	1.250	650.407
617	0.95	0.14	1102.674	2.63	0.36	652.68	142.500	1.250	651.426
618	0.94	0.14	1103.693	2.61	0.36	653.67	142.500	1.250	652.420
619	0.94	0.14	1104.687	2.58	0.36	654.64	142.500	1.250	653.388
620	0.93	0.14	1105.656	2.55	0.36	655.58	142.500	1.250	654.332
621	0.92	0.14	1106.599	2.53	0.36	656.50	142.500	1.250	655.250
622	0.91	0.14	1107.517	2.50	0.36	657.39	142.500	1.250	656.143
623	0.90	0.14	1108.410	2.48	0.36	658.26	142.500	1.250	657.010
624	0.89	0.13	1109.278	2.45	0.36	659.10	142.500	1.250	657.852
625	0.88	0.13	1110.120	2.43	0.36	659.92	142.500	1.250	658.669
626	0.87	0.13	1110.937	2.40	0.36	660.71	142.500	1.250	659.461
627	0.86	0.13	1111.729	2.38	0.36	661.48	142.500	1.250	660.227
628	0.85	0.13	1112.495	2.35	0.36	662.22	142.500	1.250	660.968
629	0.84	0.13	1113.236	2.33	0.36	662.93	142.500	1.250	661.684
630	0.83	0.13	1113.952	2.30	0.36	663.62	142.500	1.250	662.375
631	0.82	0.12	1114.642	2.28	0.36	664.29	142.500	1.250	663.040
632	0.81	0.12	1115.307	2.25	0.36	664.93	142.500	1.250	663.680
633	0.81	0.12	1115.947	2.23	0.36	665.54	142.500	1.250	664.294
634	0.80	0.12	1116.562	2.20	0.36	666.13	142.500	1.250	664.883
635	0.79	0.12	1117.151	2.18	0.36	666.70	142.500	1.250	665.447
636	0.78	0.12	1117.715	2.15	0.36	667.24	142.500	1.250	665.986
637	0.77	0.12	1118.254	2.12	0.36	667.75	142.500	1.250	666.500
638	0.76	0.11	1118.767	2.10	0.36	668.24	142.500	1.250	666.988
639	0.75	0.11	1119.255	2.07	0.36	668.70	142.500	1.250	667.451
640	0.74	0.11	1119.718	2.05	0.36	669.14	142.500	1.250	667.888
641	0.73	0.11	1120.156	2.02	0.36	669.55	142.500	1.250	668.300
642	0.72	0.11	1120.568	2.00	0.36	669.94	142.500	1.250	668.687
643	0.71	0.11	1120.955	1.97	0.36	670.30	142.500	1.250	669.049
644	0.70	0.11	1121.316	1.95	0.36	670.64	142.500	1.250	669.385
645	0.69	0.10	1121.653	1.92	0.36	670.95	142.500	1.250	669.696
646	0.69	0.10	1121.964	1.90	0.36	671.23	142.500	1.250	669.982
647	0.68	0.10	1122.249	1.87	0.36	671.49	142.500	1.250	670.242
648	0.67	0.10	1122.510	1.85	0.36	671.73	142.500	1.250	670.478
649	0.66	0.10	1122.745	1.82	0.36	671.94	142.500	1.250	670.688
650	0.65	0.10	1122.955	1.80	0.36	672.12	142.500	1.250	670.872
651	0.64	0.10	1123.140	1.77	0.36	672.28	142.500	1.250	671.031
652	0.63	0.10	1123.299	1.75	0.36	672.42	142.500	1.250	671.165
653	0.62	0.09	1123.433	1.72	0.36	672.52	142.500	1.250	671.274
654	0.61	0.09	1123.542	1.69	0.36	672.61	142.500	1.250	671.358
655	0.60	0.09	1123.625	1.67	0.36	672.67	142.500	1.250	671.416
656	0.59	0.09	1123.683	1.64	0.36	672.70	142.500	1.250	671.448
657	0.58	0.09	1123.716	1.62	0.36	672.71	142.500	1.250	671.456
658	0.57	0.09	1123.723	1.59	0.36	672.69	142.500	1.250	671.438
659	0.56	0.09	1123.706	1.57	0.36	672.65	142.500	1.250	671.395
660	0.56	0.08	1123.663	1.54	0.36	672.58	142.500	1.250	671.327
661	0.55	0.08	1123.594	1.52	0.36	672.48	142.500	1.250	671.233
662	0.54	0.08	1123.501	1.49	0.36	672.36	142.500	1.250	671.114
663	0.53	0.08	1123.382	1.47	0.36	672.22	142.500	1.250	670.970
664	0.52	0.08	1123.238	1.44	0.36	672.05	142.500	1.250	670.801
665	0.51	0.08	1123.068	1.42	0.36	671.86	142.500	1.250	670.606
666	0.50	0.08	1122.873	1.39	0.36	671.64	142.500	1.250	670.386
667	0.49	0.07	1122.653	1.37	0.36	671.39	142.500	1.250	670.140
668	0.48	0.07	1122.408	1.34	0.36	671.12	142.500	1.250	669.869
669	0.47	0.07	1122.137	1.32	0.36	670.82	142.500	1.250	669.573
670	0.46	0.07	1121.841	1.29	0.36	670.50	142.500	1.250	669.252
671	0.45	0.07	1121.520	1.26	0.36	670.16	142.500	1.250	668.906
672	0.44	0.07	1121.173	1.24	0.36	669.78	142.500	1.250	668.534
673	0.44	0.07	1120.801	1.21	0.36	669.39	142.500	1.250	668.137
674	0.43	0.06	1120.404	1.19	0.36	668.96	142.500	1.250	667.714
675	0.42	0.06	1119.982	1.16	0.36	668.52	142.500	1.250	667.266
676	0.41	0.06	1119.534	1.14	0.36	668.04	142.500	1.250	666.793
677	0.40	0.06	1119.061	1.11	0.36	667.55	142.500	1.250	666.295
678	0.39	0.06	1118.563	1.09	0.36	667.02	142.500	1.250	665.771
679	0.38	0.06	1118.039	1.06	0.36	666.47	142.500	1.250	665.222
680	0.37	0.06	1117.490	1.04	0.36	665.90	142.500	1.250	664.648
681	0.36	0.05	1116.916	1.01	0.36	665.30	142.500	1.250	664.049
682	0.35	0.05	1116.316	0.99	0.36	664.67	142.500	1.250	663.424
683	0.34	0.05	1115.691	0.96	0.36	664.02	142.500	1.250	662.774
684	0.33	0.05	1115.041	0.94	0.36	663.35	142.500	1.250	662.098
685	0.32	0.05	1114.366	0.91	0.36	662.65	142.500	1.250	661.398
686	0.31	0.05	1113.665	0.89	0.36	661.92	142.500	1.250	660.672
687	0.31	0.05	1112.939	0.86	0.36	661.17	142.500	1.250	659.921
688	0.30	0.04	1112.188	0.83	0.36	660.39	142.500	1.250	659.144
689	0.30	0.04	1111.411	0.81	0.36	659.59	142.500	1.250	658.342
690	0.29	0.04	1110.610	0.78	0.36	658.76	142.500	1.250	657.515
691	0.28	0.04	1109.782	0.76	0.36	657.91	142.500	1.250	656.662
692	0.27	0.04	1108.930	0.73	0.36	657.03	142.500	1.250	655.785
693	0.26	0.04	1108.052	0.71	0.36	656.13	142.500	1.250	654.882
694	0.25	0.04	1107.149	0.68	0.36	655.20	142.500	1.250	653.953
695	0.24	0.04	1106.221	0.66	0.36	654.25	142.500	1.250	653.000
696	0.23	0.03	1105.267	0.63	0.36	653.27	142.500	1.250	652.021
697	0.22	0.03	1104.288	0.61	0.36	652.27	142.500	1.250	651.017
698	0.21	0.03	1103.284	0.58	0.36	651.24	142.500	1.250	649.987
699	0.20	0.03	1102.255	0.56	0.36	650.18	142.500	1.250	648.932
700	0.19	0.03	1101.200	0.53	0.36	649.10	142.500	1.250	647.852
701	0.18	0.03	1100.120	0.51	0.36	648.00	142.500	1.250	646.747
702	0.17	0.03	1099.014	0.48	0.36	646.87	142.500	1.250	645.616
703	0.16	0.02	1097.884	0.46	0.36	645.71	142.500	1.250	644.460
704	0.15	0.02	1096.728	0.43	0.36	644.53	142.500	1.250	643.279
705	0.14	0.02	1095.546	0.40	0.36	643.32	142.500	1.250	642.072
706	0.13	0.02	1094.340	0.38	0.36	642.09	142.500	1.250	640.841
707	0.12	0.02	1093.108	0.35	0.36	640.83	142.500	1.250	639.583
708	0.11	0.02	1091.851	0.33	0.36	639.55	142.500	1.250	638.301
709	0.10	0.02	1090.569	0.30	0.36	638.24	142.500	1.250	636.993
710	0.09	0.01	1089.261	0.28	0.36	636.91	142.500	1.250	635.660
711	0.08	0.01	1087.928	0.25	0.36	635.55	142.500	1.250	634.302
712	0.07	0.01	1086.569	0.23	0.36	634.17	142.500	1.250	632.918
713	0.06	0.01	1085.186	0.20	0.36	632.76	142.500	1.250	631.509
			1083.777	0.18	0.36	631.33	142.500	1.250	630.075

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks Summary	720.00	108.72	Final FF Basin Volume: 1071.595				Final Basin Soakpit Volume: 142.500		
	2.00	108.72	1521.20	1966.82	254.26		142.50	498.47	
Time (min)	Distribution Curve	Rainfall (mm)	1123.72	1966.82	845.61		142.50	1121.21	671.46
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min )	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
714	0.06	0.01	1082.343	0.15	0.36	629.87	142.500	1.250	628.616
715	0.05	0.01	1080.883	0.13	0.36	628.38	142.500	1.250	627.131
716	0.04	0.01	1079.398	0.10	0.36	626.87	142.500	1.250	625.621
717	0.03	0.00	1077.888	0.08	0.36	625.34	142.500	1.250	624.086
718	0.02	0.00	1076.353	0.05	0.36	623.77	142.500	1.250	622.525
719	0.01	0.00	1074.792	0.03	0.36	622.19	142.500	1.250	620.939
720	0.00	0.00	1073.206	0.00	0.36	620.58	142.500	1.250	619.328
721	0.00	0.00	1071.595	0.00	0.36	618.97	142.500	1.250	617.716
722	0.00	0.00	1069.984	0.00	0.36	617.36	142.500	1.250	616.105
723	0.00	0.00	1068.373	0.00	0.36	615.74	142.500	1.250	614.494
724	0.00	0.00	1066.761	0.00	0.36	614.13	142.500	1.250	612.883
725	0.00	0.00	1065.150	0.00	0.36	612.52	142.500	1.250	611.271
726	0.00	0.00	1063.539	0.00	0.36	610.91	142.500	1.250	609.660
727	0.00	0.00	1061.928	0.00	0.36	609.30	142.500	1.250	608.049
728	0.00	0.00	1060.316	0.00	0.36	607.69	142.500	1.250	606.438
729	0.00	0.00	1058.705	0.00	0.36	606.08	142.500	1.250	604.826
730	0.00	0.00	1057.094	0.00	0.36	604.47	142.500	1.250	603.215
731	0.00	0.00	1055.483	0.00	0.36	602.85	142.500	1.250	601.604
732	0.00	0.00	1053.871	0.00	0.36	601.24	142.500	1.250	599.993
733	0.00	0.00	1052.260	0.00	0.36	599.63	142.500	1.250	598.381
734	0.00	0.00	1050.649	0.00	0.36	598.02	142.500	1.250	596.770
735	0.00	0.00	1049.038	0.00	0.36	596.41	142.500	1.250	595.159
736	0.00	0.00	1047.426	0.00	0.36	594.80	142.500	1.250	593.548
737	0.00	0.00	1045.815	0.00	0.36	593.19	142.500	1.250	591.936
738	0.00	0.00	1044.204	0.00	0.36	591.58	142.500	1.250	590.325
739	0.00	0.00	1042.593	0.00	0.36	589.96	142.500	1.250	588.714
740	0.00	0.00	1040.981	0.00	0.36	588.35	142.500	1.250	587.103
741	0.00	0.00	1039.370	0.00	0.36	586.74	142.500	1.250	585.491
742	0.00	0.00	1037.759	0.00	0.36	585.13	142.500	1.250	583.880
743	0.00	0.00	1036.148	0.00	0.36	583.52	142.500	1.250	582.269
744	0.00	0.00	1034.536	0.00	0.36	581.91	142.500	1.250	580.658
745	0.00	0.00	1032.925	0.00	0.36	580.30	142.500	1.250	579.046
746	0.00	0.00	1031.314	0.00	0.36	578.69	142.500	1.250	577.435
747	0.00	0.00	1029.703	0.00	0.36	577.07	142.500	1.250	575.824
748	0.00	0.00	1028.091	0.00	0.36	575.46	142.500	1.250	574.213
749	0.00	0.00	1026.480	0.00	0.36	573.85	142.500	1.250	572.601
750	0.00	0.00	1024.869	0.00	0.36	572.24	142.500	1.250	570.990
751	0.00	0.00	1023.258	0.00	0.36	570.63	142.500	1.250	569.379
752	0.00	0.00	1021.646	0.00	0.36	569.02	142.500	1.250	567.768
753	0.00	0.00	1020.035	0.00	0.36	567.41	142.500	1.250	566.156
754	0.00	0.00	1018.424	0.00	0.36	565.80	142.500	1.250	564.545
755	0.00	0.00	1016.813	0.00	0.36	564.18	142.500	1.250	562.934
756	0.00	0.00	1015.201	0.00	0.36	562.57	142.500	1.250	561.323
757	0.00	0.00	1013.590	0.00	0.36	560.96	142.500	1.250	559.711
758	0.00	0.00	1011.979	0.00	0.36	559.35	142.500	1.250	558.100
759	0.00	0.00	1010.368	0.00	0.36	557.74	142.500	1.250	556.489
760	0.00	0.00	1008.756	0.00	0.36	556.13	142.500	1.250	554.878
761	0.00	0.00	1007.145	0.00	0.36	554.52	142.500	1.250	553.266
762	0.00	0.00	1005.534	0.00	0.36	552.91	142.500	1.250	551.655
763	0.00	0.00	1003.923	0.00	0.36	551.29	142.500	1.250	550.044
764	0.00	0.00	1002.311	0.00	0.36	549.68	142.500	1.250	548.433
765	0.00	0.00	1000.700	0.00	0.36	548.07	142.500	1.250	546.821
766	0.00	0.00	999.089	0.00	0.36	546.46	142.500	1.250	545.210
767	0.00	0.00	997.478	0.00	0.36	544.85	142.500	1.250	543.599
768	0.00	0.00	995.866	0.00	0.36	543.24	142.500	1.250	541.988
769	0.00	0.00	994.255	0.00	0.36	541.63	142.500	1.250	540.376
770	0.00	0.00	992.644	0.00	0.36	540.02	142.500	1.250	538.765
771	0.00	0.00	991.033	0.00	0.36	538.40	142.500	1.250	537.154
772	0.00	0.00	989.421	0.00	0.36	536.79	142.500	1.250	535.543
773	0.00	0.00	987.810	0.00	0.36	535.18	142.500	1.250	533.931
774	0.00	0.00	986.199	0.00	0.36	533.57	142.500	1.250	532.320
775	0.00	0.00	984.588	0.00	0.36	531.96	142.500	1.250	530.709
776	0.00	0.00	982.976	0.00	0.36	530.35	142.500	1.250	529.098
777	0.00	0.00	981.365	0.00	0.36	528.74	142.500	1.250	527.486
778	0.00	0.00	979.754	0.00	0.36	527.13	142.500	1.250	525.875
779	0.00	0.00	978.143	0.00	0.36	525.51	142.500	1.250	524.264
780	0.00	0.00	976.531	0.00	0.36	523.90	142.500	1.250	522.653
781	0.00	0.00	974.920	0.00	0.36	522.29	142.500	1.250	521.041
782	0.00	0.00	973.309	0.00	0.36	520.68	142.500	1.250	519.430
783	0.00	0.00	971.698	0.00	0.36	519.07	142.500	1.250	517.819
784	0.00	0.00	970.086	0.00	0.36	517.46	142.500	1.250	516.208
785	0.00	0.00	968.475	0.00	0.36	515.85	142.500	1.250	514.596
786	0.00	0.00	966.864	0.00	0.36	514.24	142.500	1.250	512.985
787	0.00	0.00	965.253	0.00	0.36	512.62	142.500	1.250	511.374
788	0.00	0.00	963.641	0.00	0.36	511.01	142.500	1.250	509.763
789	0.00	0.00	962.030	0.00	0.36	509.40	142.500	1.250	508.151
790	0.00	0.00	960.419	0.00	0.36	507.79	142.500	1.250	506.540
791	0.00	0.00	958.808	0.00	0.36	506.18	142.500	1.250	504.929
792	0.00	0.00	957.196	0.00	0.36	504.57	142.500	1.250	503.318
793	0.00	0.00	955.585	0.00	0.36	502.96	142.500	1.250	501.706
794	0.00	0.00	953.974	0.00	0.36	501.35	142.500	1.250	500.095
795	0.00	0.00	952.363	0.00	0.36	499.73	142.500	1.250	498.484
796	0.00	0.00	950.751	0.00	0.36	498.12	142.500	1.250	496.873
797	0.00	0.00	949.140	0.00	0.36	496.51	142.500	1.250	495.261
798	0.00	0.00	947.529	0.00	0.36	494.90	142.500	1.250	493.650
799	0.00	0.00	945.918	0.00	0.36	493.29	142.500	1.250	492.039
800	0.00	0.00	944.306	0.00	0.36	491.68	142.500	1.250	490.428
801	0.00	0.00	942.695	0.00	0.36	490.07	142.500	1.250	488.816
802	0.00	0.00	941.084	0.00	0.36	488.46	142.500	1.250	487.205
803	0.00	0.00	939.473	0.00	0.36	486.84	142.500	1.250	485.594
804	0.00	0.00	937.861	0.00	0.36	485.23	142.500	1.250	483.983
805	0.00	0.00	936.250	0.00	0.36	483.62	142.500	1.250	482.371
806	0.00	0.00	934.639	0.00	0.36	482.01	142.500	1.250	480.760
807	0.00	0.00	933.028	0.00	0.36	480.40	142.500	1.250	479.149
808	0.00	0.00	931.416	0.00	0.36	478.79	142.500	1.250	477.538
809	0.00	0.00	929.805	0.00	0.36	477.18	142.500	1.250	475.926
810	0.00	0.00	928.194	0.00	0.36	475.57	142.500	1.250	474.315
811	0.00	0.00	926.583	0.00	0.36	473.95	142.500	1.250	472.704
812	0.00	0.00	924.971	0.00	0.36	472.34	142.500	1.250	471.093
813	0.00	0.00	923.360	0.00	0.36	470.73	142.500	1.250	469.481
814	0.00	0.00	921.749	0.00	0.36	469.12	142.500	1.250	467.870
815	0.00	0.00	920.138	0.00	0.36	467.51	142.500	1.250	466.259
816	0.00	0.00	918.526	0.00	0.36	465.90	142.500	1.250	464.648



Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpits		
Checks Summary	720.00	108.72	Final FF Basin Volume:		1071.595	254.26	Final Basin Soakpits Volume:		142.500
	2.00	108.72	1521.20	1966.82	1966.82		142.50	498.47	
Time (min)	Distribution Curve	Rainfall (mm)	1123.72	845.61	845.61	1121.21	142.50	1121.21	671.46
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
817	0.00	0.00	916.915	0.00	0.36	464.29	142.500	1.250	463.036
818	0.00	0.00	915.304	0.00	0.36	462.68	142.500	1.250	461.425
819	0.00	0.00	913.693	0.00	0.36	461.06	142.500	1.250	459.814
820	0.00	0.00	912.081	0.00	0.36	459.45	142.500	1.250	458.203
821	0.00	0.00	910.470	0.00	0.36	457.84	142.500	1.250	456.591
822	0.00	0.00	908.859	0.00	0.36	456.23	142.500	1.250	454.980
823	0.00	0.00	907.248	0.00	0.36	454.62	142.500	1.250	453.369
824	0.00	0.00	905.636	0.00	0.36	453.01	142.500	1.250	451.758
825	0.00	0.00	904.025	0.00	0.36	451.40	142.500	1.250	450.146
826	0.00	0.00	902.414	0.00	0.36	449.79	142.500	1.250	448.535
827	0.00	0.00	900.803	0.00	0.36	448.17	142.500	1.250	446.924
828	0.00	0.00	899.191	0.00	0.36	446.56	142.500	1.250	445.313
829	0.00	0.00	897.580	0.00	0.36	444.95	142.500	1.250	443.701
830	0.00	0.00	895.969	0.00	0.36	443.34	142.500	1.250	442.090
831	0.00	0.00	894.358	0.00	0.36	441.73	142.500	1.250	440.479
832	0.00	0.00	892.746	0.00	0.36	440.12	142.500	1.250	438.868
833	0.00	0.00	891.135	0.00	0.36	438.51	142.500	1.250	437.256
834	0.00	0.00	889.524	0.00	0.36	436.90	142.500	1.250	435.645
835	0.00	0.00	887.913	0.00	0.36	435.28	142.500	1.250	434.034
836	0.00	0.00	886.301	0.00	0.36	433.67	142.500	1.250	432.423
837	0.00	0.00	884.690	0.00	0.36	432.06	142.500	1.250	430.811
838	0.00	0.00	883.079	0.00	0.36	430.45	142.500	1.250	429.200
839	0.00	0.00	881.468	0.00	0.36	428.84	142.500	1.250	427.589
840	0.00	0.00	879.856	0.00	0.36	427.23	142.500	1.250	425.978
841	0.00	0.00	878.245	0.00	0.36	425.62	142.500	1.250	424.366
842	0.00	0.00	876.634	0.00	0.36	424.01	142.500	1.250	422.755
843	0.00	0.00	875.023	0.00	0.36	422.39	142.500	1.250	421.144
844	0.00	0.00	873.411	0.00	0.36	420.78	142.500	1.250	419.533
845	0.00	0.00	871.800	0.00	0.36	419.17	142.500	1.250	417.921
846	0.00	0.00	870.189	0.00	0.36	417.56	142.500	1.250	416.310
847	0.00	0.00	868.578	0.00	0.36	415.95	142.500	1.250	414.699
848	0.00	0.00	866.966	0.00	0.36	414.34	142.500	1.250	413.088
849	0.00	0.00	865.355	0.00	0.36	412.73	142.500	1.250	411.476
850	0.00	0.00	863.744	0.00	0.36	411.12	142.500	1.250	409.865
851	0.00	0.00	862.133	0.00	0.36	409.50	142.500	1.250	408.254
852	0.00	0.00	860.521	0.00	0.36	407.89	142.500	1.250	406.643
853	0.00	0.00	858.910	0.00	0.36	406.28	142.500	1.250	405.031
854	0.00	0.00	857.299	0.00	0.36	404.67	142.500	1.250	403.420
855	0.00	0.00	855.688	0.00	0.36	403.06	142.500	1.250	401.809
856	0.00	0.00	854.076	0.00	0.36	401.45	142.500	1.250	400.198
857	0.00	0.00	852.465	0.00	0.36	399.84	142.500	1.250	398.586
858	0.00	0.00	850.854	0.00	0.36	398.23	142.500	1.250	396.975
859	0.00	0.00	849.243	0.00	0.36	396.61	142.500	1.250	395.364
860	0.00	0.00	847.631	0.00	0.36	395.00	142.500	1.250	393.753
861	0.00	0.00	846.020	0.00	0.36	393.39	142.500	1.250	392.141
862	0.00	0.00	844.409	0.00	0.36	391.78	142.500	1.250	390.530
863	0.00	0.00	842.798	0.00	0.36	390.17	142.500	1.250	388.919
864	0.00	0.00	841.186	0.00	0.36	388.56	142.500	1.250	387.308
865	0.00	0.00	839.575	0.00	0.36	386.95	142.500	1.250	385.696
866	0.00	0.00	837.964	0.00	0.36	385.34	142.500	1.250	384.085
867	0.00	0.00	836.353	0.00	0.36	383.72	142.500	1.250	382.474
868	0.00	0.00	834.741	0.00	0.36	382.11	142.500	1.250	380.863
869	0.00	0.00	833.130	0.00	0.36	380.50	142.500	1.250	379.251
870	0.00	0.00	831.519	0.00	0.36	378.89	142.500	1.250	377.640
871	0.00	0.00	829.908	0.00	0.36	377.28	142.500	1.250	376.029
872	0.00	0.00	828.296	0.00	0.36	375.67	142.500	1.250	374.418
873	0.00	0.00	826.685	0.00	0.36	374.06	142.500	1.250	372.806
874	0.00	0.00	825.074	0.00	0.36	372.45	142.500	1.250	371.195
875	0.00	0.00	823.463	0.00	0.36	370.83	142.500	1.250	369.584
876	0.00	0.00	821.851	0.00	0.36	369.22	142.500	1.250	367.973
877	0.00	0.00	820.240	0.00	0.36	367.61	142.500	1.250	366.361
878	0.00	0.00	818.629	0.00	0.36	366.00	142.500	1.250	364.750
879	0.00	0.00	817.018	0.00	0.36	364.39	142.500	1.250	363.139
880	0.00	0.00	815.406	0.00	0.36	362.78	142.500	1.250	361.528
881	0.00	0.00	813.795	0.00	0.36	361.17	142.500	1.250	359.916
882	0.00	0.00	812.184	0.00	0.36	359.56	142.500	1.250	358.305
883	0.00	0.00	810.573	0.00	0.36	357.94	142.500	1.250	356.694
884	0.00	0.00	808.961	0.00	0.36	356.33	142.500	1.250	355.083
885	0.00	0.00	807.350	0.00	0.36	354.72	142.500	1.250	353.471
886	0.00	0.00	805.739	0.00	0.36	353.11	142.500	1.250	351.860
887	0.00	0.00	804.128	0.00	0.36	351.50	142.500	1.250	350.249
888	0.00	0.00	802.516	0.00	0.36	349.89	142.500	1.250	348.638
889	0.00	0.00	800.905	0.00	0.36	348.28	142.500	1.250	347.026
890	0.00	0.00	799.294	0.00	0.36	346.67	142.500	1.250	345.415
891	0.00	0.00	797.683	0.00	0.36	345.05	142.500	1.250	343.804
892	0.00	0.00	796.071	0.00	0.36	343.44	142.500	1.250	342.193
893	0.00	0.00	794.460	0.00	0.36	341.83	142.500	1.250	340.581
894	0.00	0.00	792.849	0.00	0.36	340.22	142.500	1.250	338.970
895	0.00	0.00	791.238	0.00	0.36	338.61	142.500	1.250	337.359
896	0.00	0.00	789.626	0.00	0.36	337.00	142.500	1.250	335.748
897	0.00	0.00	788.015	0.00	0.36	335.39	142.500	1.250	334.136
898	0.00	0.00	786.404	0.00	0.36	333.78	142.500	1.250	332.525
899	0.00	0.00	784.793	0.00	0.36	332.16	142.500	1.250	330.914
900	0.00	0.00	783.181	0.00	0.36	330.55	142.500	1.250	329.303
901	0.00	0.00	781.570	0.00	0.36	328.94	142.500	1.250	327.691
902	0.00	0.00	779.959	0.00	0.36	327.33	142.500	1.250	326.080
903	0.00	0.00	778.348	0.00	0.36	325.72	142.500	1.250	324.469
904	0.00	0.00	776.736	0.00	0.36	324.11	142.500	1.250	322.858
905	0.00	0.00	775.125	0.00	0.36	322.50	142.500	1.250	321.246
906	0.00	0.00	773.514	0.00	0.36	320.89	142.500	1.250	319.635
907	0.00	0.00	771.903	0.00	0.36	319.27	142.500	1.250	318.024
908	0.00	0.00	770.291	0.00	0.36	317.66	142.500	1.250	316.413
909	0.00	0.00	768.680	0.00	0.36	316.05	142.500	1.250	314.801
910	0.00	0.00	767.069	0.00	0.36	314.44	142.500	1.250	313.190
911	0.00	0.00	765.458	0.00	0.36	312.83	142.500	1.250	311.579
912	0.00	0.00	763.846	0.00	0.36	311.22	142.500	1.250	309.968
913	0.00	0.00	762.235	0.00	0.36	309.61	142.500	1.250	308.356
914	0.00	0.00	760.624	0.00	0.36	308.00	142.500	1.250	306.745
915	0.00	0.00	759.013	0.00	0.36	306.38	142.500	1.250	305.134
916	0.00	0.00	757.401	0.00	0.36	304.77	142.500	1.250	303.523
917	0.00	0.00	755.790	0.00	0.36	303.16	142.500	1.250	301.911
918	0.00	0.00	754.179	0.00	0.36	301.55	142.500	1.250	300.300
919	0.00	0.00	752.568	0.00	0.36	299.94	142.500	1.250	298.689

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks Summary	720.00	108.72	Final FF Basin Volume: 1071.595				Final Basin Soakpit Volume: 142.500		
	2.00	108.72	1521.20	1966.82	254.26		142.50	498.47	
Time (min)	Distribution Curve	Rainfall (mm)	1123.72	1966.82	845.61		142.50	1121.21	671.46
920	0.00	0.00	Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min )	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
921	0.00	0.00	750.956	0.00	0.36	298.33	142.500	1.250	297.078
922	0.00	0.00	749.345	0.00	0.36	296.72	142.500	1.250	295.466
923	0.00	0.00	747.734	0.00	0.36	295.11	142.500	1.250	293.855
924	0.00	0.00	746.123	0.00	0.36	293.49	142.500	1.250	292.244
925	0.00	0.00	744.511	0.00	0.36	291.88	142.500	1.250	290.633
926	0.00	0.00	742.900	0.00	0.36	290.27	142.500	1.250	289.021
927	0.00	0.00	741.289	0.00	0.36	288.66	142.500	1.250	287.410
928	0.00	0.00	739.678	0.00	0.36	287.05	142.500	1.250	285.799
929	0.00	0.00	738.066	0.00	0.36	285.44	142.500	1.250	284.188
930	0.00	0.00	736.455	0.00	0.36	283.83	142.500	1.250	282.576
931	0.00	0.00	734.844	0.00	0.36	282.22	142.500	1.250	280.965
932	0.00	0.00	733.233	0.00	0.36	280.60	142.500	1.250	279.354
933	0.00	0.00	731.621	0.00	0.36	278.99	142.500	1.250	277.743
934	0.00	0.00	730.010	0.00	0.36	277.38	142.500	1.250	276.131
935	0.00	0.00	728.399	0.00	0.36	275.77	142.500	1.250	274.520
936	0.00	0.00	726.788	0.00	0.36	274.16	142.500	1.250	272.909
937	0.00	0.00	725.176	0.00	0.36	272.55	142.500	1.250	271.298
938	0.00	0.00	723.565	0.00	0.36	270.94	142.500	1.250	269.686
939	0.00	0.00	721.954	0.00	0.36	269.33	142.500	1.250	268.075
940	0.00	0.00	720.343	0.00	0.36	267.71	142.500	1.250	266.464
941	0.00	0.00	718.731	0.00	0.36	266.10	142.500	1.250	264.853
942	0.00	0.00	717.120	0.00	0.36	264.49	142.500	1.250	263.241
943	0.00	0.00	715.509	0.00	0.36	262.88	142.500	1.250	261.630
944	0.00	0.00	713.898	0.00	0.36	261.27	142.500	1.250	260.019
945	0.00	0.00	712.286	0.00	0.36	259.66	142.500	1.250	258.408
946	0.00	0.00	710.675	0.00	0.36	258.05	142.500	1.250	256.796
947	0.00	0.00	709.064	0.00	0.36	256.44	142.500	1.250	255.185
948	0.00	0.00	707.453	0.00	0.36	254.82	142.500	1.250	253.574
949	0.00	0.00	705.841	0.00	0.36	253.21	142.500	1.250	251.963
950	0.00	0.00	704.230	0.00	0.36	251.60	142.500	1.250	250.351
951	0.00	0.00	702.619	0.00	0.36	249.99	142.500	1.250	248.740
952	0.00	0.00	701.008	0.00	0.36	248.38	142.500	1.250	247.129
953	0.00	0.00	699.396	0.00	0.36	246.77	142.500	1.250	245.518
954	0.00	0.00	697.785	0.00	0.36	245.16	142.500	1.250	243.906
955	0.00	0.00	696.174	0.00	0.36	243.55	142.500	1.250	242.295
956	0.00	0.00	694.563	0.00	0.36	241.93	142.500	1.250	240.684
957	0.00	0.00	692.951	0.00	0.36	240.32	142.500	1.250	239.073
958	0.00	0.00	691.340	0.00	0.36	238.71	142.500	1.250	237.461
959	0.00	0.00	689.729	0.00	0.36	237.10	142.500	1.250	235.850
960	0.00	0.00	688.118	0.00	0.36	235.49	142.500	1.250	234.239
961	0.00	0.00	686.506	0.00	0.36	233.88	142.500	1.250	232.628
962	0.00	0.00	684.895	0.00	0.36	232.27	142.500	1.250	231.016
963	0.00	0.00	683.284	0.00	0.36	230.66	142.500	1.250	229.405
964	0.00	0.00	681.673	0.00	0.36	229.04	142.500	1.250	227.794
965	0.00	0.00	680.061	0.00	0.36	227.43	142.500	1.250	226.183
966	0.00	0.00	678.450	0.00	0.36	225.82	142.500	1.250	224.571
967	0.00	0.00	676.839	0.00	0.36	224.21	142.500	1.250	222.960
968	0.00	0.00	675.228	0.00	0.36	222.60	142.500	1.250	221.349
969	0.00	0.00	673.616	0.00	0.36	220.99	142.500	1.250	219.738
970	0.00	0.00	672.005	0.00	0.36	219.38	142.500	1.250	218.126
971	0.00	0.00	670.394	0.00	0.36	217.77	142.500	1.250	216.515
972	0.00	0.00	668.783	0.00	0.36	216.15	142.500	1.250	214.904
973	0.00	0.00	667.171	0.00	0.36	214.54	142.500	1.250	213.293
974	0.00	0.00	665.560	0.00	0.36	212.93	142.500	1.250	211.681
975	0.00	0.00	663.949	0.00	0.36	211.32	142.500	1.250	210.070
976	0.00	0.00	662.338	0.00	0.36	209.71	142.500	1.250	208.459
977	0.00	0.00	660.726	0.00	0.36	208.10	142.500	1.250	206.848
978	0.00	0.00	659.115	0.00	0.36	206.49	142.500	1.250	205.236
979	0.00	0.00	657.504	0.00	0.36	204.88	142.500	1.250	203.625
980	0.00	0.00	655.893	0.00	0.36	203.26	142.500	1.250	202.014
981	0.00	0.00	654.281	0.00	0.36	201.65	142.500	1.250	200.403
982	0.00	0.00	652.670	0.00	0.36	200.04	142.500	1.250	198.791
983	0.00	0.00	651.059	0.00	0.36	198.43	142.500	1.250	197.180
984	0.00	0.00	649.448	0.00	0.36	196.82	142.500	1.250	195.569
985	0.00	0.00	647.836	0.00	0.36	195.21	142.500	1.250	193.958
986	0.00	0.00	646.225	0.00	0.36	193.60	142.500	1.250	192.346
987	0.00	0.00	644.614	0.00	0.36	191.99	142.500	1.250	190.735
988	0.00	0.00	643.003	0.00	0.36	190.37	142.500	1.250	189.124
989	0.00	0.00	641.391	0.00	0.36	188.76	142.500	1.250	187.513
990	0.00	0.00	639.780	0.00	0.36	187.15	142.500	1.250	185.901
991	0.00	0.00	638.169	0.00	0.36	185.54	142.500	1.250	184.290
992	0.00	0.00	636.558	0.00	0.36	183.93	142.500	1.250	182.679
993	0.00	0.00	634.946	0.00	0.36	182.32	142.500	1.250	181.068
994	0.00	0.00	633.335	0.00	0.36	180.71	142.500	1.250	179.456
995	0.00	0.00	631.724	0.00	0.36	179.10	142.500	1.250	177.845
996	0.00	0.00	630.113	0.00	0.36	177.48	142.500	1.250	176.234
997	0.00	0.00	628.501	0.00	0.36	175.87	142.500	1.250	174.623
998	0.00	0.00	626.890	0.00	0.36	174.26	142.500	1.250	173.011
999	0.00	0.00	625.279	0.00	0.36	172.65	142.500	1.250	171.400
1000	0.00	0.00	623.668	0.00	0.36	171.04	142.500	1.250	169.789
1001	0.00	0.00	622.056	0.00	0.36	169.43	142.500	1.250	168.178
1002	0.00	0.00	620.445	0.00	0.36	167.82	142.500	1.250	166.566
1003	0.00	0.00	618.834	0.00	0.36	166.21	142.500	1.250	164.955
1004	0.00	0.00	617.223	0.00	0.36	164.59	142.500	1.250	163.344
1005	0.00	0.00	615.611	0.00	0.36	162.98	142.500	1.250	161.733
1006	0.00	0.00	614.000	0.00	0.36	161.37	142.500	1.250	160.121
1007	0.00	0.00	612.389	0.00	0.36	159.76	142.500	1.250	158.510
1008	0.00	0.00	610.778	0.00	0.36	158.15	142.500	1.250	156.899
1009	0.00	0.00	609.166	0.00	0.36	156.54	142.500	1.250	155.288
1010	0.00	0.00	607.555	0.00	0.36	154.93	142.500	1.250	153.676
1011	0.00	0.00	605.944	0.00	0.36	153.32	142.500	1.250	152.065
1012	0.00	0.00	604.333	0.00	0.36	151.70	142.500	1.250	150.454
1013	0.00	0.00	602.721	0.00	0.36	150.09	142.500	1.250	148.843
1014	0.00	0.00	601.110	0.00	0.36	148.48	142.500	1.250	147.231
1015	0.00	0.00	599.499	0.00	0.36	146.87	142.500	1.250	145.620
1016	0.00	0.00	597.888	0.00	0.36	145.26	142.500	1.250	144.009
1017	0.00	0.00	596.276	0.00	0.36	143.65	142.500	1.250	142.398
1018	0.00	0.00	594.665	0.00	0.36	142.04	142.500	1.250	140.786
1019	0.00	0.00	593.054	0.00	0.36	140.43	142.500	1.250	139.175
1020	0.00	0.00	591.443	0.00	0.36	138.81	142.500	1.250	137.564
1021	0.00	0.00	589.831	0.00	0.36	137.20	142.500	1.250	135.953
1022	0.00	0.00	588.220	0.00	0.36	135.59	142.500	1.250	134.341
			586.609	0.00	0.36	133.98	142.500	1.250	132.730

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks Summary	720.00	108.72	Final FF Basin Volume: 1071.595				Final Basin Soakpit Volume: 142.500		
	2.00	108.72	1521.20	1966.82	254.26		142.50	498.47	
Time (min)	Distribution Curve	Rainfall (mm)	1123.72	1966.82	845.61	1121.21	142.50	1121.21	671.46
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min )	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
1023	0.00	0.00	584.998	0.00	0.36	132.37	142.500	1.250	131.119
1024	0.00	0.00	583.386	0.00	0.36	130.76	142.500	1.250	129.508
1025	0.00	0.00	581.775	0.00	0.36	129.15	142.500	1.250	127.896
1026	0.00	0.00	580.164	0.00	0.36	127.54	142.500	1.250	126.285
1027	0.00	0.00	578.553	0.00	0.36	125.92	142.500	1.250	124.674
1028	0.00	0.00	576.941	0.00	0.36	124.31	142.500	1.250	123.063
1029	0.00	0.00	575.330	0.00	0.36	122.70	142.500	1.250	121.451
1030	0.00	0.00	573.719	0.00	0.36	121.09	142.500	1.250	119.840
1031	0.00	0.00	572.108	0.00	0.36	119.48	142.500	1.250	118.229
1032	0.00	0.00	570.496	0.00	0.36	117.87	142.500	1.250	116.618
1033	0.00	0.00	568.885	0.00	0.36	116.26	142.500	1.250	115.006
1034	0.00	0.00	567.274	0.00	0.36	114.65	142.500	1.250	113.395
1035	0.00	0.00	565.663	0.00	0.36	113.03	142.500	1.250	111.784
1036	0.00	0.00	564.051	0.00	0.36	111.42	142.500	1.250	110.173
1037	0.00	0.00	562.440	0.00	0.36	109.81	142.500	1.250	108.561
1038	0.00	0.00	560.829	0.00	0.36	108.20	142.500	1.250	106.950
1039	0.00	0.00	559.218	0.00	0.36	106.59	142.500	1.250	105.339
1040	0.00	0.00	557.606	0.00	0.36	104.98	142.500	1.250	103.728
1041	0.00	0.00	555.995	0.00	0.36	103.37	142.500	1.250	102.116
1042	0.00	0.00	554.384	0.00	0.36	101.76	142.500	1.250	100.505
1043	0.00	0.00	552.773	0.00	0.36	100.14	142.500	1.250	98.894
1044	0.00	0.00	551.161	0.00	0.36	98.53	142.500	1.250	97.283
1045	0.00	0.00	549.550	0.00	0.36	96.92	142.500	1.250	95.671
1046	0.00	0.00	547.939	0.00	0.36	95.31	142.500	1.250	94.060
1047	0.00	0.00	546.328	0.00	0.36	93.70	142.500	1.250	92.449
1048	0.00	0.00	544.716	0.00	0.36	92.09	142.500	1.250	90.838
1049	0.00	0.00	543.105	0.00	0.36	90.48	142.500	1.250	89.226
1050	0.00	0.00	541.494	0.00	0.36	88.87	142.500	1.250	87.615
1051	0.00	0.00	539.883	0.00	0.36	87.25	142.500	1.250	86.004
1052	0.00	0.00	538.271	0.00	0.36	85.64	142.500	1.250	84.393
1053	0.00	0.00	536.660	0.00	0.36	84.03	142.500	1.250	82.781
1054	0.00	0.00	535.049	0.00	0.36	82.42	142.500	1.250	81.170
1055	0.00	0.00	533.438	0.00	0.36	80.81	142.500	1.250	79.559
1056	0.00	0.00	531.826	0.00	0.36	79.20	142.500	1.250	77.948
1057	0.00	0.00	530.215	0.00	0.36	77.59	142.500	1.250	76.336
1058	0.00	0.00	528.604	0.00	0.36	75.98	142.500	1.250	74.725
1059	0.00	0.00	526.993	0.00	0.36	74.36	142.500	1.250	73.114
1060	0.00	0.00	525.381	0.00	0.36	72.75	142.500	1.250	71.503
1061	0.00	0.00	523.770	0.00	0.36	71.14	142.500	1.250	69.891
1062	0.00	0.00	522.159	0.00	0.36	69.53	142.500	1.250	68.280
1063	0.00	0.00	520.548	0.00	0.36	67.92	142.500	1.250	66.669
1064	0.00	0.00	518.936	0.00	0.36	66.31	142.500	1.250	65.058
1065	0.00	0.00	517.325	0.00	0.36	64.70	142.500	1.250	63.446
1066	0.00	0.00	515.714	0.00	0.36	63.09	142.500	1.250	61.835
1067	0.00	0.00	514.103	0.00	0.36	61.47	142.500	1.250	60.224
1068	0.00	0.00	512.491	0.00	0.36	59.86	142.500	1.250	58.613
1069	0.00	0.00	510.880	0.00	0.36	58.25	142.500	1.250	57.001
1070	0.00	0.00	509.269	0.00	0.36	56.64	142.500	1.250	55.390
1071	0.00	0.00	507.658	0.00	0.36	55.03	142.500	1.250	53.779
1072	0.00	0.00	506.046	0.00	0.36	53.42	142.500	1.250	52.168
1073	0.00	0.00	504.435	0.00	0.36	51.81	142.500	1.250	50.556
1074	0.00	0.00	502.824	0.00	0.36	50.20	142.500	1.250	48.945
1075	0.00	0.00	501.213	0.00	0.36	48.58	142.500	1.250	47.334
1076	0.00	0.00	499.601	0.00	0.36	46.97	142.500	1.250	45.723
1077	0.00	0.00	497.990	0.00	0.36	45.36	142.500	1.250	44.111
1078	0.00	0.00	496.379	0.00	0.36	43.75	142.500	1.250	42.500
1079	0.00	0.00	494.768	0.00	0.36	42.14	142.500	1.250	40.889
1080	0.00	0.00	493.156	0.00	0.36	40.53	142.500	1.250	39.278
1081	0.00	0.00	491.545	0.00	0.36	38.92	142.500	1.250	37.666
1082	0.00	0.00	489.934	0.00	0.36	37.31	142.500	1.250	36.055
1083	0.00	0.00	488.323	0.00	0.36	35.69	142.500	1.250	34.444
1084	0.00	0.00	486.711	0.00	0.36	34.08	142.500	1.250	32.833
1085	0.00	0.00	485.100	0.00	0.36	32.47	142.500	1.250	31.221
1086	0.00	0.00	483.489	0.00	0.36	30.86	142.500	1.250	29.610
1087	0.00	0.00	481.878	0.00	0.36	29.25	142.500	1.250	27.999
1088	0.00	0.00	480.266	0.00	0.36	27.64	142.500	1.250	26.388
1089	0.00	0.00	478.655	0.00	0.36	26.03	142.500	1.250	24.776
1090	0.00	0.00	477.044	0.00	0.36	24.42	142.500	1.250	23.165
1091	0.00	0.00	475.433	0.00	0.36	22.80	142.500	1.250	21.554
1092	0.00	0.00	473.821	0.00	0.36	21.19	142.500	1.250	19.943
1093	0.00	0.00	472.210	0.00	0.36	19.58	142.500	1.250	18.331
1094	0.00	0.00	470.599	0.00	0.36	17.97	142.500	1.250	16.720
1095	0.00	0.00	468.988	0.00	0.36	16.36	142.500	1.250	15.109
1096	0.00	0.00	467.376	0.00	0.36	14.75	142.500	1.250	13.498
1097	0.00	0.00	465.765	0.00	0.36	13.14	142.500	1.250	11.886
1098	0.00	0.00	464.154	0.00	0.36	11.53	142.500	1.250	10.275
1099	0.00	0.00	462.543	0.00	0.36	9.91	142.500	1.250	8.664
1100	0.00	0.00	460.931	0.00	0.36	8.30	142.500	1.250	7.053
1101	0.00	0.00	459.320	0.00	0.36	6.69	142.500	1.250	5.441
1102	0.00	0.00	457.709	0.00	0.36	5.08	142.500	1.250	3.830
1103	0.00	0.00	456.098	0.00	0.36	3.47	142.500	1.250	2.219
1104	0.00	0.00	454.486	0.00	0.36	1.86	142.500	1.250	0.608
1105	0.00	0.00	452.875	0.00	0.36	0.25	142.500	1.250	0.000
1106	0.00	0.00	452.268	0.00	0.36	0.00	141.496	1.250	0.000
1107	0.00	0.00	451.906	0.00	0.36	0.00	140.246	1.250	0.000
1108	0.00	0.00	451.545	0.00	0.36	0.00	138.996	1.250	0.000
1109	0.00	0.00	451.184	0.00	0.36	0.00	137.746	1.250	0.000
1110	0.00	0.00	450.823	0.00	0.36	0.00	136.496	1.250	0.000
1111	0.00	0.00	450.461	0.00	0.36	0.00	135.246	1.250	0.000
1112	0.00	0.00	450.100	0.00	0.36	0.00	133.996	1.250	0.000
1113	0.00	0.00	449.739	0.00	0.36	0.00	132.746	1.250	0.000
1114	0.00	0.00	449.378	0.00	0.36	0.00	131.496	1.250	0.000
1115	0.00	0.00	449.016	0.00	0.36	0.00	130.246	1.250	0.000
1116	0.00	0.00	448.655	0.00	0.36	0.00	128.996	1.250	0.000
1117	0.00	0.00	448.294	0.00	0.36	0.00	127.746	1.250	0.000
1118	0.00	0.00	447.933	0.00	0.36	0.00	126.496	1.250	0.000
1119	0.00	0.00	447.571	0.00	0.36	0.00	125.246	1.250	0.000
1120	0.00	0.00	447.210	0.00	0.36	0.00	123.996	1.250	0.000
1121	0.00	0.00	446.849	0.00	0.36	0.00	122.746	1.250	0.000
1122	0.00	0.00	446.488	0.00	0.36	0.00	121.496	1.250	0.000
1123	0.00	0.00	446.126	0.00	0.36	0.00	120.246	1.250	0.000
1124	0.00	0.00	445.765	0.00	0.36	0.00	118.996	1.250	0.000
1125	0.00	0.00	445.404	0.00	0.36	0.00	117.746	1.250	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	720.00	108.72	Final FF Basin Volume:		1071.595		Final Basin Soakpit Volume:		142.500
Summary	2.00	108.72	1521.20	1966.82	254.26		142.50	498.47	
Time (min)	Distribution Curve	Rainfall (mm)	1123.72	1966.82	845.61		142.50	1121.21	671.46
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
1126	0.00	0.00	445.043	0.00	0.36	0.00	116.496	1.250	0.000
1127	0.00	0.00	444.681	0.00	0.36	0.00	115.246	1.250	0.000
1128	0.00	0.00	444.320	0.00	0.36	0.00	113.996	1.250	0.000
1129	0.00	0.00	443.959	0.00	0.36	0.00	112.746	1.250	0.000
1130	0.00	0.00	443.598	0.00	0.36	0.00	111.496	1.250	0.000
1131	0.00	0.00	443.236	0.00	0.36	0.00	110.246	1.250	0.000
1132	0.00	0.00	442.875	0.00	0.36	0.00	108.996	1.250	0.000
1133	0.00	0.00	442.514	0.00	0.36	0.00	107.746	1.250	0.000
1134	0.00	0.00	442.153	0.00	0.36	0.00	106.496	1.250	0.000
1135	0.00	0.00	441.791	0.00	0.36	0.00	105.246	1.250	0.000
1136	0.00	0.00	441.430	0.00	0.36	0.00	103.996	1.250	0.000
1137	0.00	0.00	441.069	0.00	0.36	0.00	102.746	1.250	0.000
1138	0.00	0.00	440.708	0.00	0.36	0.00	101.496	1.250	0.000
1139	0.00	0.00	440.346	0.00	0.36	0.00	100.246	1.250	0.000
1140	0.00	0.00	439.985	0.00	0.36	0.00	98.996	1.250	0.000
1141	0.00	0.00	439.624	0.00	0.36	0.00	97.746	1.250	0.000
1142	0.00	0.00	439.263	0.00	0.36	0.00	96.496	1.250	0.000
1143	0.00	0.00	438.901	0.00	0.36	0.00	95.246	1.250	0.000
1144	0.00	0.00	438.540	0.00	0.36	0.00	93.996	1.250	0.000
1145	0.00	0.00	438.179	0.00	0.36	0.00	92.746	1.250	0.000
1146	0.00	0.00	437.818	0.00	0.36	0.00	91.496	1.250	0.000
1147	0.00	0.00	437.456	0.00	0.36	0.00	90.246	1.250	0.000
1148	0.00	0.00	437.095	0.00	0.36	0.00	88.996	1.250	0.000
1149	0.00	0.00	436.734	0.00	0.36	0.00	87.746	1.250	0.000
1150	0.00	0.00	436.373	0.00	0.36	0.00	86.496	1.250	0.000
1151	0.00	0.00	436.011	0.00	0.36	0.00	85.246	1.250	0.000
1152	0.00	0.00	435.650	0.00	0.36	0.00	83.996	1.250	0.000
1153	0.00	0.00	435.289	0.00	0.36	0.00	82.746	1.250	0.000
1154	0.00	0.00	434.928	0.00	0.36	0.00	81.496	1.250	0.000
1155	0.00	0.00	434.566	0.00	0.36	0.00	80.246	1.250	0.000
1156	0.00	0.00	434.205	0.00	0.36	0.00	78.996	1.250	0.000
1157	0.00	0.00	433.844	0.00	0.36	0.00	77.746	1.250	0.000
1158	0.00	0.00	433.483	0.00	0.36	0.00	76.496	1.250	0.000
1159	0.00	0.00	433.121	0.00	0.36	0.00	75.246	1.250	0.000
1160	0.00	0.00	432.760	0.00	0.36	0.00	73.996	1.250	0.000
1161	0.00	0.00	432.399	0.00	0.36	0.00	72.746	1.250	0.000
1162	0.00	0.00	432.038	0.00	0.36	0.00	71.496	1.250	0.000
1163	0.00	0.00	431.676	0.00	0.36	0.00	70.246	1.250	0.000
1164	0.00	0.00	431.315	0.00	0.36	0.00	68.996	1.250	0.000
1165	0.00	0.00	430.954	0.00	0.36	0.00	67.746	1.250	0.000
1166	0.00	0.00	430.593	0.00	0.36	0.00	66.496	1.250	0.000
1167	0.00	0.00	430.231	0.00	0.36	0.00	65.246	1.250	0.000
1168	0.00	0.00	429.870	0.00	0.36	0.00	63.996	1.250	0.000
1169	0.00	0.00	429.509	0.00	0.36	0.00	62.746	1.250	0.000
1170	0.00	0.00	429.148	0.00	0.36	0.00	61.496	1.250	0.000
1171	0.00	0.00	428.786	0.00	0.36	0.00	60.246	1.250	0.000
1172	0.00	0.00	428.425	0.00	0.36	0.00	58.996	1.250	0.000
1173	0.00	0.00	428.064	0.00	0.36	0.00	57.746	1.250	0.000
1174	0.00	0.00	427.703	0.00	0.36	0.00	56.496	1.250	0.000
1175	0.00	0.00	427.341	0.00	0.36	0.00	55.246	1.250	0.000
1176	0.00	0.00	426.980	0.00	0.36	0.00	53.996	1.250	0.000
1177	0.00	0.00	426.619	0.00	0.36	0.00	52.746	1.250	0.000
1178	0.00	0.00	426.258	0.00	0.36	0.00	51.496	1.250	0.000
1179	0.00	0.00	425.896	0.00	0.36	0.00	50.246	1.250	0.000
1180	0.00	0.00	425.535	0.00	0.36	0.00	48.996	1.250	0.000
1181	0.00	0.00	425.174	0.00	0.36	0.00	47.746	1.250	0.000
1182	0.00	0.00	424.813	0.00	0.36	0.00	46.496	1.250	0.000
1183	0.00	0.00	424.451	0.00	0.36	0.00	45.246	1.250	0.000
1184	0.00	0.00	424.090	0.00	0.36	0.00	43.996	1.250	0.000
1185	0.00	0.00	423.729	0.00	0.36	0.00	42.746	1.250	0.000
1186	0.00	0.00	423.368	0.00	0.36	0.00	41.496	1.250	0.000
1187	0.00	0.00	423.006	0.00	0.36	0.00	40.246	1.250	0.000
1188	0.00	0.00	422.645	0.00	0.36	0.00	38.996	1.250	0.000
1189	0.00	0.00	422.284	0.00	0.36	0.00	37.746	1.250	0.000
1190	0.00	0.00	421.923	0.00	0.36	0.00	36.496	1.250	0.000
1191	0.00	0.00	421.561	0.00	0.36	0.00	35.246	1.250	0.000
1192	0.00	0.00	421.200	0.00	0.36	0.00	33.996	1.250	0.000
1193	0.00	0.00	420.839	0.00	0.36	0.00	32.746	1.250	0.000
1194	0.00	0.00	420.478	0.00	0.36	0.00	31.496	1.250	0.000
1195	0.00	0.00	420.116	0.00	0.36	0.00	30.246	1.250	0.000
1196	0.00	0.00	419.755	0.00	0.36	0.00	28.996	1.250	0.000
1197	0.00	0.00	419.394	0.00	0.36	0.00	27.746	1.250	0.000
1198	0.00	0.00	419.033	0.00	0.36	0.00	26.496	1.250	0.000
1199	0.00	0.00	418.671	0.00	0.36	0.00	25.246	1.250	0.000
1200	0.00	0.00	418.310	0.00	0.36	0.00	23.996	1.250	0.000
1201	0.00	0.00	417.949	0.00	0.36	0.00	22.746	1.250	0.000
1202	0.00	0.00	417.588	0.00	0.36	0.00	21.496	1.250	0.000
1203	0.00	0.00	417.226	0.00	0.36	0.00	20.246	1.250	0.000
1204	0.00	0.00	416.865	0.00	0.36	0.00	18.996	1.250	0.000
1205	0.00	0.00	416.504	0.00	0.36	0.00	17.746	1.250	0.000
1206	0.00	0.00	416.143	0.00	0.36	0.00	16.496	1.250	0.000
1207	0.00	0.00	415.781	0.00	0.36	0.00	15.246	1.250	0.000
1208	0.00	0.00	415.420	0.00	0.36	0.00	13.996	1.250	0.000
1209	0.00	0.00	415.059	0.00	0.36	0.00	12.746	1.250	0.000
1210	0.00	0.00	414.698	0.00	0.36	0.00	11.496	1.250	0.000
1211	0.00	0.00	414.336	0.00	0.36	0.00	10.246	1.250	0.000
1212	0.00	0.00	413.975	0.00	0.36	0.00	8.996	1.250	0.000
1213	0.00	0.00	413.614	0.00	0.36	0.00	7.746	1.250	0.000
1214	0.00	0.00	413.253	0.00	0.36	0.00	6.496	1.250	0.000
1215	0.00	0.00	412.891	0.00	0.36	0.00	5.246	1.250	0.000
1216	0.00	0.00	412.530	0.00	0.36	0.00	3.996	1.250	0.000
1217	0.00	0.00	412.169	0.00	0.36	0.00	2.746	1.250	0.000
1218	0.00	0.00	411.808	0.00	0.36	0.00	1.496	1.250	0.000
1219	0.00	0.00	411.446	0.00	0.36	0.00	0.246	0.246	0.000
1220	0.00	0.00	411.085	0.00	0.36	0.00	0.000	0.000	0.000
1221	0.00	0.00	410.724	0.00	0.36	0.00	0.000	0.000	0.000
1222	0.00	0.00	410.363	0.00	0.36	0.00	0.000	0.000	0.000
1223	0.00	0.00	410.001	0.00	0.36	0.00	0.000	0.000	0.000
1224	0.00	0.00	409.640	0.00	0.36	0.00	0.000	0.000	0.000
1225	0.00	0.00	409.279	0.00	0.36	0.00	0.000	0.000	0.000
1226	0.00	0.00	408.918	0.00	0.36	0.00	0.000	0.000	0.000
1227	0.00	0.00	408.556	0.00	0.36	0.00	0.000	0.000	0.000
1228	0.00	0.00	408.195	0.00	0.36	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks Summary Time (min)	720.00	108.72	Final FF Basin Volume:		1071.595	254.26	Final Basin Soakpit Volume:		142.500
	2.00	108.72	1521.20	1966.82	1966.82		142.50	498.47	
			1123.72	1966.82	845.61		142.50	1121.21	671.46
	Distribution Curve	Rainfall (mm)	Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min )	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
1229	0.00	0.00	407.834	0.00	0.36	0.00	0.000	0.000	0.000
1230	0.00	0.00	407.473	0.00	0.36	0.00	0.000	0.000	0.000
1231	0.00	0.00	407.111	0.00	0.36	0.00	0.000	0.000	0.000
1232	0.00	0.00	406.750	0.00	0.36	0.00	0.000	0.000	0.000
1233	0.00	0.00	406.389	0.00	0.36	0.00	0.000	0.000	0.000
1234	0.00	0.00	406.028	0.00	0.36	0.00	0.000	0.000	0.000
1235	0.00	0.00	405.666	0.00	0.36	0.00	0.000	0.000	0.000
1236	0.00	0.00	405.305	0.00	0.36	0.00	0.000	0.000	0.000
1237	0.00	0.00	404.944	0.00	0.36	0.00	0.000	0.000	0.000
1238	0.00	0.00	404.583	0.00	0.36	0.00	0.000	0.000	0.000
1239	0.00	0.00	404.221	0.00	0.36	0.00	0.000	0.000	0.000
1240	0.00	0.00	403.860	0.00	0.36	0.00	0.000	0.000	0.000
1241	0.00	0.00	403.499	0.00	0.36	0.00	0.000	0.000	0.000
1242	0.00	0.00	403.138	0.00	0.36	0.00	0.000	0.000	0.000
1243	0.00	0.00	402.776	0.00	0.36	0.00	0.000	0.000	0.000
1244	0.00	0.00	402.415	0.00	0.36	0.00	0.000	0.000	0.000
1245	0.00	0.00	402.054	0.00	0.36	0.00	0.000	0.000	0.000
1246	0.00	0.00	401.693	0.00	0.36	0.00	0.000	0.000	0.000
1247	0.00	0.00	401.331	0.00	0.36	0.00	0.000	0.000	0.000
1248	0.00	0.00	400.970	0.00	0.36	0.00	0.000	0.000	0.000
1249	0.00	0.00	400.609	0.00	0.36	0.00	0.000	0.000	0.000
1250	0.00	0.00	400.248	0.00	0.36	0.00	0.000	0.000	0.000
1251	0.00	0.00	399.886	0.00	0.36	0.00	0.000	0.000	0.000
1252	0.00	0.00	399.525	0.00	0.36	0.00	0.000	0.000	0.000
1253	0.00	0.00	399.164	0.00	0.36	0.00	0.000	0.000	0.000
1254	0.00	0.00	398.803	0.00	0.36	0.00	0.000	0.000	0.000
1255	0.00	0.00	398.441	0.00	0.36	0.00	0.000	0.000	0.000
1256	0.00	0.00	398.080	0.00	0.36	0.00	0.000	0.000	0.000
1257	0.00	0.00	397.719	0.00	0.36	0.00	0.000	0.000	0.000
1258	0.00	0.00	397.358	0.00	0.36	0.00	0.000	0.000	0.000
1259	0.00	0.00	396.996	0.00	0.36	0.00	0.000	0.000	0.000
1260	0.00	0.00	396.635	0.00	0.36	0.00	0.000	0.000	0.000
1261	0.00	0.00	396.274	0.00	0.36	0.00	0.000	0.000	0.000
1262	0.00	0.00	395.913	0.00	0.36	0.00	0.000	0.000	0.000
1263	0.00	0.00	395.551	0.00	0.36	0.00	0.000	0.000	0.000
1264	0.00	0.00	395.190	0.00	0.36	0.00	0.000	0.000	0.000
1265	0.00	0.00	394.829	0.00	0.36	0.00	0.000	0.000	0.000
1266	0.00	0.00	394.468	0.00	0.36	0.00	0.000	0.000	0.000
1267	0.00	0.00	394.106	0.00	0.36	0.00	0.000	0.000	0.000
1268	0.00	0.00	393.745	0.00	0.36	0.00	0.000	0.000	0.000
1269	0.00	0.00	393.384	0.00	0.36	0.00	0.000	0.000	0.000
1270	0.00	0.00	393.023	0.00	0.36	0.00	0.000	0.000	0.000
1271	0.00	0.00	392.661	0.00	0.36	0.00	0.000	0.000	0.000
1272	0.00	0.00	392.300	0.00	0.36	0.00	0.000	0.000	0.000
1273	0.00	0.00	391.939	0.00	0.36	0.00	0.000	0.000	0.000
1274	0.00	0.00	391.578	0.00	0.36	0.00	0.000	0.000	0.000
1275	0.00	0.00	391.216	0.00	0.36	0.00	0.000	0.000	0.000
1276	0.00	0.00	390.855	0.00	0.36	0.00	0.000	0.000	0.000
1277	0.00	0.00	390.494	0.00	0.36	0.00	0.000	0.000	0.000
1278	0.00	0.00	390.133	0.00	0.36	0.00	0.000	0.000	0.000
1279	0.00	0.00	389.771	0.00	0.36	0.00	0.000	0.000	0.000
1280	0.00	0.00	389.410	0.00	0.36	0.00	0.000	0.000	0.000
1281	0.00	0.00	389.049	0.00	0.36	0.00	0.000	0.000	0.000
1282	0.00	0.00	388.688	0.00	0.36	0.00	0.000	0.000	0.000
1283	0.00	0.00	388.326	0.00	0.36	0.00	0.000	0.000	0.000
1284	0.00	0.00	387.965	0.00	0.36	0.00	0.000	0.000	0.000
1285	0.00	0.00	387.604	0.00	0.36	0.00	0.000	0.000	0.000
1286	0.00	0.00	387.243	0.00	0.36	0.00	0.000	0.000	0.000
1287	0.00	0.00	386.881	0.00	0.36	0.00	0.000	0.000	0.000
1288	0.00	0.00	386.520	0.00	0.36	0.00	0.000	0.000	0.000
1289	0.00	0.00	386.159	0.00	0.36	0.00	0.000	0.000	0.000
1290	0.00	0.00	385.798	0.00	0.36	0.00	0.000	0.000	0.000
1291	0.00	0.00	385.436	0.00	0.36	0.00	0.000	0.000	0.000
1292	0.00	0.00	385.075	0.00	0.36	0.00	0.000	0.000	0.000
1293	0.00	0.00	384.714	0.00	0.36	0.00	0.000	0.000	0.000
1294	0.00	0.00	384.353	0.00	0.36	0.00	0.000	0.000	0.000
1295	0.00	0.00	383.991	0.00	0.36	0.00	0.000	0.000	0.000
1296	0.00	0.00	383.630	0.00	0.36	0.00	0.000	0.000	0.000
1297	0.00	0.00	383.269	0.00	0.36	0.00	0.000	0.000	0.000
1298	0.00	0.00	382.908	0.00	0.36	0.00	0.000	0.000	0.000
1299	0.00	0.00	382.546	0.00	0.36	0.00	0.000	0.000	0.000
1300	0.00	0.00	382.185	0.00	0.36	0.00	0.000	0.000	0.000
1301	0.00	0.00	381.824	0.00	0.36	0.00	0.000	0.000	0.000
1302	0.00	0.00	381.463	0.00	0.36	0.00	0.000	0.000	0.000
1303	0.00	0.00	381.101	0.00	0.36	0.00	0.000	0.000	0.000
1304	0.00	0.00	380.740	0.00	0.36	0.00	0.000	0.000	0.000
1305	0.00	0.00	380.379	0.00	0.36	0.00	0.000	0.000	0.000
1306	0.00	0.00	380.018	0.00	0.36	0.00	0.000	0.000	0.000
1307	0.00	0.00	379.656	0.00	0.36	0.00	0.000	0.000	0.000
1308	0.00	0.00	379.295	0.00	0.36	0.00	0.000	0.000	0.000
1309	0.00	0.00	378.934	0.00	0.36	0.00	0.000	0.000	0.000
1310	0.00	0.00	378.573	0.00	0.36	0.00	0.000	0.000	0.000
1311	0.00	0.00	378.211	0.00	0.36	0.00	0.000	0.000	0.000
1312	0.00	0.00	377.850	0.00	0.36	0.00	0.000	0.000	0.000
1313	0.00	0.00	377.489	0.00	0.36	0.00	0.000	0.000	0.000
1314	0.00	0.00	377.128	0.00	0.36	0.00	0.000	0.000	0.000
1315	0.00	0.00	376.766	0.00	0.36	0.00	0.000	0.000	0.000
1316	0.00	0.00	376.405	0.00	0.36	0.00	0.000	0.000	0.000
1317	0.00	0.00	376.044	0.00	0.36	0.00	0.000	0.000	0.000
1318	0.00	0.00	375.683	0.00	0.36	0.00	0.000	0.000	0.000
1319	0.00	0.00	375.321	0.00	0.36	0.00	0.000	0.000	0.000
1320	0.00	0.00	374.960	0.00	0.36	0.00	0.000	0.000	0.000
1321	0.00	0.00	374.599	0.00	0.36	0.00	0.000	0.000	0.000
1322	0.00	0.00	374.238	0.00	0.36	0.00	0.000	0.000	0.000
1323	0.00	0.00	373.876	0.00	0.36	0.00	0.000	0.000	0.000
1324	0.00	0.00	373.515	0.00	0.36	0.00	0.000	0.000	0.000
1325	0.00	0.00	373.154	0.00	0.36	0.00	0.000	0.000	0.000
1326	0.00	0.00	372.793	0.00	0.36	0.00	0.000	0.000	0.000
1327	0.00	0.00	372.431	0.00	0.36	0.00	0.000	0.000	0.000
1328	0.00	0.00	372.070	0.00	0.36	0.00	0.000	0.000	0.000
1329	0.00	0.00	371.709	0.00	0.36	0.00	0.000	0.000	0.000
1330	0.00	0.00	371.348	0.00	0.36	0.00	0.000	0.000	0.000
1331	0.00	0.00	370.986	0.00	0.36	0.00	0.000	0.000	0.000



Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks Summary Time (min)	720.00	108.72	Final FF Basin Volume: 1071.595				Final Basin Soakpit Volume: 142.500		
	2.00	108.72	1521.20	1966.82	254.26		142.50	498.47	
			1123.72	1966.82	845.61		142.50	1121.21	671.46
	Distribution Curve	Rainfall (mm)	Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
1332	0.00	0.00	370.625	0.00	0.36	0.00	0.000	0.000	0.000
1333	0.00	0.00	370.264	0.00	0.36	0.00	0.000	0.000	0.000
1334	0.00	0.00	369.903	0.00	0.36	0.00	0.000	0.000	0.000
1335	0.00	0.00	369.541	0.00	0.36	0.00	0.000	0.000	0.000
1336	0.00	0.00	369.180	0.00	0.36	0.00	0.000	0.000	0.000
1337	0.00	0.00	368.819	0.00	0.36	0.00	0.000	0.000	0.000
1338	0.00	0.00	368.458	0.00	0.36	0.00	0.000	0.000	0.000
1339	0.00	0.00	368.096	0.00	0.36	0.00	0.000	0.000	0.000
1340	0.00	0.00	367.735	0.00	0.36	0.00	0.000	0.000	0.000
1341	0.00	0.00	367.374	0.00	0.36	0.00	0.000	0.000	0.000
1342	0.00	0.00	367.013	0.00	0.36	0.00	0.000	0.000	0.000
1343	0.00	0.00	366.651	0.00	0.36	0.00	0.000	0.000	0.000
1344	0.00	0.00	366.290	0.00	0.36	0.00	0.000	0.000	0.000
1345	0.00	0.00	365.929	0.00	0.36	0.00	0.000	0.000	0.000
1346	0.00	0.00	365.568	0.00	0.36	0.00	0.000	0.000	0.000
1347	0.00	0.00	365.206	0.00	0.36	0.00	0.000	0.000	0.000
1348	0.00	0.00	364.845	0.00	0.36	0.00	0.000	0.000	0.000
1349	0.00	0.00	364.484	0.00	0.36	0.00	0.000	0.000	0.000
1350	0.00	0.00	364.123	0.00	0.36	0.00	0.000	0.000	0.000
1351	0.00	0.00	363.761	0.00	0.36	0.00	0.000	0.000	0.000
1352	0.00	0.00	363.400	0.00	0.36	0.00	0.000	0.000	0.000
1353	0.00	0.00	363.039	0.00	0.36	0.00	0.000	0.000	0.000
1354	0.00	0.00	362.678	0.00	0.36	0.00	0.000	0.000	0.000
1355	0.00	0.00	362.316	0.00	0.36	0.00	0.000	0.000	0.000
1356	0.00	0.00	361.955	0.00	0.36	0.00	0.000	0.000	0.000
1357	0.00	0.00	361.594	0.00	0.36	0.00	0.000	0.000	0.000
1358	0.00	0.00	361.233	0.00	0.36	0.00	0.000	0.000	0.000
1359	0.00	0.00	360.871	0.00	0.36	0.00	0.000	0.000	0.000
1360	0.00	0.00	360.510	0.00	0.36	0.00	0.000	0.000	0.000
1361	0.00	0.00	360.149	0.00	0.36	0.00	0.000	0.000	0.000
1362	0.00	0.00	359.788	0.00	0.36	0.00	0.000	0.000	0.000
1363	0.00	0.00	359.426	0.00	0.36	0.00	0.000	0.000	0.000
1364	0.00	0.00	359.065	0.00	0.36	0.00	0.000	0.000	0.000
1365	0.00	0.00	358.704	0.00	0.36	0.00	0.000	0.000	0.000
1366	0.00	0.00	358.343	0.00	0.36	0.00	0.000	0.000	0.000
1367	0.00	0.00	357.981	0.00	0.36	0.00	0.000	0.000	0.000
1368	0.00	0.00	357.620	0.00	0.36	0.00	0.000	0.000	0.000
1369	0.00	0.00	357.259	0.00	0.36	0.00	0.000	0.000	0.000
1370	0.00	0.00	356.898	0.00	0.36	0.00	0.000	0.000	0.000
1371	0.00	0.00	356.536	0.00	0.36	0.00	0.000	0.000	0.000
1372	0.00	0.00	356.175	0.00	0.36	0.00	0.000	0.000	0.000
1373	0.00	0.00	355.814	0.00	0.36	0.00	0.000	0.000	0.000
1374	0.00	0.00	355.453	0.00	0.36	0.00	0.000	0.000	0.000
1375	0.00	0.00	355.091	0.00	0.36	0.00	0.000	0.000	0.000
1376	0.00	0.00	354.730	0.00	0.36	0.00	0.000	0.000	0.000
1377	0.00	0.00	354.369	0.00	0.36	0.00	0.000	0.000	0.000
1378	0.00	0.00	354.008	0.00	0.36	0.00	0.000	0.000	0.000
1379	0.00	0.00	353.646	0.00	0.36	0.00	0.000	0.000	0.000
1380	0.00	0.00	353.285	0.00	0.36	0.00	0.000	0.000	0.000
1381	0.00	0.00	352.924	0.00	0.36	0.00	0.000	0.000	0.000
1382	0.00	0.00	352.563	0.00	0.36	0.00	0.000	0.000	0.000
1383	0.00	0.00	352.201	0.00	0.36	0.00	0.000	0.000	0.000
1384	0.00	0.00	351.840	0.00	0.36	0.00	0.000	0.000	0.000
1385	0.00	0.00	351.479	0.00	0.36	0.00	0.000	0.000	0.000
1386	0.00	0.00	351.118	0.00	0.36	0.00	0.000	0.000	0.000
1387	0.00	0.00	350.756	0.00	0.36	0.00	0.000	0.000	0.000
1388	0.00	0.00	350.395	0.00	0.36	0.00	0.000	0.000	0.000
1389	0.00	0.00	350.034	0.00	0.36	0.00	0.000	0.000	0.000
1390	0.00	0.00	349.673	0.00	0.36	0.00	0.000	0.000	0.000
1391	0.00	0.00	349.311	0.00	0.36	0.00	0.000	0.000	0.000
1392	0.00	0.00	348.950	0.00	0.36	0.00	0.000	0.000	0.000
1393	0.00	0.00	348.589	0.00	0.36	0.00	0.000	0.000	0.000
1394	0.00	0.00	348.228	0.00	0.36	0.00	0.000	0.000	0.000
1395	0.00	0.00	347.866	0.00	0.36	0.00	0.000	0.000	0.000
1396	0.00	0.00	347.505	0.00	0.36	0.00	0.000	0.000	0.000
1397	0.00	0.00	347.144	0.00	0.36	0.00	0.000	0.000	0.000
1398	0.00	0.00	346.783	0.00	0.36	0.00	0.000	0.000	0.000
1399	0.00	0.00	346.421	0.00	0.36	0.00	0.000	0.000	0.000
1400	0.00	0.00	346.060	0.00	0.36	0.00	0.000	0.000	0.000
1401	0.00	0.00	345.699	0.00	0.36	0.00	0.000	0.000	0.000
1402	0.00	0.00	345.338	0.00	0.36	0.00	0.000	0.000	0.000
1403	0.00	0.00	344.976	0.00	0.36	0.00	0.000	0.000	0.000
1404	0.00	0.00	344.615	0.00	0.36	0.00	0.000	0.000	0.000
1405	0.00	0.00	344.254	0.00	0.36	0.00	0.000	0.000	0.000
1406	0.00	0.00	343.893	0.00	0.36	0.00	0.000	0.000	0.000
1407	0.00	0.00	343.531	0.00	0.36	0.00	0.000	0.000	0.000
1408	0.00	0.00	343.170	0.00	0.36	0.00	0.000	0.000	0.000
1409	0.00	0.00	342.809	0.00	0.36	0.00	0.000	0.000	0.000
1410	0.00	0.00	342.448	0.00	0.36	0.00	0.000	0.000	0.000
1411	0.00	0.00	342.086	0.00	0.36	0.00	0.000	0.000	0.000
1412	0.00	0.00	341.725	0.00	0.36	0.00	0.000	0.000	0.000
1413	0.00	0.00	341.364	0.00	0.36	0.00	0.000	0.000	0.000
1414	0.00	0.00	341.003	0.00	0.36	0.00	0.000	0.000	0.000
1415	0.00	0.00	340.641	0.00	0.36	0.00	0.000	0.000	0.000
1416	0.00	0.00	340.280	0.00	0.36	0.00	0.000	0.000	0.000
1417	0.00	0.00	339.919	0.00	0.36	0.00	0.000	0.000	0.000
1418	0.00	0.00	339.558	0.00	0.36	0.00	0.000	0.000	0.000
1419	0.00	0.00	339.196	0.00	0.36	0.00	0.000	0.000	0.000
1420	0.00	0.00	338.835	0.00	0.36	0.00	0.000	0.000	0.000
1421	0.00	0.00	338.474	0.00	0.36	0.00	0.000	0.000	0.000
1422	0.00	0.00	338.113	0.00	0.36	0.00	0.000	0.000	0.000
1423	0.00	0.00	337.751	0.00	0.36	0.00	0.000	0.000	0.000
1424	0.00	0.00	337.390	0.00	0.36	0.00	0.000	0.000	0.000
1425	0.00	0.00	337.029	0.00	0.36	0.00	0.000	0.000	0.000
1426	0.00	0.00	336.668	0.00	0.36	0.00	0.000	0.000	0.000
1427	0.00	0.00	336.306	0.00	0.36	0.00	0.000	0.000	0.000
1428	0.00	0.00	335.945	0.00	0.36	0.00	0.000	0.000	0.000
1429	0.00	0.00	335.584	0.00	0.36	0.00	0.000	0.000	0.000
1430	0.00	0.00	335.223	0.00	0.36	0.00	0.000	0.000	0.000
1431	0.00	0.00	334.861	0.00	0.36	0.00	0.000	0.000	0.000
1432	0.00	0.00	334.500	0.00	0.36	0.00	0.000	0.000	0.000
1433	0.00	0.00	334.139	0.00	0.36	0.00	0.000	0.000	0.000
1434	0.00	0.00	333.778	0.00	0.36	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	720.00	108.72	Final FF Basin Volume:	1071.595			Final Basin Soakpit Volume:	142.500	
Summary	2.00	108.72	1521.20	1966.82	254.26		142.50	498.47	
Time (min)	Distribution Curve	Rainfall (mm)	1123.72	1966.82	845.61		142.50	1121.21	671.46
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min )	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
1435	0.00	0.00	333.416	0.00	0.36	0.00	0.000	0.000	0.000
1436	0.00	0.00	333.055	0.00	0.36	0.00	0.000	0.000	0.000
1437	0.00	0.00	332.694	0.00	0.36	0.00	0.000	0.000	0.000
1438	0.00	0.00	332.333	0.00	0.36	0.00	0.000	0.000	0.000
1439	0.00	0.00	331.971	0.00	0.36	0.00	0.000	0.000	0.000
1440	0.00	0.00	331.610	0.00	0.36	0.00	0.000	0.000	0.000
1441	0.00	0.00	331.249	0.00	0.36	0.00	0.000	0.000	0.000
1442	0.00	0.00	330.888	0.00	0.36	0.00	0.000	0.000	0.000
1443	0.00	0.00	330.526	0.00	0.36	0.00	0.000	0.000	0.000
1444	0.00	0.00	330.165	0.00	0.36	0.00	0.000	0.000	0.000
1445	0.00	0.00	329.804	0.00	0.36	0.00	0.000	0.000	0.000
1446	0.00	0.00	329.443	0.00	0.36	0.00	0.000	0.000	0.000
1447	0.00	0.00	329.081	0.00	0.36	0.00	0.000	0.000	0.000
1448	0.00	0.00	328.720	0.00	0.36	0.00	0.000	0.000	0.000
1449	0.00	0.00	328.359	0.00	0.36	0.00	0.000	0.000	0.000
1450	0.00	0.00	327.998	0.00	0.36	0.00	0.000	0.000	0.000
1451	0.00	0.00	327.636	0.00	0.36	0.00	0.000	0.000	0.000
1452	0.00	0.00	327.275	0.00	0.36	0.00	0.000	0.000	0.000
1453	0.00	0.00	326.914	0.00	0.36	0.00	0.000	0.000	0.000
1454	0.00	0.00	326.553	0.00	0.36	0.00	0.000	0.000	0.000
1455	0.00	0.00	326.191	0.00	0.36	0.00	0.000	0.000	0.000
1456	0.00	0.00	325.830	0.00	0.36	0.00	0.000	0.000	0.000
1457	0.00	0.00	325.469	0.00	0.36	0.00	0.000	0.000	0.000
1458	0.00	0.00	325.108	0.00	0.36	0.00	0.000	0.000	0.000
1459	0.00	0.00	324.746	0.00	0.36	0.00	0.000	0.000	0.000
1460	0.00	0.00	324.385	0.00	0.36	0.00	0.000	0.000	0.000
1461	0.00	0.00	324.024	0.00	0.36	0.00	0.000	0.000	0.000
1462	0.00	0.00	323.663	0.00	0.36	0.00	0.000	0.000	0.000
1463	0.00	0.00	323.301	0.00	0.36	0.00	0.000	0.000	0.000
1464	0.00	0.00	322.940	0.00	0.36	0.00	0.000	0.000	0.000
1465	0.00	0.00	322.579	0.00	0.36	0.00	0.000	0.000	0.000
1466	0.00	0.00	322.218	0.00	0.36	0.00	0.000	0.000	0.000
1467	0.00	0.00	321.856	0.00	0.36	0.00	0.000	0.000	0.000
1468	0.00	0.00	321.495	0.00	0.36	0.00	0.000	0.000	0.000
1469	0.00	0.00	321.134	0.00	0.36	0.00	0.000	0.000	0.000
1470	0.00	0.00	320.773	0.00	0.36	0.00	0.000	0.000	0.000
1471	0.00	0.00	320.411	0.00	0.36	0.00	0.000	0.000	0.000
1472	0.00	0.00	320.050	0.00	0.36	0.00	0.000	0.000	0.000
1473	0.00	0.00	319.689	0.00	0.36	0.00	0.000	0.000	0.000
1474	0.00	0.00	319.328	0.00	0.36	0.00	0.000	0.000	0.000
1475	0.00	0.00	318.966	0.00	0.36	0.00	0.000	0.000	0.000
1476	0.00	0.00	318.605	0.00	0.36	0.00	0.000	0.000	0.000
1477	0.00	0.00	318.244	0.00	0.36	0.00	0.000	0.000	0.000
1478	0.00	0.00	317.883	0.00	0.36	0.00	0.000	0.000	0.000
1479	0.00	0.00	317.521	0.00	0.36	0.00	0.000	0.000	0.000
1480	0.00	0.00	317.160	0.00	0.36	0.00	0.000	0.000	0.000
1481	0.00	0.00	316.799	0.00	0.36	0.00	0.000	0.000	0.000
1482	0.00	0.00	316.438	0.00	0.36	0.00	0.000	0.000	0.000
1483	0.00	0.00	316.076	0.00	0.36	0.00	0.000	0.000	0.000
1484	0.00	0.00	315.715	0.00	0.36	0.00	0.000	0.000	0.000
1485	0.00	0.00	315.354	0.00	0.36	0.00	0.000	0.000	0.000
1486	0.00	0.00	314.993	0.00	0.36	0.00	0.000	0.000	0.000
1487	0.00	0.00	314.631	0.00	0.36	0.00	0.000	0.000	0.000
1488	0.00	0.00	314.270	0.00	0.36	0.00	0.000	0.000	0.000
1489	0.00	0.00	313.909	0.00	0.36	0.00	0.000	0.000	0.000
1490	0.00	0.00	313.548	0.00	0.36	0.00	0.000	0.000	0.000
1491	0.00	0.00	313.186	0.00	0.36	0.00	0.000	0.000	0.000
1492	0.00	0.00	312.825	0.00	0.36	0.00	0.000	0.000	0.000
1493	0.00	0.00	312.464	0.00	0.36	0.00	0.000	0.000	0.000
1494	0.00	0.00	312.103	0.00	0.36	0.00	0.000	0.000	0.000
1495	0.00	0.00	311.741	0.00	0.36	0.00	0.000	0.000	0.000
1496	0.00	0.00	311.380	0.00	0.36	0.00	0.000	0.000	0.000
1497	0.00	0.00	311.019	0.00	0.36	0.00	0.000	0.000	0.000
1498	0.00	0.00	310.658	0.00	0.36	0.00	0.000	0.000	0.000
1499	0.00	0.00	310.296	0.00	0.36	0.00	0.000	0.000	0.000
1500	0.00	0.00	309.935	0.00	0.36	0.00	0.000	0.000	0.000
1501	0.00	0.00	309.574	0.00	0.36	0.00	0.000	0.000	0.000
1502	0.00	0.00	309.213	0.00	0.36	0.00	0.000	0.000	0.000
1503	0.00	0.00	308.851	0.00	0.36	0.00	0.000	0.000	0.000
1504	0.00	0.00	308.490	0.00	0.36	0.00	0.000	0.000	0.000
1505	0.00	0.00	308.129	0.00	0.36	0.00	0.000	0.000	0.000
1506	0.00	0.00	307.768	0.00	0.36	0.00	0.000	0.000	0.000
1507	0.00	0.00	307.406	0.00	0.36	0.00	0.000	0.000	0.000
1508	0.00	0.00	307.045	0.00	0.36	0.00	0.000	0.000	0.000
1509	0.00	0.00	306.684	0.00	0.36	0.00	0.000	0.000	0.000
1510	0.00	0.00	306.323	0.00	0.36	0.00	0.000	0.000	0.000
1511	0.00	0.00	305.961	0.00	0.36	0.00	0.000	0.000	0.000
1512	0.00	0.00	305.600	0.00	0.36	0.00	0.000	0.000	0.000
1513	0.00	0.00	305.239	0.00	0.36	0.00	0.000	0.000	0.000
1514	0.00	0.00	304.878	0.00	0.36	0.00	0.000	0.000	0.000
1515	0.00	0.00	304.516	0.00	0.36	0.00	0.000	0.000	0.000
1516	0.00	0.00	304.155	0.00	0.36	0.00	0.000	0.000	0.000
1517	0.00	0.00	303.794	0.00	0.36	0.00	0.000	0.000	0.000
1518	0.00	0.00	303.433	0.00	0.36	0.00	0.000	0.000	0.000
1519	0.00	0.00	303.071	0.00	0.36	0.00	0.000	0.000	0.000
1520	0.00	0.00	302.710	0.00	0.36	0.00	0.000	0.000	0.000
1521	0.00	0.00	302.349	0.00	0.36	0.00	0.000	0.000	0.000
1522	0.00	0.00	301.988	0.00	0.36	0.00	0.000	0.000	0.000
1523	0.00	0.00	301.626	0.00	0.36	0.00	0.000	0.000	0.000
1524	0.00	0.00	301.265	0.00	0.36	0.00	0.000	0.000	0.000
1525	0.00	0.00	300.904	0.00	0.36	0.00	0.000	0.000	0.000
1526	0.00	0.00	300.543	0.00	0.36	0.00	0.000	0.000	0.000
1527	0.00	0.00	300.181	0.00	0.36	0.00	0.000	0.000	0.000
1528	0.00	0.00	299.820	0.00	0.36	0.00	0.000	0.000	0.000
1529	0.00	0.00	299.459	0.00	0.36	0.00	0.000	0.000	0.000
1530	0.00	0.00	299.098	0.00	0.36	0.00	0.000	0.000	0.000
1531	0.00	0.00	298.736	0.00	0.36	0.00	0.000	0.000	0.000
1532	0.00	0.00	298.375	0.00	0.36	0.00	0.000	0.000	0.000
1533	0.00	0.00	298.014	0.00	0.36	0.00	0.000	0.000	0.000
1534	0.00	0.00	297.653	0.00	0.36	0.00	0.000	0.000	0.000
1535	0.00	0.00	297.291	0.00	0.36	0.00	0.000	0.000	0.000
1536	0.00	0.00	296.930	0.00	0.36	0.00	0.000	0.000	0.000
1537	0.00	0.00	296.569	0.00	0.36	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	720.00	108.72	Final FF Basin Volume:	1071.595			Final Basin Soakpit Volume:	142.500	
Summary	2.00	108.72	1521.20	1966.82	254.26		142.50	498.47	
Time (min)	Distribution Curve	Rainfall (mm)	1123.72	1966.82	845.61		142.50	1121.21	671.46
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min )	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
1538	0.00	0.00	296.208	0.00	0.36	0.00	0.000	0.000	0.000
1539	0.00	0.00	295.846	0.00	0.36	0.00	0.000	0.000	0.000
1540	0.00	0.00	295.485	0.00	0.36	0.00	0.000	0.000	0.000
1541	0.00	0.00	295.124	0.00	0.36	0.00	0.000	0.000	0.000
1542	0.00	0.00	294.763	0.00	0.36	0.00	0.000	0.000	0.000
1543	0.00	0.00	294.401	0.00	0.36	0.00	0.000	0.000	0.000
1544	0.00	0.00	294.040	0.00	0.36	0.00	0.000	0.000	0.000
1545	0.00	0.00	293.679	0.00	0.36	0.00	0.000	0.000	0.000
1546	0.00	0.00	293.318	0.00	0.36	0.00	0.000	0.000	0.000
1547	0.00	0.00	292.956	0.00	0.36	0.00	0.000	0.000	0.000
1548	0.00	0.00	292.595	0.00	0.36	0.00	0.000	0.000	0.000
1549	0.00	0.00	292.234	0.00	0.36	0.00	0.000	0.000	0.000
1550	0.00	0.00	291.873	0.00	0.36	0.00	0.000	0.000	0.000
1551	0.00	0.00	291.511	0.00	0.36	0.00	0.000	0.000	0.000
1552	0.00	0.00	291.150	0.00	0.36	0.00	0.000	0.000	0.000
1553	0.00	0.00	290.789	0.00	0.36	0.00	0.000	0.000	0.000
1554	0.00	0.00	290.428	0.00	0.36	0.00	0.000	0.000	0.000
1555	0.00	0.00	290.066	0.00	0.36	0.00	0.000	0.000	0.000
1556	0.00	0.00	289.705	0.00	0.36	0.00	0.000	0.000	0.000
1557	0.00	0.00	289.344	0.00	0.36	0.00	0.000	0.000	0.000
1558	0.00	0.00	288.983	0.00	0.36	0.00	0.000	0.000	0.000
1559	0.00	0.00	288.621	0.00	0.36	0.00	0.000	0.000	0.000
1560	0.00	0.00	288.260	0.00	0.36	0.00	0.000	0.000	0.000
1561	0.00	0.00	287.899	0.00	0.36	0.00	0.000	0.000	0.000
1562	0.00	0.00	287.538	0.00	0.36	0.00	0.000	0.000	0.000
1563	0.00	0.00	287.176	0.00	0.36	0.00	0.000	0.000	0.000
1564	0.00	0.00	286.815	0.00	0.36	0.00	0.000	0.000	0.000
1565	0.00	0.00	286.454	0.00	0.36	0.00	0.000	0.000	0.000
1566	0.00	0.00	286.093	0.00	0.36	0.00	0.000	0.000	0.000
1567	0.00	0.00	285.731	0.00	0.36	0.00	0.000	0.000	0.000
1568	0.00	0.00	285.370	0.00	0.36	0.00	0.000	0.000	0.000
1569	0.00	0.00	285.009	0.00	0.36	0.00	0.000	0.000	0.000
1570	0.00	0.00	284.648	0.00	0.36	0.00	0.000	0.000	0.000
1571	0.00	0.00	284.286	0.00	0.36	0.00	0.000	0.000	0.000
1572	0.00	0.00	283.925	0.00	0.36	0.00	0.000	0.000	0.000
1573	0.00	0.00	283.564	0.00	0.36	0.00	0.000	0.000	0.000
1574	0.00	0.00	283.203	0.00	0.36	0.00	0.000	0.000	0.000
1575	0.00	0.00	282.841	0.00	0.36	0.00	0.000	0.000	0.000
1576	0.00	0.00	282.480	0.00	0.36	0.00	0.000	0.000	0.000
1577	0.00	0.00	282.119	0.00	0.36	0.00	0.000	0.000	0.000
1578	0.00	0.00	281.758	0.00	0.36	0.00	0.000	0.000	0.000
1579	0.00	0.00	281.396	0.00	0.36	0.00	0.000	0.000	0.000
1580	0.00	0.00	281.035	0.00	0.36	0.00	0.000	0.000	0.000
1581	0.00	0.00	280.674	0.00	0.36	0.00	0.000	0.000	0.000
1582	0.00	0.00	280.313	0.00	0.36	0.00	0.000	0.000	0.000
1583	0.00	0.00	279.951	0.00	0.36	0.00	0.000	0.000	0.000
1584	0.00	0.00	279.590	0.00	0.36	0.00	0.000	0.000	0.000
1585	0.00	0.00	279.229	0.00	0.36	0.00	0.000	0.000	0.000
1586	0.00	0.00	278.868	0.00	0.36	0.00	0.000	0.000	0.000
1587	0.00	0.00	278.506	0.00	0.36	0.00	0.000	0.000	0.000
1588	0.00	0.00	278.145	0.00	0.36	0.00	0.000	0.000	0.000
1589	0.00	0.00	277.784	0.00	0.36	0.00	0.000	0.000	0.000
1590	0.00	0.00	277.423	0.00	0.36	0.00	0.000	0.000	0.000
1591	0.00	0.00	277.061	0.00	0.36	0.00	0.000	0.000	0.000
1592	0.00	0.00	276.700	0.00	0.36	0.00	0.000	0.000	0.000
1593	0.00	0.00	276.339	0.00	0.36	0.00	0.000	0.000	0.000
1594	0.00	0.00	275.978	0.00	0.36	0.00	0.000	0.000	0.000
1595	0.00	0.00	275.616	0.00	0.36	0.00	0.000	0.000	0.000
1596	0.00	0.00	275.255	0.00	0.36	0.00	0.000	0.000	0.000
1597	0.00	0.00	274.894	0.00	0.36	0.00	0.000	0.000	0.000
1598	0.00	0.00	274.533	0.00	0.36	0.00	0.000	0.000	0.000
1599	0.00	0.00	274.171	0.00	0.36	0.00	0.000	0.000	0.000
1600	0.00	0.00	273.810	0.00	0.36	0.00	0.000	0.000	0.000
1601	0.00	0.00	273.449	0.00	0.36	0.00	0.000	0.000	0.000
1602	0.00	0.00	273.088	0.00	0.36	0.00	0.000	0.000	0.000
1603	0.00	0.00	272.726	0.00	0.36	0.00	0.000	0.000	0.000
1604	0.00	0.00	272.365	0.00	0.36	0.00	0.000	0.000	0.000
1605	0.00	0.00	272.004	0.00	0.36	0.00	0.000	0.000	0.000
1606	0.00	0.00	271.643	0.00	0.36	0.00	0.000	0.000	0.000
1607	0.00	0.00	271.281	0.00	0.36	0.00	0.000	0.000	0.000
1608	0.00	0.00	270.920	0.00	0.36	0.00	0.000	0.000	0.000
1609	0.00	0.00	270.559	0.00	0.36	0.00	0.000	0.000	0.000
1610	0.00	0.00	270.198	0.00	0.36	0.00	0.000	0.000	0.000
1611	0.00	0.00	269.836	0.00	0.36	0.00	0.000	0.000	0.000
1612	0.00	0.00	269.475	0.00	0.36	0.00	0.000	0.000	0.000
1613	0.00	0.00	269.114	0.00	0.36	0.00	0.000	0.000	0.000
1614	0.00	0.00	268.753	0.00	0.36	0.00	0.000	0.000	0.000
1615	0.00	0.00	268.391	0.00	0.36	0.00	0.000	0.000	0.000
1616	0.00	0.00	268.030	0.00	0.36	0.00	0.000	0.000	0.000
1617	0.00	0.00	267.669	0.00	0.36	0.00	0.000	0.000	0.000
1618	0.00	0.00	267.308	0.00	0.36	0.00	0.000	0.000	0.000
1619	0.00	0.00	266.946	0.00	0.36	0.00	0.000	0.000	0.000
1620	0.00	0.00	266.585	0.00	0.36	0.00	0.000	0.000	0.000
1621	0.00	0.00	266.224	0.00	0.36	0.00	0.000	0.000	0.000
1622	0.00	0.00	265.863	0.00	0.36	0.00	0.000	0.000	0.000
1623	0.00	0.00	265.501	0.00	0.36	0.00	0.000	0.000	0.000
1624	0.00	0.00	265.140	0.00	0.36	0.00	0.000	0.000	0.000
1625	0.00	0.00	264.779	0.00	0.36	0.00	0.000	0.000	0.000
1626	0.00	0.00	264.418	0.00	0.36	0.00	0.000	0.000	0.000
1627	0.00	0.00	264.056	0.00	0.36	0.00	0.000	0.000	0.000
1628	0.00	0.00	263.695	0.00	0.36	0.00	0.000	0.000	0.000
1629	0.00	0.00	263.334	0.00	0.36	0.00	0.000	0.000	0.000
1630	0.00	0.00	262.973	0.00	0.36	0.00	0.000	0.000	0.000
1631	0.00	0.00	262.611	0.00	0.36	0.00	0.000	0.000	0.000
1632	0.00	0.00	262.250	0.00	0.36	0.00	0.000	0.000	0.000
1633	0.00	0.00	261.889	0.00	0.36	0.00	0.000	0.000	0.000
1634	0.00	0.00	261.528	0.00	0.36	0.00	0.000	0.000	0.000
1635	0.00	0.00	261.166	0.00	0.36	0.00	0.000	0.000	0.000
1636	0.00	0.00	260.805	0.00	0.36	0.00	0.000	0.000	0.000
1637	0.00	0.00	260.444	0.00	0.36	0.00	0.000	0.000	0.000
1638	0.00	0.00	260.083	0.00	0.36	0.00	0.000	0.000	0.000
1639	0.00	0.00	259.721	0.00	0.36	0.00	0.000	0.000	0.000
1640	0.00	0.00	259.360	0.00	0.36	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	720.00	108.72	Final FF Basin Volume:	1071.595			Final Basin Soakpit Volume:	142.500	
Summary	2.00	108.72	1521.20	1966.82	254.26		142.50	498.47	
			1123.72	1966.82	845.61		142.50	1121.21	671.46
Time (min)	Distribution Curve	Rainfall (mm)	Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
1641	0.00	0.00	258.999	0.00	0.36	0.00	0.000	0.000	0.000
1642	0.00	0.00	258.638	0.00	0.36	0.00	0.000	0.000	0.000
1643	0.00	0.00	258.276	0.00	0.36	0.00	0.000	0.000	0.000
1644	0.00	0.00	257.915	0.00	0.36	0.00	0.000	0.000	0.000
1645	0.00	0.00	257.554	0.00	0.36	0.00	0.000	0.000	0.000
1646	0.00	0.00	257.193	0.00	0.36	0.00	0.000	0.000	0.000
1647	0.00	0.00	256.831	0.00	0.36	0.00	0.000	0.000	0.000
1648	0.00	0.00	256.470	0.00	0.36	0.00	0.000	0.000	0.000
1649	0.00	0.00	256.109	0.00	0.36	0.00	0.000	0.000	0.000
1650	0.00	0.00	255.748	0.00	0.36	0.00	0.000	0.000	0.000
1651	0.00	0.00	255.386	0.00	0.36	0.00	0.000	0.000	0.000
1652	0.00	0.00	255.025	0.00	0.36	0.00	0.000	0.000	0.000
1653	0.00	0.00	254.664	0.00	0.36	0.00	0.000	0.000	0.000
1654	0.00	0.00	254.303	0.00	0.36	0.00	0.000	0.000	0.000
1655	0.00	0.00	253.941	0.00	0.36	0.00	0.000	0.000	0.000
1656	0.00	0.00	253.580	0.00	0.36	0.00	0.000	0.000	0.000
1657	0.00	0.00	253.219	0.00	0.36	0.00	0.000	0.000	0.000
1658	0.00	0.00	252.858	0.00	0.36	0.00	0.000	0.000	0.000
1659	0.00	0.00	252.496	0.00	0.36	0.00	0.000	0.000	0.000
1660	0.00	0.00	252.135	0.00	0.36	0.00	0.000	0.000	0.000
1661	0.00	0.00	251.774	0.00	0.36	0.00	0.000	0.000	0.000
1662	0.00	0.00	251.413	0.00	0.36	0.00	0.000	0.000	0.000
1663	0.00	0.00	251.051	0.00	0.36	0.00	0.000	0.000	0.000
1664	0.00	0.00	250.690	0.00	0.36	0.00	0.000	0.000	0.000
1665	0.00	0.00	250.329	0.00	0.36	0.00	0.000	0.000	0.000
1666	0.00	0.00	249.968	0.00	0.36	0.00	0.000	0.000	0.000
1667	0.00	0.00	249.606	0.00	0.36	0.00	0.000	0.000	0.000
1668	0.00	0.00	249.245	0.00	0.36	0.00	0.000	0.000	0.000
1669	0.00	0.00	248.884	0.00	0.36	0.00	0.000	0.000	0.000
1670	0.00	0.00	248.523	0.00	0.36	0.00	0.000	0.000	0.000
1671	0.00	0.00	248.161	0.00	0.36	0.00	0.000	0.000	0.000
1672	0.00	0.00	247.800	0.00	0.36	0.00	0.000	0.000	0.000
1673	0.00	0.00	247.439	0.00	0.36	0.00	0.000	0.000	0.000
1674	0.00	0.00	247.078	0.00	0.36	0.00	0.000	0.000	0.000
1675	0.00	0.00	246.716	0.00	0.36	0.00	0.000	0.000	0.000
1676	0.00	0.00	246.355	0.00	0.36	0.00	0.000	0.000	0.000
1677	0.00	0.00	245.994	0.00	0.36	0.00	0.000	0.000	0.000
1678	0.00	0.00	245.633	0.00	0.36	0.00	0.000	0.000	0.000
1679	0.00	0.00	245.271	0.00	0.36	0.00	0.000	0.000	0.000
1680	0.00	0.00	244.910	0.00	0.36	0.00	0.000	0.000	0.000
1681	0.00	0.00	244.549	0.00	0.36	0.00	0.000	0.000	0.000
1682	0.00	0.00	244.188	0.00	0.36	0.00	0.000	0.000	0.000
1683	0.00	0.00	243.826	0.00	0.36	0.00	0.000	0.000	0.000
1684	0.00	0.00	243.465	0.00	0.36	0.00	0.000	0.000	0.000
1685	0.00	0.00	243.104	0.00	0.36	0.00	0.000	0.000	0.000
1686	0.00	0.00	242.743	0.00	0.36	0.00	0.000	0.000	0.000
1687	0.00	0.00	242.381	0.00	0.36	0.00	0.000	0.000	0.000
1688	0.00	0.00	242.020	0.00	0.36	0.00	0.000	0.000	0.000
1689	0.00	0.00	241.659	0.00	0.36	0.00	0.000	0.000	0.000
1690	0.00	0.00	241.298	0.00	0.36	0.00	0.000	0.000	0.000
1691	0.00	0.00	240.936	0.00	0.36	0.00	0.000	0.000	0.000
1692	0.00	0.00	240.575	0.00	0.36	0.00	0.000	0.000	0.000
1693	0.00	0.00	240.214	0.00	0.36	0.00	0.000	0.000	0.000
1694	0.00	0.00	239.853	0.00	0.36	0.00	0.000	0.000	0.000
1695	0.00	0.00	239.491	0.00	0.36	0.00	0.000	0.000	0.000
1696	0.00	0.00	239.130	0.00	0.36	0.00	0.000	0.000	0.000
1697	0.00	0.00	238.769	0.00	0.36	0.00	0.000	0.000	0.000
1698	0.00	0.00	238.408	0.00	0.36	0.00	0.000	0.000	0.000
1699	0.00	0.00	238.046	0.00	0.36	0.00	0.000	0.000	0.000
1700	0.00	0.00	237.685	0.00	0.36	0.00	0.000	0.000	0.000
1701	0.00	0.00	237.324	0.00	0.36	0.00	0.000	0.000	0.000
1702	0.00	0.00	236.963	0.00	0.36	0.00	0.000	0.000	0.000
1703	0.00	0.00	236.601	0.00	0.36	0.00	0.000	0.000	0.000
1704	0.00	0.00	236.240	0.00	0.36	0.00	0.000	0.000	0.000
1705	0.00	0.00	235.879	0.00	0.36	0.00	0.000	0.000	0.000
1706	0.00	0.00	235.518	0.00	0.36	0.00	0.000	0.000	0.000
1707	0.00	0.00	235.156	0.00	0.36	0.00	0.000	0.000	0.000
1708	0.00	0.00	234.795	0.00	0.36	0.00	0.000	0.000	0.000
1709	0.00	0.00	234.434	0.00	0.36	0.00	0.000	0.000	0.000
1710	0.00	0.00	234.073	0.00	0.36	0.00	0.000	0.000	0.000
1711	0.00	0.00	233.711	0.00	0.36	0.00	0.000	0.000	0.000
1712	0.00	0.00	233.350	0.00	0.36	0.00	0.000	0.000	0.000
1713	0.00	0.00	232.989	0.00	0.36	0.00	0.000	0.000	0.000
1714	0.00	0.00	232.628	0.00	0.36	0.00	0.000	0.000	0.000
1715	0.00	0.00	232.266	0.00	0.36	0.00	0.000	0.000	0.000
1716	0.00	0.00	231.905	0.00	0.36	0.00	0.000	0.000	0.000
1717	0.00	0.00	231.544	0.00	0.36	0.00	0.000	0.000	0.000
1718	0.00	0.00	231.183	0.00	0.36	0.00	0.000	0.000	0.000
1719	0.00	0.00	230.821	0.00	0.36	0.00	0.000	0.000	0.000
1720	0.00	0.00	230.460	0.00	0.36	0.00	0.000	0.000	0.000
1721	0.00	0.00	230.099	0.00	0.36	0.00	0.000	0.000	0.000
1722	0.00	0.00	229.738	0.00	0.36	0.00	0.000	0.000	0.000
1723	0.00	0.00	229.376	0.00	0.36	0.00	0.000	0.000	0.000
1724	0.00	0.00	229.015	0.00	0.36	0.00	0.000	0.000	0.000
1725	0.00	0.00	228.654	0.00	0.36	0.00	0.000	0.000	0.000
1726	0.00	0.00	228.293	0.00	0.36	0.00	0.000	0.000	0.000
1727	0.00	0.00	227.931	0.00	0.36	0.00	0.000	0.000	0.000
1728	0.00	0.00	227.570	0.00	0.36	0.00	0.000	0.000	0.000
1729	0.00	0.00	227.209	0.00	0.36	0.00	0.000	0.000	0.000
1730	0.00	0.00	226.848	0.00	0.36	0.00	0.000	0.000	0.000
1731	0.00	0.00	226.486	0.00	0.36	0.00	0.000	0.000	0.000
1732	0.00	0.00	226.125	0.00	0.36	0.00	0.000	0.000	0.000
1733	0.00	0.00	225.764	0.00	0.36	0.00	0.000	0.000	0.000
1734	0.00	0.00	225.403	0.00	0.36	0.00	0.000	0.000	0.000
1735	0.00	0.00	225.041	0.00	0.36	0.00	0.000	0.000	0.000
1736	0.00	0.00	224.680	0.00	0.36	0.00	0.000	0.000	0.000
1737	0.00	0.00	224.319	0.00	0.36	0.00	0.000	0.000	0.000
1738	0.00	0.00	223.958	0.00	0.36	0.00	0.000	0.000	0.000
1739	0.00	0.00	223.596	0.00	0.36	0.00	0.000	0.000	0.000
1740	0.00	0.00	223.235	0.00	0.36	0.00	0.000	0.000	0.000
1741	0.00	0.00	222.874	0.00	0.36	0.00	0.000	0.000	0.000
1742	0.00	0.00	222.513	0.00	0.36	0.00	0.000	0.000	0.000
1743	0.00	0.00	222.151	0.00	0.36	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	720.00	108.72	Final FF Basin Volume:		1071.595		Final Basin Soakpit Volume:		142.500
Summary	2.00	108.72	1521.20	1966.82	254.26		142.50	498.47	
Time (min)	Distribution Curve	Rainfall (mm)	1123.72	1966.82	845.61		142.50	1121.21	671.46
1744	0.00	0.00	Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min )	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
1745	0.00	0.00	221.790	0.00	0.36	0.00	0.000	0.000	0.000
1746	0.00	0.00	221.429	0.00	0.36	0.00	0.000	0.000	0.000
1747	0.00	0.00	221.068	0.00	0.36	0.00	0.000	0.000	0.000
1748	0.00	0.00	220.706	0.00	0.36	0.00	0.000	0.000	0.000
1749	0.00	0.00	220.345	0.00	0.36	0.00	0.000	0.000	0.000
1750	0.00	0.00	219.984	0.00	0.36	0.00	0.000	0.000	0.000
1751	0.00	0.00	219.623	0.00	0.36	0.00	0.000	0.000	0.000
1752	0.00	0.00	219.261	0.00	0.36	0.00	0.000	0.000	0.000
1753	0.00	0.00	218.900	0.00	0.36	0.00	0.000	0.000	0.000
1754	0.00	0.00	218.539	0.00	0.36	0.00	0.000	0.000	0.000
1755	0.00	0.00	218.178	0.00	0.36	0.00	0.000	0.000	0.000
1756	0.00	0.00	217.816	0.00	0.36	0.00	0.000	0.000	0.000
1757	0.00	0.00	217.455	0.00	0.36	0.00	0.000	0.000	0.000
1758	0.00	0.00	217.094	0.00	0.36	0.00	0.000	0.000	0.000
1759	0.00	0.00	216.733	0.00	0.36	0.00	0.000	0.000	0.000
1760	0.00	0.00	216.371	0.00	0.36	0.00	0.000	0.000	0.000
1761	0.00	0.00	216.010	0.00	0.36	0.00	0.000	0.000	0.000
1762	0.00	0.00	215.649	0.00	0.36	0.00	0.000	0.000	0.000
1763	0.00	0.00	215.288	0.00	0.36	0.00	0.000	0.000	0.000
1764	0.00	0.00	214.926	0.00	0.36	0.00	0.000	0.000	0.000
1765	0.00	0.00	214.565	0.00	0.36	0.00	0.000	0.000	0.000
1766	0.00	0.00	214.204	0.00	0.36	0.00	0.000	0.000	0.000
1767	0.00	0.00	213.843	0.00	0.36	0.00	0.000	0.000	0.000
1768	0.00	0.00	213.481	0.00	0.36	0.00	0.000	0.000	0.000
1769	0.00	0.00	213.120	0.00	0.36	0.00	0.000	0.000	0.000
1770	0.00	0.00	212.759	0.00	0.36	0.00	0.000	0.000	0.000
1771	0.00	0.00	212.398	0.00	0.36	0.00	0.000	0.000	0.000
1772	0.00	0.00	212.036	0.00	0.36	0.00	0.000	0.000	0.000
1773	0.00	0.00	211.675	0.00	0.36	0.00	0.000	0.000	0.000
1774	0.00	0.00	211.314	0.00	0.36	0.00	0.000	0.000	0.000
1775	0.00	0.00	210.953	0.00	0.36	0.00	0.000	0.000	0.000
1776	0.00	0.00	210.591	0.00	0.36	0.00	0.000	0.000	0.000
1777	0.00	0.00	210.230	0.00	0.36	0.00	0.000	0.000	0.000
1778	0.00	0.00	209.869	0.00	0.36	0.00	0.000	0.000	0.000
1779	0.00	0.00	209.508	0.00	0.36	0.00	0.000	0.000	0.000
1780	0.00	0.00	209.146	0.00	0.36	0.00	0.000	0.000	0.000
1781	0.00	0.00	208.785	0.00	0.36	0.00	0.000	0.000	0.000
1782	0.00	0.00	208.424	0.00	0.36	0.00	0.000	0.000	0.000
1783	0.00	0.00	208.063	0.00	0.36	0.00	0.000	0.000	0.000
1784	0.00	0.00	207.701	0.00	0.36	0.00	0.000	0.000	0.000
1785	0.00	0.00	207.340	0.00	0.36	0.00	0.000	0.000	0.000
1786	0.00	0.00	206.979	0.00	0.36	0.00	0.000	0.000	0.000
1787	0.00	0.00	206.618	0.00	0.36	0.00	0.000	0.000	0.000
1788	0.00	0.00	206.256	0.00	0.36	0.00	0.000	0.000	0.000
1789	0.00	0.00	205.895	0.00	0.36	0.00	0.000	0.000	0.000
1790	0.00	0.00	205.534	0.00	0.36	0.00	0.000	0.000	0.000
1791	0.00	0.00	205.173	0.00	0.36	0.00	0.000	0.000	0.000
1792	0.00	0.00	204.811	0.00	0.36	0.00	0.000	0.000	0.000
1793	0.00	0.00	204.450	0.00	0.36	0.00	0.000	0.000	0.000
1794	0.00	0.00	204.089	0.00	0.36	0.00	0.000	0.000	0.000
1795	0.00	0.00	203.728	0.00	0.36	0.00	0.000	0.000	0.000
1796	0.00	0.00	203.366	0.00	0.36	0.00	0.000	0.000	0.000
1797	0.00	0.00	203.005	0.00	0.36	0.00	0.000	0.000	0.000
1798	0.00	0.00	202.644	0.00	0.36	0.00	0.000	0.000	0.000
1799	0.00	0.00	202.283	0.00	0.36	0.00	0.000	0.000	0.000
1800	0.00	0.00	201.921	0.00	0.36	0.00	0.000	0.000	0.000
1801	0.00	0.00	201.560	0.00	0.36	0.00	0.000	0.000	0.000
1802	0.00	0.00	201.199	0.00	0.36	0.00	0.000	0.000	0.000
1803	0.00	0.00	200.838	0.00	0.36	0.00	0.000	0.000	0.000
1804	0.00	0.00	200.476	0.00	0.36	0.00	0.000	0.000	0.000
1805	0.00	0.00	200.115	0.00	0.36	0.00	0.000	0.000	0.000
1806	0.00	0.00	199.754	0.00	0.36	0.00	0.000	0.000	0.000
1807	0.00	0.00	199.393	0.00	0.36	0.00	0.000	0.000	0.000
1808	0.00	0.00	199.031	0.00	0.36	0.00	0.000	0.000	0.000
1809	0.00	0.00	198.670	0.00	0.36	0.00	0.000	0.000	0.000
1810	0.00	0.00	198.309	0.00	0.36	0.00	0.000	0.000	0.000
1811	0.00	0.00	197.948	0.00	0.36	0.00	0.000	0.000	0.000
1812	0.00	0.00	197.586	0.00	0.36	0.00	0.000	0.000	0.000
1813	0.00	0.00	197.225	0.00	0.36	0.00	0.000	0.000	0.000
1814	0.00	0.00	196.864	0.00	0.36	0.00	0.000	0.000	0.000
1815	0.00	0.00	196.503	0.00	0.36	0.00	0.000	0.000	0.000
1816	0.00	0.00	196.141	0.00	0.36	0.00	0.000	0.000	0.000
1817	0.00	0.00	195.780	0.00	0.36	0.00	0.000	0.000	0.000
1818	0.00	0.00	195.419	0.00	0.36	0.00	0.000	0.000	0.000
1819	0.00	0.00	195.058	0.00	0.36	0.00	0.000	0.000	0.000
1820	0.00	0.00	194.696	0.00	0.36	0.00	0.000	0.000	0.000
1821	0.00	0.00	194.335	0.00	0.36	0.00	0.000	0.000	0.000
1822	0.00	0.00	193.974	0.00	0.36	0.00	0.000	0.000	0.000
1823	0.00	0.00	193.613	0.00	0.36	0.00	0.000	0.000	0.000
1824	0.00	0.00	193.251	0.00	0.36	0.00	0.000	0.000	0.000
1825	0.00	0.00	192.890	0.00	0.36	0.00	0.000	0.000	0.000
1826	0.00	0.00	192.529	0.00	0.36	0.00	0.000	0.000	0.000
1827	0.00	0.00	192.168	0.00	0.36	0.00	0.000	0.000	0.000
1828	0.00	0.00	191.806	0.00	0.36	0.00	0.000	0.000	0.000
1829	0.00	0.00	191.445	0.00	0.36	0.00	0.000	0.000	0.000
1830	0.00	0.00	191.084	0.00	0.36	0.00	0.000	0.000	0.000
1831	0.00	0.00	190.723	0.00	0.36	0.00	0.000	0.000	0.000
1832	0.00	0.00	190.361	0.00	0.36	0.00	0.000	0.000	0.000
1833	0.00	0.00	190.000	0.00	0.36	0.00	0.000	0.000	0.000
1834	0.00	0.00	189.639	0.00	0.36	0.00	0.000	0.000	0.000
1835	0.00	0.00	189.278	0.00	0.36	0.00	0.000	0.000	0.000
1836	0.00	0.00	188.916	0.00	0.36	0.00	0.000	0.000	0.000
1837	0.00	0.00	188.555	0.00	0.36	0.00	0.000	0.000	0.000
1838	0.00	0.00	188.194	0.00	0.36	0.00	0.000	0.000	0.000
1839	0.00	0.00	187.833	0.00	0.36	0.00	0.000	0.000	0.000
1840	0.00	0.00	187.471	0.00	0.36	0.00	0.000	0.000	0.000
1841	0.00	0.00	187.110	0.00	0.36	0.00	0.000	0.000	0.000
1842	0.00	0.00	186.749	0.00	0.36	0.00	0.000	0.000	0.000
1843	0.00	0.00	186.388	0.00	0.36	0.00	0.000	0.000	0.000
1844	0.00	0.00	186.026	0.00	0.36	0.00	0.000	0.000	0.000
1845	0.00	0.00	185.665	0.00	0.36	0.00	0.000	0.000	0.000
1846	0.00	0.00	185.304	0.00	0.36	0.00	0.000	0.000	0.000
			184.943	0.00	0.36	0.00	0.000	0.000	0.000



Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks Summary	720.00	108.72	Final FF Basin Volume:		1071.595	254.26	Final Basin Soakpit Volume:		142.500
	2.00	108.72	1521.20	1966.82	1966.82		142.50	498.47	
Time (min)	Distribution Curve	Rainfall (mm)	Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min )	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
1847	0.00	0.00	184.581	0.00	0.36	0.00	0.000	0.000	0.000
1848	0.00	0.00	184.220	0.00	0.36	0.00	0.000	0.000	0.000
1849	0.00	0.00	183.859	0.00	0.36	0.00	0.000	0.000	0.000
1850	0.00	0.00	183.498	0.00	0.36	0.00	0.000	0.000	0.000
1851	0.00	0.00	183.136	0.00	0.36	0.00	0.000	0.000	0.000
1852	0.00	0.00	182.775	0.00	0.36	0.00	0.000	0.000	0.000
1853	0.00	0.00	182.414	0.00	0.36	0.00	0.000	0.000	0.000
1854	0.00	0.00	182.053	0.00	0.36	0.00	0.000	0.000	0.000
1855	0.00	0.00	181.691	0.00	0.36	0.00	0.000	0.000	0.000
1856	0.00	0.00	181.330	0.00	0.36	0.00	0.000	0.000	0.000
1857	0.00	0.00	180.969	0.00	0.36	0.00	0.000	0.000	0.000
1858	0.00	0.00	180.608	0.00	0.36	0.00	0.000	0.000	0.000
1859	0.00	0.00	180.246	0.00	0.36	0.00	0.000	0.000	0.000
1860	0.00	0.00	179.885	0.00	0.36	0.00	0.000	0.000	0.000
1861	0.00	0.00	179.524	0.00	0.36	0.00	0.000	0.000	0.000
1862	0.00	0.00	179.163	0.00	0.36	0.00	0.000	0.000	0.000
1863	0.00	0.00	178.801	0.00	0.36	0.00	0.000	0.000	0.000
1864	0.00	0.00	178.440	0.00	0.36	0.00	0.000	0.000	0.000
1865	0.00	0.00	178.079	0.00	0.36	0.00	0.000	0.000	0.000
1866	0.00	0.00	177.718	0.00	0.36	0.00	0.000	0.000	0.000
1867	0.00	0.00	177.356	0.00	0.36	0.00	0.000	0.000	0.000
1868	0.00	0.00	176.995	0.00	0.36	0.00	0.000	0.000	0.000
1869	0.00	0.00	176.634	0.00	0.36	0.00	0.000	0.000	0.000
1870	0.00	0.00	176.273	0.00	0.36	0.00	0.000	0.000	0.000
1871	0.00	0.00	175.911	0.00	0.36	0.00	0.000	0.000	0.000
1872	0.00	0.00	175.550	0.00	0.36	0.00	0.000	0.000	0.000
1873	0.00	0.00	175.189	0.00	0.36	0.00	0.000	0.000	0.000
1874	0.00	0.00	174.828	0.00	0.36	0.00	0.000	0.000	0.000
1875	0.00	0.00	174.466	0.00	0.36	0.00	0.000	0.000	0.000
1876	0.00	0.00	174.105	0.00	0.36	0.00	0.000	0.000	0.000
1877	0.00	0.00	173.744	0.00	0.36	0.00	0.000	0.000	0.000
1878	0.00	0.00	173.383	0.00	0.36	0.00	0.000	0.000	0.000
1879	0.00	0.00	173.021	0.00	0.36	0.00	0.000	0.000	0.000
1880	0.00	0.00	172.660	0.00	0.36	0.00	0.000	0.000	0.000
1881	0.00	0.00	172.299	0.00	0.36	0.00	0.000	0.000	0.000
1882	0.00	0.00	171.938	0.00	0.36	0.00	0.000	0.000	0.000
1883	0.00	0.00	171.576	0.00	0.36	0.00	0.000	0.000	0.000
1884	0.00	0.00	171.215	0.00	0.36	0.00	0.000	0.000	0.000
1885	0.00	0.00	170.854	0.00	0.36	0.00	0.000	0.000	0.000
1886	0.00	0.00	170.493	0.00	0.36	0.00	0.000	0.000	0.000
1887	0.00	0.00	170.131	0.00	0.36	0.00	0.000	0.000	0.000
1888	0.00	0.00	169.770	0.00	0.36	0.00	0.000	0.000	0.000
1889	0.00	0.00	169.409	0.00	0.36	0.00	0.000	0.000	0.000
1890	0.00	0.00	169.048	0.00	0.36	0.00	0.000	0.000	0.000
1891	0.00	0.00	168.686	0.00	0.36	0.00	0.000	0.000	0.000
1892	0.00	0.00	168.325	0.00	0.36	0.00	0.000	0.000	0.000
1893	0.00	0.00	167.964	0.00	0.36	0.00	0.000	0.000	0.000
1894	0.00	0.00	167.603	0.00	0.36	0.00	0.000	0.000	0.000
1895	0.00	0.00	167.241	0.00	0.36	0.00	0.000	0.000	0.000
1896	0.00	0.00	166.880	0.00	0.36	0.00	0.000	0.000	0.000
1897	0.00	0.00	166.519	0.00	0.36	0.00	0.000	0.000	0.000
1898	0.00	0.00	166.158	0.00	0.36	0.00	0.000	0.000	0.000
1899	0.00	0.00	165.796	0.00	0.36	0.00	0.000	0.000	0.000
1900	0.00	0.00	165.435	0.00	0.36	0.00	0.000	0.000	0.000
1901	0.00	0.00	165.074	0.00	0.36	0.00	0.000	0.000	0.000
1902	0.00	0.00	164.713	0.00	0.36	0.00	0.000	0.000	0.000
1903	0.00	0.00	164.351	0.00	0.36	0.00	0.000	0.000	0.000
1904	0.00	0.00	163.990	0.00	0.36	0.00	0.000	0.000	0.000
1905	0.00	0.00	163.629	0.00	0.36	0.00	0.000	0.000	0.000
1906	0.00	0.00	163.268	0.00	0.36	0.00	0.000	0.000	0.000
1907	0.00	0.00	162.906	0.00	0.36	0.00	0.000	0.000	0.000
1908	0.00	0.00	162.545	0.00	0.36	0.00	0.000	0.000	0.000
1909	0.00	0.00	162.184	0.00	0.36	0.00	0.000	0.000	0.000
1910	0.00	0.00	161.823	0.00	0.36	0.00	0.000	0.000	0.000
1911	0.00	0.00	161.461	0.00	0.36	0.00	0.000	0.000	0.000
1912	0.00	0.00	161.100	0.00	0.36	0.00	0.000	0.000	0.000
1913	0.00	0.00	160.739	0.00	0.36	0.00	0.000	0.000	0.000
1914	0.00	0.00	160.378	0.00	0.36	0.00	0.000	0.000	0.000
1915	0.00	0.00	160.016	0.00	0.36	0.00	0.000	0.000	0.000
1916	0.00	0.00	159.655	0.00	0.36	0.00	0.000	0.000	0.000
1917	0.00	0.00	159.294	0.00	0.36	0.00	0.000	0.000	0.000
1918	0.00	0.00	158.933	0.00	0.36	0.00	0.000	0.000	0.000
1919	0.00	0.00	158.571	0.00	0.36	0.00	0.000	0.000	0.000
1920	0.00	0.00	158.210	0.00	0.36	0.00	0.000	0.000	0.000
1921	0.00	0.00	157.849	0.00	0.36	0.00	0.000	0.000	0.000
1922	0.00	0.00	157.488	0.00	0.36	0.00	0.000	0.000	0.000
1923	0.00	0.00	157.126	0.00	0.36	0.00	0.000	0.000	0.000
1924	0.00	0.00	156.765	0.00	0.36	0.00	0.000	0.000	0.000
1925	0.00	0.00	156.404	0.00	0.36	0.00	0.000	0.000	0.000
1926	0.00	0.00	156.043	0.00	0.36	0.00	0.000	0.000	0.000
1927	0.00	0.00	155.681	0.00	0.36	0.00	0.000	0.000	0.000
1928	0.00	0.00	155.320	0.00	0.36	0.00	0.000	0.000	0.000
1929	0.00	0.00	154.959	0.00	0.36	0.00	0.000	0.000	0.000
1930	0.00	0.00	154.598	0.00	0.36	0.00	0.000	0.000	0.000
1931	0.00	0.00	154.236	0.00	0.36	0.00	0.000	0.000	0.000
1932	0.00	0.00	153.875	0.00	0.36	0.00	0.000	0.000	0.000
1933	0.00	0.00	153.514	0.00	0.36	0.00	0.000	0.000	0.000
1934	0.00	0.00	153.153	0.00	0.36	0.00	0.000	0.000	0.000
1935	0.00	0.00	152.791	0.00	0.36	0.00	0.000	0.000	0.000
1936	0.00	0.00	152.430	0.00	0.36	0.00	0.000	0.000	0.000
1937	0.00	0.00	152.069	0.00	0.36	0.00	0.000	0.000	0.000
1938	0.00	0.00	151.708	0.00	0.36	0.00	0.000	0.000	0.000
1939	0.00	0.00	151.346	0.00	0.36	0.00	0.000	0.000	0.000
1940	0.00	0.00	150.985	0.00	0.36	0.00	0.000	0.000	0.000
1941	0.00	0.00	150.624	0.00	0.36	0.00	0.000	0.000	0.000
1942	0.00	0.00	150.263	0.00	0.36	0.00	0.000	0.000	0.000
1943	0.00	0.00	149.901	0.00	0.36	0.00	0.000	0.000	0.000
1944	0.00	0.00	149.540	0.00	0.36	0.00	0.000	0.000	0.000
1945	0.00	0.00	149.179	0.00	0.36	0.00	0.000	0.000	0.000
1946	0.00	0.00	148.818	0.00	0.36	0.00	0.000	0.000	0.000
1947	0.00	0.00	148.456	0.00	0.36	0.00	0.000	0.000	0.000
1948	0.00	0.00	148.095	0.00	0.36	0.00	0.000	0.000	0.000
1949	0.00	0.00	147.734	0.00	0.36	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	720.00	108.72	Final FF Basin Volume:		1071.595		Final Basin Soakpit Volume:		142.500
Summary	2.00	108.72	1521.20	1966.82	254.26		142.50	498.47	
Time (min)	Distribution Curve	Rainfall (mm)	1123.72	1966.82	845.61		142.50	1121.21	671.46
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
1950	0.00	0.00	147.373	0.00	0.36	0.00	0.000	0.000	0.000
1951	0.00	0.00	147.011	0.00	0.36	0.00	0.000	0.000	0.000
1952	0.00	0.00	146.650	0.00	0.36	0.00	0.000	0.000	0.000
1953	0.00	0.00	146.289	0.00	0.36	0.00	0.000	0.000	0.000
1954	0.00	0.00	145.928	0.00	0.36	0.00	0.000	0.000	0.000
1955	0.00	0.00	145.566	0.00	0.36	0.00	0.000	0.000	0.000
1956	0.00	0.00	145.205	0.00	0.36	0.00	0.000	0.000	0.000
1957	0.00	0.00	144.844	0.00	0.36	0.00	0.000	0.000	0.000
1958	0.00	0.00	144.483	0.00	0.36	0.00	0.000	0.000	0.000
1959	0.00	0.00	144.121	0.00	0.36	0.00	0.000	0.000	0.000
1960	0.00	0.00	143.760	0.00	0.36	0.00	0.000	0.000	0.000
1961	0.00	0.00	143.399	0.00	0.36	0.00	0.000	0.000	0.000
1962	0.00	0.00	143.038	0.00	0.36	0.00	0.000	0.000	0.000
1963	0.00	0.00	142.676	0.00	0.36	0.00	0.000	0.000	0.000
1964	0.00	0.00	142.315	0.00	0.36	0.00	0.000	0.000	0.000
1965	0.00	0.00	141.954	0.00	0.36	0.00	0.000	0.000	0.000
1966	0.00	0.00	141.593	0.00	0.36	0.00	0.000	0.000	0.000
1967	0.00	0.00	141.231	0.00	0.36	0.00	0.000	0.000	0.000
1968	0.00	0.00	140.870	0.00	0.36	0.00	0.000	0.000	0.000
1969	0.00	0.00	140.509	0.00	0.36	0.00	0.000	0.000	0.000
1970	0.00	0.00	140.148	0.00	0.36	0.00	0.000	0.000	0.000
1971	0.00	0.00	139.786	0.00	0.36	0.00	0.000	0.000	0.000
1972	0.00	0.00	139.425	0.00	0.36	0.00	0.000	0.000	0.000
1973	0.00	0.00	139.064	0.00	0.36	0.00	0.000	0.000	0.000
1974	0.00	0.00	138.703	0.00	0.36	0.00	0.000	0.000	0.000
1975	0.00	0.00	138.341	0.00	0.36	0.00	0.000	0.000	0.000
1976	0.00	0.00	137.980	0.00	0.36	0.00	0.000	0.000	0.000
1977	0.00	0.00	137.619	0.00	0.36	0.00	0.000	0.000	0.000
1978	0.00	0.00	137.258	0.00	0.36	0.00	0.000	0.000	0.000
1979	0.00	0.00	136.896	0.00	0.36	0.00	0.000	0.000	0.000
1980	0.00	0.00	136.535	0.00	0.36	0.00	0.000	0.000	0.000
1981	0.00	0.00	136.174	0.00	0.36	0.00	0.000	0.000	0.000
1982	0.00	0.00	135.813	0.00	0.36	0.00	0.000	0.000	0.000
1983	0.00	0.00	135.451	0.00	0.36	0.00	0.000	0.000	0.000
1984	0.00	0.00	135.090	0.00	0.36	0.00	0.000	0.000	0.000
1985	0.00	0.00	134.729	0.00	0.36	0.00	0.000	0.000	0.000
1986	0.00	0.00	134.368	0.00	0.36	0.00	0.000	0.000	0.000
1987	0.00	0.00	134.006	0.00	0.36	0.00	0.000	0.000	0.000
1988	0.00	0.00	133.645	0.00	0.36	0.00	0.000	0.000	0.000
1989	0.00	0.00	133.284	0.00	0.36	0.00	0.000	0.000	0.000
1990	0.00	0.00	132.923	0.00	0.36	0.00	0.000	0.000	0.000
1991	0.00	0.00	132.561	0.00	0.36	0.00	0.000	0.000	0.000
1992	0.00	0.00	132.200	0.00	0.36	0.00	0.000	0.000	0.000
1993	0.00	0.00	131.839	0.00	0.36	0.00	0.000	0.000	0.000
1994	0.00	0.00	131.478	0.00	0.36	0.00	0.000	0.000	0.000
1995	0.00	0.00	131.116	0.00	0.36	0.00	0.000	0.000	0.000
1996	0.00	0.00	130.755	0.00	0.36	0.00	0.000	0.000	0.000
1997	0.00	0.00	130.394	0.00	0.36	0.00	0.000	0.000	0.000
1998	0.00	0.00	130.033	0.00	0.36	0.00	0.000	0.000	0.000
1999	0.00	0.00	129.671	0.00	0.36	0.00	0.000	0.000	0.000
2000	0.00	0.00	129.310	0.00	0.36	0.00	0.000	0.000	0.000
2001	0.00	0.00	128.949	0.00	0.36	0.00	0.000	0.000	0.000
2002	0.00	0.00	128.588	0.00	0.36	0.00	0.000	0.000	0.000
2003	0.00	0.00	128.226	0.00	0.36	0.00	0.000	0.000	0.000
2004	0.00	0.00	127.865	0.00	0.36	0.00	0.000	0.000	0.000
2005	0.00	0.00	127.504	0.00	0.36	0.00	0.000	0.000	0.000
2006	0.00	0.00	127.143	0.00	0.36	0.00	0.000	0.000	0.000
2007	0.00	0.00	126.781	0.00	0.36	0.00	0.000	0.000	0.000
2008	0.00	0.00	126.420	0.00	0.36	0.00	0.000	0.000	0.000
2009	0.00	0.00	126.059	0.00	0.36	0.00	0.000	0.000	0.000
2010	0.00	0.00	125.698	0.00	0.36	0.00	0.000	0.000	0.000
2011	0.00	0.00	125.336	0.00	0.36	0.00	0.000	0.000	0.000
2012	0.00	0.00	124.975	0.00	0.36	0.00	0.000	0.000	0.000
2013	0.00	0.00	124.614	0.00	0.36	0.00	0.000	0.000	0.000
2014	0.00	0.00	124.253	0.00	0.36	0.00	0.000	0.000	0.000
2015	0.00	0.00	123.891	0.00	0.36	0.00	0.000	0.000	0.000
2016	0.00	0.00	123.530	0.00	0.36	0.00	0.000	0.000	0.000
2017	0.00	0.00	123.169	0.00	0.36	0.00	0.000	0.000	0.000
2018	0.00	0.00	122.808	0.00	0.36	0.00	0.000	0.000	0.000
2019	0.00	0.00	122.446	0.00	0.36	0.00	0.000	0.000	0.000
2020	0.00	0.00	122.085	0.00	0.36	0.00	0.000	0.000	0.000
2021	0.00	0.00	121.724	0.00	0.36	0.00	0.000	0.000	0.000
2022	0.00	0.00	121.363	0.00	0.36	0.00	0.000	0.000	0.000
2023	0.00	0.00	121.001	0.00	0.36	0.00	0.000	0.000	0.000
2024	0.00	0.00	120.640	0.00	0.36	0.00	0.000	0.000	0.000
2025	0.00	0.00	120.279	0.00	0.36	0.00	0.000	0.000	0.000
2026	0.00	0.00	119.918	0.00	0.36	0.00	0.000	0.000	0.000
2027	0.00	0.00	119.556	0.00	0.36	0.00	0.000	0.000	0.000
2028	0.00	0.00	119.195	0.00	0.36	0.00	0.000	0.000	0.000
2029	0.00	0.00	118.834	0.00	0.36	0.00	0.000	0.000	0.000
2030	0.00	0.00	118.473	0.00	0.36	0.00	0.000	0.000	0.000
2031	0.00	0.00	118.111	0.00	0.36	0.00	0.000	0.000	0.000
2032	0.00	0.00	117.750	0.00	0.36	0.00	0.000	0.000	0.000
2033	0.00	0.00	117.389	0.00	0.36	0.00	0.000	0.000	0.000
2034	0.00	0.00	117.028	0.00	0.36	0.00	0.000	0.000	0.000
2035	0.00	0.00	116.666	0.00	0.36	0.00	0.000	0.000	0.000
2036	0.00	0.00	116.305	0.00	0.36	0.00	0.000	0.000	0.000
2037	0.00	0.00	115.944	0.00	0.36	0.00	0.000	0.000	0.000
2038	0.00	0.00	115.583	0.00	0.36	0.00	0.000	0.000	0.000
2039	0.00	0.00	115.221	0.00	0.36	0.00	0.000	0.000	0.000
2040	0.00	0.00	114.860	0.00	0.36	0.00	0.000	0.000	0.000
2041	0.00	0.00	114.499	0.00	0.36	0.00	0.000	0.000	0.000
2042	0.00	0.00	114.138	0.00	0.36	0.00	0.000	0.000	0.000
2043	0.00	0.00	113.776	0.00	0.36	0.00	0.000	0.000	0.000
2044	0.00	0.00	113.415	0.00	0.36	0.00	0.000	0.000	0.000
2045	0.00	0.00	113.054	0.00	0.36	0.00	0.000	0.000	0.000
2046	0.00	0.00	112.693	0.00	0.36	0.00	0.000	0.000	0.000
2047	0.00	0.00	112.331	0.00	0.36	0.00	0.000	0.000	0.000
2048	0.00	0.00	111.970	0.00	0.36	0.00	0.000	0.000	0.000
2049	0.00	0.00	111.609	0.00	0.36	0.00	0.000	0.000	0.000
2050	0.00	0.00	111.248	0.00	0.36	0.00	0.000	0.000	0.000
2051	0.00	0.00	110.886	0.00	0.36	0.00	0.000	0.000	0.000
2052	0.00	0.00	110.525	0.00	0.36	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	720.00	108.72	Final FF Basin Volume:		1071.595		Final Basin Soakpit Volume:		142.500
Summary	2.00	108.72	1521.20	1966.82	254.26		142.50	498.47	
Time (min)	Distribution Curve	Rainfall (mm)	1123.72	1966.82	845.61		142.50	1121.21	671.46
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
2053	0.00	0.00	110.164	0.00	0.36	0.00	0.000	0.000	0.000
2054	0.00	0.00	109.803	0.00	0.36	0.00	0.000	0.000	0.000
2055	0.00	0.00	109.441	0.00	0.36	0.00	0.000	0.000	0.000
2056	0.00	0.00	109.080	0.00	0.36	0.00	0.000	0.000	0.000
2057	0.00	0.00	108.719	0.00	0.36	0.00	0.000	0.000	0.000
2058	0.00	0.00	108.358	0.00	0.36	0.00	0.000	0.000	0.000
2059	0.00	0.00	107.996	0.00	0.36	0.00	0.000	0.000	0.000
2060	0.00	0.00	107.635	0.00	0.36	0.00	0.000	0.000	0.000
2061	0.00	0.00	107.274	0.00	0.36	0.00	0.000	0.000	0.000
2062	0.00	0.00	106.913	0.00	0.36	0.00	0.000	0.000	0.000
2063	0.00	0.00	106.551	0.00	0.36	0.00	0.000	0.000	0.000
2064	0.00	0.00	106.190	0.00	0.36	0.00	0.000	0.000	0.000
2065	0.00	0.00	105.829	0.00	0.36	0.00	0.000	0.000	0.000
2066	0.00	0.00	105.468	0.00	0.36	0.00	0.000	0.000	0.000
2067	0.00	0.00	105.106	0.00	0.36	0.00	0.000	0.000	0.000
2068	0.00	0.00	104.745	0.00	0.36	0.00	0.000	0.000	0.000
2069	0.00	0.00	104.384	0.00	0.36	0.00	0.000	0.000	0.000
2070	0.00	0.00	104.023	0.00	0.36	0.00	0.000	0.000	0.000
2071	0.00	0.00	103.661	0.00	0.36	0.00	0.000	0.000	0.000
2072	0.00	0.00	103.300	0.00	0.36	0.00	0.000	0.000	0.000
2073	0.00	0.00	102.939	0.00	0.36	0.00	0.000	0.000	0.000
2074	0.00	0.00	102.578	0.00	0.36	0.00	0.000	0.000	0.000
2075	0.00	0.00	102.216	0.00	0.36	0.00	0.000	0.000	0.000
2076	0.00	0.00	101.855	0.00	0.36	0.00	0.000	0.000	0.000
2077	0.00	0.00	101.494	0.00	0.36	0.00	0.000	0.000	0.000
2078	0.00	0.00	101.133	0.00	0.36	0.00	0.000	0.000	0.000
2079	0.00	0.00	100.771	0.00	0.36	0.00	0.000	0.000	0.000
2080	0.00	0.00	100.410	0.00	0.36	0.00	0.000	0.000	0.000
2081	0.00	0.00	100.049	0.00	0.36	0.00	0.000	0.000	0.000
2082	0.00	0.00	99.688	0.00	0.36	0.00	0.000	0.000	0.000
2083	0.00	0.00	99.326	0.00	0.36	0.00	0.000	0.000	0.000
2084	0.00	0.00	98.965	0.00	0.36	0.00	0.000	0.000	0.000
2085	0.00	0.00	98.604	0.00	0.36	0.00	0.000	0.000	0.000
2086	0.00	0.00	98.243	0.00	0.36	0.00	0.000	0.000	0.000
2087	0.00	0.00	97.881	0.00	0.36	0.00	0.000	0.000	0.000
2088	0.00	0.00	97.520	0.00	0.36	0.00	0.000	0.000	0.000
2089	0.00	0.00	97.159	0.00	0.36	0.00	0.000	0.000	0.000
2090	0.00	0.00	96.798	0.00	0.36	0.00	0.000	0.000	0.000
2091	0.00	0.00	96.436	0.00	0.36	0.00	0.000	0.000	0.000
2092	0.00	0.00	96.075	0.00	0.36	0.00	0.000	0.000	0.000
2093	0.00	0.00	95.714	0.00	0.36	0.00	0.000	0.000	0.000
2094	0.00	0.00	95.353	0.00	0.36	0.00	0.000	0.000	0.000
2095	0.00	0.00	94.991	0.00	0.36	0.00	0.000	0.000	0.000
2096	0.00	0.00	94.630	0.00	0.36	0.00	0.000	0.000	0.000
2097	0.00	0.00	94.269	0.00	0.36	0.00	0.000	0.000	0.000
2098	0.00	0.00	93.908	0.00	0.36	0.00	0.000	0.000	0.000
2099	0.00	0.00	93.546	0.00	0.36	0.00	0.000	0.000	0.000
2100	0.00	0.00	93.185	0.00	0.36	0.00	0.000	0.000	0.000
2101	0.00	0.00	92.824	0.00	0.36	0.00	0.000	0.000	0.000
2102	0.00	0.00	92.463	0.00	0.36	0.00	0.000	0.000	0.000
2103	0.00	0.00	92.101	0.00	0.36	0.00	0.000	0.000	0.000
2104	0.00	0.00	91.740	0.00	0.36	0.00	0.000	0.000	0.000
2105	0.00	0.00	91.379	0.00	0.36	0.00	0.000	0.000	0.000
2106	0.00	0.00	91.018	0.00	0.36	0.00	0.000	0.000	0.000
2107	0.00	0.00	90.656	0.00	0.36	0.00	0.000	0.000	0.000
2108	0.00	0.00	90.295	0.00	0.36	0.00	0.000	0.000	0.000
2109	0.00	0.00	89.934	0.00	0.36	0.00	0.000	0.000	0.000
2110	0.00	0.00	89.573	0.00	0.36	0.00	0.000	0.000	0.000
2111	0.00	0.00	89.211	0.00	0.36	0.00	0.000	0.000	0.000
2112	0.00	0.00	88.850	0.00	0.36	0.00	0.000	0.000	0.000
2113	0.00	0.00	88.489	0.00	0.36	0.00	0.000	0.000	0.000
2114	0.00	0.00	88.128	0.00	0.36	0.00	0.000	0.000	0.000
2115	0.00	0.00	87.766	0.00	0.36	0.00	0.000	0.000	0.000
2116	0.00	0.00	87.405	0.00	0.36	0.00	0.000	0.000	0.000
2117	0.00	0.00	87.044	0.00	0.36	0.00	0.000	0.000	0.000
2118	0.00	0.00	86.683	0.00	0.36	0.00	0.000	0.000	0.000
2119	0.00	0.00	86.321	0.00	0.36	0.00	0.000	0.000	0.000
2120	0.00	0.00	85.960	0.00	0.36	0.00	0.000	0.000	0.000
2121	0.00	0.00	85.599	0.00	0.36	0.00	0.000	0.000	0.000
2122	0.00	0.00	85.238	0.00	0.36	0.00	0.000	0.000	0.000
2123	0.00	0.00	84.876	0.00	0.36	0.00	0.000	0.000	0.000
2124	0.00	0.00	84.515	0.00	0.36	0.00	0.000	0.000	0.000
2125	0.00	0.00	84.154	0.00	0.36	0.00	0.000	0.000	0.000
2126	0.00	0.00	83.793	0.00	0.36	0.00	0.000	0.000	0.000
2127	0.00	0.00	83.431	0.00	0.36	0.00	0.000	0.000	0.000
2128	0.00	0.00	83.070	0.00	0.36	0.00	0.000	0.000	0.000
2129	0.00	0.00	82.709	0.00	0.36	0.00	0.000	0.000	0.000
2130	0.00	0.00	82.348	0.00	0.36	0.00	0.000	0.000	0.000
2131	0.00	0.00	81.986	0.00	0.36	0.00	0.000	0.000	0.000
2132	0.00	0.00	81.625	0.00	0.36	0.00	0.000	0.000	0.000
2133	0.00	0.00	81.264	0.00	0.36	0.00	0.000	0.000	0.000
2134	0.00	0.00	80.903	0.00	0.36	0.00	0.000	0.000	0.000
2135	0.00	0.00	80.541	0.00	0.36	0.00	0.000	0.000	0.000
2136	0.00	0.00	80.180	0.00	0.36	0.00	0.000	0.000	0.000
2137	0.00	0.00	79.819	0.00	0.36	0.00	0.000	0.000	0.000
2138	0.00	0.00	79.458	0.00	0.36	0.00	0.000	0.000	0.000
2139	0.00	0.00	79.096	0.00	0.36	0.00	0.000	0.000	0.000
2140	0.00	0.00	78.735	0.00	0.36	0.00	0.000	0.000	0.000
2141	0.00	0.00	78.374	0.00	0.36	0.00	0.000	0.000	0.000
2142	0.00	0.00	78.013	0.00	0.36	0.00	0.000	0.000	0.000
2143	0.00	0.00	77.651	0.00	0.36	0.00	0.000	0.000	0.000
2144	0.00	0.00	77.290	0.00	0.36	0.00	0.000	0.000	0.000
2145	0.00	0.00	76.929	0.00	0.36	0.00	0.000	0.000	0.000
2146	0.00	0.00	76.568	0.00	0.36	0.00	0.000	0.000	0.000
2147	0.00	0.00	76.206	0.00	0.36	0.00	0.000	0.000	0.000
2148	0.00	0.00	75.845	0.00	0.36	0.00	0.000	0.000	0.000
2149	0.00	0.00	75.484	0.00	0.36	0.00	0.000	0.000	0.000
2150	0.00	0.00	75.123	0.00	0.36	0.00	0.000	0.000	0.000
2151	0.00	0.00	74.761	0.00	0.36	0.00	0.000	0.000	0.000
2152	0.00	0.00	74.400	0.00	0.36	0.00	0.000	0.000	0.000
2153	0.00	0.00	74.039	0.00	0.36	0.00	0.000	0.000	0.000
2154	0.00	0.00	73.678	0.00	0.36	0.00	0.000	0.000	0.000
2155	0.00	0.00	73.316	0.00	0.36	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks Summary Time (min)	720.00	108.72	Final FF Basin Volume:		1071.595	254.26	Final Basin Soakpit Volume:		142.500
	2.00	108.72	1521.20	1966.82	1966.82		142.50	498.47	142.50
			1123.72	1966.82	845.61		142.50	1121.21	671.46
Distribution Curve	Rainfall (mm)	Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )	
2156	0.00	0.00	72.955	0.00	0.36	0.000	0.000	0.000	
2157	0.00	0.00	72.594	0.00	0.36	0.000	0.000	0.000	
2158	0.00	0.00	72.233	0.00	0.36	0.000	0.000	0.000	
2159	0.00	0.00	71.871	0.00	0.36	0.000	0.000	0.000	
2160	0.00	0.00	71.510	0.00	0.36	0.000	0.000	0.000	
2161	0.00	0.00	71.149	0.00	0.36	0.000	0.000	0.000	
2162	0.00	0.00	70.788	0.00	0.36	0.000	0.000	0.000	
2163	0.00	0.00	70.426	0.00	0.36	0.000	0.000	0.000	
2164	0.00	0.00	70.065	0.00	0.36	0.000	0.000	0.000	
2165	0.00	0.00	69.704	0.00	0.36	0.000	0.000	0.000	
2166	0.00	0.00	69.343	0.00	0.36	0.000	0.000	0.000	
2167	0.00	0.00	68.981	0.00	0.36	0.000	0.000	0.000	
2168	0.00	0.00	68.620	0.00	0.36	0.000	0.000	0.000	
2169	0.00	0.00	68.259	0.00	0.36	0.000	0.000	0.000	
2170	0.00	0.00	67.898	0.00	0.36	0.000	0.000	0.000	
2171	0.00	0.00	67.536	0.00	0.36	0.000	0.000	0.000	
2172	0.00	0.00	67.175	0.00	0.36	0.000	0.000	0.000	
2173	0.00	0.00	66.814	0.00	0.36	0.000	0.000	0.000	
2174	0.00	0.00	66.453	0.00	0.36	0.000	0.000	0.000	
2175	0.00	0.00	66.091	0.00	0.36	0.000	0.000	0.000	
2176	0.00	0.00	65.730	0.00	0.36	0.000	0.000	0.000	
2177	0.00	0.00	65.369	0.00	0.36	0.000	0.000	0.000	
2178	0.00	0.00	65.008	0.00	0.36	0.000	0.000	0.000	
2179	0.00	0.00	64.646	0.00	0.36	0.000	0.000	0.000	
2180	0.00	0.00	64.285	0.00	0.36	0.000	0.000	0.000	
2181	0.00	0.00	63.924	0.00	0.36	0.000	0.000	0.000	
2182	0.00	0.00	63.563	0.00	0.36	0.000	0.000	0.000	
2183	0.00	0.00	63.201	0.00	0.36	0.000	0.000	0.000	
2184	0.00	0.00	62.840	0.00	0.36	0.000	0.000	0.000	
2185	0.00	0.00	62.479	0.00	0.36	0.000	0.000	0.000	
2186	0.00	0.00	62.118	0.00	0.36	0.000	0.000	0.000	
2187	0.00	0.00	61.756	0.00	0.36	0.000	0.000	0.000	
2188	0.00	0.00	61.395	0.00	0.36	0.000	0.000	0.000	
2189	0.00	0.00	61.034	0.00	0.36	0.000	0.000	0.000	
2190	0.00	0.00	60.673	0.00	0.36	0.000	0.000	0.000	
2191	0.00	0.00	60.311	0.00	0.36	0.000	0.000	0.000	
2192	0.00	0.00	59.950	0.00	0.36	0.000	0.000	0.000	
2193	0.00	0.00	59.589	0.00	0.36	0.000	0.000	0.000	
2194	0.00	0.00	59.228	0.00	0.36	0.000	0.000	0.000	
2195	0.00	0.00	58.866	0.00	0.36	0.000	0.000	0.000	
2196	0.00	0.00	58.505	0.00	0.36	0.000	0.000	0.000	
2197	0.00	0.00	58.144	0.00	0.36	0.000	0.000	0.000	
2198	0.00	0.00	57.783	0.00	0.36	0.000	0.000	0.000	
2199	0.00	0.00	57.421	0.00	0.36	0.000	0.000	0.000	
2200	0.00	0.00	57.060	0.00	0.36	0.000	0.000	0.000	
2201	0.00	0.00	56.699	0.00	0.36	0.000	0.000	0.000	
2202	0.00	0.00	56.338	0.00	0.36	0.000	0.000	0.000	
2203	0.00	0.00	55.976	0.00	0.36	0.000	0.000	0.000	
2204	0.00	0.00	55.615	0.00	0.36	0.000	0.000	0.000	
2205	0.00	0.00	55.254	0.00	0.36	0.000	0.000	0.000	
2206	0.00	0.00	54.893	0.00	0.36	0.000	0.000	0.000	
2207	0.00	0.00	54.531	0.00	0.36	0.000	0.000	0.000	
2208	0.00	0.00	54.170	0.00	0.36	0.000	0.000	0.000	
2209	0.00	0.00	53.809	0.00	0.36	0.000	0.000	0.000	
2210	0.00	0.00	53.448	0.00	0.36	0.000	0.000	0.000	
2211	0.00	0.00	53.086	0.00	0.36	0.000	0.000	0.000	
2212	0.00	0.00	52.725	0.00	0.36	0.000	0.000	0.000	
2213	0.00	0.00	52.364	0.00	0.36	0.000	0.000	0.000	
2214	0.00	0.00	52.003	0.00	0.36	0.000	0.000	0.000	
2215	0.00	0.00	51.641	0.00	0.36	0.000	0.000	0.000	
2216	0.00	0.00	51.280	0.00	0.36	0.000	0.000	0.000	
2217	0.00	0.00	50.919	0.00	0.36	0.000	0.000	0.000	
2218	0.00	0.00	50.558	0.00	0.36	0.000	0.000	0.000	
2219	0.00	0.00	50.196	0.00	0.36	0.000	0.000	0.000	
2220	0.00	0.00	49.835	0.00	0.36	0.000	0.000	0.000	
2221	0.00	0.00	49.474	0.00	0.36	0.000	0.000	0.000	
2222	0.00	0.00	49.113	0.00	0.36	0.000	0.000	0.000	
2223	0.00	0.00	48.751	0.00	0.36	0.000	0.000	0.000	
2224	0.00	0.00	48.390	0.00	0.36	0.000	0.000	0.000	
2225	0.00	0.00	48.029	0.00	0.36	0.000	0.000	0.000	
2226	0.00	0.00	47.668	0.00	0.36	0.000	0.000	0.000	
2227	0.00	0.00	47.306	0.00	0.36	0.000	0.000	0.000	
2228	0.00	0.00	46.945	0.00	0.36	0.000	0.000	0.000	
2229	0.00	0.00	46.584	0.00	0.36	0.000	0.000	0.000	
2230	0.00	0.00	46.223	0.00	0.36	0.000	0.000	0.000	
2231	0.00	0.00	45.861	0.00	0.36	0.000	0.000	0.000	
2232	0.00	0.00	45.500	0.00	0.36	0.000	0.000	0.000	
2233	0.00	0.00	45.139	0.00	0.36	0.000	0.000	0.000	
2234	0.00	0.00	44.778	0.00	0.36	0.000	0.000	0.000	
2235	0.00	0.00	44.416	0.00	0.36	0.000	0.000	0.000	
2236	0.00	0.00	44.055	0.00	0.36	0.000	0.000	0.000	
2237	0.00	0.00	43.694	0.00	0.36	0.000	0.000	0.000	
2238	0.00	0.00	43.333	0.00	0.36	0.000	0.000	0.000	
2239	0.00	0.00	42.971	0.00	0.36	0.000	0.000	0.000	
2240	0.00	0.00	42.610	0.00	0.36	0.000	0.000	0.000	
2241	0.00	0.00	42.249	0.00	0.36	0.000	0.000	0.000	
2242	0.00	0.00	41.888	0.00	0.36	0.000	0.000	0.000	
2243	0.00	0.00	41.526	0.00	0.36	0.000	0.000	0.000	
2244	0.00	0.00	41.165	0.00	0.36	0.000	0.000	0.000	
2245	0.00	0.00	40.804	0.00	0.36	0.000	0.000	0.000	
2246	0.00	0.00	40.443	0.00	0.36	0.000	0.000	0.000	
2247	0.00	0.00	40.081	0.00	0.36	0.000	0.000	0.000	
2248	0.00	0.00	39.720	0.00	0.36	0.000	0.000	0.000	
2249	0.00	0.00	39.359	0.00	0.36	0.000	0.000	0.000	
2250	0.00	0.00	38.998	0.00	0.36	0.000	0.000	0.000	
2251	0.00	0.00	38.636	0.00	0.36	0.000	0.000	0.000	
2252	0.00	0.00	38.275	0.00	0.36	0.000	0.000	0.000	
2253	0.00	0.00	37.914	0.00	0.36	0.000	0.000	0.000	
2254	0.00	0.00	37.553	0.00	0.36	0.000	0.000	0.000	
2255	0.00	0.00	37.191	0.00	0.36	0.000	0.000	0.000	
2256	0.00	0.00	36.830	0.00	0.36	0.000	0.000	0.000	
2257	0.00	0.00	36.469	0.00	0.36	0.000	0.000	0.000	
2258	0.00	0.00	36.108	0.00	0.36	0.000	0.000	0.000	

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks Summary	720.00	108.72	Final FF Basin Volume:		1071.595	254.26	Final Basin Soakpit Volume:		142.500
	2.00	108.72	1521.20	1966.82	1966.82		142.50	498.47	
Time (min)	Distribution Curve	Rainfall (mm)	1123.72	845.61			142.50	1121.21	671.46
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min )	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
2259	0.00	0.00	35.746	0.00	0.36	0.00	0.000	0.000	0.000
2260	0.00	0.00	35.385	0.00	0.36	0.00	0.000	0.000	0.000
2261	0.00	0.00	35.024	0.00	0.36	0.00	0.000	0.000	0.000
2262	0.00	0.00	34.663	0.00	0.36	0.00	0.000	0.000	0.000
2263	0.00	0.00	34.301	0.00	0.36	0.00	0.000	0.000	0.000
2264	0.00	0.00	33.940	0.00	0.36	0.00	0.000	0.000	0.000
2265	0.00	0.00	33.579	0.00	0.36	0.00	0.000	0.000	0.000
2266	0.00	0.00	33.218	0.00	0.36	0.00	0.000	0.000	0.000
2267	0.00	0.00	32.856	0.00	0.36	0.00	0.000	0.000	0.000
2268	0.00	0.00	32.495	0.00	0.36	0.00	0.000	0.000	0.000
2269	0.00	0.00	32.134	0.00	0.36	0.00	0.000	0.000	0.000
2270	0.00	0.00	31.773	0.00	0.36	0.00	0.000	0.000	0.000
2271	0.00	0.00	31.411	0.00	0.36	0.00	0.000	0.000	0.000
2272	0.00	0.00	31.050	0.00	0.36	0.00	0.000	0.000	0.000
2273	0.00	0.00	30.689	0.00	0.36	0.00	0.000	0.000	0.000
2274	0.00	0.00	30.328	0.00	0.36	0.00	0.000	0.000	0.000
2275	0.00	0.00	29.966	0.00	0.36	0.00	0.000	0.000	0.000
2276	0.00	0.00	29.605	0.00	0.36	0.00	0.000	0.000	0.000
2277	0.00	0.00	29.244	0.00	0.36	0.00	0.000	0.000	0.000
2278	0.00	0.00	28.883	0.00	0.36	0.00	0.000	0.000	0.000
2279	0.00	0.00	28.521	0.00	0.36	0.00	0.000	0.000	0.000
2280	0.00	0.00	28.160	0.00	0.36	0.00	0.000	0.000	0.000
2281	0.00	0.00	27.799	0.00	0.36	0.00	0.000	0.000	0.000
2282	0.00	0.00	27.438	0.00	0.36	0.00	0.000	0.000	0.000
2283	0.00	0.00	27.076	0.00	0.36	0.00	0.000	0.000	0.000
2284	0.00	0.00	26.715	0.00	0.36	0.00	0.000	0.000	0.000
2285	0.00	0.00	26.354	0.00	0.36	0.00	0.000	0.000	0.000
2286	0.00	0.00	25.993	0.00	0.36	0.00	0.000	0.000	0.000
2287	0.00	0.00	25.631	0.00	0.36	0.00	0.000	0.000	0.000
2288	0.00	0.00	25.270	0.00	0.36	0.00	0.000	0.000	0.000
2289	0.00	0.00	24.909	0.00	0.36	0.00	0.000	0.000	0.000
2290	0.00	0.00	24.548	0.00	0.36	0.00	0.000	0.000	0.000
2291	0.00	0.00	24.186	0.00	0.36	0.00	0.000	0.000	0.000
2292	0.00	0.00	23.825	0.00	0.36	0.00	0.000	0.000	0.000
2293	0.00	0.00	23.464	0.00	0.36	0.00	0.000	0.000	0.000
2294	0.00	0.00	23.103	0.00	0.36	0.00	0.000	0.000	0.000
2295	0.00	0.00	22.741	0.00	0.36	0.00	0.000	0.000	0.000
2296	0.00	0.00	22.380	0.00	0.36	0.00	0.000	0.000	0.000
2297	0.00	0.00	22.019	0.00	0.36	0.00	0.000	0.000	0.000
2298	0.00	0.00	21.658	0.00	0.36	0.00	0.000	0.000	0.000
2299	0.00	0.00	21.296	0.00	0.36	0.00	0.000	0.000	0.000
2300	0.00	0.00	20.935	0.00	0.36	0.00	0.000	0.000	0.000
2301	0.00	0.00	20.574	0.00	0.36	0.00	0.000	0.000	0.000
2302	0.00	0.00	20.213	0.00	0.36	0.00	0.000	0.000	0.000
2303	0.00	0.00	19.851	0.00	0.36	0.00	0.000	0.000	0.000
2304	0.00	0.00	19.490	0.00	0.36	0.00	0.000	0.000	0.000
2305	0.00	0.00	19.129	0.00	0.36	0.00	0.000	0.000	0.000
2306	0.00	0.00	18.768	0.00	0.36	0.00	0.000	0.000	0.000
2307	0.00	0.00	18.406	0.00	0.36	0.00	0.000	0.000	0.000
2308	0.00	0.00	18.045	0.00	0.36	0.00	0.000	0.000	0.000
2309	0.00	0.00	17.684	0.00	0.36	0.00	0.000	0.000	0.000
2310	0.00	0.00	17.323	0.00	0.36	0.00	0.000	0.000	0.000
2311	0.00	0.00	16.961	0.00	0.36	0.00	0.000	0.000	0.000
2312	0.00	0.00	16.600	0.00	0.36	0.00	0.000	0.000	0.000
2313	0.00	0.00	16.239	0.00	0.36	0.00	0.000	0.000	0.000
2314	0.00	0.00	15.878	0.00	0.36	0.00	0.000	0.000	0.000
2315	0.00	0.00	15.516	0.00	0.36	0.00	0.000	0.000	0.000
2316	0.00	0.00	15.155	0.00	0.36	0.00	0.000	0.000	0.000
2317	0.00	0.00	14.794	0.00	0.36	0.00	0.000	0.000	0.000
2318	0.00	0.00	14.433	0.00	0.36	0.00	0.000	0.000	0.000
2319	0.00	0.00	14.071	0.00	0.36	0.00	0.000	0.000	0.000
2320	0.00	0.00	13.710	0.00	0.36	0.00	0.000	0.000	0.000
2321	0.00	0.00	13.349	0.00	0.36	0.00	0.000	0.000	0.000
2322	0.00	0.00	12.988	0.00	0.36	0.00	0.000	0.000	0.000
2323	0.00	0.00	12.626	0.00	0.36	0.00	0.000	0.000	0.000
2324	0.00	0.00	12.265	0.00	0.36	0.00	0.000	0.000	0.000
2325	0.00	0.00	11.904	0.00	0.36	0.00	0.000	0.000	0.000
2326	0.00	0.00	11.543	0.00	0.36	0.00	0.000	0.000	0.000
2327	0.00	0.00	11.181	0.00	0.36	0.00	0.000	0.000	0.000
2328	0.00	0.00	10.820	0.00	0.36	0.00	0.000	0.000	0.000
2329	0.00	0.00	10.459	0.00	0.36	0.00	0.000	0.000	0.000
2330	0.00	0.00	10.098	0.00	0.36	0.00	0.000	0.000	0.000
2331	0.00	0.00	9.736	0.00	0.36	0.00	0.000	0.000	0.000
2332	0.00	0.00	9.375	0.00	0.36	0.00	0.000	0.000	0.000
2333	0.00	0.00	9.014	0.00	0.36	0.00	0.000	0.000	0.000
2334	0.00	0.00	8.653	0.00	0.36	0.00	0.000	0.000	0.000
2335	0.00	0.00	8.291	0.00	0.36	0.00	0.000	0.000	0.000
2336	0.00	0.00	7.930	0.00	0.36	0.00	0.000	0.000	0.000
2337	0.00	0.00	7.569	0.00	0.36	0.00	0.000	0.000	0.000
2338	0.00	0.00	7.208	0.00	0.36	0.00	0.000	0.000	0.000
2339	0.00	0.00	6.846	0.00	0.36	0.00	0.000	0.000	0.000
2340	0.00	0.00	6.485	0.00	0.36	0.00	0.000	0.000	0.000
2341	0.00	0.00	6.124	0.00	0.36	0.00	0.000	0.000	0.000
2342	0.00	0.00	5.763	0.00	0.36	0.00	0.000	0.000	0.000
2343	0.00	0.00	5.401	0.00	0.36	0.00	0.000	0.000	0.000
2344	0.00	0.00	5.040	0.00	0.36	0.00	0.000	0.000	0.000
2345	0.00	0.00	4.679	0.00	0.36	0.00	0.000	0.000	0.000
2346	0.00	0.00	4.318	0.00	0.36	0.00	0.000	0.000	0.000
2347	0.00	0.00	3.956	0.00	0.36	0.00	0.000	0.000	0.000
2348	0.00	0.00	3.595	0.00	0.36	0.00	0.000	0.000	0.000
2349	0.00	0.00	3.234	0.00	0.36	0.00	0.000	0.000	0.000
2350	0.00	0.00	2.873	0.00	0.36	0.00	0.000	0.000	0.000
2351	0.00	0.00	2.511	0.00	0.36	0.00	0.000	0.000	0.000
2352	0.00	0.00	2.150	0.00	0.36	0.00	0.000	0.000	0.000
2353	0.00	0.00	1.789	0.00	0.36	0.00	0.000	0.000	0.000
2354	0.00	0.00	1.428	0.00	0.36	0.00	0.000	0.000	0.000
2355	0.00	0.00	1.066	0.00	0.36	0.00	0.000	0.000	0.000
2356	0.00	0.00	0.705	0.00	0.36	0.00	0.000	0.000	0.000
2357	0.00	0.00	0.344	0.00	0.34	0.00	0.000	0.000	0.000
2358	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2359	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2360	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2361	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000



Stormwater Infrastructure Design

Client Name:	Carter Group Limited
Job Name:	104 Ryans Road
Scenario / Description:	Southern SMA: Infiltration Basin and Soak Pit Sizing
Date:	21/01/2025

Job Number:	C052850001
Prepared By:	Cameron Swales and Oliver Saunders
Checked By:	Eoghan O'Neill
Version No.	1

Step 1: Characterise Site		
Hardstand & Greenspace Areas - Route to FF Basin		
Site Area	45430	m <sup>2</sup>
Composite First Flush Coefficient	0.67	#

First Flush Basin Size		
First Flush Design Event		
Rainfall Depth	25	mm
First Flush Runoff Volume (WQV)	761.0	m <sup>3</sup>

FF Basin Dimensions		
Top Length	44	m
Top Width	43	m

Total Depth	3	m
Freeboard Depth	0.3	m
Depth to Overflow	2.7	m
Side Slopes	4	H : V

Total Volume	3120.0	m <sup>3</sup>
Basin Volume (total less freeboard)	2583.1	m <sup>3</sup>
Available Volume	1822.2	m <sup>3</sup>

FF Basin Infiltration		
Infiltration Rate	75	mm/hr
Base Infiltration	0.475	m <sup>3</sup> /min
Base Area	380	m <sup>2</sup>
Drain Time (full use of available WQV)	90.6	hrs

Basin Overflow Soakpit Size		
Basin Soakpit Dimensions		
Depth	3	m
Base Area	190	m <sup>2</sup>
Void Ratio	0.38	#
Soakpit Volume	216.6	m <sup>3</sup>

Basin Soakpit Infiltration		
Infiltration Rate	600	mm/hr
Discharge Rate	1.360	m <sup>3</sup> /min

Basin Soakpit Design Event											
Scenario	Rainfall Intensities (mm/hr) :: RCP8.5 for the period 2081-2100										
ARI	50										
	10m	20m	30m	1h	2h	6h	12h	24h	48h	72h	Critical Event
						CRITICAL					
Storm Duration (min):	10	20	30	60	120	360	720	1440	2880	4320	360
Average Intensity (mm/hr):	98.80	66.90	53.70	37.30	25.80	13.80	9.06	5.73	3.51	2.58	13.80
[Output] Peak Basin Volume (m <sup>3</sup> ):	492.39	660.15	760.95	760.95	942.05	1297.77	1242.81	760.95	760.95	760.95	1297.77
[Output] Misc. Checks Error Log:	None	None	None	None	None	None	None	None	None	None	No Errors Found
				1 day		2 days			3 days		

Summary:		
Critical Storm Summary		
TOTAL RAINFALL VOLUME	2520.27	m <sup>3</sup>
Excess volume peak	1041.18	m <sup>3</sup>
WQV - spare	781.01	m <sup>3</sup>
FF Basin Drain Down Time	63.23	hrs

Date: 21/01/2025  
By: Cameron Swales & Oliver Saunders  
Reviewed: Eoghan O'Neill

Set up Design Storm			Routing through FF Basin					Routing through Basin Soakpit				
Checks Summary Time (min)	360.00	82.80	Final FF Basin Volume:		1779.174				Final Basin Soakpit Volume:		216.600	
	2.00	82.80	2583.14	2520.27	169.20			216.60	355.30			
			1802.13	2520.27	1133.93			216.60	1386.35	1041.18		
	Distribution Curve	Rainfall (mm)	Volume at start of timestep (m³)	Site Runoff (m³/min)	Soakage (m³/min)	Overflow (m³/min)		Volume at start of timestep (m³)	Soakage (m³)	Excess (m³)		
0	0.00	0.00	0.000	0.00	0.00	0.00		0.000	0.000	0.000		
1	0.01	0.00	0.000	0.06	0.06	0.00		0.000	0.000	0.000		
2	0.02	0.00	0.000	0.11	0.11	0.00		0.000	0.000	0.000		
3	0.02	0.01	0.000	0.17	0.17	0.00		0.000	0.000	0.000		
4	0.03	0.01	0.000	0.22	0.22	0.00		0.000	0.000	0.000		
5	0.04	0.01	0.000	0.28	0.28	0.00		0.000	0.000	0.000		
6	0.05	0.01	0.000	0.33	0.33	0.00		0.000	0.000	0.000		
7	0.06	0.01	0.000	0.39	0.39	0.00		0.000	0.000	0.000		
8	0.06	0.01	0.000	0.44	0.44	0.00		0.000	0.000	0.000		
9	0.07	0.02	0.000	0.50	0.48	0.00		0.000	0.000	0.000		
10	0.08	0.02	0.025	0.56	0.48	0.00		0.000	0.000	0.000		
11	0.09	0.02	0.106	0.61	0.48	0.00		0.000	0.000	0.000		
12	0.10	0.02	0.242	0.67	0.48	0.00		0.000	0.000	0.000		
13	0.10	0.02	0.434	0.72	0.48	0.00		0.000	0.000	0.000		
14	0.11	0.03	0.681	0.78	0.48	0.00		0.000	0.000	0.000		
15	0.12	0.03	0.984	0.83	0.48	0.00		0.000	0.000	0.000		
16	0.13	0.03	1.342	0.89	0.48	0.00		0.000	0.000	0.000		
17	0.13	0.03	1.756	0.94	0.48	0.00		0.000	0.000	0.000		
18	0.14	0.03	2.226	1.00	0.48	0.00		0.000	0.000	0.000		
19	0.15	0.03	2.751	1.06	0.48	0.00		0.000	0.000	0.000		
20	0.16	0.04	3.331	1.11	0.48	0.00		0.000	0.000	0.000		
21	0.17	0.04	3.968	1.17	0.48	0.00		0.000	0.000	0.000		
22	0.17	0.04	4.660	1.22	0.48	0.00		0.000	0.000	0.000		
23	0.18	0.04	5.407	1.28	0.48	0.00		0.000	0.000	0.000		
24	0.19	0.04	6.210	1.33	0.48	0.00		0.000	0.000	0.000		
25	0.20	0.05	7.068	1.39	0.48	0.00		0.000	0.000	0.000		
26	0.21	0.05	7.982	1.44	0.48	0.00		0.000	0.000	0.000		
27	0.21	0.05	8.952	1.50	0.48	0.00		0.000	0.000	0.000		
28	0.22	0.05	9.977	1.56	0.48	0.00		0.000	0.000	0.000		
29	0.23	0.05	11.058	1.61	0.48	0.00		0.000	0.000	0.000		
30	0.24	0.05	12.194	1.67	0.48	0.00		0.000	0.000	0.000		
31	0.25	0.06	13.386	1.72	0.48	0.00		0.000	0.000	0.000		
32	0.25	0.06	14.633	1.78	0.48	0.00		0.000	0.000	0.000		
33	0.26	0.06	15.936	1.83	0.48	0.00		0.000	0.000	0.000		
34	0.27	0.06	17.295	1.89	0.48	0.00		0.000	0.000	0.000		
35	0.28	0.06	18.709	1.94	0.48	0.00		0.000	0.000	0.000		
36	0.29	0.07	20.179	2.00	0.48	0.00		0.000	0.000	0.000		
37	0.29	0.07	21.704	2.06	0.48	0.00		0.000	0.000	0.000		
38	0.30	0.07	23.285	2.11	0.48	0.00		0.000	0.000	0.000		
39	0.31	0.07	24.921	2.17	0.48	0.00		0.000	0.000	0.000		
40	0.32	0.07	26.613	2.22	0.48	0.00		0.000	0.000	0.000		
41	0.33	0.07	28.360	2.28	0.48	0.00		0.000	0.000	0.000		
42	0.33	0.08	30.163	2.33	0.48	0.00		0.000	0.000	0.000		
43	0.34	0.08	32.022	2.39	0.48	0.00		0.000	0.000	0.000		
44	0.35	0.08	33.936	2.44	0.48	0.00		0.000	0.000	0.000		
45	0.36	0.08	35.906	2.50	0.48	0.00		0.000	0.000	0.000		
46	0.37	0.08	37.931	2.56	0.48	0.00		0.000	0.000	0.000		
47	0.37	0.09	40.012	2.61	0.48	0.00		0.000	0.000	0.000		
48	0.38	0.09	42.148	2.67	0.48	0.00		0.000	0.000	0.000		
49	0.39	0.09	44.340	2.72	0.48	0.00		0.000	0.000	0.000		
50	0.40	0.09	46.588	2.78	0.48	0.00		0.000	0.000	0.000		
51	0.40	0.09	48.891	2.83	0.48	0.00		0.000	0.000	0.000		
52	0.41	0.09	51.249	2.89	0.48	0.00		0.000	0.000	0.000		
53	0.42	0.10	53.664	2.94	0.48	0.00		0.000	0.000	0.000		
54	0.43	0.10	56.133	3.00	0.48	0.00		0.000	0.000	0.000		
55	0.44	0.10	58.659	3.06	0.48	0.00		0.000	0.000	0.000		
56	0.44	0.10	61.240	3.11	0.48	0.00		0.000	0.000	0.000		
57	0.45	0.10	63.876	3.17	0.48	0.00		0.000	0.000	0.000		
58	0.46	0.11	66.568	3.22	0.48	0.00		0.000	0.000	0.000		
59	0.47	0.11	69.316	3.28	0.48	0.00		0.000	0.000	0.000		
60	0.48	0.11	72.119	3.33	0.48	0.00		0.000	0.000	0.000		
61	0.48	0.11	74.978	3.39	0.48	0.00		0.000	0.000	0.000		
62	0.49	0.11	77.892	3.44	0.48	0.00		0.000	0.000	0.000		
63	0.50	0.12	80.862	3.50	0.48	0.00		0.000	0.000	0.000		
64	0.51	0.12	83.887	3.56	0.48	0.00		0.000	0.000	0.000		
65	0.52	0.12	86.968	3.61	0.48	0.00		0.000	0.000	0.000		
66	0.52	0.12	90.104	3.67	0.48	0.00		0.000	0.000	0.000		
67	0.53	0.12	93.297	3.72	0.48	0.00		0.000	0.000	0.000		
68	0.54	0.12	96.544	3.78	0.48	0.00		0.000	0.000	0.000		
69	0.55	0.13	99.847	3.83	0.48	0.00		0.000	0.000	0.000		
70	0.56	0.13	103.206	3.89	0.48	0.00		0.000	0.000	0.000		
71	0.56	0.13	106.620	3.94	0.48	0.00		0.000	0.000	0.000		
72	0.57	0.13	110.090	4.00	0.48	0.00		0.000	0.000	0.000		
73	0.58	0.13	113.616	4.06	0.48	0.00		0.000	0.000	0.000		
74	0.59	0.14	117.197	4.11	0.48	0.00		0.000	0.000	0.000		
75	0.60	0.14	120.833	4.17	0.48	0.00		0.000	0.000	0.000		
76	0.60	0.14	124.525	4.22	0.48	0.00		0.000	0.000	0.000		
77	0.61	0.14	128.273	4.28	0.48	0.00		0.000	0.000	0.000		
78	0.62	0.14	132.076	4.33	0.48	0.00		0.000	0.000	0.000		
79	0.63	0.14	135.935	4.39	0.48	0.00		0.000	0.000	0.000		
80	0.63	0.15	139.849	4.44	0.48	0.00		0.000	0.000	0.000		
81	0.64	0.15	143.819	4.50	0.48	0.00		0.000	0.000	0.000		
82	0.65	0.15	147.845	4.56	0.48	0.00		0.000	0.000	0.000		
83	0.66	0.15	151.926	4.61	0.48	0.00		0.000	0.000	0.000		
84	0.67	0.15	156.063	4.67	0.48	0.00		0.000	0.000	0.000		
85	0.67	0.16	160.255	4.72	0.48	0.00		0.000	0.000	0.000		
86	0.68	0.16	164.502	4.78	0.48	0.00		0.000	0.000	0.000		
87	0.69	0.16	168.806	4.83	0.48	0.00		0.000	0.000	0.000		
88	0.70	0.16	173.165	4.89	0.48	0.00		0.000	0.000	0.000		
89	0.71	0.16	177.579	4.94	0.48	0.00		0.000	0.000	0.000		
90	0.71	0.16	182.049	5.00	0.48	0.00		0.000	0.000	0.000		
91	0.72	0.17	186.575	5.06	0.48	0.00		0.000	0.000	0.000		
92	0.73	0.17	191.156	5.11	0.48	0.00		0.000	0.000	0.000		
93	0.74	0.17	195.792	5.17	0.48	0.00		0.000	0.000	0.000		
94	0.75	0.17	200.485	5.22	0.48	0.00		0.000	0.000	0.000		
95	0.75	0.17	205.232	5.28	0.48	0.00		0.000	0.000	0.000		

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks Summary Time (min)	360.00	82.80	Final FF Basin Volume: 1779.174				Final Basin Soakpit Volume: 216.600		
	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
			1802.13	2520.27	1133.93		216.60	1386.35	1041.18
	Distribution Curve	Rainfall (mm)	Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min )	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
96	0.76	0.18	210.036	5.33	0.48	0.00	0.000	0.000	0.000
97	0.77	0.18	214.895	5.39	0.48	0.00	0.000	0.000	0.000
98	0.78	0.18	219.809	5.45	0.48	0.00	0.000	0.000	0.000
99	0.79	0.18	224.779	5.50	0.48	0.00	0.000	0.000	0.000
100	0.79	0.18	229.805	5.56	0.48	0.00	0.000	0.000	0.000
101	0.80	0.18	234.886	5.61	0.48	0.00	0.000	0.000	0.000
102	0.81	0.19	240.023	5.67	0.48	0.00	0.000	0.000	0.000
103	0.82	0.19	245.215	5.72	0.48	0.00	0.000	0.000	0.000
104	0.83	0.19	250.463	5.78	0.48	0.00	0.000	0.000	0.000
105	0.83	0.19	255.766	5.83	0.48	0.00	0.000	0.000	0.000
106	0.84	0.19	261.125	5.89	0.48	0.00	0.000	0.000	0.000
107	0.85	0.20	266.540	5.95	0.48	0.00	0.000	0.000	0.000
108	0.86	0.20	272.010	6.00	0.48	0.00	0.000	0.000	0.000
109	0.87	0.20	277.535	6.06	0.48	0.00	0.000	0.000	0.000
110	0.87	0.20	283.117	6.11	0.48	0.00	0.000	0.000	0.000
111	0.88	0.20	288.753	6.17	0.48	0.00	0.000	0.000	0.000
112	0.89	0.20	294.446	6.22	0.48	0.00	0.000	0.000	0.000
113	0.90	0.21	300.194	6.28	0.48	0.00	0.000	0.000	0.000
114	0.90	0.21	305.997	6.33	0.48	0.00	0.000	0.000	0.000
115	0.91	0.21	311.856	6.39	0.48	0.00	0.000	0.000	0.000
116	0.92	0.21	317.771	6.45	0.48	0.00	0.000	0.000	0.000
117	0.93	0.21	323.741	6.50	0.48	0.00	0.000	0.000	0.000
118	0.94	0.22	329.767	6.56	0.48	0.00	0.000	0.000	0.000
119	0.94	0.22	335.848	6.61	0.48	0.00	0.000	0.000	0.000
120	0.95	0.22	341.985	6.67	0.48	0.00	0.000	0.000	0.000
121	0.96	0.22	348.177	6.72	0.48	0.00	0.000	0.000	0.000
122	0.97	0.22	354.425	6.78	0.48	0.00	0.000	0.000	0.000
123	0.98	0.22	360.729	6.83	0.48	0.00	0.000	0.000	0.000
124	0.98	0.23	367.088	6.89	0.48	0.00	0.000	0.000	0.000
125	0.99	0.23	373.502	6.95	0.48	0.00	0.000	0.000	0.000
126	1.00	0.23	379.972	7.00	0.48	0.00	0.000	0.000	0.000
127	1.01	0.23	386.498	7.06	0.48	0.00	0.000	0.000	0.000
128	1.02	0.23	393.080	7.11	0.48	0.00	0.000	0.000	0.000
129	1.02	0.24	399.716	7.17	0.48	0.00	0.000	0.000	0.000
130	1.03	0.24	406.409	7.22	0.48	0.00	0.000	0.000	0.000
131	1.04	0.24	413.157	7.28	0.48	0.00	0.000	0.000	0.000
132	1.05	0.24	419.960	7.33	0.48	0.00	0.000	0.000	0.000
133	1.06	0.24	426.820	7.39	0.48	0.00	0.000	0.000	0.000
134	1.06	0.24	433.734	7.45	0.48	0.00	0.000	0.000	0.000
135	1.07	0.25	440.705	7.50	0.48	0.00	0.000	0.000	0.000
136	1.08	0.25	447.730	7.56	0.48	0.00	0.000	0.000	0.000
137	1.09	0.25	454.812	7.61	0.48	0.00	0.000	0.000	0.000
138	1.10	0.25	461.949	7.67	0.48	0.00	0.000	0.000	0.000
139	1.10	0.25	469.141	7.72	0.48	0.00	0.000	0.000	0.000
140	1.11	0.26	476.389	7.78	0.48	0.00	0.000	0.000	0.000
141	1.12	0.26	483.693	7.83	0.48	0.00	0.000	0.000	0.000
142	1.13	0.26	491.052	7.89	0.48	0.00	0.000	0.000	0.000
143	1.13	0.26	498.467	7.95	0.48	0.00	0.000	0.000	0.000
144	1.14	0.26	505.937	8.00	0.48	0.00	0.000	0.000	0.000
145	1.15	0.26	513.463	8.06	0.48	0.00	0.000	0.000	0.000
146	1.16	0.27	521.044	8.11	0.48	0.00	0.000	0.000	0.000
147	1.17	0.27	528.681	8.17	0.48	0.00	0.000	0.000	0.000
148	1.17	0.27	536.374	8.22	0.48	0.00	0.000	0.000	0.000
149	1.18	0.27	544.122	8.28	0.48	0.00	0.000	0.000	0.000
150	1.19	0.27	551.926	8.33	0.48	0.00	0.000	0.000	0.000
151	1.20	0.28	559.785	8.39	0.48	0.00	0.000	0.000	0.000
152	1.21	0.28	567.700	8.45	0.48	0.00	0.000	0.000	0.000
153	1.21	0.28	575.670	8.50	0.48	0.00	0.000	0.000	0.000
154	1.22	0.28	583.696	8.56	0.48	0.00	0.000	0.000	0.000
155	1.23	0.28	591.778	8.61	0.48	0.00	0.000	0.000	0.000
156	1.24	0.28	599.915	8.67	0.48	0.00	0.000	0.000	0.000
157	1.25	0.29	608.107	8.72	0.48	0.00	0.000	0.000	0.000
158	1.25	0.29	616.355	8.78	0.48	0.00	0.000	0.000	0.000
159	1.26	0.29	624.659	8.83	0.48	0.00	0.000	0.000	0.000
160	1.27	0.29	633.018	8.89	0.48	0.00	0.000	0.000	0.000
161	1.28	0.29	641.433	8.95	0.48	0.00	0.000	0.000	0.000
162	1.29	0.30	649.904	9.00	0.48	0.00	0.000	0.000	0.000
163	1.29	0.30	658.430	9.06	0.48	0.00	0.000	0.000	0.000
164	1.30	0.30	667.011	9.11	0.48	0.00	0.000	0.000	0.000
165	1.31	0.30	675.648	9.17	0.48	0.00	0.000	0.000	0.000
166	1.32	0.30	684.341	9.22	0.48	0.00	0.000	0.000	0.000
167	1.33	0.30	693.089	9.28	0.48	0.00	0.000	0.000	0.000
168	1.33	0.31	701.893	9.33	0.48	0.00	0.000	0.000	0.000
169	1.34	0.31	710.752	9.39	0.48	0.00	0.000	0.000	0.000
170	1.35	0.31	719.667	9.45	0.48	0.00	0.000	0.000	0.000
171	1.36	0.31	728.638	9.50	0.48	0.00	0.000	0.000	0.000
172	1.37	0.31	737.664	9.56	0.48	0.00	0.000	0.000	0.000
173	1.37	0.32	746.745	9.61	0.48	0.00	0.000	0.000	0.000
174	1.38	0.32	755.883	9.67	0.48	4.12	0.000	1.900	0.000
175	1.39	0.32	760.953	9.72	0.48	9.25	2.223	1.900	0.000
176	1.40	0.32	760.953	9.78	0.48	9.30	9.571	1.900	0.000
177	1.40	0.32	760.953	9.83	0.48	9.36	16.975	1.900	0.000
178	1.41	0.32	760.953	9.89	0.48	9.41	24.434	1.900	0.000
179	1.42	0.33	760.953	9.95	0.48	9.47	31.949	1.900	0.000
180	1.43	0.33	760.953	10.00	0.48	9.53	39.520	1.900	0.000
181	1.44	0.33	760.953	10.06	0.48	9.58	47.146	1.900	0.000
182	1.44	0.33	760.953	10.11	0.48	9.64	54.828	1.900	0.000
183	1.45	0.33	760.953	10.17	0.48	9.69	62.565	1.900	0.000
184	1.46	0.34	760.953	10.22	0.48	9.75	70.358	1.900	0.000
185	1.47	0.34	760.953	10.28	0.48	9.80	78.206	1.900	0.000
186	1.48	0.34	760.953	10.33	0.48	9.86	86.110	1.900	0.000
187	1.48	0.34	760.953	10.39	0.48	9.92	94.069	1.900	0.000
188	1.49	0.34	760.953	10.45	0.48	9.97	102.084	1.900	0.000
189	1.50	0.35	760.953	10.50	0.48	10.03	110.155	1.900	0.000
190	1.51	0.35	760.953	10.56	0.48	10.08	118.281	1.900	0.000
191	1.52	0.35	760.953	10.61	0.48	10.14	126.463	1.900	0.000
192	1.52	0.35	760.953	10.67	0.48	10.19	134.700	1.900	0.000
193	1.53	0.35	760.953	10.72	0.48	10.25	142.993	1.900	0.000
194	1.54	0.35	760.953	10.78	0.48	10.30	151.341	1.900	0.000
195	1.55	0.36	760.953	10.83	0.48	10.36	159.745	1.900	0.000
196	1.56	0.36	760.953	10.89	0.48	10.42	168.205	1.900	0.000
197	1.56	0.36	760.953	10.95	0.48	10.47	176.720	1.900	0.000
198	1.57	0.36	760.953	11.00	0.48	10.53	185.290	1.900	0.000

Set up Design Storm				Routing through FF Basin				Routing through Basin Soakpit			
Checks Summary Time (min)	360.00	82.80		Final FF Basin Volume: 1779.174				Final Basin Soakpit Volume: 216.600			
	2.00	82.80		2583.14	2520.27	169.20		216.60	355.30		
				1802.13	2520.27	1133.93		216.60	1386.35	1041.18	
	Distribution Curve	Rainfall (mm)		Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min )	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )	
199	1.58	0.36		760.953	11.06	0.48	10.58	193.917	1.900	0.000	
200	1.59	0.37		760.953	11.11	0.48	10.64	202.598	1.900	0.000	
201	1.60	0.37		760.953	11.17	0.48	10.69	211.336	1.900	3.529	
202	1.60	0.37		764.481	11.22	0.48	14.28	216.600	1.900	12.377	
203	1.61	0.37		773.329	11.28	0.48	23.18	216.600	1.900	21.281	
204	1.62	0.37		782.234	11.33	0.48	32.14	216.600	1.900	30.241	
205	1.63	0.37		791.193	11.39	0.48	41.16	216.600	1.900	39.256	
206	1.63	0.38		800.208	11.45	0.48	50.23	216.600	1.900	48.326	
207	1.64	0.38		809.279	11.50	0.48	59.35	216.600	1.900	57.453	
208	1.65	0.38		818.405	11.56	0.48	68.53	216.600	1.900	66.634	
209	1.66	0.38		827.587	11.61	0.48	77.77	216.600	1.900	75.872	
210	1.67	0.38		836.824	11.67	0.48	87.06	216.600	1.900	85.165	
211	1.67	0.39		846.117	11.72	0.48	96.41	216.600	1.900	94.513	
212	1.68	0.39		855.466	11.78	0.48	105.82	216.600	1.900	103.917	
213	1.69	0.39		864.870	11.83	0.48	115.28	216.600	1.900	113.377	
214	1.70	0.39		874.329	11.89	0.48	124.79	216.600	1.900	122.892	
215	1.71	0.39		883.845	11.95	0.48	134.36	216.600	1.900	132.463	
216	1.71	0.39		893.415	12.00	0.48	143.99	216.600	1.900	142.089	
217	1.72	0.40		903.042	12.06	0.48	153.67	216.600	1.900	151.771	
218	1.73	0.40		912.724	12.11	0.48	163.41	216.600	1.900	161.509	
219	1.74	0.40		922.461	12.17	0.48	173.20	216.600	1.900	171.301	
220	1.75	0.40		932.254	12.22	0.48	183.05	216.600	1.900	181.150	
221	1.75	0.40		942.103	12.28	0.48	192.95	216.600	1.900	191.054	
222	1.76	0.41		952.007	12.33	0.48	202.91	216.600	1.900	201.014	
223	1.77	0.41		961.966	12.39	0.48	212.93	216.600	1.900	211.029	
224	1.78	0.41		971.982	12.45	0.48	223.00	216.600	1.900	221.100	
225	1.79	0.41		982.052	12.50	0.48	233.13	216.600	1.900	231.226	
226	1.79	0.41		992.179	12.56	0.48	243.31	216.600	1.900	241.408	
227	1.80	0.41		1002.361	12.61	0.48	253.55	216.600	1.900	251.646	
228	1.81	0.42		1012.598	12.67	0.48	263.84	216.600	1.900	261.939	
229	1.82	0.42		1022.891	12.72	0.48	274.19	216.600	1.900	272.287	
230	1.83	0.42		1033.240	12.78	0.48	284.59	216.600	1.900	282.691	
231	1.83	0.42		1043.644	12.83	0.48	295.05	216.600	1.900	293.151	
232	1.84	0.42		1054.104	12.89	0.48	305.57	216.600	1.900	303.667	
233	1.85	0.43		1064.619	12.95	0.48	316.14	216.600	1.900	314.237	
234	1.86	0.43		1075.190	13.00	0.48	326.76	216.600	1.900	324.864	
235	1.87	0.43		1085.816	13.06	0.48	337.45	216.600	1.900	335.546	
236	1.87	0.43		1096.498	13.11	0.48	348.18	216.600	1.900	346.283	
237	1.88	0.43		1107.236	13.17	0.48	358.96	216.600	1.900	357.076	
238	1.89	0.43		1118.029	13.22	0.48	369.83	216.600	1.900	367.925	
239	1.90	0.44		1128.878	13.28	0.48	380.73	216.600	1.900	378.829	
240	1.90	0.44		1139.782	13.33	0.48	391.69	216.600	1.900	389.789	
241	1.91	0.44		1150.742	13.39	0.48	402.70	216.600	1.900	400.804	
242	1.92	0.44		1161.757	13.45	0.48	413.78	216.600	1.900	411.875	
243	1.93	0.44		1172.828	13.50	0.48	424.90	216.600	1.900	423.002	
244	1.94	0.45		1183.954	13.56	0.48	436.08	216.600	1.900	434.184	
245	1.94	0.45		1195.136	13.61	0.48	447.32	216.600	1.900	445.421	
246	1.95	0.45		1206.374	13.67	0.48	458.61	216.600	1.900	456.715	
247	1.96	0.45		1217.667	13.72	0.48	469.96	216.600	1.900	468.063	
248	1.97	0.45		1229.016	13.78	0.48	481.37	216.600	1.900	479.468	
249	1.98	0.45		1240.420	13.83	0.48	492.83	216.600	1.900	490.927	
250	1.98	0.46		1251.880	13.89	0.48	504.34	216.600	1.900	502.443	
251	1.99	0.46		1263.395	13.95	0.48	515.91	216.600	1.900	514.014	
252	2.00	0.46		1274.966	14.00	0.48	527.54	216.600	1.900	525.640	
253	1.98	0.46		1286.593	13.87	0.48	539.04	216.600	1.900	537.137	
254	1.96	0.45		1298.090	13.74	0.48	550.40	216.600	1.900	548.504	
255	1.94	0.45		1309.457	13.61	0.48	561.64	216.600	1.900	559.742	
256	1.93	0.44		1320.695	13.48	0.48	572.75	216.600	1.900	570.850	
257	1.91	0.44		1331.802	13.35	0.48	583.73	216.600	1.900	581.828	
258	1.89	0.43		1342.781	13.22	0.48	594.58	216.600	1.900	592.677	
259	1.87	0.43		1353.629	13.09	0.48	605.30	216.600	1.900	603.396	
260	1.85	0.43		1364.348	12.96	0.48	615.89	216.600	1.900	613.985	
261	1.83	0.42		1374.938	12.83	0.48	626.35	216.600	1.900	624.445	
262	1.81	0.42		1385.398	12.71	0.48	636.68	216.600	1.900	634.775	
263	1.80	0.41		1395.728	12.58	0.48	646.88	216.600	1.900	644.976	
264	1.78	0.41		1405.928	12.45	0.48	656.95	216.600	1.900	655.046	
265	1.76	0.40		1415.999	12.32	0.48	666.89	216.600	1.900	664.988	
266	1.74	0.40		1425.940	12.19	0.48	676.70	216.600	1.900	674.799	
267	1.72	0.40		1435.752	12.06	0.48	686.38	216.600	1.900	684.481	
268	1.70	0.39		1445.433	11.93	0.48	695.93	216.600	1.900	694.033	
269	1.69	0.39		1454.986	11.80	0.48	705.36	216.600	1.900	703.456	
270	1.67	0.38		1464.408	11.67	0.48	714.65	216.600	1.900	712.749	
271	1.65	0.38		1473.701	11.54	0.48	723.81	216.600	1.900	721.912	
272	1.63	0.37		1482.865	11.41	0.48	732.85	216.600	1.900	730.946	
273	1.61	0.37		1491.898	11.28	0.48	741.75	216.600	1.900	739.850	
274	1.59	0.37		1500.802	11.15	0.48	750.52	216.600	1.900	748.624	
275	1.57	0.36		1509.577	11.02	0.48	759.17	216.600	1.900	757.269	
276	1.56	0.36		1518.221	10.89	0.48	767.68	216.600	1.900	765.784	
277	1.54	0.35		1526.736	10.76	0.48	776.07	216.600	1.900	774.169	
278	1.52	0.35		1535.122	10.63	0.48	784.33	216.600	1.900	782.425	
279	1.50	0.35		1543.378	10.50	0.48	792.45	216.600	1.900	790.551	
280	1.48	0.34		1551.504	10.37	0.48	800.45	216.600	1.900	798.548	
281	1.46	0.34		1559.500	10.24	0.48	808.31	216.600	1.900	806.415	
282	1.44	0.33		1567.367	10.11	0.48	816.05	216.600	1.900	814.152	
283	1.43	0.33		1575.104	9.98	0.48	823.66	216.600	1.900	821.759	
284	1.41	0.32		1582.712	9.85	0.48	831.14	216.600	1.900	829.237	
285	1.39	0.32		1590.190	9.72	0.48	838.49	216.600	1.900	836.586	
286	1.37	0.32		1597.538	9.59	0.48	845.70	216.600	1.900	843.804	
287	1.35	0.31		1604.757	9.46	0.48	852.79	216.600	1.900	850.893	
288	1.33	0.31		1611.846	9.33	0.48	859.75	216.600	1.900	857.853	
289	1.31	0.30		1618.805	9.20	0.48	866.58	216.600	1.900	864.682	
290	1.30	0.30		1625.635	9.08	0.48	873.28	216.600	1.900	871.382	
291	1.28	0.29		1632.335	8.95	0.48	879.85	216.600	1.900	877.953	
292	1.26	0.29		1638.905	8.82	0.48	886.29	216.600	1.900	884.393	
293	1.24	0.29		1645.346	8.69	0.48	892.60	216.600	1.900	890.705	
294	1.22	0.28		1651.657	8.56	0.48	898.79	216.600	1.900	896.886	
295	1.20	0.28		1657.839	8.43	0.48	904.84	216.600	1.900	902.938	
296	1.19	0.27		1663.890	8.30	0.48	910.76	216.600	1.900	908.860	
297	1.17	0.27		1669.813	8.17	0.48	916.55	216.600	1.900	914.653	
298	1.15	0.26		1675.605	8.04	0.48	922.22	216.600	1.900	920.316	
299	1.13	0.26		1681.268	7.91	0.48	927.75	216.600	1.900	925.849	
300	1.11	0.26		1686.801	7.78	0.48	933.15	216.600	1.900	931.253	
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Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	360.00	82.80	Final FF Basin Volume: 1779.174				Final Basin Soakpit Volume: 216.600		
Summary	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
Time (min)	Distribution Curve	Rainfall (mm)	1802.13	2520.27	1133.93		216.60	1386.35	1041.18
302	1.07	0.25	Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min )	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
303	1.06	0.24	1697.479	7.52	0.48	943.57	216.600	1.900	941.671
304	1.04	0.24	1702.623	7.39	0.48	948.59	216.600	1.900	946.686
305	1.02	0.23	1707.638	7.26	0.48	953.47	216.600	1.900	951.571
306	1.00	0.23	1712.523	7.13	0.48	958.23	216.600	1.900	956.326
307	0.98	0.23	1717.278	7.00	0.48	962.85	216.600	1.900	960.952
308	0.96	0.22	1721.904	6.87	0.48	967.35	216.600	1.900	965.448
309	0.94	0.22	1726.400	6.74	0.48	971.71	216.600	1.900	969.814
310	0.93	0.21	1730.767	6.61	0.48	975.95	216.600	1.900	974.051
311	0.91	0.21	1735.004	6.48	0.48	980.06	216.600	1.900	978.158
312	0.89	0.20	1739.111	6.35	0.48	984.04	216.600	1.900	982.136
313	0.87	0.20	1743.088	6.22	0.48	987.88	216.600	1.900	985.984
314	0.85	0.20	1746.936	6.09	0.48	991.60	216.600	1.900	989.702
315	0.83	0.19	1750.655	5.96	0.48	995.19	216.600	1.900	993.291
316	0.81	0.19	1754.243	5.83	0.48	998.65	216.600	1.900	996.750
317	0.80	0.18	1757.702	5.70	0.48	1001.98	216.600	1.900	1000.079
318	0.78	0.18	1761.031	5.57	0.48	1005.18	216.600	1.900	1003.279
319	0.76	0.17	1764.231	5.45	0.48	1008.25	216.600	1.900	1006.349
320	0.74	0.17	1767.301	5.32	0.48	1011.19	216.600	1.900	1009.289
321	0.72	0.17	1770.242	5.19	0.48	1014.00	216.600	1.900	1012.100
322	0.70	0.16	1773.052	5.06	0.48	1016.68	216.600	1.900	1014.781
323	0.69	0.16	1775.733	4.93	0.48	1019.23	216.600	1.900	1017.332
324	0.67	0.15	1778.285	4.80	0.48	1021.65	216.600	1.900	1019.754
325	0.65	0.15	1780.707	4.67	0.48	1023.95	216.600	1.900	1022.046
326	0.63	0.14	1782.999	4.54	0.48	1026.11	216.600	1.900	1024.209
327	0.61	0.14	1785.161	4.41	0.48	1028.14	216.600	1.900	1026.242
328	0.59	0.14	1787.194	4.28	0.48	1030.05	216.600	1.900	1028.145
329	0.57	0.13	1789.098	4.15	0.48	1031.82	216.600	1.900	1029.919
330	0.56	0.13	1790.871	4.02	0.48	1033.46	216.600	1.900	1031.563
331	0.54	0.12	1792.515	3.89	0.48	1034.98	216.600	1.900	1033.077
332	0.52	0.12	1794.029	3.76	0.48	1036.36	216.600	1.900	1034.462
333	0.50	0.12	1795.414	3.63	0.48	1037.62	216.600	1.900	1035.717
334	0.48	0.11	1796.669	3.50	0.48	1038.74	216.600	1.900	1036.842
335	0.46	0.11	1797.795	3.37	0.48	1039.74	216.600	1.900	1037.838
336	0.44	0.10	1798.790	3.24	0.48	1040.60	216.600	1.900	1038.704
337	0.43	0.10	1799.656	3.11	0.48	1041.34	216.600	1.900	1039.440
338	0.41	0.09	1800.393	2.98	0.48	1041.95	216.600	1.900	1040.047
339	0.39	0.09	1801.000	2.85	0.48	1042.42	216.600	1.900	1040.524
340	0.37	0.09	1801.477	2.72	0.48	1042.77	216.600	1.900	1040.872
341	0.35	0.08	1801.824	2.59	0.48	1042.99	216.600	1.900	1041.090
342	0.33	0.08	1802.042	2.46	0.48	1043.08	216.600	1.900	1041.178
343	0.31	0.07	1802.130	2.33	0.48	1043.04	216.600	1.900	1041.136
344	0.30	0.07	1802.089	2.20	0.48	1042.87	216.600	1.900	1040.965
345	0.28	0.06	1801.918	2.07	0.48	1042.56	216.600	1.900	1040.665
346	0.26	0.06	1801.617	1.94	0.48	1042.13	216.600	1.900	1040.234
347	0.24	0.06	1801.187	1.82	0.48	1041.57	216.600	1.900	1039.674
348	0.22	0.05	1800.627	1.69	0.48	1040.88	216.600	1.900	1038.985
349	0.20	0.05	1799.937	1.56	0.48	1040.07	216.600	1.900	1038.165
350	0.19	0.04	1799.118	1.43	0.48	1039.12	216.600	1.900	1037.217
351	0.17	0.04	1798.169	1.30	0.48	1038.04	216.600	1.900	1036.138
352	0.15	0.03	1797.090	1.17	0.48	1036.83	216.600	1.900	1034.930
353	0.13	0.03	1795.882	1.04	0.48	1035.49	216.600	1.900	1033.592
354	0.11	0.03	1794.544	0.91	0.48	1034.02	216.600	1.900	1032.124
355	0.09	0.02	1793.077	0.78	0.48	1032.43	216.600	1.900	1030.527
356	0.07	0.02	1791.480	0.65	0.48	1030.70	216.600	1.900	1028.801
357	0.06	0.01	1789.753	0.52	0.48	1028.84	216.600	1.900	1026.944
358	0.04	0.01	1787.897	0.39	0.48	1026.86	216.600	1.900	1024.958
359	0.02	0.00	1785.911	0.26	0.48	1024.74	216.600	1.900	1022.842
360	0.00	0.00	1783.795	0.13	0.48	1022.50	216.600	1.900	1020.597
361	0.00	0.00	1781.549	0.00	0.48	1020.12	216.600	1.900	1018.222
362	0.00	0.00	1779.174	0.00	0.48	1017.75	216.600	1.900	1015.847
363	0.00	0.00	1776.799	0.00	0.48	1015.37	216.600	1.900	1013.472
364	0.00	0.00	1774.424	0.00	0.48	1013.00	216.600	1.900	1011.097
365	0.00	0.00	1772.049	0.00	0.48	1010.62	216.600	1.900	1008.722
366	0.00	0.00	1769.674	0.00	0.48	1008.25	216.600	1.900	1006.347
367	0.00	0.00	1767.299	0.00	0.48	1005.87	216.600	1.900	1003.972
368	0.00	0.00	1764.924	0.00	0.48	1003.50	216.600	1.900	1001.597
369	0.00	0.00	1762.549	0.00	0.48	1001.12	216.600	1.900	999.222
370	0.00	0.00	1760.174	0.00	0.48	998.75	216.600	1.900	996.847
371	0.00	0.00	1757.799	0.00	0.48	996.37	216.600	1.900	994.472
372	0.00	0.00	1755.424	0.00	0.48	994.00	216.600	1.900	992.097
373	0.00	0.00	1753.049	0.00	0.48	991.62	216.600	1.900	989.722
374	0.00	0.00	1750.674	0.00	0.48	989.25	216.600	1.900	987.347
375	0.00	0.00	1748.299	0.00	0.48	986.87	216.600	1.900	984.972
376	0.00	0.00	1745.924	0.00	0.48	984.50	216.600	1.900	982.597
377	0.00	0.00	1743.549	0.00	0.48	982.12	216.600	1.900	980.222
378	0.00	0.00	1741.174	0.00	0.48	979.75	216.600	1.900	977.847
379	0.00	0.00	1738.799	0.00	0.48	977.37	216.600	1.900	975.472
380	0.00	0.00	1736.424	0.00	0.48	975.00	216.600	1.900	973.097
381	0.00	0.00	1734.049	0.00	0.48	972.62	216.600	1.900	970.722
382	0.00	0.00	1731.674	0.00	0.48	970.25	216.600	1.900	968.347
383	0.00	0.00	1729.299	0.00	0.48	967.87	216.600	1.900	965.972
384	0.00	0.00	1726.924	0.00	0.48	965.50	216.600	1.900	963.597
385	0.00	0.00	1724.549	0.00	0.48	963.12	216.600	1.900	961.222
386	0.00	0.00	1722.174	0.00	0.48	960.75	216.600	1.900	958.847
387	0.00	0.00	1719.799	0.00	0.48	958.37	216.600	1.900	956.472
388	0.00	0.00	1717.424	0.00	0.48	956.00	216.600	1.900	954.097
389	0.00	0.00	1715.049	0.00	0.48	953.62	216.600	1.900	951.722
390	0.00	0.00	1712.674	0.00	0.48	951.25	216.600	1.900	949.347
391	0.00	0.00	1710.299	0.00	0.48	948.87	216.600	1.900	946.972
392	0.00	0.00	1707.924	0.00	0.48	946.50	216.600	1.900	944.597
393	0.00	0.00	1705.549	0.00	0.48	944.12	216.600	1.900	942.222
394	0.00	0.00	1703.174	0.00	0.48	941.75	216.600	1.900	939.847
395	0.00	0.00	1700.799	0.00	0.48	939.37	216.600	1.900	937.472
396	0.00	0.00	1698.424	0.00	0.48	937.00	216.600	1.900	935.097
397	0.00	0.00	1696.049	0.00	0.48	934.62	216.600	1.900	932.722
398	0.00	0.00	1693.674	0.00	0.48	932.25	216.600	1.900	930.347
399	0.00	0.00	1691.299	0.00	0.48	929.87	216.600	1.900	927.972
400	0.00	0.00	1688.924	0.00	0.48	927.50	216.600	1.900	925.597
401	0.00	0.00	1686.549	0.00	0.48	925.12	216.600	1.900	923.222
402	0.00	0.00	1684.174	0.00	0.48	922.75	216.600	1.900	920.847
403	0.00	0.00	1681.799	0.00	0.48	920.37	216.600	1.900	918.472
404	0.00	0.00	1679.424	0.00	0.48	918.00	216.600	1.900	916.097
404	0.00	0.00	1677.049	0.00	0.48	915.62	216.600	1.900	913.722



Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	360.00	82.80	Final FF Basin Volume: 1779.174				Final Basin Soakpit Volume: 216.600		
Summary	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
Time (min)	Distribution Curve	Rainfall (mm)	1802.13	2520.27	1133.93		216.60	1386.35	1041.18
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min )	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
405	0.00	0.00	1674.674	0.00	0.48	913.25	216.600	1.900	911.347
406	0.00	0.00	1672.299	0.00	0.48	910.87	216.600	1.900	908.972
407	0.00	0.00	1669.924	0.00	0.48	908.50	216.600	1.900	906.597
408	0.00	0.00	1667.549	0.00	0.48	906.12	216.600	1.900	904.222
409	0.00	0.00	1665.174	0.00	0.48	903.75	216.600	1.900	901.847
410	0.00	0.00	1662.799	0.00	0.48	901.37	216.600	1.900	899.472
411	0.00	0.00	1660.424	0.00	0.48	899.00	216.600	1.900	897.097
412	0.00	0.00	1658.049	0.00	0.48	896.62	216.600	1.900	894.722
413	0.00	0.00	1655.674	0.00	0.48	894.25	216.600	1.900	892.347
414	0.00	0.00	1653.299	0.00	0.48	891.87	216.600	1.900	889.972
415	0.00	0.00	1650.924	0.00	0.48	889.50	216.600	1.900	887.597
416	0.00	0.00	1648.549	0.00	0.48	887.12	216.600	1.900	885.222
417	0.00	0.00	1646.174	0.00	0.48	884.75	216.600	1.900	882.847
418	0.00	0.00	1643.799	0.00	0.48	882.37	216.600	1.900	880.472
419	0.00	0.00	1641.424	0.00	0.48	880.00	216.600	1.900	878.097
420	0.00	0.00	1639.049	0.00	0.48	877.62	216.600	1.900	875.722
421	0.00	0.00	1636.674	0.00	0.48	875.25	216.600	1.900	873.347
422	0.00	0.00	1634.299	0.00	0.48	872.87	216.600	1.900	870.972
423	0.00	0.00	1631.924	0.00	0.48	870.50	216.600	1.900	868.597
424	0.00	0.00	1629.549	0.00	0.48	868.12	216.600	1.900	866.222
425	0.00	0.00	1627.174	0.00	0.48	865.75	216.600	1.900	863.847
426	0.00	0.00	1624.799	0.00	0.48	863.37	216.600	1.900	861.472
427	0.00	0.00	1622.424	0.00	0.48	861.00	216.600	1.900	859.097
428	0.00	0.00	1620.049	0.00	0.48	858.62	216.600	1.900	856.722
429	0.00	0.00	1617.674	0.00	0.48	856.25	216.600	1.900	854.347
430	0.00	0.00	1615.299	0.00	0.48	853.87	216.600	1.900	851.972
431	0.00	0.00	1612.924	0.00	0.48	851.50	216.600	1.900	849.597
432	0.00	0.00	1610.549	0.00	0.48	849.12	216.600	1.900	847.222
433	0.00	0.00	1608.174	0.00	0.48	846.75	216.600	1.900	844.847
434	0.00	0.00	1605.799	0.00	0.48	844.37	216.600	1.900	842.472
435	0.00	0.00	1603.424	0.00	0.48	842.00	216.600	1.900	840.097
436	0.00	0.00	1601.049	0.00	0.48	839.62	216.600	1.900	837.722
437	0.00	0.00	1598.674	0.00	0.48	837.25	216.600	1.900	835.347
438	0.00	0.00	1596.299	0.00	0.48	834.87	216.600	1.900	832.972
439	0.00	0.00	1593.924	0.00	0.48	832.50	216.600	1.900	830.597
440	0.00	0.00	1591.549	0.00	0.48	830.12	216.600	1.900	828.222
441	0.00	0.00	1589.174	0.00	0.48	827.75	216.600	1.900	825.847
442	0.00	0.00	1586.799	0.00	0.48	825.37	216.600	1.900	823.472
443	0.00	0.00	1584.424	0.00	0.48	823.00	216.600	1.900	821.097
444	0.00	0.00	1582.049	0.00	0.48	820.62	216.600	1.900	818.722
445	0.00	0.00	1579.674	0.00	0.48	818.25	216.600	1.900	816.347
446	0.00	0.00	1577.299	0.00	0.48	815.87	216.600	1.900	813.972
447	0.00	0.00	1574.924	0.00	0.48	813.50	216.600	1.900	811.597
448	0.00	0.00	1572.549	0.00	0.48	811.12	216.600	1.900	809.222
449	0.00	0.00	1570.174	0.00	0.48	808.75	216.600	1.900	806.847
450	0.00	0.00	1567.799	0.00	0.48	806.37	216.600	1.900	804.472
451	0.00	0.00	1565.424	0.00	0.48	804.00	216.600	1.900	802.097
452	0.00	0.00	1563.049	0.00	0.48	801.62	216.600	1.900	799.722
453	0.00	0.00	1560.674	0.00	0.48	799.25	216.600	1.900	797.347
454	0.00	0.00	1558.299	0.00	0.48	796.87	216.600	1.900	794.972
455	0.00	0.00	1555.924	0.00	0.48	794.50	216.600	1.900	792.597
456	0.00	0.00	1553.549	0.00	0.48	792.12	216.600	1.900	790.222
457	0.00	0.00	1551.174	0.00	0.48	789.75	216.600	1.900	787.847
458	0.00	0.00	1548.799	0.00	0.48	787.37	216.600	1.900	785.472
459	0.00	0.00	1546.424	0.00	0.48	785.00	216.600	1.900	783.097
460	0.00	0.00	1544.049	0.00	0.48	782.62	216.600	1.900	780.722
461	0.00	0.00	1541.674	0.00	0.48	780.25	216.600	1.900	778.347
462	0.00	0.00	1539.299	0.00	0.48	777.87	216.600	1.900	775.972
463	0.00	0.00	1536.924	0.00	0.48	775.50	216.600	1.900	773.597
464	0.00	0.00	1534.549	0.00	0.48	773.12	216.600	1.900	771.222
465	0.00	0.00	1532.174	0.00	0.48	770.75	216.600	1.900	768.847
466	0.00	0.00	1529.799	0.00	0.48	768.37	216.600	1.900	766.472
467	0.00	0.00	1527.424	0.00	0.48	766.00	216.600	1.900	764.097
468	0.00	0.00	1525.049	0.00	0.48	763.62	216.600	1.900	761.722
469	0.00	0.00	1522.674	0.00	0.48	761.25	216.600	1.900	759.347
470	0.00	0.00	1520.299	0.00	0.48	758.87	216.600	1.900	756.972
471	0.00	0.00	1517.924	0.00	0.48	756.50	216.600	1.900	754.597
472	0.00	0.00	1515.549	0.00	0.48	754.12	216.600	1.900	752.222
473	0.00	0.00	1513.174	0.00	0.48	751.75	216.600	1.900	749.847
474	0.00	0.00	1510.799	0.00	0.48	749.37	216.600	1.900	747.472
475	0.00	0.00	1508.424	0.00	0.48	747.00	216.600	1.900	745.097
476	0.00	0.00	1506.049	0.00	0.48	744.62	216.600	1.900	742.722
477	0.00	0.00	1503.674	0.00	0.48	742.25	216.600	1.900	740.347
478	0.00	0.00	1501.299	0.00	0.48	739.87	216.600	1.900	737.972
479	0.00	0.00	1498.924	0.00	0.48	737.50	216.600	1.900	735.597
480	0.00	0.00	1496.549	0.00	0.48	735.12	216.600	1.900	733.222
481	0.00	0.00	1494.174	0.00	0.48	732.75	216.600	1.900	730.847
482	0.00	0.00	1491.799	0.00	0.48	730.37	216.600	1.900	728.472
483	0.00	0.00	1489.424	0.00	0.48	728.00	216.600	1.900	726.097
484	0.00	0.00	1487.049	0.00	0.48	725.62	216.600	1.900	723.722
485	0.00	0.00	1484.674	0.00	0.48	723.25	216.600	1.900	721.347
486	0.00	0.00	1482.299	0.00	0.48	720.87	216.600	1.900	718.972
487	0.00	0.00	1479.924	0.00	0.48	718.50	216.600	1.900	716.597
488	0.00	0.00	1477.549	0.00	0.48	716.12	216.600	1.900	714.222
489	0.00	0.00	1475.174	0.00	0.48	713.75	216.600	1.900	711.847
490	0.00	0.00	1472.799	0.00	0.48	711.37	216.600	1.900	709.472
491	0.00	0.00	1470.424	0.00	0.48	709.00	216.600	1.900	707.097
492	0.00	0.00	1468.049	0.00	0.48	706.62	216.600	1.900	704.722
493	0.00	0.00	1465.674	0.00	0.48	704.25	216.600	1.900	702.347
494	0.00	0.00	1463.299	0.00	0.48	701.87	216.600	1.900	699.972
495	0.00	0.00	1460.924	0.00	0.48	699.50	216.600	1.900	697.597
496	0.00	0.00	1458.549	0.00	0.48	697.12	216.600	1.900	695.222
497	0.00	0.00	1456.174	0.00	0.48	694.75	216.600	1.900	692.847
498	0.00	0.00	1453.799	0.00	0.48	692.37	216.600	1.900	690.472
499	0.00	0.00	1451.424	0.00	0.48	690.00	216.600	1.900	688.097
500	0.00	0.00	1449.049	0.00	0.48	687.62	216.600	1.900	685.722
501	0.00	0.00	1446.674	0.00	0.48	685.25	216.600	1.900	683.347
502	0.00	0.00	1444.299	0.00	0.48	682.87	216.600	1.900	680.972
503	0.00	0.00	1441.924	0.00	0.48	680.50	216.600	1.900	678.597
504	0.00	0.00	1439.549	0.00	0.48	678.12	216.600	1.900	676.222
505	0.00	0.00	1437.174	0.00	0.48	675.75	216.600	1.900	673.847
506	0.00	0.00	1434.799	0.00	0.48	673.37	216.600	1.900	671.472
507	0.00	0.00	1432.424	0.00	0.48	671.00	216.600	1.900	669.097

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	360.00	82.80	Final FF Basin Volume: 1779.174				Final Basin Soakpit Volume: 216.600		
Summary	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
Time (min)	Distribution Curve	Rainfall (mm)	1802.13	2520.27	1133.93		216.60	1386.35	1041.18
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min )	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
508	0.00	0.00	1430.049	0.00	0.48	668.62	216.600	1.900	666.722
509	0.00	0.00	1427.674	0.00	0.48	666.25	216.600	1.900	664.347
510	0.00	0.00	1425.299	0.00	0.48	663.87	216.600	1.900	661.972
511	0.00	0.00	1422.924	0.00	0.48	661.50	216.600	1.900	659.597
512	0.00	0.00	1420.549	0.00	0.48	659.12	216.600	1.900	657.222
513	0.00	0.00	1418.174	0.00	0.48	656.75	216.600	1.900	654.847
514	0.00	0.00	1415.799	0.00	0.48	654.37	216.600	1.900	652.472
515	0.00	0.00	1413.424	0.00	0.48	652.00	216.600	1.900	650.097
516	0.00	0.00	1411.049	0.00	0.48	649.62	216.600	1.900	647.722
517	0.00	0.00	1408.674	0.00	0.48	647.25	216.600	1.900	645.347
518	0.00	0.00	1406.299	0.00	0.48	644.87	216.600	1.900	642.972
519	0.00	0.00	1403.924	0.00	0.48	642.50	216.600	1.900	640.597
520	0.00	0.00	1401.549	0.00	0.48	640.12	216.600	1.900	638.222
521	0.00	0.00	1399.174	0.00	0.48	637.75	216.600	1.900	635.847
522	0.00	0.00	1396.799	0.00	0.48	635.37	216.600	1.900	633.472
523	0.00	0.00	1394.424	0.00	0.48	633.00	216.600	1.900	631.097
524	0.00	0.00	1392.049	0.00	0.48	630.62	216.600	1.900	628.722
525	0.00	0.00	1389.674	0.00	0.48	628.25	216.600	1.900	626.347
526	0.00	0.00	1387.299	0.00	0.48	625.87	216.600	1.900	623.972
527	0.00	0.00	1384.924	0.00	0.48	623.50	216.600	1.900	621.597
528	0.00	0.00	1382.549	0.00	0.48	621.12	216.600	1.900	619.222
529	0.00	0.00	1380.174	0.00	0.48	618.75	216.600	1.900	616.847
530	0.00	0.00	1377.799	0.00	0.48	616.37	216.600	1.900	614.472
531	0.00	0.00	1375.424	0.00	0.48	614.00	216.600	1.900	612.097
532	0.00	0.00	1373.049	0.00	0.48	611.62	216.600	1.900	609.722
533	0.00	0.00	1370.674	0.00	0.48	609.25	216.600	1.900	607.347
534	0.00	0.00	1368.299	0.00	0.48	606.87	216.600	1.900	604.972
535	0.00	0.00	1365.924	0.00	0.48	604.50	216.600	1.900	602.597
536	0.00	0.00	1363.549	0.00	0.48	602.12	216.600	1.900	600.222
537	0.00	0.00	1361.174	0.00	0.48	599.75	216.600	1.900	597.847
538	0.00	0.00	1358.799	0.00	0.48	597.37	216.600	1.900	595.472
539	0.00	0.00	1356.424	0.00	0.48	595.00	216.600	1.900	593.097
540	0.00	0.00	1354.049	0.00	0.48	592.62	216.600	1.900	590.722
541	0.00	0.00	1351.674	0.00	0.48	590.25	216.600	1.900	588.347
542	0.00	0.00	1349.299	0.00	0.48	587.87	216.600	1.900	585.972
543	0.00	0.00	1346.924	0.00	0.48	585.50	216.600	1.900	583.597
544	0.00	0.00	1344.549	0.00	0.48	583.12	216.600	1.900	581.222
545	0.00	0.00	1342.174	0.00	0.48	580.75	216.600	1.900	578.847
546	0.00	0.00	1339.799	0.00	0.48	578.37	216.600	1.900	576.472
547	0.00	0.00	1337.424	0.00	0.48	576.00	216.600	1.900	574.097
548	0.00	0.00	1335.049	0.00	0.48	573.62	216.600	1.900	571.722
549	0.00	0.00	1332.674	0.00	0.48	571.25	216.600	1.900	569.347
550	0.00	0.00	1330.299	0.00	0.48	568.87	216.600	1.900	566.972
551	0.00	0.00	1327.924	0.00	0.48	566.50	216.600	1.900	564.597
552	0.00	0.00	1325.549	0.00	0.48	564.12	216.600	1.900	562.222
553	0.00	0.00	1323.174	0.00	0.48	561.75	216.600	1.900	559.847
554	0.00	0.00	1320.799	0.00	0.48	559.37	216.600	1.900	557.472
555	0.00	0.00	1318.424	0.00	0.48	557.00	216.600	1.900	555.097
556	0.00	0.00	1316.049	0.00	0.48	554.62	216.600	1.900	552.722
557	0.00	0.00	1313.674	0.00	0.48	552.25	216.600	1.900	550.347
558	0.00	0.00	1311.299	0.00	0.48	549.87	216.600	1.900	547.972
559	0.00	0.00	1308.924	0.00	0.48	547.50	216.600	1.900	545.597
560	0.00	0.00	1306.549	0.00	0.48	545.12	216.600	1.900	543.222
561	0.00	0.00	1304.174	0.00	0.48	542.75	216.600	1.900	540.847
562	0.00	0.00	1301.799	0.00	0.48	540.37	216.600	1.900	538.472
563	0.00	0.00	1299.424	0.00	0.48	538.00	216.600	1.900	536.097
564	0.00	0.00	1297.049	0.00	0.48	535.62	216.600	1.900	533.722
565	0.00	0.00	1294.674	0.00	0.48	533.25	216.600	1.900	531.347
566	0.00	0.00	1292.299	0.00	0.48	530.87	216.600	1.900	528.972
567	0.00	0.00	1289.924	0.00	0.48	528.50	216.600	1.900	526.597
568	0.00	0.00	1287.549	0.00	0.48	526.12	216.600	1.900	524.222
569	0.00	0.00	1285.174	0.00	0.48	523.75	216.600	1.900	521.847
570	0.00	0.00	1282.799	0.00	0.48	521.37	216.600	1.900	519.472
571	0.00	0.00	1280.424	0.00	0.48	519.00	216.600	1.900	517.097
572	0.00	0.00	1278.049	0.00	0.48	516.62	216.600	1.900	514.722
573	0.00	0.00	1275.674	0.00	0.48	514.25	216.600	1.900	512.347
574	0.00	0.00	1273.299	0.00	0.48	511.87	216.600	1.900	509.972
575	0.00	0.00	1270.924	0.00	0.48	509.50	216.600	1.900	507.597
576	0.00	0.00	1268.549	0.00	0.48	507.12	216.600	1.900	505.222
577	0.00	0.00	1266.174	0.00	0.48	504.75	216.600	1.900	502.847
578	0.00	0.00	1263.799	0.00	0.48	502.37	216.600	1.900	500.472
579	0.00	0.00	1261.424	0.00	0.48	500.00	216.600	1.900	498.097
580	0.00	0.00	1259.049	0.00	0.48	497.62	216.600	1.900	495.722
581	0.00	0.00	1256.674	0.00	0.48	495.25	216.600	1.900	493.347
582	0.00	0.00	1254.299	0.00	0.48	492.87	216.600	1.900	490.972
583	0.00	0.00	1251.924	0.00	0.48	490.50	216.600	1.900	488.597
584	0.00	0.00	1249.549	0.00	0.48	488.12	216.600	1.900	486.222
585	0.00	0.00	1247.174	0.00	0.48	485.75	216.600	1.900	483.847
586	0.00	0.00	1244.799	0.00	0.48	483.37	216.600	1.900	481.472
587	0.00	0.00	1242.424	0.00	0.48	481.00	216.600	1.900	479.097
588	0.00	0.00	1240.049	0.00	0.48	478.62	216.600	1.900	476.722
589	0.00	0.00	1237.674	0.00	0.48	476.25	216.600	1.900	474.347
590	0.00	0.00	1235.299	0.00	0.48	473.87	216.600	1.900	471.972
591	0.00	0.00	1232.924	0.00	0.48	471.50	216.600	1.900	469.597
592	0.00	0.00	1230.549	0.00	0.48	469.12	216.600	1.900	467.222
593	0.00	0.00	1228.174	0.00	0.48	466.75	216.600	1.900	464.847
594	0.00	0.00	1225.799	0.00	0.48	464.37	216.600	1.900	462.472
595	0.00	0.00	1223.424	0.00	0.48	462.00	216.600	1.900	460.097
596	0.00	0.00	1221.049	0.00	0.48	459.62	216.600	1.900	457.722
597	0.00	0.00	1218.674	0.00	0.48	457.25	216.600	1.900	455.347
598	0.00	0.00	1216.299	0.00	0.48	454.87	216.600	1.900	452.972
599	0.00	0.00	1213.924	0.00	0.48	452.50	216.600	1.900	450.597
600	0.00	0.00	1211.549	0.00	0.48	450.12	216.600	1.900	448.222
601	0.00	0.00	1209.174	0.00	0.48	447.75	216.600	1.900	445.847
602	0.00	0.00	1206.799	0.00	0.48	445.37	216.600	1.900	443.472
603	0.00	0.00	1204.424	0.00	0.48	443.00	216.600	1.900	441.097
604	0.00	0.00	1202.049	0.00	0.48	440.62	216.600	1.900	438.722
605	0.00	0.00	1199.674	0.00	0.48	438.25	216.600	1.900	436.347
606	0.00	0.00	1197.299	0.00	0.48	435.87	216.600	1.900	433.972
607	0.00	0.00	1194.924	0.00	0.48	433.50	216.600	1.900	431.597
608	0.00	0.00	1192.549	0.00	0.48	431.12	216.600	1.900	429.222
609	0.00	0.00	1190.174	0.00	0.48	428.75	216.600	1.900	426.847
610	0.00	0.00	1187.799	0.00	0.48	426.37	216.600	1.900	424.472

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	360.00	82.80	Final FF Basin Volume:		1779.174		Final Basin Soakpit Volume:		216.600
Summary	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
Time (min)	Distribution Curve	Rainfall (mm)	1802.13	2520.27	1133.93		216.60	1386.35	1041.18
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min )	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
611	0.00	0.00	1185.424	0.00	0.48	424.00	216.600	1.900	422.097
612	0.00	0.00	1183.049	0.00	0.48	421.62	216.600	1.900	419.722
613	0.00	0.00	1180.674	0.00	0.48	419.25	216.600	1.900	417.347
614	0.00	0.00	1178.299	0.00	0.48	416.87	216.600	1.900	414.972
615	0.00	0.00	1175.924	0.00	0.48	414.50	216.600	1.900	412.597
616	0.00	0.00	1173.549	0.00	0.48	412.12	216.600	1.900	410.222
617	0.00	0.00	1171.174	0.00	0.48	409.75	216.600	1.900	407.847
618	0.00	0.00	1168.799	0.00	0.48	407.37	216.600	1.900	405.472
619	0.00	0.00	1166.424	0.00	0.48	405.00	216.600	1.900	403.097
620	0.00	0.00	1164.049	0.00	0.48	402.62	216.600	1.900	400.722
621	0.00	0.00	1161.674	0.00	0.48	400.25	216.600	1.900	398.347
622	0.00	0.00	1159.299	0.00	0.48	397.87	216.600	1.900	395.972
623	0.00	0.00	1156.924	0.00	0.48	395.50	216.600	1.900	393.597
624	0.00	0.00	1154.549	0.00	0.48	393.12	216.600	1.900	391.222
625	0.00	0.00	1152.174	0.00	0.48	390.75	216.600	1.900	388.847
626	0.00	0.00	1149.799	0.00	0.48	388.37	216.600	1.900	386.472
627	0.00	0.00	1147.424	0.00	0.48	386.00	216.600	1.900	384.097
628	0.00	0.00	1145.049	0.00	0.48	383.62	216.600	1.900	381.722
629	0.00	0.00	1142.674	0.00	0.48	381.25	216.600	1.900	379.347
630	0.00	0.00	1140.299	0.00	0.48	378.87	216.600	1.900	376.972
631	0.00	0.00	1137.924	0.00	0.48	376.50	216.600	1.900	374.597
632	0.00	0.00	1135.549	0.00	0.48	374.12	216.600	1.900	372.222
633	0.00	0.00	1133.174	0.00	0.48	371.75	216.600	1.900	369.847
634	0.00	0.00	1130.799	0.00	0.48	369.37	216.600	1.900	367.472
635	0.00	0.00	1128.424	0.00	0.48	367.00	216.600	1.900	365.097
636	0.00	0.00	1126.049	0.00	0.48	364.62	216.600	1.900	362.722
637	0.00	0.00	1123.674	0.00	0.48	362.25	216.600	1.900	360.347
638	0.00	0.00	1121.299	0.00	0.48	359.87	216.600	1.900	357.972
639	0.00	0.00	1118.924	0.00	0.48	357.50	216.600	1.900	355.597
640	0.00	0.00	1116.549	0.00	0.48	355.12	216.600	1.900	353.222
641	0.00	0.00	1114.174	0.00	0.48	352.75	216.600	1.900	350.847
642	0.00	0.00	1111.799	0.00	0.48	350.37	216.600	1.900	348.472
643	0.00	0.00	1109.424	0.00	0.48	348.00	216.600	1.900	346.097
644	0.00	0.00	1107.049	0.00	0.48	345.62	216.600	1.900	343.722
645	0.00	0.00	1104.674	0.00	0.48	343.25	216.600	1.900	341.347
646	0.00	0.00	1102.299	0.00	0.48	340.87	216.600	1.900	338.972
647	0.00	0.00	1099.924	0.00	0.48	338.50	216.600	1.900	336.597
648	0.00	0.00	1097.549	0.00	0.48	336.12	216.600	1.900	334.222
649	0.00	0.00	1095.174	0.00	0.48	333.75	216.600	1.900	331.847
650	0.00	0.00	1092.799	0.00	0.48	331.37	216.600	1.900	329.472
651	0.00	0.00	1090.424	0.00	0.48	329.00	216.600	1.900	327.097
652	0.00	0.00	1088.049	0.00	0.48	326.62	216.600	1.900	324.722
653	0.00	0.00	1085.674	0.00	0.48	324.25	216.600	1.900	322.347
654	0.00	0.00	1083.299	0.00	0.48	321.87	216.600	1.900	319.972
655	0.00	0.00	1080.924	0.00	0.48	319.50	216.600	1.900	317.597
656	0.00	0.00	1078.549	0.00	0.48	317.12	216.600	1.900	315.222
657	0.00	0.00	1076.174	0.00	0.48	314.75	216.600	1.900	312.847
658	0.00	0.00	1073.799	0.00	0.48	312.37	216.600	1.900	310.472
659	0.00	0.00	1071.424	0.00	0.48	310.00	216.600	1.900	308.097
660	0.00	0.00	1069.049	0.00	0.48	307.62	216.600	1.900	305.722
661	0.00	0.00	1066.674	0.00	0.48	305.25	216.600	1.900	303.347
662	0.00	0.00	1064.299	0.00	0.48	302.87	216.600	1.900	300.972
663	0.00	0.00	1061.924	0.00	0.48	300.50	216.600	1.900	298.597
664	0.00	0.00	1059.549	0.00	0.48	298.12	216.600	1.900	296.222
665	0.00	0.00	1057.174	0.00	0.48	295.75	216.600	1.900	293.847
666	0.00	0.00	1054.799	0.00	0.48	293.37	216.600	1.900	291.472
667	0.00	0.00	1052.424	0.00	0.48	291.00	216.600	1.900	289.097
668	0.00	0.00	1050.049	0.00	0.48	288.62	216.600	1.900	286.722
669	0.00	0.00	1047.674	0.00	0.48	286.25	216.600	1.900	284.347
670	0.00	0.00	1045.299	0.00	0.48	283.87	216.600	1.900	281.972
671	0.00	0.00	1042.924	0.00	0.48	281.50	216.600	1.900	279.597
672	0.00	0.00	1040.549	0.00	0.48	279.12	216.600	1.900	277.222
673	0.00	0.00	1038.174	0.00	0.48	276.75	216.600	1.900	274.847
674	0.00	0.00	1035.799	0.00	0.48	274.37	216.600	1.900	272.472
675	0.00	0.00	1033.424	0.00	0.48	272.00	216.600	1.900	270.097
676	0.00	0.00	1031.049	0.00	0.48	269.62	216.600	1.900	267.722
677	0.00	0.00	1028.674	0.00	0.48	267.25	216.600	1.900	265.347
678	0.00	0.00	1026.299	0.00	0.48	264.87	216.600	1.900	262.972
679	0.00	0.00	1023.924	0.00	0.48	262.50	216.600	1.900	260.597
680	0.00	0.00	1021.549	0.00	0.48	260.12	216.600	1.900	258.222
681	0.00	0.00	1019.174	0.00	0.48	257.75	216.600	1.900	255.847
682	0.00	0.00	1016.799	0.00	0.48	255.37	216.600	1.900	253.472
683	0.00	0.00	1014.424	0.00	0.48	253.00	216.600	1.900	251.097
684	0.00	0.00	1012.049	0.00	0.48	250.62	216.600	1.900	248.722
685	0.00	0.00	1009.674	0.00	0.48	248.25	216.600	1.900	246.347
686	0.00	0.00	1007.299	0.00	0.48	245.87	216.600	1.900	243.972
687	0.00	0.00	1004.924	0.00	0.48	243.50	216.600	1.900	241.597
688	0.00	0.00	1002.549	0.00	0.48	241.12	216.600	1.900	239.222
689	0.00	0.00	1000.174	0.00	0.48	238.75	216.600	1.900	236.847
690	0.00	0.00	997.799	0.00	0.48	236.37	216.600	1.900	234.472
691	0.00	0.00	995.424	0.00	0.48	234.00	216.600	1.900	232.097
692	0.00	0.00	993.049	0.00	0.48	231.62	216.600	1.900	229.722
693	0.00	0.00	990.674	0.00	0.48	229.25	216.600	1.900	227.347
694	0.00	0.00	988.299	0.00	0.48	226.87	216.600	1.900	224.972
695	0.00	0.00	985.924	0.00	0.48	224.50	216.600	1.900	222.597
696	0.00	0.00	983.549	0.00	0.48	222.12	216.600	1.900	220.222
697	0.00	0.00	981.174	0.00	0.48	219.75	216.600	1.900	217.847
698	0.00	0.00	978.799	0.00	0.48	217.37	216.600	1.900	215.472
699	0.00	0.00	976.424	0.00	0.48	215.00	216.600	1.900	213.097
700	0.00	0.00	974.049	0.00	0.48	212.62	216.600	1.900	210.722
701	0.00	0.00	971.674	0.00	0.48	210.25	216.600	1.900	208.347
702	0.00	0.00	969.299	0.00	0.48	207.87	216.600	1.900	205.972
703	0.00	0.00	966.924	0.00	0.48	205.50	216.600	1.900	203.597
704	0.00	0.00	964.549	0.00	0.48	203.12	216.600	1.900	201.222
705	0.00	0.00	962.174	0.00	0.48	200.75	216.600	1.900	198.847
706	0.00	0.00	959.799	0.00	0.48	198.37	216.600	1.900	196.472
707	0.00	0.00	957.424	0.00	0.48	196.00	216.600	1.900	194.097
708	0.00	0.00	955.049	0.00	0.48	193.62	216.600	1.900	191.722
709	0.00	0.00	952.674	0.00	0.48	191.25	216.600	1.900	189.347
710	0.00	0.00	950.299	0.00	0.48	188.87	216.600	1.900	186.972
711	0.00	0.00	947.924	0.00	0.48	186.50	216.600	1.900	184.597
712	0.00	0.00	945.549	0.00	0.48	184.12	216.600	1.900	182.222
713	0.00	0.00	943.174	0.00	0.48	181.75	216.600	1.900	179.847

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks Summary	360.00	82.80	Final FF Basin Volume: 1779.174				Final Basin Soakpit Volume: 216.600		
	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
			1802.13	2520.27	1133.93		216.60	1386.35	1041.18
Time (min)	Distribution Curve	Rainfall (mm)	Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min )	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
714	0.00	0.00	940.799	0.00	0.48	179.37	216.600	1.900	177.472
715	0.00	0.00	938.424	0.00	0.48	177.00	216.600	1.900	175.097
716	0.00	0.00	936.049	0.00	0.48	174.62	216.600	1.900	172.722
717	0.00	0.00	933.674	0.00	0.48	172.25	216.600	1.900	170.347
718	0.00	0.00	931.299	0.00	0.48	169.87	216.600	1.900	167.972
719	0.00	0.00	928.924	0.00	0.48	167.50	216.600	1.900	165.597
720	0.00	0.00	926.549	0.00	0.48	165.12	216.600	1.900	163.222
721	0.00	0.00	924.174	0.00	0.48	162.75	216.600	1.900	160.847
722	0.00	0.00	921.799	0.00	0.48	160.37	216.600	1.900	158.472
723	0.00	0.00	919.424	0.00	0.48	158.00	216.600	1.900	156.097
724	0.00	0.00	917.049	0.00	0.48	155.62	216.600	1.900	153.722
725	0.00	0.00	914.674	0.00	0.48	153.25	216.600	1.900	151.347
726	0.00	0.00	912.299	0.00	0.48	150.87	216.600	1.900	148.972
727	0.00	0.00	909.924	0.00	0.48	148.50	216.600	1.900	146.597
728	0.00	0.00	907.549	0.00	0.48	146.12	216.600	1.900	144.222
729	0.00	0.00	905.174	0.00	0.48	143.75	216.600	1.900	141.847
730	0.00	0.00	902.799	0.00	0.48	141.37	216.600	1.900	139.472
731	0.00	0.00	900.424	0.00	0.48	139.00	216.600	1.900	137.097
732	0.00	0.00	898.049	0.00	0.48	136.62	216.600	1.900	134.722
733	0.00	0.00	895.674	0.00	0.48	134.25	216.600	1.900	132.347
734	0.00	0.00	893.299	0.00	0.48	131.87	216.600	1.900	129.972
735	0.00	0.00	890.924	0.00	0.48	129.50	216.600	1.900	127.597
736	0.00	0.00	888.549	0.00	0.48	127.12	216.600	1.900	125.222
737	0.00	0.00	886.174	0.00	0.48	124.75	216.600	1.900	122.847
738	0.00	0.00	883.799	0.00	0.48	122.37	216.600	1.900	120.472
739	0.00	0.00	881.424	0.00	0.48	120.00	216.600	1.900	118.097
740	0.00	0.00	879.049	0.00	0.48	117.62	216.600	1.900	115.722
741	0.00	0.00	876.674	0.00	0.48	115.25	216.600	1.900	113.347
742	0.00	0.00	874.299	0.00	0.48	112.87	216.600	1.900	110.972
743	0.00	0.00	871.924	0.00	0.48	110.50	216.600	1.900	108.597
744	0.00	0.00	869.549	0.00	0.48	108.12	216.600	1.900	106.222
745	0.00	0.00	867.174	0.00	0.48	105.75	216.600	1.900	103.847
746	0.00	0.00	864.799	0.00	0.48	103.37	216.600	1.900	101.472
747	0.00	0.00	862.424	0.00	0.48	101.00	216.600	1.900	99.097
748	0.00	0.00	860.049	0.00	0.48	98.62	216.600	1.900	96.722
749	0.00	0.00	857.674	0.00	0.48	96.25	216.600	1.900	94.347
750	0.00	0.00	855.299	0.00	0.48	93.87	216.600	1.900	91.972
751	0.00	0.00	852.924	0.00	0.48	91.50	216.600	1.900	89.597
752	0.00	0.00	850.549	0.00	0.48	89.12	216.600	1.900	87.222
753	0.00	0.00	848.174	0.00	0.48	86.75	216.600	1.900	84.847
754	0.00	0.00	845.799	0.00	0.48	84.37	216.600	1.900	82.472
755	0.00	0.00	843.424	0.00	0.48	82.00	216.600	1.900	80.097
756	0.00	0.00	841.049	0.00	0.48	79.62	216.600	1.900	77.722
757	0.00	0.00	838.674	0.00	0.48	77.25	216.600	1.900	75.347
758	0.00	0.00	836.299	0.00	0.48	74.87	216.600	1.900	72.972
759	0.00	0.00	833.924	0.00	0.48	72.50	216.600	1.900	70.597
760	0.00	0.00	831.549	0.00	0.48	70.12	216.600	1.900	68.222
761	0.00	0.00	829.174	0.00	0.48	67.75	216.600	1.900	65.847
762	0.00	0.00	826.799	0.00	0.48	65.37	216.600	1.900	63.472
763	0.00	0.00	824.424	0.00	0.48	63.00	216.600	1.900	61.097
764	0.00	0.00	822.049	0.00	0.48	60.62	216.600	1.900	58.722
765	0.00	0.00	819.674	0.00	0.48	58.25	216.600	1.900	56.347
766	0.00	0.00	817.299	0.00	0.48	55.87	216.600	1.900	53.972
767	0.00	0.00	814.924	0.00	0.48	53.50	216.600	1.900	51.597
768	0.00	0.00	812.549	0.00	0.48	51.12	216.600	1.900	49.222
769	0.00	0.00	810.174	0.00	0.48	48.75	216.600	1.900	46.847
770	0.00	0.00	807.799	0.00	0.48	46.37	216.600	1.900	44.472
771	0.00	0.00	805.424	0.00	0.48	44.00	216.600	1.900	42.097
772	0.00	0.00	803.049	0.00	0.48	41.62	216.600	1.900	39.722
773	0.00	0.00	800.674	0.00	0.48	39.25	216.600	1.900	37.347
774	0.00	0.00	798.299	0.00	0.48	36.87	216.600	1.900	34.972
775	0.00	0.00	795.924	0.00	0.48	34.50	216.600	1.900	32.597
776	0.00	0.00	793.549	0.00	0.48	32.12	216.600	1.900	30.222
777	0.00	0.00	791.174	0.00	0.48	29.75	216.600	1.900	27.847
778	0.00	0.00	788.799	0.00	0.48	27.37	216.600	1.900	25.472
779	0.00	0.00	786.424	0.00	0.48	25.00	216.600	1.900	23.097
780	0.00	0.00	784.049	0.00	0.48	22.62	216.600	1.900	20.722
781	0.00	0.00	781.674	0.00	0.48	20.25	216.600	1.900	18.347
782	0.00	0.00	779.299	0.00	0.48	17.87	216.600	1.900	15.972
783	0.00	0.00	776.924	0.00	0.48	15.50	216.600	1.900	13.597
784	0.00	0.00	774.549	0.00	0.48	13.12	216.600	1.900	11.222
785	0.00	0.00	772.174	0.00	0.48	10.75	216.600	1.900	8.847
786	0.00	0.00	769.799	0.00	0.48	8.37	216.600	1.900	6.472
787	0.00	0.00	767.424	0.00	0.48	6.00	216.600	1.900	4.097
788	0.00	0.00	765.049	0.00	0.48	3.62	216.600	1.900	1.722
789	0.00	0.00	762.674	0.00	0.48	1.25	216.600	1.900	0.000
790	0.00	0.00	760.953	0.00	0.48	0.00	215.947	1.900	0.000
791	0.00	0.00	760.478	0.00	0.48	0.00	214.047	1.900	0.000
792	0.00	0.00	760.003	0.00	0.48	0.00	212.147	1.900	0.000
793	0.00	0.00	759.528	0.00	0.48	0.00	210.247	1.900	0.000
794	0.00	0.00	759.053	0.00	0.48	0.00	208.347	1.900	0.000
795	0.00	0.00	758.578	0.00	0.48	0.00	206.447	1.900	0.000
796	0.00	0.00	758.103	0.00	0.48	0.00	204.547	1.900	0.000
797	0.00	0.00	757.628	0.00	0.48	0.00	202.647	1.900	0.000
798	0.00	0.00	757.153	0.00	0.48	0.00	200.747	1.900	0.000
799	0.00	0.00	756.678	0.00	0.48	0.00	198.847	1.900	0.000
800	0.00	0.00	756.203	0.00	0.48	0.00	196.947	1.900	0.000
801	0.00	0.00	755.728	0.00	0.48	0.00	195.047	1.900	0.000
802	0.00	0.00	755.253	0.00	0.48	0.00	193.147	1.900	0.000
803	0.00	0.00	754.778	0.00	0.48	0.00	191.247	1.900	0.000
804	0.00	0.00	754.303	0.00	0.48	0.00	189.347	1.900	0.000
805	0.00	0.00	753.828	0.00	0.48	0.00	187.447	1.900	0.000
806	0.00	0.00	753.353	0.00	0.48	0.00	185.547	1.900	0.000
807	0.00	0.00	752.878	0.00	0.48	0.00	183.647	1.900	0.000
808	0.00	0.00	752.403	0.00	0.48	0.00	181.747	1.900	0.000
809	0.00	0.00	751.928	0.00	0.48	0.00	179.847	1.900	0.000
810	0.00	0.00	751.453	0.00	0.48	0.00	177.947	1.900	0.000
811	0.00	0.00	750.978	0.00	0.48	0.00	176.047	1.900	0.000
812	0.00	0.00	750.503	0.00	0.48	0.00	174.147	1.900	0.000
813	0.00	0.00	750.028	0.00	0.48	0.00	172.247	1.900	0.000
814	0.00	0.00	749.553	0.00	0.48	0.00	170.347	1.900	0.000
815	0.00	0.00	749.078	0.00	0.48	0.00	168.447	1.900	0.000
816	0.00	0.00	748.603	0.00	0.48	0.00	166.547	1.900	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	360.00	82.80	Final FF Basin Volume: 1779.174				Final Basin Soakpit Volume: 216.600		
Summary	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
Time (min)	Distribution Curve	Rainfall (mm)	1802.13	2520.27	1133.93		216.60	1386.35	1041.18
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
817	0.00	0.00	748.127	0.00	0.48	0.00	164.647	1.900	0.000
818	0.00	0.00	747.652	0.00	0.48	0.00	162.747	1.900	0.000
819	0.00	0.00	747.177	0.00	0.48	0.00	160.847	1.900	0.000
820	0.00	0.00	746.702	0.00	0.48	0.00	158.947	1.900	0.000
821	0.00	0.00	746.227	0.00	0.48	0.00	157.047	1.900	0.000
822	0.00	0.00	745.752	0.00	0.48	0.00	155.147	1.900	0.000
823	0.00	0.00	745.277	0.00	0.48	0.00	153.247	1.900	0.000
824	0.00	0.00	744.802	0.00	0.48	0.00	151.347	1.900	0.000
825	0.00	0.00	744.327	0.00	0.48	0.00	149.447	1.900	0.000
826	0.00	0.00	743.852	0.00	0.48	0.00	147.547	1.900	0.000
827	0.00	0.00	743.377	0.00	0.48	0.00	145.647	1.900	0.000
828	0.00	0.00	742.902	0.00	0.48	0.00	143.747	1.900	0.000
829	0.00	0.00	742.427	0.00	0.48	0.00	141.847	1.900	0.000
830	0.00	0.00	741.952	0.00	0.48	0.00	139.947	1.900	0.000
831	0.00	0.00	741.477	0.00	0.48	0.00	138.047	1.900	0.000
832	0.00	0.00	741.002	0.00	0.48	0.00	136.147	1.900	0.000
833	0.00	0.00	740.527	0.00	0.48	0.00	134.247	1.900	0.000
834	0.00	0.00	740.052	0.00	0.48	0.00	132.347	1.900	0.000
835	0.00	0.00	739.577	0.00	0.48	0.00	130.447	1.900	0.000
836	0.00	0.00	739.102	0.00	0.48	0.00	128.547	1.900	0.000
837	0.00	0.00	738.627	0.00	0.48	0.00	126.647	1.900	0.000
838	0.00	0.00	738.152	0.00	0.48	0.00	124.747	1.900	0.000
839	0.00	0.00	737.677	0.00	0.48	0.00	122.847	1.900	0.000
840	0.00	0.00	737.202	0.00	0.48	0.00	120.947	1.900	0.000
841	0.00	0.00	736.727	0.00	0.48	0.00	119.047	1.900	0.000
842	0.00	0.00	736.252	0.00	0.48	0.00	117.147	1.900	0.000
843	0.00	0.00	735.777	0.00	0.48	0.00	115.247	1.900	0.000
844	0.00	0.00	735.302	0.00	0.48	0.00	113.347	1.900	0.000
845	0.00	0.00	734.827	0.00	0.48	0.00	111.447	1.900	0.000
846	0.00	0.00	734.352	0.00	0.48	0.00	109.547	1.900	0.000
847	0.00	0.00	733.877	0.00	0.48	0.00	107.647	1.900	0.000
848	0.00	0.00	733.402	0.00	0.48	0.00	105.747	1.900	0.000
849	0.00	0.00	732.927	0.00	0.48	0.00	103.847	1.900	0.000
850	0.00	0.00	732.452	0.00	0.48	0.00	101.947	1.900	0.000
851	0.00	0.00	731.977	0.00	0.48	0.00	100.047	1.900	0.000
852	0.00	0.00	731.502	0.00	0.48	0.00	98.147	1.900	0.000
853	0.00	0.00	731.027	0.00	0.48	0.00	96.247	1.900	0.000
854	0.00	0.00	730.552	0.00	0.48	0.00	94.347	1.900	0.000
855	0.00	0.00	730.077	0.00	0.48	0.00	92.447	1.900	0.000
856	0.00	0.00	729.602	0.00	0.48	0.00	90.547	1.900	0.000
857	0.00	0.00	729.127	0.00	0.48	0.00	88.647	1.900	0.000
858	0.00	0.00	728.652	0.00	0.48	0.00	86.747	1.900	0.000
859	0.00	0.00	728.177	0.00	0.48	0.00	84.847	1.900	0.000
860	0.00	0.00	727.702	0.00	0.48	0.00	82.947	1.900	0.000
861	0.00	0.00	727.227	0.00	0.48	0.00	81.047	1.900	0.000
862	0.00	0.00	726.752	0.00	0.48	0.00	79.147	1.900	0.000
863	0.00	0.00	726.277	0.00	0.48	0.00	77.247	1.900	0.000
864	0.00	0.00	725.802	0.00	0.48	0.00	75.347	1.900	0.000
865	0.00	0.00	725.327	0.00	0.48	0.00	73.447	1.900	0.000
866	0.00	0.00	724.852	0.00	0.48	0.00	71.547	1.900	0.000
867	0.00	0.00	724.377	0.00	0.48	0.00	69.647	1.900	0.000
868	0.00	0.00	723.902	0.00	0.48	0.00	67.747	1.900	0.000
869	0.00	0.00	723.427	0.00	0.48	0.00	65.847	1.900	0.000
870	0.00	0.00	722.952	0.00	0.48	0.00	63.947	1.900	0.000
871	0.00	0.00	722.477	0.00	0.48	0.00	62.047	1.900	0.000
872	0.00	0.00	722.002	0.00	0.48	0.00	60.147	1.900	0.000
873	0.00	0.00	721.527	0.00	0.48	0.00	58.247	1.900	0.000
874	0.00	0.00	721.052	0.00	0.48	0.00	56.347	1.900	0.000
875	0.00	0.00	720.577	0.00	0.48	0.00	54.447	1.900	0.000
876	0.00	0.00	720.102	0.00	0.48	0.00	52.547	1.900	0.000
877	0.00	0.00	719.627	0.00	0.48	0.00	50.647	1.900	0.000
878	0.00	0.00	719.152	0.00	0.48	0.00	48.747	1.900	0.000
879	0.00	0.00	718.677	0.00	0.48	0.00	46.847	1.900	0.000
880	0.00	0.00	718.202	0.00	0.48	0.00	44.947	1.900	0.000
881	0.00	0.00	717.727	0.00	0.48	0.00	43.047	1.900	0.000
882	0.00	0.00	717.252	0.00	0.48	0.00	41.147	1.900	0.000
883	0.00	0.00	716.777	0.00	0.48	0.00	39.247	1.900	0.000
884	0.00	0.00	716.302	0.00	0.48	0.00	37.347	1.900	0.000
885	0.00	0.00	715.827	0.00	0.48	0.00	35.447	1.900	0.000
886	0.00	0.00	715.352	0.00	0.48	0.00	33.547	1.900	0.000
887	0.00	0.00	714.877	0.00	0.48	0.00	31.647	1.900	0.000
888	0.00	0.00	714.402	0.00	0.48	0.00	29.747	1.900	0.000
889	0.00	0.00	713.927	0.00	0.48	0.00	27.847	1.900	0.000
890	0.00	0.00	713.452	0.00	0.48	0.00	25.947	1.900	0.000
891	0.00	0.00	712.977	0.00	0.48	0.00	24.047	1.900	0.000
892	0.00	0.00	712.502	0.00	0.48	0.00	22.147	1.900	0.000
893	0.00	0.00	712.027	0.00	0.48	0.00	20.247	1.900	0.000
894	0.00	0.00	711.552	0.00	0.48	0.00	18.347	1.900	0.000
895	0.00	0.00	711.077	0.00	0.48	0.00	16.447	1.900	0.000
896	0.00	0.00	710.602	0.00	0.48	0.00	14.547	1.900	0.000
897	0.00	0.00	710.127	0.00	0.48	0.00	12.647	1.900	0.000
898	0.00	0.00	709.652	0.00	0.48	0.00	10.747	1.900	0.000
899	0.00	0.00	709.177	0.00	0.48	0.00	8.847	1.900	0.000
900	0.00	0.00	708.702	0.00	0.48	0.00	6.947	1.900	0.000
901	0.00	0.00	708.227	0.00	0.48	0.00	5.047	1.900	0.000
902	0.00	0.00	707.752	0.00	0.48	0.00	3.147	1.900	0.000
903	0.00	0.00	707.277	0.00	0.48	0.00	1.247	1.247	0.000
904	0.00	0.00	706.802	0.00	0.48	0.00	0.000	0.000	0.000
905	0.00	0.00	706.327	0.00	0.48	0.00	0.000	0.000	0.000
906	0.00	0.00	705.852	0.00	0.48	0.00	0.000	0.000	0.000
907	0.00	0.00	705.377	0.00	0.48	0.00	0.000	0.000	0.000
908	0.00	0.00	704.902	0.00	0.48	0.00	0.000	0.000	0.000
909	0.00	0.00	704.427	0.00	0.48	0.00	0.000	0.000	0.000
910	0.00	0.00	703.952	0.00	0.48	0.00	0.000	0.000	0.000
911	0.00	0.00	703.477	0.00	0.48	0.00	0.000	0.000	0.000
912	0.00	0.00	703.002	0.00	0.48	0.00	0.000	0.000	0.000
913	0.00	0.00	702.527	0.00	0.48	0.00	0.000	0.000	0.000
914	0.00	0.00	702.052	0.00	0.48	0.00	0.000	0.000	0.000
915	0.00	0.00	701.577	0.00	0.48	0.00	0.000	0.000	0.000
916	0.00	0.00	701.102	0.00	0.48	0.00	0.000	0.000	0.000
917	0.00	0.00	700.627	0.00	0.48	0.00	0.000	0.000	0.000
918	0.00	0.00	700.152	0.00	0.48	0.00	0.000	0.000	0.000
919	0.00	0.00	699.677	0.00	0.48	0.00	0.000	0.000	0.000



Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	360.00	82.80	Final FF Basin Volume:		1779.174		Final Basin Soakpit Volume:		216.600
Summary	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
Time (min)	Distribution Curve	Rainfall (mm)	1802.13	2520.27	1133.93		216.60	1386.35	1041.18
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
920	0.00	0.00	699.202	0.00	0.48	0.00	0.000	0.000	0.000
921	0.00	0.00	698.727	0.00	0.48	0.00	0.000	0.000	0.000
922	0.00	0.00	698.252	0.00	0.48	0.00	0.000	0.000	0.000
923	0.00	0.00	697.777	0.00	0.48	0.00	0.000	0.000	0.000
924	0.00	0.00	697.302	0.00	0.48	0.00	0.000	0.000	0.000
925	0.00	0.00	696.827	0.00	0.48	0.00	0.000	0.000	0.000
926	0.00	0.00	696.352	0.00	0.48	0.00	0.000	0.000	0.000
927	0.00	0.00	695.877	0.00	0.48	0.00	0.000	0.000	0.000
928	0.00	0.00	695.402	0.00	0.48	0.00	0.000	0.000	0.000
929	0.00	0.00	694.927	0.00	0.48	0.00	0.000	0.000	0.000
930	0.00	0.00	694.452	0.00	0.48	0.00	0.000	0.000	0.000
931	0.00	0.00	693.977	0.00	0.48	0.00	0.000	0.000	0.000
932	0.00	0.00	693.502	0.00	0.48	0.00	0.000	0.000	0.000
933	0.00	0.00	693.027	0.00	0.48	0.00	0.000	0.000	0.000
934	0.00	0.00	692.552	0.00	0.48	0.00	0.000	0.000	0.000
935	0.00	0.00	692.077	0.00	0.48	0.00	0.000	0.000	0.000
936	0.00	0.00	691.602	0.00	0.48	0.00	0.000	0.000	0.000
937	0.00	0.00	691.127	0.00	0.48	0.00	0.000	0.000	0.000
938	0.00	0.00	690.652	0.00	0.48	0.00	0.000	0.000	0.000
939	0.00	0.00	690.177	0.00	0.48	0.00	0.000	0.000	0.000
940	0.00	0.00	689.702	0.00	0.48	0.00	0.000	0.000	0.000
941	0.00	0.00	689.227	0.00	0.48	0.00	0.000	0.000	0.000
942	0.00	0.00	688.752	0.00	0.48	0.00	0.000	0.000	0.000
943	0.00	0.00	688.277	0.00	0.48	0.00	0.000	0.000	0.000
944	0.00	0.00	687.802	0.00	0.48	0.00	0.000	0.000	0.000
945	0.00	0.00	687.327	0.00	0.48	0.00	0.000	0.000	0.000
946	0.00	0.00	686.852	0.00	0.48	0.00	0.000	0.000	0.000
947	0.00	0.00	686.377	0.00	0.48	0.00	0.000	0.000	0.000
948	0.00	0.00	685.902	0.00	0.48	0.00	0.000	0.000	0.000
949	0.00	0.00	685.427	0.00	0.48	0.00	0.000	0.000	0.000
950	0.00	0.00	684.952	0.00	0.48	0.00	0.000	0.000	0.000
951	0.00	0.00	684.477	0.00	0.48	0.00	0.000	0.000	0.000
952	0.00	0.00	684.002	0.00	0.48	0.00	0.000	0.000	0.000
953	0.00	0.00	683.527	0.00	0.48	0.00	0.000	0.000	0.000
954	0.00	0.00	683.052	0.00	0.48	0.00	0.000	0.000	0.000
955	0.00	0.00	682.577	0.00	0.48	0.00	0.000	0.000	0.000
956	0.00	0.00	682.102	0.00	0.48	0.00	0.000	0.000	0.000
957	0.00	0.00	681.627	0.00	0.48	0.00	0.000	0.000	0.000
958	0.00	0.00	681.152	0.00	0.48	0.00	0.000	0.000	0.000
959	0.00	0.00	680.677	0.00	0.48	0.00	0.000	0.000	0.000
960	0.00	0.00	680.202	0.00	0.48	0.00	0.000	0.000	0.000
961	0.00	0.00	679.727	0.00	0.48	0.00	0.000	0.000	0.000
962	0.00	0.00	679.252	0.00	0.48	0.00	0.000	0.000	0.000
963	0.00	0.00	678.777	0.00	0.48	0.00	0.000	0.000	0.000
964	0.00	0.00	678.302	0.00	0.48	0.00	0.000	0.000	0.000
965	0.00	0.00	677.827	0.00	0.48	0.00	0.000	0.000	0.000
966	0.00	0.00	677.352	0.00	0.48	0.00	0.000	0.000	0.000
967	0.00	0.00	676.877	0.00	0.48	0.00	0.000	0.000	0.000
968	0.00	0.00	676.402	0.00	0.48	0.00	0.000	0.000	0.000
969	0.00	0.00	675.927	0.00	0.48	0.00	0.000	0.000	0.000
970	0.00	0.00	675.452	0.00	0.48	0.00	0.000	0.000	0.000
971	0.00	0.00	674.977	0.00	0.48	0.00	0.000	0.000	0.000
972	0.00	0.00	674.502	0.00	0.48	0.00	0.000	0.000	0.000
973	0.00	0.00	674.027	0.00	0.48	0.00	0.000	0.000	0.000
974	0.00	0.00	673.552	0.00	0.48	0.00	0.000	0.000	0.000
975	0.00	0.00	673.077	0.00	0.48	0.00	0.000	0.000	0.000
976	0.00	0.00	672.602	0.00	0.48	0.00	0.000	0.000	0.000
977	0.00	0.00	672.127	0.00	0.48	0.00	0.000	0.000	0.000
978	0.00	0.00	671.652	0.00	0.48	0.00	0.000	0.000	0.000
979	0.00	0.00	671.177	0.00	0.48	0.00	0.000	0.000	0.000
980	0.00	0.00	670.702	0.00	0.48	0.00	0.000	0.000	0.000
981	0.00	0.00	670.227	0.00	0.48	0.00	0.000	0.000	0.000
982	0.00	0.00	669.752	0.00	0.48	0.00	0.000	0.000	0.000
983	0.00	0.00	669.277	0.00	0.48	0.00	0.000	0.000	0.000
984	0.00	0.00	668.802	0.00	0.48	0.00	0.000	0.000	0.000
985	0.00	0.00	668.327	0.00	0.48	0.00	0.000	0.000	0.000
986	0.00	0.00	667.852	0.00	0.48	0.00	0.000	0.000	0.000
987	0.00	0.00	667.377	0.00	0.48	0.00	0.000	0.000	0.000
988	0.00	0.00	666.902	0.00	0.48	0.00	0.000	0.000	0.000
989	0.00	0.00	666.427	0.00	0.48	0.00	0.000	0.000	0.000
990	0.00	0.00	665.952	0.00	0.48	0.00	0.000	0.000	0.000
991	0.00	0.00	665.477	0.00	0.48	0.00	0.000	0.000	0.000
992	0.00	0.00	665.002	0.00	0.48	0.00	0.000	0.000	0.000
993	0.00	0.00	664.527	0.00	0.48	0.00	0.000	0.000	0.000
994	0.00	0.00	664.052	0.00	0.48	0.00	0.000	0.000	0.000
995	0.00	0.00	663.577	0.00	0.48	0.00	0.000	0.000	0.000
996	0.00	0.00	663.102	0.00	0.48	0.00	0.000	0.000	0.000
997	0.00	0.00	662.627	0.00	0.48	0.00	0.000	0.000	0.000
998	0.00	0.00	662.152	0.00	0.48	0.00	0.000	0.000	0.000
999	0.00	0.00	661.677	0.00	0.48	0.00	0.000	0.000	0.000
1000	0.00	0.00	661.202	0.00	0.48	0.00	0.000	0.000	0.000
1001	0.00	0.00	660.727	0.00	0.48	0.00	0.000	0.000	0.000
1002	0.00	0.00	660.252	0.00	0.48	0.00	0.000	0.000	0.000
1003	0.00	0.00	659.777	0.00	0.48	0.00	0.000	0.000	0.000
1004	0.00	0.00	659.302	0.00	0.48	0.00	0.000	0.000	0.000
1005	0.00	0.00	658.827	0.00	0.48	0.00	0.000	0.000	0.000
1006	0.00	0.00	658.352	0.00	0.48	0.00	0.000	0.000	0.000
1007	0.00	0.00	657.877	0.00	0.48	0.00	0.000	0.000	0.000
1008	0.00	0.00	657.402	0.00	0.48	0.00	0.000	0.000	0.000
1009	0.00	0.00	656.927	0.00	0.48	0.00	0.000	0.000	0.000
1010	0.00	0.00	656.452	0.00	0.48	0.00	0.000	0.000	0.000
1011	0.00	0.00	655.977	0.00	0.48	0.00	0.000	0.000	0.000
1012	0.00	0.00	655.502	0.00	0.48	0.00	0.000	0.000	0.000
1013	0.00	0.00	655.027	0.00	0.48	0.00	0.000	0.000	0.000
1014	0.00	0.00	654.552	0.00	0.48	0.00	0.000	0.000	0.000
1015	0.00	0.00	654.077	0.00	0.48	0.00	0.000	0.000	0.000
1016	0.00	0.00	653.602	0.00	0.48	0.00	0.000	0.000	0.000
1017	0.00	0.00	653.127	0.00	0.48	0.00	0.000	0.000	0.000
1018	0.00	0.00	652.652	0.00	0.48	0.00	0.000	0.000	0.000
1019	0.00	0.00	652.177	0.00	0.48	0.00	0.000	0.000	0.000
1020	0.00	0.00	651.702	0.00	0.48	0.00	0.000	0.000	0.000
1021	0.00	0.00	651.227	0.00	0.48	0.00	0.000	0.000	0.000
1022	0.00	0.00	650.752	0.00	0.48	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	360.00	82.80	Final FF Basin Volume:		1779.174		Final Basin Soakpit Volume:		216.600
Summary	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
			1802.13	2520.27	1133.93		216.60	1386.35	1041.18
Time (min)	Distribution Curve	Rainfall (mm)	Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
1023	0.00	0.00	650.277	0.00	0.48	0.00	0.000	0.000	0.000
1024	0.00	0.00	649.802	0.00	0.48	0.00	0.000	0.000	0.000
1025	0.00	0.00	649.327	0.00	0.48	0.00	0.000	0.000	0.000
1026	0.00	0.00	648.852	0.00	0.48	0.00	0.000	0.000	0.000
1027	0.00	0.00	648.377	0.00	0.48	0.00	0.000	0.000	0.000
1028	0.00	0.00	647.902	0.00	0.48	0.00	0.000	0.000	0.000
1029	0.00	0.00	647.427	0.00	0.48	0.00	0.000	0.000	0.000
1030	0.00	0.00	646.952	0.00	0.48	0.00	0.000	0.000	0.000
1031	0.00	0.00	646.477	0.00	0.48	0.00	0.000	0.000	0.000
1032	0.00	0.00	646.002	0.00	0.48	0.00	0.000	0.000	0.000
1033	0.00	0.00	645.527	0.00	0.48	0.00	0.000	0.000	0.000
1034	0.00	0.00	645.052	0.00	0.48	0.00	0.000	0.000	0.000
1035	0.00	0.00	644.577	0.00	0.48	0.00	0.000	0.000	0.000
1036	0.00	0.00	644.102	0.00	0.48	0.00	0.000	0.000	0.000
1037	0.00	0.00	643.627	0.00	0.48	0.00	0.000	0.000	0.000
1038	0.00	0.00	643.152	0.00	0.48	0.00	0.000	0.000	0.000
1039	0.00	0.00	642.677	0.00	0.48	0.00	0.000	0.000	0.000
1040	0.00	0.00	642.202	0.00	0.48	0.00	0.000	0.000	0.000
1041	0.00	0.00	641.727	0.00	0.48	0.00	0.000	0.000	0.000
1042	0.00	0.00	641.252	0.00	0.48	0.00	0.000	0.000	0.000
1043	0.00	0.00	640.777	0.00	0.48	0.00	0.000	0.000	0.000
1044	0.00	0.00	640.302	0.00	0.48	0.00	0.000	0.000	0.000
1045	0.00	0.00	639.827	0.00	0.48	0.00	0.000	0.000	0.000
1046	0.00	0.00	639.352	0.00	0.48	0.00	0.000	0.000	0.000
1047	0.00	0.00	638.877	0.00	0.48	0.00	0.000	0.000	0.000
1048	0.00	0.00	638.402	0.00	0.48	0.00	0.000	0.000	0.000
1049	0.00	0.00	637.927	0.00	0.48	0.00	0.000	0.000	0.000
1050	0.00	0.00	637.452	0.00	0.48	0.00	0.000	0.000	0.000
1051	0.00	0.00	636.977	0.00	0.48	0.00	0.000	0.000	0.000
1052	0.00	0.00	636.502	0.00	0.48	0.00	0.000	0.000	0.000
1053	0.00	0.00	636.027	0.00	0.48	0.00	0.000	0.000	0.000
1054	0.00	0.00	635.552	0.00	0.48	0.00	0.000	0.000	0.000
1055	0.00	0.00	635.077	0.00	0.48	0.00	0.000	0.000	0.000
1056	0.00	0.00	634.602	0.00	0.48	0.00	0.000	0.000	0.000
1057	0.00	0.00	634.127	0.00	0.48	0.00	0.000	0.000	0.000
1058	0.00	0.00	633.652	0.00	0.48	0.00	0.000	0.000	0.000
1059	0.00	0.00	633.177	0.00	0.48	0.00	0.000	0.000	0.000
1060	0.00	0.00	632.702	0.00	0.48	0.00	0.000	0.000	0.000
1061	0.00	0.00	632.227	0.00	0.48	0.00	0.000	0.000	0.000
1062	0.00	0.00	631.752	0.00	0.48	0.00	0.000	0.000	0.000
1063	0.00	0.00	631.277	0.00	0.48	0.00	0.000	0.000	0.000
1064	0.00	0.00	630.802	0.00	0.48	0.00	0.000	0.000	0.000
1065	0.00	0.00	630.327	0.00	0.48	0.00	0.000	0.000	0.000
1066	0.00	0.00	629.852	0.00	0.48	0.00	0.000	0.000	0.000
1067	0.00	0.00	629.377	0.00	0.48	0.00	0.000	0.000	0.000
1068	0.00	0.00	628.902	0.00	0.48	0.00	0.000	0.000	0.000
1069	0.00	0.00	628.427	0.00	0.48	0.00	0.000	0.000	0.000
1070	0.00	0.00	627.952	0.00	0.48	0.00	0.000	0.000	0.000
1071	0.00	0.00	627.477	0.00	0.48	0.00	0.000	0.000	0.000
1072	0.00	0.00	627.002	0.00	0.48	0.00	0.000	0.000	0.000
1073	0.00	0.00	626.527	0.00	0.48	0.00	0.000	0.000	0.000
1074	0.00	0.00	626.052	0.00	0.48	0.00	0.000	0.000	0.000
1075	0.00	0.00	625.577	0.00	0.48	0.00	0.000	0.000	0.000
1076	0.00	0.00	625.102	0.00	0.48	0.00	0.000	0.000	0.000
1077	0.00	0.00	624.627	0.00	0.48	0.00	0.000	0.000	0.000
1078	0.00	0.00	624.152	0.00	0.48	0.00	0.000	0.000	0.000
1079	0.00	0.00	623.677	0.00	0.48	0.00	0.000	0.000	0.000
1080	0.00	0.00	623.202	0.00	0.48	0.00	0.000	0.000	0.000
1081	0.00	0.00	622.727	0.00	0.48	0.00	0.000	0.000	0.000
1082	0.00	0.00	622.252	0.00	0.48	0.00	0.000	0.000	0.000
1083	0.00	0.00	621.777	0.00	0.48	0.00	0.000	0.000	0.000
1084	0.00	0.00	621.302	0.00	0.48	0.00	0.000	0.000	0.000
1085	0.00	0.00	620.827	0.00	0.48	0.00	0.000	0.000	0.000
1086	0.00	0.00	620.352	0.00	0.48	0.00	0.000	0.000	0.000
1087	0.00	0.00	619.877	0.00	0.48	0.00	0.000	0.000	0.000
1088	0.00	0.00	619.402	0.00	0.48	0.00	0.000	0.000	0.000
1089	0.00	0.00	618.927	0.00	0.48	0.00	0.000	0.000	0.000
1090	0.00	0.00	618.452	0.00	0.48	0.00	0.000	0.000	0.000
1091	0.00	0.00	617.977	0.00	0.48	0.00	0.000	0.000	0.000
1092	0.00	0.00	617.502	0.00	0.48	0.00	0.000	0.000	0.000
1093	0.00	0.00	617.027	0.00	0.48	0.00	0.000	0.000	0.000
1094	0.00	0.00	616.552	0.00	0.48	0.00	0.000	0.000	0.000
1095	0.00	0.00	616.077	0.00	0.48	0.00	0.000	0.000	0.000
1096	0.00	0.00	615.602	0.00	0.48	0.00	0.000	0.000	0.000
1097	0.00	0.00	615.127	0.00	0.48	0.00	0.000	0.000	0.000
1098	0.00	0.00	614.652	0.00	0.48	0.00	0.000	0.000	0.000
1099	0.00	0.00	614.177	0.00	0.48	0.00	0.000	0.000	0.000
1100	0.00	0.00	613.702	0.00	0.48	0.00	0.000	0.000	0.000
1101	0.00	0.00	613.227	0.00	0.48	0.00	0.000	0.000	0.000
1102	0.00	0.00	612.752	0.00	0.48	0.00	0.000	0.000	0.000
1103	0.00	0.00	612.277	0.00	0.48	0.00	0.000	0.000	0.000
1104	0.00	0.00	611.802	0.00	0.48	0.00	0.000	0.000	0.000
1105	0.00	0.00	611.327	0.00	0.48	0.00	0.000	0.000	0.000
1106	0.00	0.00	610.852	0.00	0.48	0.00	0.000	0.000	0.000
1107	0.00	0.00	610.377	0.00	0.48	0.00	0.000	0.000	0.000
1108	0.00	0.00	609.902	0.00	0.48	0.00	0.000	0.000	0.000
1109	0.00	0.00	609.427	0.00	0.48	0.00	0.000	0.000	0.000
1110	0.00	0.00	608.952	0.00	0.48	0.00	0.000	0.000	0.000
1111	0.00	0.00	608.477	0.00	0.48	0.00	0.000	0.000	0.000
1112	0.00	0.00	608.002	0.00	0.48	0.00	0.000	0.000	0.000
1113	0.00	0.00	607.527	0.00	0.48	0.00	0.000	0.000	0.000
1114	0.00	0.00	607.052	0.00	0.48	0.00	0.000	0.000	0.000
1115	0.00	0.00	606.577	0.00	0.48	0.00	0.000	0.000	0.000
1116	0.00	0.00	606.102	0.00	0.48	0.00	0.000	0.000	0.000
1117	0.00	0.00	605.627	0.00	0.48	0.00	0.000	0.000	0.000
1118	0.00	0.00	605.152	0.00	0.48	0.00	0.000	0.000	0.000
1119	0.00	0.00	604.677	0.00	0.48	0.00	0.000	0.000	0.000
1120	0.00	0.00	604.202	0.00	0.48	0.00	0.000	0.000	0.000
1121	0.00	0.00	603.727	0.00	0.48	0.00	0.000	0.000	0.000
1122	0.00	0.00	603.252	0.00	0.48	0.00	0.000	0.000	0.000
1123	0.00	0.00	602.777	0.00	0.48	0.00	0.000	0.000	0.000
1124	0.00	0.00	602.302	0.00	0.48	0.00	0.000	0.000	0.000
1125	0.00	0.00	601.827	0.00	0.48	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	360.00	82.80	Final FF Basin Volume:		1779.174		Final Basin Soakpit Volume:		216.600
Summary	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
Time (min)	Distribution Curve	Rainfall (mm)	1802.13	2520.27	1133.93		216.60	1386.35	1041.18
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
1126	0.00	0.00	601.352	0.00	0.48	0.00	0.000	0.000	0.000
1127	0.00	0.00	600.877	0.00	0.48	0.00	0.000	0.000	0.000
1128	0.00	0.00	600.402	0.00	0.48	0.00	0.000	0.000	0.000
1129	0.00	0.00	599.927	0.00	0.48	0.00	0.000	0.000	0.000
1130	0.00	0.00	599.452	0.00	0.48	0.00	0.000	0.000	0.000
1131	0.00	0.00	598.977	0.00	0.48	0.00	0.000	0.000	0.000
1132	0.00	0.00	598.502	0.00	0.48	0.00	0.000	0.000	0.000
1133	0.00	0.00	598.027	0.00	0.48	0.00	0.000	0.000	0.000
1134	0.00	0.00	597.552	0.00	0.48	0.00	0.000	0.000	0.000
1135	0.00	0.00	597.077	0.00	0.48	0.00	0.000	0.000	0.000
1136	0.00	0.00	596.602	0.00	0.48	0.00	0.000	0.000	0.000
1137	0.00	0.00	596.127	0.00	0.48	0.00	0.000	0.000	0.000
1138	0.00	0.00	595.652	0.00	0.48	0.00	0.000	0.000	0.000
1139	0.00	0.00	595.177	0.00	0.48	0.00	0.000	0.000	0.000
1140	0.00	0.00	594.702	0.00	0.48	0.00	0.000	0.000	0.000
1141	0.00	0.00	594.227	0.00	0.48	0.00	0.000	0.000	0.000
1142	0.00	0.00	593.752	0.00	0.48	0.00	0.000	0.000	0.000
1143	0.00	0.00	593.277	0.00	0.48	0.00	0.000	0.000	0.000
1144	0.00	0.00	592.802	0.00	0.48	0.00	0.000	0.000	0.000
1145	0.00	0.00	592.327	0.00	0.48	0.00	0.000	0.000	0.000
1146	0.00	0.00	591.852	0.00	0.48	0.00	0.000	0.000	0.000
1147	0.00	0.00	591.377	0.00	0.48	0.00	0.000	0.000	0.000
1148	0.00	0.00	590.902	0.00	0.48	0.00	0.000	0.000	0.000
1149	0.00	0.00	590.427	0.00	0.48	0.00	0.000	0.000	0.000
1150	0.00	0.00	589.952	0.00	0.48	0.00	0.000	0.000	0.000
1151	0.00	0.00	589.477	0.00	0.48	0.00	0.000	0.000	0.000
1152	0.00	0.00	589.002	0.00	0.48	0.00	0.000	0.000	0.000
1153	0.00	0.00	588.527	0.00	0.48	0.00	0.000	0.000	0.000
1154	0.00	0.00	588.052	0.00	0.48	0.00	0.000	0.000	0.000
1155	0.00	0.00	587.577	0.00	0.48	0.00	0.000	0.000	0.000
1156	0.00	0.00	587.102	0.00	0.48	0.00	0.000	0.000	0.000
1157	0.00	0.00	586.627	0.00	0.48	0.00	0.000	0.000	0.000
1158	0.00	0.00	586.152	0.00	0.48	0.00	0.000	0.000	0.000
1159	0.00	0.00	585.677	0.00	0.48	0.00	0.000	0.000	0.000
1160	0.00	0.00	585.202	0.00	0.48	0.00	0.000	0.000	0.000
1161	0.00	0.00	584.727	0.00	0.48	0.00	0.000	0.000	0.000
1162	0.00	0.00	584.252	0.00	0.48	0.00	0.000	0.000	0.000
1163	0.00	0.00	583.777	0.00	0.48	0.00	0.000	0.000	0.000
1164	0.00	0.00	583.302	0.00	0.48	0.00	0.000	0.000	0.000
1165	0.00	0.00	582.827	0.00	0.48	0.00	0.000	0.000	0.000
1166	0.00	0.00	582.352	0.00	0.48	0.00	0.000	0.000	0.000
1167	0.00	0.00	581.877	0.00	0.48	0.00	0.000	0.000	0.000
1168	0.00	0.00	581.402	0.00	0.48	0.00	0.000	0.000	0.000
1169	0.00	0.00	580.927	0.00	0.48	0.00	0.000	0.000	0.000
1170	0.00	0.00	580.452	0.00	0.48	0.00	0.000	0.000	0.000
1171	0.00	0.00	579.977	0.00	0.48	0.00	0.000	0.000	0.000
1172	0.00	0.00	579.502	0.00	0.48	0.00	0.000	0.000	0.000
1173	0.00	0.00	579.027	0.00	0.48	0.00	0.000	0.000	0.000
1174	0.00	0.00	578.552	0.00	0.48	0.00	0.000	0.000	0.000
1175	0.00	0.00	578.077	0.00	0.48	0.00	0.000	0.000	0.000
1176	0.00	0.00	577.602	0.00	0.48	0.00	0.000	0.000	0.000
1177	0.00	0.00	577.127	0.00	0.48	0.00	0.000	0.000	0.000
1178	0.00	0.00	576.652	0.00	0.48	0.00	0.000	0.000	0.000
1179	0.00	0.00	576.177	0.00	0.48	0.00	0.000	0.000	0.000
1180	0.00	0.00	575.702	0.00	0.48	0.00	0.000	0.000	0.000
1181	0.00	0.00	575.227	0.00	0.48	0.00	0.000	0.000	0.000
1182	0.00	0.00	574.752	0.00	0.48	0.00	0.000	0.000	0.000
1183	0.00	0.00	574.277	0.00	0.48	0.00	0.000	0.000	0.000
1184	0.00	0.00	573.802	0.00	0.48	0.00	0.000	0.000	0.000
1185	0.00	0.00	573.327	0.00	0.48	0.00	0.000	0.000	0.000
1186	0.00	0.00	572.852	0.00	0.48	0.00	0.000	0.000	0.000
1187	0.00	0.00	572.377	0.00	0.48	0.00	0.000	0.000	0.000
1188	0.00	0.00	571.902	0.00	0.48	0.00	0.000	0.000	0.000
1189	0.00	0.00	571.427	0.00	0.48	0.00	0.000	0.000	0.000
1190	0.00	0.00	570.952	0.00	0.48	0.00	0.000	0.000	0.000
1191	0.00	0.00	570.477	0.00	0.48	0.00	0.000	0.000	0.000
1192	0.00	0.00	570.002	0.00	0.48	0.00	0.000	0.000	0.000
1193	0.00	0.00	569.527	0.00	0.48	0.00	0.000	0.000	0.000
1194	0.00	0.00	569.052	0.00	0.48	0.00	0.000	0.000	0.000
1195	0.00	0.00	568.577	0.00	0.48	0.00	0.000	0.000	0.000
1196	0.00	0.00	568.102	0.00	0.48	0.00	0.000	0.000	0.000
1197	0.00	0.00	567.627	0.00	0.48	0.00	0.000	0.000	0.000
1198	0.00	0.00	567.152	0.00	0.48	0.00	0.000	0.000	0.000
1199	0.00	0.00	566.677	0.00	0.48	0.00	0.000	0.000	0.000
1200	0.00	0.00	566.202	0.00	0.48	0.00	0.000	0.000	0.000
1201	0.00	0.00	565.727	0.00	0.48	0.00	0.000	0.000	0.000
1202	0.00	0.00	565.252	0.00	0.48	0.00	0.000	0.000	0.000
1203	0.00	0.00	564.777	0.00	0.48	0.00	0.000	0.000	0.000
1204	0.00	0.00	564.302	0.00	0.48	0.00	0.000	0.000	0.000
1205	0.00	0.00	563.827	0.00	0.48	0.00	0.000	0.000	0.000
1206	0.00	0.00	563.352	0.00	0.48	0.00	0.000	0.000	0.000
1207	0.00	0.00	562.877	0.00	0.48	0.00	0.000	0.000	0.000
1208	0.00	0.00	562.402	0.00	0.48	0.00	0.000	0.000	0.000
1209	0.00	0.00	561.927	0.00	0.48	0.00	0.000	0.000	0.000
1210	0.00	0.00	561.452	0.00	0.48	0.00	0.000	0.000	0.000
1211	0.00	0.00	560.977	0.00	0.48	0.00	0.000	0.000	0.000
1212	0.00	0.00	560.502	0.00	0.48	0.00	0.000	0.000	0.000
1213	0.00	0.00	560.027	0.00	0.48	0.00	0.000	0.000	0.000
1214	0.00	0.00	559.552	0.00	0.48	0.00	0.000	0.000	0.000
1215	0.00	0.00	559.077	0.00	0.48	0.00	0.000	0.000	0.000
1216	0.00	0.00	558.602	0.00	0.48	0.00	0.000	0.000	0.000
1217	0.00	0.00	558.127	0.00	0.48	0.00	0.000	0.000	0.000
1218	0.00	0.00	557.652	0.00	0.48	0.00	0.000	0.000	0.000
1219	0.00	0.00	557.177	0.00	0.48	0.00	0.000	0.000	0.000
1220	0.00	0.00	556.702	0.00	0.48	0.00	0.000	0.000	0.000
1221	0.00	0.00	556.227	0.00	0.48	0.00	0.000	0.000	0.000
1222	0.00	0.00	555.752	0.00	0.48	0.00	0.000	0.000	0.000
1223	0.00	0.00	555.277	0.00	0.48	0.00	0.000	0.000	0.000
1224	0.00	0.00	554.802	0.00	0.48	0.00	0.000	0.000	0.000
1225	0.00	0.00	554.327	0.00	0.48	0.00	0.000	0.000	0.000
1226	0.00	0.00	553.852	0.00	0.48	0.00	0.000	0.000	0.000
1227	0.00	0.00	553.377	0.00	0.48	0.00	0.000	0.000	0.000
1228	0.00	0.00	552.902	0.00	0.48	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	360.00	82.80	Final FF Basin Volume: 1779.174				Final Basin Soakpit Volume: 216.600		
Summary	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
Time (min)	Distribution Curve	Rainfall (mm)	1802.13	2520.27	1133.93		216.60	1386.35	1041.18
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
1229	0.00	0.00	552.427	0.00	0.48	0.00	0.000	0.000	0.000
1230	0.00	0.00	551.952	0.00	0.48	0.00	0.000	0.000	0.000
1231	0.00	0.00	551.477	0.00	0.48	0.00	0.000	0.000	0.000
1232	0.00	0.00	551.002	0.00	0.48	0.00	0.000	0.000	0.000
1233	0.00	0.00	550.527	0.00	0.48	0.00	0.000	0.000	0.000
1234	0.00	0.00	550.052	0.00	0.48	0.00	0.000	0.000	0.000
1235	0.00	0.00	549.577	0.00	0.48	0.00	0.000	0.000	0.000
1236	0.00	0.00	549.102	0.00	0.48	0.00	0.000	0.000	0.000
1237	0.00	0.00	548.627	0.00	0.48	0.00	0.000	0.000	0.000
1238	0.00	0.00	548.152	0.00	0.48	0.00	0.000	0.000	0.000
1239	0.00	0.00	547.677	0.00	0.48	0.00	0.000	0.000	0.000
1240	0.00	0.00	547.202	0.00	0.48	0.00	0.000	0.000	0.000
1241	0.00	0.00	546.727	0.00	0.48	0.00	0.000	0.000	0.000
1242	0.00	0.00	546.252	0.00	0.48	0.00	0.000	0.000	0.000
1243	0.00	0.00	545.777	0.00	0.48	0.00	0.000	0.000	0.000
1244	0.00	0.00	545.302	0.00	0.48	0.00	0.000	0.000	0.000
1245	0.00	0.00	544.827	0.00	0.48	0.00	0.000	0.000	0.000
1246	0.00	0.00	544.352	0.00	0.48	0.00	0.000	0.000	0.000
1247	0.00	0.00	543.877	0.00	0.48	0.00	0.000	0.000	0.000
1248	0.00	0.00	543.402	0.00	0.48	0.00	0.000	0.000	0.000
1249	0.00	0.00	542.927	0.00	0.48	0.00	0.000	0.000	0.000
1250	0.00	0.00	542.452	0.00	0.48	0.00	0.000	0.000	0.000
1251	0.00	0.00	541.977	0.00	0.48	0.00	0.000	0.000	0.000
1252	0.00	0.00	541.502	0.00	0.48	0.00	0.000	0.000	0.000
1253	0.00	0.00	541.027	0.00	0.48	0.00	0.000	0.000	0.000
1254	0.00	0.00	540.552	0.00	0.48	0.00	0.000	0.000	0.000
1255	0.00	0.00	540.077	0.00	0.48	0.00	0.000	0.000	0.000
1256	0.00	0.00	539.602	0.00	0.48	0.00	0.000	0.000	0.000
1257	0.00	0.00	539.127	0.00	0.48	0.00	0.000	0.000	0.000
1258	0.00	0.00	538.652	0.00	0.48	0.00	0.000	0.000	0.000
1259	0.00	0.00	538.177	0.00	0.48	0.00	0.000	0.000	0.000
1260	0.00	0.00	537.702	0.00	0.48	0.00	0.000	0.000	0.000
1261	0.00	0.00	537.227	0.00	0.48	0.00	0.000	0.000	0.000
1262	0.00	0.00	536.752	0.00	0.48	0.00	0.000	0.000	0.000
1263	0.00	0.00	536.277	0.00	0.48	0.00	0.000	0.000	0.000
1264	0.00	0.00	535.802	0.00	0.48	0.00	0.000	0.000	0.000
1265	0.00	0.00	535.327	0.00	0.48	0.00	0.000	0.000	0.000
1266	0.00	0.00	534.852	0.00	0.48	0.00	0.000	0.000	0.000
1267	0.00	0.00	534.377	0.00	0.48	0.00	0.000	0.000	0.000
1268	0.00	0.00	533.902	0.00	0.48	0.00	0.000	0.000	0.000
1269	0.00	0.00	533.427	0.00	0.48	0.00	0.000	0.000	0.000
1270	0.00	0.00	532.952	0.00	0.48	0.00	0.000	0.000	0.000
1271	0.00	0.00	532.477	0.00	0.48	0.00	0.000	0.000	0.000
1272	0.00	0.00	532.002	0.00	0.48	0.00	0.000	0.000	0.000
1273	0.00	0.00	531.527	0.00	0.48	0.00	0.000	0.000	0.000
1274	0.00	0.00	531.052	0.00	0.48	0.00	0.000	0.000	0.000
1275	0.00	0.00	530.577	0.00	0.48	0.00	0.000	0.000	0.000
1276	0.00	0.00	530.102	0.00	0.48	0.00	0.000	0.000	0.000
1277	0.00	0.00	529.627	0.00	0.48	0.00	0.000	0.000	0.000
1278	0.00	0.00	529.152	0.00	0.48	0.00	0.000	0.000	0.000
1279	0.00	0.00	528.677	0.00	0.48	0.00	0.000	0.000	0.000
1280	0.00	0.00	528.202	0.00	0.48	0.00	0.000	0.000	0.000
1281	0.00	0.00	527.727	0.00	0.48	0.00	0.000	0.000	0.000
1282	0.00	0.00	527.252	0.00	0.48	0.00	0.000	0.000	0.000
1283	0.00	0.00	526.777	0.00	0.48	0.00	0.000	0.000	0.000
1284	0.00	0.00	526.302	0.00	0.48	0.00	0.000	0.000	0.000
1285	0.00	0.00	525.827	0.00	0.48	0.00	0.000	0.000	0.000
1286	0.00	0.00	525.352	0.00	0.48	0.00	0.000	0.000	0.000
1287	0.00	0.00	524.877	0.00	0.48	0.00	0.000	0.000	0.000
1288	0.00	0.00	524.402	0.00	0.48	0.00	0.000	0.000	0.000
1289	0.00	0.00	523.927	0.00	0.48	0.00	0.000	0.000	0.000
1290	0.00	0.00	523.452	0.00	0.48	0.00	0.000	0.000	0.000
1291	0.00	0.00	522.977	0.00	0.48	0.00	0.000	0.000	0.000
1292	0.00	0.00	522.502	0.00	0.48	0.00	0.000	0.000	0.000
1293	0.00	0.00	522.027	0.00	0.48	0.00	0.000	0.000	0.000
1294	0.00	0.00	521.552	0.00	0.48	0.00	0.000	0.000	0.000
1295	0.00	0.00	521.077	0.00	0.48	0.00	0.000	0.000	0.000
1296	0.00	0.00	520.602	0.00	0.48	0.00	0.000	0.000	0.000
1297	0.00	0.00	520.127	0.00	0.48	0.00	0.000	0.000	0.000
1298	0.00	0.00	519.652	0.00	0.48	0.00	0.000	0.000	0.000
1299	0.00	0.00	519.177	0.00	0.48	0.00	0.000	0.000	0.000
1300	0.00	0.00	518.702	0.00	0.48	0.00	0.000	0.000	0.000
1301	0.00	0.00	518.227	0.00	0.48	0.00	0.000	0.000	0.000
1302	0.00	0.00	517.752	0.00	0.48	0.00	0.000	0.000	0.000
1303	0.00	0.00	517.277	0.00	0.48	0.00	0.000	0.000	0.000
1304	0.00	0.00	516.802	0.00	0.48	0.00	0.000	0.000	0.000
1305	0.00	0.00	516.327	0.00	0.48	0.00	0.000	0.000	0.000
1306	0.00	0.00	515.852	0.00	0.48	0.00	0.000	0.000	0.000
1307	0.00	0.00	515.377	0.00	0.48	0.00	0.000	0.000	0.000
1308	0.00	0.00	514.902	0.00	0.48	0.00	0.000	0.000	0.000
1309	0.00	0.00	514.427	0.00	0.48	0.00	0.000	0.000	0.000
1310	0.00	0.00	513.952	0.00	0.48	0.00	0.000	0.000	0.000
1311	0.00	0.00	513.477	0.00	0.48	0.00	0.000	0.000	0.000
1312	0.00	0.00	513.002	0.00	0.48	0.00	0.000	0.000	0.000
1313	0.00	0.00	512.527	0.00	0.48	0.00	0.000	0.000	0.000
1314	0.00	0.00	512.052	0.00	0.48	0.00	0.000	0.000	0.000
1315	0.00	0.00	511.577	0.00	0.48	0.00	0.000	0.000	0.000
1316	0.00	0.00	511.102	0.00	0.48	0.00	0.000	0.000	0.000
1317	0.00	0.00	510.627	0.00	0.48	0.00	0.000	0.000	0.000
1318	0.00	0.00	510.152	0.00	0.48	0.00	0.000	0.000	0.000
1319	0.00	0.00	509.677	0.00	0.48	0.00	0.000	0.000	0.000
1320	0.00	0.00	509.202	0.00	0.48	0.00	0.000	0.000	0.000
1321	0.00	0.00	508.727	0.00	0.48	0.00	0.000	0.000	0.000
1322	0.00	0.00	508.252	0.00	0.48	0.00	0.000	0.000	0.000
1323	0.00	0.00	507.777	0.00	0.48	0.00	0.000	0.000	0.000
1324	0.00	0.00	507.302	0.00	0.48	0.00	0.000	0.000	0.000
1325	0.00	0.00	506.827	0.00	0.48	0.00	0.000	0.000	0.000
1326	0.00	0.00	506.352	0.00	0.48	0.00	0.000	0.000	0.000
1327	0.00	0.00	505.877	0.00	0.48	0.00	0.000	0.000	0.000
1328	0.00	0.00	505.402	0.00	0.48	0.00	0.000	0.000	0.000
1329	0.00	0.00	504.927	0.00	0.48	0.00	0.000	0.000	0.000
1330	0.00	0.00	504.452	0.00	0.48	0.00	0.000	0.000	0.000
1331	0.00	0.00	503.977	0.00	0.48	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	360.00	82.80	Final FF Basin Volume:		1779.174		Final Basin Soakpit Volume:		216.600
Summary	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
Time (min)	Distribution Curve	Rainfall (mm)	1802.13	2520.27	1133.93		216.60	1386.35	1041.18
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
1332	0.00	0.00	503.502	0.00	0.48	0.00	0.000	0.000	0.000
1333	0.00	0.00	503.027	0.00	0.48	0.00	0.000	0.000	0.000
1334	0.00	0.00	502.552	0.00	0.48	0.00	0.000	0.000	0.000
1335	0.00	0.00	502.077	0.00	0.48	0.00	0.000	0.000	0.000
1336	0.00	0.00	501.602	0.00	0.48	0.00	0.000	0.000	0.000
1337	0.00	0.00	501.127	0.00	0.48	0.00	0.000	0.000	0.000
1338	0.00	0.00	500.652	0.00	0.48	0.00	0.000	0.000	0.000
1339	0.00	0.00	500.177	0.00	0.48	0.00	0.000	0.000	0.000
1340	0.00	0.00	499.702	0.00	0.48	0.00	0.000	0.000	0.000
1341	0.00	0.00	499.227	0.00	0.48	0.00	0.000	0.000	0.000
1342	0.00	0.00	498.752	0.00	0.48	0.00	0.000	0.000	0.000
1343	0.00	0.00	498.277	0.00	0.48	0.00	0.000	0.000	0.000
1344	0.00	0.00	497.802	0.00	0.48	0.00	0.000	0.000	0.000
1345	0.00	0.00	497.327	0.00	0.48	0.00	0.000	0.000	0.000
1346	0.00	0.00	496.852	0.00	0.48	0.00	0.000	0.000	0.000
1347	0.00	0.00	496.377	0.00	0.48	0.00	0.000	0.000	0.000
1348	0.00	0.00	495.902	0.00	0.48	0.00	0.000	0.000	0.000
1349	0.00	0.00	495.427	0.00	0.48	0.00	0.000	0.000	0.000
1350	0.00	0.00	494.952	0.00	0.48	0.00	0.000	0.000	0.000
1351	0.00	0.00	494.477	0.00	0.48	0.00	0.000	0.000	0.000
1352	0.00	0.00	494.002	0.00	0.48	0.00	0.000	0.000	0.000
1353	0.00	0.00	493.527	0.00	0.48	0.00	0.000	0.000	0.000
1354	0.00	0.00	493.052	0.00	0.48	0.00	0.000	0.000	0.000
1355	0.00	0.00	492.577	0.00	0.48	0.00	0.000	0.000	0.000
1356	0.00	0.00	492.102	0.00	0.48	0.00	0.000	0.000	0.000
1357	0.00	0.00	491.627	0.00	0.48	0.00	0.000	0.000	0.000
1358	0.00	0.00	491.152	0.00	0.48	0.00	0.000	0.000	0.000
1359	0.00	0.00	490.677	0.00	0.48	0.00	0.000	0.000	0.000
1360	0.00	0.00	490.202	0.00	0.48	0.00	0.000	0.000	0.000
1361	0.00	0.00	489.727	0.00	0.48	0.00	0.000	0.000	0.000
1362	0.00	0.00	489.252	0.00	0.48	0.00	0.000	0.000	0.000
1363	0.00	0.00	488.777	0.00	0.48	0.00	0.000	0.000	0.000
1364	0.00	0.00	488.302	0.00	0.48	0.00	0.000	0.000	0.000
1365	0.00	0.00	487.827	0.00	0.48	0.00	0.000	0.000	0.000
1366	0.00	0.00	487.352	0.00	0.48	0.00	0.000	0.000	0.000
1367	0.00	0.00	486.877	0.00	0.48	0.00	0.000	0.000	0.000
1368	0.00	0.00	486.402	0.00	0.48	0.00	0.000	0.000	0.000
1369	0.00	0.00	485.927	0.00	0.48	0.00	0.000	0.000	0.000
1370	0.00	0.00	485.452	0.00	0.48	0.00	0.000	0.000	0.000
1371	0.00	0.00	484.977	0.00	0.48	0.00	0.000	0.000	0.000
1372	0.00	0.00	484.502	0.00	0.48	0.00	0.000	0.000	0.000
1373	0.00	0.00	484.027	0.00	0.48	0.00	0.000	0.000	0.000
1374	0.00	0.00	483.552	0.00	0.48	0.00	0.000	0.000	0.000
1375	0.00	0.00	483.077	0.00	0.48	0.00	0.000	0.000	0.000
1376	0.00	0.00	482.602	0.00	0.48	0.00	0.000	0.000	0.000
1377	0.00	0.00	482.127	0.00	0.48	0.00	0.000	0.000	0.000
1378	0.00	0.00	481.652	0.00	0.48	0.00	0.000	0.000	0.000
1379	0.00	0.00	481.177	0.00	0.48	0.00	0.000	0.000	0.000
1380	0.00	0.00	480.702	0.00	0.48	0.00	0.000	0.000	0.000
1381	0.00	0.00	480.227	0.00	0.48	0.00	0.000	0.000	0.000
1382	0.00	0.00	479.752	0.00	0.48	0.00	0.000	0.000	0.000
1383	0.00	0.00	479.277	0.00	0.48	0.00	0.000	0.000	0.000
1384	0.00	0.00	478.802	0.00	0.48	0.00	0.000	0.000	0.000
1385	0.00	0.00	478.327	0.00	0.48	0.00	0.000	0.000	0.000
1386	0.00	0.00	477.852	0.00	0.48	0.00	0.000	0.000	0.000
1387	0.00	0.00	477.377	0.00	0.48	0.00	0.000	0.000	0.000
1388	0.00	0.00	476.902	0.00	0.48	0.00	0.000	0.000	0.000
1389	0.00	0.00	476.427	0.00	0.48	0.00	0.000	0.000	0.000
1390	0.00	0.00	475.952	0.00	0.48	0.00	0.000	0.000	0.000
1391	0.00	0.00	475.477	0.00	0.48	0.00	0.000	0.000	0.000
1392	0.00	0.00	475.002	0.00	0.48	0.00	0.000	0.000	0.000
1393	0.00	0.00	474.527	0.00	0.48	0.00	0.000	0.000	0.000
1394	0.00	0.00	474.052	0.00	0.48	0.00	0.000	0.000	0.000
1395	0.00	0.00	473.577	0.00	0.48	0.00	0.000	0.000	0.000
1396	0.00	0.00	473.102	0.00	0.48	0.00	0.000	0.000	0.000
1397	0.00	0.00	472.627	0.00	0.48	0.00	0.000	0.000	0.000
1398	0.00	0.00	472.152	0.00	0.48	0.00	0.000	0.000	0.000
1399	0.00	0.00	471.677	0.00	0.48	0.00	0.000	0.000	0.000
1400	0.00	0.00	471.202	0.00	0.48	0.00	0.000	0.000	0.000
1401	0.00	0.00	470.727	0.00	0.48	0.00	0.000	0.000	0.000
1402	0.00	0.00	470.252	0.00	0.48	0.00	0.000	0.000	0.000
1403	0.00	0.00	469.777	0.00	0.48	0.00	0.000	0.000	0.000
1404	0.00	0.00	469.302	0.00	0.48	0.00	0.000	0.000	0.000
1405	0.00	0.00	468.827	0.00	0.48	0.00	0.000	0.000	0.000
1406	0.00	0.00	468.352	0.00	0.48	0.00	0.000	0.000	0.000
1407	0.00	0.00	467.877	0.00	0.48	0.00	0.000	0.000	0.000
1408	0.00	0.00	467.402	0.00	0.48	0.00	0.000	0.000	0.000
1409	0.00	0.00	466.927	0.00	0.48	0.00	0.000	0.000	0.000
1410	0.00	0.00	466.452	0.00	0.48	0.00	0.000	0.000	0.000
1411	0.00	0.00	465.977	0.00	0.48	0.00	0.000	0.000	0.000
1412	0.00	0.00	465.502	0.00	0.48	0.00	0.000	0.000	0.000
1413	0.00	0.00	465.027	0.00	0.48	0.00	0.000	0.000	0.000
1414	0.00	0.00	464.552	0.00	0.48	0.00	0.000	0.000	0.000
1415	0.00	0.00	464.077	0.00	0.48	0.00	0.000	0.000	0.000
1416	0.00	0.00	463.602	0.00	0.48	0.00	0.000	0.000	0.000
1417	0.00	0.00	463.127	0.00	0.48	0.00	0.000	0.000	0.000
1418	0.00	0.00	462.652	0.00	0.48	0.00	0.000	0.000	0.000
1419	0.00	0.00	462.177	0.00	0.48	0.00	0.000	0.000	0.000
1420	0.00	0.00	461.702	0.00	0.48	0.00	0.000	0.000	0.000
1421	0.00	0.00	461.227	0.00	0.48	0.00	0.000	0.000	0.000
1422	0.00	0.00	460.752	0.00	0.48	0.00	0.000	0.000	0.000
1423	0.00	0.00	460.277	0.00	0.48	0.00	0.000	0.000	0.000
1424	0.00	0.00	459.802	0.00	0.48	0.00	0.000	0.000	0.000
1425	0.00	0.00	459.327	0.00	0.48	0.00	0.000	0.000	0.000
1426	0.00	0.00	458.852	0.00	0.48	0.00	0.000	0.000	0.000
1427	0.00	0.00	458.377	0.00	0.48	0.00	0.000	0.000	0.000
1428	0.00	0.00	457.902	0.00	0.48	0.00	0.000	0.000	0.000
1429	0.00	0.00	457.427	0.00	0.48	0.00	0.000	0.000	0.000
1430	0.00	0.00	456.952	0.00	0.48	0.00	0.000	0.000	0.000
1431	0.00	0.00	456.477	0.00	0.48	0.00	0.000	0.000	0.000
1432	0.00	0.00	456.002	0.00	0.48	0.00	0.000	0.000	0.000
1433	0.00	0.00	455.527	0.00	0.48	0.00	0.000	0.000	0.000
1434	0.00	0.00	455.052	0.00	0.48	0.00	0.000	0.000	0.000



Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	360.00	82.80	Final FF Basin Volume: 1779.174				Final Basin Soakpit Volume: 216.600		
Summary	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
Time (min)	Distribution Curve	Rainfall (mm)	1802.13	2520.27	1133.93		216.60	1386.35	1041.18
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
1435	0.00	0.00	454.577	0.00	0.48	0.00	0.000	0.000	0.000
1436	0.00	0.00	454.102	0.00	0.48	0.00	0.000	0.000	0.000
1437	0.00	0.00	453.627	0.00	0.48	0.00	0.000	0.000	0.000
1438	0.00	0.00	453.152	0.00	0.48	0.00	0.000	0.000	0.000
1439	0.00	0.00	452.677	0.00	0.48	0.00	0.000	0.000	0.000
1440	0.00	0.00	452.202	0.00	0.48	0.00	0.000	0.000	0.000
1441	0.00	0.00	451.727	0.00	0.48	0.00	0.000	0.000	0.000
1442	0.00	0.00	451.252	0.00	0.48	0.00	0.000	0.000	0.000
1443	0.00	0.00	450.777	0.00	0.48	0.00	0.000	0.000	0.000
1444	0.00	0.00	450.302	0.00	0.48	0.00	0.000	0.000	0.000
1445	0.00	0.00	449.827	0.00	0.48	0.00	0.000	0.000	0.000
1446	0.00	0.00	449.352	0.00	0.48	0.00	0.000	0.000	0.000
1447	0.00	0.00	448.877	0.00	0.48	0.00	0.000	0.000	0.000
1448	0.00	0.00	448.402	0.00	0.48	0.00	0.000	0.000	0.000
1449	0.00	0.00	447.927	0.00	0.48	0.00	0.000	0.000	0.000
1450	0.00	0.00	447.452	0.00	0.48	0.00	0.000	0.000	0.000
1451	0.00	0.00	446.977	0.00	0.48	0.00	0.000	0.000	0.000
1452	0.00	0.00	446.502	0.00	0.48	0.00	0.000	0.000	0.000
1453	0.00	0.00	446.027	0.00	0.48	0.00	0.000	0.000	0.000
1454	0.00	0.00	445.552	0.00	0.48	0.00	0.000	0.000	0.000
1455	0.00	0.00	445.077	0.00	0.48	0.00	0.000	0.000	0.000
1456	0.00	0.00	444.602	0.00	0.48	0.00	0.000	0.000	0.000
1457	0.00	0.00	444.127	0.00	0.48	0.00	0.000	0.000	0.000
1458	0.00	0.00	443.652	0.00	0.48	0.00	0.000	0.000	0.000
1459	0.00	0.00	443.177	0.00	0.48	0.00	0.000	0.000	0.000
1460	0.00	0.00	442.702	0.00	0.48	0.00	0.000	0.000	0.000
1461	0.00	0.00	442.227	0.00	0.48	0.00	0.000	0.000	0.000
1462	0.00	0.00	441.752	0.00	0.48	0.00	0.000	0.000	0.000
1463	0.00	0.00	441.277	0.00	0.48	0.00	0.000	0.000	0.000
1464	0.00	0.00	440.802	0.00	0.48	0.00	0.000	0.000	0.000
1465	0.00	0.00	440.327	0.00	0.48	0.00	0.000	0.000	0.000
1466	0.00	0.00	439.852	0.00	0.48	0.00	0.000	0.000	0.000
1467	0.00	0.00	439.377	0.00	0.48	0.00	0.000	0.000	0.000
1468	0.00	0.00	438.902	0.00	0.48	0.00	0.000	0.000	0.000
1469	0.00	0.00	438.427	0.00	0.48	0.00	0.000	0.000	0.000
1470	0.00	0.00	437.952	0.00	0.48	0.00	0.000	0.000	0.000
1471	0.00	0.00	437.477	0.00	0.48	0.00	0.000	0.000	0.000
1472	0.00	0.00	437.002	0.00	0.48	0.00	0.000	0.000	0.000
1473	0.00	0.00	436.527	0.00	0.48	0.00	0.000	0.000	0.000
1474	0.00	0.00	436.052	0.00	0.48	0.00	0.000	0.000	0.000
1475	0.00	0.00	435.577	0.00	0.48	0.00	0.000	0.000	0.000
1476	0.00	0.00	435.102	0.00	0.48	0.00	0.000	0.000	0.000
1477	0.00	0.00	434.627	0.00	0.48	0.00	0.000	0.000	0.000
1478	0.00	0.00	434.152	0.00	0.48	0.00	0.000	0.000	0.000
1479	0.00	0.00	433.677	0.00	0.48	0.00	0.000	0.000	0.000
1480	0.00	0.00	433.202	0.00	0.48	0.00	0.000	0.000	0.000
1481	0.00	0.00	432.727	0.00	0.48	0.00	0.000	0.000	0.000
1482	0.00	0.00	432.252	0.00	0.48	0.00	0.000	0.000	0.000
1483	0.00	0.00	431.777	0.00	0.48	0.00	0.000	0.000	0.000
1484	0.00	0.00	431.302	0.00	0.48	0.00	0.000	0.000	0.000
1485	0.00	0.00	430.827	0.00	0.48	0.00	0.000	0.000	0.000
1486	0.00	0.00	430.352	0.00	0.48	0.00	0.000	0.000	0.000
1487	0.00	0.00	429.877	0.00	0.48	0.00	0.000	0.000	0.000
1488	0.00	0.00	429.402	0.00	0.48	0.00	0.000	0.000	0.000
1489	0.00	0.00	428.927	0.00	0.48	0.00	0.000	0.000	0.000
1490	0.00	0.00	428.452	0.00	0.48	0.00	0.000	0.000	0.000
1491	0.00	0.00	427.977	0.00	0.48	0.00	0.000	0.000	0.000
1492	0.00	0.00	427.502	0.00	0.48	0.00	0.000	0.000	0.000
1493	0.00	0.00	427.027	0.00	0.48	0.00	0.000	0.000	0.000
1494	0.00	0.00	426.552	0.00	0.48	0.00	0.000	0.000	0.000
1495	0.00	0.00	426.077	0.00	0.48	0.00	0.000	0.000	0.000
1496	0.00	0.00	425.602	0.00	0.48	0.00	0.000	0.000	0.000
1497	0.00	0.00	425.127	0.00	0.48	0.00	0.000	0.000	0.000
1498	0.00	0.00	424.652	0.00	0.48	0.00	0.000	0.000	0.000
1499	0.00	0.00	424.177	0.00	0.48	0.00	0.000	0.000	0.000
1500	0.00	0.00	423.702	0.00	0.48	0.00	0.000	0.000	0.000
1501	0.00	0.00	423.227	0.00	0.48	0.00	0.000	0.000	0.000
1502	0.00	0.00	422.752	0.00	0.48	0.00	0.000	0.000	0.000
1503	0.00	0.00	422.277	0.00	0.48	0.00	0.000	0.000	0.000
1504	0.00	0.00	421.802	0.00	0.48	0.00	0.000	0.000	0.000
1505	0.00	0.00	421.327	0.00	0.48	0.00	0.000	0.000	0.000
1506	0.00	0.00	420.852	0.00	0.48	0.00	0.000	0.000	0.000
1507	0.00	0.00	420.377	0.00	0.48	0.00	0.000	0.000	0.000
1508	0.00	0.00	419.902	0.00	0.48	0.00	0.000	0.000	0.000
1509	0.00	0.00	419.427	0.00	0.48	0.00	0.000	0.000	0.000
1510	0.00	0.00	418.952	0.00	0.48	0.00	0.000	0.000	0.000
1511	0.00	0.00	418.477	0.00	0.48	0.00	0.000	0.000	0.000
1512	0.00	0.00	418.002	0.00	0.48	0.00	0.000	0.000	0.000
1513	0.00	0.00	417.527	0.00	0.48	0.00	0.000	0.000	0.000
1514	0.00	0.00	417.052	0.00	0.48	0.00	0.000	0.000	0.000
1515	0.00	0.00	416.577	0.00	0.48	0.00	0.000	0.000	0.000
1516	0.00	0.00	416.102	0.00	0.48	0.00	0.000	0.000	0.000
1517	0.00	0.00	415.627	0.00	0.48	0.00	0.000	0.000	0.000
1518	0.00	0.00	415.152	0.00	0.48	0.00	0.000	0.000	0.000
1519	0.00	0.00	414.677	0.00	0.48	0.00	0.000	0.000	0.000
1520	0.00	0.00	414.202	0.00	0.48	0.00	0.000	0.000	0.000
1521	0.00	0.00	413.727	0.00	0.48	0.00	0.000	0.000	0.000
1522	0.00	0.00	413.252	0.00	0.48	0.00	0.000	0.000	0.000
1523	0.00	0.00	412.777	0.00	0.48	0.00	0.000	0.000	0.000
1524	0.00	0.00	412.302	0.00	0.48	0.00	0.000	0.000	0.000
1525	0.00	0.00	411.827	0.00	0.48	0.00	0.000	0.000	0.000
1526	0.00	0.00	411.352	0.00	0.48	0.00	0.000	0.000	0.000
1527	0.00	0.00	410.877	0.00	0.48	0.00	0.000	0.000	0.000
1528	0.00	0.00	410.402	0.00	0.48	0.00	0.000	0.000	0.000
1529	0.00	0.00	409.927	0.00	0.48	0.00	0.000	0.000	0.000
1530	0.00	0.00	409.452	0.00	0.48	0.00	0.000	0.000	0.000
1531	0.00	0.00	408.977	0.00	0.48	0.00	0.000	0.000	0.000
1532	0.00	0.00	408.502	0.00	0.48	0.00	0.000	0.000	0.000
1533	0.00	0.00	408.027	0.00	0.48	0.00	0.000	0.000	0.000
1534	0.00	0.00	407.552	0.00	0.48	0.00	0.000	0.000	0.000
1535	0.00	0.00	407.077	0.00	0.48	0.00	0.000	0.000	0.000
1536	0.00	0.00	406.602	0.00	0.48	0.00	0.000	0.000	0.000
1537	0.00	0.00	406.127	0.00	0.48	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	360.00	82.80	Final FF Basin Volume:		1779.174		Final Basin Soakpit Volume:		216.600
Summary	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
Time (min)	Distribution Curve	Rainfall (mm)	1802.13	2520.27	1133.93		216.60	1386.35	1041.18
			Volume at start of timestep (m³)	Site Runoff (m³/min)	Soakage (m³/min)	Overflow (m³/min)	Volume at start of timestep (m³)	Soakage (m³)	Excess (m³)
1538	0.00	0.00	405.652	0.00	0.48	0.00	0.000	0.000	0.000
1539	0.00	0.00	405.177	0.00	0.48	0.00	0.000	0.000	0.000
1540	0.00	0.00	404.702	0.00	0.48	0.00	0.000	0.000	0.000
1541	0.00	0.00	404.227	0.00	0.48	0.00	0.000	0.000	0.000
1542	0.00	0.00	403.752	0.00	0.48	0.00	0.000	0.000	0.000
1543	0.00	0.00	403.277	0.00	0.48	0.00	0.000	0.000	0.000
1544	0.00	0.00	402.802	0.00	0.48	0.00	0.000	0.000	0.000
1545	0.00	0.00	402.327	0.00	0.48	0.00	0.000	0.000	0.000
1546	0.00	0.00	401.852	0.00	0.48	0.00	0.000	0.000	0.000
1547	0.00	0.00	401.377	0.00	0.48	0.00	0.000	0.000	0.000
1548	0.00	0.00	400.902	0.00	0.48	0.00	0.000	0.000	0.000
1549	0.00	0.00	400.427	0.00	0.48	0.00	0.000	0.000	0.000
1550	0.00	0.00	399.952	0.00	0.48	0.00	0.000	0.000	0.000
1551	0.00	0.00	399.477	0.00	0.48	0.00	0.000	0.000	0.000
1552	0.00	0.00	399.002	0.00	0.48	0.00	0.000	0.000	0.000
1553	0.00	0.00	398.527	0.00	0.48	0.00	0.000	0.000	0.000
1554	0.00	0.00	398.052	0.00	0.48	0.00	0.000	0.000	0.000
1555	0.00	0.00	397.577	0.00	0.48	0.00	0.000	0.000	0.000
1556	0.00	0.00	397.102	0.00	0.48	0.00	0.000	0.000	0.000
1557	0.00	0.00	396.627	0.00	0.48	0.00	0.000	0.000	0.000
1558	0.00	0.00	396.152	0.00	0.48	0.00	0.000	0.000	0.000
1559	0.00	0.00	395.677	0.00	0.48	0.00	0.000	0.000	0.000
1560	0.00	0.00	395.202	0.00	0.48	0.00	0.000	0.000	0.000
1561	0.00	0.00	394.727	0.00	0.48	0.00	0.000	0.000	0.000
1562	0.00	0.00	394.252	0.00	0.48	0.00	0.000	0.000	0.000
1563	0.00	0.00	393.777	0.00	0.48	0.00	0.000	0.000	0.000
1564	0.00	0.00	393.302	0.00	0.48	0.00	0.000	0.000	0.000
1565	0.00	0.00	392.827	0.00	0.48	0.00	0.000	0.000	0.000
1566	0.00	0.00	392.352	0.00	0.48	0.00	0.000	0.000	0.000
1567	0.00	0.00	391.877	0.00	0.48	0.00	0.000	0.000	0.000
1568	0.00	0.00	391.402	0.00	0.48	0.00	0.000	0.000	0.000
1569	0.00	0.00	390.927	0.00	0.48	0.00	0.000	0.000	0.000
1570	0.00	0.00	390.452	0.00	0.48	0.00	0.000	0.000	0.000
1571	0.00	0.00	389.977	0.00	0.48	0.00	0.000	0.000	0.000
1572	0.00	0.00	389.502	0.00	0.48	0.00	0.000	0.000	0.000
1573	0.00	0.00	389.027	0.00	0.48	0.00	0.000	0.000	0.000
1574	0.00	0.00	388.552	0.00	0.48	0.00	0.000	0.000	0.000
1575	0.00	0.00	388.077	0.00	0.48	0.00	0.000	0.000	0.000
1576	0.00	0.00	387.602	0.00	0.48	0.00	0.000	0.000	0.000
1577	0.00	0.00	387.127	0.00	0.48	0.00	0.000	0.000	0.000
1578	0.00	0.00	386.652	0.00	0.48	0.00	0.000	0.000	0.000
1579	0.00	0.00	386.177	0.00	0.48	0.00	0.000	0.000	0.000
1580	0.00	0.00	385.702	0.00	0.48	0.00	0.000	0.000	0.000
1581	0.00	0.00	385.227	0.00	0.48	0.00	0.000	0.000	0.000
1582	0.00	0.00	384.752	0.00	0.48	0.00	0.000	0.000	0.000
1583	0.00	0.00	384.277	0.00	0.48	0.00	0.000	0.000	0.000
1584	0.00	0.00	383.802	0.00	0.48	0.00	0.000	0.000	0.000
1585	0.00	0.00	383.327	0.00	0.48	0.00	0.000	0.000	0.000
1586	0.00	0.00	382.852	0.00	0.48	0.00	0.000	0.000	0.000
1587	0.00	0.00	382.377	0.00	0.48	0.00	0.000	0.000	0.000
1588	0.00	0.00	381.902	0.00	0.48	0.00	0.000	0.000	0.000
1589	0.00	0.00	381.427	0.00	0.48	0.00	0.000	0.000	0.000
1590	0.00	0.00	380.952	0.00	0.48	0.00	0.000	0.000	0.000
1591	0.00	0.00	380.477	0.00	0.48	0.00	0.000	0.000	0.000
1592	0.00	0.00	380.002	0.00	0.48	0.00	0.000	0.000	0.000
1593	0.00	0.00	379.527	0.00	0.48	0.00	0.000	0.000	0.000
1594	0.00	0.00	379.052	0.00	0.48	0.00	0.000	0.000	0.000
1595	0.00	0.00	378.577	0.00	0.48	0.00	0.000	0.000	0.000
1596	0.00	0.00	378.102	0.00	0.48	0.00	0.000	0.000	0.000
1597	0.00	0.00	377.627	0.00	0.48	0.00	0.000	0.000	0.000
1598	0.00	0.00	377.152	0.00	0.48	0.00	0.000	0.000	0.000
1599	0.00	0.00	376.677	0.00	0.48	0.00	0.000	0.000	0.000
1600	0.00	0.00	376.202	0.00	0.48	0.00	0.000	0.000	0.000
1601	0.00	0.00	375.727	0.00	0.48	0.00	0.000	0.000	0.000
1602	0.00	0.00	375.252	0.00	0.48	0.00	0.000	0.000	0.000
1603	0.00	0.00	374.777	0.00	0.48	0.00	0.000	0.000	0.000
1604	0.00	0.00	374.302	0.00	0.48	0.00	0.000	0.000	0.000
1605	0.00	0.00	373.827	0.00	0.48	0.00	0.000	0.000	0.000
1606	0.00	0.00	373.352	0.00	0.48	0.00	0.000	0.000	0.000
1607	0.00	0.00	372.877	0.00	0.48	0.00	0.000	0.000	0.000
1608	0.00	0.00	372.402	0.00	0.48	0.00	0.000	0.000	0.000
1609	0.00	0.00	371.927	0.00	0.48	0.00	0.000	0.000	0.000
1610	0.00	0.00	371.452	0.00	0.48	0.00	0.000	0.000	0.000
1611	0.00	0.00	370.977	0.00	0.48	0.00	0.000	0.000	0.000
1612	0.00	0.00	370.502	0.00	0.48	0.00	0.000	0.000	0.000
1613	0.00	0.00	370.027	0.00	0.48	0.00	0.000	0.000	0.000
1614	0.00	0.00	369.552	0.00	0.48	0.00	0.000	0.000	0.000
1615	0.00	0.00	369.077	0.00	0.48	0.00	0.000	0.000	0.000
1616	0.00	0.00	368.602	0.00	0.48	0.00	0.000	0.000	0.000
1617	0.00	0.00	368.127	0.00	0.48	0.00	0.000	0.000	0.000
1618	0.00	0.00	367.652	0.00	0.48	0.00	0.000	0.000	0.000
1619	0.00	0.00	367.177	0.00	0.48	0.00	0.000	0.000	0.000
1620	0.00	0.00	366.702	0.00	0.48	0.00	0.000	0.000	0.000
1621	0.00	0.00	366.227	0.00	0.48	0.00	0.000	0.000	0.000
1622	0.00	0.00	365.752	0.00	0.48	0.00	0.000	0.000	0.000
1623	0.00	0.00	365.277	0.00	0.48	0.00	0.000	0.000	0.000
1624	0.00	0.00	364.802	0.00	0.48	0.00	0.000	0.000	0.000
1625	0.00	0.00	364.327	0.00	0.48	0.00	0.000	0.000	0.000
1626	0.00	0.00	363.852	0.00	0.48	0.00	0.000	0.000	0.000
1627	0.00	0.00	363.377	0.00	0.48	0.00	0.000	0.000	0.000
1628	0.00	0.00	362.902	0.00	0.48	0.00	0.000	0.000	0.000
1629	0.00	0.00	362.427	0.00	0.48	0.00	0.000	0.000	0.000
1630	0.00	0.00	361.952	0.00	0.48	0.00	0.000	0.000	0.000
1631	0.00	0.00	361.477	0.00	0.48	0.00	0.000	0.000	0.000
1632	0.00	0.00	361.002	0.00	0.48	0.00	0.000	0.000	0.000
1633	0.00	0.00	360.527	0.00	0.48	0.00	0.000	0.000	0.000
1634	0.00	0.00	360.052	0.00	0.48	0.00	0.000	0.000	0.000
1635	0.00	0.00	359.577	0.00	0.48	0.00	0.000	0.000	0.000
1636	0.00	0.00	359.102	0.00	0.48	0.00	0.000	0.000	0.000
1637	0.00	0.00	358.627	0.00	0.48	0.00	0.000	0.000	0.000
1638	0.00	0.00	358.152	0.00	0.48	0.00	0.000	0.000	0.000
1639	0.00	0.00	357.677	0.00	0.48	0.00	0.000	0.000	0.000
1640	0.00	0.00	357.202	0.00	0.48	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	360.00	82.80	Final FF Basin Volume: 1779.174				Final Basin Soakpit Volume: 216.600		
Summary	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
Time (min)	Distribution Curve	Rainfall (mm)	1802.13	2520.27	1133.93		216.60	1386.35	1041.18
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
1641	0.00	0.00	356.727	0.00	0.48	0.00	0.000	0.000	0.000
1642	0.00	0.00	356.252	0.00	0.48	0.00	0.000	0.000	0.000
1643	0.00	0.00	355.777	0.00	0.48	0.00	0.000	0.000	0.000
1644	0.00	0.00	355.302	0.00	0.48	0.00	0.000	0.000	0.000
1645	0.00	0.00	354.827	0.00	0.48	0.00	0.000	0.000	0.000
1646	0.00	0.00	354.352	0.00	0.48	0.00	0.000	0.000	0.000
1647	0.00	0.00	353.877	0.00	0.48	0.00	0.000	0.000	0.000
1648	0.00	0.00	353.402	0.00	0.48	0.00	0.000	0.000	0.000
1649	0.00	0.00	352.927	0.00	0.48	0.00	0.000	0.000	0.000
1650	0.00	0.00	352.452	0.00	0.48	0.00	0.000	0.000	0.000
1651	0.00	0.00	351.977	0.00	0.48	0.00	0.000	0.000	0.000
1652	0.00	0.00	351.502	0.00	0.48	0.00	0.000	0.000	0.000
1653	0.00	0.00	351.027	0.00	0.48	0.00	0.000	0.000	0.000
1654	0.00	0.00	350.552	0.00	0.48	0.00	0.000	0.000	0.000
1655	0.00	0.00	350.077	0.00	0.48	0.00	0.000	0.000	0.000
1656	0.00	0.00	349.602	0.00	0.48	0.00	0.000	0.000	0.000
1657	0.00	0.00	349.127	0.00	0.48	0.00	0.000	0.000	0.000
1658	0.00	0.00	348.652	0.00	0.48	0.00	0.000	0.000	0.000
1659	0.00	0.00	348.177	0.00	0.48	0.00	0.000	0.000	0.000
1660	0.00	0.00	347.702	0.00	0.48	0.00	0.000	0.000	0.000
1661	0.00	0.00	347.227	0.00	0.48	0.00	0.000	0.000	0.000
1662	0.00	0.00	346.752	0.00	0.48	0.00	0.000	0.000	0.000
1663	0.00	0.00	346.277	0.00	0.48	0.00	0.000	0.000	0.000
1664	0.00	0.00	345.802	0.00	0.48	0.00	0.000	0.000	0.000
1665	0.00	0.00	345.327	0.00	0.48	0.00	0.000	0.000	0.000
1666	0.00	0.00	344.852	0.00	0.48	0.00	0.000	0.000	0.000
1667	0.00	0.00	344.377	0.00	0.48	0.00	0.000	0.000	0.000
1668	0.00	0.00	343.902	0.00	0.48	0.00	0.000	0.000	0.000
1669	0.00	0.00	343.427	0.00	0.48	0.00	0.000	0.000	0.000
1670	0.00	0.00	342.952	0.00	0.48	0.00	0.000	0.000	0.000
1671	0.00	0.00	342.477	0.00	0.48	0.00	0.000	0.000	0.000
1672	0.00	0.00	342.002	0.00	0.48	0.00	0.000	0.000	0.000
1673	0.00	0.00	341.527	0.00	0.48	0.00	0.000	0.000	0.000
1674	0.00	0.00	341.052	0.00	0.48	0.00	0.000	0.000	0.000
1675	0.00	0.00	340.577	0.00	0.48	0.00	0.000	0.000	0.000
1676	0.00	0.00	340.102	0.00	0.48	0.00	0.000	0.000	0.000
1677	0.00	0.00	339.627	0.00	0.48	0.00	0.000	0.000	0.000
1678	0.00	0.00	339.152	0.00	0.48	0.00	0.000	0.000	0.000
1679	0.00	0.00	338.677	0.00	0.48	0.00	0.000	0.000	0.000
1680	0.00	0.00	338.202	0.00	0.48	0.00	0.000	0.000	0.000
1681	0.00	0.00	337.727	0.00	0.48	0.00	0.000	0.000	0.000
1682	0.00	0.00	337.252	0.00	0.48	0.00	0.000	0.000	0.000
1683	0.00	0.00	336.777	0.00	0.48	0.00	0.000	0.000	0.000
1684	0.00	0.00	336.302	0.00	0.48	0.00	0.000	0.000	0.000
1685	0.00	0.00	335.827	0.00	0.48	0.00	0.000	0.000	0.000
1686	0.00	0.00	335.352	0.00	0.48	0.00	0.000	0.000	0.000
1687	0.00	0.00	334.877	0.00	0.48	0.00	0.000	0.000	0.000
1688	0.00	0.00	334.402	0.00	0.48	0.00	0.000	0.000	0.000
1689	0.00	0.00	333.927	0.00	0.48	0.00	0.000	0.000	0.000
1690	0.00	0.00	333.452	0.00	0.48	0.00	0.000	0.000	0.000
1691	0.00	0.00	332.977	0.00	0.48	0.00	0.000	0.000	0.000
1692	0.00	0.00	332.502	0.00	0.48	0.00	0.000	0.000	0.000
1693	0.00	0.00	332.027	0.00	0.48	0.00	0.000	0.000	0.000
1694	0.00	0.00	331.552	0.00	0.48	0.00	0.000	0.000	0.000
1695	0.00	0.00	331.077	0.00	0.48	0.00	0.000	0.000	0.000
1696	0.00	0.00	330.602	0.00	0.48	0.00	0.000	0.000	0.000
1697	0.00	0.00	330.127	0.00	0.48	0.00	0.000	0.000	0.000
1698	0.00	0.00	329.652	0.00	0.48	0.00	0.000	0.000	0.000
1699	0.00	0.00	329.177	0.00	0.48	0.00	0.000	0.000	0.000
1700	0.00	0.00	328.702	0.00	0.48	0.00	0.000	0.000	0.000
1701	0.00	0.00	328.227	0.00	0.48	0.00	0.000	0.000	0.000
1702	0.00	0.00	327.752	0.00	0.48	0.00	0.000	0.000	0.000
1703	0.00	0.00	327.277	0.00	0.48	0.00	0.000	0.000	0.000
1704	0.00	0.00	326.802	0.00	0.48	0.00	0.000	0.000	0.000
1705	0.00	0.00	326.327	0.00	0.48	0.00	0.000	0.000	0.000
1706	0.00	0.00	325.852	0.00	0.48	0.00	0.000	0.000	0.000
1707	0.00	0.00	325.377	0.00	0.48	0.00	0.000	0.000	0.000
1708	0.00	0.00	324.902	0.00	0.48	0.00	0.000	0.000	0.000
1709	0.00	0.00	324.427	0.00	0.48	0.00	0.000	0.000	0.000
1710	0.00	0.00	323.952	0.00	0.48	0.00	0.000	0.000	0.000
1711	0.00	0.00	323.477	0.00	0.48	0.00	0.000	0.000	0.000
1712	0.00	0.00	323.002	0.00	0.48	0.00	0.000	0.000	0.000
1713	0.00	0.00	322.527	0.00	0.48	0.00	0.000	0.000	0.000
1714	0.00	0.00	322.052	0.00	0.48	0.00	0.000	0.000	0.000
1715	0.00	0.00	321.577	0.00	0.48	0.00	0.000	0.000	0.000
1716	0.00	0.00	321.102	0.00	0.48	0.00	0.000	0.000	0.000
1717	0.00	0.00	320.627	0.00	0.48	0.00	0.000	0.000	0.000
1718	0.00	0.00	320.152	0.00	0.48	0.00	0.000	0.000	0.000
1719	0.00	0.00	319.677	0.00	0.48	0.00	0.000	0.000	0.000
1720	0.00	0.00	319.202	0.00	0.48	0.00	0.000	0.000	0.000
1721	0.00	0.00	318.727	0.00	0.48	0.00	0.000	0.000	0.000
1722	0.00	0.00	318.252	0.00	0.48	0.00	0.000	0.000	0.000
1723	0.00	0.00	317.777	0.00	0.48	0.00	0.000	0.000	0.000
1724	0.00	0.00	317.302	0.00	0.48	0.00	0.000	0.000	0.000
1725	0.00	0.00	316.827	0.00	0.48	0.00	0.000	0.000	0.000
1726	0.00	0.00	316.352	0.00	0.48	0.00	0.000	0.000	0.000
1727	0.00	0.00	315.877	0.00	0.48	0.00	0.000	0.000	0.000
1728	0.00	0.00	315.402	0.00	0.48	0.00	0.000	0.000	0.000
1729	0.00	0.00	314.927	0.00	0.48	0.00	0.000	0.000	0.000
1730	0.00	0.00	314.452	0.00	0.48	0.00	0.000	0.000	0.000
1731	0.00	0.00	313.977	0.00	0.48	0.00	0.000	0.000	0.000
1732	0.00	0.00	313.502	0.00	0.48	0.00	0.000	0.000	0.000
1733	0.00	0.00	313.027	0.00	0.48	0.00	0.000	0.000	0.000
1734	0.00	0.00	312.552	0.00	0.48	0.00	0.000	0.000	0.000
1735	0.00	0.00	312.077	0.00	0.48	0.00	0.000	0.000	0.000
1736	0.00	0.00	311.602	0.00	0.48	0.00	0.000	0.000	0.000
1737	0.00	0.00	311.127	0.00	0.48	0.00	0.000	0.000	0.000
1738	0.00	0.00	310.652	0.00	0.48	0.00	0.000	0.000	0.000
1739	0.00	0.00	310.177	0.00	0.48	0.00	0.000	0.000	0.000
1740	0.00	0.00	309.702	0.00	0.48	0.00	0.000	0.000	0.000
1741	0.00	0.00	309.227	0.00	0.48	0.00	0.000	0.000	0.000
1742	0.00	0.00	308.752	0.00	0.48	0.00	0.000	0.000	0.000
1743	0.00	0.00	308.277	0.00	0.48	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	360.00	82.80	Final FF Basin Volume: 1779.174				Final Basin Soakpit Volume: 216.600		
Summary	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
Time (min)	Distribution Curve	Rainfall (mm)	1802.13	2520.27	1133.93		216.60	1386.35	1041.18
1744	0.00	0.00	Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
1745	0.00	0.00	307.802	0.00	0.48	0.00	0.000	0.000	0.000
1746	0.00	0.00	307.327	0.00	0.48	0.00	0.000	0.000	0.000
1747	0.00	0.00	306.852	0.00	0.48	0.00	0.000	0.000	0.000
1748	0.00	0.00	306.377	0.00	0.48	0.00	0.000	0.000	0.000
1749	0.00	0.00	305.902	0.00	0.48	0.00	0.000	0.000	0.000
1750	0.00	0.00	305.427	0.00	0.48	0.00	0.000	0.000	0.000
1751	0.00	0.00	304.952	0.00	0.48	0.00	0.000	0.000	0.000
1752	0.00	0.00	304.477	0.00	0.48	0.00	0.000	0.000	0.000
1753	0.00	0.00	304.002	0.00	0.48	0.00	0.000	0.000	0.000
1754	0.00	0.00	303.527	0.00	0.48	0.00	0.000	0.000	0.000
1755	0.00	0.00	303.052	0.00	0.48	0.00	0.000	0.000	0.000
1756	0.00	0.00	302.577	0.00	0.48	0.00	0.000	0.000	0.000
1757	0.00	0.00	302.102	0.00	0.48	0.00	0.000	0.000	0.000
1758	0.00	0.00	301.627	0.00	0.48	0.00	0.000	0.000	0.000
1759	0.00	0.00	301.152	0.00	0.48	0.00	0.000	0.000	0.000
1760	0.00	0.00	300.677	0.00	0.48	0.00	0.000	0.000	0.000
1761	0.00	0.00	300.202	0.00	0.48	0.00	0.000	0.000	0.000
1762	0.00	0.00	299.727	0.00	0.48	0.00	0.000	0.000	0.000
1763	0.00	0.00	299.252	0.00	0.48	0.00	0.000	0.000	0.000
1764	0.00	0.00	298.777	0.00	0.48	0.00	0.000	0.000	0.000
1765	0.00	0.00	298.302	0.00	0.48	0.00	0.000	0.000	0.000
1766	0.00	0.00	297.827	0.00	0.48	0.00	0.000	0.000	0.000
1767	0.00	0.00	297.352	0.00	0.48	0.00	0.000	0.000	0.000
1768	0.00	0.00	296.877	0.00	0.48	0.00	0.000	0.000	0.000
1769	0.00	0.00	296.402	0.00	0.48	0.00	0.000	0.000	0.000
1770	0.00	0.00	295.927	0.00	0.48	0.00	0.000	0.000	0.000
1771	0.00	0.00	295.452	0.00	0.48	0.00	0.000	0.000	0.000
1772	0.00	0.00	294.977	0.00	0.48	0.00	0.000	0.000	0.000
1773	0.00	0.00	294.502	0.00	0.48	0.00	0.000	0.000	0.000
1774	0.00	0.00	294.027	0.00	0.48	0.00	0.000	0.000	0.000
1775	0.00	0.00	293.552	0.00	0.48	0.00	0.000	0.000	0.000
1776	0.00	0.00	293.077	0.00	0.48	0.00	0.000	0.000	0.000
1777	0.00	0.00	292.602	0.00	0.48	0.00	0.000	0.000	0.000
1778	0.00	0.00	292.127	0.00	0.48	0.00	0.000	0.000	0.000
1779	0.00	0.00	291.652	0.00	0.48	0.00	0.000	0.000	0.000
1780	0.00	0.00	291.177	0.00	0.48	0.00	0.000	0.000	0.000
1781	0.00	0.00	290.702	0.00	0.48	0.00	0.000	0.000	0.000
1782	0.00	0.00	290.227	0.00	0.48	0.00	0.000	0.000	0.000
1783	0.00	0.00	289.752	0.00	0.48	0.00	0.000	0.000	0.000
1784	0.00	0.00	289.277	0.00	0.48	0.00	0.000	0.000	0.000
1785	0.00	0.00	288.802	0.00	0.48	0.00	0.000	0.000	0.000
1786	0.00	0.00	288.327	0.00	0.48	0.00	0.000	0.000	0.000
1787	0.00	0.00	287.852	0.00	0.48	0.00	0.000	0.000	0.000
1788	0.00	0.00	287.377	0.00	0.48	0.00	0.000	0.000	0.000
1789	0.00	0.00	286.902	0.00	0.48	0.00	0.000	0.000	0.000
1790	0.00	0.00	286.427	0.00	0.48	0.00	0.000	0.000	0.000
1791	0.00	0.00	285.952	0.00	0.48	0.00	0.000	0.000	0.000
1792	0.00	0.00	285.477	0.00	0.48	0.00	0.000	0.000	0.000
1793	0.00	0.00	285.002	0.00	0.48	0.00	0.000	0.000	0.000
1794	0.00	0.00	284.527	0.00	0.48	0.00	0.000	0.000	0.000
1795	0.00	0.00	284.052	0.00	0.48	0.00	0.000	0.000	0.000
1796	0.00	0.00	283.577	0.00	0.48	0.00	0.000	0.000	0.000
1797	0.00	0.00	283.102	0.00	0.48	0.00	0.000	0.000	0.000
1798	0.00	0.00	282.627	0.00	0.48	0.00	0.000	0.000	0.000
1799	0.00	0.00	282.152	0.00	0.48	0.00	0.000	0.000	0.000
1800	0.00	0.00	281.677	0.00	0.48	0.00	0.000	0.000	0.000
1801	0.00	0.00	281.202	0.00	0.48	0.00	0.000	0.000	0.000
1802	0.00	0.00	280.727	0.00	0.48	0.00	0.000	0.000	0.000
1803	0.00	0.00	280.252	0.00	0.48	0.00	0.000	0.000	0.000
1804	0.00	0.00	279.777	0.00	0.48	0.00	0.000	0.000	0.000
1805	0.00	0.00	279.302	0.00	0.48	0.00	0.000	0.000	0.000
1806	0.00	0.00	278.827	0.00	0.48	0.00	0.000	0.000	0.000
1807	0.00	0.00	278.352	0.00	0.48	0.00	0.000	0.000	0.000
1808	0.00	0.00	277.877	0.00	0.48	0.00	0.000	0.000	0.000
1809	0.00	0.00	277.402	0.00	0.48	0.00	0.000	0.000	0.000
1810	0.00	0.00	276.927	0.00	0.48	0.00	0.000	0.000	0.000
1811	0.00	0.00	276.452	0.00	0.48	0.00	0.000	0.000	0.000
1812	0.00	0.00	275.977	0.00	0.48	0.00	0.000	0.000	0.000
1813	0.00	0.00	275.502	0.00	0.48	0.00	0.000	0.000	0.000
1814	0.00	0.00	275.027	0.00	0.48	0.00	0.000	0.000	0.000
1815	0.00	0.00	274.552	0.00	0.48	0.00	0.000	0.000	0.000
1816	0.00	0.00	274.077	0.00	0.48	0.00	0.000	0.000	0.000
1817	0.00	0.00	273.602	0.00	0.48	0.00	0.000	0.000	0.000
1818	0.00	0.00	273.127	0.00	0.48	0.00	0.000	0.000	0.000
1819	0.00	0.00	272.652	0.00	0.48	0.00	0.000	0.000	0.000
1820	0.00	0.00	272.177	0.00	0.48	0.00	0.000	0.000	0.000
1821	0.00	0.00	271.702	0.00	0.48	0.00	0.000	0.000	0.000
1822	0.00	0.00	271.227	0.00	0.48	0.00	0.000	0.000	0.000
1823	0.00	0.00	270.752	0.00	0.48	0.00	0.000	0.000	0.000
1824	0.00	0.00	270.277	0.00	0.48	0.00	0.000	0.000	0.000
1825	0.00	0.00	269.802	0.00	0.48	0.00	0.000	0.000	0.000
1826	0.00	0.00	269.327	0.00	0.48	0.00	0.000	0.000	0.000
1827	0.00	0.00	268.852	0.00	0.48	0.00	0.000	0.000	0.000
1828	0.00	0.00	268.377	0.00	0.48	0.00	0.000	0.000	0.000
1829	0.00	0.00	267.902	0.00	0.48	0.00	0.000	0.000	0.000
1830	0.00	0.00	267.427	0.00	0.48	0.00	0.000	0.000	0.000
1831	0.00	0.00	266.952	0.00	0.48	0.00	0.000	0.000	0.000
1832	0.00	0.00	266.477	0.00	0.48	0.00	0.000	0.000	0.000
1833	0.00	0.00	266.002	0.00	0.48	0.00	0.000	0.000	0.000
1834	0.00	0.00	265.527	0.00	0.48	0.00	0.000	0.000	0.000
1835	0.00	0.00	265.052	0.00	0.48	0.00	0.000	0.000	0.000
1836	0.00	0.00	264.577	0.00	0.48	0.00	0.000	0.000	0.000
1837	0.00	0.00	264.102	0.00	0.48	0.00	0.000	0.000	0.000
1838	0.00	0.00	263.627	0.00	0.48	0.00	0.000	0.000	0.000
1839	0.00	0.00	263.152	0.00	0.48	0.00	0.000	0.000	0.000
1840	0.00	0.00	262.677	0.00	0.48	0.00	0.000	0.000	0.000
1841	0.00	0.00	262.202	0.00	0.48	0.00	0.000	0.000	0.000
1842	0.00	0.00	261.727	0.00	0.48	0.00	0.000	0.000	0.000
1843	0.00	0.00	261.252	0.00	0.48	0.00	0.000	0.000	0.000
1844	0.00	0.00	260.777	0.00	0.48	0.00	0.000	0.000	0.000
1845	0.00	0.00	260.302	0.00	0.48	0.00	0.000	0.000	0.000
1846	0.00	0.00	259.827	0.00	0.48	0.00	0.000	0.000	0.000
			259.352	0.00	0.48	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	360.00	82.80	Final FF Basin Volume: 1779.174				Final Basin Soakpit Volume: 216.600		
Summary	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
Time (min)	Distribution Curve	Rainfall (mm)	1802.13	2520.27	1133.93		216.60	1386.35	1041.18
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
1847	0.00	0.00	258.877	0.00	0.48	0.00	0.000	0.000	0.000
1848	0.00	0.00	258.402	0.00	0.48	0.00	0.000	0.000	0.000
1849	0.00	0.00	257.927	0.00	0.48	0.00	0.000	0.000	0.000
1850	0.00	0.00	257.452	0.00	0.48	0.00	0.000	0.000	0.000
1851	0.00	0.00	256.977	0.00	0.48	0.00	0.000	0.000	0.000
1852	0.00	0.00	256.502	0.00	0.48	0.00	0.000	0.000	0.000
1853	0.00	0.00	256.027	0.00	0.48	0.00	0.000	0.000	0.000
1854	0.00	0.00	255.552	0.00	0.48	0.00	0.000	0.000	0.000
1855	0.00	0.00	255.077	0.00	0.48	0.00	0.000	0.000	0.000
1856	0.00	0.00	254.602	0.00	0.48	0.00	0.000	0.000	0.000
1857	0.00	0.00	254.127	0.00	0.48	0.00	0.000	0.000	0.000
1858	0.00	0.00	253.652	0.00	0.48	0.00	0.000	0.000	0.000
1859	0.00	0.00	253.177	0.00	0.48	0.00	0.000	0.000	0.000
1860	0.00	0.00	252.702	0.00	0.48	0.00	0.000	0.000	0.000
1861	0.00	0.00	252.227	0.00	0.48	0.00	0.000	0.000	0.000
1862	0.00	0.00	251.752	0.00	0.48	0.00	0.000	0.000	0.000
1863	0.00	0.00	251.277	0.00	0.48	0.00	0.000	0.000	0.000
1864	0.00	0.00	250.802	0.00	0.48	0.00	0.000	0.000	0.000
1865	0.00	0.00	250.327	0.00	0.48	0.00	0.000	0.000	0.000
1866	0.00	0.00	249.852	0.00	0.48	0.00	0.000	0.000	0.000
1867	0.00	0.00	249.377	0.00	0.48	0.00	0.000	0.000	0.000
1868	0.00	0.00	248.902	0.00	0.48	0.00	0.000	0.000	0.000
1869	0.00	0.00	248.427	0.00	0.48	0.00	0.000	0.000	0.000
1870	0.00	0.00	247.952	0.00	0.48	0.00	0.000	0.000	0.000
1871	0.00	0.00	247.477	0.00	0.48	0.00	0.000	0.000	0.000
1872	0.00	0.00	247.002	0.00	0.48	0.00	0.000	0.000	0.000
1873	0.00	0.00	246.527	0.00	0.48	0.00	0.000	0.000	0.000
1874	0.00	0.00	246.052	0.00	0.48	0.00	0.000	0.000	0.000
1875	0.00	0.00	245.577	0.00	0.48	0.00	0.000	0.000	0.000
1876	0.00	0.00	245.102	0.00	0.48	0.00	0.000	0.000	0.000
1877	0.00	0.00	244.627	0.00	0.48	0.00	0.000	0.000	0.000
1878	0.00	0.00	244.152	0.00	0.48	0.00	0.000	0.000	0.000
1879	0.00	0.00	243.677	0.00	0.48	0.00	0.000	0.000	0.000
1880	0.00	0.00	243.202	0.00	0.48	0.00	0.000	0.000	0.000
1881	0.00	0.00	242.727	0.00	0.48	0.00	0.000	0.000	0.000
1882	0.00	0.00	242.252	0.00	0.48	0.00	0.000	0.000	0.000
1883	0.00	0.00	241.777	0.00	0.48	0.00	0.000	0.000	0.000
1884	0.00	0.00	241.302	0.00	0.48	0.00	0.000	0.000	0.000
1885	0.00	0.00	240.827	0.00	0.48	0.00	0.000	0.000	0.000
1886	0.00	0.00	240.352	0.00	0.48	0.00	0.000	0.000	0.000
1887	0.00	0.00	239.877	0.00	0.48	0.00	0.000	0.000	0.000
1888	0.00	0.00	239.402	0.00	0.48	0.00	0.000	0.000	0.000
1889	0.00	0.00	238.927	0.00	0.48	0.00	0.000	0.000	0.000
1890	0.00	0.00	238.452	0.00	0.48	0.00	0.000	0.000	0.000
1891	0.00	0.00	237.977	0.00	0.48	0.00	0.000	0.000	0.000
1892	0.00	0.00	237.502	0.00	0.48	0.00	0.000	0.000	0.000
1893	0.00	0.00	237.027	0.00	0.48	0.00	0.000	0.000	0.000
1894	0.00	0.00	236.552	0.00	0.48	0.00	0.000	0.000	0.000
1895	0.00	0.00	236.077	0.00	0.48	0.00	0.000	0.000	0.000
1896	0.00	0.00	235.602	0.00	0.48	0.00	0.000	0.000	0.000
1897	0.00	0.00	235.127	0.00	0.48	0.00	0.000	0.000	0.000
1898	0.00	0.00	234.652	0.00	0.48	0.00	0.000	0.000	0.000
1899	0.00	0.00	234.177	0.00	0.48	0.00	0.000	0.000	0.000
1900	0.00	0.00	233.702	0.00	0.48	0.00	0.000	0.000	0.000
1901	0.00	0.00	233.227	0.00	0.48	0.00	0.000	0.000	0.000
1902	0.00	0.00	232.752	0.00	0.48	0.00	0.000	0.000	0.000
1903	0.00	0.00	232.277	0.00	0.48	0.00	0.000	0.000	0.000
1904	0.00	0.00	231.802	0.00	0.48	0.00	0.000	0.000	0.000
1905	0.00	0.00	231.327	0.00	0.48	0.00	0.000	0.000	0.000
1906	0.00	0.00	230.852	0.00	0.48	0.00	0.000	0.000	0.000
1907	0.00	0.00	230.377	0.00	0.48	0.00	0.000	0.000	0.000
1908	0.00	0.00	229.902	0.00	0.48	0.00	0.000	0.000	0.000
1909	0.00	0.00	229.427	0.00	0.48	0.00	0.000	0.000	0.000
1910	0.00	0.00	228.952	0.00	0.48	0.00	0.000	0.000	0.000
1911	0.00	0.00	228.477	0.00	0.48	0.00	0.000	0.000	0.000
1912	0.00	0.00	228.002	0.00	0.48	0.00	0.000	0.000	0.000
1913	0.00	0.00	227.527	0.00	0.48	0.00	0.000	0.000	0.000
1914	0.00	0.00	227.052	0.00	0.48	0.00	0.000	0.000	0.000
1915	0.00	0.00	226.577	0.00	0.48	0.00	0.000	0.000	0.000
1916	0.00	0.00	226.102	0.00	0.48	0.00	0.000	0.000	0.000
1917	0.00	0.00	225.627	0.00	0.48	0.00	0.000	0.000	0.000
1918	0.00	0.00	225.152	0.00	0.48	0.00	0.000	0.000	0.000
1919	0.00	0.00	224.677	0.00	0.48	0.00	0.000	0.000	0.000
1920	0.00	0.00	224.202	0.00	0.48	0.00	0.000	0.000	0.000
1921	0.00	0.00	223.727	0.00	0.48	0.00	0.000	0.000	0.000
1922	0.00	0.00	223.252	0.00	0.48	0.00	0.000	0.000	0.000
1923	0.00	0.00	222.777	0.00	0.48	0.00	0.000	0.000	0.000
1924	0.00	0.00	222.302	0.00	0.48	0.00	0.000	0.000	0.000
1925	0.00	0.00	221.827	0.00	0.48	0.00	0.000	0.000	0.000
1926	0.00	0.00	221.352	0.00	0.48	0.00	0.000	0.000	0.000
1927	0.00	0.00	220.877	0.00	0.48	0.00	0.000	0.000	0.000
1928	0.00	0.00	220.402	0.00	0.48	0.00	0.000	0.000	0.000
1929	0.00	0.00	219.927	0.00	0.48	0.00	0.000	0.000	0.000
1930	0.00	0.00	219.452	0.00	0.48	0.00	0.000	0.000	0.000
1931	0.00	0.00	218.977	0.00	0.48	0.00	0.000	0.000	0.000
1932	0.00	0.00	218.502	0.00	0.48	0.00	0.000	0.000	0.000
1933	0.00	0.00	218.027	0.00	0.48	0.00	0.000	0.000	0.000
1934	0.00	0.00	217.552	0.00	0.48	0.00	0.000	0.000	0.000
1935	0.00	0.00	217.077	0.00	0.48	0.00	0.000	0.000	0.000
1936	0.00	0.00	216.602	0.00	0.48	0.00	0.000	0.000	0.000
1937	0.00	0.00	216.127	0.00	0.48	0.00	0.000	0.000	0.000
1938	0.00	0.00	215.652	0.00	0.48	0.00	0.000	0.000	0.000
1939	0.00	0.00	215.177	0.00	0.48	0.00	0.000	0.000	0.000
1940	0.00	0.00	214.702	0.00	0.48	0.00	0.000	0.000	0.000
1941	0.00	0.00	214.227	0.00	0.48	0.00	0.000	0.000	0.000
1942	0.00	0.00	213.752	0.00	0.48	0.00	0.000	0.000	0.000
1943	0.00	0.00	213.277	0.00	0.48	0.00	0.000	0.000	0.000
1944	0.00	0.00	212.802	0.00	0.48	0.00	0.000	0.000	0.000
1945	0.00	0.00	212.327	0.00	0.48	0.00	0.000	0.000	0.000
1946	0.00	0.00	211.852	0.00	0.48	0.00	0.000	0.000	0.000
1947	0.00	0.00	211.377	0.00	0.48	0.00	0.000	0.000	0.000
1948	0.00	0.00	210.902	0.00	0.48	0.00	0.000	0.000	0.000
1949	0.00	0.00	210.427	0.00	0.48	0.00	0.000	0.000	0.000



Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	360.00	82.80	Final FF Basin Volume:		1779.174		Final Basin Soakpit Volume:		216.600
Summary	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
Time (min)	Distribution Curve	Rainfall (mm)	1802.13	2520.27	1133.93		216.60	1386.35	1041.18
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
1950	0.00	0.00	209.952	0.00	0.48	0.00	0.000	0.000	0.000
1951	0.00	0.00	209.477	0.00	0.48	0.00	0.000	0.000	0.000
1952	0.00	0.00	209.002	0.00	0.48	0.00	0.000	0.000	0.000
1953	0.00	0.00	208.527	0.00	0.48	0.00	0.000	0.000	0.000
1954	0.00	0.00	208.052	0.00	0.48	0.00	0.000	0.000	0.000
1955	0.00	0.00	207.577	0.00	0.48	0.00	0.000	0.000	0.000
1956	0.00	0.00	207.102	0.00	0.48	0.00	0.000	0.000	0.000
1957	0.00	0.00	206.627	0.00	0.48	0.00	0.000	0.000	0.000
1958	0.00	0.00	206.152	0.00	0.48	0.00	0.000	0.000	0.000
1959	0.00	0.00	205.677	0.00	0.48	0.00	0.000	0.000	0.000
1960	0.00	0.00	205.202	0.00	0.48	0.00	0.000	0.000	0.000
1961	0.00	0.00	204.727	0.00	0.48	0.00	0.000	0.000	0.000
1962	0.00	0.00	204.252	0.00	0.48	0.00	0.000	0.000	0.000
1963	0.00	0.00	203.777	0.00	0.48	0.00	0.000	0.000	0.000
1964	0.00	0.00	203.302	0.00	0.48	0.00	0.000	0.000	0.000
1965	0.00	0.00	202.827	0.00	0.48	0.00	0.000	0.000	0.000
1966	0.00	0.00	202.352	0.00	0.48	0.00	0.000	0.000	0.000
1967	0.00	0.00	201.877	0.00	0.48	0.00	0.000	0.000	0.000
1968	0.00	0.00	201.402	0.00	0.48	0.00	0.000	0.000	0.000
1969	0.00	0.00	200.927	0.00	0.48	0.00	0.000	0.000	0.000
1970	0.00	0.00	200.452	0.00	0.48	0.00	0.000	0.000	0.000
1971	0.00	0.00	199.977	0.00	0.48	0.00	0.000	0.000	0.000
1972	0.00	0.00	199.502	0.00	0.48	0.00	0.000	0.000	0.000
1973	0.00	0.00	199.027	0.00	0.48	0.00	0.000	0.000	0.000
1974	0.00	0.00	198.552	0.00	0.48	0.00	0.000	0.000	0.000
1975	0.00	0.00	198.077	0.00	0.48	0.00	0.000	0.000	0.000
1976	0.00	0.00	197.602	0.00	0.48	0.00	0.000	0.000	0.000
1977	0.00	0.00	197.127	0.00	0.48	0.00	0.000	0.000	0.000
1978	0.00	0.00	196.652	0.00	0.48	0.00	0.000	0.000	0.000
1979	0.00	0.00	196.177	0.00	0.48	0.00	0.000	0.000	0.000
1980	0.00	0.00	195.702	0.00	0.48	0.00	0.000	0.000	0.000
1981	0.00	0.00	195.227	0.00	0.48	0.00	0.000	0.000	0.000
1982	0.00	0.00	194.752	0.00	0.48	0.00	0.000	0.000	0.000
1983	0.00	0.00	194.277	0.00	0.48	0.00	0.000	0.000	0.000
1984	0.00	0.00	193.802	0.00	0.48	0.00	0.000	0.000	0.000
1985	0.00	0.00	193.327	0.00	0.48	0.00	0.000	0.000	0.000
1986	0.00	0.00	192.852	0.00	0.48	0.00	0.000	0.000	0.000
1987	0.00	0.00	192.377	0.00	0.48	0.00	0.000	0.000	0.000
1988	0.00	0.00	191.902	0.00	0.48	0.00	0.000	0.000	0.000
1989	0.00	0.00	191.427	0.00	0.48	0.00	0.000	0.000	0.000
1990	0.00	0.00	190.952	0.00	0.48	0.00	0.000	0.000	0.000
1991	0.00	0.00	190.477	0.00	0.48	0.00	0.000	0.000	0.000
1992	0.00	0.00	190.002	0.00	0.48	0.00	0.000	0.000	0.000
1993	0.00	0.00	189.527	0.00	0.48	0.00	0.000	0.000	0.000
1994	0.00	0.00	189.052	0.00	0.48	0.00	0.000	0.000	0.000
1995	0.00	0.00	188.577	0.00	0.48	0.00	0.000	0.000	0.000
1996	0.00	0.00	188.102	0.00	0.48	0.00	0.000	0.000	0.000
1997	0.00	0.00	187.627	0.00	0.48	0.00	0.000	0.000	0.000
1998	0.00	0.00	187.152	0.00	0.48	0.00	0.000	0.000	0.000
1999	0.00	0.00	186.677	0.00	0.48	0.00	0.000	0.000	0.000
2000	0.00	0.00	186.202	0.00	0.48	0.00	0.000	0.000	0.000
2001	0.00	0.00	185.727	0.00	0.48	0.00	0.000	0.000	0.000
2002	0.00	0.00	185.252	0.00	0.48	0.00	0.000	0.000	0.000
2003	0.00	0.00	184.777	0.00	0.48	0.00	0.000	0.000	0.000
2004	0.00	0.00	184.302	0.00	0.48	0.00	0.000	0.000	0.000
2005	0.00	0.00	183.827	0.00	0.48	0.00	0.000	0.000	0.000
2006	0.00	0.00	183.352	0.00	0.48	0.00	0.000	0.000	0.000
2007	0.00	0.00	182.877	0.00	0.48	0.00	0.000	0.000	0.000
2008	0.00	0.00	182.402	0.00	0.48	0.00	0.000	0.000	0.000
2009	0.00	0.00	181.927	0.00	0.48	0.00	0.000	0.000	0.000
2010	0.00	0.00	181.452	0.00	0.48	0.00	0.000	0.000	0.000
2011	0.00	0.00	180.977	0.00	0.48	0.00	0.000	0.000	0.000
2012	0.00	0.00	180.502	0.00	0.48	0.00	0.000	0.000	0.000
2013	0.00	0.00	180.027	0.00	0.48	0.00	0.000	0.000	0.000
2014	0.00	0.00	179.552	0.00	0.48	0.00	0.000	0.000	0.000
2015	0.00	0.00	179.077	0.00	0.48	0.00	0.000	0.000	0.000
2016	0.00	0.00	178.602	0.00	0.48	0.00	0.000	0.000	0.000
2017	0.00	0.00	178.127	0.00	0.48	0.00	0.000	0.000	0.000
2018	0.00	0.00	177.652	0.00	0.48	0.00	0.000	0.000	0.000
2019	0.00	0.00	177.177	0.00	0.48	0.00	0.000	0.000	0.000
2020	0.00	0.00	176.702	0.00	0.48	0.00	0.000	0.000	0.000
2021	0.00	0.00	176.227	0.00	0.48	0.00	0.000	0.000	0.000
2022	0.00	0.00	175.752	0.00	0.48	0.00	0.000	0.000	0.000
2023	0.00	0.00	175.277	0.00	0.48	0.00	0.000	0.000	0.000
2024	0.00	0.00	174.802	0.00	0.48	0.00	0.000	0.000	0.000
2025	0.00	0.00	174.327	0.00	0.48	0.00	0.000	0.000	0.000
2026	0.00	0.00	173.852	0.00	0.48	0.00	0.000	0.000	0.000
2027	0.00	0.00	173.377	0.00	0.48	0.00	0.000	0.000	0.000
2028	0.00	0.00	172.902	0.00	0.48	0.00	0.000	0.000	0.000
2029	0.00	0.00	172.427	0.00	0.48	0.00	0.000	0.000	0.000
2030	0.00	0.00	171.952	0.00	0.48	0.00	0.000	0.000	0.000
2031	0.00	0.00	171.477	0.00	0.48	0.00	0.000	0.000	0.000
2032	0.00	0.00	171.002	0.00	0.48	0.00	0.000	0.000	0.000
2033	0.00	0.00	170.527	0.00	0.48	0.00	0.000	0.000	0.000
2034	0.00	0.00	170.052	0.00	0.48	0.00	0.000	0.000	0.000
2035	0.00	0.00	169.577	0.00	0.48	0.00	0.000	0.000	0.000
2036	0.00	0.00	169.102	0.00	0.48	0.00	0.000	0.000	0.000
2037	0.00	0.00	168.627	0.00	0.48	0.00	0.000	0.000	0.000
2038	0.00	0.00	168.152	0.00	0.48	0.00	0.000	0.000	0.000
2039	0.00	0.00	167.677	0.00	0.48	0.00	0.000	0.000	0.000
2040	0.00	0.00	167.202	0.00	0.48	0.00	0.000	0.000	0.000
2041	0.00	0.00	166.727	0.00	0.48	0.00	0.000	0.000	0.000
2042	0.00	0.00	166.252	0.00	0.48	0.00	0.000	0.000	0.000
2043	0.00	0.00	165.777	0.00	0.48	0.00	0.000	0.000	0.000
2044	0.00	0.00	165.302	0.00	0.48	0.00	0.000	0.000	0.000
2045	0.00	0.00	164.827	0.00	0.48	0.00	0.000	0.000	0.000
2046	0.00	0.00	164.352	0.00	0.48	0.00	0.000	0.000	0.000
2047	0.00	0.00	163.877	0.00	0.48	0.00	0.000	0.000	0.000
2048	0.00	0.00	163.402	0.00	0.48	0.00	0.000	0.000	0.000
2049	0.00	0.00	162.927	0.00	0.48	0.00	0.000	0.000	0.000
2050	0.00	0.00	162.452	0.00	0.48	0.00	0.000	0.000	0.000
2051	0.00	0.00	161.977	0.00	0.48	0.00	0.000	0.000	0.000
2052	0.00	0.00	161.502	0.00	0.48	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	360.00	82.80	Final FF Basin Volume: 1779.174				Final Basin Soakpit Volume: 216.600		
Summary	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
Time (min)	Distribution Curve	Rainfall (mm)	1802.13	2520.27	1133.93		216.60	1386.35	1041.18
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
2053	0.00	0.00	161.027	0.00	0.48	0.00	0.000	0.000	0.000
2054	0.00	0.00	160.552	0.00	0.48	0.00	0.000	0.000	0.000
2055	0.00	0.00	160.077	0.00	0.48	0.00	0.000	0.000	0.000
2056	0.00	0.00	159.602	0.00	0.48	0.00	0.000	0.000	0.000
2057	0.00	0.00	159.127	0.00	0.48	0.00	0.000	0.000	0.000
2058	0.00	0.00	158.652	0.00	0.48	0.00	0.000	0.000	0.000
2059	0.00	0.00	158.177	0.00	0.48	0.00	0.000	0.000	0.000
2060	0.00	0.00	157.702	0.00	0.48	0.00	0.000	0.000	0.000
2061	0.00	0.00	157.227	0.00	0.48	0.00	0.000	0.000	0.000
2062	0.00	0.00	156.752	0.00	0.48	0.00	0.000	0.000	0.000
2063	0.00	0.00	156.277	0.00	0.48	0.00	0.000	0.000	0.000
2064	0.00	0.00	155.802	0.00	0.48	0.00	0.000	0.000	0.000
2065	0.00	0.00	155.327	0.00	0.48	0.00	0.000	0.000	0.000
2066	0.00	0.00	154.852	0.00	0.48	0.00	0.000	0.000	0.000
2067	0.00	0.00	154.377	0.00	0.48	0.00	0.000	0.000	0.000
2068	0.00	0.00	153.902	0.00	0.48	0.00	0.000	0.000	0.000
2069	0.00	0.00	153.427	0.00	0.48	0.00	0.000	0.000	0.000
2070	0.00	0.00	152.952	0.00	0.48	0.00	0.000	0.000	0.000
2071	0.00	0.00	152.477	0.00	0.48	0.00	0.000	0.000	0.000
2072	0.00	0.00	152.002	0.00	0.48	0.00	0.000	0.000	0.000
2073	0.00	0.00	151.527	0.00	0.48	0.00	0.000	0.000	0.000
2074	0.00	0.00	151.052	0.00	0.48	0.00	0.000	0.000	0.000
2075	0.00	0.00	150.577	0.00	0.48	0.00	0.000	0.000	0.000
2076	0.00	0.00	150.102	0.00	0.48	0.00	0.000	0.000	0.000
2077	0.00	0.00	149.627	0.00	0.48	0.00	0.000	0.000	0.000
2078	0.00	0.00	149.152	0.00	0.48	0.00	0.000	0.000	0.000
2079	0.00	0.00	148.677	0.00	0.48	0.00	0.000	0.000	0.000
2080	0.00	0.00	148.202	0.00	0.48	0.00	0.000	0.000	0.000
2081	0.00	0.00	147.727	0.00	0.48	0.00	0.000	0.000	0.000
2082	0.00	0.00	147.252	0.00	0.48	0.00	0.000	0.000	0.000
2083	0.00	0.00	146.777	0.00	0.48	0.00	0.000	0.000	0.000
2084	0.00	0.00	146.302	0.00	0.48	0.00	0.000	0.000	0.000
2085	0.00	0.00	145.827	0.00	0.48	0.00	0.000	0.000	0.000
2086	0.00	0.00	145.352	0.00	0.48	0.00	0.000	0.000	0.000
2087	0.00	0.00	144.877	0.00	0.48	0.00	0.000	0.000	0.000
2088	0.00	0.00	144.402	0.00	0.48	0.00	0.000	0.000	0.000
2089	0.00	0.00	143.927	0.00	0.48	0.00	0.000	0.000	0.000
2090	0.00	0.00	143.452	0.00	0.48	0.00	0.000	0.000	0.000
2091	0.00	0.00	142.977	0.00	0.48	0.00	0.000	0.000	0.000
2092	0.00	0.00	142.502	0.00	0.48	0.00	0.000	0.000	0.000
2093	0.00	0.00	142.027	0.00	0.48	0.00	0.000	0.000	0.000
2094	0.00	0.00	141.552	0.00	0.48	0.00	0.000	0.000	0.000
2095	0.00	0.00	141.077	0.00	0.48	0.00	0.000	0.000	0.000
2096	0.00	0.00	140.602	0.00	0.48	0.00	0.000	0.000	0.000
2097	0.00	0.00	140.127	0.00	0.48	0.00	0.000	0.000	0.000
2098	0.00	0.00	139.652	0.00	0.48	0.00	0.000	0.000	0.000
2099	0.00	0.00	139.177	0.00	0.48	0.00	0.000	0.000	0.000
2100	0.00	0.00	138.702	0.00	0.48	0.00	0.000	0.000	0.000
2101	0.00	0.00	138.227	0.00	0.48	0.00	0.000	0.000	0.000
2102	0.00	0.00	137.752	0.00	0.48	0.00	0.000	0.000	0.000
2103	0.00	0.00	137.277	0.00	0.48	0.00	0.000	0.000	0.000
2104	0.00	0.00	136.802	0.00	0.48	0.00	0.000	0.000	0.000
2105	0.00	0.00	136.327	0.00	0.48	0.00	0.000	0.000	0.000
2106	0.00	0.00	135.852	0.00	0.48	0.00	0.000	0.000	0.000
2107	0.00	0.00	135.377	0.00	0.48	0.00	0.000	0.000	0.000
2108	0.00	0.00	134.902	0.00	0.48	0.00	0.000	0.000	0.000
2109	0.00	0.00	134.427	0.00	0.48	0.00	0.000	0.000	0.000
2110	0.00	0.00	133.952	0.00	0.48	0.00	0.000	0.000	0.000
2111	0.00	0.00	133.477	0.00	0.48	0.00	0.000	0.000	0.000
2112	0.00	0.00	133.002	0.00	0.48	0.00	0.000	0.000	0.000
2113	0.00	0.00	132.527	0.00	0.48	0.00	0.000	0.000	0.000
2114	0.00	0.00	132.052	0.00	0.48	0.00	0.000	0.000	0.000
2115	0.00	0.00	131.577	0.00	0.48	0.00	0.000	0.000	0.000
2116	0.00	0.00	131.102	0.00	0.48	0.00	0.000	0.000	0.000
2117	0.00	0.00	130.627	0.00	0.48	0.00	0.000	0.000	0.000
2118	0.00	0.00	130.152	0.00	0.48	0.00	0.000	0.000	0.000
2119	0.00	0.00	129.677	0.00	0.48	0.00	0.000	0.000	0.000
2120	0.00	0.00	129.202	0.00	0.48	0.00	0.000	0.000	0.000
2121	0.00	0.00	128.727	0.00	0.48	0.00	0.000	0.000	0.000
2122	0.00	0.00	128.252	0.00	0.48	0.00	0.000	0.000	0.000
2123	0.00	0.00	127.777	0.00	0.48	0.00	0.000	0.000	0.000
2124	0.00	0.00	127.302	0.00	0.48	0.00	0.000	0.000	0.000
2125	0.00	0.00	126.827	0.00	0.48	0.00	0.000	0.000	0.000
2126	0.00	0.00	126.352	0.00	0.48	0.00	0.000	0.000	0.000
2127	0.00	0.00	125.877	0.00	0.48	0.00	0.000	0.000	0.000
2128	0.00	0.00	125.402	0.00	0.48	0.00	0.000	0.000	0.000
2129	0.00	0.00	124.927	0.00	0.48	0.00	0.000	0.000	0.000
2130	0.00	0.00	124.452	0.00	0.48	0.00	0.000	0.000	0.000
2131	0.00	0.00	123.977	0.00	0.48	0.00	0.000	0.000	0.000
2132	0.00	0.00	123.502	0.00	0.48	0.00	0.000	0.000	0.000
2133	0.00	0.00	123.027	0.00	0.48	0.00	0.000	0.000	0.000
2134	0.00	0.00	122.552	0.00	0.48	0.00	0.000	0.000	0.000
2135	0.00	0.00	122.077	0.00	0.48	0.00	0.000	0.000	0.000
2136	0.00	0.00	121.602	0.00	0.48	0.00	0.000	0.000	0.000
2137	0.00	0.00	121.127	0.00	0.48	0.00	0.000	0.000	0.000
2138	0.00	0.00	120.652	0.00	0.48	0.00	0.000	0.000	0.000
2139	0.00	0.00	120.177	0.00	0.48	0.00	0.000	0.000	0.000
2140	0.00	0.00	119.702	0.00	0.48	0.00	0.000	0.000	0.000
2141	0.00	0.00	119.227	0.00	0.48	0.00	0.000	0.000	0.000
2142	0.00	0.00	118.752	0.00	0.48	0.00	0.000	0.000	0.000
2143	0.00	0.00	118.277	0.00	0.48	0.00	0.000	0.000	0.000
2144	0.00	0.00	117.802	0.00	0.48	0.00	0.000	0.000	0.000
2145	0.00	0.00	117.327	0.00	0.48	0.00	0.000	0.000	0.000
2146	0.00	0.00	116.852	0.00	0.48	0.00	0.000	0.000	0.000
2147	0.00	0.00	116.377	0.00	0.48	0.00	0.000	0.000	0.000
2148	0.00	0.00	115.902	0.00	0.48	0.00	0.000	0.000	0.000
2149	0.00	0.00	115.427	0.00	0.48	0.00	0.000	0.000	0.000
2150	0.00	0.00	114.952	0.00	0.48	0.00	0.000	0.000	0.000
2151	0.00	0.00	114.477	0.00	0.48	0.00	0.000	0.000	0.000
2152	0.00	0.00	114.002	0.00	0.48	0.00	0.000	0.000	0.000
2153	0.00	0.00	113.527	0.00	0.48	0.00	0.000	0.000	0.000
2154	0.00	0.00	113.052	0.00	0.48	0.00	0.000	0.000	0.000
2155	0.00	0.00	112.577	0.00	0.48	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	360.00	82.80	Final FF Basin Volume:		1779.174		Final Basin Soakpit Volume:		216.600
Summary	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
Time (min)	Distribution Curve	Rainfall (mm)	1802.13	2520.27	1133.93		216.60	1386.35	1041.18
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
2156	0.00	0.00	112.102	0.00	0.48	0.00	0.000	0.000	0.000
2157	0.00	0.00	111.627	0.00	0.48	0.00	0.000	0.000	0.000
2158	0.00	0.00	111.152	0.00	0.48	0.00	0.000	0.000	0.000
2159	0.00	0.00	110.677	0.00	0.48	0.00	0.000	0.000	0.000
2160	0.00	0.00	110.202	0.00	0.48	0.00	0.000	0.000	0.000
2161	0.00	0.00	109.727	0.00	0.48	0.00	0.000	0.000	0.000
2162	0.00	0.00	109.252	0.00	0.48	0.00	0.000	0.000	0.000
2163	0.00	0.00	108.777	0.00	0.48	0.00	0.000	0.000	0.000
2164	0.00	0.00	108.302	0.00	0.48	0.00	0.000	0.000	0.000
2165	0.00	0.00	107.827	0.00	0.48	0.00	0.000	0.000	0.000
2166	0.00	0.00	107.352	0.00	0.48	0.00	0.000	0.000	0.000
2167	0.00	0.00	106.877	0.00	0.48	0.00	0.000	0.000	0.000
2168	0.00	0.00	106.402	0.00	0.48	0.00	0.000	0.000	0.000
2169	0.00	0.00	105.927	0.00	0.48	0.00	0.000	0.000	0.000
2170	0.00	0.00	105.452	0.00	0.48	0.00	0.000	0.000	0.000
2171	0.00	0.00	104.977	0.00	0.48	0.00	0.000	0.000	0.000
2172	0.00	0.00	104.502	0.00	0.48	0.00	0.000	0.000	0.000
2173	0.00	0.00	104.027	0.00	0.48	0.00	0.000	0.000	0.000
2174	0.00	0.00	103.552	0.00	0.48	0.00	0.000	0.000	0.000
2175	0.00	0.00	103.077	0.00	0.48	0.00	0.000	0.000	0.000
2176	0.00	0.00	102.602	0.00	0.48	0.00	0.000	0.000	0.000
2177	0.00	0.00	102.127	0.00	0.48	0.00	0.000	0.000	0.000
2178	0.00	0.00	101.652	0.00	0.48	0.00	0.000	0.000	0.000
2179	0.00	0.00	101.177	0.00	0.48	0.00	0.000	0.000	0.000
2180	0.00	0.00	100.702	0.00	0.48	0.00	0.000	0.000	0.000
2181	0.00	0.00	100.227	0.00	0.48	0.00	0.000	0.000	0.000
2182	0.00	0.00	99.752	0.00	0.48	0.00	0.000	0.000	0.000
2183	0.00	0.00	99.277	0.00	0.48	0.00	0.000	0.000	0.000
2184	0.00	0.00	98.802	0.00	0.48	0.00	0.000	0.000	0.000
2185	0.00	0.00	98.327	0.00	0.48	0.00	0.000	0.000	0.000
2186	0.00	0.00	97.852	0.00	0.48	0.00	0.000	0.000	0.000
2187	0.00	0.00	97.377	0.00	0.48	0.00	0.000	0.000	0.000
2188	0.00	0.00	96.902	0.00	0.48	0.00	0.000	0.000	0.000
2189	0.00	0.00	96.427	0.00	0.48	0.00	0.000	0.000	0.000
2190	0.00	0.00	95.952	0.00	0.48	0.00	0.000	0.000	0.000
2191	0.00	0.00	95.477	0.00	0.48	0.00	0.000	0.000	0.000
2192	0.00	0.00	95.002	0.00	0.48	0.00	0.000	0.000	0.000
2193	0.00	0.00	94.527	0.00	0.48	0.00	0.000	0.000	0.000
2194	0.00	0.00	94.052	0.00	0.48	0.00	0.000	0.000	0.000
2195	0.00	0.00	93.577	0.00	0.48	0.00	0.000	0.000	0.000
2196	0.00	0.00	93.102	0.00	0.48	0.00	0.000	0.000	0.000
2197	0.00	0.00	92.627	0.00	0.48	0.00	0.000	0.000	0.000
2198	0.00	0.00	92.152	0.00	0.48	0.00	0.000	0.000	0.000
2199	0.00	0.00	91.677	0.00	0.48	0.00	0.000	0.000	0.000
2200	0.00	0.00	91.202	0.00	0.48	0.00	0.000	0.000	0.000
2201	0.00	0.00	90.727	0.00	0.48	0.00	0.000	0.000	0.000
2202	0.00	0.00	90.252	0.00	0.48	0.00	0.000	0.000	0.000
2203	0.00	0.00	89.777	0.00	0.48	0.00	0.000	0.000	0.000
2204	0.00	0.00	89.302	0.00	0.48	0.00	0.000	0.000	0.000
2205	0.00	0.00	88.827	0.00	0.48	0.00	0.000	0.000	0.000
2206	0.00	0.00	88.352	0.00	0.48	0.00	0.000	0.000	0.000
2207	0.00	0.00	87.877	0.00	0.48	0.00	0.000	0.000	0.000
2208	0.00	0.00	87.402	0.00	0.48	0.00	0.000	0.000	0.000
2209	0.00	0.00	86.927	0.00	0.48	0.00	0.000	0.000	0.000
2210	0.00	0.00	86.452	0.00	0.48	0.00	0.000	0.000	0.000
2211	0.00	0.00	85.977	0.00	0.48	0.00	0.000	0.000	0.000
2212	0.00	0.00	85.502	0.00	0.48	0.00	0.000	0.000	0.000
2213	0.00	0.00	85.027	0.00	0.48	0.00	0.000	0.000	0.000
2214	0.00	0.00	84.552	0.00	0.48	0.00	0.000	0.000	0.000
2215	0.00	0.00	84.077	0.00	0.48	0.00	0.000	0.000	0.000
2216	0.00	0.00	83.602	0.00	0.48	0.00	0.000	0.000	0.000
2217	0.00	0.00	83.127	0.00	0.48	0.00	0.000	0.000	0.000
2218	0.00	0.00	82.652	0.00	0.48	0.00	0.000	0.000	0.000
2219	0.00	0.00	82.177	0.00	0.48	0.00	0.000	0.000	0.000
2220	0.00	0.00	81.702	0.00	0.48	0.00	0.000	0.000	0.000
2221	0.00	0.00	81.227	0.00	0.48	0.00	0.000	0.000	0.000
2222	0.00	0.00	80.752	0.00	0.48	0.00	0.000	0.000	0.000
2223	0.00	0.00	80.277	0.00	0.48	0.00	0.000	0.000	0.000
2224	0.00	0.00	79.802	0.00	0.48	0.00	0.000	0.000	0.000
2225	0.00	0.00	79.327	0.00	0.48	0.00	0.000	0.000	0.000
2226	0.00	0.00	78.852	0.00	0.48	0.00	0.000	0.000	0.000
2227	0.00	0.00	78.377	0.00	0.48	0.00	0.000	0.000	0.000
2228	0.00	0.00	77.902	0.00	0.48	0.00	0.000	0.000	0.000
2229	0.00	0.00	77.427	0.00	0.48	0.00	0.000	0.000	0.000
2230	0.00	0.00	76.952	0.00	0.48	0.00	0.000	0.000	0.000
2231	0.00	0.00	76.477	0.00	0.48	0.00	0.000	0.000	0.000
2232	0.00	0.00	76.002	0.00	0.48	0.00	0.000	0.000	0.000
2233	0.00	0.00	75.527	0.00	0.48	0.00	0.000	0.000	0.000
2234	0.00	0.00	75.052	0.00	0.48	0.00	0.000	0.000	0.000
2235	0.00	0.00	74.577	0.00	0.48	0.00	0.000	0.000	0.000
2236	0.00	0.00	74.102	0.00	0.48	0.00	0.000	0.000	0.000
2237	0.00	0.00	73.627	0.00	0.48	0.00	0.000	0.000	0.000
2238	0.00	0.00	73.152	0.00	0.48	0.00	0.000	0.000	0.000
2239	0.00	0.00	72.677	0.00	0.48	0.00	0.000	0.000	0.000
2240	0.00	0.00	72.202	0.00	0.48	0.00	0.000	0.000	0.000
2241	0.00	0.00	71.727	0.00	0.48	0.00	0.000	0.000	0.000
2242	0.00	0.00	71.252	0.00	0.48	0.00	0.000	0.000	0.000
2243	0.00	0.00	70.777	0.00	0.48	0.00	0.000	0.000	0.000
2244	0.00	0.00	70.302	0.00	0.48	0.00	0.000	0.000	0.000
2245	0.00	0.00	69.827	0.00	0.48	0.00	0.000	0.000	0.000
2246	0.00	0.00	69.352	0.00	0.48	0.00	0.000	0.000	0.000
2247	0.00	0.00	68.877	0.00	0.48	0.00	0.000	0.000	0.000
2248	0.00	0.00	68.402	0.00	0.48	0.00	0.000	0.000	0.000
2249	0.00	0.00	67.927	0.00	0.48	0.00	0.000	0.000	0.000
2250	0.00	0.00	67.452	0.00	0.48	0.00	0.000	0.000	0.000
2251	0.00	0.00	66.977	0.00	0.48	0.00	0.000	0.000	0.000
2252	0.00	0.00	66.502	0.00	0.48	0.00	0.000	0.000	0.000
2253	0.00	0.00	66.027	0.00	0.48	0.00	0.000	0.000	0.000
2254	0.00	0.00	65.552	0.00	0.48	0.00	0.000	0.000	0.000
2255	0.00	0.00	65.077	0.00	0.48	0.00	0.000	0.000	0.000
2256	0.00	0.00	64.602	0.00	0.48	0.00	0.000	0.000	0.000
2257	0.00	0.00	64.127	0.00	0.48	0.00	0.000	0.000	0.000
2258	0.00	0.00	63.652	0.00	0.48	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	360.00	82.80	Final FF Basin Volume: 1779.174				Final Basin Soakpit Volume: 216.600		
Summary	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
Time (min)	Distribution Curve	Rainfall (mm)	1802.13	2520.27	1133.93		216.60	1386.35	1041.18
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
2259	0.00	0.00	63.177	0.00	0.48	0.00	0.000	0.000	0.000
2260	0.00	0.00	62.702	0.00	0.48	0.00	0.000	0.000	0.000
2261	0.00	0.00	62.227	0.00	0.48	0.00	0.000	0.000	0.000
2262	0.00	0.00	61.752	0.00	0.48	0.00	0.000	0.000	0.000
2263	0.00	0.00	61.277	0.00	0.48	0.00	0.000	0.000	0.000
2264	0.00	0.00	60.802	0.00	0.48	0.00	0.000	0.000	0.000
2265	0.00	0.00	60.327	0.00	0.48	0.00	0.000	0.000	0.000
2266	0.00	0.00	59.852	0.00	0.48	0.00	0.000	0.000	0.000
2267	0.00	0.00	59.377	0.00	0.48	0.00	0.000	0.000	0.000
2268	0.00	0.00	58.902	0.00	0.48	0.00	0.000	0.000	0.000
2269	0.00	0.00	58.427	0.00	0.48	0.00	0.000	0.000	0.000
2270	0.00	0.00	57.952	0.00	0.48	0.00	0.000	0.000	0.000
2271	0.00	0.00	57.477	0.00	0.48	0.00	0.000	0.000	0.000
2272	0.00	0.00	57.002	0.00	0.48	0.00	0.000	0.000	0.000
2273	0.00	0.00	56.527	0.00	0.48	0.00	0.000	0.000	0.000
2274	0.00	0.00	56.052	0.00	0.48	0.00	0.000	0.000	0.000
2275	0.00	0.00	55.577	0.00	0.48	0.00	0.000	0.000	0.000
2276	0.00	0.00	55.102	0.00	0.48	0.00	0.000	0.000	0.000
2277	0.00	0.00	54.627	0.00	0.48	0.00	0.000	0.000	0.000
2278	0.00	0.00	54.152	0.00	0.48	0.00	0.000	0.000	0.000
2279	0.00	0.00	53.677	0.00	0.48	0.00	0.000	0.000	0.000
2280	0.00	0.00	53.202	0.00	0.48	0.00	0.000	0.000	0.000
2281	0.00	0.00	52.727	0.00	0.48	0.00	0.000	0.000	0.000
2282	0.00	0.00	52.252	0.00	0.48	0.00	0.000	0.000	0.000
2283	0.00	0.00	51.777	0.00	0.48	0.00	0.000	0.000	0.000
2284	0.00	0.00	51.302	0.00	0.48	0.00	0.000	0.000	0.000
2285	0.00	0.00	50.827	0.00	0.48	0.00	0.000	0.000	0.000
2286	0.00	0.00	50.352	0.00	0.48	0.00	0.000	0.000	0.000
2287	0.00	0.00	49.877	0.00	0.48	0.00	0.000	0.000	0.000
2288	0.00	0.00	49.402	0.00	0.48	0.00	0.000	0.000	0.000
2289	0.00	0.00	48.927	0.00	0.48	0.00	0.000	0.000	0.000
2290	0.00	0.00	48.452	0.00	0.48	0.00	0.000	0.000	0.000
2291	0.00	0.00	47.977	0.00	0.48	0.00	0.000	0.000	0.000
2292	0.00	0.00	47.502	0.00	0.48	0.00	0.000	0.000	0.000
2293	0.00	0.00	47.027	0.00	0.48	0.00	0.000	0.000	0.000
2294	0.00	0.00	46.552	0.00	0.48	0.00	0.000	0.000	0.000
2295	0.00	0.00	46.077	0.00	0.48	0.00	0.000	0.000	0.000
2296	0.00	0.00	45.602	0.00	0.48	0.00	0.000	0.000	0.000
2297	0.00	0.00	45.127	0.00	0.48	0.00	0.000	0.000	0.000
2298	0.00	0.00	44.652	0.00	0.48	0.00	0.000	0.000	0.000
2299	0.00	0.00	44.177	0.00	0.48	0.00	0.000	0.000	0.000
2300	0.00	0.00	43.702	0.00	0.48	0.00	0.000	0.000	0.000
2301	0.00	0.00	43.227	0.00	0.48	0.00	0.000	0.000	0.000
2302	0.00	0.00	42.752	0.00	0.48	0.00	0.000	0.000	0.000
2303	0.00	0.00	42.277	0.00	0.48	0.00	0.000	0.000	0.000
2304	0.00	0.00	41.802	0.00	0.48	0.00	0.000	0.000	0.000
2305	0.00	0.00	41.327	0.00	0.48	0.00	0.000	0.000	0.000
2306	0.00	0.00	40.852	0.00	0.48	0.00	0.000	0.000	0.000
2307	0.00	0.00	40.377	0.00	0.48	0.00	0.000	0.000	0.000
2308	0.00	0.00	39.902	0.00	0.48	0.00	0.000	0.000	0.000
2309	0.00	0.00	39.427	0.00	0.48	0.00	0.000	0.000	0.000
2310	0.00	0.00	38.952	0.00	0.48	0.00	0.000	0.000	0.000
2311	0.00	0.00	38.477	0.00	0.48	0.00	0.000	0.000	0.000
2312	0.00	0.00	38.002	0.00	0.48	0.00	0.000	0.000	0.000
2313	0.00	0.00	37.527	0.00	0.48	0.00	0.000	0.000	0.000
2314	0.00	0.00	37.052	0.00	0.48	0.00	0.000	0.000	0.000
2315	0.00	0.00	36.577	0.00	0.48	0.00	0.000	0.000	0.000
2316	0.00	0.00	36.102	0.00	0.48	0.00	0.000	0.000	0.000
2317	0.00	0.00	35.627	0.00	0.48	0.00	0.000	0.000	0.000
2318	0.00	0.00	35.152	0.00	0.48	0.00	0.000	0.000	0.000
2319	0.00	0.00	34.677	0.00	0.48	0.00	0.000	0.000	0.000
2320	0.00	0.00	34.202	0.00	0.48	0.00	0.000	0.000	0.000
2321	0.00	0.00	33.727	0.00	0.48	0.00	0.000	0.000	0.000
2322	0.00	0.00	33.252	0.00	0.48	0.00	0.000	0.000	0.000
2323	0.00	0.00	32.777	0.00	0.48	0.00	0.000	0.000	0.000
2324	0.00	0.00	32.302	0.00	0.48	0.00	0.000	0.000	0.000
2325	0.00	0.00	31.827	0.00	0.48	0.00	0.000	0.000	0.000
2326	0.00	0.00	31.352	0.00	0.48	0.00	0.000	0.000	0.000
2327	0.00	0.00	30.877	0.00	0.48	0.00	0.000	0.000	0.000
2328	0.00	0.00	30.402	0.00	0.48	0.00	0.000	0.000	0.000
2329	0.00	0.00	29.927	0.00	0.48	0.00	0.000	0.000	0.000
2330	0.00	0.00	29.452	0.00	0.48	0.00	0.000	0.000	0.000
2331	0.00	0.00	28.977	0.00	0.48	0.00	0.000	0.000	0.000
2332	0.00	0.00	28.502	0.00	0.48	0.00	0.000	0.000	0.000
2333	0.00	0.00	28.027	0.00	0.48	0.00	0.000	0.000	0.000
2334	0.00	0.00	27.552	0.00	0.48	0.00	0.000	0.000	0.000
2335	0.00	0.00	27.077	0.00	0.48	0.00	0.000	0.000	0.000
2336	0.00	0.00	26.602	0.00	0.48	0.00	0.000	0.000	0.000
2337	0.00	0.00	26.127	0.00	0.48	0.00	0.000	0.000	0.000
2338	0.00	0.00	25.652	0.00	0.48	0.00	0.000	0.000	0.000
2339	0.00	0.00	25.177	0.00	0.48	0.00	0.000	0.000	0.000
2340	0.00	0.00	24.702	0.00	0.48	0.00	0.000	0.000	0.000
2341	0.00	0.00	24.227	0.00	0.48	0.00	0.000	0.000	0.000
2342	0.00	0.00	23.752	0.00	0.48	0.00	0.000	0.000	0.000
2343	0.00	0.00	23.277	0.00	0.48	0.00	0.000	0.000	0.000
2344	0.00	0.00	22.802	0.00	0.48	0.00	0.000	0.000	0.000
2345	0.00	0.00	22.327	0.00	0.48	0.00	0.000	0.000	0.000
2346	0.00	0.00	21.852	0.00	0.48	0.00	0.000	0.000	0.000
2347	0.00	0.00	21.377	0.00	0.48	0.00	0.000	0.000	0.000
2348	0.00	0.00	20.902	0.00	0.48	0.00	0.000	0.000	0.000
2349	0.00	0.00	20.427	0.00	0.48	0.00	0.000	0.000	0.000
2350	0.00	0.00	19.952	0.00	0.48	0.00	0.000	0.000	0.000
2351	0.00	0.00	19.477	0.00	0.48	0.00	0.000	0.000	0.000
2352	0.00	0.00	19.002	0.00	0.48	0.00	0.000	0.000	0.000
2353	0.00	0.00	18.527	0.00	0.48	0.00	0.000	0.000	0.000
2354	0.00	0.00	18.052	0.00	0.48	0.00	0.000	0.000	0.000
2355	0.00	0.00	17.577	0.00	0.48	0.00	0.000	0.000	0.000
2356	0.00	0.00	17.102	0.00	0.48	0.00	0.000	0.000	0.000
2357	0.00	0.00	16.627	0.00	0.48	0.00	0.000	0.000	0.000
2358	0.00	0.00	16.152	0.00	0.48	0.00	0.000	0.000	0.000
2359	0.00	0.00	15.677	0.00	0.48	0.00	0.000	0.000	0.000
2360	0.00	0.00	15.202	0.00	0.48	0.00	0.000	0.000	0.000
2361	0.00	0.00	14.727	0.00	0.48	0.00	0.000	0.000	0.000

Set up Design Storm			Routing through FF Basin				Routing through Basin Soakpit		
Checks	360.00	82.80	Final FF Basin Volume:		1779.174		Final Basin Soakpit Volume:		216.600
Summary	2.00	82.80	2583.14	2520.27	169.20		216.60	355.30	
Time (min)	Distribution Curve	Rainfall (mm)	1802.13	2520.27	1133.93		216.60	1386.35	1041.18
			Volume at start of timestep (m <sup>3</sup> )	Site Runoff (m <sup>3</sup> /min)	Soakage (m <sup>3</sup> /min)	Overflow (m <sup>3</sup> /min)	Volume at start of timestep (m <sup>3</sup> )	Soakage (m <sup>3</sup> )	Excess (m <sup>3</sup> )
2362	0.00	0.00	14.252	0.00	0.48	0.00	0.000	0.000	0.000
2363	0.00	0.00	13.777	0.00	0.48	0.00	0.000	0.000	0.000
2364	0.00	0.00	13.302	0.00	0.48	0.00	0.000	0.000	0.000
2365	0.00	0.00	12.827	0.00	0.48	0.00	0.000	0.000	0.000
2366	0.00	0.00	12.352	0.00	0.48	0.00	0.000	0.000	0.000
2367	0.00	0.00	11.877	0.00	0.48	0.00	0.000	0.000	0.000
2368	0.00	0.00	11.402	0.00	0.48	0.00	0.000	0.000	0.000
2369	0.00	0.00	10.927	0.00	0.48	0.00	0.000	0.000	0.000
2370	0.00	0.00	10.452	0.00	0.48	0.00	0.000	0.000	0.000
2371	0.00	0.00	9.977	0.00	0.48	0.00	0.000	0.000	0.000
2372	0.00	0.00	9.502	0.00	0.48	0.00	0.000	0.000	0.000
2373	0.00	0.00	9.027	0.00	0.48	0.00	0.000	0.000	0.000
2374	0.00	0.00	8.552	0.00	0.48	0.00	0.000	0.000	0.000
2375	0.00	0.00	8.077	0.00	0.48	0.00	0.000	0.000	0.000
2376	0.00	0.00	7.602	0.00	0.48	0.00	0.000	0.000	0.000
2377	0.00	0.00	7.127	0.00	0.48	0.00	0.000	0.000	0.000
2378	0.00	0.00	6.652	0.00	0.48	0.00	0.000	0.000	0.000
2379	0.00	0.00	6.177	0.00	0.48	0.00	0.000	0.000	0.000
2380	0.00	0.00	5.702	0.00	0.48	0.00	0.000	0.000	0.000
2381	0.00	0.00	5.227	0.00	0.48	0.00	0.000	0.000	0.000
2382	0.00	0.00	4.752	0.00	0.48	0.00	0.000	0.000	0.000
2383	0.00	0.00	4.277	0.00	0.48	0.00	0.000	0.000	0.000
2384	0.00	0.00	3.802	0.00	0.48	0.00	0.000	0.000	0.000
2385	0.00	0.00	3.327	0.00	0.48	0.00	0.000	0.000	0.000
2386	0.00	0.00	2.852	0.00	0.48	0.00	0.000	0.000	0.000
2387	0.00	0.00	2.377	0.00	0.48	0.00	0.000	0.000	0.000
2388	0.00	0.00	1.902	0.00	0.48	0.00	0.000	0.000	0.000
2389	0.00	0.00	1.427	0.00	0.48	0.00	0.000	0.000	0.000
2390	0.00	0.00	0.952	0.00	0.48	0.00	0.000	0.000	0.000
2391	0.00	0.00	0.477	0.00	0.48	0.00	0.000	0.000	0.000
2392	0.00	0.00	0.002	0.00	0.00	0.00	0.000	0.000	0.000
2393	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2394	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2395	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2396	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2397	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2398	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2399	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2400	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2401	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2402	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2403	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2404	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2405	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2406	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2407	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2408	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2409	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2410	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2411	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2412	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2413	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2414	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2415	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2416	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2417	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2418	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2419	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2420	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2421	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2422	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2423	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2424	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2425	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2426	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2427	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2428	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2429	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2430	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2431	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2432	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2433	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2434	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2435	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2436	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2437	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2438	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2439	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2440	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2441	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2442	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2443	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2444	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2445	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2446	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2447	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2448	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2449	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2450	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2451	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2452	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2453	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2454	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2455	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2456	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2457	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2458	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2459	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2460	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2461	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2462	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2463	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000
2464	0.00	0.00	0.000	0.00	0.00	0.00	0.000	0.000	0.000





### **Cameron Swales**

Cameron has six years of experience as a Civil and Environmental Engineer specialising in environmental and stormwater engineering. Cameron brings diverse experience across a range of three-waters and civil infra-structure projects. He has been involved in all project stages, from initial feasibility studies and options assessments to detailed design, preparing tender documents, and overseeing construction. Cameron has collaborated with multidisciplinary teams to successfully deliver complex projects from start to finish. He is dedicated to providing high-quality engineering solutions that align with clients' needs and budgets.

### **Eoghan O'Neill**

Eoghan is a Technical Director with Pattle Delamore Partners Ltd and has been employed in that capacity since October 2012. He is a Chartered Professional Engineer with approximately 25 years' experience in the planning and design of wastewater, water supply and stormwater infrastructure. He holds Bachelor of Engineering and Master of Engineering Science degrees awarded by University College Dublin. Much of his experience is related to the planning of infrastructure to facilitate development in New Zealand. He has prepared and presented evidence to Plan Change Hearings, Resource Consent Hearings and the Environment Court on numerous occasions.