

## HE ARA TĀMATA CREATING GREAT PLACES

Supporting our people

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# Request for approval of engineering plans and reports required by conditions of Resource Consent or Consent Notice

1. Applicant details (Consent Holder or Property Owner):

Check this box if the you wish to be included in correspondence regarding this application.  Designer/Engineer contact details (Contact Person):  Name/s: (please write all names in full)  Contact phone number:  Email:  3. Primary Contact details: (Please specify which person identified above is the primary point of contact):  Name/s:  Sebastian Hicks	Name/s names	s: (please write all in full)	Dandy Developments Ltd
Check this box if the you wish to be included in correspondence regarding this application.  Designer/Engineer contact details (Contact Person):  Name/s: (please write all names in full)  Contact phone number:  Email:  3. Primary Contact details: (Please specify which person identified above is the primary point of contact):  Name/s: Sebastian Hicks  4. The document number for which these plan(s) or report(s) relate: Please note the Resource Consent or Consent Notice reference below. Please ensure the correct suffix is used if there are any variations or objections associated with this application.	Phone i	numbers:	Work: Home:
2. Designer/Engineer contact details (Contact Person):  Name/s: (please write all names in full)  Contact phone number:  Email:  3. Primary Contact details: (Please specify which person identified above is the primary point of contact):  Name/s: Sebastian Hicks  4. The document number for which these plan(s) or report(s) relate: Please note the Resource Consent or Consent Notice reference below. Please ensure the correct suffix is used if there are any variations or objections associated with this application.	Email:		
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Please note the Resource Consent or Consent Notice reference below. Please ensure the correct suffix is used if there are any variations or objections associated with this application.	Name/s	<b>3:</b>	Sebastian Hicks
	if there	note the Resou are any variation	rce Consent or Consent Notice reference below. Please ensure the correct suffix is used

## 5. Conditions to be approved:

List the conditions to which this request relates and specify which documents relate to each.

If additional space is required, please attach a summary document.

Condition	Document reference	Drawing numbers
3(d)(i)	Geologix	300 & 390
3(d)(ii)	ENGINEERING REPORT FOR	Section 5, Sheets 300, 250 & 380
3(d)(iii)	ENGINEERING	Section 4, Sheets 110, 380 & 390
3(d)(iv)	DESIGN APPROVAL	Section 6, 6.1, Sheet 130

6.	Does this app	lication in	clude any of the	following (tick w	here appropriate):	-
	Infrastructur	re: To	be vested:	Upgrades:	New connection:	
	Roads					
	Street lighting	ng				
	Wastewater	Not	e - Lot 7 to vest in	FNDC for sewerage	but no wastewater assets	
	Stormwater					
	Potable Wat	er				
7.	Please note a	ny associa	ted Building Co	onsent reference (	if applicable):	
process	sing this request don completion	n or entity tha for approval of the work	of engineering pla	ns and reports. Staff fer to the council's	pices or receiving any refunc time required to process thi Fees and Charges docum	is approval will be
	a: (please write es in full)	Dandy De	velopments			
Postal a	address:					
					Post code:	
Phone i	numbers:	Work:		Home:		
		Fax:		Email:		
Name o	of bi <u>ll payer:</u> Da	nielle Moa	(pleas	se print)		
Signatu	re:		(signa	ature of bill payer – m	nandatory) Date:	
Import	ant informatio	n:				
there is your ap	sensitive inform plication for app	ation include roval can be	d in this request. 7	The information you he formation will be stor	comes public information. P nave provided on this form i red on the council's property	s required so that
Declara	ation: The inform	nation I have	supplied with this	application is true an	nd complete to the best of m	y knowledge.
Name:	Danielle Moa		(pleas	se print)		
Signatu	re:		(signa	ature) D	Pate:	



## **ENGINEERING REPORT**

FOR ENGINEERING DESIGN APPROVAL (EDA)

458A HIHI ROAD, HIHI

MOA EQUITY LTD

C0651N-S02 AUGUST 2025 REVISION 1





## **DOCUMENT MANAGEMENT**

**Document Title** Engineering Report – For Engineering Design Approval (EDA)

Site Reference 458A Hihi Road, Hihi

Client Moa Equity Ltd

Geologix Reference C0651N-S02

**Issue Date** August 2025

Revision 01

Prepared by Gerard McHardy

Civil Engineer, BE Civil

**Reviewed** Sebastian Hicks

Principal Civil Engineer, BSc Eng (Hons), CPEng Reg. 1168062,

IntPE(NZ) /APEC Engineer, CMEngNZ

**Approved by** Edward Collings

Managing Director, CEnvP Reg. 0861, CPEng Reg. 1033153, CMEngNZ

## **REVISION HISTORY**

Issue	Prepared	Reviewed	Approved
For EDA Application	GM	SH	EC
		•	



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## 1 INTRODUCTION

This Engineering Report has been prepared by Geologix Consulting Engineers Ltd (Geologix) for Moa Equity Ltd as our Client in accordance with our standard short form agreement and general terms and conditions of engagement.

The scope of works has been undertaken to prepare an Engineering Design Approval (EDA) application in relation to the proposed subdivision of 458A Hihi Road, Hihi (the 'site') into 7 new Lots. Refer Figure 1 and 2 for images of the proposed site layout.

The proposed subdivision has been granted Resource Consent by Far North District Council (FNDC). The FNDC Resource Consent reference is 2230063-RMASUB. The consents are based on supporting information provided by others. This documentation is noted below for reference and included in the appendices of this report where indicated:

- Scheme Plan, Ref. No 23812, Proposed Subdivision of Lot 2 DP 195378, Dated May 2022, by Williams and King Ltd, stamped "Approved Plan" by FNDC 22/04/2024 – Refer Appendix A
- Site Suitability Report for Proposed Subdivision, Ref 22118, Revision Final, Dated May 2022, by Haigh Workman Ltd Civil and Structural Engineers<sup>1</sup>

The detailed design presented with this EDA application intends to only advance the necessary elements of the preliminary design to satisfy the related conditions of consent. This report serves to provide clarity to the adopted design and drawings included in Appendix B.

The focus of the detailed design is the accessway (Right of Way) and stormwater drainage to facilitate the subdivision to the satisfaction of the related conditions of consent. All other onlot infrastructure (such as wastewater and water supply) is to be applied for under the individual on-lot development consents in accordance with the conditions of the above-referenced resource consent.

It is also noted that the vehicle crossings to each lot from the Right of Way are indicative within in this submission. These crossings are proposed to be finalised and formed at time of individual lot development, rather than at subdivision formation.

C0651A-S-02 Moa Equity Ltd 4
458A Hihi Road, Hihi

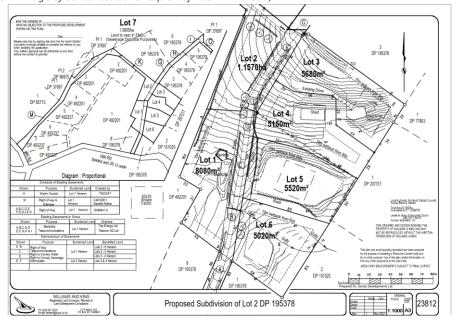
<sup>&</sup>lt;sup>1</sup> Site Suitability Report for Proposed Subdivision, Ref 22118, Revision Final, Dated May 2022, by Haigh Workman Ltd Civil and Structural Engineers



Figure 1: Aerial Image of 458A Hihi Road, Hihi



Figure 2: Image of consented scheme plan of 458A Hihi Road, Hihi



## 2 SITE DESCRIPTION

The site is located on Hihi Road, Hihi, on the northern side of the road. The site encompasses  $51,772 \, \text{m}^2$ , including access road corridors, with the gross area of approximately  $35,000 \, \text{m}^2$  available for the subdivision. The majority of the site is grass with some areas of bush along the eastern side. There is an existing unconsented shed in the north-eastern quadrant of the



site which will be removed as part of the development. The topography of the site is generally gently rising to the north from Hihi Road with an unsealed access road following a ridge along the western side of the site. In the south-eastern corner of the site there is a gully trending southeast towards an estuary feeding the Mangonui Harbour.

As indicated on FNDC Maps and in Figure 3 below, there is no existing 3 water infrastructure or reticulated networks present within the site boundaries.



Figure 3: FNDC 3Waters Maps GIS Image of Existing Services

#### 3 PROPOSED DEVELOPMENT

The approved scheme plan<sup>2</sup> received from Williams and King presents a subdivision comprising 6 residential Lots and an access road (Lot 7) to be vested in Council.

It is proposed to upgrade the existing vehicle crossing off Hihi Road which complies with the Councils Engineering Standard FNDC/S/6D and section 3.3.7.1 of the Engineering standards and NZS4404:2004 in accordance with the plans approved under Condition 3(b) of the Resource Consent. Vegetation is to be cleared in both directions along Hihi Road in accordance with the recommendations in Haigh Workman report<sup>3</sup>, reference 22 118, Chapter 5.6.

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<sup>&</sup>lt;sup>2</sup> Scheme Plan, Ref. No 23812, Proposed Subdivision of Lot 2 DP 195378, Dated May 2022, by Williams and King

<sup>&</sup>lt;sup>3</sup> Site Suitability Report for Proposed Subdivision, Ref 22118, Revision Final, Dated May 2022, by Haigh Workman Ltd Civil and Structural Engineers



The existing access road will be upgraded to a sealed access ROW with a 5m wide carriageway in accordance with condition 4(b) of the Resource Consent, noting this is a departure from Table 3-16 of the FNDC Engineering Standards.

The formation is to consist of a minimum of 150mm of GAP 65 sub-base and 100mm GAP 40 basecourse with a sealed surface and is to include water table drains, culverts and culvert wingwalls as required to direct and control stormwater runoff.

Stormwater considerations are detailed further in Section 4.

The site has minimal earthworks proposed and is only required to implement the above roading and drainage.

#### 4 **STORMWATER**

#### 4.1 Existing (Pre-development) Considerations

Stormwater runoff on the eastern side of the existing accessway generally flows towards a gully within the proposed Lot 6, trending south-eastwards through a neighbouring property to the CMA.

Runoff from the accessway and proposed Lots 1 and 2 is generally directed to swale drains alongside the accessway and discharged towards the gully, with a 300mm culvert under the accessway directing runoff from the western side towards the gully.

To the south of this culvert, stormwater is directed to swale drains on either side of the accessway carry runoff to the Hihi Road water table. Two culverts carry the runoff across the road towards the estuary via a neighbouring property.

At the northern end of the accessway, there is a 250mm culvert that crosses the ROW and redirects the runoff to the west.

It is noted that sediment and vegetation has caused many of the intakes to be partially blocked.

#### 4.2 **Proposed Stormwater Management**

The stormwater management elements directly addressed within this Engineering Approval application are:

- Catchment post-development flows for the proposed subdivision, determined by the rational method.
- Sizing of roadside swales.
- Routing of drainage, considering the new paved ROW and the effect on the existing drainage paths.
- Sizing of culverts under the right of way and proposed vehicle crossings.



Key design criteria for stormwater management elements are presented as follows:

- The stormwater discharge from the site is determined for a design storm of 10% AEP.
- Rainfall data has been obtained from NIWA HIRDS V4.0, for the 10yr ARI / 10% AEP, 10-minute storm duration, adjusted for a 20% increase due to climate change as per FNDC engineering standards.

The site has been divided into five catchments.

Catchment A encompasses approximately 5,380 m<sup>2</sup>, incorporating most of Lots 1 and 2 and the western side of the proposed RoW. Stormwater is directed towards the western swale drain the passes through a culvert towards the gully within Lot 6, ultimately being directed to the CMA.

Catchment B encompasses approximately 1,705 m<sup>2</sup>, incorporating the eastern side of the proposed RoW and a thin strip of adjacent land. Stormwater is directed towards the eastern swale drain then through the gully within Lot 6, ultimately being directed to the CMA.

Catchment C encompasses approximately 30,142 m<sup>2</sup>, incorporating land on the eastern side of the proposed RoW. Stormwater is directed towards the gully within Lot 6, ultimately being directed to the CMA.

Catchment D encompasses approximately 5,724 m<sup>2</sup>, incorporating the balance of Lot 1 and a portion of the neighbouring site and the western side of the proposed RoW. Stormwater is directed towards the Hihi Road water table then through a culvert under Hihi Road towards the CMA via a neighbouring property.

Catchment E encompasses approximately 942 m<sup>2</sup>, incorporating the eastern side of the proposed RoW and a thin strip of adjacent land. Stormwater is directed towards the Hihi Road water table then through a culvert under Hihi Road towards the CMA via a neighbouring property.

The overall primary stormwater discharge for the proposed RoW will be managed through roadside water tables. These will be piped below road crossings and driveways where required.

The slope of the RoW generally exceeds 10%, as such all swales are to be rock lined.

All inlets are to have headwalls with screens to prevent blockage from vegetation.

There is no need to build wingwalls on the downstream side of the culverts as the swale is to be rock lined.

On lot development stormwater management will be provided as per the conditions of consent.

Engineering Calculations can be found in Appendix C.



## 4.3 Stormwater Attenuation

As there are no downstream properties below the site, and the receiving infrastructure/channels have sufficient capacity to convey the design storms to the coastal marine area, attenuation of accessway runoff for the formed subdivision is not required.

## 5 ROADING

## 5.1 Internal Roading

The internal roading layout and details have been prepared in accordance with the conditions of consent as supported by the RC Engineering Report.

For purposes of clarification:

The roading cross-section has been prepared in accordance with the FNDC engineering standards Sheet 9, Rural Privateway Details.

The existing driveway will be upgraded to a sealed access ROW with a 5m wide carriageway along its' full length in accordance with condition 4(b) of the Resource Consent, noting this is a departure from Table 3-16 of the FNDC Engineering Standards.

The RoW will have dual crossfall throughout the full length, with a standard crossfall of 3%. The formation is to consist of a minimum of 150mm of GAP 65 sub-base and 100mm GAP 40 basecourse with a sealed surface and is to include water table drains, culverts and culvert wingwalls as required to direct and control stormwater runoff.

Longitudinal grades exceed 5%, as such the table drains will be rock lined. This will occur along the full length of the RoW.

## 6 EARTHWORKS

Earthworks are required to form the proposed internal roading, drainage channels and the stormwater pond.

The proposed earthworks activities have been modelled with 3d design by Geologix. Proposed earthworks are summarised below within Table 2. The cut volumes presented in this volume assessment includes topsoil stripping volume and fill volumes include for the pavement layer works. Earthworks for vehicle crossings has not been modelled and is anticipated to involve topsoil strip only.

Table 2: Summary of Proposed Earthworks

Activity	Proposed Volume	Net Volume	Total Area	Max. Height
Cut	330m <sup>3</sup>	40m³		1.0m
Fill	290m³			0.8m
Total	m³	40m³cut	2,670m²	



#### 6.1 **Erosion and Sediment Control**

Erosion and sediment control measures are required to control sediment runoff from areas of proposed earthworks. These include:

- Stabilised entrance formed at the proposed crossings to Hihi Road and Brunton Place.
- Silt fences along the downslope face of the proposed RoW.
- Temporary diversion of existing overland flow paths, i.e. drainage ditches around culvert

#### 7 **LIMITATIONS**

This report has been prepared for Moa Equity Limited as our Client. It may be relied upon by our Client and their appointed Consultants, Contractors and for the purpose of Consent as outlined by the specific objectives in this report. This report and associated recommendations, conclusions or intellectual property is not to be relied upon by any other party for any purpose unless agreed in writing by Geologix Consulting Engineers Ltd and our Client. In any case the reliance by any other party for any other purpose shall be at such parties' sole risk and no reliability is provided by Geologix Consulting Engineers Ltd.

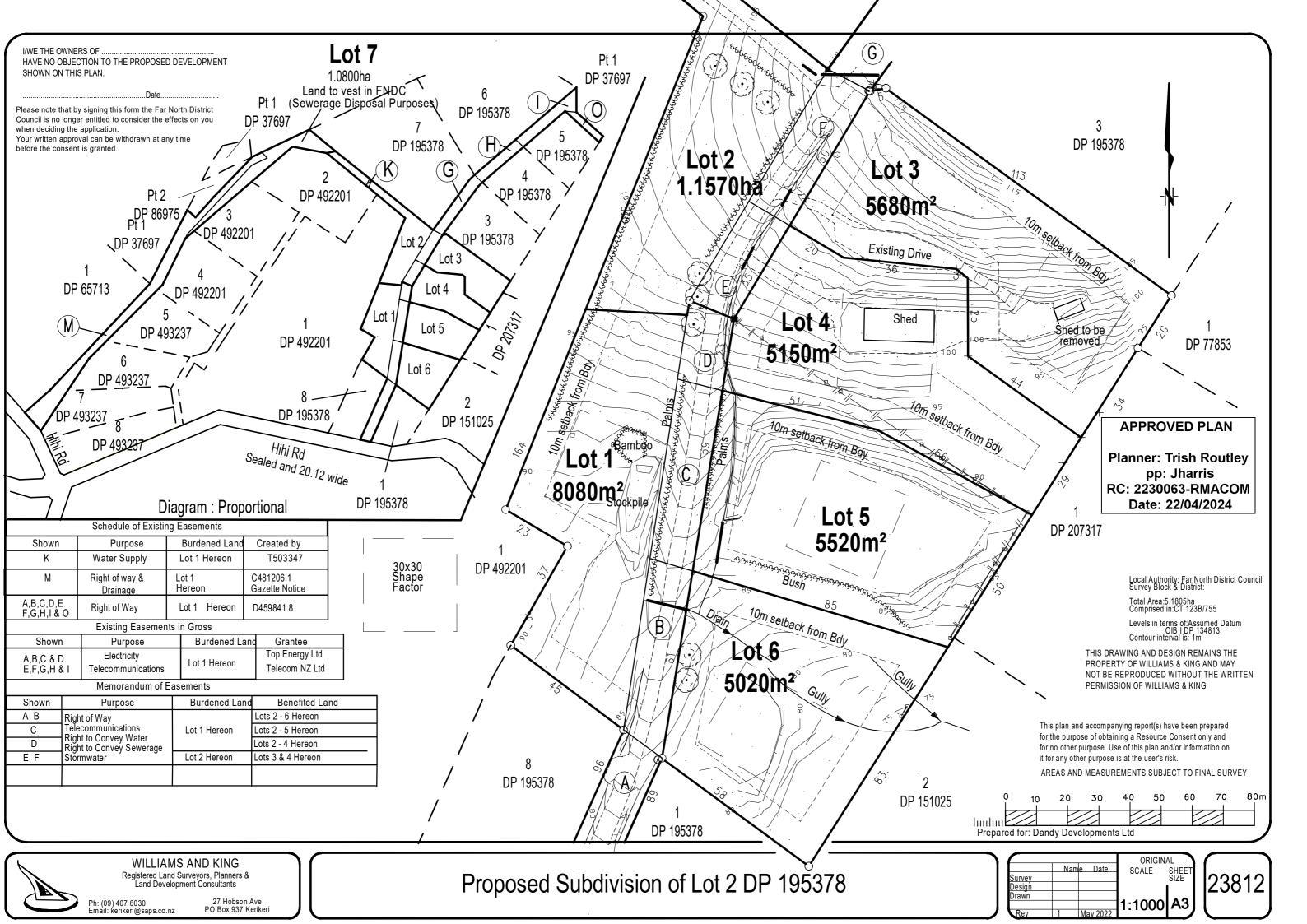
The opinions and recommendations of this report are based on plans, specifications and reports provided to us at the time of writing, as referenced. Any changes, additions or amendments to the project scope and referenced documents may require an amendment to this report and Geologix Consulting Engineers should be consulted. Geologix Consulting Engineers Ltd reserve the right to review this report and accompanying plans.

C0651A-S-02 Moa Equity Ltd 10



**APPENDIX A** 

Scheme Plan

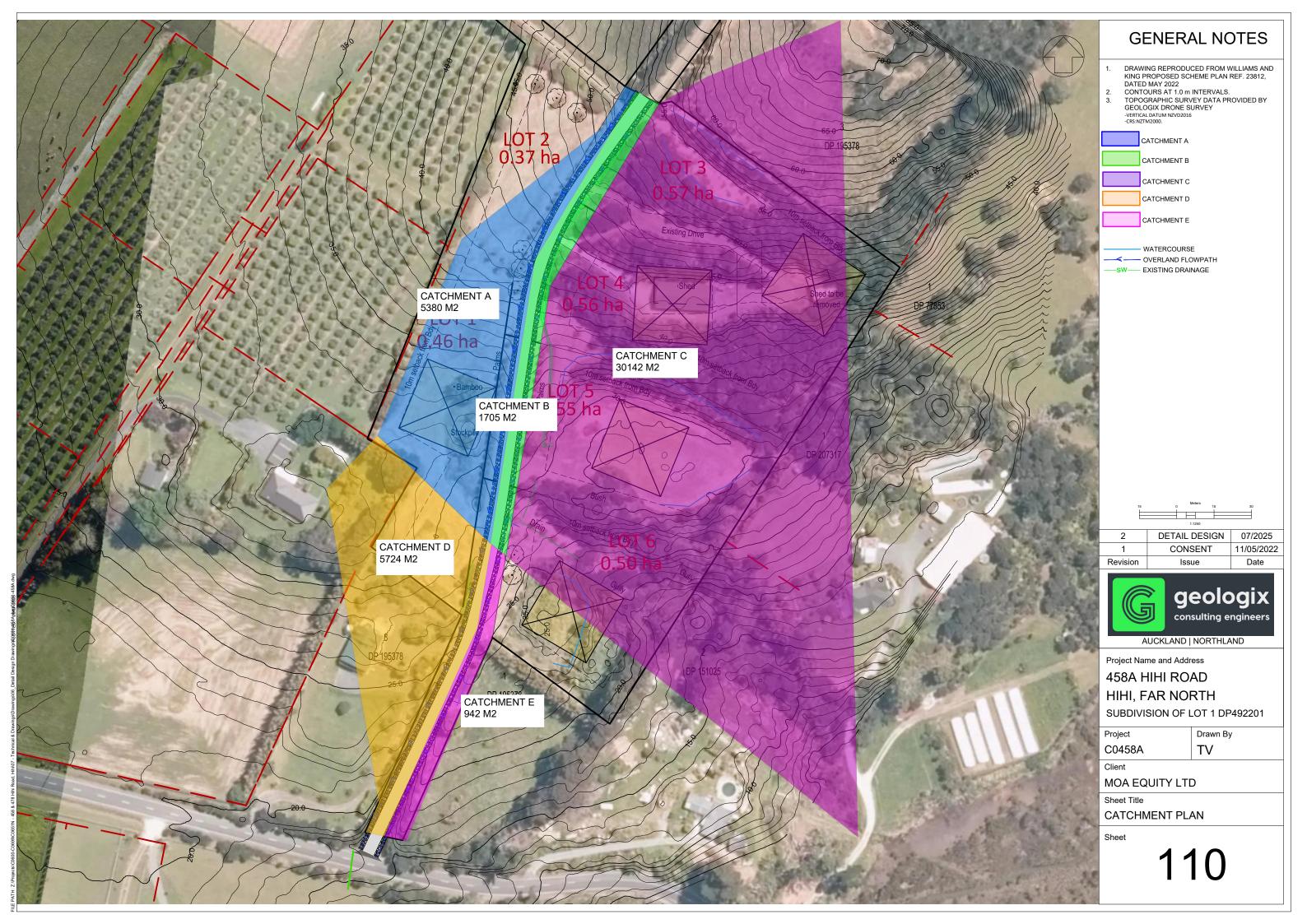


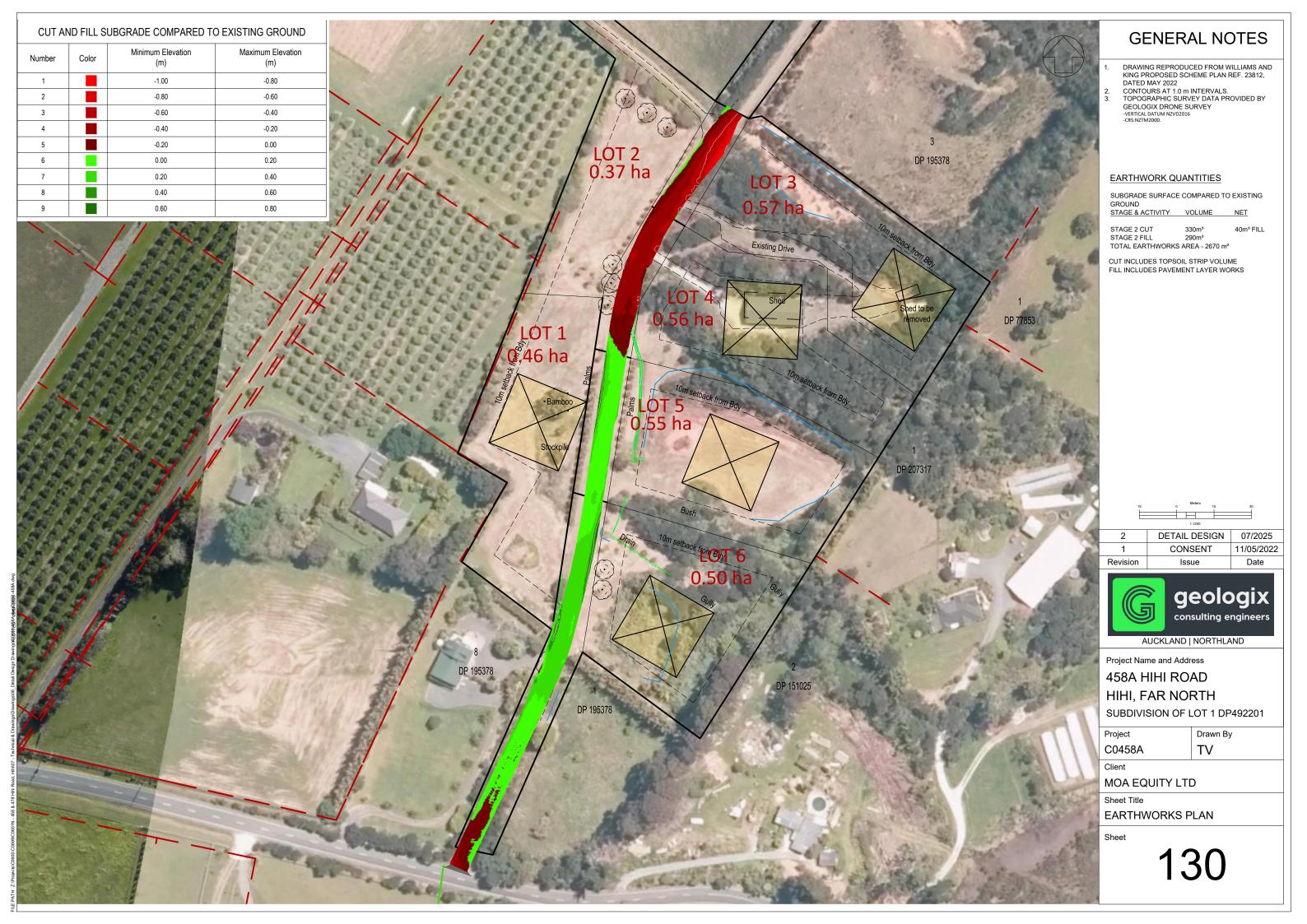


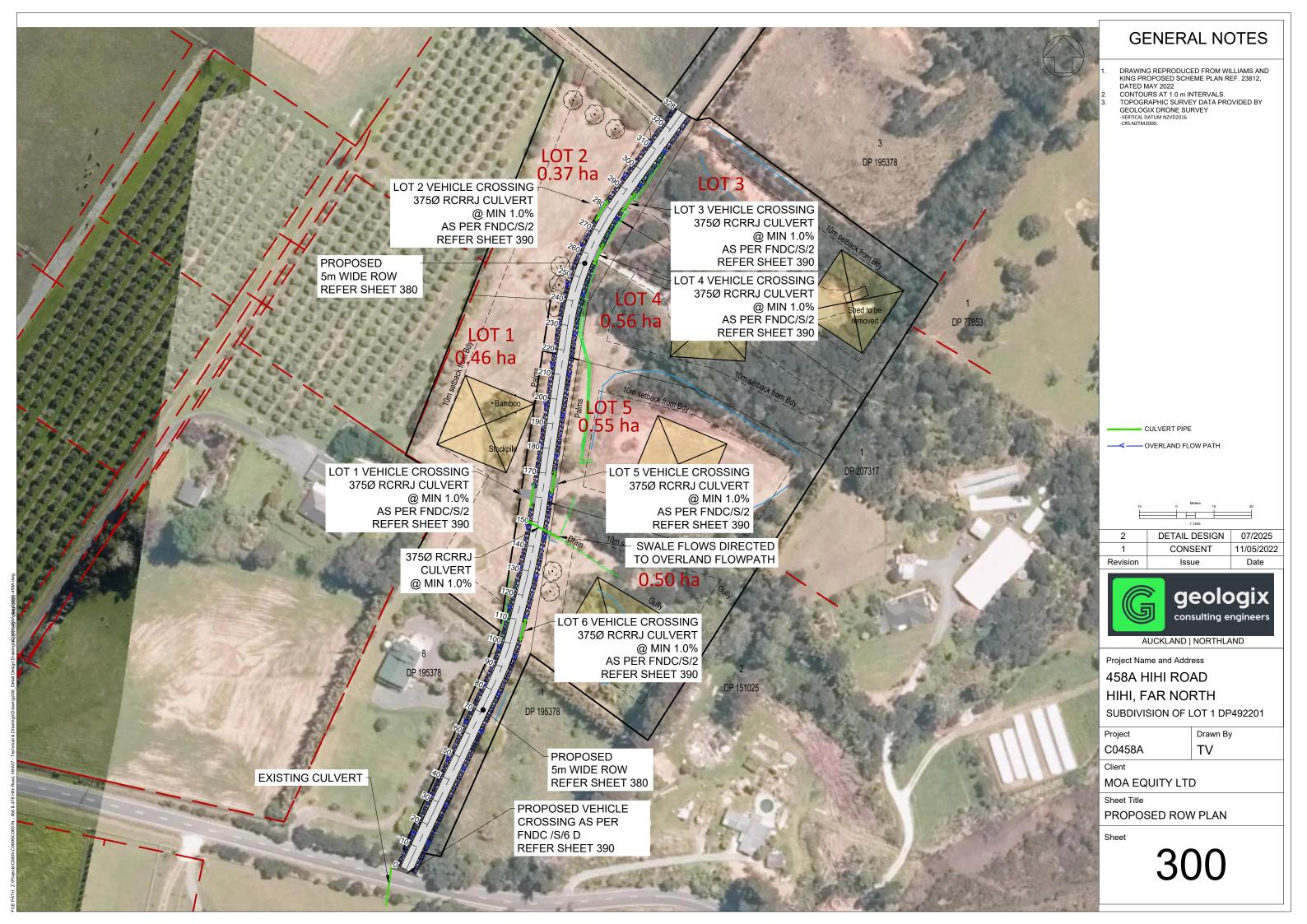
**APPENDIX B** 

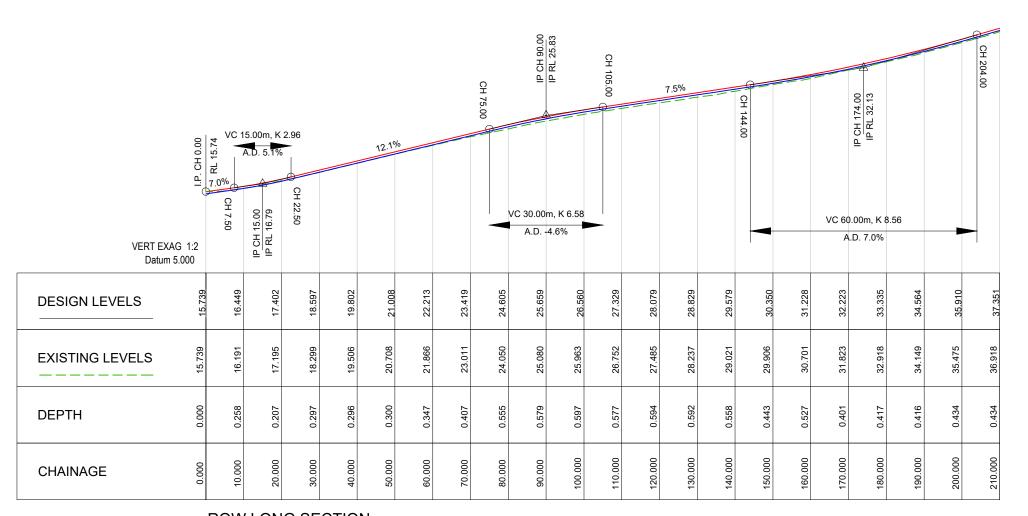
Drawings











**ROW LONG SECTION** VERT EXAG 1:2 Datum 30.000 FINISH SURFACE LEVEL 8 53.436 54.503 **EXISTING LEVELS** DEPTH SUBGRADE LEVEL 328.220 CHAINAGE

**ROW LONG SECTION** 

**GENERAL NOTES** 

2 DETAIL DESIGN 07/2025 CONSENT 11/05/2022 Revision Date



Project Name and Address

458A HIHI ROAD HIHI, FAR NORTH

SUBDIVISION OF LOT 1 DP492201

Project C0458A

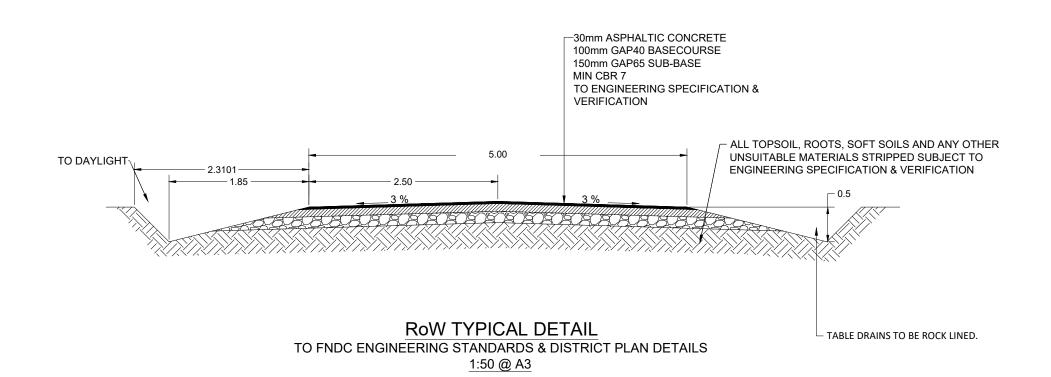
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MOA EQUITY LTD

Sheet Title

**ROW LONG SECTION** 

350









AUCKLAND | NORTHLAND

Project Name and Address

458A HIHI ROAD HIHI, FAR NORTH

SUBDIVISION OF LOT 1 DP492201

Project C0458A Drawn By

Client

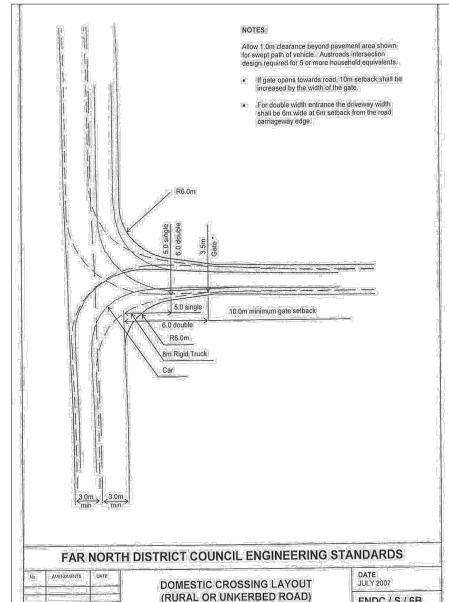
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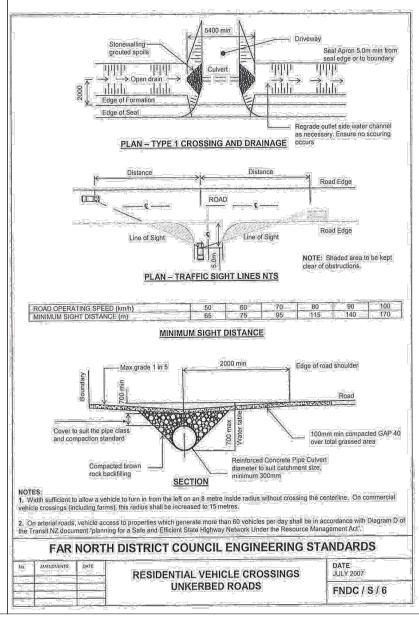
TYPICAL CROSS SECTIONS

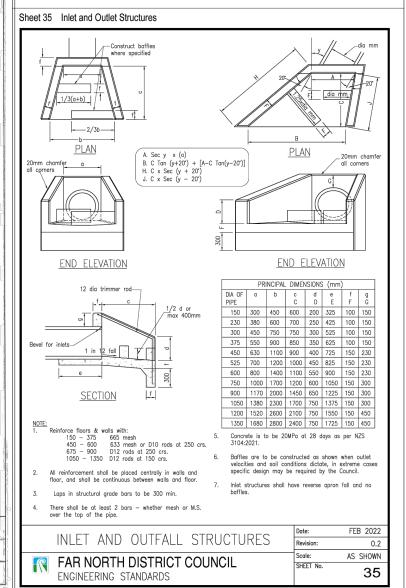
Sheet

380



FNDC/S/6B







2	DETAIL DESIGN	07/2025
1	CONSENT	11/05/2022
Revision	Issue	Date



AUCKLAND | NORTHLAND

**Project Name and Address** 

458A HIHI ROAD HIHI, FAR NORTH

SUBDIVISION OF LOT 1 DP492201

Project Drawn By C0651 TV

Client

MOA EQUITY LTD

Sheet Title

**TYPICAL CROSS SECTIONS** 

Sheet

390

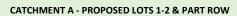


**APPENDIX C** 

**Calculations** 

## C0651N Project Ref: Project Address: 458A HIHI ROAD, HIHI Prepared By: GM 1 July 2025 REV 1

## **PEAK RUNOFF ASSESSMENT**





ATTENUATION DESIGN PROVIDED IN ACCORDANCE WITH NEW ZEALAND BUILDING CODE E1 FOR THE RATIONALE METHOD ACCOUNTING FOR THE EFFECTS OF CLIMATE CHANGE (20% FACTOR AS PER 2023 FNDC ENGINEERING STANDARDS).

PREDEVELOPMENT SCE	NARIO			POST DEVE	LOPMENT SCENARIO		
		COEFFICIENT, C	.DESCRIPTION	ITEM	AREA, A, m2	COFFEICIENT	, C DESCRIPTION
115101	4870	0.67	PASTURE/ GRASS	111 [17]	4230	0.67	PASTURE/ GRASS
	510	0.85	EXISTING ACCESSWAY		510	0.07	PROPOSED RIGHT OF WAY
	310	0.83	LAISTING ACCESSIVAT	ļ	640	0.96	PROPOSED LOT ROOF/PAVING
TOTAL	5380	TYPE D	PR = PROPOSED	TOTAL	5380	TYPE D	- FROFOSED EOT ROOF/FAVING
TOTAL	3380	ITFLD	FR - FROPOSED	ITOTAL	3380	ITTED	
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CLIMATE CHANGE FACT	OR, 20% AS PER	R FNDC STANDAR	<u>20</u>	%	ENGINEERING STAN	IDARDS 4.3.9.1.	NIWA HISTORIC RAINFALL INTENSITY
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20 % AEP POST DEVELO			·}	l/s			
PRE TO POST DEVELOPN			·	l/s	:		
				, ,	<b>!</b>		
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10 % AEP POST DEVELO	PMENT PEAK F	LOW	114.34	I/s			
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1 0/ AED DAINIEALL INITE	NSITY, 10 MIN,	I, mm/hr	132.0	mm/hr			% APPLIED IN ACCORDANCE WITH FNDC
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CLIMATE CHANGE FACT 1 % AEP RAINFALL INTEI	NSITY, 10 MIN V IENT PEAK FLOV	WITH CC W		ii			INVALE CHANGE FACTOR.

Project Ref: Project Address:	C0651N 458A HIHI ROAD, HIH	 	PEAK RUNOFF ASSESSMENT		geologix
Prepared By: GM					consulting engineers
Date:	1 July 2025	REV 1	CATCHIVIENT B - PART ROW		
ATTENUATION DI	ESIGN PROVIDED IN AC	CORDANCE WITH	NEW ZEALAND BUILDING CODE E1 FOR THE RATIONALE METHOD ACCOUNTIN	IG FOR THE EF	FECTS OF CLIMATE

CHANGE (20% FACTOR AS PER 2023 FNDC ENGINEERING STANDARDS).

PREDEVELOPMENT SO	CENIARIO			DOST DEVE	OPMENT SCENARIO		
		COEFFICIENT, C	DECEMBER	ITEM		LOGEFFICIENT	, C DESCRIPTION
ITEM	AREA, A, m2		<b>}</b>	ITEIVI	AREA, A, m2	-+	
	1195	0.67	PASTURE/ GRASS	<u> </u>	1195	0.67	PASTURE/ GRASS
	510	0.85	EXISTING ACCESSWAY	ļ	510	0.96	PROPOSED RIGHT OF WAY
	4705	TVDE D	DD DDODOCED	TOTAL	4705	TVDE D	PROPOSED LOT ROOF/PAVING
TOTAL	1705	TYPE D	PR = PROPOSED	TOTAL	1705	TYPE D	!
PRE TO POST DEVELO	PMENT RUNGER	- 20 % ΔFP					
20 % AEP RAINFALL IN			74.4	mm/hr	* CLIMATE CHANGE	FACTOR OF 20	% APPLIED IN ACCORDANCE WITH FNDO
CLIMATE CHANGE FAC		·	}	%			NIWA HISTORIC RAINFALL INTENSITY
20 % AEP RAINFALL IN			89.3	mm/hr	4		IMATE CHANGE FACTOR.
20 % AEP PRE DEVELO			<u> </u>	l/s			
20 % AEP POST DEVEL			<u> </u>	I/s			
PRE TO POST DEVELO			}	1/s			
THE TO TOO! DEVELO	WILLIAM DITTERCE	101	1.55	1/ 5	l		
PRE TO POST DEVELO	PMENT RUNOFF	- 50 % AEP					
50 % AEP RAINFALL IN			57.3	mm/hr	* CLIMATE CHANGE	FACTOR OF 20	% APPLIED IN ACCORDANCE WITH FNDC
CLIMATE CHANGE FAC			ļ	%	ENGINEERING STAN	IDARDS 4.3.9.1.	NIWA HISTORIC RAINFALL INTENSITY
50 % AEP RAINFALL IN			68.8	mm/hr	DATA, 10MIN, IS M	ULTIPLIED BY CL	IMATE CHANGE FACTOR.
50 % AEP PRE DEVELC			23.57	I/s			
50 % AEP POST DEVEL			24.64	l/s			
PRE TO POST DEVELO	PMENT DIFFEREN	VCE	1.07	l/s			
			I.				
PRE TO POST DEVELO	PMENT RUNOFF	- 10 % AEP					
10 % AEP RAINFALL IN	NTENSITY, 10 MI	N, I, mm/hr	87.1	mm/hr	* CLIMATE CHANGE	FACTOR OF 20	% APPLIED IN ACCORDANCE WITH FND
CLINAATE CHANGE EA	CTOR 20% AS DE			,		IDADDE 4 2 0 1	
CLIIVIATE CHANGE FA	CION, 20/0 A3 FL	R FNDC STANDAR	20	%	ENGINEERING STAP	NDAND3 4.3.3.1	NIWA HISTORIC RAINFALL INTENSITY
CLIMATE CHANGE FA			20 104.5	% mm/hr	4		. NIWA HISTORIC RAINFALL INTENSITY LIMATE CHANGE FACTOR.
	NTENSITY, 10 MII	N WITH CC	<b></b>		4		
10 % AEP RAINFALL IN	NTENSITY, 10 MII OPMENT PEAK FL	N WITH CC LOW	104.5	mm/hr	4		
10 % AEP RAINFALL IN 10 % AEP PRE DEVELC 10 % AEP POST DEVEL	NTENSITY, 10 MII DPMENT PEAK FL LOPMENT PEAK I	N WITH CC LOW FLOW	104.5 35.83 37.46	mm/hr I/s	4		
10 % AEP RAINFALL IN 10 % AEP PRE DEVELC 10 % AEP POST DEVEL	NTENSITY, 10 MII DPMENT PEAK FL LOPMENT PEAK I	N WITH CC LOW FLOW	104.5 35.83 37.46	mm/hr l/s l/s	4		
10 % AEP RAINFALL IN 10 % AEP PRE DEVELC 10 % AEP POST DEVEL	NTENSITY, 10 MII DPMENT PEAK FL LOPMENT PEAK I DPMENT DIFFERE	N WITH CC LOW FLOW NCE	104.5 35.83 37.46	mm/hr l/s l/s	4		
10 % AEP RAINFALL II 10 % AEP PRE DEVELO 10 % AEP POST DEVEI PRE TO POST DEVELO PRE TO POST DEVELO	NTENSITY, 10 MII DPMENT PEAK FL LOPMENT PEAK I PMENT DIFFERE	N WITH CC LOW FLOW NCE	104.5 35.83 37.46	mm/hr l/s l/s	DATA, 10MIN, IS M	ULTIPLIED BY C	
10 % AEP RAINFALL II 10 % AEP PRE DEVELO 10 % AEP POST DEVEI PRE TO POST DEVELO PRE TO POST DEVELO	NTENSITY, 10 MID DPMENT PEAK FL LOPMENT PEAK I PMENT DIFFERE DPMENT RUNOFF TENSITY, 10 MIN,	N WITH CC LOW FLOW NCE - 1 % AEP	104.5 35.83 37.46 1.63	mm/hr I/s I/s I/s	DATA, 10MIN, IS M	ULTIPLIED BY C	LIMATE CHANGE FACTOR.
10 % AEP RAINFALL IN 10 % AEP PRE DEVELO 10 % AEP POST DEVELO PRE TO POST DEVELO PRE TO POST DEVELO 1 % AEP RAINFALL INT	NTENSITY, 10 MID DPMENT PEAK FL LOPMENT PEAK I DPMENT DIFFERE DPMENT RUNOFF TENSITY, 10 MIN, CTOR, 20% AS PE	N WITH CC LOW FLOW NCE 1% AEP I, mm/hr R FNDC STANDARI	104.5 35.83 37.46 1.63	mm/hr I/s I/s I/s I/s	* CLIMATE CHANGE	E FACTOR OF 20'	LIMATE CHANGE FACTOR.  WAS APPLIED IN ACCORDANCE WITH FNDO
10 % AEP RAINFALL IN 10 % AEP PRE DEVELO 10 % AEP POST DEVELO PRE TO POST DEVELO PRE TO POST DEVELO 1 % AEP RAINFALL INT CLIMATE CHANGE FAC	DEPMENT PEAK FOR THE PEAK FOR T	N WITH CC LOW FLOW NCE - 1 % AEP I, mm/hr R FNDC STANDAR	104.5 35.83 37.46 1.63	mm/hr I/s I/s I/s mm/hr	* CLIMATE CHANGE	E FACTOR OF 20'	LIMATE CHANGE FACTOR.  % APPLIED IN ACCORDANCE WITH FNDO NIWA HISTORIC RAINFALL INTENSITY
10 % AEP RAINFALL IN 10 % AEP PRE DEVELO 10 % AEP POST DEVELO PRE TO POST DEVELO PRE TO POST DEVELO 1 % AEP RAINFALL INT CLIMATE CHANGE FAC 1 % AEP RAINFALL INT	DEPMENT PEAK FOR THE PEAK FOR T	N WITH CC LOW FLOW NCE - 1 % AEP I, mm/hr R FNDC STANDARI WITH CC	104.5 35.83 37.46 1.63 132.0 20 158.4	mm/hr l/s l/s l/s mm/hr % mm/hr	* CLIMATE CHANGE	E FACTOR OF 20'	LIMATE CHANGE FACTOR.  % APPLIED IN ACCORDANCE WITH FNDO NIWA HISTORIC RAINFALL INTENSITY

Project Ref:	C0651N			PEAK RUNOFF ASSESSMENT	
Project Address:	458A HIHI ROAD, HIF	11		PEAR RUNOFF ASSESSIVEINT	geologix
Prepared By:	GM			CATCUMENT C LOTS 2 C	consulting engineers
Date:	1 July 2025		REV 1	CATCHIVILINI C - LOTS 5-0	J

ATTENUATION DESIGN PROVIDED IN ACCORDANCE WITH NEW ZEALAND BUILDING CODE E1 FOR THE RATIONALE METHOD ACCOUNTING FOR THE EFFECTS OF CLIMATE CHANGE (20% FACTOR AS PER 2023 FNDC ENGINEERING STANDARDS).

<b>PKEDEVELOP</b>	MENT SCENARIO		<u> </u>	POST DEVE	OPMENT SCENARIO				
ITEM	AREA, A, m2	COEFFICIENT, C	DESCRIPTION	ITEM	AREA, A, m2	COEFFICIENT	, C DESCRIPTION		
	30142	0.67	PASTURE/ GRASS	1 ! !	28662	0.67	PASTURE/ GRASS		
	0	0.96	EXISTING ACCESSWAY	j !	0	0.96	PROPOSED RIGHT OF WAY		
			 !	{ !	1480	0.96	PROPOSED LOT ROOF/PAVING		
TOTAL	30142	TYPE D	PR = PROPOSED	TOTAL	30142	TYPE D			
	<u> </u>		•		•	•	•		
PRE TO POST	DEVELOPMENT RUNOFF -	20 % AEP							
20 % AEP RAI	NFALL INTENSITY, 10 MIN, I	I, mm/hr	74.4	mm/hr	* CLIMATE CHANGE	FACTOR OF 20	% APPLIED IN ACCORDANCE WITH FND		
CLIMATE CHA	NGE FACTOR, 20% AS PER	FNDC STANDAR	20	%	ENGINEERING STAN	IDARDS 4.3.9.1.	NIWA HISTORIC RAINFALL INTENSITY		
20 % AEP RAI	NFALL INTENSITY, 10 MIN V	VITH CC	89.3	mm/hr	DATA, 10MIN, IS MI	ULTIPLIED BY CL	IMATE CHANGE FACTOR.		
20 % AEP PRE	DEVELOPMENT PEAK FLOV	N	500.84	l/s	<del> </del>				
	ST DEVELOPMENT PEAK FLO			l/s	<del> </del>				
	DEVELOPMENT DIFFERENC		10.64	I/s					
					I				
PRE TO POST	DEVELOPMENT RUNOFF -	50 % AEP							
50 % AEP RAI	NFALL INTENSITY, 10 MIN, I	I. mm/hr	57.3	mm/hr	* CLIMATE CHANGE	FACTOR OF 20	% APPLIED IN ACCORDANCE WITH FND		
	NGE FACTOR, 20% AS PER	·	<b></b>	%	ENGINEERING STANDARDS 4.3.9.1. NIWA HISTORIC RAINFALL INTENSITY				
	NFALL INTENSITY, 10 MIN V		72.0	mm/hr	DATA, 10MIN, IS MI	ULTIPLIED BY CL	IMATE CHANGE FACTOR.		
	DEVELOPMENT PEAK FLOV		403.79	l/s					
	ST DEVELOPMENT PEAK FLO		412.37	I/s					
	DEVELOPMENT DIFFERENC		8.58	I/s	†				
		_		.,,,	<u> </u>				
PRE TO POST	DEVELOPMENT RUNOFF -	10 % AEP							
	NFALL INTENSITY, 10 MIN,					EACTOR OF 20			
10 % AEP RAI		I. mm/hr	87.1	:mm/nr	!* CLIMATE CHANGE	FACION OF 20	% APPLIED IN ACCORDANCE WITH FND		
	ANGE FACTOR, 20% AS PER	·	<del></del>	mm/hr %					
CLIMATE CHA	ANGE FACTOR, 20% AS PER	FNDC STANDAR	<del></del>	%	ENGINEERING STAN	NDARDS 4.3.9.1			
CLIMATE CHA 10 % AEP RAI	NGE FACTOR, 20% AS PER NFALL INTENSITY, 10 MIN	FNDC STANDAF WITH CC	27.51 111.1	% mm/hr	ENGINEERING STAN	NDARDS 4.3.9.1	. NIWA HISTORIC RAINFALL INTENSITY		
CLIMATE CHA 10 % AEP RAI 10 % AEP PRE	NGE FACTOR, 20% AS PER NFALL INTENSITY, 10 MIN DEVELOPMENT PEAK FLO	FNDC STANDAF WITH CC W	27.51 111.1 623.03	% mm/hr l/s	ENGINEERING STAN	NDARDS 4.3.9.1	. NIWA HISTORIC RAINFALL INTENSITY		
CLIMATE CHA 10 % AEP RAI 10 % AEP PRE 10 % AEP POS	NGE FACTOR, 20% AS PER NFALL INTENSITY, 10 MIN DEVELOPMENT PEAK FLO ST DEVELOPMENT PEAK FLO	FNDC STANDAF WITH CC W OW	27.51 111.1 623.03 636.27	% mm/hr l/s l/s	ENGINEERING STAN	NDARDS 4.3.9.1	. NIWA HISTORIC RAINFALL INTENSITY		
CLIMATE CHA 10 % AEP RAI 10 % AEP PRE 10 % AEP POS	NGE FACTOR, 20% AS PER NFALL INTENSITY, 10 MIN DEVELOPMENT PEAK FLO	FNDC STANDAF WITH CC W OW	27.51 111.1 623.03 636.27	% mm/hr l/s	ENGINEERING STAN	NDARDS 4.3.9.1	. NIWA HISTORIC RAINFALL INTENSITY		
CLIMATE CHA 10 % AEP RAI 10 % AEP PRE 10 % AEP POST PRE TO POST	NGE FACTOR, 20% AS PER NFALL INTENSITY, 10 MIN I DEVELOPMENT PEAK FLO ST DEVELOPMENT PEAK FLO DEVELOPMENT DIFFERENC	FNDC STANDAR WITH CC W OW CE	27.51 111.1 623.03 636.27	% mm/hr l/s l/s	ENGINEERING STAN	NDARDS 4.3.9.1	. NIWA HISTORIC RAINFALL INTENSITY		
CLIMATE CHA 10 % AEP RAI 10 % AEP PRE 10 % AEP POST PRE TO POST	NGE FACTOR, 20% AS PER NFALL INTENSITY, 10 MIN DEVELOPMENT PEAK FLO ST DEVELOPMENT PEAK FLO	FNDC STANDAR WITH CC W OW CE	27.51 111.1 623.03 636.27	% mm/hr l/s l/s	DATA, 10MIN, IS M	NDARDS 4.3.9.1 ULTIPLIED BY C	NIWA HISTORIC RAINFALL INTENSITY LIMATE CHANGE FACTOR.		
CLIMATE CHA 10 % AEP RAI 10 % AEP PRE 10 % AEP POST PRE TO POST PRE TO POST 1 % AEP RAIN	NGE FACTOR, 20% AS PER NFALL INTENSITY, 10 MIN 1 DEVELOPMENT PEAK FLO ST DEVELOPMENT PEAK FLO DEVELOPMENT DIFFERENCE DEVELOPMENT RUNOFF - FALL INTENSITY, 10 MIN, I,	FNDC STANDAR WITH CC W OW CE 1 % AEP mm/hr	27.51 111.1 623.03 636.27 13.24	% mm/hr I/s I/s I/s	ENGINEERING STAN DATA, 10MIN, IS M  * CLIMATE CHANGE	NDARDS 4.3.9.1 ULTIPLIED BY C	NIWA HISTORIC RAINFALL INTENSITY LIMATE CHANGE FACTOR.		
CLIMATE CHA 10 % AEP RAI 10 % AEP PRE 10 % AEP POS PRE TO POST 1 % AEP RAIN CLIMATE CHA	NGE FACTOR, 20% AS PER NFALL INTENSITY, 10 MIN V DEVELOPMENT PEAK FLO ST DEVELOPMENT PEAK FLO DEVELOPMENT DIFFERENCE DEVELOPMENT RUNOFF - FALL INTENSITY, 10 MIN, I, NGE FACTOR, 20% AS PER	FNDC STANDAR WITH CC W OW CE 1 % AEP mm/hr FNDC STANDAR	27.51 111.1 623.03 636.27 13.24	% mm/hr l/s l/s l/s mm/hr	ENGINEERING STAN DATA, 10MIN, IS M  * CLIMATE CHANGE ENGINEERING STAN	ULTIPLIED BY C	MIWA HISTORIC RAINFALL INTENSITY LIMATE CHANGE FACTOR.  APPLIED IN ACCORDANCE WITH FND NIWA HISTORIC RAINFALL INTENSITY		
CLIMATE CHA 10 % AEP RAI 10 % AEP PRE 10 % AEP POS PRE TO POST 1 % AEP RAIN CLIMATE CHA 1 % AEP RAIN	NGE FACTOR, 20% AS PER NFALL INTENSITY, 10 MIN V DEVELOPMENT PEAK FLO ST DEVELOPMENT PEAK FLO DEVELOPMENT DIFFERENCE DEVELOPMENT RUNOFF - FALL INTENSITY, 10 MIN, I, NGE FACTOR, 20% AS PER I FALL INTENSITY, 10 MIN W	FNDC STANDAR WITH CC W OW CE 1 % AEP mm/hr FNDC STANDAR	27.51 111.1 623.03 636.27 13.24 132.0 28.56 169.7	% mm/hr l/s l/s l/s mm/hr % mm/hr	ENGINEERING STAN DATA, 10MIN, IS M  * CLIMATE CHANGE ENGINEERING STAN	ULTIPLIED BY C	NIWA HISTORIC RAINFALL INTENSITY LIMATE CHANGE FACTOR.		
CLIMATE CHA 10 % AEP RAI 10 % AEP POS PRE TO POST PRE TO POST 1 % AEP RAIN CLIMATE CHA 1 % AEP RAIN 1 % AEP PRE	NGE FACTOR, 20% AS PER NFALL INTENSITY, 10 MIN V DEVELOPMENT PEAK FLO ST DEVELOPMENT PEAK FLO DEVELOPMENT DIFFERENCE DEVELOPMENT RUNOFF - FALL INTENSITY, 10 MIN, I, NGE FACTOR, 20% AS PER	FNDC STANDAR WITH CC W OW CE 1 % AEP mm/hr FNDC STANDAR ITH CC	27.51 111.1 623.03 636.27 13.24 132.0 28.56 169.7	% mm/hr l/s l/s l/s mm/hr	ENGINEERING STAN DATA, 10MIN, IS M  * CLIMATE CHANGE ENGINEERING STAN	ULTIPLIED BY C	MAPPLIED IN ACCORDANCE WITH FINDS NIWA HISTORIC RAINFALL INTENSITY		

Project Ref: Project Address:	C0651N 458A HIHI ROAD, HIH		PEAK RUNOFF ASSESSMENT	a g	eologix
Prepared By:	Prepared By: GM		CATCHMENT D - BALANCE OF LOT 1		sulting engineers
Date:	1 July 2025	REV 1	CATCHIVIENT D - BALANCE OF LOT 1		
ATTENULATION D	SCIENT BROWER IN AC	CORDANICE MUTI	I NEW ZEALAND BUILDING CODE E4 FOR THE RATIONALE METHOD ACCOUNTIN	10 FOR THE FEFERTS	OF CUINANTE

ATTENUATION DESIGN PROVIDED IN ACCORDANCE WITH NEW ZEALAND BUILDING CODE E1 FOR THE RATIONALE METHOD ACCOUNTING FOR THE EFFECTS OF CLIMATE CHANGE (20% FACTOR AS PER 2023 FNDC ENGINEERING STANDARDS).

<b>PREDEVELOP</b>	MENT SCENARIO			POST DEVEL	OPMENT SCENARIO				
ITEM	AREA, A, m2	COEFFICIENT, C	DESCRIPTION	ITEM	AREA, A, m2	COEFFICIENT, C DESCRIPTION			
	5179	0.67	PASTURE/ GRASS	1 ! !	4859	0.67	PASTURE/ GRASS		
	545	0.85	EXISTING ACCESSWAY	j 	545	0.96	PROPOSED RIGHT OF WAY		
			 !	{ !	320	0.96	PROPOSED LOT ROOF/PAVING		
TOTAL	5724	TYPE D	PR = PROPOSED	TOTAL	5724	TYPE D			
	•				•	•			
PRE TO POST	DEVELOPMENT RUNOFF	- 20 % AEP							
20 % AEP RAI	NFALL INTENSITY, 10 MIN,	I, mm/hr	74.4	mm/hr	* CLIMATE CHANGE	FACTOR OF 209	% APPLIED IN ACCORDANCE WITH FNDO		
CLIMATE CHA	NGE FACTOR, 20% AS PER	FNDC STANDARI	20	%	ENGINEERING STAN	IDARDS 4.3.9.1.	NIWA HISTORIC RAINFALL INTENSITY		
20 % AEP RAI	NFALL INTENSITY, 10 MIN	WITH CC	89.3	mm/hr	DATA, 10MIN, IS MI	ULTIPLIED BY CL	IMATE CHANGE FACTOR.		
20 % AEP PRE	DEVELOPMENT PEAK FLO	W	97.54	l/s					
	ST DEVELOPMENT PEAK FL			i/s					
PRE TO POST	DEVELOPMENT DIFFEREN	CE	3.79	l/s					
				, ,	I				
PRE TO POST	DEVELOPMENT RUNOFF	- 50 % AEP							
50 % AEP RAI	NFALL INTENSITY, 10 MIN,	I. mm/hr	57.3	mm/hr	* CLIMATE CHANGE	FACTOR OF 209	% APPLIED IN ACCORDANCE WITH FNDO		
	NGE FACTOR, 20% AS PER		<b></b>	%	ENGINEERING STANDARDS 4.3.9.1. NIWA HISTORIC RAINFALL INTENSITY				
	NFALL INTENSITY, 10 MIN		72.0	mm/hr	DATA, 10MIN, IS MI	ULTIPLIED BY CL	IMATE CHANGE FACTOR.		
	DEVELOPMENT PEAK FLO		78.64	l/s					
	ST DEVELOPMENT PEAK FL		81.70	I/s					
	DEVELOPMENT DIFFEREN		3.05	l/s					
				7 -	<u> </u>				
PRE TO POST	DEVELOPMENT RUNOFF	- 10 % AEP							
10 % AEP RAI	NFALL INTENSITY, 10 MIN	, I, mm/hr	87.1	mm/hr	* CLIMATE CHANGE	FACTOR OF 20	% APPLIED IN ACCORDANCE WITH FND		
	NGE FACTOR, 20% AS PER	LÍLLLÍLLLLLL	27.51	%	ENGINEERING STAN	NDARDS 4.3.9.1	NIWA HISTORIC RAINFALL INTENSITY		
CLIMATE CHA		K FNDC STANDAR	27.51	. / 0					
	NFALL INTENSITY, 10 MIN		111.1	mm/hr	DATA, 10MIN, IS M	ULTIPLIED BY C	LIMATE CHANGE FACTOR.		
10 % AEP RAI		WITH CC	111.1	mm/hr	DATA, 10MIN, IS M	ULTIPLIED BY C	LIMATE CHANGE FACTOR.		
10 % AEP RAI 10 % AEP PRE	NFALL INTENSITY, 10 MIN DEVELOPMENT PEAK FLO ST DEVELOPMENT PEAK FLO	WITH CC DW	111.1 121.34	mm/hr I/s	DATA, 10MIN, IS M	ULTIPLIED BY C	LIMATE CHANGE FACTOR.		
10 % AEP RAI 10 % AEP PRE 10 % AEP POS	DEVELOPMENT PEAK FLO	WITH CC DW LOW	111.1 121.34 126.05	mm/hr I/s I/s	DATA, 10MIN, IS M	ULTIPLIED BY C	LIMATE CHANGE FACTOR.		
10 % AEP RAI 10 % AEP PRE 10 % AEP POS	DEVELOPMENT PEAK FLO ST DEVELOPMENT PEAK F	WITH CC DW LOW	111.1 121.34 126.05	mm/hr I/s	DATA, 10MIN, IS M	ULTIPLIED BY C	LIMATE CHANGE FACTOR.		
10 % AEP RAI 10 % AEP PRE 10 % AEP POS PRE TO POST	DEVELOPMENT PEAK FLO ST DEVELOPMENT PEAK F DEVELOPMENT DIFFEREN	WITH CC DW LOW ICE	111.1 121.34 126.05	mm/hr I/s I/s	DATA, 10MIN, IS M	ULTIPLIED BY C	LIMATE CHANGE FACTOR.		
10 % AEP RAI 10 % AEP PRE 10 % AEP POST PRE TO POST	DEVELOPMENT PEAK FLO ST DEVELOPMENT PEAK F	WITH CC DW LOW ICE	111.1 121.34 126.05	mm/hr I/s I/s					
10 % AEP RAI 10 % AEP PRE 10 % AEP POST PRE TO POST PRE TO POST 1 % AEP RAIN	DEVELOPMENT PEAK FLO ST DEVELOPMENT PEAK F DEVELOPMENT DIFFEREN DEVELOPMENT RUNOFF FALL INTENSITY, 10 MIN, I	WITH CC DW LOW ICE - 1 % AEP , mm/hr	111.1 121.34 126.05 4.71	mm/hr I/s I/s I/s mm/hr	* CLIMATE CHANGE	FACTOR OF 20			
10 % AEP RAI 10 % AEP PRE 10 % AEP POS PRE TO POST PRE TO POST 1 % AEP RAIN CLIMATE CHA	DEVELOPMENT PEAK FLO ST DEVELOPMENT PEAK FL DEVELOPMENT DIFFEREN DEVELOPMENT RUNOFF FALL INTENSITY, 10 MIN, I UNGE FACTOR, 20% AS PER	WITH CC DW LOW ICE - 1 % AEP , mm/hr FNDC STANDARI	111.1 121.34 126.05 4.71	mm/hr I/s I/s I/s mm/hr	* CLIMATE CHANGE ENGINEERING STAN	FACTOR OF 201 DARDS 4.3.9.1.	% applied in accordance with fnd		
10 % AEP RAI 10 % AEP PRE 10 % AEP POS PRE TO POST PRE TO POST 1 % AEP RAIN CLIMATE CHA 1 % AEP RAIN	DEVELOPMENT PEAK FLO ST DEVELOPMENT PEAK FLO DEVELOPMENT DIFFEREN DEVELOPMENT RUNOFF F FALL INTENSITY, 10 MIN, I NINGE FACTOR, 20% AS PER FALL INTENSITY, 10 MIN V	WITH CC DW LOW ICE - 1 % AEP , mm/hr FNDC STANDARI	111.1 121.34 126.05 4.71 132.0 28.56 169.7	mm/hr I/s I/s I/s I/s I/s mm/hr % mm/hr	* CLIMATE CHANGE ENGINEERING STAN	FACTOR OF 201 DARDS 4.3.9.1.	% APPLIED IN ACCORDANCE WITH FND NIWA HISTORIC RAINFALL INTENSITY		
10 % AEP RAI 10 % AEP PRE 10 % AEP POST PRE TO POST 1 % AEP RAIN CLIMATE CHA 1 % AEP RAIN 1 % AEP PRE	DEVELOPMENT PEAK FLO ST DEVELOPMENT PEAK FL DEVELOPMENT DIFFEREN DEVELOPMENT RUNOFF FALL INTENSITY, 10 MIN, I UNGE FACTOR, 20% AS PER	WITH CC DW LOW ICE - 1 % AEP , mm/hr FNDC STANDARI	111.1 121.34 126.05 4.71 132.0 28.56 169.7	mm/hr I/s I/s I/s mm/hr	* CLIMATE CHANGE ENGINEERING STAN	FACTOR OF 201 DARDS 4.3.9.1.	% APPLIED IN ACCORDANCE WITH FNDO NIWA HISTORIC RAINFALL INTENSITY		

Project Ref:	C0651N		PEAK RUNOFF ASSESSMENT	
Project Address:	458A HIHI ROAD, HIH	I	PEAR RUNOFF ASSESSIVEIN I	geologix
Prepared By:	GM		CATCHMENT E - PART ROW	consulting engineers
Date:	1 July 2025	REV 1	CATCHIVIENT E - PART ROW	

ATTENUATION DESIGN PROVIDED IN ACCORDANCE WITH NEW ZEALAND BUILDING CODE E1 FOR THE RATIONALE METHOD ACCOUNTING FOR THE EFFECTS OF CLIMATE CHANGE (20% FACTOR AS PER 2023 FNDC ENGINEERING STANDARDS).

PKEDEVELOP	MENT SCENARIO			POST DEVE	OPMENT SCENARIO				
ITEM	AREA, A, m2	COEFFICIENT, C	DESCRIPTION	ITEM	AREA, A, m2	COEFFICIENT, C DESCRIPTION			
	397	0.67	PASTURE/ GRASS	1 ! !	397	0.67	PASTURE/ GRASS		
	545	0.85	EXISTING ACCESSWAY	j !	545	0.96	PROPOSED RIGHT OF WAY		
		† !	 !	{ !		- <del> </del>	PROPOSED LOT ROOF/PAVING		
TOTAL	942	TYPE D	PR = PROPOSED	TOTAL	942	TYPE D			
		•	•		•	•	•		
PRE TO POST	DEVELOPMENT RUNOFF	- 20 % AEP							
20 % AEP RAI	NFALL INTENSITY, 10 MIN,	, I, mm/hr	74.4	mm/hr	* CLIMATE CHANGE	FACTOR OF 20	% APPLIED IN ACCORDANCE WITH FND		
CLIMATE CHA	NGE FACTOR, 20% AS PER	R FNDC STANDAR	20	%	ENGINEERING STAN	IDARDS 4.3.9.1.	NIWA HISTORIC RAINFALL INTENSITY		
20 % AEP RAI	NFALL INTENSITY, 10 MIN	WITH CC	89.3	mm/hr	DATA, 10MIN, IS M	ULTIPLIED BY CL	IMATE CHANGE FACTOR.		
20 % AEP PRE	DEVELOPMENT PEAK FLO	)W	18.09	l/s	<del> </del>				
20 % AEP POS	ST DEVELOPMENT PEAK FL	LOW		I/s	+				
PRE TO POST	DEVELOPMENT DIFFEREN	ICE	}	l/s					
					<b>I</b>				
PRE TO POST	DEVELOPMENT RUNOFF	- 50 % AEP							
50 % AEP RAI	NFALL INTENSITY, 10 MIN	. I. mm/hr	57.3	mm/hr	* CLIMATE CHANGE	FACTOR OF 20	% APPLIED IN ACCORDANCE WITH FNDO		
	NGE FACTOR, 20% AS PER		<b></b>	%	ENGINEERING STANDARDS 4.3.9.1. NIWA HISTORIC RAINFALL INTENSIT				
	NFALL INTENSITY, 10 MIN		72.0	mm/hr	DATA, 10MIN, IS M	JLTIPLIED BY CL	IMATE CHANGE FACTOR.		
	DEVELOPMENT PEAK FLO		14.58	l/s					
	ST DEVELOPMENT PEAK FL		15.78	I/s					
	DEVELOPMENT DIFFEREN		1.20	I/s	†				
				.,,,	<u> </u>				
PRE TO POST	DEVELOPMENT RUNOFF	- 10 % AEP							
	NFALL INTENSITY, 10 MIN	/b	87.1	mm/hr	I* CLIMATE CHANGE	FACTOR OF 20			
10 % AEP RAI		v, i, mm/nr	87.1		CLIIVIA I E CHAINGI		% APPLIED IN ACCORDANCE WITH FNL		
	NGE FACTOR, 20% AS PE		<del></del>	%					
CLIMATE CHA		R FNDC STANDAF	<del></del>	{i	ENGINEERING STAP	NDARDS 4.3.9.1			
CLIMATE CHA 10 % AEP RAI	NGE FACTOR, 20% AS PE NFALL INTENSITY, 10 MIN	R FNDC STANDAF N WITH CC	27.51 111.1	% mm/hr	ENGINEERING STAP	NDARDS 4.3.9.1	. NIWA HISTORIC RAINFALL INTENSITY		
CLIMATE CHA 10 % AEP RAI 10 % AEP PRE	NGE FACTOR, 20% AS PE	R FNDC STANDAF N WITH CC OW	27.51 111.1 22.50	% mm/hr l/s	ENGINEERING STAP	NDARDS 4.3.9.1	. NIWA HISTORIC RAINFALL INTENSITY		
CLIMATE CHA 10 % AEP RAI 10 % AEP PRE 10 % AEP POS	NGE FACTOR, 20% AS PEI NFALL INTENSITY, 10 MIN DEVELOPMENT PEAK FL	R FNDC STANDAF N WITH CC OW LOW	27.51 111.1 22.50 24.35	% mm/hr l/s l/s	ENGINEERING STAP	NDARDS 4.3.9.1	% APPLIED IN ACCORDANCE WITH FND . NIWA HISTORIC RAINFALL INTENSITY LIMATE CHANGE FACTOR.		
CLIMATE CHA 10 % AEP RAI 10 % AEP PRE 10 % AEP POS	NGE FACTOR, 20% AS PEI NFALL INTENSITY, 10 MIN DEVELOPMENT PEAK FL T DEVELOPMENT PEAK F	R FNDC STANDAF N WITH CC OW LOW	27.51 111.1 22.50 24.35	% mm/hr l/s	ENGINEERING STAP	NDARDS 4.3.9.1	. NIWA HISTORIC RAINFALL INTENSITY		
CLIMATE CHA 10 % AEP RAI 10 % AEP PRE 10 % AEP POST PRE TO POST	INGE FACTOR, 20% AS PEI NFALL INTENSITY, 10 MIN E DEVELOPMENT PEAK FL ST DEVELOPMENT PEAK F DEVELOPMENT DIFFEREN	R FNDC STANDAR N WITH CC OW LOW NCE	27.51 111.1 22.50 24.35	% mm/hr l/s l/s	ENGINEERING STAP	NDARDS 4.3.9.1	. NIWA HISTORIC RAINFALL INTENSITY		
CLIMATE CHA 10 % AEP RAI 10 % AEP PRE 10 % AEP POST PRE TO POST	NGE FACTOR, 20% AS PEI NFALL INTENSITY, 10 MIN DEVELOPMENT PEAK FL T DEVELOPMENT PEAK F	R FNDC STANDAR N WITH CC OW LOW NCE	27.51 111.1 22.50 24.35	% mm/hr l/s l/s	DATA, 10MIN, IS M	NDARDS 4.3.9.1 ULTIPLIED BY C	NIWA HISTORIC RAINFALL INTENSITY LIMATE CHANGE FACTOR.		
CLIMATE CHA 10 % AEP RAI 10 % AEP PRE 10 % AEP POST PRE TO POST PRE TO POST 1 % AEP RAIN	INGE FACTOR, 20% AS PEI NFALL INTENSITY, 10 MIN DEVELOPMENT PEAK FLI ST DEVELOPMENT PEAK F DEVELOPMENT DIFFEREN DEVELOPMENT RUNOFF FALL INTENSITY, 10 MIN,	R FNDC STANDAR N WITH CC OW LOW NCE - 1 % AEP I, mm/hr	27.51 111.1 22.50 24.35 1.85	% mm/hr i/s i/s i/s mm/hr	ENGINEERING STAP DATA, 10MIN, IS M  * CLIMATE CHANGE	NDARDS 4.3.9.1 ULTIPLIED BY C	NIWA HISTORIC RAINFALL INTENSITY LIMATE CHANGE FACTOR.		
CLIMATE CHA 10 % AEP RAI 10 % AEP PRE 10 % AEP POS PRE TO POST 1 % AEP RAIN CLIMATE CHA	INGE FACTOR, 20% AS PEI NFALL INTENSITY, 10 MIN DEVELOPMENT PEAK FL ST DEVELOPMENT PEAK F DEVELOPMENT DIFFEREN DEVELOPMENT RUNOFF FALL INTENSITY, 10 MIN, INGE FACTOR, 20% AS PER	R FNDC STANDAR N WITH CC OW LOW NCE - 1 % AEP I, mm/hr R FNDC STANDAR	27.51 111.1 22.50 24.35 1.85	% mm/hr l/s l/s l/s mm/hr	* CLIMATE CHANGE	ULTIPLIED BY C	MAPPLIED IN ACCORDANCE WITH FND NIWA HISTORIC RAINFALL INTENSITY		
CLIMATE CHA 10 % AEP RAI 10 % AEP PRE 10 % AEP POS PRE TO POST 1 % AEP RAIN CLIMATE CHA 1 % AEP RAIN	INGE FACTOR, 20% AS PEI NFALL INTENSITY, 10 MIN DEVELOPMENT PEAK FL ST DEVELOPMENT PEAK F DEVELOPMENT DIFFEREN DEVELOPMENT RUNOFF FALL INTENSITY, 10 MIN, INGE FACTOR, 20% AS PEF FALL INTENSITY, 10 MIN IN	R FNDC STANDAR N WITH CC OW LOW NCE - 1 % AEP I, mm/hr R FNDC STANDAR WITH CC	27.51 111.1 22.50 24.35 1.85 132.0 28.56 169.7	% mm/hr l/s l/s l/s mm/hr % mm/hr	* CLIMATE CHANGE	ULTIPLIED BY C	NIWA HISTORIC RAINFALL INTENSITY LIMATE CHANGE FACTOR.		
CLIMATE CHA 10 % AEP RAI 10 % AEP POS PRE TO POST PRE TO POST 1 % AEP RAIN CLIMATE CHA 1 % AEP RAIN 1 % AEP PRE	INGE FACTOR, 20% AS PEI NFALL INTENSITY, 10 MIN DEVELOPMENT PEAK FL ST DEVELOPMENT PEAK F DEVELOPMENT DIFFEREN DEVELOPMENT RUNOFF FALL INTENSITY, 10 MIN, INGE FACTOR, 20% AS PER	R FNDC STANDAR N WITH CC OW LOW NCE - 1 % AEP I, mm/hr R FNDC STANDAR NITH CC	27.51 111.1 22.50 24.35 1.85 132.0 28.56 169.7	% mm/hr l/s l/s l/s mm/hr	* CLIMATE CHANGE	ULTIPLIED BY C	MAPPLIED IN ACCORDANCE WITH FINDS NIWA HISTORIC RAINFALL INTENSITY		

HIRDS V4 I	ntensity-Du	ration-Freq	uency Resul	ts						
Sitename:	HIHI									
Coordinate	system: W	GS84								
Longitude:	173.5479									
Latitude: -3	34.971									
DDF Mode	Parameter	š C	d	e	f	g	h	i		
	Values:	0.001702	0.504677	-0.03943	0	0.25324	-0.01065	3.196961		
	Example:	Duration (h	n ARI (yrs)	х	у	Rainfall Ra	te (mm/hr)			
		24	100	3.178054	4.600149	8.92641				
Rainfall int	ensities (mr	n/hr) :: Hist	orical Data							
ARI	AEP	10m	20m	30m	1h	2h	6h	12h	24h	48h

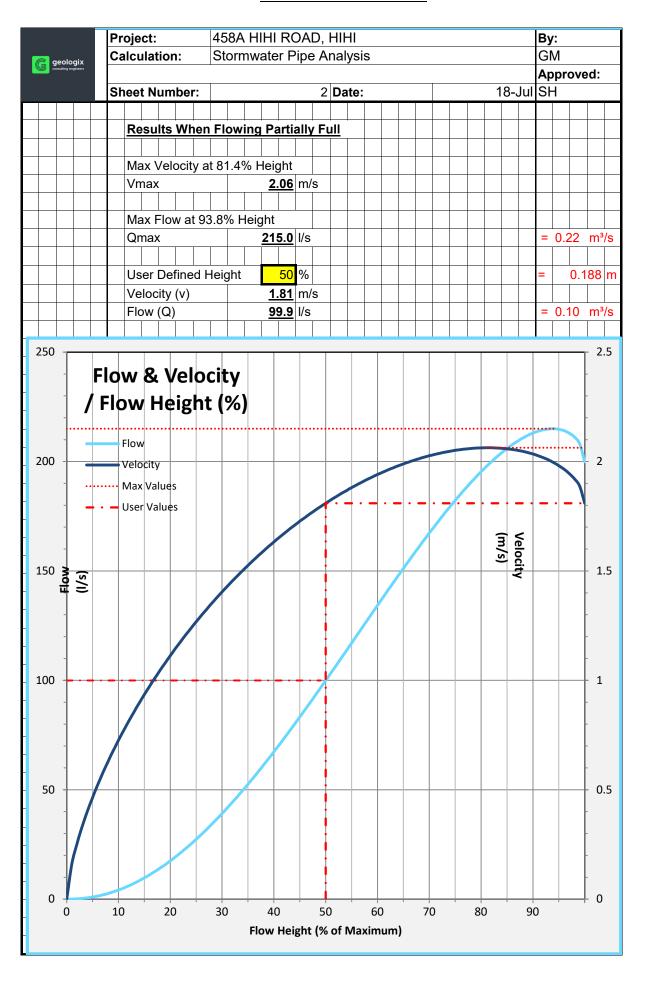
Delet	-11 1-4	lates from the	r) :: Historic	-10-4-										
ARI	AE				m 1h	2h 24.4	6h 17	12h 8.87	24h 5.6	48h	72h 1.99	96h 1.43	1.12	20h
	1.58	0.5	57.3	44	37.1	26.8	18.7	9.73	6.14	3.4 3.74	2.19	1.57	1.23	0.924 1.02
	5 10	0.2	74.4 87.1	57.2 67	48.2 56.5	34.9 41	24.3 28.6	12.7 15	8.04 9.47	4.9 5.77	2.87 3.38	2.06	1.62	1.34
	20	0.05	100 108	77.2 83.3	65.1 70.3	47.2 51	33 35.6	17.3 18.7	11 11.8	6.68	3.92 4.25	2.82	2.22	1.83
	40	0.025	114	87.7	74	53.7	37.6	19.7	12.5	7.63	4.48	3.23	2.54	2.09
	50 60	0.02	118 122	91.1 94	76.9 79.3	55.9 57.6	39.1 40.3	20.5 21.2	13 13.4	7.94 8.2	4.67	3.36	2.64	2.18
	80	0.013	128	98.5	83.1	60.4	42.3	22.2	14.1	8.61	5.06	3.65	2.87	2.37
	100 250	0.01	132 151	102 116	86.1 98.3	62.6 71.5	43.8 50.1	23 26.4	14.6 16.8	8.93 10.3	5.25 6.04	3.78 4.35	2.97 3.42	2.46 2.83
Inter	sity stand		mm/hr) :: Hi m 20:	storical Data m 30r		2h	6h	12h	24h	48h	72h	96h	11	20h
	1.58	0.633	6.7	4.4	3.2	2.4	1.7	1	0.71	0.56	0.36	0.27	0.21	0.18
	2 5	0.5	7.3 10	4.8 6.9	3.5 5.2	2.6 3.7	1.8 2.6	1.1	0.78 1.1	0.63	0.4	0.31	0.23	0.2
	10 20	0.1	13 16	9.1 12	6.9 9.2	4.9 6.5	3.4 4.5	2.6	1.3	1.2	0.64	0.49	0.37	0.32
	30	0.033	19	14	11	7.6	5.3	3	2	1.3	0.83	0.64	0.48	0.41
	40 50	0.025	21 23	16 17	12 13	8.5 9.3	6.6	3.4	2.2	1.4	0.88	0.68	0.52	0.44
	60	0.017	24 27	18	14	10	7.1	4	2.6	1.5	0.97	0.75	0.57	0.48
	80 100	0.013	27	20 22	16 17	11 12	7.9 8.7	4.4 4.8	2.9 3.1	1.7 1.7	1.1	0.84	0.61	0.51 0.54
Raint	250	0.004 ities (mm/h	39 r):: RCP2.6	31 for the perio	24 nd 2031-20	17	12	6.9	4.5	2.2	1.3	1	0.79	0.66
ARI	AE	P 10	m 20	m 30r	m 1h	2h	6h	12h	24h	48h	72h	96h		20h
	1.58	0.633	56 61.4	43 47.2	36.2 39.7	26.2 28.7	18.1 20	9.36 10.3	5.86 6.45	3.54 3.89	2.06	1.47 1.62	1.15 1.27	0.949 1.05
	5 10	0.2	80 93.8	61.5 72.2	51.8 60.9	37.5 44.1	26.1 30.7	13.5 15.9	8.48 10	5.12 6.05	2.98 3.52	2.14	1.67	1.38
	20	0.05	108	83.2	70.2	50.9	35.5	18.4	11.6	7	4.09	2.93	2.3	1.89
	30 40	0.033	117 123	89.9 94.6	75.8 79.8	55 58	38.4 40.4	19.9 21	12.5 13.2	7.58	4.43	3.18	2.49	2.05
	50	0.02	128	98.4	83	60.3	42.1	21.9	13.8	8.33	4.87	3.49	2.74	2.26
	60 80	0.017	131 138	101 106	85.6 89.8	62.2 65.3	43.4 45.5	22.6 23.7	14.2 14.9	8.61 9.04	5.03 5.29	3.61 3.79	2.83	2.33
	100 250	0.01	143 163	110 126	93 106	67.6 77.3	47.2 54	24.6 28.2	15.5 17.8	9.38 10.8	5.48 6.31	3.94 4.53	3.09 3.56	2.55 2.93
	all intens	ities (mm/h	r) :: RCP2.6	for the perio	od 2081-21	00								
ARI	AE 1.58	P 10 0.633	m 20:	m 30r 43	m 1h 36.2		6h 18.1	12h 9.36	24h 5.86	48h 3.54	72h 2.06	96h 1.47	1.15	20h 0.949
	2	0.5	61.4	47.2	39.7	28.7	20	10.3	6.45	3.89	2.27	1.62	1.27	1.05
	5 10	0.2	80 93.8	61.5 72.2	51.8 60.9	37.5 44.1	26.1 30.7	13.5 15.9	8.48 10	5.12 6.05	2.98 3.52	2.14	1.67 1.98	1.38 1.63
	20 30	0.05	108 117	83.2 89.9	70.2 75.8	50.9 55	35.5 38.4	18.4 19.9	11.6 12.5	7 7.58	4.09 4.43	2.93 3.18	2.3	1.89 2.05
	40	0.025	123	94.6	79.8	58	40.4	21	13.2	8	4.67	3.36	2.63	2.17
	50 60	0.02	128 131	98.4 101	83 85.6	60.3 62.2	42.1 43.4	21.9 22.6	13.8 14.2	8.33 8.61	4.87 5.03	3.49 3.61	2.74	2.26
	80	0.013	138	106	89.8	65.3	45.5	23.7	14.9	9.04	5.29	3.79	2.97	2.45
	100 250	0.01	143 163	110 126	93 106	67.6 77.3	47.2 54	24.6 28.2	15.5 17.8	9.38 10.8	5.48 6.31	3.94 4.53	3.09 3.56	2.55 2.93
Raint	all intens AE	ities (mm/h P 10	r)::RCP4.5 m 20	for the perion 30r			6h	12h	24h	48h	72h	96h	11	20h
	1.58	0.633	56.9	43.7	36.8	26.6	18.4	9.48	5.93	3.58	2.08	1.48	1.16	0.955
	2 5	0.5	62.5 81.4	48 62.6	40.4 52.8	29.2 38.2	20.3 26.6	10.4 13.7	6.53 8.59	3.93 5.18	2.29 3.01	1.63 2.16	1.28	1.05
	10 20	0.1	95.5 110	73.5 84.8	62 71.5	44.9 51.9	31.3 36.1	16.2 18.7	10.1 11.7	6.12 7.08	3.56 4.13	2.55	2 2.32	1.64
	30	0.033	119	91.5	77.2	56.1	39.1	20.2	12.7	7.67	4.48	3.21	2.51	2.07
	40 50	0.025	125 130	96.4 100	81.3 84.6	59.1 61.4	41.2 42.8	21.4	13.4	8.1 8.43	4.72	3.39	2.65	2.19
	60	0.017	134	103	87.2	63.4	44.2	22.9	14.4	8.71	5.08	3.65	2.86	2.35
	80 100	0.013	140 145	108 112	91.5 94.8	66.5 68.9	46.4 48	24.1 25	15.1 15.7	9.15 9.49	5.34 5.54	3.83	3 3.12	2.47 2.57
Point	250	0.004	166 r):: RCP4.5	128	108	78.7	55	28.6	18	10.9	6.37	4.58	3.59	2.96
ARI	all intens AE					00								
ARI						2h	6h	12h	24h	48h	72h	96h	12	
ARI	1.58	0.633	59.9	45.9	38.7	28	19.3	9.88	6.14	3.69	2.13	1.52	1.18	0.975
AKI	1.58 2 5	0.633 0.5 0.2	59.9 65.7 85.9	45.9 50.5 66.1	38.7 42.5 55.7	28 30.8 40.3	19.3 21.3 28	9.88 10.9 14.3	6.14 6.78 8.94	3.69 4.06 5.36	2.13 2.35 3.1	1.52 1.68 2.22	1.18 1.31 1.73	0.975 1.08 1.42
AKI	1.58 2 5 10 20	0.633 0.5 0.2 0.1 0.05	59.9 65.7 85.9 101 116	45.9 50.5 66.1 77.7 89.6	38.7 42.5 55.7 65.5 75.6	28 30.8 40.3 47.5 54.8	19.3 21.3 28 33 38.1	9.88 10.9 14.3 16.9 19.6	6.14 6.78 8.94 10.6 12.2	3.69 4.06 5.36 6.34 7.34	2.13 2.35 3.1 3.67 4.26	1.52 1.68 2.22 2.63 3.05	1.18 1.31 1.73 2.05 2.38	0.975 1.08 1.42 1.69 1.96
AKI	1.58 2 5 10 20 30	0.633 0.5 0.2 0.1 0.05 0.033	59.9 65.7 85.9 101 116 126	45.9 50.5 66.1 77.7 89.6 96.8	38.7 42.5 55.7 65.5 75.6 81.7	28 30.8 40.3 47.5 54.8 59.3	19.3 21.3 28 33 38.1 41.2	9.88 10.9 14.3 16.9 19.6 21.2	6.14 6.78 8.94 10.6 12.2 13.3	3.69 4.06 5.36 6.34 7.34 7.95	2.13 2.35 3.1 3.67 4.26 4.62	1.52 1.68 2.22 2.63 3.05 3.3	1.18 1.31 1.73 2.05 2.38 2.58	0.975 1.08 1.42 1.69 1.96 2.12
ARI	1.58 2 5 10 20 30 40 50	0.633 0.5 0.2 0.1 0.05 0.033 0.025 0.02	59.9 65.7 85.9 101 116 126 132 137	45.9 50.5 66.1 77.7 89.6 96.8 102 106	38.7 42.5 55.7 65.5 75.6 81.7 86 89.5	28 30.8 40.3 47.5 54.8 59.3 62.4 65	19.3 21.3 28 33 38.1 41.2 43.4 45.2	9.88 10.9 14.3 16.9 19.6 21.2 22.4 23.3	6.14 6.78 8.94 10.6 12.2 13.3 14 14.6	3.69 4.06 5.36 6.34 7.34 7.95 8.4 8.74	2.13 2.35 3.1 3.67 4.26 4.62 4.88 5.08	1.52 1.68 2.22 2.63 3.05 3.3 3.49 3.64	1.18 1.31 1.73 2.05 2.38 2.58 2.73 2.85	0.975 1.08 1.42 1.69 1.96 2.12 2.25 2.34
ARI	1.58 2 5 10 20 30 40	0.633 0.5 0.2 0.1 0.05 0.033 0.025	59.9 65.7 85.9 101 116 126 132	45.9 50.5 66.1 77.7 89.6 96.8 102	38.7 42.5 55.7 65.5 75.6 81.7 86	28 30.8 40.3 47.5 54.8 59.3 62.4	19.3 21.3 28 33 38.1 41.2 43.4	9.88 10.9 14.3 16.9 19.6 21.2 22.4	6.14 6.78 8.94 10.6 12.2 13.3	3.69 4.06 5.36 6.34 7.34 7.95 8.4	2.13 2.35 3.1 3.67 4.26 4.62 4.88	1.52 1.68 2.22 2.63 3.05 3.3 3.49	1.18 1.31 1.73 2.05 2.38 2.58 2.73	0.975 1.08 1.42 1.69 1.96 2.12 2.25
ARI	1.58 2 5 10 20 30 40 50 60 80	0.633 0.5 0.2 0.1 0.05 0.033 0.025 0.02 0.017 0.013 0.01	59.9 65.7 85.9 101 116 126 132 137 142 149 154	45.9 50.5 66.1 77.7 89.6 96.8 102 106 109 115	38.7 42.5 55.7 65.5 75.6 81.7 86 89.5 92.3 96.8 100	28 30.8 40.3 47.5 54.8 59.3 62.4 65 67 70.4 72.9	19.3 21.3 28 33 38.1 41.2 43.4 45.2 46.6 49 50.7	9.88 10.9 14.3 16.9 19.6 21.2 22.4 23.3 24.1 25.3 26.2	6.14 6.78 8.94 10.6 12.2 13.3 14 14.6 15 15.8 16.4	3.69 4.06 5.36 6.34 7.34 7.95 8.4 8.74 9.04 9.49 9.86	2.13 2.35 3.1 3.67 4.26 4.62 4.88 5.08 5.25 5.52 5.73	1.52 1.68 2.22 2.63 3.05 3.3 3.49 3.64 3.76 3.95 4.1	1.18 1.31 1.73 2.05 2.38 2.58 2.73 2.85 2.94 3.09 3.21	0.975 1.08 1.42 1.69 1.96 2.12 2.25 2.34 2.42 2.54 2.64
Raint	1.58 2 5 10 20 30 40 50 60 80 100 250 fall intens	0.633 0.5 0.2 0.1 0.05 0.033 0.025 0.02 0.017 0.013 0.01 0.004 ities (mm/h	59.9 65.7 85.9 101 116 126 132 137 142 149 154 175 F) :: RCP6.0	45.9 50.5 66.1 77.7 89.6 96.8 102 106 109 115 119 135 for the perior	38.7 42.5 55.7 65.5 75.6 81.7 86 89.5 92.3 96.8 100 114 od 2031-20	28 30.8 40.3 47.5 54.8 59.3 62.4 65 67 70.4 72.9 83.3	19.3 21.3 28 33 38.1 41.2 43.4 45.2 46.6 49 50.7 58.1	9.88 10.9 14.3 16.9 19.6 21.2 22.4 23.3 24.1 25.3 26.2 30.1	6.14 6.78 8.94 10.6 12.2 13.3 14 14.6 15 15.8 16.4 18.8	3.69 4.06 5.36 6.34 7.34 7.95 8.4 8.74 9.04 9.49 9.86 11.3	2.13 2.35 3.1 3.67 4.26 4.62 4.88 5.08 5.25 5.52 5.73 6.59	1.52 1.68 2.22 2.63 3.05 3.3 3.49 3.64 3.76 3.95 4.1	1.18 1.31 1.73 2.05 2.38 2.58 2.73 2.85 2.94 3.09 3.21 3.69	0.975 1.08 1.42 1.69 1.96 2.12 2.25 2.34 2.42 2.54 2.64 3.04
	1.58 2 5 10 20 30 40 50 60 80 100 250	0.633 0.5 0.2 0.1 0.05 0.033 0.025 0.02 0.017 0.013 0.01 0.004 ities (mm/h	59.9 65.7 85.9 101 116 126 132 137 142 149 154 175 F) :: RCP6.0	45.9 50.5 66.1 77.7 89.6 96.8 102 106 109 115 119 135 for the perior	38.7 42.5 55.7 65.5 75.6 81.7 86 89.5 92.3 96.8 100 114 od 2031-20	28 30.8 40.3 47.5 54.8 59.3 62.4 65 67 70.4 72.9 83.3	19.3 21.3 28 33 38.1 41.2 43.4 45.2 46.6 49 50.7	9.88 10.9 14.3 16.9 19.6 21.2 22.4 23.3 24.1 25.3 26.2	6.14 6.78 8.94 10.6 12.2 13.3 14 14.6 15 15.8 16.4	3.69 4.06 5.36 6.34 7.34 7.95 8.4 8.74 9.04 9.49 9.86	2.13 2.35 3.1 3.67 4.26 4.62 4.88 5.08 5.25 5.52 5.73	1.52 1.68 2.22 2.63 3.05 3.3 3.49 3.64 3.76 3.95 4.1	1.18 1.31 1.73 2.05 2.38 2.58 2.73 2.85 2.94 3.09 3.21 3.69	0.975 1.08 1.42 1.69 1.96 2.12 2.25 2.34 2.42 2.54 2.64
Raint	1.58 2 5 10 20 30 40 50 60 80 100 250 fall intens AE 1.58 2	0.633 0.5 0.2 0.1 0.05 0.033 0.025 0.02 0.017 0.013 0.01 0.004 ities (mm/h P 10 0.633 0.5	59.9 65.7 85.9 101 116 126 132 137 142 149 154 175 r) :: RCP6.0 m	45.9 50.5 66.1 77.7 89.6 96.8 102 106 109 115 119 135 for the perior m 300 43.4 47.7	38.7 42.5 55.7 65.5 75.6 81.7 86 89.5 92.3 96.8 100 114 od 2031-20 m 1h 36.5 40.1	28 30.8 40.3 47.5 54.8 59.3 62.4 65 67 70.4 72.9 83.3 50 2h 26.4 29	19.3 21.3 28 33 38.1 41.2 43.4 45.2 46.6 49 50.7 58.1 6h 18.3 20.1	9.88 10.9 14.3 16.9 19.6 21.2 22.4 23.3 24.1 25.3 26.2 30.1 12h 9.43 10.4	6.14 6.78 8.94 10.6 12.2 13.3 14 14.6 15 15.8 16.4 18.8	3.69 4.06 5.36 6.34 7.34 7.95 8.4 8.74 9.04 9.49 9.86 11.3 48h 3.56 3.92	2.13 2.35 3.1 3.67 4.26 4.62 4.88 5.08 5.25 5.52 5.73 6.59 72h 2.07	1.52 1.68 2.22 2.63 3.05 3.3 3.49 3.64 3.76 3.95 4.1 4.72 96h 1.48 1.63	1.18 1.31 1.73 2.05 2.38 2.58 2.73 2.85 2.94 3.09 3.21 3.69	0.975 1.08 1.42 1.69 1.96 2.12 2.25 2.34 2.42 2.54 2.64 3.04
Raint	1.58 2 5 10 20 30 40 50 60 80 100 250 iall intens AE 1.58 2 5	0.633 0.5 0.2 0.1 0.05 0.033 0.025 0.02 0.017 0.013 0.01 0.004 lities (mm/h P 10 0.633 0.5 0.2 0.0	59.9 65.7 85.9 101 116 126 132 137 142 149 154 175 r):: RCP6.0 m 200 56.6 62 80.9 94.9	45.9 50.5 66.1 77.7 89.6 96.8 102 106 109 115 119 135 for the period m 30r 43.4 47.7 62.2 73	38.7 42.5 55.7 65.5 75.6 81.7 86 89.5 92.3 96.8 100 114 od 2031-20 m 1h 36.5 40.1 52.4 61.6	28 30.8 40.3 47.5 54.8 59.3 62.4 65 67 70.4 72.9 83.3 50 2h 26.4 29 34.6	19.3 21.3 28 33 38.1 41.2 43.4 45.2 46.6 49 50.7 58.1 6h 18.3 20.1 26.4 31	9.88 10.9 14.3 16.9 19.6 21.2 22.4 23.3 26.2 30.1 12h 9.43 10.4 13.6 16.1	6.14 6.78 8.94 10.6 12.2 13.3 14 14.6 15 15.8 16.4 18.8 24h 5.9 6.5 8.55	3.69 4.06 5.36 6.34 7.34 7.95 8.4 8.74 9.04 9.86 11.3 48h 3.56 3.92 5.16 6.09	2.13 2.35 3.1 3.67 4.26 4.62 4.88 5.08 5.25 5.25 5.52 5.73 6.59 72h 2.07 2.28 3	1.52 1.68 2.22 2.63 3.05 3.3 3.49 3.64 3.76 3.95 4.1 4.72 96h 1.48 1.63 2.15	1.18 1.31 1.73 2.05 2.38 2.58 2.73 2.85 2.94 3.09 3.21 3.69	0.975 1.08 1.42 1.69 1.96 2.12 2.25 2.34 2.42 2.54 2.64 3.04 20h 0.953 1.05 1.39
Raint	1.58 2 5 10 20 30 40 50 60 80 100 250 all intens AE	0.633 0.5 0.2 0.1 0.05 0.033 0.025 0.02 0.017 0.013 0.01 0.004 lities (mm/h P 10 0.633 0.5 0.63	59.9 65.7 85.9 101 116 126 132 137 142 149 154 175 r) :: RCP6.0 m 200 56.6 62 80.9	45.9 50.5 66.1 77.7 89.6 96.8 102 106 109 115 119 135 for the peric m 30r 43.4 47.7 62.2	38.7 42.5 55.7 65.5 75.6 81.7 86 89.5 92.3 96.8 100 114 od 2031-20 m 1h 36.5 40.1	28 30.8 40.3 47.5 54.8 59.3 62.4 65 67 70.4 72.9 83.3 50 2h 26.4 29 38	19.3 21.3 28 33 38.1 41.2 43.4 45.2 46.6 49 50.7 58.1 6h 18.3 20.1 26.4	9.88 10.9 14.3 16.9 19.6 21.2 22.4 23.3 24.1 25.3 26.2 30.1 12h 9.43 10.4 13.6	6.14 6.78 8.94 10.6 12.2 13.3 14 14.6 15 15.8 16.4 18.8 24h 5.9 6.5 8.55	3.69 4.06 5.36 6.34 7.34 7.95 8.4 8.74 9.04 9.49 9.86 11.3 48h 3.56 3.92 5.16	2.13 2.35 3.1 3.67 4.26 4.62 4.88 5.08 5.25 5.52 5.73 6.59 72h 2.07 2.28	1.52 1.68 2.22 2.63 3.05 3.3 3.49 3.64 3.76 3.95 4.1 4.72 96h 1.48 1.63 2.15	1.18 1.31 1.73 2.05 2.38 2.58 2.73 2.85 2.94 3.09 3.21 3.69	0.975 1.08 1.42 1.69 1.96 2.12 2.25 2.34 2.42 2.54 3.04 20h 0.953 1.05 1.39
Raint	1.58 2 5 10 20 30 40 50 60 80 100 250 fall intens AE 1.58 2 5 10 20 30 40 40 50 40 250 30 40 250 30 40 250 30 40 250 30 40 40 40 40 50 40 40 40 40 40 40 40 40 40 40 40 40 40	0.633 0.5 0.2 0.1 0.05 0.033 0.025 0.02 0.017 0.010 0.004 titles (mm/h P 10 0.633 0.5 0.2 0.1 0.05 0.01 0.002 0.001 0.002 0.001 0.002 0.001 0.002 0.001 0.002 0.002 0.003	59.9 65.7 85.9 101 116 126 132 137 142 149 154 157 1::::::::::::::::::::::::::::::::::	45.9 50.5 66.1 77.7 89.6 96.8 102 106 109 115 119 135 for the perior 43.4 47.7 62.2 73 84.2 90.9 95.7	38.7 42.5 55.7 65.5 75.6 81.7 86 89.5 92.3 96.8 100 114 02 2031-20 m 1h 36.5 40.1 52.4 61.6 71 76.7 80.7	28 30.8 40.3 47.5 54.8 59.3 62.4 65 67 70.4 72.9 83.3 50 2h 26.4 29 38 44.6 51.5 55.7 58.6	19.3 21.3 28 33 38.1 41.2 45.2 46.6 49 50.7 58.1 6h 18.3 20.1 26.4 31 35.9 38.8 40.9	9.88 10.9 14.3 16.9 19.6 21.2 22.4 23.3 24.1 25.3 26.2 30.1 12h 9.43 10.4 13.6 16.1 18.6 20.1 21.2	6.14 6.78 8.94 10.6 12.2 13.3 14 14.6 15.8 16.4 18.8 24h 5.9 6.5 8.55 10.1 11.7 12.6	3.69 4.06 6.34 7.34 7.95 8.4 8.74 9.49 9.86 11.3 48h 3.56 3.92 5.16 6.09 7.05 7.64	2.13 2.35 3.1 3.67 4.26 4.62 4.88 5.08 5.25 5.73 6.59 72h 2.07 2.28 3 3.55 4.11 4.46 4.7	1.52 1.68 2.22 2.63 3.05 3.3 3.49 3.64 3.76 4.1 4.72 96h 1.48 1.63 2.15 2.54 2.95 3.3	1.18 1.31 1.73 2.05 2.38 2.58 2.73 2.85 2.94 3.09 3.21 3.69 12 1.16 1.28 1.68 1.99 2.31 2.5 2.64	0.975 1.08 1.42 1.69 1.96 2.12 2.25 2.34 2.64 2.64 3.04 20h 0.953 1.05 1.39 1.64 1.9 2.06 2.18
Raint	1.58 2 5 10 20 30 40 50 60 80 100 250 all intens AE 1.58 2 5 10 20 30 40 50 60 80 100 250 30 40 250 30 40 250 30 40 250 30 40 40 40 40 40 40 40 40 40 40 40 40 40	0.633 0.5 0.2 0.1 0.05 0.025 0.02 0.017 0.013 0.01 0.010 0.633 0.5 0.2 0.1 0.05 0.025 0.025 0.021 0.010 0.01	59.9 65.7 85.9 101 116 126 132 137 142 149 154 175 1::::RCP6.00 m 60.00 60.00 60.00 118 124 129 129 133	45.9 50.5 66.1 77.7 89.6 96.8 102 106 109 115 119 135 for the perid m 30r 43.4 47.7 62.2 73 84.2 90.9 95.7 99.5 103	38.7 42.5 55.7 65.5 75.6 81.7 86 89.5 92.3 96.8 100 114 40d 2031-20 m 1h 36.5 40.1 76.7 80.7 84.6	28 30.8 40.3 47.5 54.8 59.3 62.4 65 67 70.4 72.9 83.3 50 2h 26.4 29 38 44.6 51.5 55.7 58.6 61 62.9	19.3 21.3 28 33 38.1 41.2 46.6 49 50.7 58.1 6h 18.3 20.1 26.4 31 32.3 38.8 40.9 42.5 43.9	9.88 10.9 14.3 16.9 19.6 21.2 22.4 23.3 26.2 30.1 12h 9.43 10.4 13.6 16.1 18.6 20.1 21.2 22.1 22.2	6.14 6.78 8.94 10.6 12.2 13.3 14 14.6 15.8 16.4 18.8 24h 5.9 6.5 8.55 10.1 11.7 12.6 13.3 13.9	3.69 4.06 5.36 6.34 7.34 7.95 8.4 8.74 9.04 9.86 11.3 48h 3.56 6.09 7.05 7.64 8.39 8.39 8.67	2.13 2.35 3.1 3.67 4.26 4.62 4.88 5.08 5.25 5.52 5.73 6.59 72h 2.07 2.28 3.3.55 4.11 4.46 4.7 4.9	1.52 1.68 2.22 2.63 3.05 3.3 3.49 3.64 3.76 4.1 4.72 96h 1.48 1.63 2.15 2.54 2.95 3.2 3.38 3.52 3.38	1.18 1.31 1.73 2.05 2.38 2.58 2.73 2.85 2.94 3.09 3.21 3.69 12 1.16 1.28 1.68 1.99 2.31 2.5 2.64 2.76 2.85	0.975 1.08 1.42 1.69 1.96 2.12 2.25 2.34 2.42 2.54 2.64 3.04 20h 0.953 1.05 1.39 1.64 1.99 2.06 2.18 2.27
Raint	1.58 2 5 10 20 30 40 50 60 80 100 250 all intens AE 1.58 2 5 10 20 30 40 40 50 60 80 100 250 30 40 250 40 250 40 40 40 40 40 40 40 40 40 40 40 40 40	0.633 0.5 0.2 0.1 0.05 0.033 0.025 0.017 0.013 0.01 0.004 ities (mm/h P 10 0.633 0.5 0.2 0.1 0.05 0.03 0.01 0.03	59.9 65.7 85.9 101 116 126 132 137 142 149 154 175 r)::::::::::::::::::::::::::::::::::::	45.9 50.5 66.1 77.7 89.6 96.8 102 106 109 115 119 135 for the perior m 30r 43.4 47.7 62.2 73 84.2 90.9 95.5	38.7 42.5 55.7 65.5 75.6 81.7 86 89.5 92.3 96.8 100 114 od 2031-20 m 1h 36.5 40.1 52.4 61.6 71 76.7 80.7 84	28 30.8 40.3 47.5 54.8 59.3 62.4 65 67 70.4 72.9 83.3 50 2h 26.4 29 38 44.6 55.5 55.7 55.7 58.6 61	19.3 21.3 28 33 38.1 41.2 43.4 45.2 46.6 49 50.7 58.1 6h 18.3 20.1 26.4 31 35.9 38.8 40.9 42.5	9.88 10.9 14.3 16.9 19.6 21.2 22.4 23.3 26.2 30.1 12h 9.43 10.4 13.6 16.1 18.6 20.1 21.2	6.14 6.78 8.94 10.6 12.2 13.3 14 14.6 15. 15.8 16.4 18.8 24h 5.9 6.5 8.55 10.1 11.7 12.6 13.3 13.9	3.69 4.06 6.34 7.34 7.95 8.4 8.74 9.04 9.86 11.3 48h 3.56 3.92 5.16 6.09 7.05 7.64 8.06 8.39	2.13 2.35 3.1 3.67 4.26 4.62 4.88 5.08 5.25 5.52 5.73 6.59 72h 2.07 2.228 3 3.55 4.11 4.46 4.7	1.52 1.68 2.22 2.63 3.05 3.49 3.64 3.76 3.95 4.1 4.72 96h 1.48 1.63 2.15 2.54 2.95 3.2	1.18 1.31 1.73 2.05 2.38 2.58 2.73 2.85 2.94 3.09 3.21 3.69 1.16 1.28 1.68 1.99 2.31 2.5 2.64	0.975 1.08 1.42 1.69 1.96 2.12 2.25 2.34 2.42 2.54 3.04 20h 0.953 1.05 1.39 2.06 2.18
Raint ARI	1.58 2 5 10 20 30 40 40 50 60 80 11.58 2 5 10 20 30 40 40 50 66 60 80 60 60 80 60 80 60 80 60 80 80 80 250 250 250 800 800 800 800 800 800 800 800 800 8	0.633 0.5 0.2 0.1 0.05 0.033 0.025 0.02 0.017 0.013 0.01 0.004 lities (mm/h p 10 0.633 0.5 0.2 0.1 0.05 0.2 0.1 0.05 0.02 0.017 0.013 0.01 0.010 0.010 0.010 0.010 0.010 0.010 0.010 0.010 0.010 0.010 0.010 0.010 0.010	59.9 65.7 85.9 101 116 126 132 137 142 149 154 175 r)::RCP6.0 m 200 56.6 62 80.9 94.9 109 118 124 129 133 139 144	45.9 50.5 66.1 77.7 89.6 96.8 102 106 109 115 119 135 for the perich 43.4 47.7 62.2 73 84.2 90.9 95.7 99.5,7 99.5 103 108 1111 27	38.7 42.5 55.7 65.5 75.6 81.7 86 89.5 92.3 96.8 100 114 od 2031-20 m 1h 36.5 40.1 52.4 61.6 71 76.7 80.7 84.6 90.8 94.1 107	28 30.8 40.3 47.5 54.8 59.3 62.4 65 67 70.4 72.9 83.3 50 2h 26.4 29 38 44.6 51.5 55.7 58.6 61 62.9 66 68.4 78.2	19.3 21.3 28 33 38.1 41.2 43.4 45.2 46.6 49 50.7 58.1 6h 18.3 20.1 26.4 31 35.9 38.8 40.9 42.5 43.9	9.88 10.9 14.3 16.9 19.6 21.2 22.4 23.3 26.2 30.1 12h 9.43 10.4 13.6 16.1 18.6 20.1 21.2 22.1 22.3 23.9	6.14 6.78 8.94 10.6 12.2 13.3 14 14.6 15 15.8 16.4 18.8 24h 5.9 6.5 8.55 10.1 11.7 12.6 13.3 13.9 14.3	3.69 4.06 5.36 6.34 7.34 8.7 8.4 8.7 9.04 9.86 11.3 48h 3.56 3.92 5.16 6.09 7.05 7.64 8.06 8.39 8.67 9.1	2.13 2.35 3.1 3.67 4.26 4.62 4.88 5.08 5.25 5.25 5.73 6.59 72h 2.07 2.28 3 3.55 4.11 4.46 4.7 4.9 5.06	1.52 1.68 2.22 2.63 3.05 3.49 3.64 3.76 3.95 4.1 4.72 96h 1.48 1.63 2.15 2.54 2.95 3.2 3.38 3.52 3.38	1.18 1.31 1.73 2.05 2.38 2.58 2.73 2.85 2.94 3.09 3.21 3.69 1.16 1.28 1.68 1.99 2.31 2.5 2.64 2.76 2.85	0.975 1.08 1.42 1.69 1.96 2.12 2.25 2.34 2.42 2.54 3.04  20h 0.953 1.05 1.39 1.64 1.9 2.06 2.18 2.27 2.34 2.42
Raint ARI	1.58 2 5 10 20 40 50 60 80 1100 250 40 40 40 50 60 80 1100 250 50 60 80 80 1100 250 80 80 80 80 80 80 80 80 80 80 80 80 80	0.633 0.5 0.2 0.1 0.05 0.033 0.025 0.017 0.013 0.01 0.633 0.5 0.2 0.1 0.05 0.03 0.02 0.017 0.013 0.010 0.004 litles (mm/h	59.9 65.7 85.9 101 116 126 132 137 142 149 154 157 1:: RCP6.0 m 200 56.6 62 80.9 94.9 109 118 124 129 133 139 144 164 r):: RCP6.0 m 200 200 200 200 200 200 200 200 200	45.9 50.5 66.1 77.7 89.6 8 102 106 109 115 119 135 for the peric m 301 43.4 47.7 62.2 73 84.2 90.9 95.7 99.5 103 108 111 127 for the peric m 301 108 111 127 for the peric m 301 108 111 127 for the peric m 301 108 111 127	38.7 42.5 55.7 65.5 75.6 86.8 89.5 92.3 96.8 100 113-20 m 1h 36.5 40.1 76.7 80.7 84.8 66.6 90.8 94.1 107 0d 2031-21 m 107 0d 2031-21 m 2031-21 84.6 90.8 94.1 107 0d 2031-21 85.6 90.8	28 30.8 40.3 47.5 54.8 59.3 62.4 65 67 70.4 72.9 83.3 50 26.4 29 38 44.6 51.5 55.7 58.6 61 62.9 66 68.4 78.2	19.3 21.3 38.1 41.2 43.4 45.2 46.6 49 50.7 58.1 6h 18.3 20.1 26.4 31 35.9 38.8 40.9 42.5 43.9 46 47.7 54.6	9.88 10.9 14.3 16.9 19.6 21.2 22.4 23.3 24.1 25.3 26.2 30.1 12h 9.43 10.4 13.6 16.1 18.6 20.1 22.2 22.1 22.3 24.1 25.3 26.2 30.1 12h 26.2 30.2 26.2 30.2 26.2 30.2 26.2 30.2 26.2 30.2 26.2 30.2 26.2 30.2 26.2 30.2 26.2 30.2 26.2 30.2 26.2 30.2 30.2 30.2 30.2 30.2 30.2 30.2 30	6.14 6.78 8.94 10.6 12.2 13.3 14 6.15 15.8 16.4 18.8 24h 5.9 6.5 8.55 10.1 11.7 12.6 13.3 13.9 14.3 15.9 12.6 17.9	3.69 4.06 6.34 7.35 8.74 9.04 9.86 11.3 48h 3.56 3.92 5.16 6.09 7.05 7.64 8.06 8.39 9.86 7.05	2.13 2.35 3.1 3.67 4.26 4.62 4.88 5.25 5.52 5.52 5.57 6.59 72h 2.28 3 3 3 3 3 5,55 4.11 4.46 4.7 4.9 5.06 5.25 6.59	1.52 1.68 2.22 2.63 3.05 3.3 3.64 3.76 3.95 4.1 4.72 96h 1.48 1.63 2.15 2.54 2.95 3.2 3.38 3.52 3.63 3.82 3.63 3.82 3.95	1.18 1.31 1.73 2.05 2.38 2.73 2.85 2.73 3.09 3.21 3.69 1.128 1.68 1.99 2.31 2.5 2.64 2.85 2.99 3.11 3.58	0.975 1.08 1.42 1.69 1.96 2.12 2.25 2.34 2.64 2.64 3.04  20h 0.953 1.05 1.39 1.64 1.9 2.06 2.18 2.27 2.34 2.47 2.54 2.95
Raint ARI	1.58 2 5 10 20 30 40 50 60 80 100 80 100 80 100 80 100 80 100 80 100 80 100 80 100 80 100 80 110 100 80 110 100 80 110 11	0.633 0.5 0.2 0.1 0.05 0.033 0.025 0.017 0.010 0.05 0.033 0.010 0.010 0.004 0.010 0.004 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	59.9 65.7 85.9 101 116 126 132 137 142 149 154 157 1:: RCP6.0 m 200 56.6 62 80.9 94.9 109 118 124 129 133 139 144 164 r):: RCP6.0 m 200 200 200 200 200 200 200 200 200	45.9 50.5 66.1 77.7 89.6 96.8 102 106 109 115 119 135 60.7 43.4 47.7 62.2 73 84.2 90.9 95.7 103 108 111 127 for the perids	38.7 42.5 55.7 65.5 75.6 86.8 89.5 92.3 96.8 100 113-20 m 1h 36.5 40.1 76.7 80.7 84.8 66.6 90.8 94.1 107 0d 2031-21 m 107 0d 2031-21 m 2031-21 84.6 90.8 94.1 107 0d 2031-21 85.6 90.8	28 30.8 40.3 47.5 54.8 59.3 62.4 65 67 70.4 72.9 83.3 50 26.4 29 38 44.6 51.5 55.7 58.6 61 62.9 66 68.4 78.2 00	19.3 21.3 28 33 38.1 41.2 43.4 45.2 46.6 49 50.7 58.1 6h 18.3 20.1 26.4 31 35.9 38.8 40.9 40.5 43.9 46.6 47.7 54.6	9.88 10.9 14.3 16.9 19.6 21.2 22.4 23.3 24.1 25.3 26.2 30.1 12h 19.43 10.4 13.6 16.1 18.6 20.1 21.2 22.2 22.1 22.8 23.9 24.1 24.1 25.3 26.2 26.2 27.2 26.2 27.2 26.2 27.2 27.2	6.14 6.78 8.94 10.6 12.2 13.3 14 6.15 15.8 16.4 18.8 24h 5.9 6.5 8.55 10.1 11.7 12.6 13.3 13.9 14.3 15.9 12.6 17.9	3.69 4.06 6.34 7.35 8.74 9.04 9.86 11.3 48h 3.56 3.92 5.16 6.09 7.05 7.64 8.06 8.39 9.86 7.05	2.13 2.35 3.1 3.67 4.26 4.62 4.88 5.25 5.52 5.73 6.59 72h 2.07 2.28 3.355 4.11 4.46 4.7 4.9 5.08 5.25 5.73 6.59	1.52 1.68 2.22 2.63 3.05 3.3 3.64 3.76 3.95 4.1 4.72 96h 1.48 1.63 2.15 2.54 2.95 3.2 3.38 3.52 3.63 3.82 3.63 3.82 3.95	1.18 1.31 1.73 2.05 2.38 2.73 2.85 2.73 3.09 3.21 3.69 1.128 1.68 1.99 2.31 2.5 2.64 2.85 2.99 3.11 3.58	0.975 1.08 1.42 1.69 1.96 2.12 2.25 2.34 2.64 2.64 3.04 20h 0.953 1.05 1.39 1.64 1.9 2.06 2.18 2.27 2.34 2.47 2.56 2.95
Raint ARI	1.58 2 5 10 20 40 50 40 50 60 80 100 250 40 50 60 80 100 250 30 40 50 60 80 100 250 60 100 250 60 100 250 50 66 100 250 50 66 100 250 50 66 100 250 50 66 100 250 50 66 50 60 100 250 50 60 60 60 60 60 60 60 60 60 60 60 60 60	0.633 0.5 0.2 0.1 0.05 0.033 0.025 0.01 0.001 0.001 0.001 0.001 0.003 0.01 0.001 0.003 0.01 0.001 0.003 0.01 0.001 0.001 0.001 0.001 0.001 0.001 0.003	59.9 65.7 85.9 101 116 126 132 137 142 149 154 175 80.9 80.9 94.9 109 118 129 133 139 144 164 17)::::::::::::::::::::::::::::::::::::	45.9 50.5 66.1 77.7 89.6 69.8 102 106 109 115 119 135 for the perick m 30r 43.4 47.7 62.2 73 84.2 90.9 95.7 103 108 111 127 for the perick m 30r 48 52.8 69.1	38.7 42.5 55.7 65.5 75.6 81.7 86 89.5 92.3 96.8 100 114 od 2031-20 m 1h 36.5 40.1 52.4 61.6 71 76.7 80.7 84 86.6 99.8 94.1 107 dd 2031-21 m 1h 40.4 44.4 58.3	28 30.8 40.3 47.5 54.8 59.3 62.4 65 67 70.4 72.9 83.3 50 2h 26.4 29 38.6 61 62.9 66 68.4 70.2 20 21 22 21 22 22 23 24 24 25 25 26 27 27 28 28 28 28 28 28 28 28 28 28 28 28 28	19.3 21.3 38.1 41.2 43.4 45.2 46.6 49 50.7 58.1 18.3 20.1 26.4 31.3 35.9 38.8 40.9 42.5 43.9 46.6 47.7 54.6 6h	9.88 10.9 14.3 16.9 19.6 21.2 22.4 23.3 26.2 30.1 12h 9.43 10.4 13.6 20.1 21.2 22.1 18.6 20.1 21.2 22.1 22.8 24.8 28.5 12h	6.14 6.78 8.94 10.6 12.2 13.3 14 14.6 15.8 16.4 18.8 24h 5.9 6.5 8.55 10.1 11.7 12.6 13.3 11.9 14.3 15.6 17.9 24h 6.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9	3.69 4.06 5.36 6.34 7.95 8.4 8.74 9.04 9.86 11.3 48h 3.56 3.92 7.05 7.64 8.39 8.67 9.1 9.45 10.9	2.13 2.35 3.1 3.67 4.26 4.62 4.88 5.08 5.25 5.73 6.59 72h 2.07 2.28 3 3.55 4.11 4.46 4.7 4.9 5.06 5.32 5.32 5.32 5.32 5.32 5.32 5.32 5.32	1.52 2.22 2.63 3.05 3.3 3.49 3.64 3.76 3.95 4.1 4.72 96h 1.48 1.63 2.15 2.54 2.95 3.2 3.38 3.62 3.62 3.62 3.62 3.62 3.62 3.62 3.62	1.18 1.31 1.73 2.05 2.38 2.73 2.85 2.73 2.85 2.94 3.09 3.21 3.69 2.31 2.5 2.64 2.76 2.85 2.99 3.11 3.58	0.975 1.08 1.42 1.69 1.96 2.12 2.25 2.34 2.42 2.54 3.04 2.095 1.05 1.39 1.64 1.9 2.06 2.18 2.27 2.34 2.42 2.7 2.56 0.992 1.1 1.45
Raint ARI	1.58 2 5 10 20 30 40 50 60 80 100 250 250 30 40 40 250 30 41 intens AE 1.58 2 5 10 20 30 41 intens AE 1.58 AE 2 5 5 10 250 40 100 250 41 intens AE 2 5 5 10 250 250 250 250 250 250 250 250 250 25	0.633	59.9 50.9 65.7 85.9 101 116 126 131 147 142 149 154 175 80.9 94.9 109 118 124 129 133 139 144 164 164 162 68.7 89.9 106 122	45,9 50.5 66.1 77.7 79.5 66.1 109 115 119 115 115 115 115 115 115 115 11	38.7 42.5 55.7 65.5 765.5 77.5 6.6 89.5 92.3 92.3 96.8 100 104 40 2031.20 11 11 10 10 10 10 10 10 10 10 10 10 10	28 30.8 40.3 47.5 54.8 59.3 62.4 65 67 70.4 72.9 83.3 50 26.4 29 38.6 44.6 51.5 55.7 58.6 61 62.9 66 68.4 70.2 29 20 20 21 22 24 27 25 25 26 27 27 28 28 28 28 28 28 28 28 28 28 28 28 28	19.3 21.3 28 33 38.1 41.2 46.6 49 50.7 58.1 18.3 30.1 20.1 35.9 42.5 43.9 42.5 43.9 42.5 43.9 42.5 43.9 42.5 43.9 42.5 43.9 42.7 46.6 6h 6ch 20.1 22.2 29.2 34.5 30.9 39.9	9.88 10.9 14.3 16.9 19.6 21.2 22.4 23.3 24.1 25.3 26.2 30.1 12.4 13.6 16.1 18.6 20.1 21.2 22.1 22.8 23.9 24.8 28.5 10.2 11.3 14.9 14.9 17.6 20.1 17.6 20.1 21.1 21.2 22.1 22.8 23.9 24.8 28.5 11.9 21.9 24.8 28.5 11.9 21.9 21.9 21.9 21.9 21.9 21.9 21.9	6.14 6.78 8.94 10.6 172.2 13.3 14 14.6 15.5 15.8 16.4 5.5 8.55 10.1 11.7 12.6 6.3 13.9 15.6 6.3 17.9 24h 6.33 7.9 2.5 10.9 12.7 10.9 12.7 10.9 10.9 10.9 10.9 10.9 10.9 10.9 10.9	3.69 4.06 6.34 7.95 8.4 8.74 9.49 9.86 6.03 4.06 6.09 9.86 6.09 9.86 6.09 9.86 6.09 9.86 8.39 9.49 9.49 9.86 8.39 9.49 9.49 9.49 9.49 9.49 9.49 9.49 9	2.13 2.35 3.1 3.67 4.26 4.52 4.88 5.08 5.05 5.52 5.73 3.3.55 4.11 4.46 4.7 4.9 5.06 6.35 5.52 2.18 2.4 3.3.77 4.9 4.9 5.32 2.4 3.3 3.18 3.77 4.9 4.9 4.9 4.9 4.9 4.9 4.9 4.9 4.9 4.9	1.52 2.22 2.63 3.05 3.3 3.64 3.76 3.76 4.1 4.72 4.72 4.72 2.15 2.54 3.38 3.52 3.63 3.52 3.63 3.62 3.62 3.62 3.62 3.62 3.62 3.6	1.18 1.31 1.73 2.05 2.38 2.73 2.94 3.09 3.21 3.69 1.16 1.28 1.99 2.31 2.5 2.64 2.85 2.99 3.11 3.58	0.975 1.08 1.42 1.69 1.96 2.12 2.25 2.34 2.64 3.04 2.09 2.10 2.55 2.64 3.04 2.09 2.06 2.18 2.27 2.34 2.42 2.44 2.40 2.40 2.18 2.27 2.34 2.47 2.56 2.95 2.06 0.992 1.15 1.72 2.26
Raint ARI	1.58 2 5 5 10 20 30 40 100 250 80 1100 250 30 40 40 50 60 80 1100 250 30 30 40 50 60 80 1100 250 31 100 80 110	0.633	59,9 (65,7 (85,9 (10)) (116) (	45.9 50.5 50.5 50.5 50.5 50.5 50.5 50.5 5	38.7 42.5 55.7 65.5 57.7 65.5 61.7 75.6 81.7 75.6 89.5 90.8 100 d 2031-21 114 40.1 52.4 40.1 52.4 60.7 66.7 60.7 80.7 84.6 66.6 69.8 90.8 66.6 68.6 67.0 2 68.6 68.6 68.6 67.7 92.2 85.6 85.6 85.6 85.6 85.8 85.8 85.8 85.8	28 30.8 40.3 47.5 54.8 59.3 62.4 65 67 70.4 72.9 83.3 50 26.4 29 38 44.6 51.5 55.7 58.6 61 62.9 66 68.2 20 20 21 42.2 42.2 42.7 42.7 57.5 66.2 40.2 66.2 67.3 68.3 68.4 69.3 69.3 69.3 69.3 69.3 69.3 69.3 69.3	19.3 21.3 28 33 38.1 41.2 28 43.4 45.2 45.2 20.1 26.4 49 45.2 20.1 26.4 49 42.5 43.9 46.6 64 49 42.5 43.9 46.6 64 49 42.5 43.9 46.6 66 66 66 66 66 66 66 66 66 66 66 66	9.88 (10.9 14.3 16.9 14.3 16.9 14.3 16.9 16.6 17.6 17.6 17.6 17.6 17.6 17.6 17.6	6.14 6.78 8.19 10.6 17.2 13.3 14 14.6 15.5 15.8 24h 18.8 24h 19.6 6.5 8.55 10.1 11.7 12.6 13.3 15.6 17.9 24h 6.33 7 9.25 10.9 12.7 7 10.9 12.7 13.7 13.7 13.7	3.59 48h 4.79 4.17 5.52 48h 7.55 4.17 5.52 4.17 5.52 4.17 5.52 5.16 6.53 7.57 7.57 6.53 6.53 7.57 7.57 6.53 6.53 7.57 7.57 6.52 6.53 7.57 6.53 6.53 7.57 7.57 6.52 6.53 7.57 6.52 6.53 7.57 6.53 6.53 7.57 6.53 6.53 7.57 6.53 6.53 7.57 6.53 6.53 7.57 6.53 6.53 7.57 6.53 6.53 7.57 6.53 6.53 7.57 6.53 6.53 7.57 6.53 6.53 7.57 6.53 6.53 7.57 6.53 6.53 7.57 6.53 6.53 7.57 6.53 6.53 7.57 6.53 6.53 7.57 6.53 6.53 7.57 6.53 6.53 7.57 6.53 6.53 7.57 6.53 6.53 6.53 7.57 6.53 6.53 6.53 6.53 6.53 6.53 6.53 6.53	2.13 3.17 3.67 4.26 4.62 4.88 5.08 5.08 5.05 72h 4.11 4.46 4.49 4.90 5.32 2.28 8.3 3.55 5.41 4.46 4.46 4.5 5.32 6.35 72h 4.38 8.44 4.46 4.47 4.74 4.74 4.74 4.74 4.75 6.32 6.35 72h 4.38 72 4.	1.52 2.22 2.63 3.05 3.3 3.64 9.65 4.1 4.72 96h 1.63 3.52 3.63 3.64 3.65 3.76 3.95 4.1 4.72 2.54 4.72 2.55 3.2 3.38 3.52 3.63 3.63 3.63 3.65 3.82 3.65 3.82 3.66 3.66 96h 4.56 96h 3.38 3.96 4.56 9.65 9.65 9.65 9.65 9.65 9.65 9.65 9	1.18 1.31 1.73 2.05 2.38 2.58 2.73 3.69 12 1.16 2.85 2.94 3.09 2.17 3.69 1.17 2.11 2.11 2.11 2.11 2.11 2.11 2.11	0.975 1.08 1.42 1.69 1.96 2.12 2.25 2.34 2.64 3.04 2.00 0.953 1.05 1.39 1.64 1.9 2.06 2.18 2.27 2.34 2.27 2.36 2.95 2.95 2.95 2.95 2.96 2.97 2.11 1.45 2.27 2.21 2.21
Raint ARI	1.58 2 5 5 10 20 30 40 100 250 80	0.633	S9.9	45.9 50.5 50.5 50.5 50.5 50.5 50.5 50.5 5	38.7 42.5 55.7 65.5 57.7 65.5 57.7 65.5 81.7 75.6 81.7 8.6 89.5 100 114 100 203.1 10 114 10.1 10.1 10.1 10.1 10.1 10.1	28 443 593 308 8403 475 545 67 70.4 29 22 29 2 29 2 29 2 29 2 29 2 29 2 2	19.3 21.3 28.3 38.1 41.2 48.2 49.2 45.2 46.6 49.2 50.1 26.4 31.3 35.9 46.7 58.1 26.4 49.2 42.5 43.9 46.5 49.2 42.5 43.9 46.6 60.1 22.2 2.3 4.5 39.9 44.7 47.3 45.5 39.9 9	9.88 10.9 14.3 16.9 19.6 21.2 22.4 23.3 10.4 16.9 16.6 16.1 18.6 20.1 22.8 23.9 12.8 12.9 24.8 28.5 12.9 12.9 12.9 22.1 23.3 14.9 6 20.4 22.1 23.3 14.9 6 20.4 22.1 23.3 14.9 6 20.4 22.1 23.3 22.2 22.1 23.3 24.9 22.1 23.3 24.9 22.1 23.3 24.9 22.1 23.3 24.9 22.1 23.3 24.9 22.1 23.3 24.9 22.1 23.3 24.9 22.1 23.3 24.9 22.1 23.3 24.9 22.1 23.3 24.9 22.1 23.3 24.9 22.1 23.3 24.9 22.1 23.3 24.9 22.1 23.3 24.9 22.1 22.1 23.3 24.9 22.1 22.1 23.3 24.9 22.1 22.1 23.3 24.9 22.1 22.1 22.1 22.1 22.1 22.1 22.1 22	6.14 8.94 10.6 17.8 19.6 19.6 19.6 19.6 19.6 19.6 19.6 19.6	3.69 4.06 6.34 4.06 6.34 7.34 8.74 9.49 9.49 9.48 6.06 8.39 2.06 6.09 9.45 6.00 9.45 6	2.13 3.31 3.67 4.62 4.62 4.62 4.62 4.62 4.62 5.08 5.08 5.08 5.02 5.52 5.52 5.52 6.59 72h 4.11 4.9 5.06 5.32 2.8 8.3 3.7 5.52 5.52 6.35 5.52 6.35 5.52 5.52 5.52 5.52 5.52 5.52 5.52 5	1.52 2.63 3.3 3.69 3.64 4.72 96h 4.56 3.3 3.82 3.63 3.83 3.82 3.63 3.83 3.83 3.83 3.83 3.83 3.83 3.83	1.18 1.31 1.73 2.05 2.05 2.38 2.58 2.73 3.69 3.21 3.69 3.21 3.69 1.128 1.68 1.28 1.69 2.31 1.99 2.31 1.99 2.31 1.57 2.1 1.33 5.88 1.77 2.1 1.77 2.1 1.77 2.1 2.44 2.65 2.89 2.99 2.92	0.975 1.08 1.42 1.69 1.96 2.12 2.25 2.34 2.64 2.64 2.64 2.64 2.10 2.00 1.05 1.39 1.64 1.9 2.06 2.18 2.27 2.34 2.47 2.59 2.17 2.37 2.59 2.01 1.1 1.45 2.77 2.21 7.2 2.17 2.37 2.39 2.39 2.39 2.39 2.10 1.10 2.20 2.17 2.20 2.17 2.20 2.17 2.20 2.20 2.20 2.20 2.20 2.20 2.20 2.2
Raint ARI	1.58 2 5 10 20 30 40 80 80 100 250 60 80 100 250 60 80 100 250 60 80 100 250 60 80 100 25 1.58 80 100 25 1.58 80 100 30 40 40 40 40 40 40 40 40 40 40 40 40 40	0.633	S9.9	45,9 50.5 50.5 50.5 50.5 50.5 50.5 50.5 50.	38.7 42.5 55.7 66.5 575.6 81.7 75.6 88.6 89.5 100 114 02031-20 m s.5 540.1 71 76.7 84 86.6 99.8 94.1 107 121 107 121 107 120 120 120 120 120 120 120 120 120 120	28 40.3 30.8 40.3 47.5 54.8 59.3 47.5 54.8 65.7 70.4 83.3 500 26.4 46.5 51.5 55.7 58.6 61 62.9 66.6 68.4 29.2 49.7 29.2 49.7 57.5 62.2 49.7 57.5 62.5 65.5 65.5	19.3 2.13 2.13 38.1 41.2 45.2 45.2 45.2 45.2 45.2 45.2 45.2 45	9.88 10.9 14.3 16.9 16.1 16.1 16.1 16.1 16.1 16.1 16.1	6.14 6.78 8.94 10.6 172.2 13.3 14 14.6 15.5 15.8 16.4 6.5 8.55 10.1 11.7 12.6 6.3 13.9 15.6 17.9 24h 6.33 7 9.25 10.9 12.7 13.7 13.7 13.7 13.9 12.9 12.7 13.7 13.7 13.9 12.9 12.7 13.7 13.7 13.7 13.9 12.9 12.7 13.7 13.7 13.7 13.7 13.7 13.7 13.7 13	3.59 4.06 5.36 6.34 7.34 7.95 8.4 8.74 9.49 9.49 9.86 11.3 48h 8.76 6.09 7.05 8.69 9.1 9.45 6.53 7.57 6.4 8.06 8.09 4.17 6.5 6.5 8.21 6.5	2.13 3.17 3.67 4.62 4.62 4.62 4.88 5.08 5.05 5.25 5.52 72h 2.07 7.2 4.9 5.06 4.7 4.9 5.06 5.02 5.02 5.03 7.7 4.9 5.03 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0	1.52 2.63 3.3 3.9 4.1 4.72 96th 1.55 3.22 3.49 4.56 4.56 4.56 4.56 4.56 4.56 4.56 4.56	1.18 1.31 1.73 2.05 2.05 2.38 2.58 2.73 3.69 3.21 3.69 3.21 3.69 2.31 2.5 2.64 2.76 2.85 2.99 3.11 3.58	0.975 1.08 1.42 1.69 2.12 2.25 2.34 2.42 2.64 3.04 2.01 2.05 2.34 2.64 2.64 2.64 2.64 2.65 2.7 2.7 2.7 2.44 2.66 0.992 1.1 2.7 2.86 1.72 2.95 2.95 2.95 2.97 2.91 2.92 2.11 2.93 2.93 2.93 2.93
Raint ARI	1.58 2 5 5 10 20 30 40 50 60 80 100 250 60 80 100 250 60 80 100 250 60 80 100 250 60 80 100 60 80 80 100 60 80 80 100 60 80 80 100 60 80 80 100 60 80 80 100 60 80 80 100 60 80 80 100 60 80 80 100 100 100 80 80 100 100 100 80 80 100 10	0.633 0.02 0.017 0.013 0.05 0.02 0.02 0.07 0.010 0.004 0.005 0.02 0.017 0.013 0.004 0.005	99.9 (85.7 85.9 85.9 85.9 85.9 85.7 85.9 85.9 85.7 85.9 85.7 85.9 85.7 85.9 85.7 85.7 85.7 85.7 85.7 85.7 85.7 85.7	45.9 50.5 50.5 50.5 50.5 50.5 50.5 50.5 5	38.7 42.5 55.7 65.5 65.5 75.6 81.7 75.6 88.5 100 114 92.3 96.8 100 114 61.6 61.6 71 176.7 80.7 80.7 80.7 80.7 80.7 80.7 80.8 94.1 107 04 2081.2 68.6 68.6 68.6 85.3 68.6 68.6 85.3 88.3 88.3 88.5 88.3 88.3 88.5 88.3 88.5 88.3 88.3	28 40.3 30.8 40.3 47.5 54.8 47.5 59.3 62.4 47.5 59.3 50.2 26.4 29.3 32.6 66.8 4 69.5 67.7 62.2 66.8 47.8 29.2 59.2 59.3 59.5 66.2 96.5 68.2 49.7 62.5 66.2 97.5 62.2 66.3 49.7 78.2 19.5 66.5 68.2 78.2 19.5 66.5 68.2 78.2 19.5 66.5 68.2 78.2 19.5 66.5 68.2 78.2 19.5 66.5 68.2 78.2 19.5 66.5 68.2 78.2 19.5 66.5 68.2 78.2 19.5 66.5 68.2 79.5 79.5 66.5 68.2 79.5 79.5 79.5 79.5 79.5 79.5 79.5 79.5	19.3 28.3 38.1 41.2 43.4 49.5 50.7 58.1 60.1 83.3 38.9 40.5 42.5 42.5 42.5 42.5 42.5 42.5 42.5 42	9.88 10.9 14.3 16.9 19.6 19.6 19.6 19.6 19.6 19.6 19.6	6.14 8.8 8.94 10.6 6.78 8.94 14.6 12.2 13.3 14 14.6 15 15.8 24h 18.8 24h 11.7 12.6 6.3 15.6 6.3 15.9 12.7 9.25 16.3 15.6 6.3 15.6 6.3 15.7 9.25 16.5 16.4 17.7 15.6 16.4 17.8 15.6 16.4 17.8 15.6 16.4 17.8 15.6 16.4 17.8 15.6 16.4 17.8 17.8 17.8 17.8 17.8 17.8 17.8 17.8	3.69 48h 4.17 5.52 6.53 7.75 7.75 8.21 1.02 8.67 9.03 9.8 6.77 9.04 9.8 6.76 9.9 9.8 6.76 9.9 9.8 6.76 9.9 9.8 6.76 9.9 9.8 6.77 9.9 9.8 6.77 9.9 9.8 6.77 9.9 9.8 6.77 9.9 9.8 9.8 9.8 9.8 9.8 9.8 9.8 9.8 9.8	2.13 3.1 4.26 4.52 4.88 5.25 5.73 6.59 72h 4.96 4.91 4.91 4.91 4.91 4.91 4.91 4.91 4.91	1.52 2.63 3.05 4.11 4.72 96h 4.75 4.75 4.75 4.75 4.75 4.75 4.75 4.75	1.18 1.31 1.73 2.05 2.08 2.38 2.73 2.88 2.73 2.85 2.94 3.69 3.21 3.69 3.21 3.69 3.21 3.69 3.11 3.58 1.77 2.1 2.44 2.92 2.85 2.85 2.86 2.99 3.11 3.38	0.975 1.08   1.42 1.69   1.96   2.12   2.25   2.34   2.64   2.64   2.69   3.04   2.06   2.18   2.07   2.06   2.18   2.07   2.17   2.17   2.27   2.17   2.3   2.39   2.47   2.64   2.7   2.7   2.7   2.7   2.7   2.7   2.7   2.6   2.7   2.7   2.7   2.7   2.6   2.7   2.7   2.7   2.7   2.7   2.7   2.7   2.6   2.7   2.
Raint ARI Raint ARI	1.58 2 5 5 10 20 30 40 50 60 80 100 250 40 40 50 60 80 100 250 60 80 100 250 60 80 100 250 60 80 100 250 60 80 100 250 60 80 100 250 60 80 100 250 60 80 100 250 60 80 100 250 60 80 100 250 80 100 250 60 80 100 250 60 80 100 250 60 80 100 80 100	0.633	99.9 (85.7   85.9   101   116   116   117	45.9 96.8 102 105 105 105 105 105 105 105 105 105 105	38.7 42.5 55.7 5.6 65.5 55.7 5.6 81.7 88.6 89.5 92.3 100 dd 2031-20 71.7 67.7 107 76.7 107 76.7 107 76.7 84 61.6 61.6 80.8 100 90.8 20 90.8 80.6 90.8 100 90.0 100 100 100 100 100 100 100 100 100	28 403 30.8 403 30.8 403 30.8 403 30.8 403 475 54.8 475 593 362.4 65 67 70.4 72.9 38 62.9 38 44.6 51.5 55.7 58.6 61 62.9 29.2 32.1 2000 29.2 32.1 49.7 75.5 682.2 49.7 70.3 73.8 6.6 16.6 5.6 5.7 56.5 68.2 75.7 56.5 68	19.3 28.3 38.1 41.2 43.4 49.5 50.7 58.1 31.3 320.1 45.5 49.5 50.7 58.1 20.1 42.5 24.5 40.5 40.5 40.5 40.5 40.5 40.5 40.5 4	9.88   9.88   10.9   14.3   16.9   19.6   19	6.14 6.78 8.94 10.6 6.78 8.94 12.2 13.3 14 15.5 8.16.4 18.8 16.4 18.8 16.4 18.8 16.4 18.8 16.5 10.1 17.1 12.6 13.3 13.3 13.9 13.5 15.6 17.9 24h 16.6 6.3 7 7 2.6 17.7 12.6 17.7 15.5 15.1 15.6 16.4 17.1 19.5	3.69 48h 4.17 5.52 6.53 7.57 8.21 1.02 9.03 9.8 8.67 9.04 9.04 9.05 8.3 9.8 8.06 8.39 9.45 9.45 9.45 9.45 9.45 9.45 9.45 9.4	2.13 3.1 4.26 4.88 5.25 5.72 1.20 4.94 4.97 4.97 4.97 4.97 4.97 4.97 4.97	1.52 2.63 3.05 3.05 4.1 4.72 96h 4.72 96h 1.48 92.15 3.22 3.33 3.39 3.49 4.72 96h 1.48 9.61 1.48 9.61 1.55 1.71 2.72 2.72 2.72 2.72 2.73 3.33 3.39 4.72 4.72 4.72 4.72 4.72 4.72 4.72 4.72	1.18 1.31 1.73 2.05 2.05 2.38 2.58 2.58 2.94 3.09 3.21 3.69 2.31 1.16 2.5 2.85 2.85 2.81 2.13 3.58 1.77 2.1 2.44 2.76 2.85 2.89 3.11 3.58 1.77 2.1 2.43 3.79 3.79	0.975 1.08 1.42 1.699 1.96 2.12 2.25 2.34 4.3.04 2.06 3.04 2.08 2.19 2.06 2.18 2.19 2.06 2.19 2.06 2.19 2.10 2.10 2.10 2.10 2.10 2.10 2.10 2.10
Raint ARI Raint ARI	1.58 2 5 10 20 30 40 50 60 80 100 50 60 80 100 80 80 100 80 100 80 80 100 80 100 80 80 80 80 80 80 80 80 80 80 80 80 8	0.633   0.004   0.004   0.005   0.00   0.007   0.007   0.007   0.008   0.008   0.009	99.9 Sep. 9.6 Sep. 9.	45,9 50.5 50.5 50.5 50.5 50.5 50.5 50.5 50.	38.7 42.5 55.7 75.6 65.5 55.7 75.6 65.5 55.7 75.6 65.5 55.7 75.6 65.5 55.7 75.6 65.5 55.7 75.6 65.5 55.7 75.6 65.5 55.7 75.6 67.0 75.0 75.0 75.0 75.0 75.0 75.0 75.0 7	28 403 403 475 548 475 593 624 475 65 67 704 729 321 28 446 629 66 684 782 22 321 62 575 575 66 52 96 66 68 478 22 321 62 575 58 66 61 975 66 68 68 68 68 68 68 68 68 68 68 68 68	19.3 28 33 38.1 41.2 43.4 41.2 46.6 49 50.7 58.1 18.3 15.3 12.6 44.7 54.6 65.1 18.3 15.9 46.6 66.6 66.8 66.8 66.8 66.8 66.8 66.8	9.88 1.09 1.43 1.09 1.43 1.65 1.65 1.65 1.65 1.65 1.65 1.65 1.65	6.14 6.78 8.94 10.6 6.78 8.94 11.6 12.2 12.3 14.4 6.15 15.8 16.4 18.8 16.4 18.8 16.4 18.8 16.4 18.8 16.4 18.8 15.9 16.3 15.5 15.6 6.33 15.5 15.6 6.33 7 9.25 12.7 12.7 14.5 15.6 15.6 15.6 15.6 15.6 15.6 15.6 15	3.69 4.06 6.34 4.06 6.34 7.34 9.04 9.04 9.08 8.74 9.04 9.08 8.74 9.04 9.08 8.05 9.05 9.05 9.05 9.05 9.05 9.05 9.05 9	2.13   2.35   3.1   3.67   4.26   4.88   5.25   5.73   6.59   72h   2.07   72h   4.46   4.75   5.08   5.32   5.33   3.55   4.11   4.46   4.7   4.9   5.06   3.3   5.4   4.15   5.01   5.02   7.2h   4.38   5.89   5.89   5.89   5.89   7.2h   7.	1.52 2.63 3.05 4.1 4.72 96h 4.56 4.56 4.56 4.56 4.56 4.56 4.56 4.56	1.18 1.31 1.73 2.05 2.08 2.58 2.94 3.69 3.21 1.16 2.85 2.94 3.69 3.21 1.16 2.85 2.99 3.11 3.58 1.21 2.64 2.76 2.85 2.99 3.11 3.58 1.21 2.1 2.44 2.65 2.92 3.79 3.16 3.29 3.79	0.975 1.08 1.42 1.69 1.96 1.96 2.11 2.25 2.42 2.54 3.04 2.67 1.39 1.69 1.90 0.953 1.05 2.68 2.95 2.06 0.992 2.11 1.45 2.17 2.23 2.95 2.07 2.27 2.27 2.27 2.27 2.27 2.34 2.47 3.23 2.47 2.47 3.11 2.26 2.77 3.11 2.27 2.39 2.47 3.11 2.20 1.20 1.20 1.20 1.20 1.20 1.20 1
Raint ARI Raint ARI	1.58 2 5 5 10 20 30 40 50 60 80 100 250 80 100 250 40 100 250 60 80 100 250 60 80 100 250 60 80 100 250 80 110 250 80 110 250 80 110 250 80 11	0.633 0.025 0.000 0.001 0.001 0.000	59.9 (55.7 (85.9 (10.1 (	45.9 99.5 103 108 111 111 120 125 for the perish 101 115 110 115 111 110 115 111 110 115 111 110 115 111 110 115 111 110 115 115	38.7 42.5 55.7 5.6 65.5 55.7 5.6 65.5 55.7 5.6 65.5 55.7 5.6 65.5 55.7 5.6 65.5 55.7 5.6 65.5 55.7 56.6 65.5 55.7 56.6 65.5 55.7 56.6 65.5 55.6 65.5 56.5 65.5 65	28 40.3 30.8 40.3 47.5 54.8 65 67 70.4 72.9 38.3 38.6 24.4 65 661 62.9 666 68.4 78.2 20.2 20.2 32.1 62.5 66.5 29.0 66.5 67.7 80.2 20.2 20.2 32.1 60.5 60.5 60.5 60.5 60.5 60.5 60.5 60.5	19.3 28 33 38.1 41.2 43.4 41.2 46.6 49 50.7 58.1 18.3 35.8 40.9 40.9 40.5 43.9 46.6 47.7 54.6 66.8 66.8 66.8 66.8 66.8 66.8 66.8 6	9.88 10.9 14.3 16.9 19.6 19.6 19.6 19.6 19.6 19.6 19.6	6.14 6.78 8.94 10.6 6.78 8.94 11.6 6.78 8.94 12.2 12.3 14.4 6.15 15.8 16.4 18.8 16.4 18.8 16.4 18.8 16.4 18.8 16.4 18.8 15.9 12.7 12.6 6.33 15 15.6 6.33 15 15.6 6.33 15 15.6 6.33 15 15.6 6.3 15.5 15.6 6.3 15.5 15.6 15.5 15.5 15.6 15.5 15.5 15.5	3.69 48h 4.07 48h 4.07 4.07 4.07 4.07 4.07 4.07 4.07 4.07	2.13   2.35   3.1   4.26   4.82   4.82   4.82   4.82   5.08   5.25   5.73   6.59   72h   4.92   6.59   5.08   3.35   4.11   4.97   4.98   5.06   5.08   5.09   6.30   72h   4.44   4.75   5.06   5.06   5.07   72h   4.38   72h   4.38   5.89   6.78   72h	1.52 2.63 3.05 4.1 4.72 96h 4.72 2.54 3.8 3.92 3.92 4.72 2.54 3.92 3.93 3.92 3.92 4.72 2.75 3.93 3.92 3.93 3.93 3.93 3.93 3.93 3.93	1.18 1.13 1.73 2.05 2.85 2.85 2.89 3.09 1.25 1.28 1.28 2.59 3.09 3.21 3.69 1.25 2.64 2.85 2.96 3.11 3.58 2.25 2.64 2.85 2.99 3.11 3.58 2.25 2.64 2.85 2.99 3.11 3.58 2.25 2.64 2.85 2.99 3.11 3.58 2.92 2.85 2.99 3.11 3.58 2.92 2.85 2.99 3.11 3.58 2.92 2.99 3.11 3.58 2.92 2.85 2.99 3.11 3.58 2.92 2.99 3.11 3.58 2.92 2.99 3.11 3.58 2.92 2.99 3.11 3.58 2.92 2.92 2.99 3.11 3.58 2.92 2.99 3.11 3.58 2.92 2.99 3.11 3.58 2.92 2.99 3.11 3.58 2.92 2.99 3.11 3.58 2.92 2.99 3.11 3.58 2.92 2.92 2.99 3.11 3.58 2.92 2.92 2.99 3.11 3.58 2.92 2.99 3.11 3.58 2.92 2.92 2.99 3.11 3.58 2.92 2.92 2.92 2.92 2.92 2.92 2.92 2.9	0.975 1.08 1.42 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09
Raint ARI Raint ARI	1.58 2 2 5 5 100 250 400 100 250 40 100 250 40 100 250 40 100 250 40 100 250 40 100 250 40 100 250 250 20 30 40 100 250 250 30 40 100 250 250 30 40 100 250 250 30 100 250 250 30 100 250 250 30 100 250 250 30 100 250 250 30 100 250 250 30 100 250 250 30 100 250 250 30 100 250	0.633 0.025 0.02 0.011 0.004 0.005 0.025 0.02 0.015 0.005 0.007 0.007 0.001 0.	99.9 (19.5) (19.	45.9 96.8 102 105 106 107 107 107 107 107 107 107 107 107 107	38.7 42.5 55.7 75.6 65.5 75.6 65.5 75.6 65.5 92.3 81.7 86 89.5 92.3 1114 42 10 42 10 114 42 10 42 114 42 114 117 76.7 84 85.6 80.8 86.6 90.8 90.8 10.0 10 10 10 10 10 10 10 10 10 10 10 10 10	28 40.3 10.8 40.3 10.8 40.3 10.8 40.3 10.8 40.5 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8	19.3 28 33 38.1 41.2 43.4 45.2 46.6 49 50.7 58.1 26.4 49.9 42.5 46.6 49.9 42.5 46.6 64.3 9.4 46.7 54.6 66.1 22.2 29.2 34.5 34.5 36.2 66.8 66.1 82.6 66.1 82.	9.88 10.9 14.3 16.9 19.6 19.6 19.6 19.6 19.6 19.6 19.6	6.14 8.94 10.6 6.78 8.94 12.2 13.3 14.6 15.8 16.4 8.5 16.4 15.8 8.5 10.1 12.6 6.5 10.1 12.6 6.3 7 7 12.6 6.3 7 7 12.6 6.3 17.9 12.5 10.1 15.6 6.3 17.9 12.5 10.1 15.6 6.3 17.9 12.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10	3.69 48h 4.07 48h 4.07 4.07 4.07 4.07 4.07 4.07 4.07 4.07	2.13 3.13 3.67 4.26 4.88 5.25 5.08 5.25 5.73 3.13 3.55 72h 4.26 4.88 4.11 4.46 4.7 4.9 4.9 6.5 5.2 6.35 5.52 2.28 8.3 3.55 5.52 2.44 8.8 4.75 5.06 6.78 72h 6.78 5.68 5.89 6.78 72h 7.56 6.78 72h 7.56 6.78 72h 7.56 7.56 7.56 7.56 7.56 7.56 7.56 7.56	1.52 2.63 3.05 3.3 3.49 3.64 4.72 96h 4.72 2.63 3.25 3.25 3.25 3.26 4.72 2.63 3.26 4.72 2.63 3.27 3.28 3.29 5.25 3.29 5.25 3.20 3.28 3.29 5.25 3.29 5.25 3.29 5.25 3.29 5.25 3.29 5.25 3.29 5.25 3.29 5.25 3.29 5.25 3.29 5.25 3.29 5.25 3.29 5.25 3.29 5.25 3.29 5.25 3.29 5.25 3.29 5.25 3.29 5.25 3.29 5.25 5.25 5.25 5.25 5.25 5.25 5.25 5	1.18 (1.31 (1.32 (1.33 (	0.975 1.08 1.42 2.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1
Raint ARI Raint ARI	1.58 2 2 5 5 10 20 250 60 80 1000 250 60 80 1000 250 60 80 100 250 60 80 100 250 60 80 100 100 100 100 100 100 100 100 100	0.633 0.025 0.00 0.011 0.001 0.001 0.001 0.001 0.001 0.002 0.002 0.001 0	59.9 (55.7 (55.9 (55.7 (55.9 (55.7 (55.9 (55.7 (55.9 (55.7 (55.9 (55.2 (	45.9 50.5 56.6 66.1 77.7 78.8 6.6 66.1 109 96.8 102 109 96.8 102 109 115 91 91 91 91 91 91 91 91 91 91 91 91 91	38.7 42.5 55.7 75.6 65.5 75.6 75.6 75.6 75.6 75	28 40.3 30.8 40.3 47.5 54.8 47.5 59.3 62.4 47.5 59.3 50. 25.4 29.9 66.8 42.9 29.2 66.8 42.0 29.2 66.0 20.0 20.0 20.0 20.0 20.0 20.0 20	19.3 28 33 38.1 41.2 43.4 44.2 45.2 46.6 49.9 50.7 58.1 64.0 49.9 42.5 46.6 49.9 42.5 46.6 49.9 42.5 46.6 49.9 42.5 46.6 60.8 60.8 60.8 60.8 60.8 60.8 60.8 6	9.88   9.88   10.9   14.3   10.9   14.3   10.9   14.3   10.4   10.9   10.5   10	6.14 6.78 8.94 10.6 6.78 8.94 11.2 12.3 14.6 11.3 14.6 11.8 16.4 11.8 16.4 11.8 16.4 11.8 16.4 11.8 11.7 12.6 11.8 11.7 12.6 11.8 11.7 12.6 11.8 11.7 12.6 11.8 11.7 12.6 11.8 11.7 12.6 11.8 11.8 11.8 11.8 11.8 11.8 11.8 11	3.69 4.06 6.34 4.06 6.34 7.34 9.04 9.86 7.95 8.4 4.06 6.39 9.86 6.11 9.3 9.86 6.09 9.86 6.09 9.86 6.09 9.86 6.09 9.86 6.09 9.86 6.09 9.11 9.4 48h 8.07 7.5 5.22 6.17 7.5 5.22 6.17 7.7 48h 3.96 9.33 9.8 2.1 10.7 48h 3.96 9.30 9.30 9.30 9.30 9.30 9.30 9.30 9.30	2.13 2.35 3.1 3.67 4.26 4.88 5.25 5.08 5.25 5.73 6.59 2.07 2.28 3.3.55 6.39 2.37 4.40 4.9 4.9 4.9 4.9 4.9 4.9 4.9 4.9 4.9 4.9	152 2.22 2.63 3.05 3.3 3.49 4.1 4.72 4.72 4.72 4.72 4.72 4.72 4.72 4.72	1.18 2.05 2.38 2.58 2.73 2.85 2.84 3.09 11 1.68 1.99 2.16 2.81 2.51 2.51 2.51 2.51 2.51 2.51 2.51 2.5	0.975 1.08 1.42 2.54 2.42 2.54 3.04 2.64 3.04 2.64 2.64 2.64 3.04 2.64 2.64 2.64 2.64 2.64 2.64 2.64 2.6
Raint ARI Raint ARI	1.58 2 2 5 10 20 30 40 40 50 60 80 100 250 60 80 100 250 80 100 80 100 80 80 80 80 80 80 80 80 80 80 80 80 8	0.633 0.025 0.1 0.05 0.2 0.1 0.05 0.05 0.2 0.1 0.05 0.05 0.05 0.05 0.0 0.05 0.05 0	99.9 (65.7 (85.9 (10.1 (	45.9 96.8 102 106 109 107 111 111 115 120 125 for the perior was a second of the period of the perio	38.7 42.5 55.7 75.6 55.5 75.6 56.5 56.5 56.5 56	28 40.3 30.8 40.3 47.5 54.8 40.3 62.2 40.3 38.4 44.6 668.4 49.7 55.5 666.2 90.2 20.2 142.2 40.7 57.5 66.8 66.8 40.7 57.5 66.8 60.8 40.7 57.5 66.8 60.8 40.7 57.5 66.8 60.8 40.7 57.5 66.8 60.8 40.7 57.5 66.8 60.8 40.7 57.5 66.8 60.8 40.7 57.5 60.2 50.8 60.2 50.8 60.8 60.8 60.8 60.8 60.8 60.8 60.8 6	19.3 28 33 38.1 41.2 43.4 45.2 46.6 95.0 58.1 68 49.9 50.7 42.5 46.6 49.9 42.5 46.6 40.9 42.5 46.6 60.8 66.8 66.8 66.8 66.8 66.8 66.8 6	9.88   9.88   10.9   14.3   10.9   14.3   10.9   14.3   10.4   10.9   10.5   10	6.14 8.94 10.6 6.78 8.94 11.2 11.3 11.3 11.5 6.5 10.1 11.5 11.5 6.3 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11	3.69 4.06 6.34 4.06 6.34 7.34 4.06 6.34 7.34 9.04 9.08 6.35 6.09 7.05 8.4 4.06 6.09 9.86 6.09 7.05 7.05 7.05 7.05 7.05 7.05 7.05 7.05	2.13 2.35 3.1 3.67 4.26 4.88 5.25 2.72 2.28 3.3.55 3.73 2.55 3.3.55 3.5	1.52 2.53 3.05 3.64 4.21 4.72 4.72 4.72 4.72 4.72 4.72 4.72 4.72	1.18 2.05 2.38 2.58 2.73 2.85 2.84 3.09 11 1.68 1.99 2.31 2.5 2.85 2.99 3.11 3.5 2.5 2.8 2.91 3.5 2.1 2.1 2.1 2.1 2.1 2.44 2.76 2.8 2.8 2.9 3.11 3.3 1.77 2.1 2.44 2.76 2.8 2.8 2.9 2.1 1.2 2.4 2.4 2.7 2.1 2.2 2.4 2.4 2.5 2.8 2.2 2.2 2.2 3.0 1.2 2.4 2.4 2.4 2.5 2.8 2.2 2.2 2.2 3.0 1.2 2.4 2.4 2.4 2.5 2.8 2.2 2.5 2.8 2.2 2.5 2.5 2.8 2.5 2.8 2.5 2.8 2.5 2.8 2.5 2.8 2.5 2.5 2.8 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5	0.975 1.08 1.42 2.12 2.15 2.34 2.42 2.54 2.64 3.04 2.09 2.10 2.55 2.54 2.67 2.56 2.18 2.75 2.75 2.75 2.75 2.75 2.75 2.75 2.75
Raint ARI Raint ARI	1.58 2 5 10 20 20 30 40 40 50 60 80 100 250 60 80 100 250 60 80 100 250 60 80 1.58 6 1	0.633 0.0025 0.0025 0.002 0.003 0.005 0.002 0.001 0.000 0.001 0.000 0.00	59.9 (55.7 (55.9 (55.7 (55.9 (55.7 (55.9 (55.7 (55.9 (55.7 (55.9 (55.2 (	45.9 50.5 566.1 77.7 789.6 80.6 100.9 96.8 100.9	38.7 42.5 55.7 75.6 65.5 75.6 65.5 75.6 65.5 92.3 81.7 86 99.8 81.7 89.5 92.3 100 2011.2 10 76.7 84 85.6 60.0 81.0 107 84 107 107 84 107 85.6 85.6 90.8 85.6 90.8 85.6 90.2 91.8 85.6 90.2 91.8 85.6 90.2 91.8 85.6 90.2 91.8 85.6 90.2 91.8 85.6 90.2 91.8 85.6 90.2 91.8 91.0 91.0 91.0 91.0 91.0 91.0 91.0 91.0	28 403 30.8 403 403 47.5 54.8 65 67 70.4 72.9 32.6 4.8 65 661 70.4 72.9 26.4 26.4 78.2 26.4 78.2 20.2 29.2 32.1 20.2 29.2 32.1 70.8 37.7 55.5 66.8 2 92.2 32.1 70.8 37.7 55.5 66.8 2 92.2 32.1 56.5 68.2 49.7 7.5 67.2 50.5 68.2 32.7 66.3 38.7 48.5 55.5 66.8 38.7 48.5 55.5 55.6 88.2 45.5 55.6 88.2 45.5 55.6 88.2 45.5 55.6 88.2 45.5 55.6 88.2 55.6 56.8 87.4 45.5 55.6 56.8 57.6 5	19.3 28 33 38.1 41.2 43.4 41.2 45.2 46.6 49 50.7 58.1 6h 49.2 50.5 44.3 45.2 46.6 49 49.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 40.9 42.5 40.9 40.9 40.9 40.9 40.9 40.9 40.9 40.9	9.88   9.88   10.9   14.3   16.9   19.6   19	6.14 6.78 8.94 10.6 6.78 8.94 12.2 13.3 14.6 15.8 16.4 8.5 5.8 10.1 11.7 12.6 6.33 7 7 12.6 6.33 7 7 12.6 6.33 7 7 13.7 13.7 13.7 13.7 13.7 13.7 13	3.69 4.06 6.34 4.06 6.34 7.34 9.04 9.08 8.74 9.04 9.86 6.35 6.16 6.16 6.16 6.16 6.16 6.16 6.16 6.1	2.13 3.13 3.67 4.26 4.88 5.25 5.08 5.25 5.73 3.13 3.55 4.11 4.46 4.77 4.99 6.55 5.2 6.35 72h 2.18 4.78 4.78 4.78 4.78 4.78 4.78 4.78 4.7	1.52 2.63 3.05 3.3 3.49 4.14 4.72 96 1.55 1.55 2.54 2.59 3.82 3.96 4.56 4.56 4.56 4.56 4.56 4.56 4.56 4.5	1.18 2.58 2.73 2.85 2.89 3.09 11.168 1.99 2.64 2.76 2.85 2.99 3.09 12.26 2.73 2.53 2.91 3.59 2.73 2.11 1.68 1.99 2.76 2.85 2.99 3.11 3.58 2.79 2.70 2.70 2.70 2.70 2.70 2.70 2.70 2.70	0.975 2.00 1.08 1.42 2.00 1.09 1.09 1.09 1.00 1.00 1.00 1.00 1
Raint ARI Raint ARI	1.58 2 5 10 20 100 100 100 100 100 100 100 100 1	0.633 0.004 0.005 0.004 0.005 0.004 0.005	59.9 59.9 55.7 55.9 59.9 59.9 59.9 59.9	45.9 50.5 566.1 77.7 789.6 100 96.8 100 996.8 100 996.8 100 996.8 100 996.8 100 996.8 100 996.8 100 996.8 100 996.8 100 996.8 100 995.7 79 99.5 70 99.	38.7 42.5 55.7 75.6 65.5 75.6 65.5 75.6 65.5 11.7 86.5 11.7 86.5 11.7 11.0 11.0 11.0 11.0 11.0 11.0 11.0	28 40.3 30.8 40.3 47.5 54.8 67.4 29.2 29.2 29.2 29.2 29.2 29.2 20.2 29.2 29	19.3 28 33 38.1 41.2 43.4 41.5 46.6 64 47.7 54.6 66 47.7 54.6 66 67.2 29.2 29.2 39.3 39.3 41.5 46.5 66 67.3 67.5 67.5 67.5 67.5 67.5 67.5 67.5 67.5	9.88   9.88   10.9   14.3   10.9   14.3   10.9   14.3   10.5   10	6.14 8.84 12.2 13.5 16.6 16.4 17.7 9.25 16.5 24h 17.7 9.25 16.6 16.6 17.9 17.9 17.9 17.9 17.9 17.9 17.9 17.9	3.69 48h 48h 3.76 6.09 9.11 48h 3.79 9.01 48h 3.79 9.11 48h 3.79 9.01 48	2.13	1.52 2.63 3.05 3.3 3.49 4.06 4.56 4.56 4.51 4.52 4.51 4.52 4.52 4.52 4.52 4.52 4.52 4.52 4.52	1.18 1.31 1.73 2.05 2.38 2.73 3.09 3.21 1.16 2.85 2.76 2.85 2.94 3.11 3.58 2.76 2.85 2.94 3.11 3.58 2.76 2.85 2.99 3.11 3.58 2.76 2.85 2.99 3.17 2.1 2.44 2.92 3.01 3.79 2.1 2.45 2.85 2.8 2.92 3.01 2.25 2.85 2.92 3.01 2.26 2.85 2.92 3.01 2.26 2.85 2.92 3.01 2.26 2.85 2.92 3.01 2.27 2.28 2.82 2.92 3.01 3.16 3.29 3.79 2.27 2.28 2.82 2.92 3.01 2.33 3.79 2.27 2.28 2.88 3.02 2.57 2.88 3.02 2.57 2.88 3.02 2.88	0.975 2.12 2.34 2.64 3.04 2.05 2.05 2.05 2.05 2.05 2.05 2.05 2.05
Raint ARI Raint ARI	1.58 2 5 10 20 100 100 100 100 100 100 100 100 1	0.633 0.025 0.000 0.001 0.004 0.000	99.9 (19.5) (19.	45.9 95.7 77.7 89.6 100 100 100 100 100 100 100 100 100 10	38.7 42.5 55.7 75.6 65.5 75.6 75.6 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10	28 40.3 30.8 40.3 47.5 54.8 65.9 3 62.4 42.9 29.2 15.15 55.7 67.4 42.9 29.2 29.2 16.5 66.2 29.2 29.2 16.5 66.2 29.2 30.8 67.4 40.7 57.5 55.7 66.2 66.5 29.9 30.8 67.4 40.7 57.5 55.6 66.3 29.9 30.8 67.4 40.7 57.5 55.6 66.3 29.9 30.8 67.4 40.7 67.8 57.5 57.4 55.5 57.4 55.5 57.4 55.5 57.4 55.5 57.4 55.5 57.4 55.5 57.4 55.5 57.4 57.5 57.5	19.3 28 33 38.1 41.2 43.4 44.5 2 46.6 95.7 49.7 54.6 69.8 40.9 42.5 39.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 50.7 54.6 60.8 60.8 60.8 60.8 60.8 60.8 60.8 60	9.88   9.88   10.9   14.3   16.9   19.6   19	6.14 8.94 10.6 6.78 8.94 11.2 11.3 11.3 11.5 6.5 10.1 11.5 11.5 11.5 11.5 11.5 11.5 11	3.69 4.06 6.34 4.06 6.34 7.34 4.06 6.34 7.34 9.04 9.86 3.92 4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.0	2.13 2.35 3.1 3.67 4.26 4.88 5.25 5.08 5.25 5.72 2.28 72h 4.96 6.59 72h 4.96 7.97 7.97 7.97 7.97 7.97 7.97 7.97 7	1.52 2.53 3.05 3.349 4.1 4.72 4.72 4.72 4.72 4.72 4.72 4.72 4.72	1.18 1.31 1.73 2.05 2.88 2.73 3.29 3.21 3.59 2.75 2.85 2.94 2.76 2.76 2.78 2.85 2.99 3.21 3.59 2.75 2.75 2.75 2.75 2.75 2.75 2.77 2.77	0.975 2.34 2.42 2.54 2.95 2.95 2.95 2.95 2.95 2.95 2.95 2.95
Raint ARI Raint ARI	1.58 2 5 10 20 30 40 40 40 40 40 40 40 40 40 40 40 40 40	0.633 0.025 0.02 0.017 0.003 0.025 0.02 0.025 0.02 0.007 0.001 0.00 0.00 0.00 0.00 0.00 0.	59.9	45.9 96.8 100 96.8 100 100 115 115 115 100 100 100 100 100	38.7 42.5 55.7 75.6 65.5 55.7 75.6 65.5 55.7 75.6 61.0 100 100 100 100 100 100 100 100 100	28 40.3 30.8 40.3 47.5 54.8 65 67 70.4 72.9 38.3 38.4 46.6 61.9 55.7 66.2 9.6 66.8 4 78.2 20.2 20.2 20.2 20.2 20.1 20.2 20.2 20	19.3 28 33 38.1 41.2 43.4 45.2 46.6 49 50.7 54.6 49 49.5 50.7 54.6 60.8 60.8 60.8 60.8 60.8 60.8 60.8 60	9.88 10.9 14.3 16.9 19.6 19.6 19.6 19.6 19.6 19.6 19.6	6.14 8.94 10.6 6.78 8.94 10.6 12.2 10.6 12.2 11.3 3.14 14.6 11.5 8.8 16.4 8.5 10.1 11.7 12.6 12.3 13.9 15.1 15.6 12.9 12.7 12.6 12.8 12.9 12.7 14.5 15.6 12.9 12.7 14.5 15.6 12.9 12.7 14.5 15.6 12.9 12.7 14.5 15.6 12.9 12.7 14.5 15.6 12.9 12.7 14.5 15.6 12.9 12.7 14.5 15.6 12.9 12.7 14.5 15.6 12.9 12.7 14.5 15.6 12.9 12.7 14.5 15.9 12.7 14.5 15.9 12.7 14.5 15.9 12.7 14.5 15.9 12.7 14.5 15.9 12.7 14.5 15.5 14.4 15.3 15.9 18.2 14.4 15.3 15.9 18.2	3.69 48h	2.13 3.367 4.26 4.88 5.25 5.08 5.22 5.73 3.67 4.26 6.59 72.h 2.28 3 3.55 6.59 5.22 2.38 4.51 4.46 4.77 4.99 6.78 5.52 5.52 6.35 5.41 4.45 6.50 6.78 72.h 2.28 4.75 5.08 5.89 6.78 72.h 2.29 3.30.30 3.00 3.00 6.78 6.78 72.h 2.50 6.78	1.52 2.63 3.05 3.3 3.49 4.72 96 1.472 1.52 1.52 1.52 1.52 1.52 1.52 1.52 1.5	1.18 (1.31 1.73 1.73 1.73 1.73 1.73 1.73 1.73	0.975 2.34 2.42 2.54 2.64 2.65 2.95 2.00 0.992 1.145 1.72 2.72 2.73 2.39 2.47 2.72 2.73 2.39 2.47 2.73 2.73 2.73 2.74 2.75 2.75 2.75 2.75 2.75 2.75 2.75 2.75
Raint ARI Raint ARI	1.58 2 5 10 20 30 40 100 250 100 250 30 40 158 60 80 100 250 60 80 100 20 250 80 100 250 80 100 250 80 100 250 80 100 250 80 100 250 80 100 250 80 100 250 80 100 250 80 100 250 80 100 100 250 80 100 100 250 80 100 100 100 100 100 100 100 100 100	0.633 0.025 0.000 0.011 0.000 0.001	59.9   59.9   59.7   55.7   55.9   55.7   55.9   55.6   57.7	45.9 96.8 102 105 106 107 117 117 117 117 117 117 117 117 117	38.7 42.5 55.7 75.6 65.5 75.6 65.5 75.6 86 89.5 92.3 88.6 66.6 99.2 105 99.3 8.6 96.8 100 100 100 100 100 100 100 100 100 10	28 40.3 30.8 40.3 47.5 54.8 47.5 59.3 62.4 65 67 70.4 72.9 38.3 38.44.6 66.1 62.9 66.8 47.8 2.2 65.5 8.6 661.9 46.7 78.2 26.9 5.0 20.2 22 22 21.2 12.0 20.2 25.5 8.6 661.9 8.8 76.5 50.0 20.0 20.0 20.0 20.0 20.0 20.0 20	19.3 28 33 38.1 41.2 43.4 44.7 45.2 24.2 22.2 22.2 22.2 26.6 66 66 8.3 48.4 47.7 48.4 48.7 55.7 66 62 21.9	9.88   9.88   10.9   14.3   16.9   19.6   19	6.14 6.78 8.94 10.6 6.78 8.94 11.33 14.6 6.15 15.8 16.4 8.5 10.1 11.7 12.6 6.33 13.9 12.7 12.6 6.33 13.9 12.7 12.6 6.33 13.9 12.7 12.6 6.33 13.9 12.7 12.6 6.33 13.9 12.7 12.6 6.33 13.9 12.7 12.6 6.33 13.9 12.7 12.5 12.5 12.5 12.5 12.5 12.5 12.5 12.5	3.69 4.60 6.34 4.06 6.34 4.06 6.34 4.06 6.34 4.06 6.34 4.06 6.34 4.06 6.34 4.06 6.09 9.86 6.09 9.86 6.09 9.86 6.09 9.86 6.09 9.86 6.09 9.86 6.09 9.45 10.9 9.45 10.9 10.9 10.0 4.00 6.00 6.00 9.45 10.9 10.0 4.00 6.00 6.00 6.00 6.00 6.00 6.00 6	2.13	1.52 2.63 3.05 3.3 3.49 3.56 4.1.29 4.72 4.72 4.72 4.72 4.72 4.72 4.72 4.72	1.18   1.31   1.73   2.05   2.38   2.73   3.69   3.21   1.16   2.5   2.64   2.76   2.85   2.94   3.69   3.21   1.28   1.29   3.11   3.58   1.27   2.41   2.4	0.975 2.34 2.42 2.54 2.64 2.65 2.95 2.00 0.992 1.145 1.72 2.72 2.73 2.39 2.47 2.73 2.39 2.47 2.56 2.75 2.75 2.75 2.75 2.75 2.75 2.75 2.75
Raint ARI Raint ARI	1.58 2 5 10 20 20 20 20 20 20 20 20 20 20 20 20 20	0.633	59.9	45.9 96.8 102 105 106 107 117 117 117 117 117 117 117 117 117	38.7 42.5 55.7 75.6 65.5 75.6 75.6 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10	28 40.3 30.8 40.3 47.5 54.8 65.6 65.6 65.6 65.6 65.6 65.6 65.6 65	193 28 33 38.1 41.2 43.4 46.6 46.2 46.6 46.2 42.2 42.2 42.4 43.4 42.4 43.4 47.4 48.7 55.7 66 66	9.88   9.88   10.9   14.3   16.9   19.6   19	6.14 8.94 10.6 6.78 8.94 11.2 11.3 11.3 11.5 11.5 11.5 11.5 11.5 11.5	3.69 48h 48h 3.56 6.29 9.45 11.3 48h 48h 3.79 4.5 12.5 12.5 12.5 12.5 12.5 12.5 12.5 12	2.13 2.35 3.11 4.26 4.88 5.29 2.72 4.88 5.29 2.72 4.26 4.89 5.25 5.73 3.35 5.20 6.35 5	1.52 2.63 3.05 3.3 3.49 4.04 4.72 96 h 1.55 1.52 2.69 3.3 3.3 3.49 4.56 9.60 4.56 4.56 4.56 4.56 4.56 4.56 4.56 4.56	1.18 1.31 1.73 2.05 2.38 2.73 3.69 1.16 2.85 2.99 3.21 3.58 2.73 3.69 1.17.77 2.1 2.44 2.76 2.85 2.99 3.79 3.79 2.17 2.17 2.17 2.17 2.17 2.17 2.17 2.17	0.975 1.08 1.42 2.12 2.55 2.04 2.58 2.95 2.07 3.11 2.09 2.27 2.47 2.56 6.27 3.11 2.00 0.96 2.72 2.17 2.17 2.17 2.17 2.17 2.17 2.17
Raint ARI Raint ARI	1.58 2 5 10 20 20 30 40 250 20 30 40 250 30 40 250 30 40 250 30 30 40 30 30 30 30 30 30 30 30 30 30 30 30 30	0.633 0.025 0.02 0.031 0.004 0.004 0.004 0.005 0.025 0.02 0.007 0.005 0.	59.9   59.9	45.9 50.5 566.1 77.7 789.6 50.5 566.1 109 96.8 102 106 109 97.8 102 106 109 97.8 109 109 109 109 109 109 109 109 109 109	38.7 42.5 55.7 75.6 65.5 75.6 75.6 75.6 75.6 75	28 40.3 30.8 40.3 47.5 54.8 47.5 59.3 62.4 47.5 59.3 38.4 44.6 29.2 55.5 55.7 66.2 66.2 66.2 66.2 66.2 66.2 66.2 66	19.3 28 33 38.1 41.2 43.4 44.2 46.6 9 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 42.5 40.9 60.8 60.8 60.8 60.8 60.8 60.8 60.8 60.8	9.88   9.88   10.9   14.3   16.9   19.6   19	6.14 6.78 8.94 10.6 6.78 8.94 11.3 3.14 14.6 11.5 11.6 8.5 10.6 11.5 11.6 8.5 10.1 11.7 12.6 11.5 11.7 12.6 11.7 12.	3.69 48h	2.13 2.35 3.11 3.67 4.26 4.88 5.25 5.27 2.27 2.28 3.355 6.59 2.27 2.28 3.355 6.59 2.29 2.29 2.21 2.21 2.21 2.21 2.21 2.2	1.52 2.63 3.05 3.3 3.49 4.11 4.88 1.63 3.25 2.54 4.72 4.72 4.72 4.72 4.72 4.72 4.72 4.7	1.18 1.31 1.73 1.73 1.73 1.73 1.73 1.73 1.73	0.975 1.08 1.42 2.12 2.54 2.42 2.54 2.42 2.54 2.54 2.54 2.5
Raint ARI Raint ARI	1.58 2 5 10 20 30 40 100 250 80 100 250 80 100 20 20 30 40 100 250 80 100 250	0.633 0.025 0.02 0.01 0.05 0.02 0.01 0.001	59.9   59.9	45.9 96.8 102 105 106 107 111 115 115 120 121 121 121 121 121 121 121 121 121	38.7 42.5 55.7 75.6 55.5 75.6 65.5 55.7 75.6 65.5 55.7 75.6 75.6	28 40.3 30.8 40.3 47.5 54.8 40.3 50.0 20.2 21.3 42.2 46.4 40.7 72.3 38.4 44.6 66.4 42.9 72.3 38.4 44.6 66.4 42.7 72.3 38.4 44.6 66.4 42.7 72.3 51.5 56.7 76.5 86.6 61.9 66.8 42.9 76.5 86.6 61.9 66.8 42.9 76.5 86.6 61.9 62.9 66.8 42.0 76.5 66.0 76.5 66.0 76.	19.3 28 33 38.1 41.2 43.4 44.2 45.2 46.6 49.9 50.7 54.6 69.4 25.5 40.9 42.5 39.9 42.5 40.9 42.5	9.88   9.88   10.9   14.3   16.9   19.6   19	6.14 8.94 10.6 6.78 8.94 11.3 13.3 14.4 11.5 16.8 16.8 16.8 16.8 16.8 16.8 16.8 16.8	3.69 4.66 6.34 4.66 6.34 4.66 6.34 4.7.34 4.66 6.34 4.67 6.39 9.86 6.11 6.09 9.86 6.53 7.57 6.65 9.11 6.09 9.86 6.53 7.57 7.05 7.64 8.80 4.80 6.53 7.57 7.65 6.53 7.57 7.65 6.53 7.57 7.65 6.53 7.57 7.65 6.53 7.57 7.65 6.53 7.57 7.65 6.53 7.57 7.57 6.55 6.53 7.57 7.57 6.55 6.53 7.57 7.57 6.55 6.53 7.57 7.57 6.55 6.53 7.57 7.57 6.55 6.53 7.57 7.57 6.55 6.53 7.57 7.57 6.55 6.53 7.57 7.57 6.55 6.53 7.57 7.57 6.55 6.53 7.57 7.57 6.55 6.53 7.57 7.57 6.55 6.53 7.57 7.57 6.55 6.53 7.57 7.57 6.55 6.53 7.57 7.57 6.55 6.53 7.57 7.57 6.55 6.53 7.57 7.57 6.55 6.53 7.57 7.57 6.55 6.55 6.53 7.57 7.57 6.55 6.55 6.55 6.55 6.55 6.55	2.13 2.35 3.1 3.67 4.26 4.88 5.25 5.08 5.25 5.73 6.59 72 4.9 6.59 72 72 72 72 72 72 72 72 72 72 72 72 72	1.52 2.63 3.05 3.3 3.49 4.1 4.72 4.72 4.72 4.72 4.72 4.72 4.72 4.72	1.18 1.31 1.73 2.05 2.38 2.73 3.09 3.21 3.36 9 1.2 1.2 1.2 2.5 2.94 3.11 3.5 8 1.99 1.7 2.1 2.44 2.76 2.85 2.99 3.01 3.17 2.1 2.44 2.76 2.85 2.99 3.01 3.18 3.5 8 3.02 3.11 3.	0.975 d. 1.08 1.42 2.12 2.54 2.42 2.54 2.42 2.54 2.42 2.54 2.42 2.54 2.42 2.54 2.42 2.54 2.42 2.54 2.42 2.54 2.42 2.54 2.54
Raint ARI Raint ARI	1.58 2 5 10 20 30 40 100 250 80 100 250 80 100 250 80 100 250 80 100 250 80 100 250 80 100 80 100 250 80 100 80 80 80 80 80 80 80 80 80 80 80 80 8	0.633 0.025 0.025 0.02 0.011 0.05 0.025 0.02 0.012 0.013 0.05 0.025 0.02 0.013 0.01 0.01 0.01 0.01 0.01 0.01 0.0	59.9 (55.7 (55.9 (55.7 (55.9 (55.7 (55.9 (55.7 (55.9 (55.7 (55.9 (55.7 (55.9 (55.2 (	45.9 50.5 566.1 77.7 789.6 8 102 102 103 103 103 103 103 103 103 103 103 103	38.7 42.5 55.7 75.6 65.5 55.7 75.6 65.5 55.7 75.6 65.5 11.7 86.5 100 40 201.2 11.0 40	28 40.3 30.8 40.3 47.5 54.8 65.6 67 70.4 72.9 38.3 38.4 44.6 55.7 55.7 66.8 4 78.2 20.2 29.2 32.1 42.2 46.5 55.7 70.3 87.4 42.2 46.5 55.7 70.3 87.4 42.2 46.5 55.7 65.0 20.2 29.2 32.1 46.7 73.8 76.5 52.6 85.2 66.2 32.2 66.5 26.2 66.2 6	19.3 28 33 38.1 41.2 43.4 44.5 2 46.6 6 6 6 6 18.6 6 6 6 8 20.5 26.9 6 6 6 6 18.6 6 6 6 18.6 6 6 6 18.6 6 6 6 18.6 6 6 6 18.6 6 6 6 18.6 6 6 6 18.6 6 6 6 18.6 6 6 6 18.6 6 6 6 18.6 6 6 6 18.6 6 6 6 18.6 6 6 6 18.6 6 6 6 18.6 6 6 6 18.6 6 6 6 18.6 6 6 6 18.6 6 6 6 18.6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	9.88 10.9 14.3 10.9 14.5 16.2 12.1 12.2 12.1 1	6.14 8.94 10.6 6.78 8.94 11.5 8.94 12.2 12.6 12.2 12.6 12.2 12.6 12.5 12.6 12.5 12.6 12.5 12.6 12.5 12.6 12.5 12.6 12.5 12.6 12.5 12.6 12.5 12.6 12.5 12.6 12.5 12.6 12.5 12.6 12.5 12.6 12.5 12.5 12.5 12.5 12.5 12.5 12.5 12.5	3.69 48h 4.06 6.34 7.34 7.34 7.39 8.7 9.04 9.08 8.7 9.09 9.86 3.99 9.86 8.7 48h 3.5 6.09 9.1 1.3 48h 3.5 6.09 9.45 10.9 9.45 10.9 9.45 10.9 11.7 48h 3.6 6.39 9.8 10.2 9.33 9.8 10.2 11.7 48h 4.17 48h	2.13 3.367 4.26 4.88 5.25 5.73 1.72h 4.96 6.78 72h 4.76 6.78 5.98 6.78 72h 4.76 6.78 6.78 6.78 6.78 6.78 6.78 6.78 6	1.52 2.63 3.05 3.3 3.49 96h 1.55 96h 1.55 9.64 4.72 2.95 3.2 2.95 3.2 2.95 3.3 3.8 3.96 4.56 96h 1.55 9.64 4.64 4.64 4.64 4.64 4.64 4.64 4.64	1.18 (1.31 1.73 1.73 1.73 1.73 1.73 1.73 1.73	0.975 1.08 1.42 2.12 2.34 2.44 2.64 3.04 2.09 3.10 5.0 2.12 2.34 2.44 2.64 3.04 2.06 0.993 1.05 2.06 6.06 6.06 6.06 6.06 6.06 6.06 6.06
Raint ARI Raint ARI	1.58 2 5 10 20 20 20 20 20 20 20 20 20 20 20 20 20	0.633	59.9	45.9 50.5 566.1 77.7 789.6 8 102 996.8 102 996.8 102 996.8 102 996.8 102 996.8 102 996.8 102 996.8 102 996.8 102 996.8 102 996.7 73 102 102 102 102 102 102 102 102 102 102	38.7 42.5 55.7 75.6 65.5 75.6 75.6 104 2031-20 107 2031-20 107 2031-20 107 2031-20 107 2031-20 107 2031-20 107 2031-20 107 2031-20 107 2031-20 107 2031-20 107 2031-20 107 2031-20 107 2031-20	28 30.8 40.3 10.8 40.3 47.5 54.8 40.3 47.5 59.3 62.4 29.2 55.7 66.6 68.4 40.7 57.5 55.7 68.2 29.2 42.2 40.7 57.5 56.2 56.2 36.2 36.2 56.2 36.2 56.2 36.2 56.2 36.2 56.2 36.2 56.2 36.2 56.2 36.2 36.2 56.2 36.2 36.2 56.2 36.2 36.2 36.2 36.2 36.2 36.2 36.2 3	19.3 28 33 38.1 41.2 43.4 45.2 46.6 49 50.7 54.6 61 43.9 42.5 42.6 64 49 42.5 46.6 61 43.1 45.2 46.6 61 43.5 46.6 61 43.5 46.6 61 45.5 46.6 61 45.5 46.6 61 45.5 46.6 61 45.5 46.6 61 45.5 46.6 61 45.5 46.7 61 45.5 46.7 61 45.5 46.7 61 45.5 46.7 61 45.5 46.7 61 45	9.88   9.88   10.9   14.3   10.9   14.3   10.9   19.6   19	6.14 8.8 8.94 10.6 17.9 19.5 10.1 13.3 14.4 18.8 24.4 18.8 8.55 10.1 17.9 12.6 13.3 17.9 12.6 13.3 17.9 12.6 13.3 17.9 12.6 13.3 17.9 12.6 13.3 17.9 12.6 13.3 17.9 12.6 13.3 17.9 12.6 13.3 17.9 12.6 13.3 17.9 12.6 13.3 17.9 12.7 12.8 13.5 15.1 13.5 15.6 16.4 17.7 19.5 18.1 13.5 15.9 18.2 18.5 18.5 18.5 18.5 18.5 18.5 18.5 18.5	3.69 48h 3.7.95 8.4 4.06 6.34 7.34 9.04 9.07 9.07 9.07 9.07 9.07 9.07 9.07 9.07	2.13 2.35 3.1 3.67 4.26 4.88 5.52 2.77 4.26 4.88 5.52 3.36 6.59 72.07 2.28 3.35 5.52 5.54 4.65 5.55 5.53 5.53 5.53 5.53 5.53 5.53 5	1.52 2.63 3.05 3.3 3.49 4.05 4.148 1.63 3.76 6.3 3.77 6.3	1.18 (1.31 1.73 1.73 1.73 1.73 1.73 1.73 1.73	0.975 1.08 1.42 2.12 2.54 4.42 2.52 2.6 6.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1
Raint ARI Raint ARI	1.58 2 5 10 20 30 40 31 30 40 32 50 40 31 30 40 31 30 40 31 30 40 31 30 40 31 30 40 31 30 40 31 30 40 31 30 31 30 31 30 31 30 31 30 31 30 31 30 31 30 31 30 31 30 31 30 31 30 31 30 31 30 31 30 31 31 31 31 31 31 31 31 31 31 31 31 31	0.633	59.9   59.9	45.9 9.95.7 7.10 114 120 125 140 125 1	38.7 42.5 55.7 75.6 6 65.5 75.6 6 65.5 75.6 6 65.5 75.6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	28 40.3 30.8 40.3 47.5 54.8 40.5 59.3 40.5 65.5 59.3 38.7 42.9 20.0 26.4 42.9 29.2 40.4 40.7 57.5 55.7 66.5 66.5 66.5 66.5 66.5 66	19.3 28 33 38.1 41.2 43.4 46.6 6 6 6 6 47.7 54.6 6 6 6 47.7 54.6 6 6 6 6 6 7 5 7 5 7 5 7 5 7 5 7 5 7 5	9.88   9.88   10.9   14.3   10.9   14.3   10.9   19.6   19	6.14 8.94 10.6 6.78 8.94 11.2 11.3 11.4 11.5 11.6 11.6 11.6 11.6 11.6 11.6 11.6	3.69 48h 4.06 5.36 6.34 7.34 9.04 9.86 3.92 9.86 8.392 9.86 8.392 9.87 9.91 9.45 9.87 9.88 8.379 9.88 8.379 9.88 8.379 9.88 8.379 9.88 8.379 9.88 8.379 9.88 8.379 9.88 8.379 9.88 8.379 9.88 8.389 9.88	2.13	1.52 2.63 3.05 3.3 3.49 4.56 4.56 4.56 4.56 4.51 4.88 4.56 4.56 4.56 4.56 4.56 4.56 4.56 4.56	1.18 (1.31 1.73 1.73 1.73 1.73 1.73 1.73 1.73	0.975 d. 1.08 1.42 2.12 2.15 2.14 2.15 2.15 2.15 2.15 2.15 2.15 2.15 2.15
Raint ARI Raint ARI	1.58 (2 ) 5 (2 ) 30 (40 ) 50 (60 ) 80 (100 ) 250 (60 ) 80 (100 ) 250 (60 ) 80 (100 ) 250 (60 ) 80 (100 ) 250 (60 ) 80 (100 ) 250 (60 ) 80 (100 ) 250 (60 ) 80 (100 ) 250 (60 ) 80 (100 ) 250 (60 ) 80 (100 ) 250 (60 ) 80 (100 ) 250 (60 ) 80 (100 ) 250 (60 ) 80 (100 ) 250 (60 ) 80 (100 ) 250 (60 ) 80 (100 ) 250 (60 ) 80 (100 ) 250 (60 ) 80 (100 ) 250 (60 ) 80 (100 ) 250 (60 ) 80 (70 ) 250 (70 ) 250	0.633 0.025 0.01 0.05 0.025 0.025 0.025 0.009 0.010 0.001 0.	59.9	45.9 96.8 102 105 106 107 117 117 117 117 117 117 117 117 117	38.7 42.5 55.7 75.6 56.5 55.7 75.6 56.5 56.5 575.6 60.5 56.5 56.5 56.5 56.5 56.5 56.5 5	28 40.3 30.8 40.3 47.5 54.8 40.3 59.3 62.4 65.6 67 70.4 72.9 38.4 44.6 61.5 55.7 66.2 9.6 9.8 9.7 65.5 66.2 9.6 9.6 9.8 9.7 65.5 66.2 9.6 66.2 9.6 66.2 9.6 66.2 9.6 9.8 9.7 65.5 66.2 9.6 9.8 9.7 65.5 66.2 9.6 9.8 9.7 65.5 66.2 9.6 9.8 9.7 66.2 9.6 9.8 9.7 65.5 66.2 9.6 9.8 9.7 65.5 66.2 9.6 9.8 9.7 65.5 66.2 9.6 9.8 9.7 65.5 66.2 9.7	19.3 28 33 38.1 41.2 43.4 45.2 46.6 49 50.7 58.1 ch 18.3 32.0.1 20.1 26.4 49.4 50.7 54.6 60.8 60.8 60.8 60.8 60.8 60.8 60.8 60	9.88   9.88   10.9   14.3   16.9   19.6   19	6.14 8.94 10.6 6.78 8.94 11.3 11.3 11.3 11.3 11.3 11.3 11.3 11.	3.69 4.60 6.34 4.60 6.34 4.60 6.34 4.60 6.34 4.7.34 4.60 6.34 4.60 6.39 6.50 6.50 6.50 6.50 6.50 6.50 6.50 6.50	2.13 2.35 3.11 3.67 4.26 4.28 4.88 5.25 5.73 6.59 72h 4.26 72h 4.38 3.35 5.43 4.61 4.75 4.99 2.18 3.18 3.77 4.38 5.68 72h 4.75 5.01 2.18 3.17 4.38 4.75 5.01 2.18 3.17 4.38 4.75 5.01 2.18 4.75 5.01 2.18 4.75 5.01 2.18 4.75 5.01 2.18 4.75 5.01 3.30 3.30 3.30 3.30 3.30 3.30 3.30 3	1.52 2.53 3.05 3.34 4.3 3.76 4.72 4.72 4.72 4.72 4.72 4.72 4.72 4.72	1.18 1.31 1.73 2.05 2.38 2.73 3.09 3.21 3.36 9 12 1.16 6.8 1.99 2.56 2.81 2.56 2.91 3.51 3.58 2.91 3.51 3.58 2.91 3.51 3.58 3.59 1.17 2.10 2.44 2.76 2.85 2.89 3.01 3.58 3.02 3.11 3.58 3.02 3.11 3.58 3.02 3.11 3.58 3.02 3.11 3.59 3.11 3.	0.975 2.34 2.42 2.54 2.45 2.95 2.95 2.95 2.95 2.97 2.47 2.66 2.77 2.56 2.75 2.57 2.57 2.57 2.57 2.57 2.57 2.57

0.1

10

0.01

## **Colebrook-White Calculation**



## **Colebrook-White Calculation**

