Appendix F
Revised Drainage Impact Assessment

Proposed Land Sharing Pilot Scheme for a Site at Various Lots in D.D 115, Tung Shing Lei Yuen Long

Drainage Impact Assessment

April 2024

Report Reference: 220014.01

AECOM

CONTENTS **Page**

APPENDICES

1 INTRODUCTION

1.1 Background

1.1.1 AECOM Asia Company Limited was commissioned to act as the engineering consultants for the preparation of Drainage Impact Assessment (DIA) report for the proposed public and private housing developments under Land Sharing Pilot Scheme (hereafter referred to as Proposed Development) in Tung Shing Lei.

1.1.2 The location of the Site is shown in **Figure 1.1.**

Figure 1.1 – Location plan

1.2 Objective of the Assessment

1.2.1 This DIA is prepared based on available information and requirements under Drainage Services Department (DSD) Stormwater Drainage Manual, Advice Note No. 1 – Application to Drainage Impact Assessment Process to Private Sector Projects. In order to identify, assess and mitigate potential adverse drainage impacts arising from the proposed development at the Site.

1.3 Structure of the Report

1.3.1 This DIA Report comprises the following sections after this introduction:

1.3.2 **Chapter 2** discusses the development proposal and the existing drainage characteristics in the vicinity of the Site.

1.3.3 **Chapter 3** presents the approach and criteria in carrying out this DIA.

1.3.4 **Chapter 4** examines the potential drainage impact arising from the proposed works.

1.3.5 **Chapter 5** provides consideration on operation and maintenance of the drainage system upon completion of the works.

1.3.6 **Chapter 6** summaries the conclusions and recommendation of this DIA Report.

2 DEVELOPMENT PROPOSAL AND EXISTING DRAINAGE CHARACTERISTICS

2.1 Location of the Project

2.1.1 The Site situates at the North of Ho Chau Road and at the East of N-49 Channel near Yuen Long Bypass Floodway. The master layout plan and the surroundings of the Site are shown in ***Appendix A***.

2.1.2 The existing access road and Ho Chau Road will be widened to provide access to the Site, which does not form part of the Proposed Development.

2.1.3 In this DIA, the drainage impact of the development site and the widened access road will be reviewed. To identify, assess and mitigate potential adverse drainage impacts arising from the proposed development at the Site. Locations of major drainage structures & river streams are shown in ***Appendix B***.

2.2 Existing Drainage Network

2.2.1 The total catchment area of the Site including the public housing, private housing, access road and amenity area is 5.84ha approximately. The Site is further delineated into varies sub-catchments (e.g. CAT01 to CAT15 except CAT11). From the available record, the surface runoff from the catchments uphill of the Site flow to the west by gravity and merged with the runoff from the Site. The runoff from these catchments is discharged to the N-49 Channel. The existing Sub-catchment plan of Site and the adjacent areas are shown in ***Appendix C***.

2.2.2 Catchment CAT01 to CAT15 comprised the uphill located to the North of the Site, the runoff from these catchments is discharged to the existing N-49 channel by gravity.

2.2.3 Catchment NSW_191_5B & 5C and YL_1564 comprised the areas located in the north and west of the Site, the runoff from these catchments is discharged to the existing N-49 Channel by gravity.

2.2.4 Catchment NSW_191_5A comprised the areas located in the south of the Site and the Ho Chau Road, the runoff from this catchment is discharged to the Yuen Long Bypass Floodway by gravity.

2.2.5 According to the aerial views of the orthomap in GeoInfo Map, the existing site is in rural area and almost vegetated. Existing site of development generally comprise fallow grassland and patches or vegetation. The site area were paddy fields in the past.

3 ASSESSMENT APPROACH

3.1 Technical Approach

3.1.1 InfoWorks ICM Version 2021.8.0 has been used as the modelling tool to assess the potential drainage impact arising from the Site and the proposed widened access road.

3.1.2 The design criteria and assumptions adopted for the assessment are in accordance with DSD's Stormwater Drainage Manual, Fifth Edition, 2018 (SDM) with Corrigendum No. 1/2022.

3.2 Rainfall-Runoff (RR) Model

3.2.1 The RR model describes how the rainfall transforms to direct surface runoff through the process of abstraction and routing over the catchment surface. For this performance assessment, SCS method and fixed method were adopted.

3.2.2 SCS method - The Curve Number (CN) values for the adjacent Approved Residential Development (A/YL-NSW/274) and the vicinity were collected by Land Drainage Division of DSD and would be adopted for the rural catchment in the hydraulic model. The CN values is shown in ***Appendices C and D***. Normal Antecedent moisture classes, i.e. (AMC) II condition will be adopted for the hydraulic model of this Study.

3.2.3 Fixed Method - Runoff Coefficient (C) Values for different land uses within the Site and the proposed widen road are made reference to Section 7.5.2 of the SDM and summarized in ***Table 3.1***:

Table 3.1 Runoff Types

Land Use	C Value
1. Unpaved e.g. natural grass surface	0.3
2. Paved e.g. Concrete	0.9

3.2.4 The adequacy of the drainage system is checked by using Manning or Colebrook-White equation according to Table 12 of the SDM:

$$\bar{V} = \frac{R^{1/6}}{n}\sqrt{RS_f}$$

$$\bar{V} = -\sqrt{32gRS_f}\log\left[\frac{k_s}{14.8R} + \frac{1.255v}{R\sqrt{32gRS_f}}\right]$$

3.2.5 The adopted roughness values are presented in ***Table 3.2***.

Table 3.2 Design Roughness Values

Classification	Roughness Coefficient	Remarks
PVC Lined Concrete Pipe	Ks = 0.3mm	Slimed
Concrete Pipe, Concrete Road Surface (Overland Flow)	Ks = 3mm	Slimed
Natural-stream channel, clean	N = 0.030	Fair
Concrete-lined channels	N = 0.016	Fair

3.2.6 Siltation

Silt depth in the stormwater drainage system is considered in the assessment. As a conservative approach, 10% (of flow area) sedimentation is adopted for the drainage system.

3.3 Assessment Criteria

3.3.1 The design criteria for this DIA are based on standards as set out in Table 10 of the SDM. The recommended design return periods based on flood levels for the various drainage systems depending on the land use, as shown below:

Table 3.3 Recommended Design Return Periods

Description	Design Return Periods
Intensively Used Agricultural Land	2 – 5 Years
Village Drainage including internal Drainage System under a polder Scheme	10 Years
Main Rural Catchment Drainage Channels	50 Years
Urban Drainage Trunk System	200 Years
Urban Drainage Branch System	50 Years

3.3.2 According to the SDM, 200-year design return period is recommended for the design of Urban Drainage Trunk System. Hence, the impact on Kam Tin River, Yuen Long Bypass Floodway and N-49 Channel for 200-year design return period will be assessed and the proposed drainage system within the site and along Ho Chau Road will be designed according to 50-year design return period.

3.3.3 Considering the Development is a residential development which is likely for occupation until end of 21st Century, climate change effect up to end of 21st Century

and design allowance are adopted. Hence, the rainfall increase percentage of 28.1% as stipulated in Table 28 of SDM is adopted in the calculation of the peak flow.

3.3.4 The boundary conditions have been extracted from the InfoWorks ICM model provided by Land Drainage Division of DSD for the development of the model. Based on the acquired information, the following boundary conditions are adopted according to "Existing Network + Proposed Land use (EP)" scenario, plus the further increase of climate change until end of 21st Century according to DSD corrigendum No. 1/2022. Details could be referred to Appendix E.

Table 3.4 Boundary Condition

Scenario	**823015835036 (Kam Tin River) Max Level**	**822342835388 (N-49) Max Level**	**SGJ1013281 (Kam Tin River) Max Flow**	**822527834420 (N-49) Max Flow**
50yr Case A	5.211 mPD	4.841 mPD	831.548 m^3/s	136.014 m^3/s
50yr Case B	5.392 mPD	5.204 mPD	706.955 m^3/s	116.552 m^3/s
200yr Case A	5.375 mPD	4.963 mPD	999.903 m^3/s	148.036 m^3/s
200yr Case B	6.148 mPD	6.114 mPD	755.761 m^3/s	109.893 m^3/s

4 POTENTIAL DRAINAGE IMPACT

4.1 Changes in Drainage Characteristics

4.1.1 The Site is proposed to be built at level +6.5mPD after site formation. A widened road is proposed at the Southern side of the Site to connect to the widened Ho Chau Road. With such development, there will be an increase in paved areas and the overland flow path for the sub-catchment would be affected. Therefore, increase in surface runoff would be expected. The proposed private housing development should have minimum 30% greenery area in accordance to Section 18 APP-152 (Practical Notes for AP/RSE/RGE), Buildings Department. Hence, it is assumed 70% area would be paved for the residential use and the remaining 30% would be unpaved area. On the other hand, it is assumed 100% area would be paved in the proposed public housing development site.

4.2 Drainage Impact

4.2.1 Upon completion of the Proposed Development, the water from the catchment at the Public Housing Site (CAT01A to CAT01E) and at the Private Housing Site (CAT02A to CAT02C) will be collected within the Site by two separate drainage system (1650mm PVC lined concrete drain). The runoff is further converted to the south via the proposed twin 1650mm PVC lined concrete drain underneath the access road. The runoff from the adjacent Approved Residential Development (A/YL-NSW/274) (CAT16A to CAT16C) would be collected by internal drainage system (e.g. 1650mm PVC lined concrete drain). The runoff would be collected by twin 2100mm PVC lined concrete drain from proposed manhole SMH08 and further convert to the Bypass Floodway. The overland flow path of CAT11 toward N-49 Channel was blocked, therefore a new u-channel with catchpit (e.g. CP-07A) is proposed to convert the flow to N-49 Channel. On the other hand, to minimize the drainage impact for the runoff on catchment NSW_191_5E, the existing discharge arrangement of catchment NSW_191_5E would be maintained by a new drainage system underneath the new access road. The catchment plans after the proposed Development are attached in ***Appendix D***.

4.2.2 The maximum water level and flood depth are summarized in ***Appendix E***. The proposed drainage scheme is shown in ***Appendix F.***

4.2.3 According to the simulation result under 200-yr flood return period. It is observed that the maximum water level in Kam Tin River remains unchanged. The maximum water level in N-49 channel is decreased. From the current hydraulic model results, it is observed that the maximum water level in Yuen Long Bypass Floodway (YLBF) node 822527834420 (adjacent to Yuen Long Highway) would be only increased from 6.206mPD to 6.207mPD with 0.001m under 200-yr flood return period. Therefore, it is expected the impact at further upstream of YLBF (e.g. between Yuen Long Highway and Castle Peak Road) which further away from the discharge point of the proposed twin 2100mm drain would be <0.001m, hence it is concluded the risk of flooding in upstream area would not be happened.

4.2.4 According to the simulation result under 50-yr flood return period. It is noted that the maximum water levels at SMH08A and SMH09 are controlled by the high-water level of the boundary condition. The maximum water levels in the proposed drainage system are significantly decreased with 0.443m to 0.452m when comparing with the existing drainage system, (e.g. SMH08A vs. SLH1004802 and SMH09 vs. SMH4048627).

4.2.5 Based on the above, it is considered that the drainage impact is insignificant after both the adjacent Approved Residential Development (A/YL-NSW/274) and Proposed Development are completed.

5 OPERATION and MAINTENANCE

5.1 Detailed Design

5.1.1 Operation and maintenance requirements should be considered in the detailed design stage in accordance with the requirement specified in the SDM. These features include manholes, and pipes, etc.

5.2 Maintenance Responsibility

5.2.1 Proposed stormwater conveyance system in terms of gravity pipes below government land are proposed to be handed over to DSD for maintenance.

5.3 Construction Consideration

5.3.1 The contractor is responsible for temporary drainage arrangement during construction and to ensure that the existing drainage system within and adjacent to the Site would not be affected at the construction stage.

5.3.2 Should any temporary blockage or diversion of the flow path be necessary for construction, the work must be carried out within the dry season(s) and the Contractor must have appropriate mitigation measures in place. Examples of appropriate mitigation measures include providing sandbags or similar to increase the in-channel capacity and to maintain flow through a given channel section through over-pumping.

5.3.3 Flow diversion should be designed in accordance with standards and recommendations established in the Drainage Service Department (DSD) Stormwater Drainage Manual (SDM), DSD Technical Circular No. 1/2017 - Temporary Flow Diversions and Temporary Works Affecting Capacity in Stormwater Drainage System, and DSD Practice Note No. 1/2017 - Design Rainfall Depth for Temporary Works within the Dry Season.

5.3.4 Proper measures shall be taken to maintain the existing drainage characteristics of the catchment areas and to minimize drainage impacts associated with the construction works. The principal drainage impacts which are associated with construction of the works have been identified as follows:

- Erosion of ground materials;
- Sediment transportation to existing downstream drainage system; and
- Obstruction to drainage systems.

5.3.5 Excavated slopes for the Site shall be protected to prevent any loose material being washed out during rainfall. Temporary protection may be in the form of placing layers of granular material and rock fill material or hard surface cover on the sloping faces of channel or tarpaulin covering.

5.3.6 Perimeter U-channels should be provided at crest of any temporary excavated slope to intercept the runoff and hence avoiding erosion to the surfaces of proposed temporary cutting.

5.3.7 Regular inspection shall be carried out to ensure integrity of the works. These inspections shall cover works under construction as well as recently completed areas.

5.3.8 No excavated materials should be left on site. If it is not possible to transport away the excavated material within the same day, the material should be covered by tarpaulin/impervious sheets. Measures shall be taken to ensure that runoff from the Site is managed so that silts and other pollution are properly intercepted.

5.3.9 In the event of extreme weather including Landslip Warning, issuance of Amber/Red/Black Rainstorm Warning, Special Flood Announcement, Typhoon Signal No. 3 or above and the like, site inspections and surveys shall be carried out by the contractor's emergency team as deemed practical and safe before and after the events to ascertain if there has been any siltation or erosion. If it is determined that any unacceptable siltation or erosion has occurred, the contractor shall rectify it immediately.

6 CONCLUSIONS AND RECOMMENDATION

6.1 Conclusions

6.1.1 This DIA is prepared to assess the potential drainage impact as a result of the proposed new drainage works for the proposed development.

6.1.2 The maximum water level at the downstream existing drainage system would be increased by 0.001m after the proposed development mainly by the increased of runoff due to changes from unpaved area to paved area.

6.1.3 Based on the hydraulic assessment, there is no adverse drainage impact to the surrounding drainage system arising from the proposed residential development at Site with proposed drainage works.

6.2 Recommendation

6.2.1 Suitable internal drainage system would be further considered during the detailed design stage to collect the drainage flow within the Site to the public drainage system.

6.2.2 The drainage facilities proposed within the Site to convey the surface runoff outside site and discharged to the terminal manholes at the proposed widen road are recommended to be undertaken by the proposed development. The stormwater drains to be laid beneath the proposed widen road which connect to the existing DSD drainage channel will be handed back to the Drainage Services Department upon completion of the drainage works.

6.2.3 The proposed private development should have minimum 30% greenery area which tally with the blue-green concept as stipulated in Section 3.2.2 of the Stormwater Drainage Manual (2018).

Appendix A

Master Layout Plan

Site Demarcation Plan

TUNG SHING LEI "R(D)" ZONE

PROPOSED LAND SHARING PILOT SCHEME (LSPS) FOR A SITE AT VARIOUS LOTS IN D.D. 115,
TUNG SHING LEI, YUEN LONG, THE NEW TERRITORIES

DATE : 15 MAR 2024
1 : 2500 (A3)

ARCHI+
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Indicative Block Plan

TUNG SHING LEI "R(D)" ZONE

PROPOSED LAND SHARING PILOT SCHEME (LSPS) FOR A SITE AT VARIOUS LOTS IN D.D. 115, TUNG SHING LEI, YUEN LONG, THE NEW TERRITORIES

DATE : 15 MAR 2024
1 : 2500 (A3)

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Indicative Ground Floor Plan

TUNG SHING LEI "R(D)" ZONE

PROPOSED LAND SHARING PILOT SCHEME (LSPS) FOR A SITE AT VARIOUS LOTS IN D.D. 115,
TUNG SHING LEI, YUEN LONG, THE NEW TERRITORIES

DATE : 15 MAR 2024
1 : 2500 (A3)

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LEGEND :

- APPLICATION SITE BOUNDARY
- SITE BOUNDARY FOR PRIVATE HOUSING PORTION
- SITE BOUNDARY FOR PUBLIC HOUSING PORTION
- PUBLIC HOUSING PORTION
- PRIVATE HOUSING PORTION
- PROVISION OF PUBLIC ACCESS ROAD AND INFRASTRUCTURE TO BE MANAGED AND MAINTAINED BY GOVERNMENT DEPARTMENTS

GIC +13.00
T8
T7
CARPARK & E&M +13.00
T6
T6
RAMP
CARPARK & E&M +13.00
T5
CARPARK & E&M +13.00
+13.00
+13.00
T1
T2
+14.00
T3
KINDER-GARTEN +11.50
VOID ABOVE PTT
YUEN LONG HIGHWAY
元朗公路
TSING LONG HIGHWAY
青朗公路

N

Indicative First Floor Plan

TUNG SHING LEI "R(D)" ZONE

PROPOSED LAND SHARING PILOT SCHEME (LSPS) FOR A SITE AT VARIOUS LOTS IN D.D. 115, TUNG SHING LEI, YUEN LONG, THE NEW TERRITORIES

DATE : 05 JUL 2023
1 : 2500 (A3)

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LEGEND :

- APPLICATION SITE BOUNDARY
- SITE BOUNDARY FOR PRIVATE HOUSING PORTION
- SITE BOUNDARY FOR PUBLIC HOUSING PORTION
- PUBLIC HOUSING PORTION
- PRIVATE HOUSING PORTION

N

Indicative Basement Floor Plan

TUNG SHING LEI "R(D)" ZONE

PROPOSED LAND SHARING PILOT SCHEME (LSPS) FOR A SITE AT VARIOUS LOTS IN D.D. 115,
TUNG SHING LEI, YUEN LONG, THE NEW TERRITORIES

DATE : 05 JUL 2023
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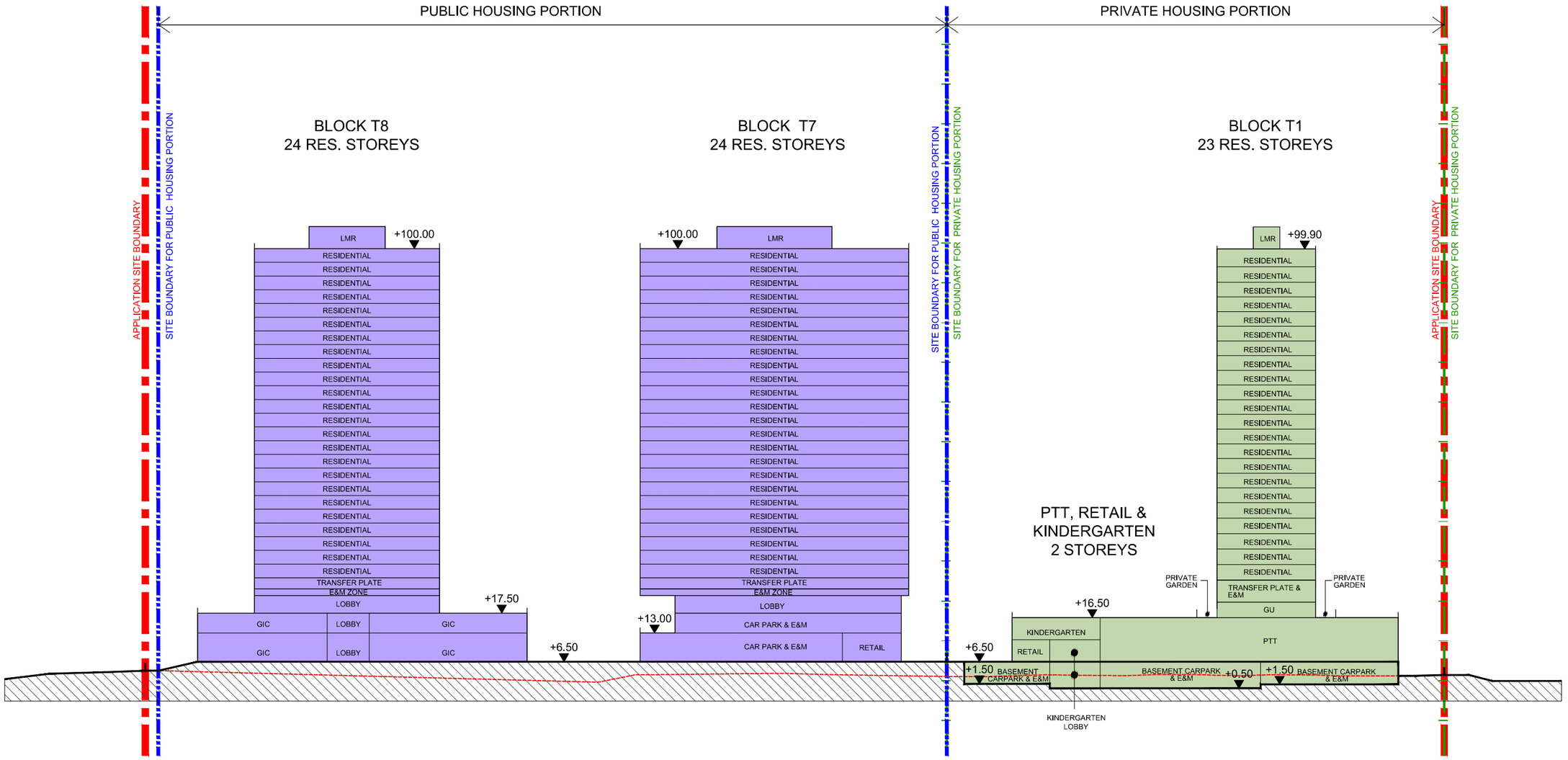
LEGEND

------ EXISTING SITE LEVEL



SECTION S1

Indicative Section S1

TUNG SHING LEI "R(D)" ZONE

PROPOSED LAND SHARING PILOT SCHEME (LSPS) FOR A SITE AT VARIOUS LOTS IN D.D. 115,
TUNG SHING LEI, YUEN LONG, THE NEW TERRITORIES

DATE : 05 JUL 2023
1 : 1000 (A3)

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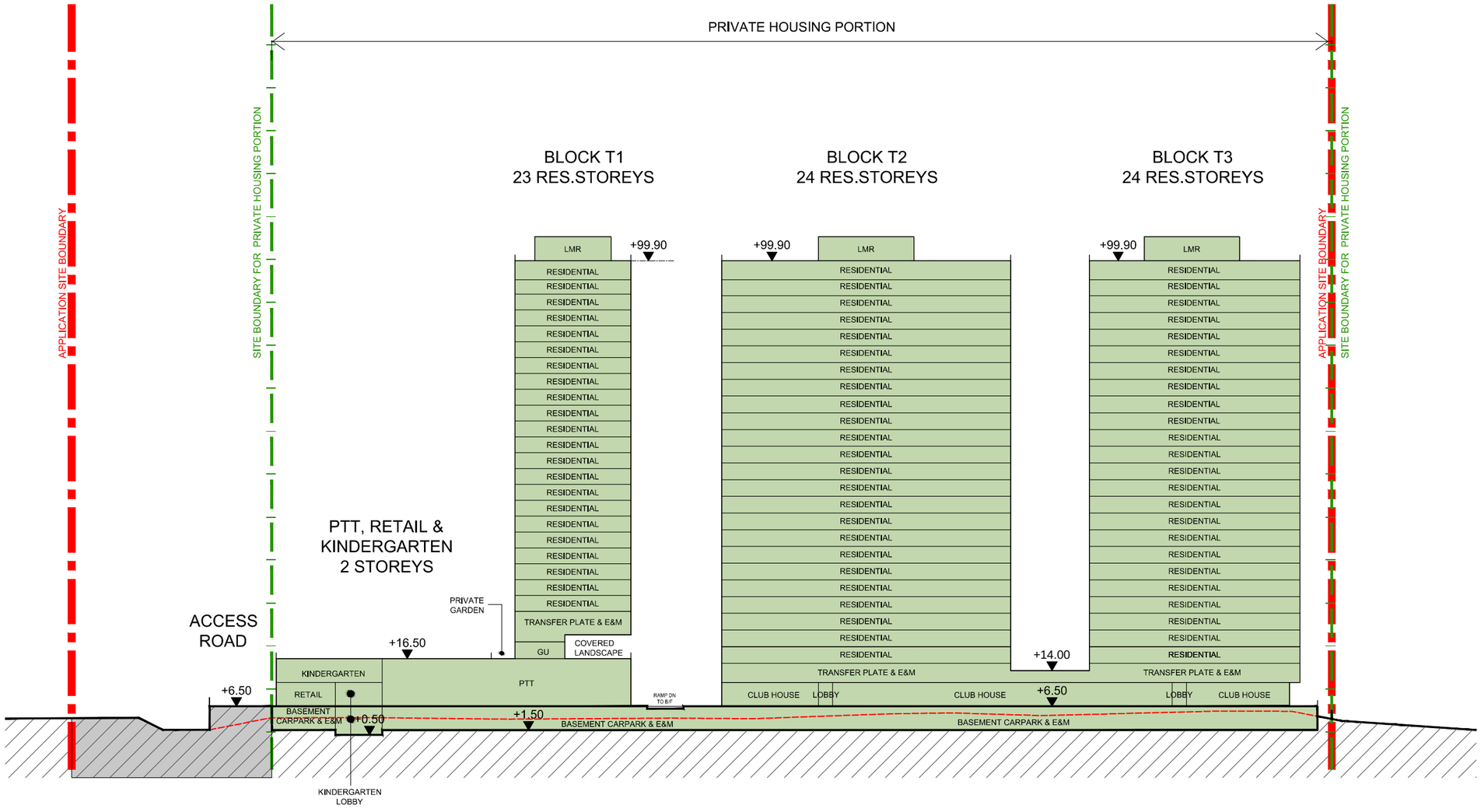
LEGEND

EXISTING SITE LEVEL



SECTION S2

Indicative Section S2

TUNG SHING LEI "R(D)" ZONE

PROPOSED LAND SHARING PILOT SCHEME (LSPS) FOR A SITE AT VARIOUS LOTS IN D.D. 115,
TUNG SHING LEI, YUEN LONG, THE NEW TERRITORIES

DATE : 05 JUL 2023
1 : 1000 (A3)

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Appendix B

Locations of Major Drainage Structures & River Streams

N-49 Channel

Kam Tin River

Yuen Long Bypass Floodway

Legend

- Phase 1 Development
- Phase 2 Public Development
- Phase 2 Private Development
- Public Access and Amenity
- Widen Road

Title
Locations of Major Drainage Structures & River Streams

Appendix
B

0 20 40 80 Meters

Appendix C

Existing Sub-catchment Plan

NSW_191_5C
11.47ha

N-49 Channel

Kam Tin River

CAT04
0.01ha

CAT05
0.01ha

CAT12
0.15ha

CAT03
0.02ha

CAT11
0.84ha

CAT06
0.16ha

CAT07
0.03ha

CAT01
1.98ha

CAT13
0.3ha

CAT08
0.21ha

CAT02
1.97ha

NSW_191_5B
15.79ha

CAT09
0.1ha

NSW_191_5A
5.08ha

CAT14
0.35ha

CAT15
0.3ha

CAT10
0.24ha

Yuen Long Bypass Floodway

YL_1564
5.99ha

Legend

Subcatchment

LandUse

CN = 72.82

CN = 76.45

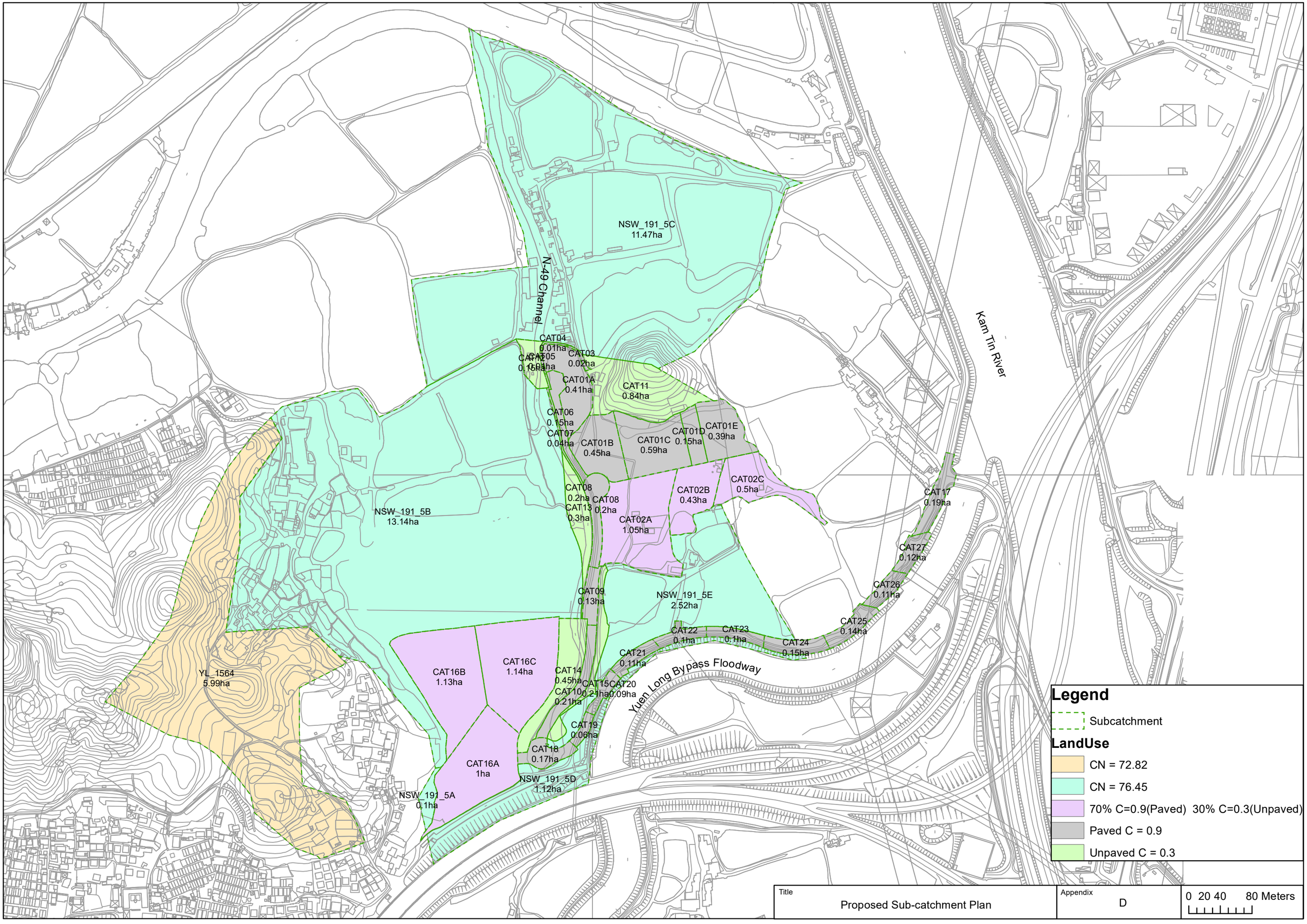
Unpaved C = 0.3

Title	Appendix
Existing Sub-catchment Plan	C

0 20 40 80 Meters

Appendix D

Proposed Sub-catchment Plan


NSW_191_5C
11.47ha
N-49 Channel
Kam Tin River
CAT04
0.01ha
CAT05
0.01ha
CAT12
0.15ha
CAT03
0.02ha
CAT01A
0.41ha
CAT11
0.84ha
CAT06
0.15ha
CAT07
0.04ha
CAT01B
0.45ha
CAT01C
0.59ha
CAT01D
0.15ha
CAT01E
0.39ha
CAT08
0.2ha
CAT13
0.3ha
CAT08
0.2ha
CAT02A
1.05ha
CAT02B
0.43ha
CAT02C
0.5ha
CAT17
0.19ha
NSW_191_5B
13.14ha
CAT27
0.12ha
CAT26
0.11ha
CAT09
0.13ha
NSW_191_5E
2.52ha
CAT22
0.1ha
CAT23
0.1ha
CAT24
0.15ha
CAT25
0.14ha
CAT21
0.11ha
YL_1564
5.99ha
CAT16B
1.13ha
CAT16C
1.14ha
CAT14
0.45ha
CAT10
0.21ha
CAT15
0.21ha
CAT20
0.09ha
Yuen Long Bypass Floodway
CAT19
0.06ha
CAT18
0.17ha
CAT16A
1ha
NSW_191_5D
1.12ha
NSW_191_5A
0.1ha
Legend
Subcatchment
LandUse
CN = 72.82
CN = 76.45
70% C=0.9(Paved) 30% C=0.3(Unpaved)
Paved C = 0.9
Unpaved C = 0.3
Title
Proposed Sub-catchment Plan
Appendix
D
0 20 40 80 Meters

Appendix E

Result of Hydraulic Model

Hydraulic Performance

Return Period
200yr Case A - With 200yr Rain (CC28.1%) + 10 yr tide CC
200yr Case B - With 10yr Rain (CC28.1%) + 200 yr tide CC
50yr Case A - With 50yr Rain (CC28.1%) + 10 yr tide CC
50yr Case B - With 10yr Rain (CC28.1%) + 50 yr tide CC
Downstream Boundary
Node: 823015835036 Kam Tin River Downstream
Node: 822342835388 N-49 Downstream
Inflow Boundary
Conduit: 822941834692.1 Bypass Floodway
Conduit: SGJ1013281.1 Kam Tin River Upstream
Roughness of the UPVC lined concrete pipe are assumed as 0.3mm (Ks Value)
Silt 10% of the flow area is allowed in model
DSD Corrigendum No. 1/2022 for CC is adopted

Table 1 - Case 200A,B for Trunk Drain

		Existing				Phase 1 & 2 Trial 4 - 2 x 2100mm drain					
Node	Ground Level (mPD)	200yr Case A Max. Level (mPD)	200yr Case B Max. Level (mPD)	Max 200-yr Level (mPD)	Flood Depth (m)	200yr Case A Max. Level (mPD)	200yr Case B Max. Level (mPD)	Max 200-yr Level (mPD)	Flood Depth (m)	Different with Extg (m)	Remark
SGJ1013281	5.408	5.414	6.169	6.169	0.761	5.416	6.169	6.169	0.761	0	KT River
823035834982	5.113	5.391	6.146	6.146	1.033	5.37	6.146	6.146	1.033	0	
823015835036	5.194	5.392	6.148	6.148	0.954	5.375	6.148	6.148	0.954	0	
822527834420	5.82	5.477	6.206	6.206	0.386	5.486	6.207	6.207	0.387	0.001	Bypass Floodway
822542834506	5.37	5.473	6.205	6.205	0.835	5.483	6.206	6.206	0.836	0.001	
822557834527	5.366	5.472	6.204	6.204	0.838	5.481	6.205	6.205	0.839	0.001	
822615834565	5.354	5.469	6.203	6.203	0.849	5.478	6.204	6.204	0.85	0.001	
822667834568	5.345	5.465	6.202	6.202	0.857	5.475	6.202	6.202	0.857	0	
822765834544	5.327	5.462	6.2	6.2	0.873	5.471	6.201	6.201	0.874	0.001	
822838834568	5.301	5.459	6.199	6.199	0.898	5.47	6.2	6.2	0.899	0.001	
822881834610	5.268	5.457	6.198	6.198	0.93	5.467	6.199	6.199	0.931	0.001	
822916834655	5.238	5.455	6.198	6.198	0.96	5.466	6.199	6.199	0.961	0.001	
822924834669	5.207	5.435	6.184	6.184	0.977	5.439	6.185	6.185	0.978	0.001	
822941834692	5.173	5.434	6.184	6.184	1.011	5.438	6.185	6.185	1.012	0.001	
822976834782	5.08	5.431	6.183	6.183	1.103	5.435	6.183	6.183	1.103	0	
822981834797	4.98	5.407	6.16	6.16	1.18	5.402	6.161	6.161	1.181	0.001	
822983834821	4.676	5.407	6.16	6.16	1.484	5.402	6.16	6.16	1.484	0	
N49-1	2.505	5.336	6.779	6.779	4.274	4.963	6.779	6.779	4.274	0	N-49
N49-2	2.559	5.33	6.754	6.754	4.195	4.963	6.754	6.754	4.195	0	
N49-3	2.68	5.271	6.52	6.52	3.84	4.963	6.52	6.52	3.84	0	
N49-4	2.732	5.216	6.301	6.301	3.569	4.963	6.301	6.301	3.569	0	
822342835388	-0.7	5.204	6.114	6.114	6.814	4.963	6.114	6.114	6.814	0	

It is noted that the impact in Bypass Flood Way is slightly increased by 1mm only. No adverse impact would be in KT River and N-49 Channel

Table 2 - Case 50A,B for Branch Drain

					Phase 1 & 2 Trial 4 - 2 x 2100mm drain						
Node	Ground Level (mPD)	50yr Case A Max. Level (mPD)	50yr Case B Max. Level (mPD)	Max 50-yr Level (mPD)	50yr Case A Max. Level (mPD)	50yr Case B Max. Level (mPD)	Max 50-yr Level (mPD)	Flood Depth (m)	Different with Extg (m)		Remark
SMH03	6.5				5.349	5.545	5.545	-0.955			
SMH04	6.5				5.345	5.512	5.512	-0.988			
SMH05	6.1				5.341	5.496	5.496	-0.604			
SMH06	5.8				5.337	5.494	5.494	-0.306			
SMH06A	6.4				5.333	5.49	5.49	-0.91			
SMH07	7				5.33	5.488	5.488	-1.512			
SMH07A	6.65				5.326	5.485	5.485	-1.165			
SMH08	6.1				5.323	5.483	5.483	-0.617			
SMH08A	5.1	5.923	5.879	5.923	5.319	5.48	5.48	0.38	-0.443		Extg refer to node SLH1004802
SMH08B	5.15				5.318	5.479	5.479	0.329			
SMH09	5.1	5.929	5.886	5.929	5.316	5.477	5.477	0.377	-0.452		Extg refer to node SMH4048627
SMH_T1	6.5				5.378	5.573	5.573	-0.927			
SMH_T2	6.5				5.358	5.555	5.555	-0.945			
SMH_T3	7.5				5.333	5.49	5.49	-2.01			

It is noted that the maximum water level is controlled by the high water level of the boundary condition
However, the maximum water levels in the proposed drainage system are similar to the maximum water level in Bypass Flood Way.

Assumption of Boundaries

	10-yr		50-yr		200-yr		Remarks
Tide adopted from DMP Review Model is	3.74	mPD	4.32	mPD	5	mPD	(Tsim Bei Tsui)
According to DSD Corridendum No. 1/2022	3.52	mPD	4.09	mPD	4.78	mPD	(Tsim Bei Tsui)
	0.47	m	0.47	mPD	0.47	m	Table 29 Mean Sea Level Rise due to CC
	0.15	m	0.2	m	0.26	m	Table 30b Storm Surge up to End 21st Century
	0.23	m	0.25	m	0.27	m	Table 31 Design Allowance in End 21st Century
with End 21st CC	4.37	mPD	5.01	mPD	5.78	mPD	
Different	**0.63**	**m**	**0.69**	**mPD**	**0.78**	**m**	Added into the Result of DMP Review Model

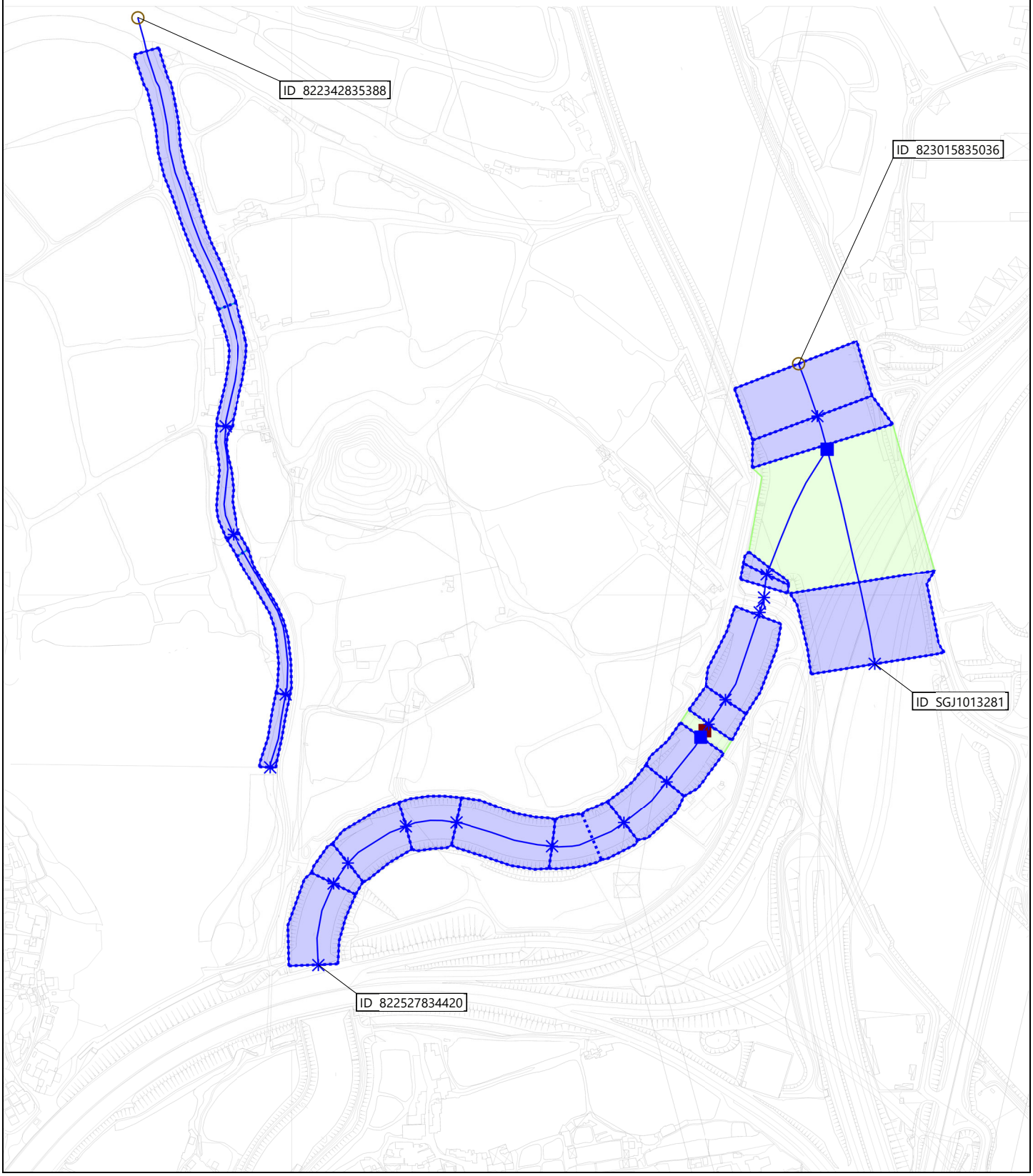
Boundary for Node: 823015835036 Kam Tin River Downstream & Node: 822342835388 N-49 Downstream

	200 yr Case A				200 yr Case B				50 yr Case A				50 yr Case B			
	from DMP Review Model		DSD Corr No. 1/222		from DMP Review Model		DSD Corr No. 1/222		from DMP Review Model		DSD Corr No. 1/222		from DMP Review Model		DSD Corr No. 1/222	
Time	823015835036	822342835388	823015835036	822342835388	823015835036	822342835388	823015835036	822342835388	823015835036	822342835388	823015835036	822342835388	823015835036	822342835388	823015835036	822342835388
Max level	**4.745**	**4.333**	**5.375**	**4.963**	**5.368**	**5.334**	**6.148**	**6.114**	**4.581**	**4.211**	**5.211**	**4.841**	**4.702**	**4.514**	**5.392**	**5.204**
00::00:00	3.74	3.74	4.37	4.37	4	4	4.78	4.78	3.74	3.74	4.37	4.37	4	4	4.69	4.69
00::00:01	3.74	3.742	4.37	4.372	4.009	4.896	4.789	5.676	3.74	3.741	4.37	4.371	4.001	4.209	4.691	4.899
00::00:02	3.74	3.746	4.37	4.376	4.018	4.991	4.798	5.771	3.74	3.745	4.37	4.375	4.003	4.294	4.693	4.984
00::00:03	3.74	3.75	4.37	4.38	4.063	4.957	4.843	5.737	3.74	3.748	4.37	4.378	4.015	4.351	4.705	5.041
00::00:04	3.741	3.751	4.371	4.381	4.169	4.93	4.949	5.71	3.741	3.749	4.371	4.379	4.03	4.357	4.72	5.047
00::00:05	3.742	3.751	4.372	4.381	4.309	4.92	5.089	5.7	3.742	3.749	4.372	4.379	4.041	4.292	4.731	4.982
00::00:06	3.744	3.749	4.374	4.379	4.444	4.905	5.224	5.685	3.743	3.747	4.373	4.377	4.067	4.255	4.757	4.945
00::00:07	3.745	3.745	4.375	4.375	4.53	4.882	5.31	5.662	3.744	3.744	4.374	4.374	4.084	4.245	4.774	4.935
00::00:08	3.746	3.743	4.376	4.373	4.711	4.869	5.491	5.649	3.744	3.742	4.374	4.372	4.125	4.257	4.815	4.947
00::00:09	3.748	3.744	4.378	4.374	4.803	4.861	5.583	5.641	3.745	3.743	4.375	4.373	4.181	4.266	4.871	4.956
00::00:10	3.75	3.745	4.38	4.375	4.866	4.862	5.646	5.642	3.747	3.744	4.377	4.374	4.239	4.266	4.929	4.956
00::00:11	3.753	3.747	4.383	4.377	4.906	4.881	5.686	5.661	3.749	3.745	4.379	4.375	4.264	4.266	4.954	4.956
00::00:12	3.756	3.748	4.386	4.378	4.94	4.897	5.72	5.677	3.751	3.746	4.381	4.376	4.284	4.27	4.974	4.96
00::00:13	3.758	3.75	4.388	4.38	4.945	4.9	5.725	5.68	3.753	3.747	4.383	4.377	4.301	4.274	4.991	4.964
00::00:14	3.761	3.753	4.391	4.383	4.963	4.913	5.743	5.693	3.755	3.749	4.385	4.379	4.313	4.276	5.003	4.966
00::00:15	3.764	3.756	4.394	4.386	4.988	4.916	5.768	5.696	3.757	3.751	4.387	4.381	4.317	4.275	5.007	4.965
00::00:16	3.768	3.759	4.398	4.389	5.005	4.911	5.785	5.691	3.76	3.754	4.39	4.384	4.321	4.274	5.011	4.964
00::00:17	3.773	3.763	4.403	4.393	5.02	4.911	5.8	5.691	3.763	3.757	4.393	4.387	4.324	4.274	5.014	4.964
00::00:18	3.777	3.767	4.407	4.397	5.033	4.916	5.813	5.696	3.766	3.76	4.396	4.39	4.326	4.275	5.016	4.965
00::00:19	3.781	3.771	4.411	4.401	5.035	4.919	5.815	5.699	3.769	3.763	4.399	4.393	4.331	4.278	5.021	4.968
00::00:20	3.786	3.775	4.416	4.405	5.036	4.923	5.816	5.703	3.773	3.766	4.403	4.396	4.338	4.28	5.028	4.97
00::00:21	3.792	3.779	4.422	4.409	5.033	4.932	5.813	5.712	3.777	3.769	4.407	4.399	4.343	4.282	5.033	4.972
00::00:22	3.798	3.783	4.428	4.413	5.027	4.94	5.807	5.72	3.781	3.772	4.411	4.402	4.349	4.286	5.039	4.976
00::00:23	3.804	3.787	4.434	4.417	5.035	4.948	5.815	5.728	3.786	3.775	4.416	4.405	4.352	4.291	5.042	4.981
00::00:24	3.809	3.79	4.439	4.42	5.037	4.955	5.817	5.735	3.79	3.778	4.42	4.408	4.352	4.295	5.042	4.985
00::00:25	3.815	3.793	4.445	4.423	5.044	4.962	5.824	5.742	3.794	3.78	4.424	4.41	4.355	4.298	5.045	4.988
00::00:26	3.82	3.796	4.45	4.426	5.054	4.968	5.834	5.748	3.798	3.782	4.428	4.412	4.361	4.302	5.051	4.992
00::00:27	3.825	3.798	4.455	4.428	5.062	4.974	5.842	5.754	3.802	3.784	4.432	4.414	4.366	4.306	5.056	4.996
00::00:28	3.83	3.8	4.46	4.43	5.071	4.98	5.851	5.76	3.805	3.785	4.435	4.415	4.372	4.31	5.062	5
00::00:29	3.835	3.801	4.465	4.431	5.078	4.985	5.858	5.765	3.808	3.787	4.438	4.417	4.379	4.315	5.069	5.005
00::00:30	3.841	3.802	4.471	4.432	5.085	4.99	5.865	5.77	3.811	3.788	4.441	4.418	4.388	4.32	5.078	5.01
00::00:31	3.845	3.803	4.475	4.433	5.095	4.996	5.875	5.776	3.815	3.789	4.445	4.419	4.398	4.325	5.088	5.015
00::00:32	3.85	3.804	4.48	4.434	5.106	5.001	5.886	5.781	3.819	3.79	4.449	4.42	4.407	4.33	5.097	5.02
00::00:33	3.854	3.805	4.484	4.435	5.117	5.008	5.897	5.788	3.822	3.79	4.452	4.42	4.415	4.334	5.105	5.024
00::00:34	3.859	3.807	4.489	4.437	5.13	5.015	5.91	5.795	3.825	3.791	4.455	4.421	4.423	4.339	5.113	5.029
00::00:35	3.862	3.808	4.492	4.438	5.139	5.022	5.919	5.802	3.827	3.792	4.457	4.422	4.431	4.343	5.121	5.033
00::00:36	3.864	3.809	4.494	4.439	5.144	5.029	5.924	5.809	3.829	3.792	4.459	4.422	4.439	4.347	5.129	5.037
00::00:37	3.866	3.81	4.496	4.44	5.146	5.036	5.926	5.816	3.83	3.793	4.46	4.423	4.443	4.351	5.133	5.041
00::00:38	3.868	3.811	4.498	4.441	5.143	5.043	5.923	5.823	3.832	3.793	4.462	4.423	4.445	4.355	5.135	5.045
00::00:39	3.87	3.813	4.5	4.443	5.14	5.05	5.92	5.83	3.834	3.793	4.464	4.423	4.443	4.36	5.133	5.05
00::00:40	3.872	3.814	4.502	4.444	5.134	5.056	5.914	5.836	3.835	3.794	4.465	4.424	4.44	4.364	5.13	5.054
00::00:41	3.875	3.815	4.505	4.445	5.128	5.062	5.908	5.842	3.835	3.794	4.465	4.424	4.434	4.368	5.124	5.058
00::00:42	3.879	3.816	4.509	4.446	5.125	5.068	5.905	5.848	3.837	3.795	4.467	4.425	4.428	4.372	5.118	5.062
00::00:43	3.884	3.817	4.514	4.447	5.121	5.074	5.901	5.854	3.838	3.796	4.468	4.426	4.421	4.376	5.111	5.066
00::00:44	3.889	3.818	4.519	4.448	5.117	5.079	5.897	5.859	3.84	3.797	4.47	4.427	4.416	4.38	5.106	5.07
00::00:45	3.894	3.82	4.524	4.45	5.116	5.085	5.896	5.865	3.841	3.798	4.471	4.428	4.412	4.383	5.102	5.073
00::00:46	3.901	3.822	4.531	4.452	5.114	5.091	5.894	5.871	3.843	3.799	4.473	4.429	4.409	4.386	5.099	5.076
00::00:47	3.908	3.823	4.538	4.453	5.113	5.096	5.893	5.876	3.846	3.8	4.476	4.43	4.406	4.389	5.096	5.079
00::00:48	3.915	3.825	4.545	4.455	5.113	5.101	5.893	5.881	3.85	3.801	4.48	4.431	4.405	4.392	5.095	5.082
00::00:49	3.92	3.827	4.55	4.457	5.113	5.106	5.893	5.886	3.853	3.802	4.483	4.432	4.403	4.394	5.093	5.084
00::00:50	3.924	3.829	4.554	4.459	5.114	5.11	5.894	5.89	3.857	3.803	4.487	4.433	4.401	4.396	5.091	5.086
00::00:51	3.928	3.831	4.558	4.461	5.115	5.114	5.895	5.894	3.861	3.805	4.491	4.435	4.4	4.398	5.09	5.088
00::00:52	3.932	3.833	4.562	4.463	5.118	5.117	5.898	5.897	3.865	3.806	4.495	4.436	4.399	4.4	5.089	5.09
00::00:53	3.936	3.835	4.566	4.465	5.121	5.121	5.901	5.901	3.869	3.807	4.499	4.437	4.398	4.401	5.088	5.091
00::00:54	3.94	3.837	4.57	4.467	5.123	5.125	5.903	5.905	3.873	3.808	4.503	4.438	4.398	4.403	5.088	5.093
00::00:55	3.944	3.839	4.574	4.469	5.125	5.128	5.905	5.908	3.877	3.809	4.507	4.439	4.399	4.404	5.089	5.094
00::00:56	3.949	3.841	4.579	4.471	5.128	5.131	5.908	5.911	3.88	3.81	4.51	4.44	4.401	4.406	5.091	5.096
00::00:57	3.953	3.844	4.583	4.474	5.13	5.134	5.91	5.914	3.882	3.812	4.512	4.442	4.402	4.407	5.092	5.097
00::00:58	3.957	3.846	4.587	4.476	5.131	5.137	5.911	5.917	3.885	3.813	4.515	4.443	4.403	4.408	5.093	5.098
00::00:59	3.961	3.848	4.591	4.478	5.132	5.14	5.912	5.92	3.887	3.815	4.517	4.445	4.403	4.409	5.093	5.099
00::01:00	3.965	3.85	4.595	4.48	5.133	5.142	5.913	5.922	3.89	3.817	4.52	4.447	4.403	4.409	5.093	5.099
00::01:01	3.97	3.852	4.6	4.482	5.134	5.144	5.914	5.924	3.893	3.818	4.523	4.448	4.403	4.41	5.093	5.1
00::01:02	3.974	3.855	4.604	4.485	5.134	5.146	5.914	5.926	3.896	3.82	4.526	4.45	4.402	4.41	5.092	5.1
00::01:03	3.979	3.857	4.609	4.487	5.134	5.149	5.914	5.929	3.898	3.822	4.528	4.452	4.401	4.411	5.091	5.101
00::01:04	3.984	3.859	4.614	4.489	5.134	5.15	5.914	5.93	3.901	3.823	4.531	4.453	4.401	4.411	5.091	5.101
00::01:05	3.988	3.861	4.618	4.491	5.134	5.152	5.914	5.932	3.904	3.825	4.534	4.455	4.4	4.411	5.09	5.101
00::01:06	3.993	3.863	4.623	4.493	5.134	5.154	5.914	5.934	3.906	3.826	4.536	4.456	4.399	4.411	5.089	5.101
00::01:07	3.997	3.866	4.627	4.496	5.135	5.155	5.915	5.935	3.909	3.827	4.539	4.457	4.398	4.411	5.088	5.101
00::01:08	4.002	3.868	4.632	4.498	5.136	5.156	5.916	5.936	3.912	3.829	4.542	4.459	4.397	4.411	5.087	5.101
00::01:09	4.007	3.87	4.637	4.5	5.138	5.158	5.918	5.938	3.915	3.83	4.545	4.46	4.396	4.411	5.086	5.101
00::01:10	4.012	3.872	4.642	4.502	5.14	5.159	5.92	5.939	3.918	3.832	4.548	4.462	4.395	4.411	5.085	5.101
00::01:11	4.017	3.875	4.647	4.505	5.142	5.159	5.922	5.939	3.921	3.833	4.551	4.463	4.394	4.411	5.084	5.101
00::01:12	4.022	3.877	4.652	4.507	5.144	5.16	5.924	5.94	3.924	3.834	4.554	4.464	4.394	4.41	5.084	5.1
00::01:13	4.027	3.88	4.657	4.51	5.147	5.161	5.927	5.941	3.929	3.836	4.559	4.466	4.394	4.41	5.084	5.1
00::01:14	4.033	3.883	4.663	4.513	5.149	5.162	5.929	5.942	3.932	3.838	4.562	4.468	4.394	4.409	5.084	5.099
00::01:15	4.039	3.885	4.669	4.515	5.152	5.162	5.932	5.942	3.936	3.839	4.566	4.469	4.394	4.409	5.084	5.099
00::01:16	4.044	3.888	4.674	4.518	5.154	5.163	5.934	5.943	3.94	3.841	4.57	4.471	4.394	4.408	5.084	5.098
00::01:17	4.05	3.891	4.68	4.521	5.157	5.164	5.937	5.944	3.944	3.843	4.574	4.473	4.394	4.407	5.084	5.097
00::01:18	4.056	3.894	4.686	4.524	5.159	5.164	5.939	5.944	3.948	3.845	4.578	4.475	4.395	4.406	5.085	5.096
00::01:19	4.062	3.897	4.692	4.527	5.161	5.165	5.941	5.945	3.952	3.847	4.582	4.477	4.395	4.406	5.085	5.096
00::01:20	4.067	3.899	4.697	4.529	5.164	5.166	5.944	5.946	3.956	3.849	4.586	4.479	4.396	4.405	5.086	5.095
00::01:21	4.072	3.902	4.702	4.532	5.166	5.166	5.946	5.946	3.961	3.851	4.591	4.481	4.396	4.404	5.086	5.094
00::01:22	4.077	3.905	4.707	4.535	5.168	5.167	5.948	5.947	3.965	3.853	4.595	4.483	4.397	4.403	5.087	5.093
00::01:23	4.082	3.908	4.712	4.538	5.169	5.168	5.949	5.948	3.97	3.855	4.6	4.485	4.398	4.402	5.088	5.092
00::01:24	4.087	3.911	4.717	4.541	5.171	5.169	5.951	5.949	3.974	3.857	4.604	4.487	4.398	4.401	5.088	5.091
00::01:25	4.093	3.914	4.723	4.544	5.173	5.169	5.953	5.949	3.979	3.859	4.609	4.489	4.399	4.401	5.089	5.091
00::01:26	4.099	3.917	4.729	4.547	5.174	5.17	5.954	5.95	3.984	3.861	4.614	4.491	4.4	4.4	5.09	5.09
00::01:27	4.105	3.92	4.735	4.55	5.175	5.171	5.955	5.951	3.988	3.863	4.618	4.493	4.401	4.399	5.091	5.089
00::01:28	4.111	3.924	4.741	4.554	5.177	5.172	5.957	5.952	3.993	3.865	4.623	4.495	4.402	4.398	5.092	5.088
00::01:29	4.117	3.927	4.747	4.557	5.178	5.173	5.958	5.953	3.998	3.867	4.628	4.497	4.403	4.398	5.093	5.088
00::01:30	4.123	3.931	4.753	4.561	5.18	5.173	5.96	5.953	4.003	3.87	4.633	4.5	4.404	4.397	5.094	5.087
00::01:31	4.128	3.934	4.758	4.564	5.181	5.174	5.961	5.954	4.008	3.872	4.638	4.502	4.405	4.396	5.095	5.086
00::01:32	4.134	3.938	4.764	4.568	5.182	5.175	5.962	5.955	4.014	3.874	4.644	4.504	4.406	4.396	5.096	5.086
00::01:33	4.14	3.941	4.77	4.571	5.184	5.176	5.964	5.956	4.019	3.877	4.649	4.507	4.407	4.395	5.097	5.085
00::01:34	4.147	3.945	4.777	4.575	5.185	5.177	5.965	5.957	4.024	3.879	4.654	4.509	4.409	4.395	5.099	5.085
00::01:35	4.153	3.948	4.783	4.578	5.187	5.178	5.967	5.958	4.029	3.882	4.659	4.512	4.41	4.394	5.1	5.084
00::01:36	4.16	3.952	4.79	4.582	5.188	5.179	5.968	5.959	4.035	3.885	4.665	4.515	4.411	4.394	5.101	5.084
00::01:37	4.167	3.955	4.797	4.585	5.19	5.18	5.97	5.96	4.04	3.887	4.67	4.517	4.413	4.393	5.103	5.083
00::01:38	4.173	3.959	4.803	4.589	5.192	5.181	5.972	5.961	4.046	3.89	4.676	4.52	4.415	4.393	5.105	5.083
00::01:39	4.18	3.962	4.81	4.592	5.194	5.182	5.974	5.962	4.052	3.893	4.682	4.523	4.417	4.393	5.107	5.083
00::01:40	4.187	3.966	4.817	4.596	5.196	5.183	5.976	5.963	4.058	3.896	4.688	4.526	4.419	4.392	5.109	5.082
00::01:41	4.193	3.97	4.823	4.6	5.197	5.184	5.977	5.964	4.063	3.899	4.693	4.529	4.42	4.392	5.11	5.082
00::01:42	4.2	3.973	4.83	4.603	5.199	5.186	5.979	5.966	4.069	3.902	4.699	4.532	4.422	4.392	5.112	5.082
00::01:43	4.207	3.977	4.837	4.607	5.201	5.187	5.981	5.967	4.075	3.905	4.705	4.535	4.424	4.392	5.114	5.082
00::01:44	4.213	3.981	4.843	4.611	5.203	5.188	5.983	5.968	4.081	3.908	4.711	4.538	4.427	4.392	5.117	5.082
00::01:45	4.221	3.984	4.851	4.614	5.205	5.189	5.985	5.969	4.087	3.911	4.717	4.541	4.429	4.392	5.119	5.082
00::01:46	4.227	3.988	4.857	4.618	5.207	5.191	5.987	5.971	4.094	3.915	4.724	4.545	4.432	4.392	5.122	5.082
00::01:47	4.234	3.992	4.864	4.622	5.209	5.192	5.989	5.972	4.1	3.918	4.73	4.548	4.435	4.392	5.125	5.082
00::01:48	4.242	3.996	4.872	4.626	5.211	5.194	5.991	5.974	4.107	3.922	4.737	4.552	4.438	4.393	5.128	5.083
00::01:49	4.249	4	4.879	4.63	5.213	5.195	5.993	5.975	4.114	3.925	4.744	4.555	4.441	4.393	5.131	5.083

00::01:50	4.257	4.004	4.887	4.634	5.215	5.197	5.995	5.977	4.121	3.929	4.751	4.559	4.444	4.394	5.134	5.084
00::01:51	4.264	4.008	4.894	4.638	5.218	5.198	5.998	5.978	4.128	3.933	4.758	4.563	4.448	4.394	5.138	5.084
00::01:52	4.272	4.012	4.902	4.642	5.22	5.2	6	5.98	4.136	3.937	4.766	4.567	4.452	4.395	5.142	5.085
00::01:53	4.28	4.016	4.91	4.646	5.223	5.201	6.003	5.981	4.144	3.942	4.774	4.572	4.456	4.396	5.146	5.086
00::01:54	4.289	4.021	4.919	4.651	5.225	5.203	6.005	5.983	4.152	3.946	4.782	4.576	4.46	4.396	5.15	5.086
00::01:55	4.297	4.025	4.927	4.655	5.228	5.205	6.008	5.985	4.161	3.951	4.791	4.581	4.464	4.398	5.154	5.088
00::01:56	4.306	4.03	4.936	4.66	5.231	5.207	6.011	5.987	4.171	3.956	4.801	4.586	4.469	4.399	5.159	5.089
00::01:57	4.316	4.035	4.946	4.665	5.234	5.209	6.014	5.989	4.181	3.962	4.811	4.592	4.475	4.4	5.165	5.09
00::01:58	4.326	4.041	4.956	4.671	5.238	5.211	6.018	5.991	4.191	3.968	4.821	4.598	4.48	4.402	5.17	5.092
00::01:59	4.337	4.047	4.967	4.677	5.242	5.214	6.022	5.994	4.202	3.975	4.832	4.605	4.487	4.404	5.177	5.094
00::02:00	4.349	4.055	4.979	4.685	5.247	5.217	6.027	5.997	4.214	3.983	4.844	4.613	4.494	4.408	5.184	5.098
00::02:01	4.362	4.065	4.992	4.695	5.252	5.221	6.032	6.001	4.227	3.995	4.857	4.625	4.502	4.413	5.192	5.103
00::02:02	4.376	4.075	5.006	4.705	5.258	5.225	6.038	6.005	4.241	4.006	4.871	4.636	4.511	4.417	5.201	5.107
00::02:03	4.392	4.078	5.022	4.708	5.265	5.225	6.045	6.005	4.257	4.01	4.887	4.64	4.522	4.416	5.212	5.106
00::02:04	4.409	4.076	5.039	4.706	5.273	5.226	6.053	6.006	4.274	4.008	4.904	4.638	4.534	4.414	5.224	5.104
00::02:05	4.426	4.073	5.056	4.703	5.28	5.229	6.06	6.009	4.291	4.003	4.921	4.633	4.545	4.413	5.235	5.103
00::02:06	4.442	4.068	5.072	4.698	5.286	5.231	6.066	6.011	4.309	3.998	4.939	4.628	4.557	4.414	5.247	5.104
00::02:07	4.458	4.07	5.088	4.7	5.291	5.234	6.071	6.014	4.326	3.999	4.956	4.629	4.569	4.415	5.259	5.105
00::02:08	4.473	4.078	5.103	4.708	5.297	5.237	6.077	6.017	4.343	4.007	4.973	4.637	4.58	4.417	5.27	5.107
00::02:09	4.488	4.087	5.118	4.717	5.304	5.241	6.084	6.021	4.359	4.019	4.989	4.649	4.591	4.42	5.281	5.11
00::02:10	4.502	4.096	5.132	4.726	5.31	5.245	6.09	6.025	4.375	4.03	5.005	4.66	4.602	4.423	5.292	5.113
00::02:11	4.515	4.102	5.145	4.732	5.315	5.249	6.095	6.029	4.39	4.038	5.02	4.668	4.612	4.426	5.302	5.116
00::02:12	4.528	4.108	5.158	4.738	5.32	5.252	6.1	6.032	4.405	4.045	5.035	4.675	4.622	4.429	5.312	5.119
00::02:13	4.541	4.114	5.171	4.744	5.324	5.256	6.104	6.036	4.419	4.052	5.049	4.682	4.631	4.432	5.321	5.122
00::02:14	4.552	4.12	5.182	4.75	5.329	5.26	6.109	6.04	4.433	4.058	5.063	4.688	4.64	4.436	5.33	5.126
00::02:15	4.565	4.126	5.195	4.756	5.333	5.263	6.113	6.043	4.447	4.065	5.077	4.695	4.648	4.439	5.338	5.129
00::02:16	4.577	4.133	5.207	4.763	5.336	5.267	6.116	6.047	4.461	4.071	5.091	4.701	4.657	4.442	5.347	5.132
00::02:17	4.589	4.139	5.219	4.769	5.34	5.27	6.12	6.05	4.475	4.077	5.105	4.707	4.665	4.446	5.355	5.136
00::02:18	4.601	4.145	5.231	4.775	5.344	5.273	6.124	6.053	4.487	4.083	5.117	4.713	4.672	4.449	5.362	5.139
00::02:19	4.613	4.15	5.243	4.78	5.348	5.277	6.128	6.057	4.498	4.088	5.128	4.718	4.68	4.452	5.37	5.142
00::02:20	4.623	4.155	5.253	4.785	5.352	5.28	6.132	6.06	4.509	4.092	5.139	4.722	4.686	4.455	5.376	5.145
00::02:21	4.632	4.16	5.262	4.79	5.356	5.284	6.136	6.064	4.519	4.096	5.149	4.726	4.692	4.458	5.382	5.148
00::02:22	4.641	4.165	5.271	4.795	5.359	5.287	6.139	6.067	4.528	4.101	5.158	4.731	4.696	4.461	5.386	5.151
00::02:23	4.652	4.17	5.282	4.8	5.362	5.291	6.142	6.071	4.536	4.105	5.166	4.735	4.7	4.464	5.39	5.154
00::02:24	4.663	4.175	5.293	4.805	5.364	5.294	6.144	6.074	4.543	4.11	5.173	4.74	4.702	4.467	5.392	5.157
00::02:25	4.674	4.181	5.304	4.811	5.365	5.297	6.145	6.077	4.547	4.115	5.177	4.745	4.702	4.47	5.392	5.16
00::02:26	4.683	4.186	5.313	4.816	5.366	5.3	6.146	6.08	4.552	4.12	5.182	4.75	4.701	4.473	5.391	5.163
00::02:27	4.691	4.19	5.321	4.82	5.367	5.303	6.147	6.083	4.555	4.125	5.185	4.755	4.7	4.476	5.39	5.166
00::02:28	4.697	4.195	5.327	4.825	5.368	5.306	6.148	6.086	4.558	4.13	5.188	4.76	4.698	4.479	5.388	5.169
00::02:29	4.702	4.2	5.332	4.83	5.368	5.308	6.148	6.088	4.56	4.134	5.19	4.764	4.696	4.482	5.386	5.172
00::02:30	4.706	4.204	5.336	4.834	5.368	5.311	6.148	6.091	4.561	4.139	5.191	4.769	4.694	4.485	5.384	5.175
00::02:31	4.71	4.208	5.34	4.838	5.368	5.314	6.148	6.094	4.563	4.143	5.193	4.773	4.691	4.488	5.381	5.178
00::02:32	4.713	4.213	5.343	4.843	5.368	5.316	6.148	6.096	4.565	4.147	5.195	4.777	4.688	4.49	5.378	5.18
00::02:33	4.717	4.217	5.347	4.847	5.368	5.318	6.148	6.098	4.569	4.15	5.199	4.78	4.686	4.492	5.376	5.182
00::02:34	4.72	4.221	5.35	4.851	5.368	5.32	6.148	6.1	4.572	4.154	5.202	4.784	4.684	4.495	5.374	5.185
00::02:35	4.723	4.225	5.353	4.855	5.367	5.322	6.147	6.102	4.575	4.157	5.205	4.787	4.682	4.497	5.372	5.187
00::02:36	4.726	4.228	5.356	4.858	5.367	5.324	6.147	6.104	4.578	4.16	5.208	4.79	4.681	4.499	5.371	5.189
00::02:37	4.729	4.232	5.359	4.862	5.366	5.325	6.146	6.105	4.579	4.163	5.209	4.793	4.68	4.5	5.37	5.19
00::02:38	4.732	4.235	5.362	4.865	5.364	5.327	6.144	6.107	4.581	4.165	5.211	4.795	4.678	4.502	5.368	5.192
00::02:39	4.734	4.239	5.364	4.869	5.363	5.328	6.143	6.108	4.581	4.168	5.211	4.798	4.677	4.504	5.367	5.194
00::02:40	4.737	4.242	5.367	4.872	5.361	5.33	6.141	6.11	4.581	4.17	5.211	4.8	4.676	4.505	5.366	5.195
00::02:41	4.739	4.245	5.369	4.875	5.36	5.331	6.14	6.111	4.581	4.173	5.211	4.803	4.674	4.506	5.364	5.196
00::02:42	4.741	4.248	5.371	4.878	5.358	5.332	6.138	6.112	4.58	4.175	5.21	4.805	4.672	4.508	5.362	5.198
00::02:43	4.742	4.251	5.372	4.881	5.356	5.332	6.136	6.112	4.58	4.176	5.21	4.806	4.67	4.509	5.36	5.199
00::02:44	4.743	4.254	5.373	4.884	5.354	5.333	6.134	6.113	4.579	4.178	5.209	4.808	4.667	4.51	5.357	5.2
00::02:45	4.744	4.257	5.374	4.887	5.352	5.333	6.132	6.113	4.578	4.18	5.208	4.81	4.664	4.511	5.354	5.201
00::02:46	4.745	4.26	5.375	4.89	5.349	5.334	6.129	6.114	4.577	4.181	5.207	4.811	4.661	4.511	5.351	5.201
00::02:47	4.745	4.262	5.375	4.892	5.347	5.334	6.127	6.114	4.577	4.183	5.207	4.813	4.657	4.512	5.347	5.202
00::02:48	4.745	4.265	5.375	4.895	5.345	5.334	6.125	6.114	4.576	4.184	5.206	4.814	4.653	4.512	5.343	5.202
00::02:49	4.745	4.267	5.375	4.897	5.343	5.334	6.123	6.114	4.575	4.186	5.205	4.816	4.649	4.513	5.339	5.203
00::02:50	4.745	4.27	5.375	4.9	5.341	5.334	6.121	6.114	4.575	4.187	5.205	4.817	4.645	4.513	5.335	5.203
00::02:51	4.744	4.272	5.374	4.902	5.339	5.334	6.119	6.114	4.574	4.189	5.204	4.819	4.641	4.514	5.331	5.204
00::02:52	4.744	4.274	5.374	4.904	5.337	5.334	6.117	6.114	4.573	4.19	5.203	4.82	4.637	4.514	5.327	5.204
00::02:53	4.743	4.277	5.373	4.907	5.335	5.333	6.115	6.113	4.572	4.191	5.202	4.821	4.634	4.514	5.324	5.204
00::02:54	4.742	4.279	5.372	4.909	5.333	5.333	6.113	6.113	4.572	4.192	5.202	4.822	4.63	4.514	5.32	5.204
00::02:55	4.742	4.281	5.372	4.911	5.331	5.332	6.111	6.112	4.572	4.193	5.202	4.823	4.627	4.514	5.317	5.204
00::02:56	4.741	4.283	5.371	4.913	5.329	5.332	6.109	6.112	4.571	4.194	5.201	4.824	4.624	4.514	5.314	5.204
00::02:57	4.74	4.285	5.37	4.915	5.328	5.331	6.108	6.111	4.57	4.195	5.2	4.825	4.621	4.514	5.311	5.204
00::02:58	4.74	4.287	5.37	4.917	5.326	5.33	6.106	6.11	4.569	4.196	5.199	4.826	4.617	4.513	5.307	5.203
00::02:59	4.739	4.289	5.369	4.919	5.324	5.329	6.104	6.109	4.567	4.197	5.197	4.827	4.614	4.513	5.304	5.203
00::03:00	4.739	4.291	5.369	4.921	5.322	5.328	6.102	6.108	4.565	4.198	5.195	4.828	4.611	4.513	5.301	5.203
00::03:01	4.738	4.293	5.368	4.923	5.321	5.327	6.101	6.107	4.562	4.199	5.192	4.829	4.609	4.512	5.299	5.202
00::03:02	4.737	4.295	5.367	4.925	5.319	5.326	6.099	6.106	4.56	4.199	5.19	4.829	4.606	4.512	5.296	5.202
00::03:03	4.736	4.297	5.366	4.927	5.318	5.325	6.098	6.105	4.557	4.2	5.187	4.83	4.603	4.511	5.293	5.201
00::03:04	4.735	4.298	5.365	4.928	5.316	5.324	6.096	6.104	4.554	4.201	5.184	4.831	4.601	4.51	5.291	5.2
00::03:05	4.733	4.3	5.363	4.93	5.315	5.323	6.095	6.103	4.551	4.202	5.181	4.832	4.599	4.51	5.289	5.2
00::03:06	4.732	4.302	5.362	4.932	5.313	5.322	6.093	6.102	4.548	4.203	5.178	4.833	4.596	4.509	5.286	5.199
00::03:07	4.73	4.303	5.36	4.933	5.311	5.321	6.091	6.101	4.545	4.204	5.175	4.834	4.594	4.508	5.284	5.198
00::03:08	4.728	4.305	5.358	4.935	5.31	5.319	6.09	6.099	4.542	4.205	5.172	4.835	4.592	4.508	5.282	5.198
00::03:09	4.726	4.307	5.356	4.937	5.308	5.318	6.088	6.098	4.539	4.206	5.169	4.836	4.59	4.507	5.28	5.197
00::03:10	4.724	4.308	5.354	4.938	5.307	5.317	6.087	6.097	4.536	4.206	5.166	4.836	4.588	4.506	5.278	5.196
00::03:11	4.722	4.309	5.352	4.939	5.305	5.316	6.085	6.096	4.533	4.207	5.163	4.837	4.586	4.505	5.276	5.195
00::03:12	4.72	4.311	5.35	4.941	5.303	5.314	6.083	6.094	4.53	4.208	5.16	4.838	4.584	4.504	5.274	5.194
00::03:13	4.717	4.312	5.347	4.942	5.302	5.313	6.082	6.093	4.527	4.208	5.157	4.838	4.581	4.503	5.271	5.193
00::03:14	4.715	4.314	5.345	4.944	5.3	5.312	6.08	6.092	4.524	4.209	5.154	4.839	4.579	4.502	5.269	5.192
00::03:15	4.712	4.315	5.342	4.945	5.299	5.31	6.079	6.09	4.521	4.209	5.151	4.839	4.577	4.501	5.267	5.191
00::03:16	4.71	4.316	5.34	4.946	5.297	5.309	6.077	6.089	4.518	4.209	5.148	4.839	4.574	4.5	5.264	5.19
00::03:17	4.707	4.317	5.337	4.947	5.296	5.308	6.076	6.088	4.515	4.21	5.145	4.84	4.571	4.499	5.261	5.189
00::03:18	4.705	4.319	5.335	4.949	5.294	5.306	6.074	6.086	4.511	4.21	5.141	4.84	4.569	4.498	5.259	5.188
00::03:19	4.702	4.32	5.332	4.95	5.293	5.305	6.073	6.085	4.508	4.21	5.138	4.84	4.567	4.497	5.257	5.187
00::03:20	4.699	4.321	5.329	4.951	5.291	5.304	6.071	6.084	4.505	4.211	5.135	4.841	4.564	4.496	5.254	5.186
00::03:21	4.696	4.322	5.326	4.952	5.289	5.302	6.069	6.082	4.502	4.211	5.132	4.841	4.562	4.495	5.252	5.185
00::03:22	4.694	4.323	5.324	4.953	5.288	5.301	6.068	6.081	4.499	4.211	5.129	4.841	4.56	4.494	5.25	5.184
00::03:23	4.691	4.323	5.321	4.953	5.286	5.3	6.066	6.08	4.496	4.211	5.126	4.841	4.557	4.492	5.247	5.182
00::03:24	4.688	4.324	5.318	4.954	5.285	5.298	6.065	6.078	4.493	4.211	5.123	4.841	4.555	4.491	5.245	5.181
00::03:25	4.685	4.325	5.315	4.955	5.283	5.297	6.063	6.077	4.49	4.211	5.12	4.841	4.553	4.49	5.243	5.18
00::03:26	4.682	4.326	5.312	4.956	5.282	5.296	6.062	6.076	4.486	4.211	5.116	4.841	4.55	4.489	5.24	5.179
00::03:27	4.679	4.327	5.309	4.957	5.281	5.295	6.061	6.075	4.483	4.211	5.113	4.841	4.548	4.488	5.238	5.178
00::03:28	4.677	4.327	5.307	4.957	5.279	5.293	6.059	6.073	4.48	4.211	5.11	4.841	4.546	4.486	5.236	5.176
00::03:29	4.674	4.328	5.304	4.958	5.278	5.292	6.058	6.072	4.477	4.21	5.107	4.84	4.544	4.485	5.234	5.175
00::03:30	4.671	4.329	5.301	4.959	5.277	5.291	6.057	6.071	4.474	4.21	5.104	4.84	4.542	4.484	5.232	5.174
00::03:31	4.668	4.329	5.298	4.959	5.275	5.289	6.055	6.069	4.471	4.21	5.101	4.84	4.54	4.483	5.23	5.173
00::03:32	4.665	4.33	5.295	4.96	5.274	5.288	6.054	6.068	4.468	4.21	5.098	4.84	4.538	4.481	5.228	5.171
00::03:33	4.662	4.33	5.292	4.96	5.272	5.287	6.052	6.067	4.464	4.209	5.094	4.839	4.536	4.48	5.226	5.17
00::03:34	4.66	4.331	5.29	4.961	5.271	5.286	6.051	6.066	4.462	4.209	5.092	4.839	4.534	4.479	5.224	5.169
00::03:35	4.657	4.331	5.287	4.961	5.27	5.285	6.05	6.065	4.459	4.208	5.089	4.838	4.532	4.478	5.222	5.168
00::03:36	4.654	4.332	5.284	4.962	5.268	5.283	6.048	6.063	4.456	4.208	5.086	4.838	4.53	4.476	5.22	5.166
00::03:37	4.652	4.332	5.282	4.962	5.268	5.282	6.048	6.062	4.453	4.208	5.083	4.838	4.528	4.475	5.218	5.165
00::03:38	4.649	4.332	5.279	4.962	5.266	5.281	6.046	6.061	4.45	4.207	5.08	4.837	4.526	4.474	5.216	5.164
00::03:39	4.647	4.332	5.277	4.962	5.265	5.28	6.045	6.06	4.447	4.207	5.077	4.837	4.524	4.472	5.214	5.162
00::03:40	4.645	4.333	5.275	4.963	5.264	5.279	6.044	6.059	4.444	4.206	5.074	4.836	4.522	4.471	5.212	5.161
00::03:41	4.642	4.333	5.272	4.963	5.262	5.277	6.042	6.057	4.441	4.206	5.071	4.836	4.521	4.47	5.211	5.16
00::03:42	4.64	4.333	5.27	4.963	5.261	5.276	6.041	6.056	4.438	4.205	5.068	4.835	4.518	4.468	5.208	5.158
00::03:43	4.638	4.333	5.268	4.963	5.26	5.275	6.04	6.055	4.436	4.204	5.066	4.834	4.517	4.467	5.207	5.157
00::03:44	4.636	4.333	5.266	4.963	5.259	5.274	6.039	6.054	4.433	4.204	5.063	4.834	4.515	4.466	5.205	5.156
00::03:45	4.633	4.333	5.263	4.963	5.258	5.273	6.038	6.053	4.43	4.203	5.06	4.833	4.513	4.464	5.203	5.154
00::03:46	4.631	4.333	5.261	4.963	5.257	5.272	6.037	6.052	4.427	4.202	5.057	4.832	4.511	4.463	5.201	5.153
00::03:47	4.629	4.333	5.259	4.963	5.256	5.271	6.036	6.051	4.424	4.202	5.054	4.832	4.509	4.462	5.199	5.152
00::03:48	4.627	4.333	5.257	4.963	5.255	5.269	6.035	6.049	4.422	4.201	5.052	4.831	4.508	4.46	5.198	5.15
00::03:49	4.625	4.333	5.255	4.963	5.253	5.268	6.033	6.048	4.419	4.2	5.049	4.83	4.506	4.459	5.196	5.149
00::03:50	4.623	4.333	5.253	4.963	5.252	5.267	6.032	6.047	4.416	4.199	5.046	4.829	4.504	4.458	5.194	5.148
00::03:51	4.621	4.333	5.251	4.963	5.251	5.266	6.031	6.046	4.414	4.199	5.044	4.829	4.502	4.456	5.192	5.146
00::03:52	4.619	4.333	5.249	4.963	5.25	5.265	6.03	6.045	4.411	4.198	5.041	4.828	4.5	4.455	5.19	5.145
00::03:53	4.617	4.333	5.247	4.963	5.249	5.264	6.029	6.044	4.408	4.197	5.038	4.827	4.499	4.454	5.189	5.144
00::03:54	4.615	4.333	5.245	4.963	5.248	5.263	6.028	6.043	4.405	4.196	5.035	4.826	4.497	4.452	5.187	5.142

00::03:55	4.613	4.333	5.243	4.963	5.247	5.262	6.027	6.042	4.403	4.195	5.033	4.825	4.495	4.451	5.185	5.141
00::03:56	4.611	4.332	5.241	4.962	5.246	5.261	6.026	6.041	4.4	4.195	5.03	4.825	4.493	4.45	5.183	5.14
00::03:57	4.609	4.332	5.239	4.962	5.246	5.26	6.026	6.04	4.398	4.194	5.028	4.824	4.491	4.448	5.181	5.138
00::03:58	4.607	4.332	5.237	4.962	5.244	5.259	6.024	6.039	4.395	4.193	5.025	4.823	4.49	4.447	5.18	5.137
00::03:59	4.605	4.332	5.235	4.962	5.243	5.258	6.023	6.038	4.393	4.192	5.023	4.822	4.488	4.446	5.178	5.136
00::04:00	4.603	4.331	5.233	4.961	5.242	5.257	6.022	6.037	4.391	4.191	5.021	4.821	4.486	4.444	5.176	5.134
00::04:01	4.601	4.331	5.231	4.961	5.241	5.256	6.021	6.036	4.388	4.19	5.018	4.82	4.485	4.443	5.175	5.133
00::04:02	4.599	4.329	5.229	4.959	5.24	5.254	6.02	6.034	4.386	4.188	5.016	4.818	4.483	4.441	5.173	5.131
00::04:03	4.596	4.326	5.226	4.956	5.239	5.252	6.019	6.032	4.383	4.184	5.013	4.814	4.481	4.438	5.171	5.128
00::04:04	4.593	4.324	5.223	4.954	5.238	5.251	6.018	6.031	4.38	4.181	5.01	4.811	4.479	4.436	5.169	5.126
00::04:05	4.59	4.322	5.22	4.952	5.236	5.25	6.016	6.03	4.376	4.179	5.006	4.809	4.476	4.435	5.166	5.125
00::04:06	4.585	4.322	5.215	4.952	5.234	5.249	6.014	6.029	4.372	4.178	5.002	4.808	4.474	4.433	5.164	5.123
00::04:07	4.581	4.322	5.211	4.952	5.232	5.248	6.012	6.028	4.367	4.178	4.997	4.808	4.471	4.432	5.161	5.122
00::04:08	4.576	4.322	5.206	4.952	5.23	5.247	6.01	6.027	4.362	4.178	4.992	4.808	4.467	4.431	5.157	5.121
00::04:09	4.57	4.321	5.2	4.951	5.229	5.245	6.009	6.025	4.357	4.177	4.987	4.807	4.464	4.429	5.154	5.119
00::04:10	4.565	4.32	5.195	4.95	5.226	5.244	6.006	6.024	4.352	4.175	4.982	4.805	4.46	4.428	5.15	5.118
00::04:11	4.558	4.319	5.188	4.949	5.224	5.243	6.004	6.023	4.346	4.173	4.976	4.803	4.456	4.426	5.146	5.116
00::04:12	4.551	4.318	5.181	4.948	5.221	5.242	6.001	6.022	4.339	4.171	4.969	4.801	4.452	4.425	5.142	5.115
00::04:13	4.544	4.317	5.174	4.947	5.218	5.24	5.998	6.02	4.333	4.17	4.963	4.8	4.448	4.423	5.138	5.113
00::04:14	4.536	4.315	5.166	4.945	5.216	5.239	5.996	6.019	4.327	4.168	4.957	4.798	4.444	4.422	5.134	5.112
00::04:15	4.528	4.314	5.158	4.944	5.213	5.237	5.993	6.017	4.32	4.166	4.95	4.796	4.44	4.42	5.13	5.11
00::04:16	4.521	4.312	5.151	4.942	5.211	5.235	5.991	6.015	4.314	4.163	4.944	4.793	4.436	4.418	5.126	5.108
00::04:17	4.512	4.311	5.142	4.941	5.208	5.234	5.988	6.014	4.307	4.161	4.937	4.791	4.431	4.416	5.121	5.106
00::04:18	4.503	4.309	5.133	4.939	5.205	5.232	5.985	6.012	4.3	4.158	4.93	4.788	4.427	4.414	5.117	5.104
00::04:19	4.493	4.307	5.123	4.937	5.202	5.231	5.982	6.011	4.293	4.155	4.923	4.785	4.422	4.412	5.112	5.102
00::04:20	4.484	4.305	5.114	4.935	5.2	5.229	5.98	6.009	4.285	4.152	4.915	4.782	4.417	4.41	5.107	5.1
00::04:21	4.473	4.303	5.103	4.933	5.197	5.227	5.977	6.007	4.276	4.148	4.906	4.778	4.413	4.407	5.103	5.097
00::04:22	4.462	4.301	5.092	4.931	5.194	5.225	5.974	6.005	4.267	4.145	4.897	4.775	4.407	4.405	5.097	5.095
00::04:23	4.45	4.299	5.08	4.929	5.191	5.223	5.971	6.003	4.257	4.141	4.887	4.771	4.402	4.402	5.092	5.092
00::04:24	4.438	4.296	5.068	4.926	5.187	5.222	5.967	6.002	4.246	4.137	4.876	4.767	4.396	4.4	5.086	5.09
00::04:25	4.425	4.294	5.055	4.924	5.184	5.22	5.964	6	4.234	4.133	4.864	4.763	4.39	4.397	5.08	5.087
00::04:26	4.411	4.291	5.041	4.921	5.181	5.218	5.961	5.998	4.221	4.129	4.851	4.759	4.383	4.395	5.073	5.085
00::04:27	4.396	4.289	5.026	4.919	5.176	5.216	5.956	5.996	4.207	4.124	4.837	4.754	4.376	4.392	5.066	5.082
00::04:28	4.382	4.286	5.012	4.916	5.172	5.214	5.952	5.994	4.193	4.12	4.823	4.75	4.369	4.389	5.059	5.079
00::04:29	4.367	4.283	4.997	4.913	5.168	5.211	5.948	5.991	4.178	4.115	4.808	4.745	4.361	4.387	5.051	5.077
00::04:30	4.353	4.28	4.983	4.91	5.163	5.209	5.943	5.989	4.163	4.111	4.793	4.741	4.353	4.384	5.043	5.074
00::04:31	4.338	4.276	4.968	4.906	5.158	5.207	5.938	5.987	4.148	4.106	4.778	4.736	4.346	4.381	5.036	5.071
00::04:32	4.324	4.273	4.954	4.903	5.153	5.205	5.933	5.985	4.132	4.101	4.762	4.731	4.338	4.378	5.028	5.068
00::04:33	4.31	4.269	4.94	4.899	5.148	5.203	5.928	5.983	4.116	4.096	4.746	4.726	4.331	4.375	5.021	5.065
00::04:34	4.296	4.264	4.926	4.894	5.144	5.2	5.924	5.98	4.1	4.091	4.73	4.721	4.324	4.372	5.014	5.062
00::04:35	4.28	4.259	4.91	4.889	5.14	5.198	5.92	5.978	4.085	4.086	4.715	4.716	4.317	4.369	5.007	5.059
00::04:36	4.266	4.254	4.896	4.884	5.136	5.196	5.916	5.976	4.069	4.081	4.699	4.711	4.31	4.366	5	5.056
00::04:37	4.25	4.249	4.88	4.879	5.132	5.193	5.912	5.973	4.054	4.075	4.684	4.705	4.304	4.363	4.994	5.053
00::04:38	4.234	4.243	4.864	4.873	5.129	5.191	5.909	5.971	4.039	4.07	4.669	4.7	4.299	4.359	4.989	5.049
00::04:39	4.22	4.237	4.85	4.867	5.126	5.189	5.906	5.969	4.025	4.065	4.655	4.695	4.293	4.356	4.983	5.046
00::04:40	4.206	4.231	4.836	4.861	5.123	5.186	5.903	5.966	4.011	4.059	4.641	4.689	4.289	4.353	4.979	5.043
00::04:41	4.192	4.226	4.822	4.856	5.121	5.184	5.901	5.964	3.997	4.054	4.627	4.684	4.285	4.35	4.975	5.04
00::04:42	4.179	4.22	4.809	4.85	5.119	5.181	5.899	5.961	3.985	4.048	4.615	4.678	4.281	4.347	4.971	5.037
00::04:43	4.166	4.214	4.796	4.844	5.117	5.179	5.897	5.959	3.973	4.043	4.603	4.673	4.278	4.344	4.968	5.034
00::04:44	4.153	4.208	4.783	4.838	5.116	5.177	5.896	5.957	3.961	4.037	4.591	4.667	4.275	4.341	4.965	5.031
00::04:45	4.141	4.202	4.771	4.832	5.115	5.174	5.895	5.954	3.95	4.032	4.58	4.662	4.272	4.338	4.962	5.028
00::04:46	4.128	4.195	4.758	4.825	5.114	5.172	5.894	5.952	3.94	4.026	4.57	4.656	4.27	4.336	4.96	5.026
00::04:47	4.116	4.189	4.746	4.819	5.113	5.169	5.893	5.949	3.93	4.02	4.56	4.65	4.268	4.333	4.958	5.023
00::04:48	4.104	4.183	4.734	4.813	5.112	5.167	5.892	5.947	3.92	4.015	4.55	4.645	4.266	4.33	4.956	5.02
00::04:49	4.093	4.177	4.723	4.807	5.111	5.165	5.891	5.945	3.91	4.009	4.54	4.639	4.265	4.328	4.955	5.018
00::04:50	4.081	4.171	4.711	4.801	5.11	5.162	5.89	5.942	3.901	4.004	4.531	4.634	4.264	4.325	4.954	5.015
00::04:51	4.07	4.164	4.7	4.794	5.109	5.16	5.889	5.94	3.891	3.998	4.521	4.628	4.264	4.323	4.954	5.013
00::04:52	4.059	4.158	4.689	4.788	5.109	5.158	5.889	5.938	3.882	3.993	4.512	4.623	4.263	4.32	4.953	5.01
00::04:53	4.049	4.152	4.679	4.782	5.108	5.155	5.888	5.935	3.873	3.987	4.503	4.617	4.263	4.318	4.953	5.008
00::04:54	4.038	4.145	4.668	4.775	5.107	5.153	5.887	5.933	3.863	3.982	4.493	4.612	4.263	4.316	4.953	5.006
00::04:55	4.027	4.139	4.657	4.769	5.106	5.151	5.886	5.931	3.854	3.977	4.484	4.607	4.263	4.314	4.953	5.004
00::04:56	4.017	4.133	4.647	4.763	5.106	5.149	5.886	5.929	3.845	3.972	4.475	4.602	4.263	4.312	4.953	5.002
00::04:57	4.007	4.126	4.637	4.756	5.105	5.147	5.885	5.927	3.837	3.967	4.467	4.597	4.263	4.31	4.953	5
00::04:58	3.996	4.12	4.626	4.75	5.104	5.144	5.884	5.924	3.829	3.961	4.459	4.591	4.263	4.308	4.953	4.998
00::04:59	3.986	4.113	4.616	4.743	5.104	5.142	5.884	5.922	3.82	3.956	4.45	4.586	4.263	4.306	4.953	4.996
00::05:00	3.975	4.107	4.605	4.737	5.103	5.14	5.883	5.92	3.813	3.951	4.443	4.581	4.263	4.304	4.953	4.994

InfoWorks Model - Inflow and Level Boundaries



Extg 50yr
Case A

ID N49-4
ground (m AD) 2.732
max level (m AD) 4.841

ID N49-3
ground (m AD) 2.680
max level (m AD) 4.841

ID N49-2
ground (m AD) 2.559
max level (m AD) 4.841

ID N49-1
ground (m AD) 2.505
max level (m AD) 4.841

ID SLH1004802
ground (m AD) 5.150
max level (m AD) 5.929

ID SMH4048627
ground (m AD) 3.960
max level (m AD) 5.923

ID 822983834821
ground (m AD) 4.676
max level (m AD) 5.232

ID 822976834782
ground (m AD) 5.080
max level (m AD) 5.264

ID 823015835036
ground (m AD) 5.194
max level (m AD) 5.211

ID 823035834982
ground (m AD) 5.113
max level (m AD) 5.208

ID 822941834692
ground (m AD) 5.173
max level (m AD) 5.267

ID SGJ1013281
ground (m AD) 5.408
max level (m AD) 5.243

ID 822924834669
ground (m AD) 5.207
max level (m AD) 5.267

ID 822916834655
ground (m AD) 5.238
max level (m AD) 5.294

ID 822881834610
ground (m AD) 5.268
max level (m AD) 5.295

ID 822838834568
ground (m AD) 5.301
max level (m AD) 5.298

ID 822765834544
ground (m AD) 5.327
max level (m AD) 5.300

ID 822615834565
ground (m AD) 5.354
max level (m AD) 5.307

ID 822667834568
ground (m AD) 5.345
max level (m AD) 5.303

ID 822542834506
ground (m AD) 5.370
max level (m AD) 5.311

ID 822557834527
ground (m AD) 5.366
max level (m AD) 5.310

ID 822527834420
ground (m AD) 5.820
max level (m AD) 5.314

Extg 50yr Case B

ID N49-4
ground (m AD) 2.732
max level (m AD) 5.216

ID N49-3
ground (m AD) 2.680
max level (m AD) 5.271

ID N49-2
ground (m AD) 2.559
max level (m AD) 5.330

ID N49-1
ground (m AD) 2.505
max level (m AD) 5.336

ID SLH1004802
ground (m AD) 5.150
max level (m AD) 5.886

ID SMH4048627
ground (m AD) 3.960
max level (m AD) 5.879

ID 822983834821
ground (m AD) 4.676
max level (m AD) 5.407

ID 822976834782
ground (m AD) 5.080
max level (m AD) 5.431

ID 823015835036
ground (m AD) 5.194
max level (m AD) 5.392

ID 823035834982
ground (m AD) 5.113
max level (m AD) 5.391

ID 822941834692
ground (m AD) 5.173
max level (m AD) 5.434

ID SGJ1013281
ground (m AD) 5.408
max level (m AD) 5.414

ID 822924834669
ground (m AD) 5.207
max level (m AD) 5.435

ID 822916834655
ground (m AD) 5.238
max level (m AD) 5.455

ID 822881834610
ground (m AD) 5.268
max level (m AD) 5.457

ID 822838834568
ground (m AD) 5.301
max level (m AD) 5.459

ID 822765834544
ground (m AD) 5.327
max level (m AD) 5.462

ID 822667834568
ground (m AD) 5.345
max level (m AD) 5.465

ID 822615834565
ground (m AD) 5.354
max level (m AD) 5.469

ID 822557834527
ground (m AD) 5.366
max level (m AD) 5.472

ID 822542834506
ground (m AD) 5.370
max level (m AD) 5.473

ID 822527834420
ground (m AD) 5.820
max level (m AD) 5.477

Extg 200yr Case A

ID N49-4
ground (m AD) 2.732
max level (m AD) 4.963

ID N49-3
ground (m AD) 2.680
max level (m AD) 4.963

ID N49-2
ground (m AD) 2.559
max level (m AD) 4.963

ID N49-1
ground (m AD) 2.505
max level (m AD) 4.963

ID SLH1004802
ground (m AD) 5.150
max level (m AD) 6.165

ID SMH4048627
ground (m AD) 3.960
max level (m AD) 6.162

ID 822983834821
ground (m AD) 4.676
max level (m AD) 5.402

ID 822976834782
ground (m AD) 5.080
max level (m AD) 5.435

ID 823015835036
ground (m AD) 5.194
max level (m AD) 5.375

ID 823035834982
ground (m AD) 5.113
max level (m AD) 5.370

ID 822941834692
ground (m AD) 5.173
max level (m AD) 5.437

ID SGJ1013281
ground (m AD) 5.408
max level (m AD) 5.416

ID 822924834669
ground (m AD) 5.207
max level (m AD) 5.438

ID 822916834655
ground (m AD) 5.238
max level (m AD) 5.464

ID 822881834610
ground (m AD) 5.268
max level (m AD) 5.465

ID 822838834568
ground (m AD) 5.301
max level (m AD) 5.468

ID 822765834544
ground (m AD) 5.327
max level (m AD) 5.470

ID 822615834565
ground (m AD) 5.354
max level (m AD) 5.476

ID 822667834568
ground (m AD) 5.345
max level (m AD) 5.473

ID 822557834527
ground (m AD) 5.366
max level (m AD) 5.479

ID 822542834506
ground (m AD) 5.370
max level (m AD) 5.481

ID 822527834420
ground (m AD) 5.820
max level (m AD) 5.484

Extg 200yr Case B

ID N49-4
ground (m AD) 2.732
max level (m AD) 6.301

ID N49-3
ground (m AD) 2.680
max level (m AD) 6.520

ID N49-2
ground (m AD) 2.559
max level (m AD) 6.754

ID N49-1
ground (m AD) 2.505
max level (m AD) 6.779

ID SLH1004802
ground (m AD) 5.150
max level (m AD) 6.547

ID SMH4048627
ground (m AD) 3.960
max level (m AD) 6.546

ID 822983834821
ground (m AD) 4.676
max level (m AD) 6.160

ID 822976834782
ground (m AD) 5.080
max level (m AD) 6.183

ID 823015835036
ground (m AD) 5.194
max level (m AD) 6.148

ID 823035834982
ground (m AD) 5.113
max level (m AD) 6.146

ID 822941834692
ground (m AD) 5.173
max level (m AD) 6.184

ID SGJ1013281
ground (m AD) 5.408
max level (m AD) 6.169

ID 822924834669
ground (m AD) 5.207
max level (m AD) 6.184

ID 822916834655
ground (m AD) 5.238
max level (m AD) 6.198

ID 822881834610
ground (m AD) 5.268
max level (m AD) 6.198

ID 822838834568
ground (m AD) 5.301
max level (m AD) 6.199

ID 822765834544
ground (m AD) 5.327
max level (m AD) 6.200

ID 822667834568
ground (m AD) 5.345
max level (m AD) 6.202

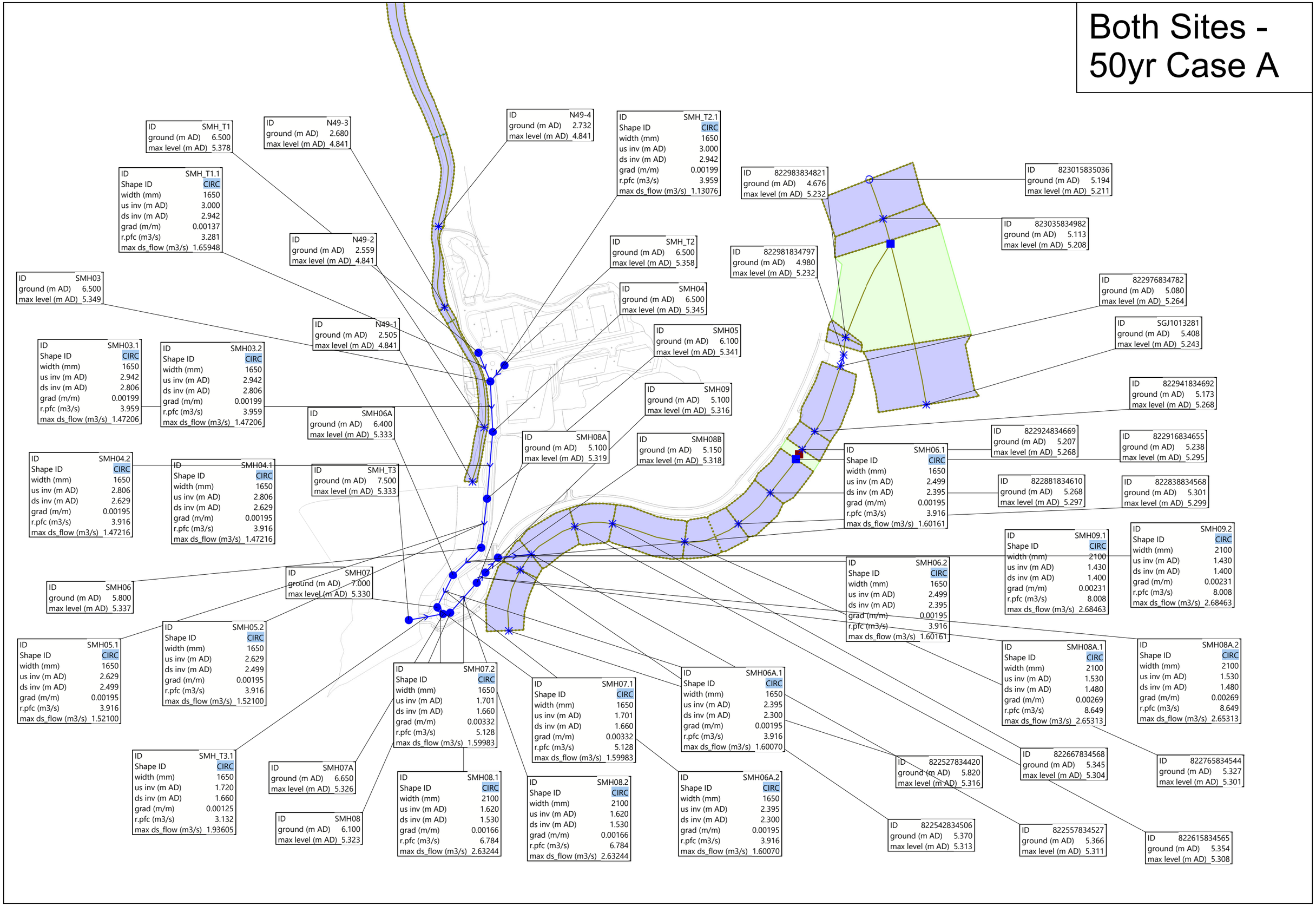
ID 822615834565
ground (m AD) 5.354
max level (m AD) 6.203

ID 822557834527
ground (m AD) 5.366
max level (m AD) 6.204

ID 822542834506
ground (m AD) 5.370
max level (m AD) 6.205

ID 822527834420
ground (m AD) 5.820
max level (m AD) 6.206

Both Sites - 50yr Case A



Both Sites - 50yr Case B

ID	SMH_T1
ground (m AD)	6.500
max level (m AD)	5.573

ID	N49-3
ground (m AD)	2.680
max level (m AD)	5.271

ID	N49-4
ground (m AD)	2.732
max level (m AD)	5.216

ID	SMH_T2.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	3.000
ds inv (m AD)	2.942
grad (m/m)	0.00199
r.pfc (m3/s)	3.959
max ds_flow (m3/s)	1.00519

ID	SMH_T1.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	3.000
ds inv (m AD)	2.942
grad (m/m)	0.00137
r.pfc (m3/s)	3.281
max ds_flow (m3/s)	1.48533

ID	N49-2
ground (m AD)	2.559
max level (m AD)	5.330

ID	SMH_T2
ground (m AD)	6.500
max level (m AD)	5.555

ID	SMH03
ground (m AD)	6.500
max level (m AD)	5.545

ID	SMH04
ground (m AD)	6.500
max level (m AD)	5.512

ID	N49-1
ground (m AD)	2.505
max level (m AD)	5.336

ID	SMH05
ground (m AD)	6.100
max level (m AD)	5.496

ID	SMH03.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.942
ds inv (m AD)	2.806
grad (m/m)	0.00199
r.pfc (m3/s)	3.959
max ds_flow (m3/s)	1.31484

ID	SMH03.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.942
ds inv (m AD)	2.806
grad (m/m)	0.00199
r.pfc (m3/s)	3.959
max ds_flow (m3/s)	1.31484

ID	SMH09
ground (m AD)	5.100
max level (m AD)	5.477

ID	SMH06A
ground (m AD)	6.400
max level (m AD)	5.490

ID	SMH08A
ground (m AD)	5.100
max level (m AD)	5.480

ID	SMH08B
ground (m AD)	5.150
max level (m AD)	5.479

ID	SMH04.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.806
ds inv (m AD)	2.629
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.31543

ID	SMH04.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.806
ds inv (m AD)	2.629
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.31543

ID	SMH_T3
ground (m AD)	7.500
max level (m AD)	5.490

ID	822983834821
ground (m AD)	4.676
max level (m AD)	5.407

ID	823015835036
ground (m AD)	5.194
max level (m AD)	5.392

ID	823035834982
ground (m AD)	5.113
max level (m AD)	5.391

ID	822981834797
ground (m AD)	4.980
max level (m AD)	5.407

ID	822976834782
ground (m AD)	5.080
max level (m AD)	5.431

ID	SGJ1013281
ground (m AD)	5.408
max level (m AD)	5.414

ID	822941834692
ground (m AD)	5.173
max level (m AD)	5.435

ID	SMH06.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.499
ds inv (m AD)	2.395
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.43303

ID	822924834669
ground (m AD)	5.207
max level (m AD)	5.435

ID	822916834655
ground (m AD)	5.238
max level (m AD)	5.456

ID	822881834610
ground (m AD)	5.268
max level (m AD)	5.458

ID	822838834568
ground (m AD)	5.301
max level (m AD)	5.460

ID	SMH09.1
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.430
ds inv (m AD)	1.400
grad (m/m)	0.00231
r.pfc (m3/s)	8.008
max ds_flow (m3/s)	2.37934

ID	SMH09.2
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.430
ds inv (m AD)	1.400
grad (m/m)	0.00231
r.pfc (m3/s)	8.008
max ds_flow (m3/s)	2.37934

ID	SMH07
ground (m AD)	7.000
max level (m AD)	5.488

ID	SMH06
ground (m AD)	5.800
max level (m AD)	5.494

ID	SMH06.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.499
ds inv (m AD)	2.395
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.43303

ID	SMH05.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.629
ds inv (m AD)	2.499
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.35992

ID	SMH05.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.629
ds inv (m AD)	2.499
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.35992

ID	SMH07.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.701
ds inv (m AD)	1.660
grad (m/m)	0.00332
r.pfc (m3/s)	5.128
max ds_flow (m3/s)	1.43196

ID	SMH07.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.701
ds inv (m AD)	1.660
grad (m/m)	0.00332
r.pfc (m3/s)	5.128
max ds_flow (m3/s)	1.43196

ID	SMH06A.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.395
ds inv (m AD)	2.300
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.43252

ID	SMH08A.1
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.530
ds inv (m AD)	1.480
grad (m/m)	0.00269
r.pfc (m3/s)	8.649
max ds_flow (m3/s)	2.36004

ID	SMH08A.2
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.530
ds inv (m AD)	1.480
grad (m/m)	0.00269
r.pfc (m3/s)	8.649
max ds_flow (m3/s)	2.36004

ID	SMH_T3.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.720
ds inv (m AD)	1.660
grad (m/m)	0.00125
r.pfc (m3/s)	3.132
max ds_flow (m3/s)	1.73013

ID	SMH07A
ground (m AD)	6.650
max level (m AD)	5.485

ID	SMH08.1
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.620
ds inv (m AD)	1.530
grad (m/m)	0.00166
r.pfc (m3/s)	6.784
max ds_flow (m3/s)	2.35613

ID	SMH08.2
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.620
ds inv (m AD)	1.530
grad (m/m)	0.00166
r.pfc (m3/s)	6.784
max ds_flow (m3/s)	2.35613

ID	SMH06A.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.395
ds inv (m AD)	2.300
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.43252

ID	SMH08
ground (m AD)	6.100
max level (m AD)	5.483

ID	822527834420
ground (m AD)	5.820
max level (m AD)	5.478

ID	822667834568
ground (m AD)	5.345
max level (m AD)	5.467

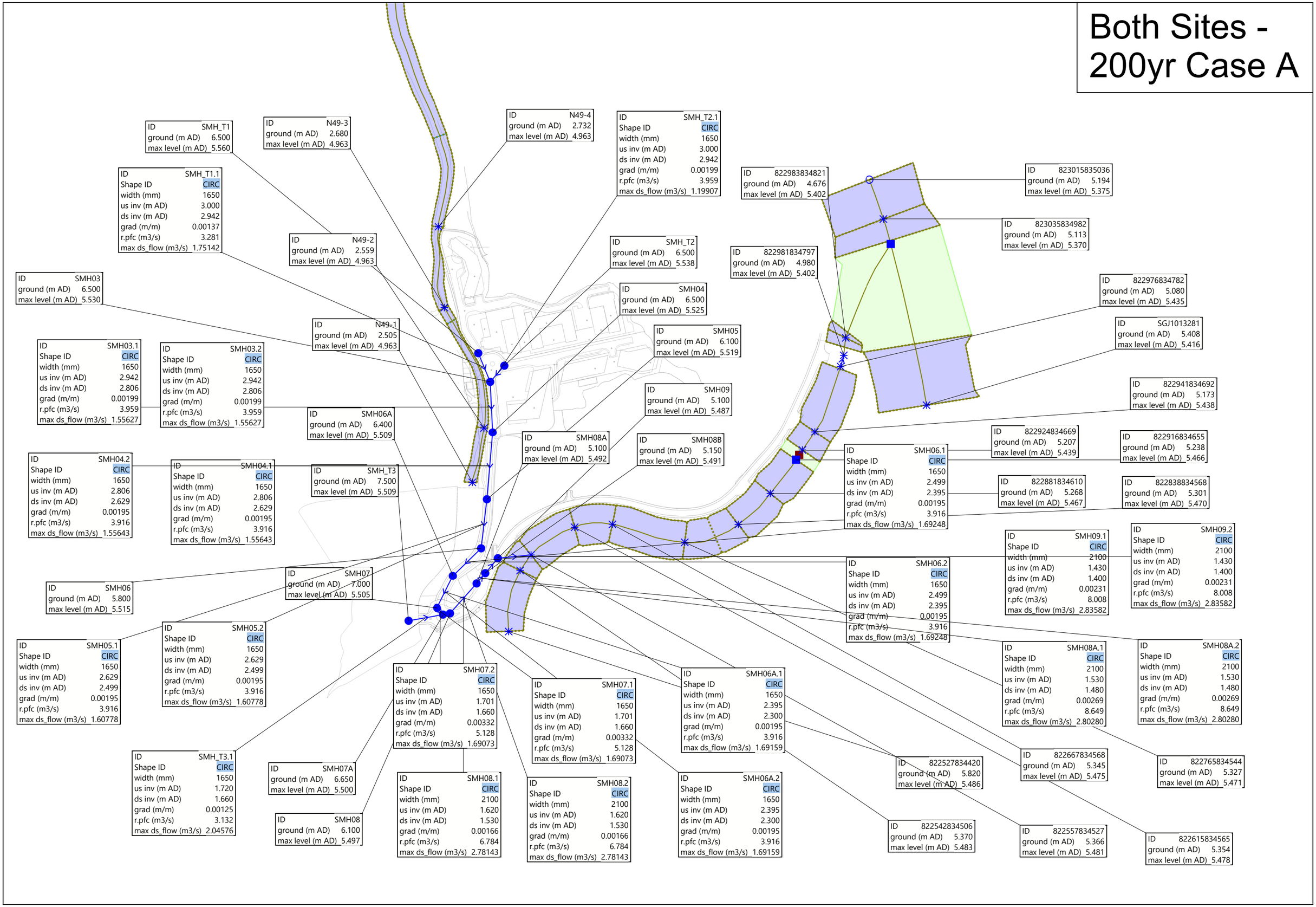
ID	822765834544
ground (m AD)	5.327
max level (m AD)	5.463

ID	822542834506
ground (m AD)	5.370
max level (m AD)	5.474

ID	822557834527
ground (m AD)	5.366
max level (m AD)	5.473

ID	822615834565
ground (m AD)	5.354
max level (m AD)	5.470

Both Sites - 200yr Case A



Both Sites - 200yr Case B

ID	SMH_T1
ground (m AD)	6.500
max level (m AD)	6.322

ID	N49-3
ground (m AD)	2.680
max level (m AD)	6.520

ID	N49-4
ground (m AD)	2.732
max level (m AD)	6.301

ID	SMH_T2.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	3.000
ds inv (m AD)	2.942
grad (m/m)	0.00199
r.pfc (m3/s)	3.959
max ds_flow (m3/s)	1.00386

ID	SMH_T1.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	3.000
ds inv (m AD)	2.942
grad (m/m)	0.00137
r.pfc (m3/s)	3.281
max ds_flow (m3/s)	1.48383

ID	N49-2
ground (m AD)	2.559
max level (m AD)	6.754

ID	SMH_T2
ground (m AD)	6.500
max level (m AD)	6.307

ID	SMH03
ground (m AD)	6.500
max level (m AD)	6.299

ID	SMH04
ground (m AD)	6.500
max level (m AD)	6.271

ID	N49-1
ground (m AD)	2.505
max level (m AD)	6.779

ID	SMH05
ground (m AD)	6.100
max level (m AD)	6.243

ID	SMH03.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.942
ds inv (m AD)	2.806
grad (m/m)	0.00199
r.pfc (m3/s)	3.959
max ds_flow (m3/s)	1.31197

ID	SMH03.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.942
ds inv (m AD)	2.806
grad (m/m)	0.00199
r.pfc (m3/s)	3.959
max ds_flow (m3/s)	1.31197

ID	SMH09
ground (m AD)	5.100
max level (m AD)	6.208

ID	SMH06A
ground (m AD)	6.400
max level (m AD)	6.218

ID	SMH08A
ground (m AD)	5.100
max level (m AD)	6.208

ID	SMH08B
ground (m AD)	5.150
max level (m AD)	6.208

ID	SMH04.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.806
ds inv (m AD)	2.629
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.31074

ID	SMH04.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.806
ds inv (m AD)	2.629
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.31074

ID	SMH_T3
ground (m AD)	7.500
max level (m AD)	6.218

ID	SMH06.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.499
ds inv (m AD)	2.395
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.35510

ID	822983834821
ground (m AD)	4.676
max level (m AD)	6.160

ID	823015835036
ground (m AD)	5.194
max level (m AD)	6.148

ID	823035834982
ground (m AD)	5.113
max level (m AD)	6.146

ID	822981834797
ground (m AD)	4.980
max level (m AD)	6.161

ID	822976834782
ground (m AD)	5.080
max level (m AD)	6.183

ID	SGJ1013281
ground (m AD)	5.408
max level (m AD)	6.169

ID	822941834692
ground (m AD)	5.173
max level (m AD)	6.185

ID	822924834669
ground (m AD)	5.207
max level (m AD)	6.185

ID	822916834655
ground (m AD)	5.238
max level (m AD)	6.199

ID	822881834610
ground (m AD)	5.268
max level (m AD)	6.199

ID	822838834568
ground (m AD)	5.301
max level (m AD)	6.200

ID	SMH09.1
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.430
ds inv (m AD)	1.400
grad (m/m)	0.00231
r.pfc (m3/s)	8.008
max ds_flow (m3/s)	2.21641

ID	SMH09.2
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.430
ds inv (m AD)	1.400
grad (m/m)	0.00231
r.pfc (m3/s)	8.008
max ds_flow (m3/s)	2.21641

ID	SMH07
ground (m AD)	7.000
max level (m AD)	6.216

ID	SMH06.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.499
ds inv (m AD)	2.395
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.35510

ID	SMH06
ground (m AD)	5.800
max level (m AD)	6.221

ID	SMH05.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.629
ds inv (m AD)	2.499
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.38362

ID	SMH05.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.629
ds inv (m AD)	2.499
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.38362

ID	SMH07.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.701
ds inv (m AD)	1.660
grad (m/m)	0.00332
r.pfc (m3/s)	5.128
max ds_flow (m3/s)	1.35733

ID	SMH07.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.701
ds inv (m AD)	1.660
grad (m/m)	0.00332
r.pfc (m3/s)	5.128
max ds_flow (m3/s)	1.35733

ID	SMH06A.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.395
ds inv (m AD)	2.300
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.35764

ID	SMH08A.1
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.530
ds inv (m AD)	1.480
grad (m/m)	0.00269
r.pfc (m3/s)	8.649
max ds_flow (m3/s)	-1.64606

ID	SMH08A.2
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.530
ds inv (m AD)	1.480
grad (m/m)	0.00269
r.pfc (m3/s)	8.649
max ds_flow (m3/s)	-1.64606

ID	SMH_T3.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.720
ds inv (m AD)	1.660
grad (m/m)	0.00125
r.pfc (m3/s)	3.132
max ds_flow (m3/s)	1.72972

ID	SMH07A
ground (m AD)	6.650
max level (m AD)	6.213

ID	SMH08.1
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.620
ds inv (m AD)	1.530
grad (m/m)	0.00166
r.pfc (m3/s)	6.784
max ds_flow (m3/s)	2.31337

ID	SMH08.2
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.620
ds inv (m AD)	1.530
grad (m/m)	0.00166
r.pfc (m3/s)	6.784
max ds_flow (m3/s)	2.31337

ID	SMH06A.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.395
ds inv (m AD)	2.300
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.35764

ID	SMH08
ground (m AD)	6.100
max level (m AD)	6.212

ID	822527834420
ground (m AD)	5.820
max level (m AD)	6.207

ID	822667834568
ground (m AD)	5.345
max level (m AD)	6.202

ID	822765834544
ground (m AD)	5.327
max level (m AD)	6.201

ID	822542834506
ground (m AD)	5.370
max level (m AD)	6.206

ID	822557834527
ground (m AD)	5.366
max level (m AD)	6.205

ID	822615834565
ground (m AD)	5.354
max level (m AD)	6.204

The Proposed public and private housing developments under Land Sharing Pilot Scheme, Tung Shing Lei, Yuen Long

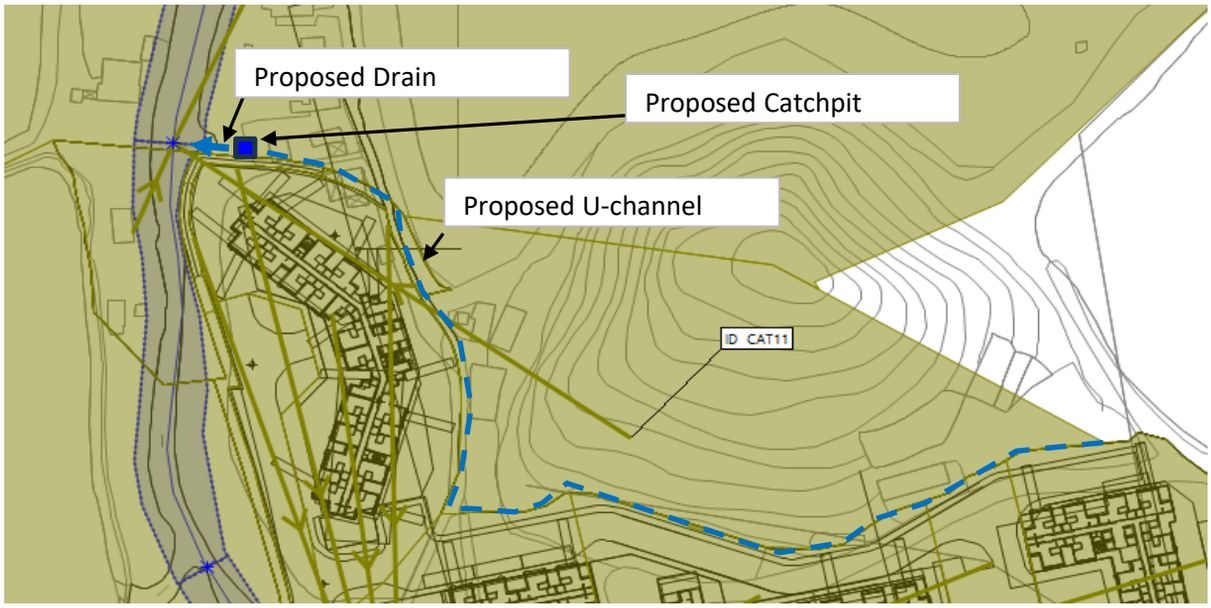
Hydraulic Check for Proposed Drainage System adjacent to Site (CAT11)

Design Parameters				
Design storm		50	year return period	(Yuen Long Area)
Storm constants	a	451.3		
	b	2.46		
	c	0.337		
Highest Point	=	26	mPD	
Lowest Point (Inlet)	=	2.5	mPD	
Average Slope	H	7.83	m/100m	
Length of flow	L	300	m	
Inlet time $t_0=0.14465L/H^{0.2}A^{0.1}$	t_0	11.65	min	(Part of Sub-catchment NSW_191_5B)
Catchment area	A_P	8400	m^2	
Catchment area (Paved)	A_{paved}	0	m^2	(C = 0.9)
Catchment area (Unpaved)	$A_{unpaved}$	8400	m^2	(C = 0.3)
Runoff coef.	C_P	0.30		(Weighted C Value)
Peak Runoff				
Time of concentration	t_c	=	t_0	
		=	11.65	min
Inetnsity	i	=	$a / (t_c + b)^c$	
		=	184.97	mm/hr
Peak runoff	Q_p	=	0.278 C i A	
		=	**0.130**	m^3/s
with 28.1% increase by Climate Change		=	**0.166**	m^3/s
Hydraulic Capacity of Proposed Surface Channel (Manning Equation)				
Size	W	=	500	mm
	D	=	500	mm
Area	A	=	0.223	m^2
Wetted Perimeter	P	=	1.285	m
Hydraulic Radius	R	=	0.174	m
Slope [Decimal]	s	=	0.004	(1:250)
Manning's Roughness	n	=	0.016	For Fair Concrete Channel
Full Flow Velocity	v	=	1.230	m/s
Full Flow Discharge	Q	=	0.275	m^3/s
10% reduction in flow area		=	**0.247**	m^3/s
		>	Peak runoff Q_p	**OK**

The Proposed public and private housing developments under Land Sharing Pilot Scheme, Tung Shing Lei, Yuen Long

Hydraulic Check for Proposed Drainage System adjacent to Site (CAT11)

Hydraulic Capacity of Proposed Drains (Colebrook-White Equation)					
Surface roughness	k_s		0.3	mm	PVC Lined Concrete Pipe (Slimed)
kinematic viscosity	v		1.14	mm^2/s	
Frictional gradient	S_f	1 in	250		
Trial pipe size	D		=	450	mm
Hydraulic radius	R = D/4		=	0.1125	m
Mean velocity (Colebrook-White)		$\bar{V}$	=	$-\sqrt{32gRS_f}\log\left[\frac{k_s}{14.8R}+\frac{1.255v}{R\sqrt{(32gRS_f)}}\right]$	
			=	1.38	m/s
Capacity provided		Q	=	V x Cross Section Area of Drain	
			=	**0.219**	m^3/s
10% reduction in flow area			=	**0.197**	m^3/s
			>	Peak runoff Q_p	**OK**



The Proposed public and private housing developments under Land Sharing Pilot Scheme, Tung Shing Lei, Yuen Long

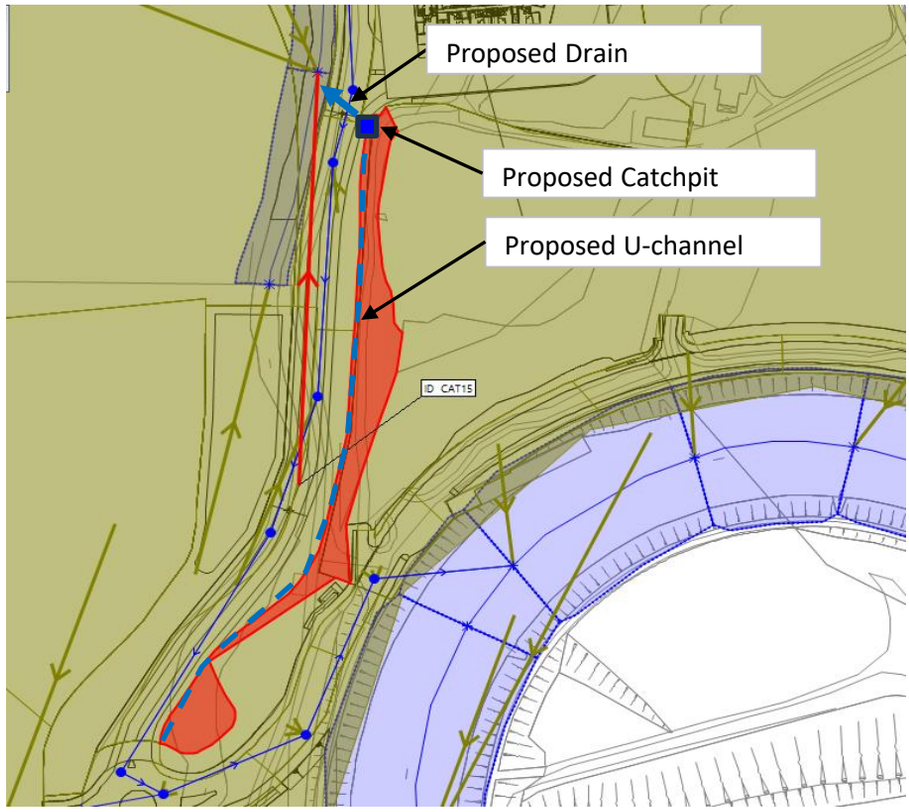
Hydraulic Check for Proposed Drainage System adjacent to Site (CAT15)

Design Parameters				
Design storm		50	year return period	(Yuen Long Area)
Storm constants	a	451.3		
	b	2.46		
	c	0.337		
Highest Point	=	4	mPD	
Lowest Point (Inlet)	=	3.5	mPD	
Average Slope	H	0.25	m/100m	
Length of flow	L	200	m	
Inlet time $t_0=0.14465L/H^{0.2}A^{0.1}$	t_0	17.72	min	(Part of Sub-catchment NSW_191_5B)
Catchment area	A_P	2150	m^2	
Catchment area (Paved)	A_{paved}	0	m^2	(C = 0.9)
Catchment area (Unpaved)	$A_{unpaved}$	2150	m^2	(C = 0.3)
Runoff coef.	C_P	0.30		(Weighted C Value)
Peak Runoff				
Time of concentration	t_c	=	t_0	
		=	17.72	min
Inetnsity	i	=	$a / (t_c + b)^c$	
		=	163.94	mm/hr
Peak runoff	Q_p	=	0.278 C i A	
		=	**0.029**	m^3/s
with 28.1% increase by Climate Change		=	**0.038**	m^3/s
Hydraulic Capacity of Proposed Surface Channel (Manning Equation)				
Size	W	=	300	mm
	D	=	300	mm
Area	A	=	0.080	m^2
Wetted Perimeter	P	=	0.771	m
Hydraulic Radius	R	=	0.104	m
Slope [Decimal]	s	=	0.004	(1:250)
Manning's Roughness	n	=	0.016	For Fair Concrete Channel
Full Flow Velocity	v	=	0.875	m/s
Full Flow Discharge	Q	=	0.070	m^3/s
10% reduction in flow area		=	**0.063**	m^3/s
		>	Peak runoff Q_p	**OK**

The Proposed public and private housing developments under Land Sharing Pilot Scheme, Tung Shing Lei, Yuen Long

Hydraulic Check for Proposed Drainage System adjacent to Site (CAT15)

Hydraulic Capacity of Proposed Drains (Colebrook-White Equation)					
Surface roughness	k_s		0.3	mm	PVC Lined Concrete Pipe (Slimed)
kinematic viscosity	v		1.14	mm^2/s	
Frictional gradient	S_f	1 in	250		
Trial pipe size	D		=	300	mm
Hydraulic radius	R = D/4		=	0.075	m
Mean velocity (Colebrook-White)		$\bar{V}$	=	$-\sqrt{32gRS_f}\log\left[\frac{k_s}{14.8R}+\frac{1.255v}{R\sqrt{(32gRS_f)}}\right]$	
			=	1.07	m/s
Capacity provided		Q	=	V x Cross Section Area of Drain	
			=	**0.075**	m^3/s
10% reduction in flow area			=	**0.068**	m^3/s
			>	Peak runoff Q_p	**OK**



Yuen Long Bypass Floodway

Legend (Flood Depth) (mm)

MAXHAZDEPT

- 0.001 - 0.300
- 0.301 - 0.600
- 0.601 - 0.900
- 0.901 - 1.200
- >1.200

Title	Appendix	
Flood Extent Map (Existing) 50yr	FEM_01	0 15 30 60 Meters

Yuen Long Bypass Floodway

Legend (Flood Depth) (mm)

MAXHAZDEPT

- 0.001 - 0.300
- 0.301 - 0.600
- 0.601 - 0.900
- 0.901 - 1.200
- >1.200

Title	Appendix	
Flood Extent Map (Both Site) 50yr	FEM_02	0 15 30 60 Meters

Appendix F

Proposed Drainage Works

Proposed 1:250 450mm Drain

CP-07A
GL: 3.7mPD

Proposed 1:250 500mm U-channel

SMH_T1
GL: 6.5mPD

SMH_T2
GL: 6.5mPD

SMH03
GL: 6.5mPD

N-49 Channel to be maintained

SMH04
GL: 6.5mPD

Proposed 1:250 300 Drain

CP-11A
GL: 4mPD

Proposed 1:250 300mm U-channel

SMH05
GL: 6.1mPD

Yuen Long Bypass Floodway

SMH06
GL: 5.8mPD

SMH09
GL: 5.1mPD

SMH08B
GL: 5.15mPD

Twin 2100mm Drain Connect
to Yuen Long Bypass Floodway
with Outfall

SMH06A
GL: 6.4mPD

SMH08A
GL: 5.1mPD

SMH07
GL: 7mPD

SMH08
GL: 6.1mPD

SMH_T3
GL: 7.5mPD

SMH07A
GL: 6.65mPD

Legend

- Node
- Conduit

Title	Appendix	
Proposed Drainage Works	F	0 10 20 40 Meters

Summary of Proposed Drainage Works

Manhole Schedule

Manhole No.	Ground Level (mPD)	TYPE
SMH03	6.5	Manhole
SMH04	6.5	Manhole
SMH05	6.2	Manhole
SMH06	6	Manhole
SMH06A	5.8	Manhole
SMH07	7	Manhole
SMH07A	6.65	Manhole
SMH08	6.1	Manhole
SMH08A	5.1	Manhole
SMH08B	5.15	Manhole
SMH09	5.1	Manhole
SMH_T1	6.5	Manhole
SMH_T2	6.5	Manhole
SMH_T3	7.5	Manhole
CP-07A	3.7	Catchpit
CP-11A	4	Catchpit

Pipeline Schedule

Upstream Manhole	Downstream Manhole	Pipe Diameter (mm)	US invert level (mPD)	DS invert level (mPD)	Material
SMH03	SMH04	2 x 1650	2.942	2.806	Concrete Pipe with UPVC Lining
SMH04	SMH05	2 x 1650	2.806	2.629	Concrete Pipe with UPVC Lining
SMH05	SMH06	2 x 1650	2.629	2.499	Concrete Pipe with UPVC Lining
SMH06	SMH06A	2 x 1650	2.499	2.395	Concrete Pipe with UPVC Lining
SMH06A	SMH07	2 x 1650	2.395	2.3	Concrete Pipe with UPVC Lining
SMH07	SMH07A	2 x 1650	1.701	1.66	Concrete Pipe with UPVC Lining
SMH07A	SMH08	2 x 2100	1.66	1.62	Concrete Pipe with UPVC Lining
SMH08	SMH08A	2 x 2100	1.62	1.53	Concrete Pipe with UPVC Lining
SMH08A	SMH08B	2 x 2100	1.53	1.48	Concrete Pipe with UPVC Lining
SMH08B	SMH09	2 x 2100	1.48	1.43	Concrete Pipe with UPVC Lining
SMH09	Connect to YLBF (Adjust to Node 822557834527)	2 x 2100	1.43	1.4	Concrete Pipe with UPVC Lining
SMH_T1	SMH03	1650	3	2.942	Concrete Pipe with UPVC Lining
SMH_T2	SMH03	1650	3	2.942	Concrete Pipe with UPVC Lining
SMH_T3	SMH08	1650	1.72	1.66	Concrete Pipe with UPVC Lining
CP-07A	Connect to N-49 Channel (adjacent to Node N49-4)	450	1.18	1.1	Concrete Pipe with UPVC Lining
CP-11A	Connect to N-49 Channel (adjacent to Node N49-2)	300	1.38	1.3	Concrete Pipe with UPVC Lining

U-channel Schedule

Upstream Catchpit	Downstream Catchpit	U channel (mm)	US invert level (mPD)	DS invert level (mPD)	Material
-	CP-07A	500	2.308	1.18	Concrete
-	CP-11A	300	2.26	1.38	Concrete

Appendix G

Result of Hydraulic Model for Approved Residential Development (A/YL-NSW/274) Only and LSPS Only

A/YL-NSW/274 Site Only - 50yr Case A

ID	N49-3
ground (m AD)	2.680
max level (m AD)	4.841

ID	N49-4
ground (m AD)	2.732
max level (m AD)	4.841

ID	N49-2
ground (m AD)	2.559
max level (m AD)	4.841

ID	N49-1
ground (m AD)	2.505
max level (m AD)	4.841

ID	SMH_T3
ground (m AD)	7.500
max level (m AD)	5.326

ID	SMH08A
ground (m AD)	5.100
max level (m AD)	5.315

ID	SMH09
ground (m AD)	5.100
max level (m AD)	5.313

ID	SMH08B
ground (m AD)	5.150
max level (m AD)	5.315

ID	822983834821
ground (m AD)	4.676
max level (m AD)	5.232

ID	823015835036
ground (m AD)	5.194
max level (m AD)	5.211

ID	823035834982
ground (m AD)	5.113
max level (m AD)	5.208

ID	822981834797
ground (m AD)	4.980
max level (m AD)	5.232

ID	822976834782
ground (m AD)	5.080
max level (m AD)	5.264

ID	SGJ1013281
ground (m AD)	5.408
max level (m AD)	5.243

ID	822941834692
ground (m AD)	5.173
max level (m AD)	5.267

ID	822924834669
ground (m AD)	5.207
max level (m AD)	5.267

ID	822916834655
ground (m AD)	5.238
max level (m AD)	5.294

ID	822881834610
ground (m AD)	5.268
max level (m AD)	5.296

ID	822838834568
ground (m AD)	5.301
max level (m AD)	5.298

ID	SMH09.2
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.430
ds inv (m AD)	1.400
grad (m/m)	0.00231
r.pfc (m3/s)	8.008
max ds_flow (m3/s)	2.17217

ID	SMH08A.1
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.530
ds inv (m AD)	1.480
grad (m/m)	0.00269
r.pfc (m3/s)	8.649
max ds_flow (m3/s)	2.10896

ID	SMH_T3.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.720
ds inv (m AD)	1.660
grad (m/m)	0.00125
r.pfc (m3/s)	3.132
max ds_flow (m3/s)	1.93644

ID	SMH07A
ground (m AD)	6.650
max level (m AD)	5.319

ID	SMH08
ground (m AD)	6.100
max level (m AD)	5.318

ID	SMH08.1
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.620
ds inv (m AD)	1.530
grad (m/m)	0.00166
r.pfc (m3/s)	6.784
max ds_flow (m3/s)	2.06705

ID	822527834420
ground (m AD)	5.820
max level (m AD)	5.315

ID	822667834568
ground (m AD)	5.345
max level (m AD)	5.303

ID	822765834544
ground (m AD)	5.327
max level (m AD)	5.300

ID	822542834506
ground (m AD)	5.370
max level (m AD)	5.312

ID	822557834527
ground (m AD)	5.366
max level (m AD)	5.310

ID	822615834565
ground (m AD)	5.354
max level (m AD)	5.307

A/YL-NSW/274 Site Only - 50yr Case B

ID	N49-3
ground (m AD)	2.680
max level (m AD)	5.271

ID	N49-4
ground (m AD)	2.732
max level (m AD)	5.216

ID	N49-2
ground (m AD)	2.559
max level (m AD)	5.330

ID	N49-1
ground (m AD)	2.505
max level (m AD)	5.336

ID	SMH_T3
ground (m AD)	7.500
max level (m AD)	5.486

ID	SMH08A
ground (m AD)	5.100
max level (m AD)	5.478

ID	SMH09
ground (m AD)	5.100
max level (m AD)	5.474

ID	SMH08B
ground (m AD)	5.150
max level (m AD)	5.478

ID	822983834821
ground (m AD)	4.676
max level (m AD)	5.407

ID	823015835036
ground (m AD)	5.194
max level (m AD)	5.392

ID	823035834982
ground (m AD)	5.113
max level (m AD)	5.391

ID	822981834797
ground (m AD)	4.980
max level (m AD)	5.407

ID	822976834782
ground (m AD)	5.080
max level (m AD)	5.431

ID	SGJ1013281
ground (m AD)	5.408
max level (m AD)	5.414

ID	822941834692
ground (m AD)	5.173
max level (m AD)	5.434

ID	822924834669
ground (m AD)	5.207
max level (m AD)	5.435

ID	822916834655
ground (m AD)	5.238
max level (m AD)	5.455

ID	822881834610
ground (m AD)	5.268
max level (m AD)	5.457

ID	822838834568
ground (m AD)	5.301
max level (m AD)	5.460

ID	SMH09.2
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.430
ds inv (m AD)	1.400
grad (m/m)	0.00231
r.pfc (m3/s)	8.008
max ds_flow (m3/s)	1.92729

ID	SMH08A.1
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.530
ds inv (m AD)	1.480
grad (m/m)	0.00269
r.pfc (m3/s)	8.649
max ds_flow (m3/s)	1.88636

ID	SMH_T3.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.720
ds inv (m AD)	1.660
grad (m/m)	0.00125
r.pfc (m3/s)	3.132
max ds_flow (m3/s)	1.73031

ID	SMH07A
ground (m AD)	6.650
max level (m AD)	5.481

ID	SMH08
ground (m AD)	6.100
max level (m AD)	5.480

ID	SMH08.1
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.620
ds inv (m AD)	1.530
grad (m/m)	0.00166
r.pfc (m3/s)	6.784
max ds_flow (m3/s)	1.84915

ID	822527834420
ground (m AD)	5.820
max level (m AD)	5.477

ID	822667834568
ground (m AD)	5.345
max level (m AD)	5.466

ID	822765834544
ground (m AD)	5.327
max level (m AD)	5.462

ID	822542834506
ground (m AD)	5.370
max level (m AD)	5.474

ID	822557834527
ground (m AD)	5.366
max level (m AD)	5.472

ID	822615834565
ground (m AD)	5.354
max level (m AD)	5.469

A/YL-NSW/274 Site Only - 200yr Case A

ID	N49-3
ground (m AD)	2.680
max level (m AD)	4.963

ID	N49-4
ground (m AD)	2.732
max level (m AD)	4.963

ID	N49-2
ground (m AD)	2.559
max level (m AD)	4.963

ID	N49-1
ground (m AD)	2.505
max level (m AD)	4.963

ID	SMH_T3
ground (m AD)	7.500
max level (m AD)	5.502

ID	SMH08A
ground (m AD)	5.100
max level (m AD)	5.488

ID	SMH09
ground (m AD)	5.100
max level (m AD)	5.484

ID	SMH08B
ground (m AD)	5.150
max level (m AD)	5.488

ID	822983834821
ground (m AD)	4.676
max level (m AD)	5.402

ID	823015835036
ground (m AD)	5.194
max level (m AD)	5.375

ID	823035834982
ground (m AD)	5.113
max level (m AD)	5.370

ID	822981834797
ground (m AD)	4.980
max level (m AD)	5.402

ID	822976834782
ground (m AD)	5.080
max level (m AD)	5.435

ID	SGJ1013281
ground (m AD)	5.408
max level (m AD)	5.416

ID	822941834692
ground (m AD)	5.173
max level (m AD)	5.438

ID	822924834669
ground (m AD)	5.207
max level (m AD)	5.438

ID	822916834655
ground (m AD)	5.238
max level (m AD)	5.465

ID	822881834610
ground (m AD)	5.268
max level (m AD)	5.466

ID	822838834568
ground (m AD)	5.301
max level (m AD)	5.468

ID	SMH09.2
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.430
ds inv (m AD)	1.400
grad (m/m)	0.00231
r.pfc (m3/s)	8.008
max ds_flow (m3/s)	2.29302

ID	SMH08A.1
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.530
ds inv (m AD)	1.480
grad (m/m)	0.00269
r.pfc (m3/s)	8.649
max ds_flow (m3/s)	2.22684

ID	SMH_T3.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.720
ds inv (m AD)	1.660
grad (m/m)	0.00125
r.pfc (m3/s)	3.132
max ds_flow (m3/s)	2.04613

ID	SMH07A
ground (m AD)	6.650
max level (m AD)	5.493

ID	SMH08
ground (m AD)	6.100
max level (m AD)	5.491

ID	SMH08.1
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.620
ds inv (m AD)	1.530
grad (m/m)	0.00166
r.pfc (m3/s)	6.784
max ds_flow (m3/s)	2.18316

ID	822527834420
ground (m AD)	5.820
max level (m AD)	5.484

ID	822667834568
ground (m AD)	5.345
max level (m AD)	5.473

ID	822765834544
ground (m AD)	5.327
max level (m AD)	5.470

ID	822542834506
ground (m AD)	5.370
max level (m AD)	5.481

ID	822557834527
ground (m AD)	5.366
max level (m AD)	5.480

ID	822615834565
ground (m AD)	5.354
max level (m AD)	5.477

A/YL-NSW/274 Site Only - 200yr Case B

ID	N49-3
ground (m AD)	2.680
max level (m AD)	6.520

ID	N49-4
ground (m AD)	2.732
max level (m AD)	6.301

ID	N49-2
ground (m AD)	2.559
max level (m AD)	6.754

ID	N49-1
ground (m AD)	2.505
max level (m AD)	6.779

ID	SMH_T3
ground (m AD)	7.500
max level (m AD)	6.215

ID	SMH08A
ground (m AD)	5.100
max level (m AD)	6.205

ID	SMH08B
ground (m AD)	5.150
max level (m AD)	6.206

ID	SMH09
ground (m AD)	5.100
max level (m AD)	6.206

ID	822983834821
ground (m AD)	4.676
max level (m AD)	6.160

ID	823015835036
ground (m AD)	5.194
max level (m AD)	6.148

ID	823035834982
ground (m AD)	5.113
max level (m AD)	6.146

ID	822981834797
ground (m AD)	4.980
max level (m AD)	6.160

ID	822976834782
ground (m AD)	5.080
max level (m AD)	6.183

ID	SGJ1013281
ground (m AD)	5.408
max level (m AD)	6.169

ID	822941834692
ground (m AD)	5.173
max level (m AD)	6.184

ID	822924834669
ground (m AD)	5.207
max level (m AD)	6.184

ID	822916834655
ground (m AD)	5.238
max level (m AD)	6.198

ID	822881834610
ground (m AD)	5.268
max level (m AD)	6.199

ID	822838834568
ground (m AD)	5.301
max level (m AD)	6.200

ID	SMH09.2
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.430
ds inv (m AD)	1.400
grad (m/m)	0.00231
r.pfc (m3/s)	8.008
max ds_flow (m3/s)	-2.67182

ID	SMH08A.1
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.530
ds inv (m AD)	1.480
grad (m/m)	0.00269
r.pfc (m3/s)	8.649
max ds_flow (m3/s)	-2.12356

ID	SMH_T3.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.720
ds inv (m AD)	1.660
grad (m/m)	0.00125
r.pfc (m3/s)	3.132
max ds_flow (m3/s)	1.73044

ID	SMH07A
ground (m AD)	6.650
max level (m AD)	6.210

ID	SMH08
ground (m AD)	6.100
max level (m AD)	6.210

ID	SMH08.1
Shape ID	CIRC
width (mm)	2100
us inv (m AD)	1.620
ds inv (m AD)	1.530
grad (m/m)	0.00166
r.pfc (m3/s)	6.784
max ds_flow (m3/s)	1.98840

ID	822527834420
ground (m AD)	5.820
max level (m AD)	6.207

ID	822667834568
ground (m AD)	5.345
max level (m AD)	6.202

ID	822765834544
ground (m AD)	5.327
max level (m AD)	6.200

ID	822542834506
ground (m AD)	5.370
max level (m AD)	6.205

ID	822557834527
ground (m AD)	5.366
max level (m AD)	6.205

ID	822615834565
ground (m AD)	5.354
max level (m AD)	6.203

PnP Site only - 50yr Case A

ID	SMH_T1
ground (m AD)	6.500
max level (m AD)	5.362

ID	N49-3
ground (m AD)	2.680
max level (m AD)	4.841

ID	N49-4
ground (m AD)	2.732
max level (m AD)	4.841

ID	SMH_T2.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	3.000
ds inv (m AD)	2.942
grad (m/m)	0.00199
r.pfc (m3/s)	3.959
max ds_flow (m3/s)	1.13068

ID	SMH_T1.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	3.000
ds inv (m AD)	2.942
grad (m/m)	0.00137
r.pfc (m3/s)	3.281
max ds_flow (m3/s)	1.65939

ID	N49-2
ground (m AD)	2.559
max level (m AD)	4.841

ID	SMH_T2
ground (m AD)	6.500
max level (m AD)	5.348

ID	822983834821
ground (m AD)	4.676
max level (m AD)	5.232

ID	823015835036
ground (m AD)	5.194
max level (m AD)	5.211

ID	823035834982
ground (m AD)	5.113
max level (m AD)	5.208

ID	822981834797
ground (m AD)	4.980
max level (m AD)	5.232

ID	SMH03
ground (m AD)	6.500
max level (m AD)	5.347

ID	SMH04
ground (m AD)	6.500
max level (m AD)	5.347

ID	822976834782
ground (m AD)	5.080
max level (m AD)	5.264

ID	N49-1
ground (m AD)	2.505
max level (m AD)	4.841

ID	SMH05
ground (m AD)	6.100
max level (m AD)	5.338

ID	SGJ1013281
ground (m AD)	5.408
max level (m AD)	5.243

ID	SMH03.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.942
ds inv (m AD)	2.806
grad (m/m)	0.00199
r.pfc (m3/s)	3.959
max ds_flow (m3/s)	0.00391

ID	SMH03.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.942
ds inv (m AD)	2.806
grad (m/m)	0.00199
r.pfc (m3/s)	3.959
max ds_flow (m3/s)	0.00391

ID	SMH09
ground (m AD)	5.100
max level (m AD)	5.314

ID	822941834692
ground (m AD)	5.173
max level (m AD)	5.267

ID	SMH06A
ground (m AD)	6.400
max level (m AD)	5.331

ID	SMH08A
ground (m AD)	5.100
max level (m AD)	5.318

ID	SMH08B
ground (m AD)	5.150
max level (m AD)	5.316

ID	822924834669
ground (m AD)	5.207
max level (m AD)	5.267

ID	822916834655
ground (m AD)	5.238
max level (m AD)	5.295

ID	SMH06.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.499
ds inv (m AD)	2.395
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.60171

ID	822881834610
ground (m AD)	5.268
max level (m AD)	5.296

ID	822838834568
ground (m AD)	5.301
max level (m AD)	5.299

ID	SMH09.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.430
ds inv (m AD)	1.400
grad (m/m)	0.00231
r.pfc (m3/s)	4.268
max ds_flow (m3/s)	1.71847

ID	SMH09.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.430
ds inv (m AD)	1.400
grad (m/m)	0.00231
r.pfc (m3/s)	4.268
max ds_flow (m3/s)	1.71847

ID	SMH06
ground (m AD)	5.800
max level (m AD)	5.335

ID	SMH07
ground (m AD)	7.000
max level (m AD)	5.327

ID	SMH06.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.499
ds inv (m AD)	2.395
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.60171

ID	SMH05.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.629
ds inv (m AD)	2.499
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.52112

ID	SMH05.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.629
ds inv (m AD)	2.499
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.52112

ID	SMH07.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.701
ds inv (m AD)	1.660
grad (m/m)	0.00332
r.pfc (m3/s)	5.128
max ds_flow (m3/s)	1.59995

ID	SMH07.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.701
ds inv (m AD)	1.660
grad (m/m)	0.00332
r.pfc (m3/s)	5.128
max ds_flow (m3/s)	1.59995

ID	SMH06A.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.395
ds inv (m AD)	2.300
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.60080

ID	SMH08A.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.530
ds inv (m AD)	1.480
grad (m/m)	0.00269
r.pfc (m3/s)	4.611
max ds_flow (m3/s)	1.68626

ID	SMH08A.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.530
ds inv (m AD)	1.480
grad (m/m)	0.00269
r.pfc (m3/s)	4.611
max ds_flow (m3/s)	1.68626

ID	SMH07A
ground (m AD)	6.650
max level (m AD)	5.324

ID	SMH08.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.620
ds inv (m AD)	1.530
grad (m/m)	0.00166
r.pfc (m3/s)	3.615
max ds_flow (m3/s)	1.66521

ID	SMH08.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.620
ds inv (m AD)	1.530
grad (m/m)	0.00166
r.pfc (m3/s)	3.615
max ds_flow (m3/s)	1.66521

ID	SMH06A.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.395
ds inv (m AD)	2.300
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.60080

ID	822527834420
ground (m AD)	5.820
max level (m AD)	5.315

ID	822667834568
ground (m AD)	5.345
max level (m AD)	5.304

ID	822765834544
ground (m AD)	5.327
max level (m AD)	5.301

ID	SMH08
ground (m AD)	6.100
max level (m AD)	5.322

ID	822542834506
ground (m AD)	5.370
max level (m AD)	5.312

ID	822557834527
ground (m AD)	5.366
max level (m AD)	5.311

ID	822615834565
ground (m AD)	5.354
max level (m AD)	5.308

PnP Site only - 50yr Case B

ID	SMH_T1
ground (m AD)	6.500
max level (m AD)	5.558

ID	N49-3
ground (m AD)	2.680
max level (m AD)	5.271

ID	N49-4
ground (m AD)	2.732
max level (m AD)	5.216

ID	SMH_T2.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	3.000
ds inv (m AD)	2.942
grad (m/m)	0.00199
r.pfc (m3/s)	3.959
max ds_flow (m3/s)	1.00511

ID	SMH_T1.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	3.000
ds inv (m AD)	2.942
grad (m/m)	0.00137
r.pfc (m3/s)	3.281
max ds_flow (m3/s)	1.48524

ID	N49-2
ground (m AD)	2.559
max level (m AD)	5.330

ID	SMH_T2
ground (m AD)	6.500
max level (m AD)	5.540

ID	822983834821
ground (m AD)	4.676
max level (m AD)	5.407

ID	823015835036
ground (m AD)	5.194
max level (m AD)	5.392

ID	823035834982
ground (m AD)	5.113
max level (m AD)	5.391

ID	822981834797
ground (m AD)	4.980
max level (m AD)	5.407

ID	SMH03
ground (m AD)	6.500
max level (m AD)	5.530

ID	SMH04
ground (m AD)	6.500
max level (m AD)	5.530

ID	822976834782
ground (m AD)	5.080
max level (m AD)	5.431

ID	N49-1
ground (m AD)	2.505
max level (m AD)	5.336

ID	SMH05
ground (m AD)	6.100
max level (m AD)	5.495

ID	SGJ1013281
ground (m AD)	5.408
max level (m AD)	5.414

ID	SMH03.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.942
ds inv (m AD)	2.806
grad (m/m)	0.00199
r.pfc (m3/s)	3.959
max ds_flow (m3/s)	0.00371

ID	SMH03.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.942
ds inv (m AD)	2.806
grad (m/m)	0.00199
r.pfc (m3/s)	3.959
max ds_flow (m3/s)	0.00371

ID	SMH09
ground (m AD)	5.100
max level (m AD)	5.476

ID	822941834692
ground (m AD)	5.173
max level (m AD)	5.435

ID	SMH06A
ground (m AD)	6.400
max level (m AD)	5.489

ID	SMH08A
ground (m AD)	5.100
max level (m AD)	5.480

ID	SMH08B
ground (m AD)	5.150
max level (m AD)	5.479

ID	822924834669
ground (m AD)	5.207
max level (m AD)	5.435

ID	822916834655
ground (m AD)	5.238
max level (m AD)	5.455

ID	SMH06.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.499
ds inv (m AD)	2.395
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.43345

ID	822881834610
ground (m AD)	5.268
max level (m AD)	5.457

ID	822838834568
ground (m AD)	5.301
max level (m AD)	5.460

ID	SMH09.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.430
ds inv (m AD)	1.400
grad (m/m)	0.00231
r.pfc (m3/s)	4.268
max ds_flow (m3/s)	1.52987

ID	SMH09.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.430
ds inv (m AD)	1.400
grad (m/m)	0.00231
r.pfc (m3/s)	4.268
max ds_flow (m3/s)	1.52987

ID	SMH06.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.499
ds inv (m AD)	2.395
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.43345

ID	SMH07
ground (m AD)	7.000
max level (m AD)	5.487

ID	SMH06
ground (m AD)	5.800
max level (m AD)	5.493

ID	SMH05.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.629
ds inv (m AD)	2.499
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.36039

ID	SMH05.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.629
ds inv (m AD)	2.499
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.36039

ID	SMH08A.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.530
ds inv (m AD)	1.480
grad (m/m)	0.00269
r.pfc (m3/s)	4.611
max ds_flow (m3/s)	1.51033

ID	SMH08A.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.530
ds inv (m AD)	1.480
grad (m/m)	0.00269
r.pfc (m3/s)	4.611
max ds_flow (m3/s)	1.51033

ID	SMH07.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.701
ds inv (m AD)	1.660
grad (m/m)	0.00332
r.pfc (m3/s)	5.128
max ds_flow (m3/s)	1.43234

ID	SMH07.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.701
ds inv (m AD)	1.660
grad (m/m)	0.00332
r.pfc (m3/s)	5.128
max ds_flow (m3/s)	1.43234

ID	SMH06A.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.395
ds inv (m AD)	2.300
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.43291

ID	822527834420
ground (m AD)	5.820
max level (m AD)	5.477

ID	822667834568
ground (m AD)	5.345
max level (m AD)	5.466

ID	822765834544
ground (m AD)	5.327
max level (m AD)	5.462

ID	SMH07A
ground (m AD)	6.650
max level (m AD)	5.484

ID	SMH08.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.620
ds inv (m AD)	1.530
grad (m/m)	0.00166
r.pfc (m3/s)	3.615
max ds_flow (m3/s)	1.49176

ID	SMH08.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.620
ds inv (m AD)	1.530
grad (m/m)	0.00166
r.pfc (m3/s)	3.615
max ds_flow (m3/s)	1.49176

ID	SMH06A.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.395
ds inv (m AD)	2.300
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.43291

ID	822542834506
ground (m AD)	5.370
max level (m AD)	5.474

ID	822557834527
ground (m AD)	5.366
max level (m AD)	5.473

ID	822615834565
ground (m AD)	5.354
max level (m AD)	5.470

ID	SMH08
ground (m AD)	6.100
max level (m AD)	5.483

PnP Site only - 200yr Case A

ID	SMH_T1
ground (m AD)	6.500
max level (m AD)	5.538

ID	N49-3
ground (m AD)	2.680
max level (m AD)	4.963

ID	N49-4
ground (m AD)	2.732
max level (m AD)	4.963

ID	SMH_T2.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	3.000
ds inv (m AD)	2.942
grad (m/m)	0.00199
r.pfc (m3/s)	3.959
max ds_flow (m3/s)	1.19904

ID	SMH_T1.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	3.000
ds inv (m AD)	2.942
grad (m/m)	0.00137
r.pfc (m3/s)	3.281
max ds_flow (m3/s)	1.75140

ID	N49-2
ground (m AD)	2.559
max level (m AD)	4.964

ID	SMH_T2
ground (m AD)	6.500
max level (m AD)	5.530

ID	822983834821
ground (m AD)	4.676
max level (m AD)	5.402

ID	823015835036
ground (m AD)	5.194
max level (m AD)	5.375

ID	823035834982
ground (m AD)	5.113
max level (m AD)	5.370

ID	822981834797
ground (m AD)	4.980
max level (m AD)	5.402

ID	SMH03
ground (m AD)	6.500
max level (m AD)	5.528

ID	SMH04
ground (m AD)	6.500
max level (m AD)	5.528

ID	822976834782
ground (m AD)	5.080
max level (m AD)	5.435

ID	N49-1
ground (m AD)	2.505
max level (m AD)	4.964

ID	SMH05
ground (m AD)	6.100
max level (m AD)	5.517

ID	SGJ1013281
ground (m AD)	5.408
max level (m AD)	5.416

ID	SMH03.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.942
ds inv (m AD)	2.806
grad (m/m)	0.00199
r.pfc (m3/s)	3.959
max ds_flow (m3/s)	0.00396

ID	SMH03.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.942
ds inv (m AD)	2.806
grad (m/m)	0.00199
r.pfc (m3/s)	3.959
max ds_flow (m3/s)	0.00396

ID	SMH09
ground (m AD)	5.100
max level (m AD)	5.485

ID	822941834692
ground (m AD)	5.173
max level (m AD)	5.438

ID	SMH06A
ground (m AD)	6.400
max level (m AD)	5.507

ID	SMH08A
ground (m AD)	5.100
max level (m AD)	5.491

ID	SMH08B
ground (m AD)	5.150
max level (m AD)	5.490

ID	822924834669
ground (m AD)	5.207
max level (m AD)	5.438

ID	822916834655
ground (m AD)	5.238
max level (m AD)	5.465

ID	SMH06.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.499
ds inv (m AD)	2.395
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.69291

ID	822881834610
ground (m AD)	5.268
max level (m AD)	5.467

ID	822838834568
ground (m AD)	5.301
max level (m AD)	5.469

ID	SMH09.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.430
ds inv (m AD)	1.400
grad (m/m)	0.00231
r.pfc (m3/s)	4.268
max ds_flow (m3/s)	1.81535

ID	SMH09.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.430
ds inv (m AD)	1.400
grad (m/m)	0.00231
r.pfc (m3/s)	4.268
max ds_flow (m3/s)	1.81535

ID	SMH06.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.499
ds inv (m AD)	2.395
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.69291

ID	SMH07
ground (m AD)	7.000
max level (m AD)	5.503

ID	SMH06
ground (m AD)	5.800
max level (m AD)	5.513

ID	SMH05.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.629
ds inv (m AD)	2.499
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.60819

ID	SMH05.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.629
ds inv (m AD)	2.499
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.60819

ID	SMH08A.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.530
ds inv (m AD)	1.480
grad (m/m)	0.00269
r.pfc (m3/s)	4.611
max ds_flow (m3/s)	1.78168

ID	SMH08A.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.530
ds inv (m AD)	1.480
grad (m/m)	0.00269
r.pfc (m3/s)	4.611
max ds_flow (m3/s)	1.78168

ID	SMH07.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.701
ds inv (m AD)	1.660
grad (m/m)	0.00332
r.pfc (m3/s)	5.128
max ds_flow (m3/s)	1.69125

ID	SMH07.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.701
ds inv (m AD)	1.660
grad (m/m)	0.00332
r.pfc (m3/s)	5.128
max ds_flow (m3/s)	1.69125

ID	SMH06A.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.395
ds inv (m AD)	2.300
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.69206

ID	822527834420
ground (m AD)	5.820
max level (m AD)	5.485

ID	822667834568
ground (m AD)	5.345
max level (m AD)	5.474

ID	822765834544
ground (m AD)	5.327
max level (m AD)	5.471

ID	SMH07A
ground (m AD)	6.650
max level (m AD)	5.498

ID	SMH08.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.620
ds inv (m AD)	1.530
grad (m/m)	0.00166
r.pfc (m3/s)	3.615
max ds_flow (m3/s)	1.75980

ID	SMH08.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.620
ds inv (m AD)	1.530
grad (m/m)	0.00166
r.pfc (m3/s)	3.615
max ds_flow (m3/s)	1.75980

ID	SMH06A.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.395
ds inv (m AD)	2.300
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.69206

ID	SMH08
ground (m AD)	6.100
max level (m AD)	5.496

ID	822542834506
ground (m AD)	5.370
max level (m AD)	5.482

ID	822557834527
ground (m AD)	5.366
max level (m AD)	5.481

ID	822615834565
ground (m AD)	5.354
max level (m AD)	5.478

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ID	SMH_T1
ground (m AD)	6.500
max level (m AD)	6.318

ID	N49-3
ground (m AD)	2.680
max level (m AD)	6.520

ID	N49-4
ground (m AD)	2.732
max level (m AD)	6.301

ID	SMH_T2.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	3.000
ds inv (m AD)	2.942
grad (m/m)	0.00199
r.pfc (m3/s)	3.959
max ds_flow (m3/s)	1.00383

ID	SMH_T1.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	3.000
ds inv (m AD)	2.942
grad (m/m)	0.00137
r.pfc (m3/s)	3.281
max ds_flow (m3/s)	1.48380

ID	N49-2
ground (m AD)	2.559
max level (m AD)	6.754

ID	SMH_T2
ground (m AD)	6.500
max level (m AD)	6.303

ID	822983834821
ground (m AD)	4.676
max level (m AD)	6.160

ID	823015835036
ground (m AD)	5.194
max level (m AD)	6.148

ID	823035834982
ground (m AD)	5.113
max level (m AD)	6.146

ID	822981834797
ground (m AD)	4.980
max level (m AD)	6.161

ID	SMH03
ground (m AD)	6.500
max level (m AD)	6.295

ID	SMH04
ground (m AD)	6.500
max level (m AD)	6.295

ID	822976834782
ground (m AD)	5.080
max level (m AD)	6.183

ID	N49-1
ground (m AD)	2.505
max level (m AD)	6.779

ID	SMH05
ground (m AD)	6.100
max level (m AD)	6.241

ID	SGJ1013281
ground (m AD)	5.408
max level (m AD)	6.169

ID	SMH03.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.942
ds inv (m AD)	2.806
grad (m/m)	0.00199
r.pfc (m3/s)	3.959
max ds_flow (m3/s)	0.00934

ID	SMH03.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.942
ds inv (m AD)	2.806
grad (m/m)	0.00199
r.pfc (m3/s)	3.959
max ds_flow (m3/s)	0.00934

ID	SMH09
ground (m AD)	5.100
max level (m AD)	6.208

ID	822941834692
ground (m AD)	5.173
max level (m AD)	6.184

ID	SMH06A
ground (m AD)	6.400
max level (m AD)	6.219

ID	SMH08A
ground (m AD)	5.100
max level (m AD)	6.207

ID	SMH08B
ground (m AD)	5.150
max level (m AD)	6.208

ID	822924834669
ground (m AD)	5.207
max level (m AD)	6.185

ID	822916834655
ground (m AD)	5.238
max level (m AD)	6.199

ID	SMH06.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.499
ds inv (m AD)	2.395
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.33313

ID	822881834610
ground (m AD)	5.268
max level (m AD)	6.199

ID	822838834568
ground (m AD)	5.301
max level (m AD)	6.200

ID	SMH09.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.430
ds inv (m AD)	1.400
grad (m/m)	0.00231
r.pfc (m3/s)	4.268
max ds_flow (m3/s)	-1.40518

ID	SMH09.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.430
ds inv (m AD)	1.400
grad (m/m)	0.00231
r.pfc (m3/s)	4.268
max ds_flow (m3/s)	-1.40518

ID	SMH06
ground (m AD)	5.800
max level (m AD)	6.222

ID	SMH07
ground (m AD)	7.000
max level (m AD)	6.217

ID	SMH06.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.499
ds inv (m AD)	2.395
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.33313

ID	SMH08A.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.530
ds inv (m AD)	1.480
grad (m/m)	0.00269
r.pfc (m3/s)	4.611
max ds_flow (m3/s)	-1.07645

ID	SMH08A.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.530
ds inv (m AD)	1.480
grad (m/m)	0.00269
r.pfc (m3/s)	4.611
max ds_flow (m3/s)	-1.07645

ID	SMH05.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.629
ds inv (m AD)	2.499
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.39146

ID	SMH05.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.629
ds inv (m AD)	2.499
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.39146

ID	SMH07.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.701
ds inv (m AD)	1.660
grad (m/m)	0.00332
r.pfc (m3/s)	5.128
max ds_flow (m3/s)	1.33480

ID	SMH07.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.701
ds inv (m AD)	1.660
grad (m/m)	0.00332
r.pfc (m3/s)	5.128
max ds_flow (m3/s)	1.33480

ID	SMH06A.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.395
ds inv (m AD)	2.300
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.33529

ID	822527834420
ground (m AD)	5.820
max level (m AD)	6.207

ID	822667834568
ground (m AD)	5.345
max level (m AD)	6.202

ID	822765834544
ground (m AD)	5.327
max level (m AD)	6.201

ID	SMH07A
ground (m AD)	6.650
max level (m AD)	6.215

ID	SMH08.1
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.620
ds inv (m AD)	1.530
grad (m/m)	0.00166
r.pfc (m3/s)	3.615
max ds_flow (m3/s)	1.46798

ID	SMH08.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	1.620
ds inv (m AD)	1.530
grad (m/m)	0.00166
r.pfc (m3/s)	3.615
max ds_flow (m3/s)	1.46798

ID	SMH06A.2
Shape ID	CIRC
width (mm)	1650
us inv (m AD)	2.395
ds inv (m AD)	2.300
grad (m/m)	0.00195
r.pfc (m3/s)	3.916
max ds_flow (m3/s)	1.33529

ID	822542834506
ground (m AD)	5.370
max level (m AD)	6.206

ID	822557834527
ground (m AD)	5.366
max level (m AD)	6.205

ID	822615834565
ground (m AD)	5.354
max level (m AD)	6.204

ID	SMH08
ground (m AD)	6.100
max level (m AD)	6.213