

Hong Kong Housing Authority
Agreement No. CB20120293
Planning and Engineering Study
for the Public Housing Site and
Yuen Long Industrial Estate
Extension at Wang Chau

Final Technical Report No.1 (TR-1)
Baseline Review

Figures

March 2013

IMPORTANT – CONFIDENTIALITY

This project and study shall be kept confidential and any information contained in and/or related to the project/study shall not be disclosed to any person not involved in the project/study.

226464

Ove Arup & Partners Hong Kong Ltd
Level 5 Festival Walk
80 Tat Chee Avenue
Kowloon Tong
Kowloon
Hong Kong
www.arup.com

This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

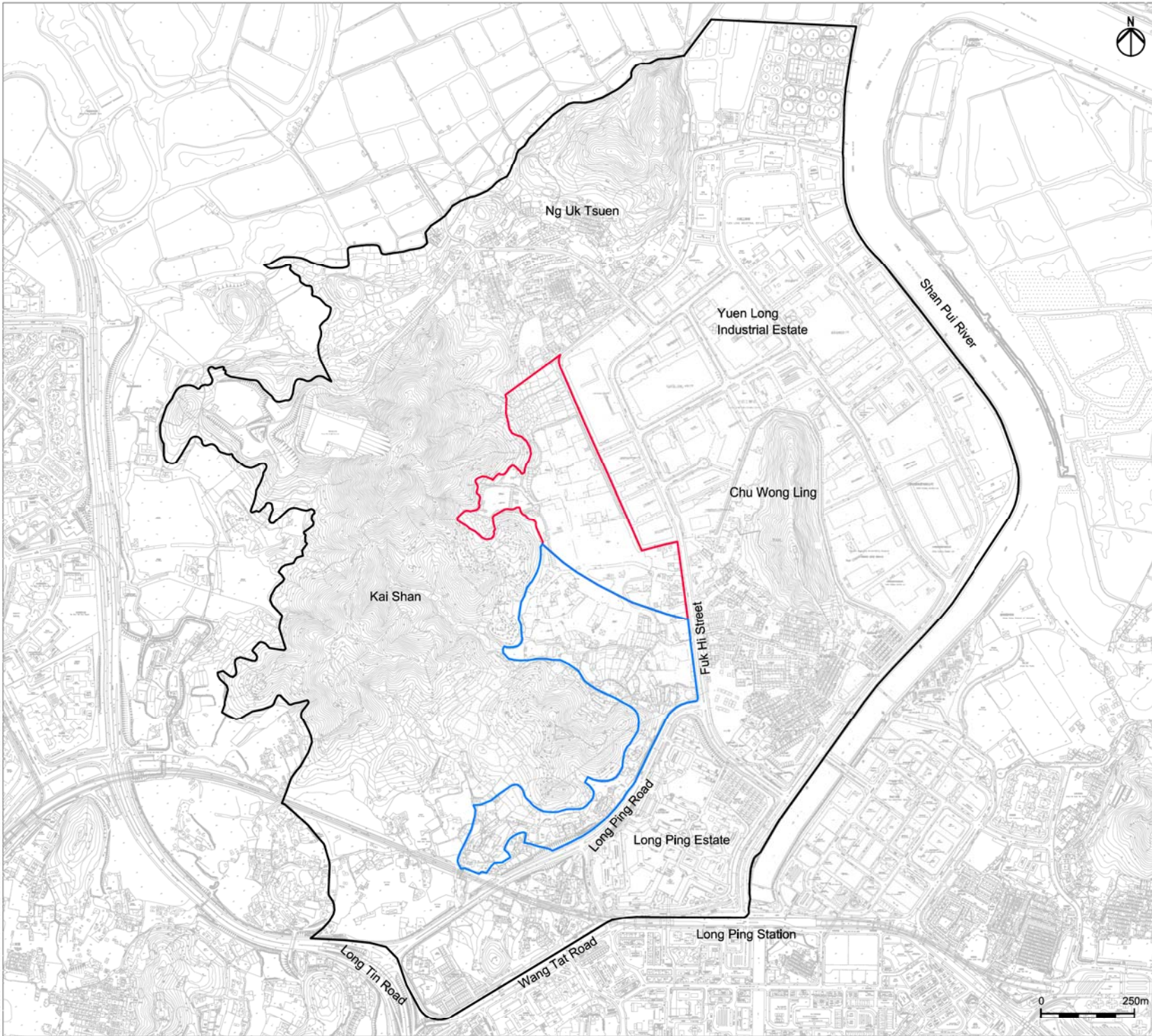
Job number 226464

ARUP

List of Figures

Figure 1.1.1	Study Area and Project Site	Figure 2.6.6	NTH Screening along boundary of proposed YLIEE and PHD
Figure 2.1.1	HK 2030 Study – Recommended Development Pattern (Wang Chau)	Figure 2.7.1	General Boundary of Yuen Long Basin and Tin Shui Wai Basin
Figure 2.1.2	Statutory Land Use Zoning & Boundaries of Wetland Conservation Area & Wetland Buffer Area	Figure 2.7.2	Main Drainage Systems in the Vicinity of Proposed Developments
Figure 2.1.3	Existing Land Uses and Developments	Figure 2.7.3	Problematic Flooding Location in the Vicinity of Proposed Developments
Figure 2.1.4	Tertiary Planning Units covering the Project Site and its Surroundings	Figure 2.8.1	General Layout of Yuen Long Sewerage Catchment and Location of YLSTW
Figure 2.1.5	Major Government Institution or Community Facilities & Open Space	Figure 2.9.1	Key Waterworks and Fresh Water Service Reservoir Supply Zones
Figure 2.2.1	District Characters and Appreciation of Site Dimensions	Figure 2.9.2	Existing Fresh Water Distribution Main in the Vicinity of Project Site
Figure 2.2.2	District Characters	Figure 2.9.3	Existing Gas Main in the Vicinity of Proposed Developments
Figure 2.2.3	Existing Landform and Development Height Profile	Figure 2.9.4	Existing Main Supply Circuits in the Vicinity of Project Site
Figure 2.2.4	Vistas and Visual Corridors	Figure 2.9.5	Existing Main Communication Cables in the Vicinity of Project Site
Figure 2.4.1	Land Status of the Project Site and Surrounding Areas	Figure 2.10.1	Preliminary Habitat Map of the Study Area
Figure 2.4.2	Burial Grounds and Graves	Figure 2.10.2	Location of Ponds within the Study Area (based on preliminary habitat map)
Figure 2.4.3	Tso and Tong Lots	Figure 2.11.1	Assessment Area for Cultural Heritage
Figure 2.5.1	Existing Highway and Rail Network	Figure 2.11.2	Mong Tseng and Sheung Cheung Wai Sites of Archaeological Interest
Figure 2.5.2	Franchised Bus Service, GMB Services and Rail Based Services on Major Corridor within Study Area	Figure 2.11.2a	Map Showing Areas of No, Low and Very Low Archaeological Potential
Figure 2.5.3	Cycling and Pedestrian Facilities in the Study Area	Figure 2.11.3	Location of Historic Villages
Figure 2.6.1	Published Geological Map (1:20,000)	Figure 2.11.3a	Location of Historic Villages
Figure 2.6.2a	Topographic Map (1:1,000)	Figure 2.11.3b	Location of Historic Villages
Figure 2.6.2b	Topographic Map (1:1,000)	Figure 2.11.3c	Location of Historic Villages
Figure 2.6.2c	Topographic Map (1:1,000)	Figure 2.11.4	Built Heritage Resources
Figure 2.6.2d	Topographic Map (1:1,000)	Figure 2.11.4a	Built Heritage Resources
Figure 2.6.2e	Topographic Map (1:1,000)	Figure 2.11.4b	Built Heritage Resources
Figure 2.6.2f	Topographic Map (1:1,000)	Figure 2.11.4c	Built Heritage Resources
Figure 2.6.3	Published 1:5,000 Superficial Geological Map	Figure 2.11.4d	Built Heritage Resources
Figure 2.6.4	Published 1:5,000 Solid Geological Map	Figure 2.11.5	Burial Grounds
Figure 2.6.5	Legend for Published 1:5,000 Solid and Superficial Geological Map	Figure 2.12.1	PATH Grid of Wang Chau
		Figure 2.12.2	Locations of Air Sensitive Receivers and Air Assessment Points

Figure 2.12.3	Chimney Locations	Figure 2.12.18	Landscape Resource 10, 11 & 12
Figure 2.12.3a	Chimney Locations	Figure 2.12.19	Landscape Resource 13, 14 & 15
Figure 2.12.3b	Chimney Locations	Figure 2.12.20	Landscape Character Plan
Figure 2.12.3c	Chimney Locations	Figure 2.12.21	Visually Sensitive Receiver Plan
Figure 2.12.3d	Chimney Locations	Figure 2.12.22	VSR 1 and 2
Figure 2.12.3e	Chimney Locations	Figure 2.12.23	VSR 3 and 4
Figure 2.12.4	Odour Survey Findings	Figure 2.12.24	VSR 5 and 6
Figure 2.12.5	Concurrent Projects	Figure 2.12.25	VSR 7 and 8
Figure 2.12.6	Locations of Existing and Planned Noise Sources	Figure 2.12.26	VSR 9 and 10
Figure 2.12.7	Location of Rural Industrial Noise Sources within Project Site and its Vicinity	Figure 2.12.27	VSR 11 and 12
Figure 2.12.8	Prevailing Noise Measurement Locations	Figure 2.12.28	VSR 13 and 14
Figure 2.12.9	Locations of Noise Sensitive Receivers and Noise Assessment Points	Figure 2.12.29	VSR 15 and 16
Figure 2.12.9a	Locations of Noise Assessment Points	Figure 2.12.30	VSR 17 and 18
Figure 2.12.9b	Locations of Noise Assessment Points	Figure 2.12.31	VSR 19 and 20
Figure 2.12.9c	Locations of Noise Assessment Points	Figure 3.1.1	Key Development Constraints and Opportunities in Land Use Planning
Figure 2.12.10	Water Quality Sensitive Receivers	Figure 3.3.1	Development Opportunities Plan
Figure 2.12.11	Project Site for Land Contamination Assessment	Figure 3.4.1	Development Constraints and No-go Areas on Land Matters
Figure 2.12.12	Location of Surveyed Sites for Land Contamination Assessment	Figure 3.10.1	Ecological Key Issues in the Proximity of the Project Site and the Study Area and No-go Areas within the Study Area
Figure 2.12.13	Areas with Dangerous Goods (from FSD's information)	Figure 3.10.2	No-go Area because of Fisheries within the Study Area
Figure 2.12.14	Landscape Resources Plan	Figure 3.11.1a	Historic Villages and Archaeological No-go Areas
Figure 2.12.15	Landscape Resource 1, 2 & 3	Figure 3.11.1b	Area Identified for Archaeological Field Survey
Figure 2.12.16	Landscape Resource 4, 5 & 6	Figure 3.11.2	Built Heritage No-go Areas and Development Constraints
Figure 2.12.17	Landscape Resource 7, 8 & 9	Figure 3.12.1	Helicopter Noise Measurement Locations



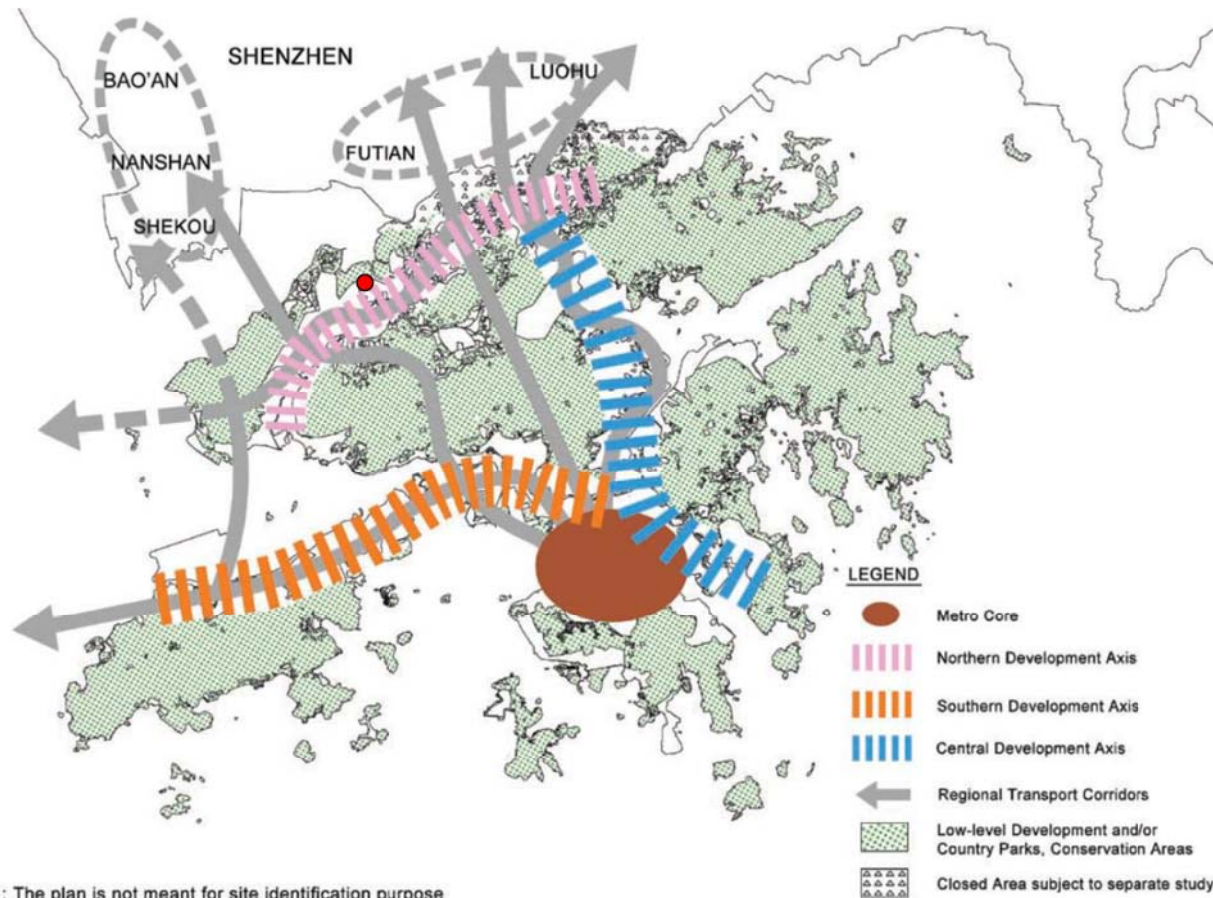
Legend

- Study Area
- Potential Public Housing Development Site
- Yuen Long Industrial Estate Extension

USER: HKCADACT08 TIME: 27 OCT 2012 - 23:58M
 FILE NAME: C:\ENVIRONMENTAL\PROJECTS\HONGKONG\DMAT\TIN\BASELINE\REV\REV001E_1.LDWG

A	FIRST ISSUE	GL	10/12		
Rev	Description	By	Date		
Consultant					
ARUP					
Project title					
Agreement No. CB20120293 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau					
Drawing title					
Study Area and Project Site					
Drawing no.					
Figure 1.1.1					Rev.
					A
Drawn	GL	Date	10/12	Checked	IL
			Approved	ST	
Scale			Status		
1:10000 (A3)			PRELIMINARY		
COPYRIGHT RESERVED					





Remark : The plan is not meant for site identification purpose

Legend

● Project Site

A	FIRST ISSUE	VARIOUS	10/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 HK 2030 Study – Recommended Development Pattern (Wang Chau)

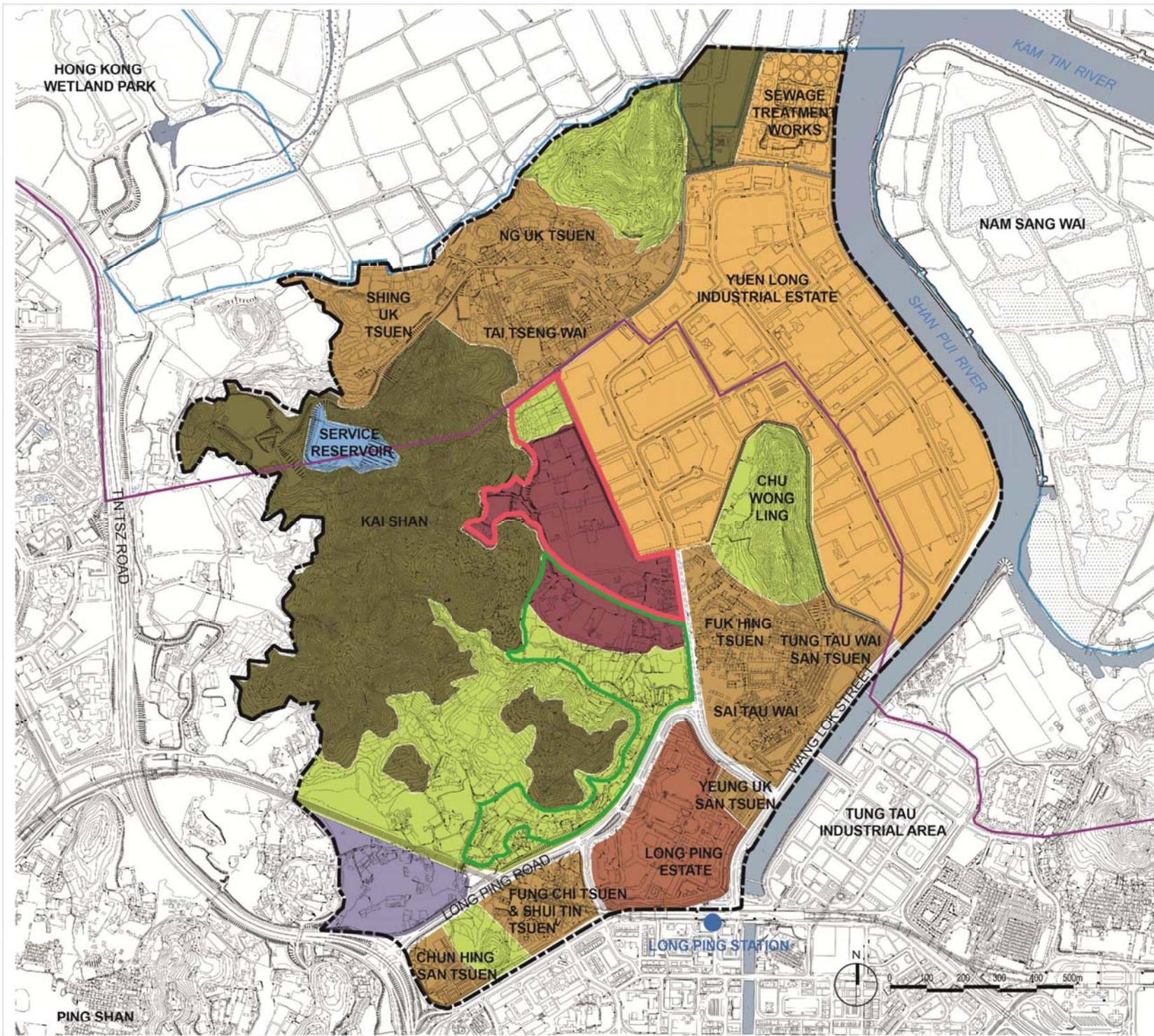
Drawing no. Rev. A
Figure 2.1.1

Drawn	VARIOUS	Date	10/12	Checked	BC	Approved	ST
-------	---------	------	-------	---------	----	----------	----

Scale	NTS	Status	PRELIMINARY
-------	-----	--------	-------------

COPYRIGHT RESERVED





LEGEND

- Study Area
- Study Site
- Boundary of Wetland Conservation Area
- Boundary of Wetland Buffer Area

OZP (S/YL-PS/14, S/YL/21 & S/YL-LFS/7) - ZONES

- Conservation Area (CA)
- Green Belt (GB)
- Government, Institution or Community (G/IC)
- Residential (Group A) (R(A))
- Village Type Development (V)
- Comprehensive Development Area (CDA)
- Other Specified Uses (OU)
- Open Storage (OS)

B	SECOND ISSUE	VARIOUS	03/13
A	FIRST ISSUE	VARIOUS	10/12
Rev	Description	By	Date

Consultant

ARUP

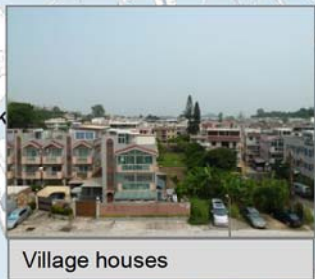
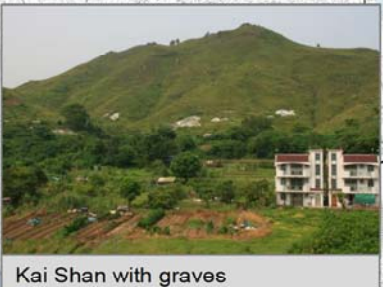
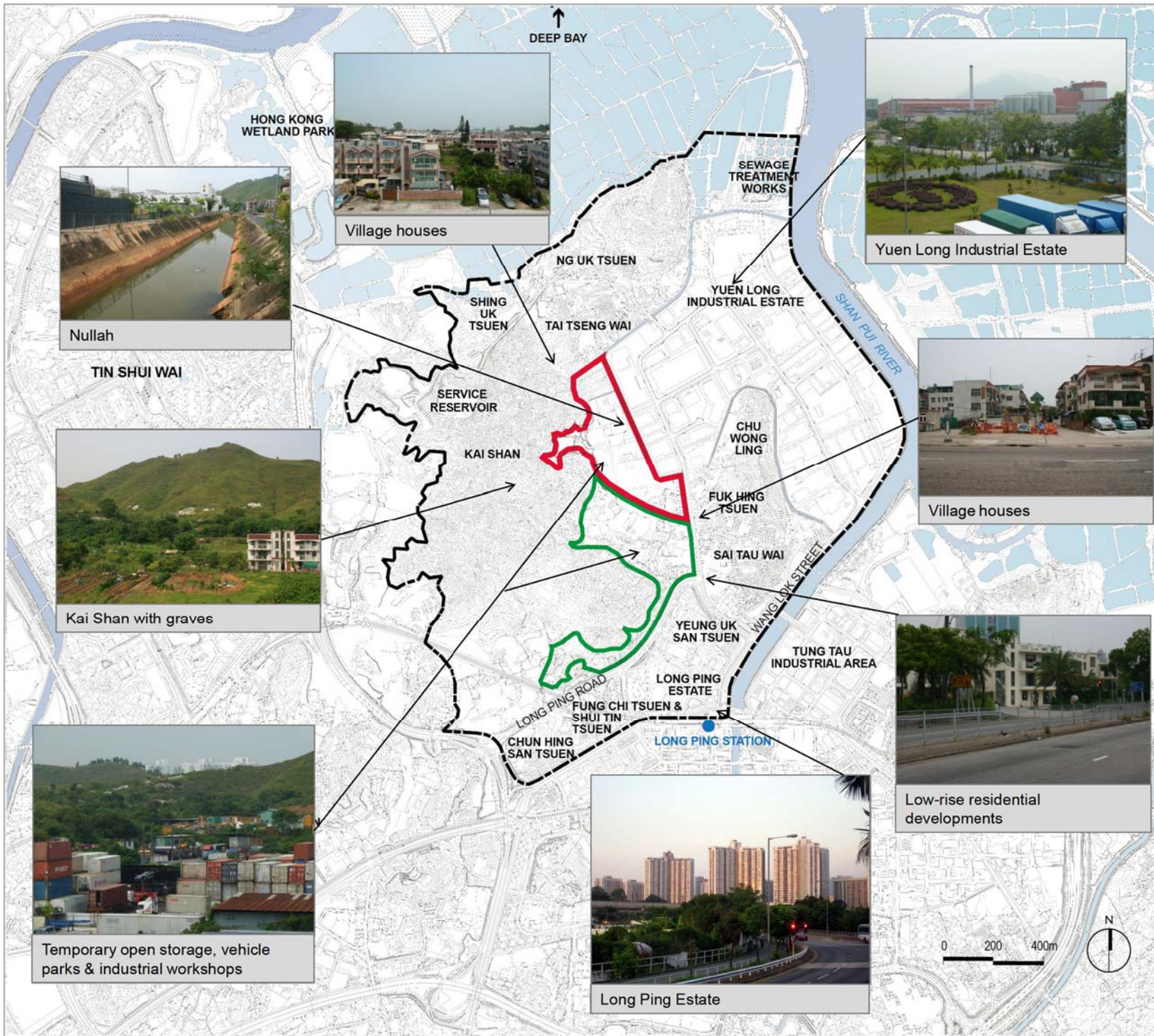
Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Statutory Land Use Zoning & Boundaries of Wetland Conservation Area & Wetland Buffer Area

Drawing no.	Figure 2.1.2		Rev.	B			
Drawn	VARIOUS	Date	03/13	Checked	BC	Approved	ST
Scale	1:10 000(A3)		Status	PRELIMINARY			

COPYRIGHT RESERVED





Rev	Description	By	Date
A	FIRST ISSUE	VARIOUS	10/12

Consultant **ARUP**

Project title
Agreement No. CB20120293
Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
Existing Land Uses and Developments

Drawn	VARIOUS	Date	10/12	Checked	BC	Approved	ST
Scale	1:15 000(A3)			Status	PRELIMINARY		



LEGEND

- Study Area
- Project Site
- Tertiary Planning Units

A	FIRST ISSUE	VARIOUS	10/12
Rev	Description	By	Date
Consultant			

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Tertiary Planning Units covering the Project Site and its Surroundings

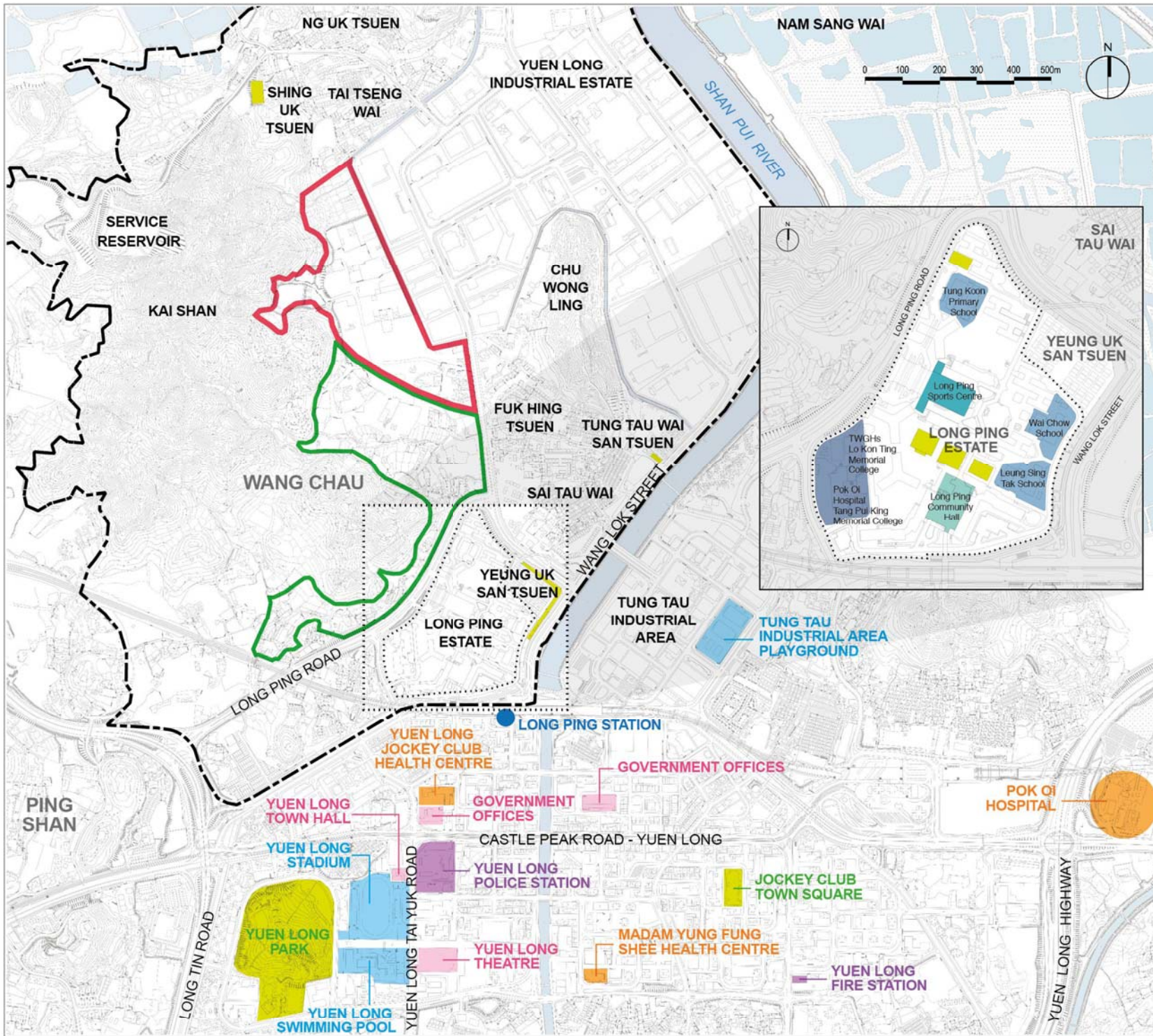
Drawing no. Rev. A
Figure 2.1.4

Drawn VARIOUS	Date 10/12	Checked BC	Approved ST
----------------------	------------	------------	-------------

Scale 1:25 000(A3)	Status PRELIMINARY
--------------------	--------------------

COPYRIGHT RESERVED





LEGEND

- Study Area
- Project Site
- Open Space
- Recreational Facilities
- Community Facilities
- Medical & Health Service
- Fire, Ambulance & Police Service

- Long Ping Estate**
- Secondary School
 - Primary School
 - Community Hall
 - Sports Centre
 - Open Space

Rev	Description	By	Date
A	FIRST ISSUE	VARIOUS	10/12

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Major Government Institution or Community Facilities & Open Space

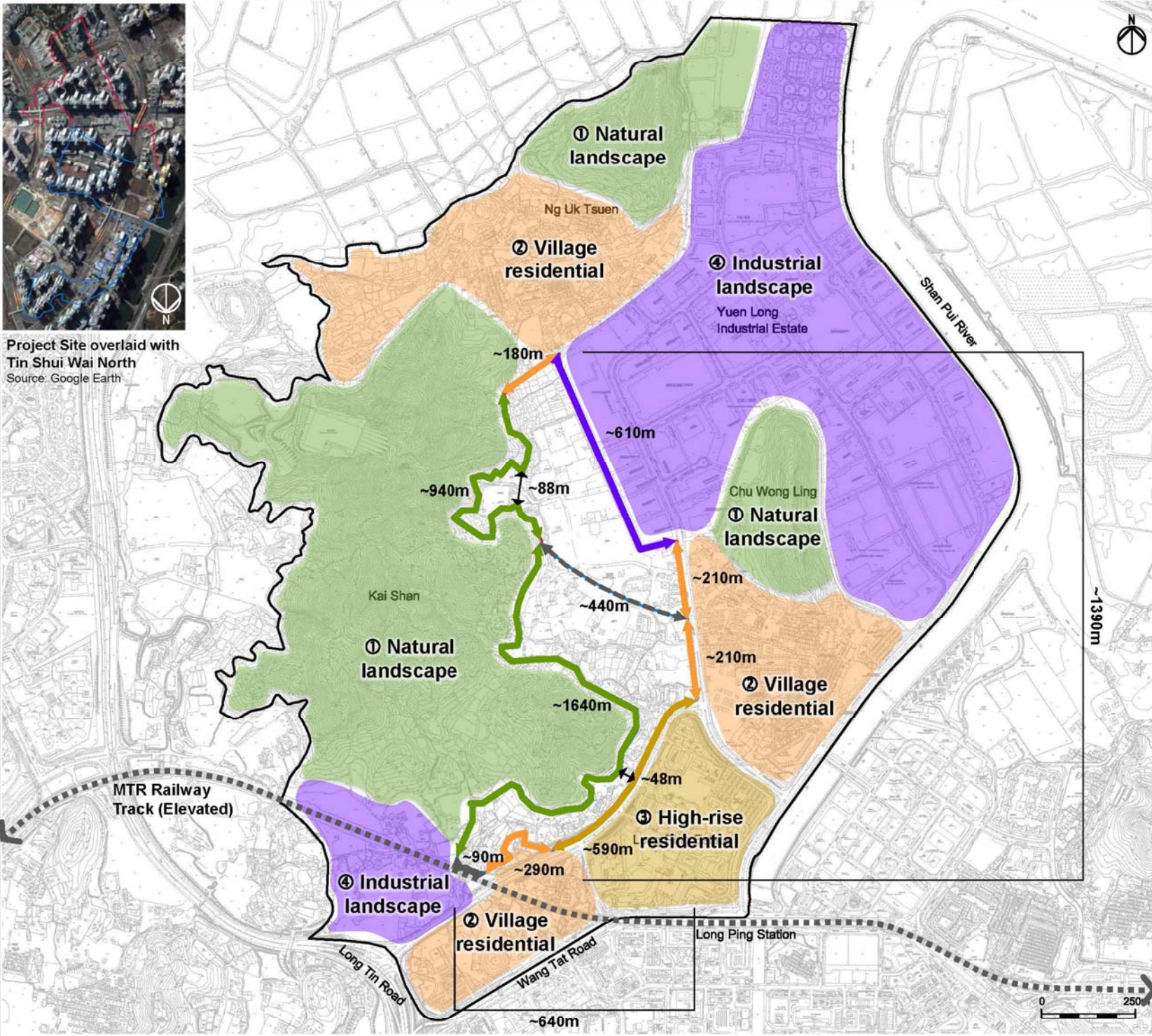
Drawing no.	Figure 2.1.5	Rev.	A
Drawn	VARIOUS	Date	10/12
Checked	BC	Approved	ST
Scale	1:10 000(A3)	Status	PRELIMINARY

COPYRIGHT RESERVED





Project Site overlaid with Tin Shui Wai North
Source: Google Earth



Legend

- Study Area
- Potential Public Rental Housing Site
- Yuen Long Industrial Estate Extension

B	SECOND ISSUE	VARIOUS	01/13
A	FIRST ISSUE	VARIOUS	10/12
Rev	Description	By	Date

Consultant

ARUP

Project title
Agreement No. CB20120293
Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
District Characters and Appreciation of Site Dimensions

Drawing no.	Figure 2.2.1			Rev.	B
Drawn	VARIOUS	Date	01/13	Checked	KSL
Scale	1:5 000 (A1)		Status	PRELIMINARY	



① Natural landscape



② Village residential



③ High-rise residential



④ Industrial landscape



* Please refer to Figure 2.2.1 for areas delineation for district characters

A	FIRST ISSUE	VARIOUS	10/12
Rev	Description	By	Date

Consultant
ARUP

Project title
Agreement No. CB20120293
Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

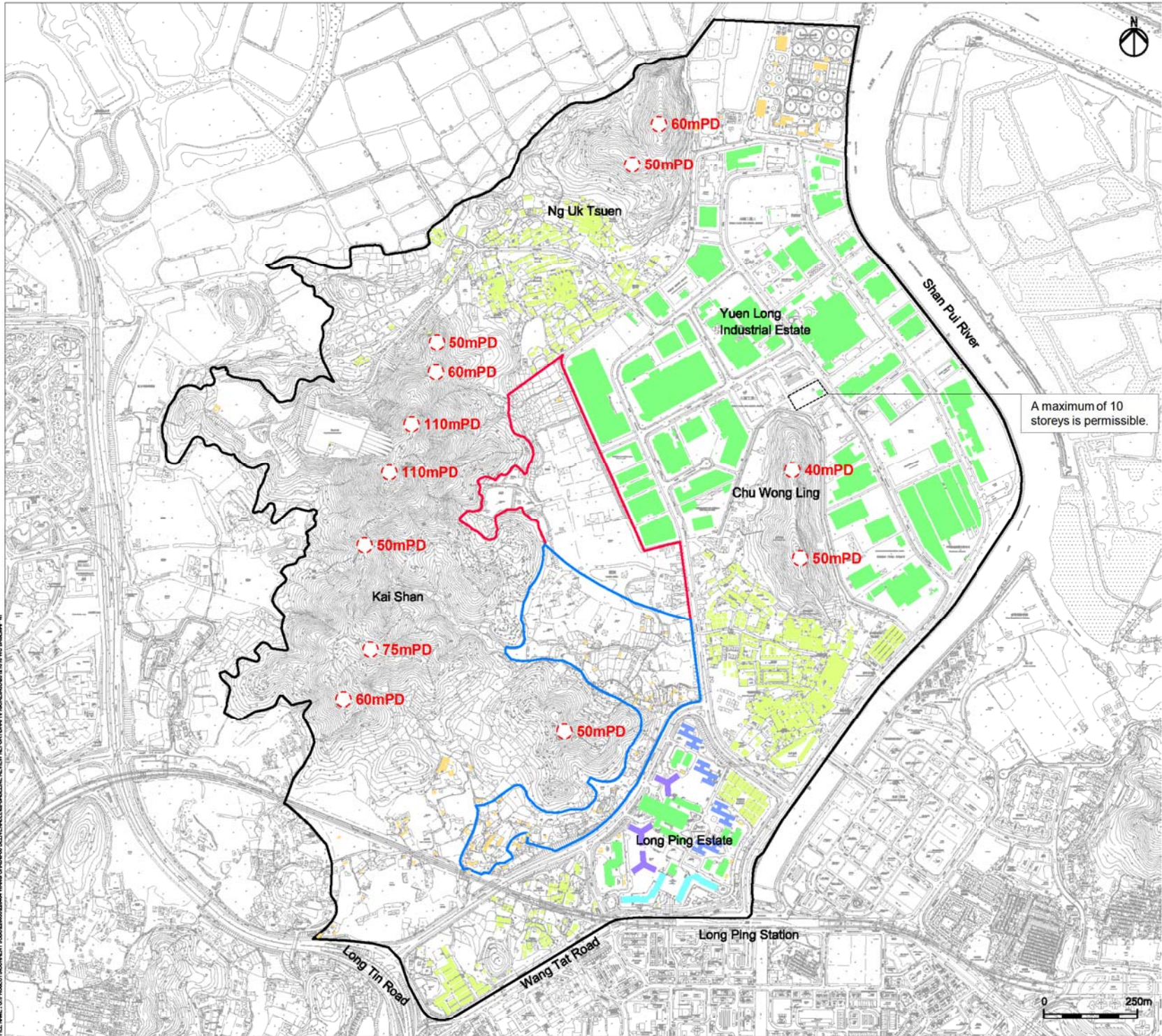
Drawing title
District Characters

Drawing no.	Figure 2.2.2			Rev.	A
Drawn	VARIOUS	Date	10/12	Checked	KSL
Scale	N/A	Status	PRELIMINARY	Approved	ST

COPYRIGHT RESERVED



HONG KONG HOUSING AUTHORITY



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - 2 storeys or below
 - 3 storeys or below
 - 8 storeys or below
 - 20-24 storeys
 - 25-29 storeys
 - 30-35 storeys
 - Hill tops with visual prominence
- A maximum of 10 storeys is permissible.

A	FIRST ISSUE	VARIOUS	10/12
Rev	Description	By	Date
Consultant			

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

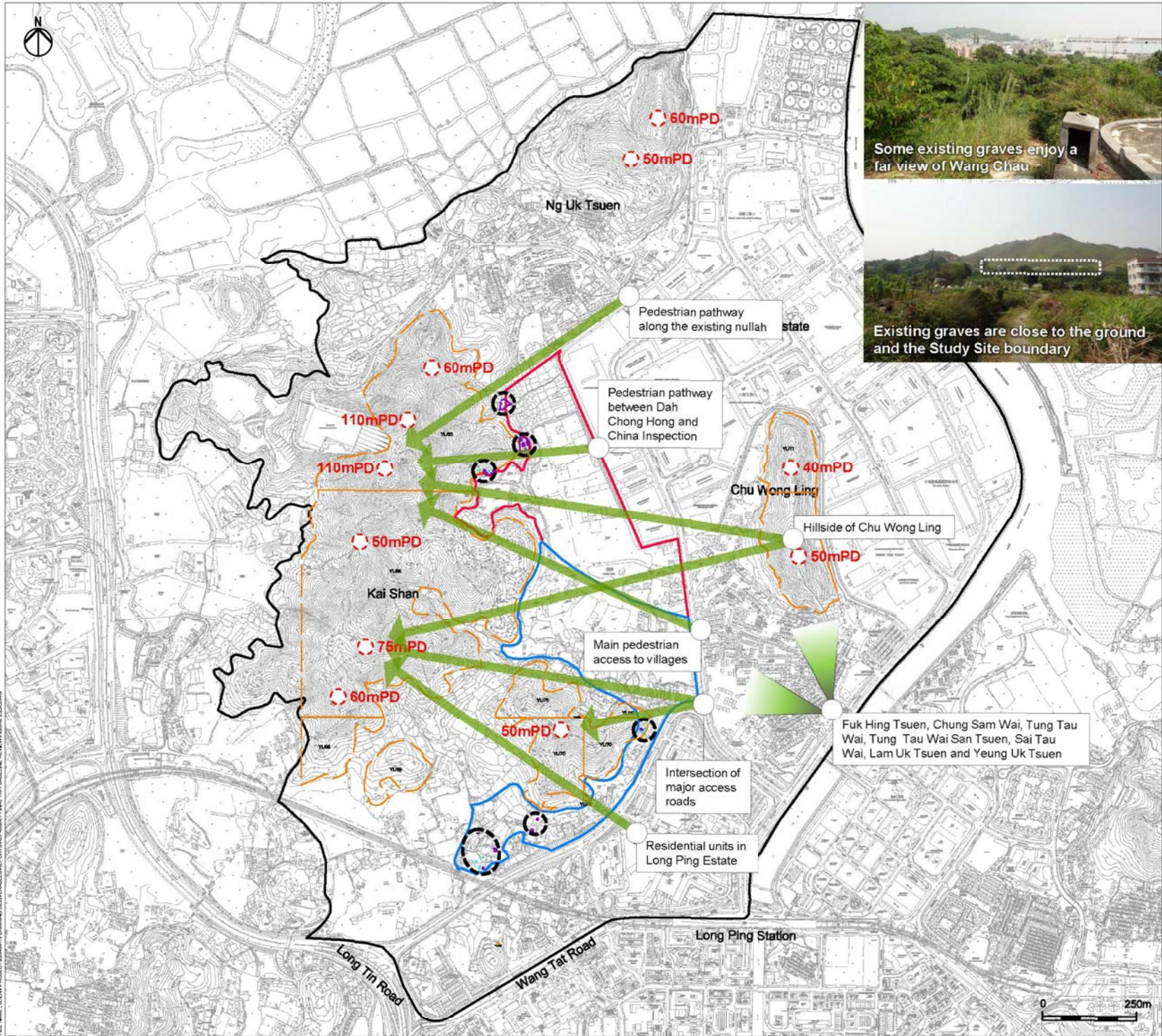
Drawing title
 Existing Landform and Development Height Profile

Drawing no.	Figure 2.2.3	Rev.	A
Drawn	VARIOUS	Date	10/12
Checked	KSL	Approved	ST
Scale	1:10000 (A3)	Status	PRELIMINARY

COPYRIGHT RESERVED



USER: HONGKONG2019 TIME: 28 OCT 2012 4:02:00 PM
 FILE NAME: C:\PROJECTS\PROJECT_2008\20080208\WANG CHAU\WANG CHAU\WANG CHAU\EXISTING LANDFORM AND DEVELOPMENT HEIGHT PROFILE\FIGURE 2.2.3\FIG 2.2.3.DWG



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Major clusters of graves*
 - Zones for burial grounds for indigenous villagers reserved by Lands Department*
 - Potential visual corridors to be preserved
 - Anticipated demand for visual connections to hills

*Sources: B1000 Topographic Maps & C1000 Land Boundary Maps from Lands Department

Rev	Description	By	Date
B	SECOND ISSUE	GL	01/13
A	FIRST ISSUE	GL	10/12

Consultant
ARUP

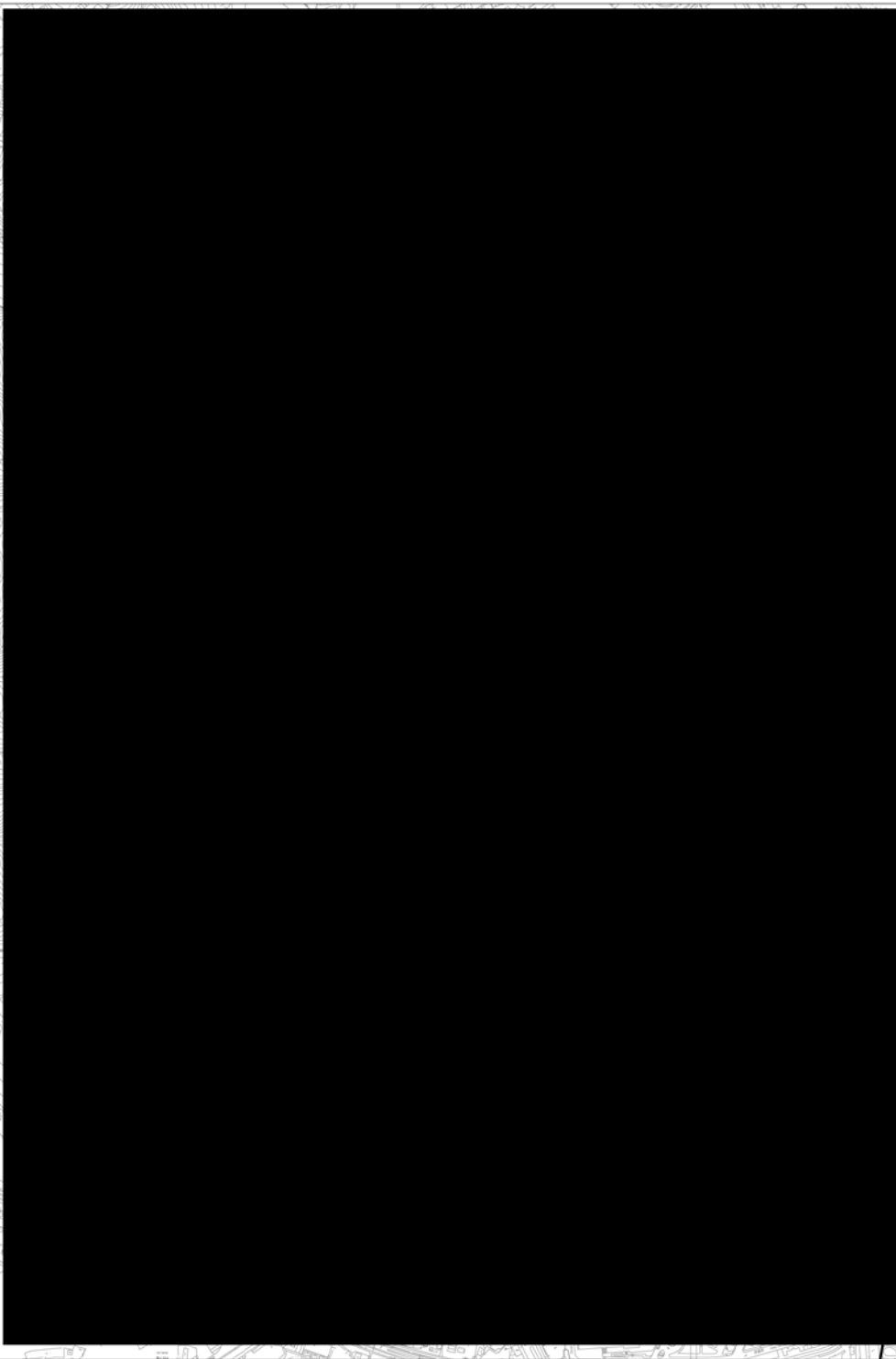
Project title
Agreement No. CB20120293
Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
Vistas and Visual Corridors

Drawing no.	Figure 2.2.4			Rev.	B
Drawn	GL	Date	01/13	Checked	IL
Scale	NTS		Status	PRELIMINARY	

USER: HKCAD0108 TIME: 07 MAR 2013 - 8:09PM
 FILE NAME: C:\CONPRODUCTION\DRAWING\DELIVERABLES\REPORTS\PRODOTY\FINAL\TIN\BASELINE\REV\WAP/FIGURE 2.2.4.DWG

USER: HKHQA\CT08 TIME: 27 OCT 2012 - 15:59PM
 FILE NAME: C:\CON\PROJECT\2086613\DRAWING\2086613\REPORTS\REPORTS\REPORTS\REPORTS\ZAL_LAND STATUS OF THE PROJECT



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Old Schedule Lot (OSL)
 - Old New Grant Lot (ONG)
 - New Grant Lot (NNG)
 - Short Term Tenancy (STT)
 - Government Land Licence (GLL)
 - Permanent Government Land Allocation (GLA)

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant
ARUP

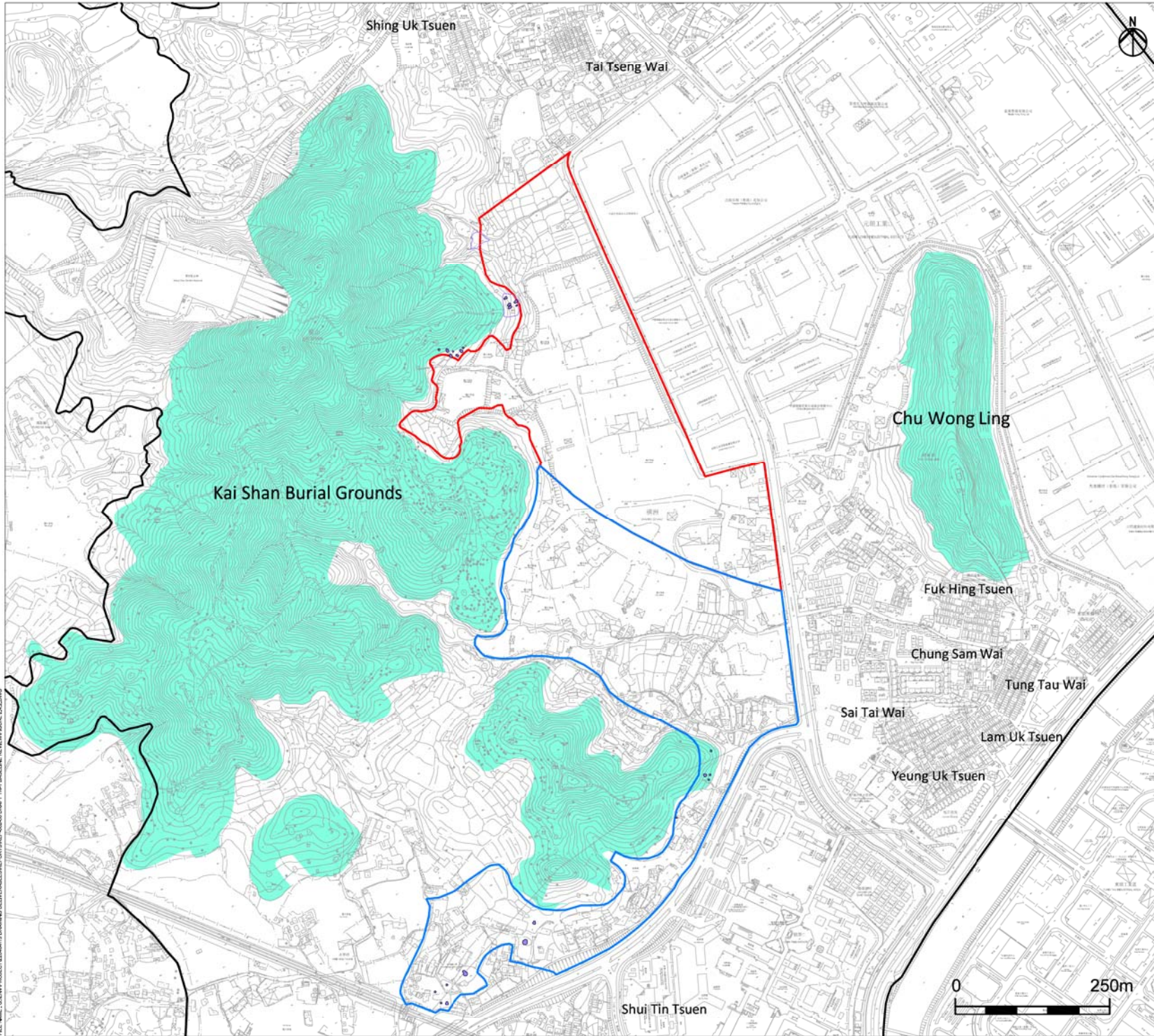
Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Land Status of the Project Site and Surrounding Areas

Drawing no.	Figure 2.4.1				Rev.	A	
Drawn	GL	Date	10/12	Checked	IL	Approved	ST
Scale	AS SHOWN		Status	PRELIMINARY			

COPYRIGHT RESERVED



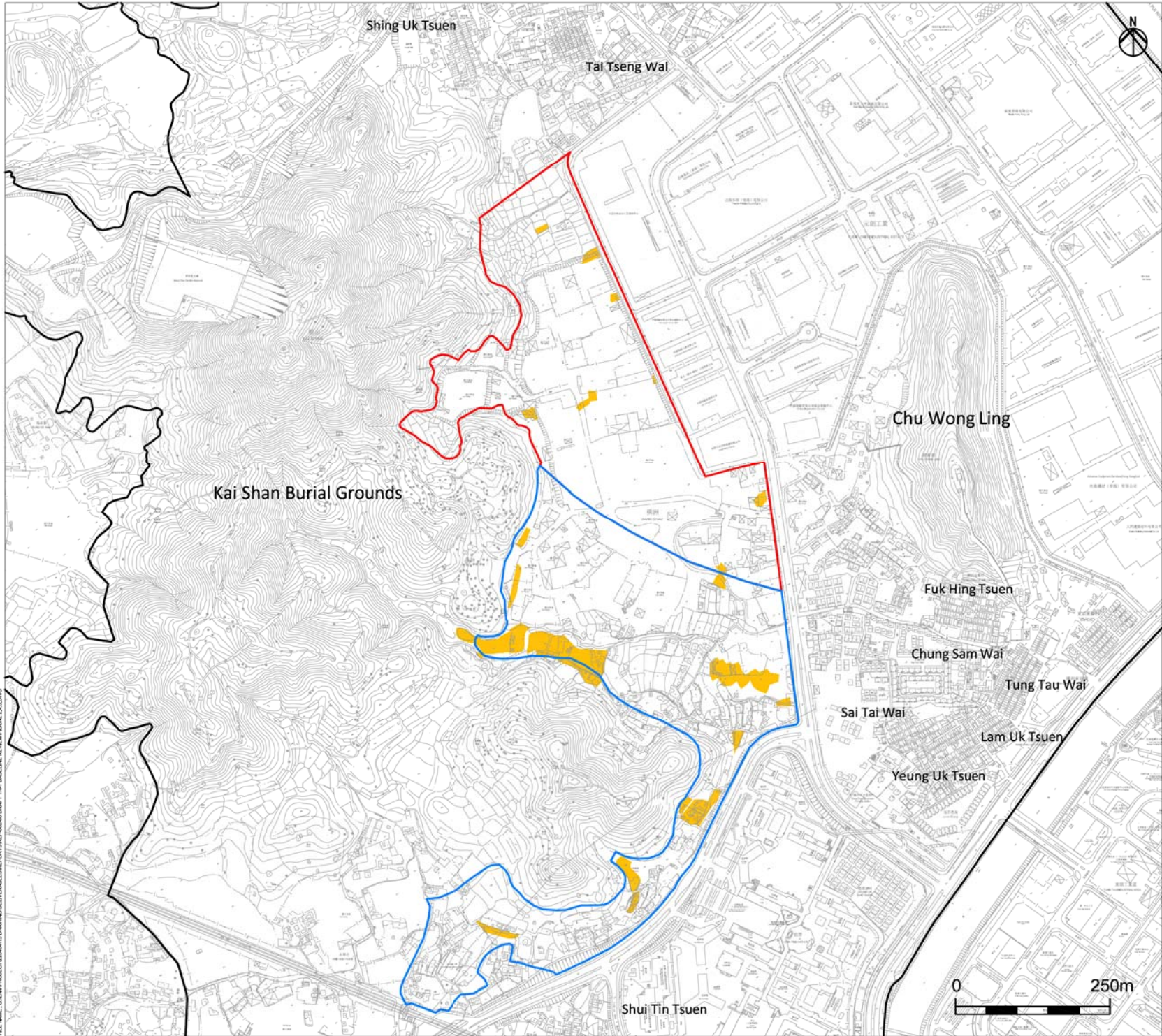


- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Burial Grounds (No-go Areas)
 - Grave (G)

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date
Consultant			
ARUP			
Project title			
Agreement No. CB20120293 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau			
Drawing title			
Burial Grounds and Graves			
Drawing no.		Figure 2.4.2	Rev. A
Drawn	GL	Date 10/12	Checked IL Approved ST
Scale NTS		Status PRELIMINARY	
COPYRIGHT RESERVED			



USER: HK04ACT12 TIME: 20 OCT 2012 12:52:04
 FILE NAME: C:\ENR\PROJECT\2012\12\DRAWING\DELIVERABLES\REPORTS\REPORTS\DMPT\THM\BASELINE\REV\WANGCHAU_ZAL2012.DWG



- Legend**
-  Study Area
 -  Potential Public Housing Development Site
 -  Yuen Long Industrial Estate Extension
 -  Tso & Tong Lots

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant
ARUP

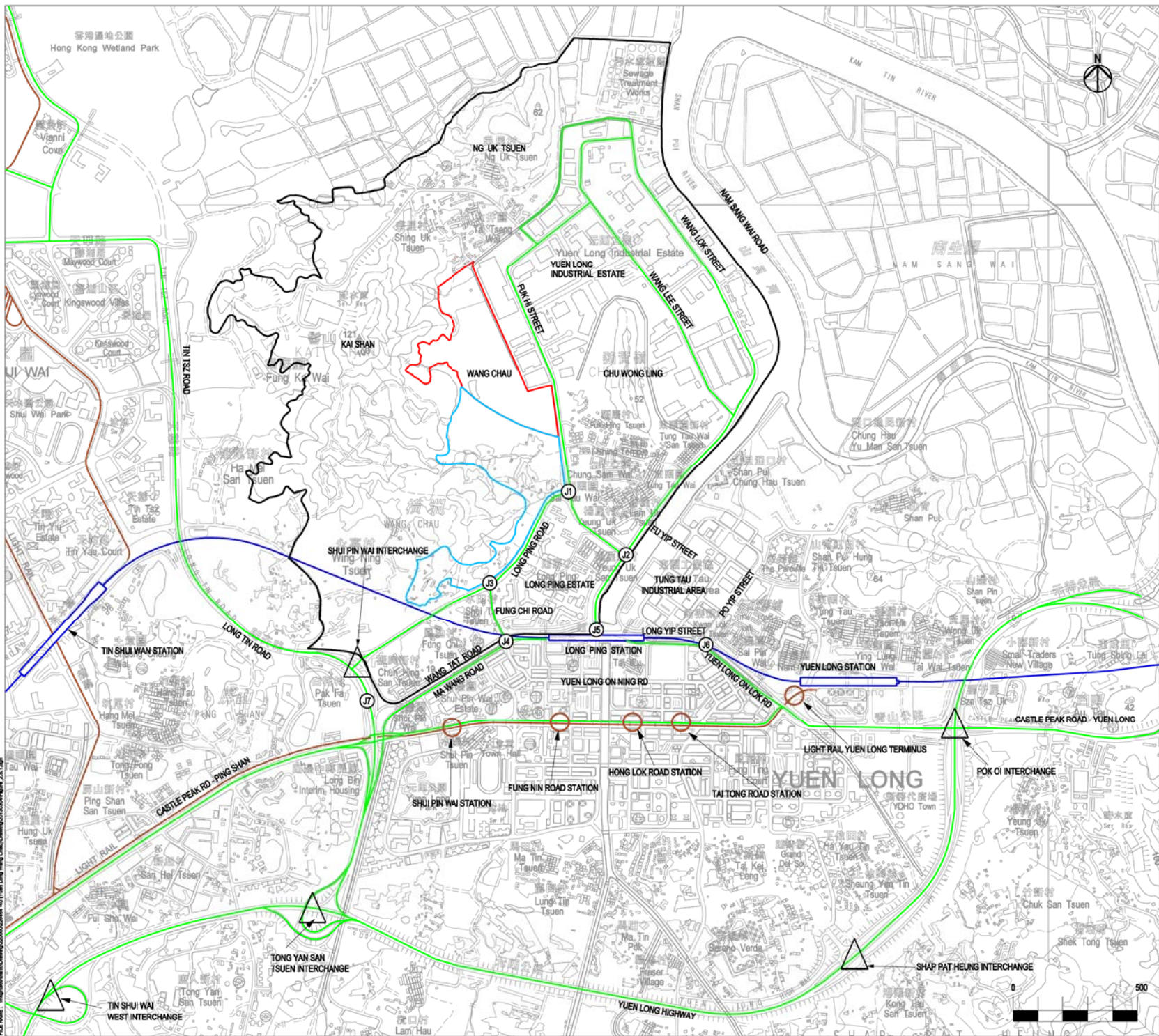
Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Tso and Tong Lots

Drawing no.	Figure 2.4.3	Rev.	A
Drawn	GL	Date	10/12
Checked	IL	Approved	ST
Scale	AS SHOWN	Status	PRELIMINARY



USER: HKHQA0108 TIME: 20 OCT 2012 12:24:00
 FILE NAME: C:\GDP\PROJECT\20120613\DRAWING\DELIVERABLES\REPORTS\REPORT\HONGKONG\DMPT\THM\BASELINE\REV\WANGCHAU_ZALLOWS



- LEGEND:**
- STUDY AREA
 - POTENTIAL PUBLIC HOUSING DEVELOPMENT SITE
 - YUEN LONG INDUSTRIAL ESTATE EXTENSION
 - EXISTING RAILWAY LINE (LRT)
 - EXISTING RAILWAY LINE (WEST RAIL)
 - EXISTING ROAD
 - MAJOR INTERCHANGE
 - SURVEYED JUNCTION

B	SECOND ISSUE	KHC	01/13
A	FIRST ISSUE	KHC	10/12
Rev	Description	By	Date

Consultant

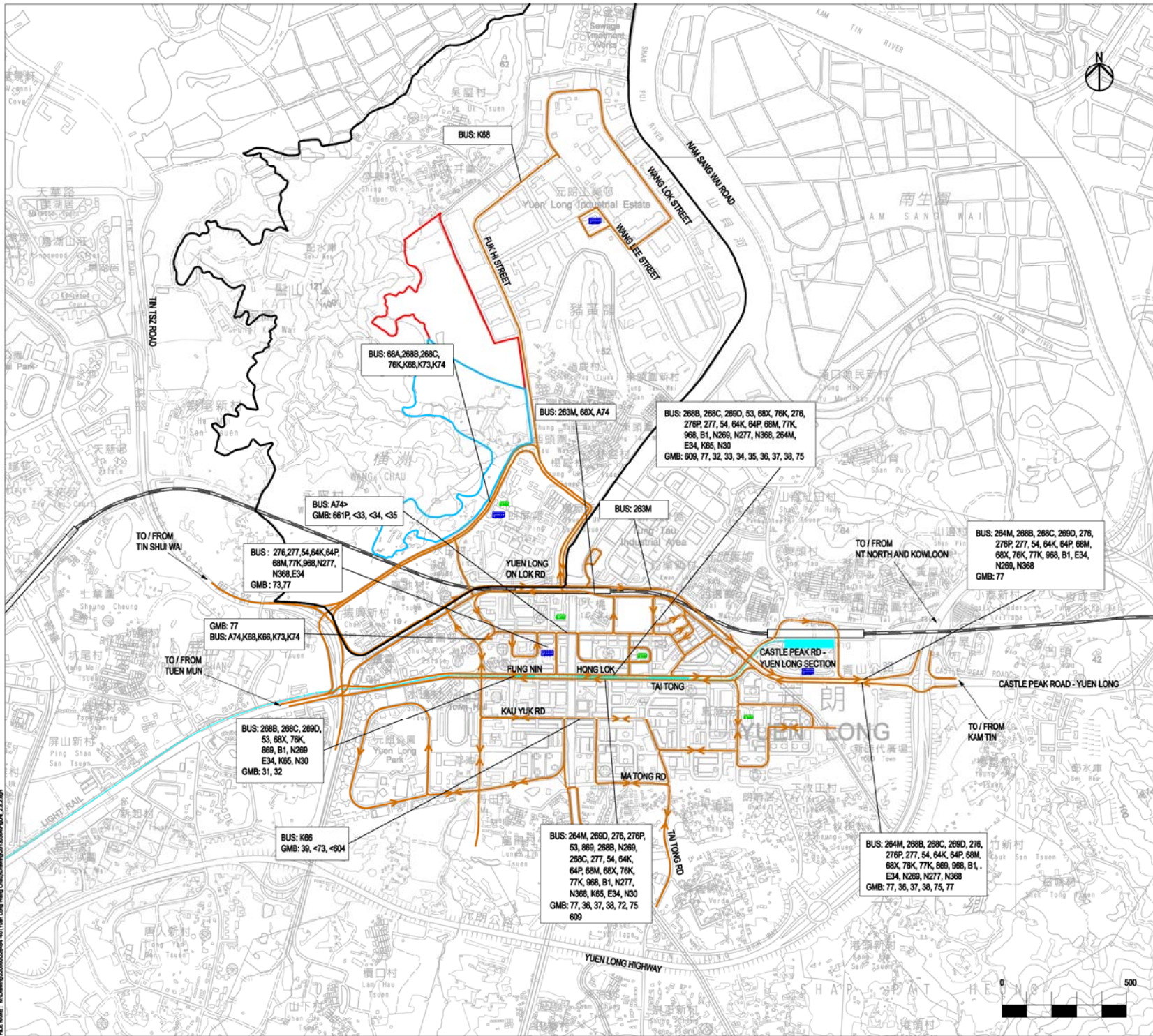
ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
EXISTING HIGHWAY AND RAIL NETWORK

Drawing no.	FIGURE 2.5.1			Rev.	B
Drawn	KHC	Date	OCT 12	Checked	DW
Scale	N.T.S.		Status	PRELIMINARY	

USER: H01.Chen
 FILE NAME: \\hkg-h01\h01\working\2012\0220293\0220293_401\Yuen Long Wang Chau\img\20120220293_401.jpg



LEGEND:

- STUDY AREA
- POTENTIAL PUBLIC HOUSING DEVELOPMENT SITE
- YUEN LONG INDUSTRIAL ESTATE EXTENSION
- BUS TERMINUS
- GMB TERMINUS
- WEST RAIL
- LRT
- BUS ROUTE

A	FIRST ISSUE	KHC	01/13
Rev	Description	By	Date

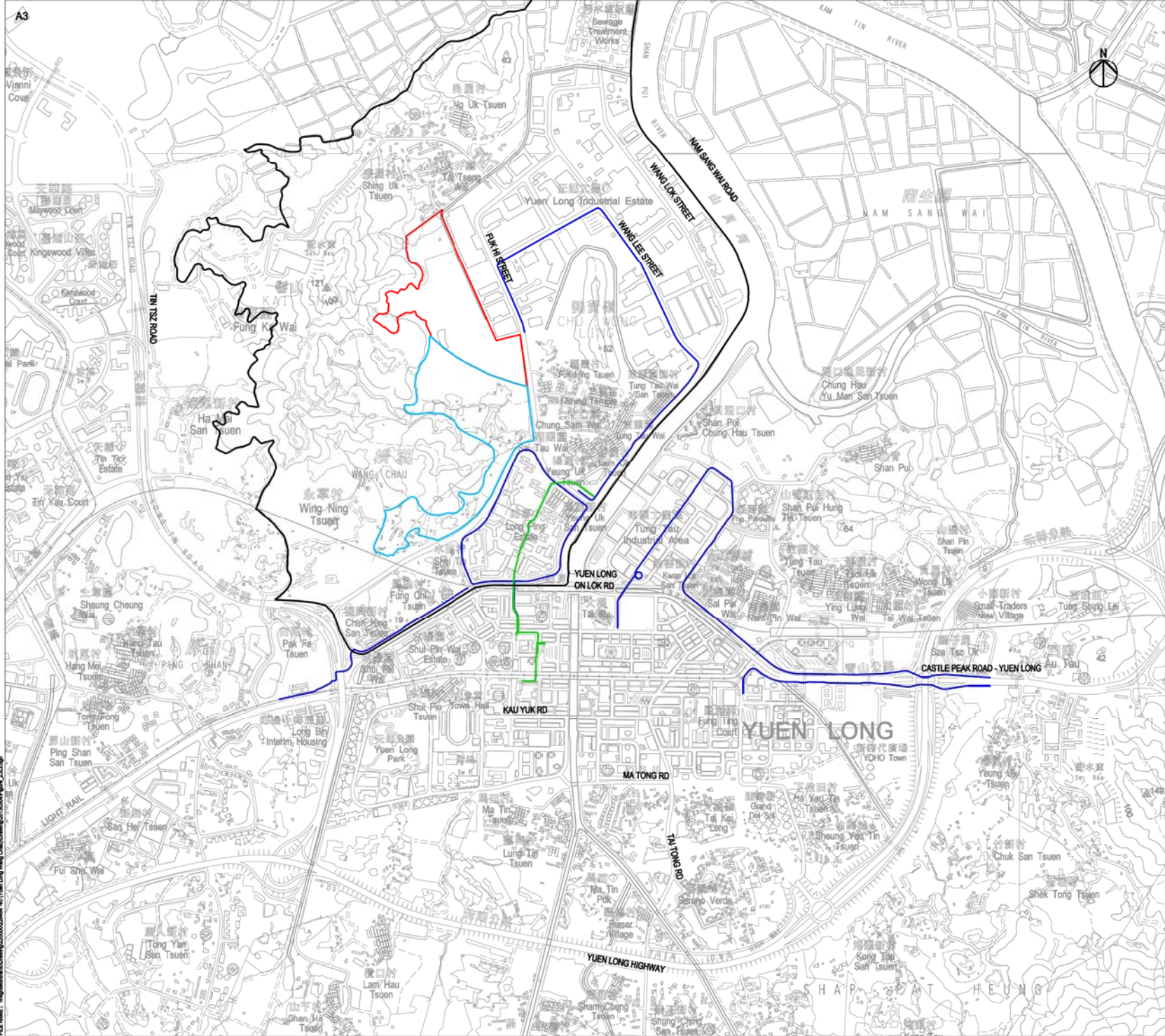
ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
FRANCHISED BUS SERVICE, GMB SERVICES AND RAIL BASED SERVICES ON MAJOR CORRIDOR WITHIN STUDY AREA

Drawing no.	FIGURE 2.5.2		Rev.	A
Drawn	KHC	Date	OCT 12	Checked
Scale	N.T.S.	Status	DW	Approved
			WC	

USER: HQ China
 FILE NAME: M:\Drawing\20120293\20120293\Figure_3.2.dwg



- LEGEND:
- STUDY AREA
 - POTENTIAL PUBLIC HOUSING DEVELOPMENT SITE
 - YUEN LONG INDUSTRIAL ESTATE EXTENSION
 - CYCLE TRACK
 - ELEVATED PEDESTRIAN CORRIDOR

Rev	Description	By	Date

Consultant **ARUP**

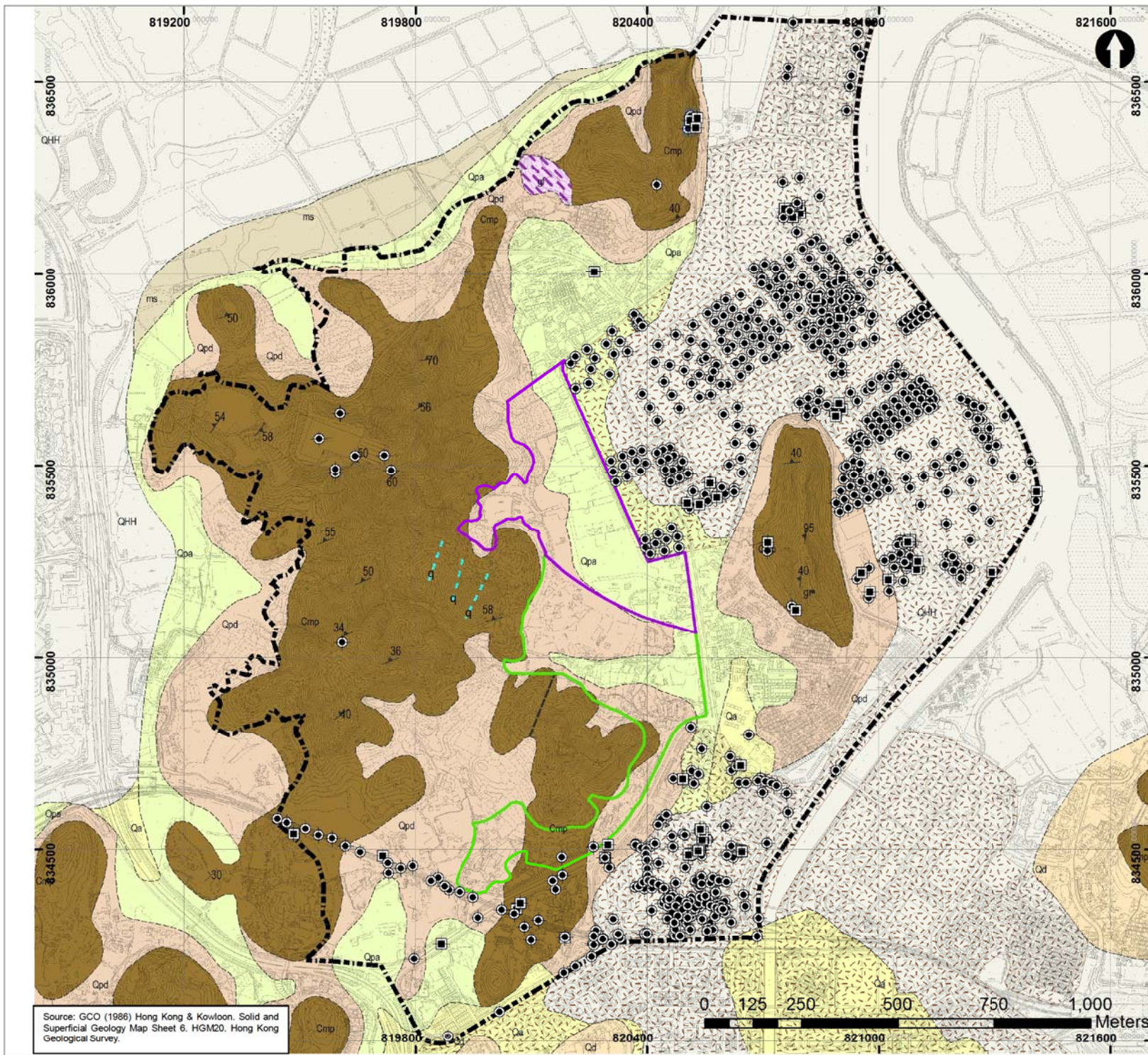
Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
CYCLING AND PEDESTRIAN FACILITIES IN THE STUDY AREA

Drawing no.	FIGURE 2.5.3				Rev.	-	
Drawn	KHC	Date	OCT 12	Checked	DW	Approved	WC
Scale	N.T.S.		Status	PRELIMINARY			
COPYRIGHT RESERVED							



USER: H01 Chew
 FILE NAME: I:\projects\h01\cb20120293\20121012\fig2_5_3.dwg



Legend

- Study Area
- Proposed YLIEE
- Proposed PHD Site

Existing GI

- Boreholes
- Trial Pits

Structural Geology

- Bedding
- Mineral Occurrence
- Foliation
- Superficial / superficial
- Superficial / solid
- Solid / solid, inferred
- Bdry of overprint, observed
- Fault: solid / solid, inferred
- Fault, inferred
- Mineral Vein

Superficial Geology

- Marine Sand
- Alluvium
- Debris Flow Deposits
- Marine Mud
- Terraced Alluvium
- Debris Flow Deposits
- Fill

Metamorphic Rock

- Mylonite
- Schist

Solid Geology

- Metasandstone and Graphite Schist
- Fine-grained Granite
- Coarse-ash Crystal Tuff

A	FIRST ISSUE	RHL	09/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

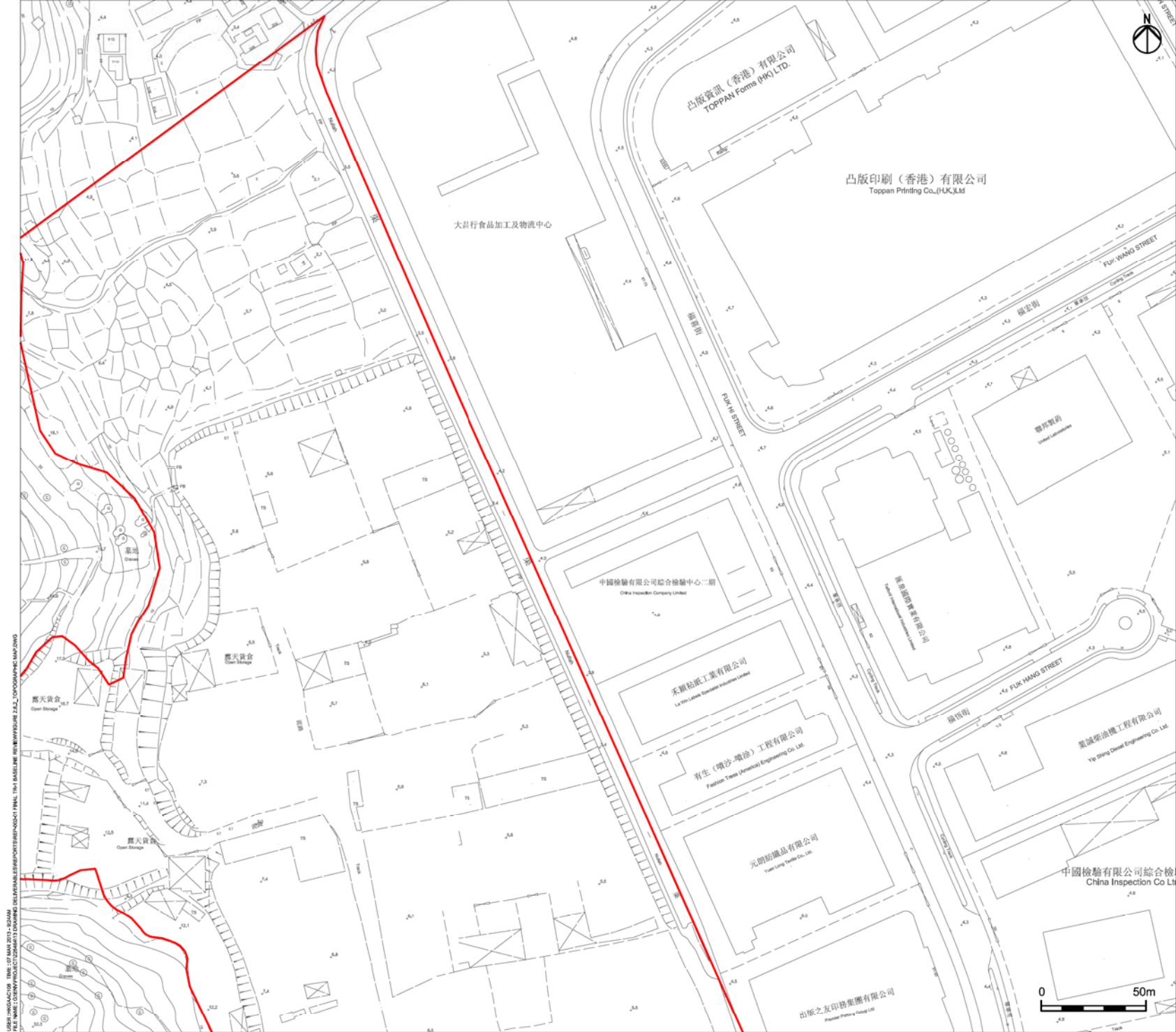
Drawing title
 Published Geological Map (1:20,000)

Drawing no.		Figure 2.6.1		Rev. A	
Drawn	RHL	Date	09/12	Checked	JH
Scale			AS SHOWN	Status	PRELIMINARY



Source: GCO (1986) Hong Kong & Kowloon. Solid and Superficial Geology Map Sheet 6. HGM20. Hong Kong Geological Survey.





Legend

- Study Area
- Potential Public Housing Development Site
- Yuen Long Industrial Estate Extension

Rev	Description	By	Date
A	FIRST ISSUE	ELCF	12/12

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Topographic Map (1:1,000)
 (Sheet 1 of 6)

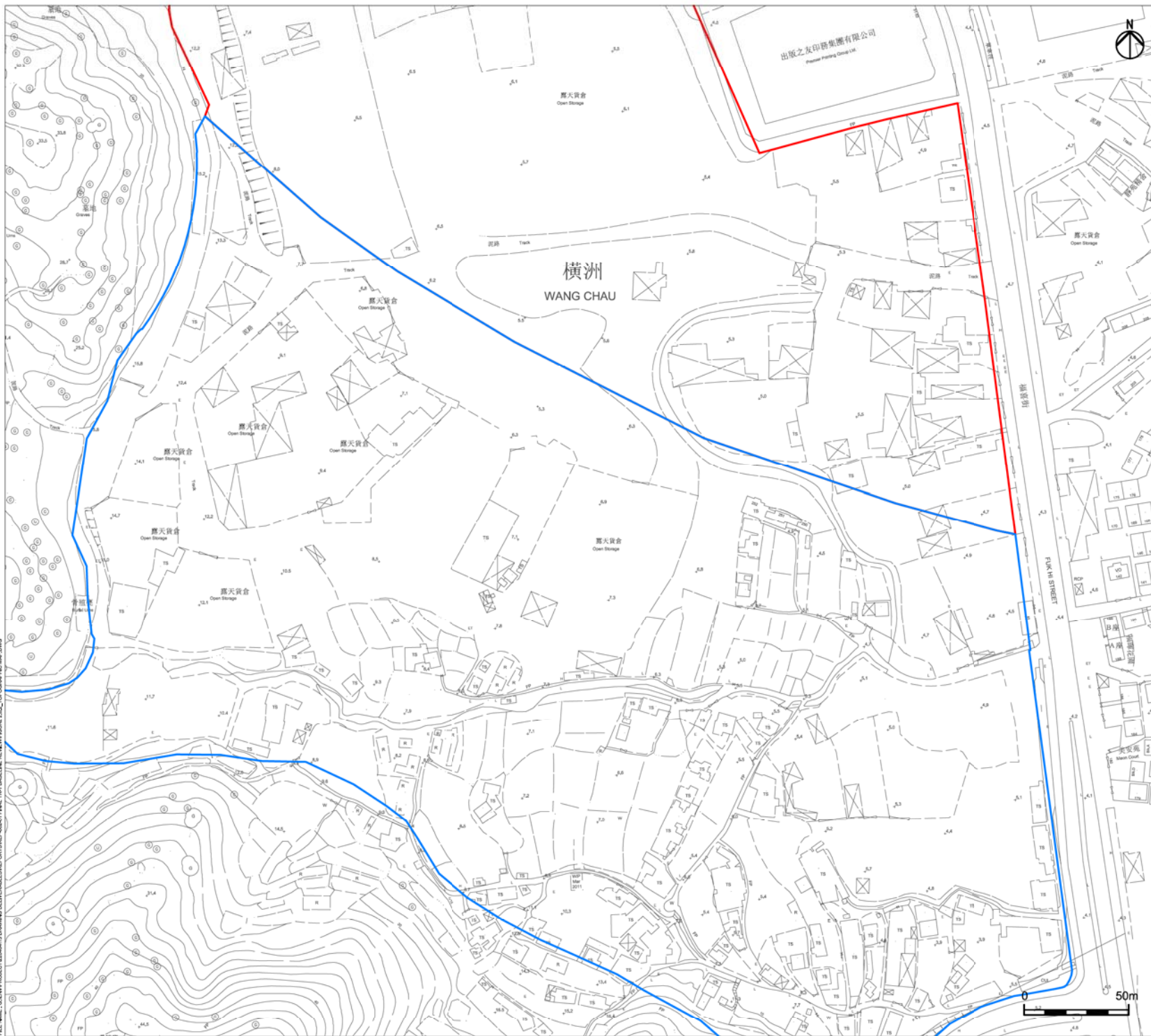
Drawing no.	Figure 2.6.2a		Rev.	A			
Drawn	ELCF	Date	12/12	Checked	IL	Approved	ST
Scale	AS SHOWN		Status	PRELIMINARY			

COPYRIGHT RESERVED

HONG KONG HOUSING AUTHORITY

USER: HKCAD108 TIME: 07 MAR 2013 - 02:44
 FILE NAME: C:\GDP\PROJECT\20120293\DRAWING\DELIVERABLES\REPORTS\REPORT_FINAL_T101_BASELINE_ISSUE\WPPURE_ZAL_CDD\WPP\MAC\ZING





- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension

USER: HKOLCA0108 TIME: 07 MAR 2013 - 02:54M
 FILE NAME: C:\CONPROJECT\20120616\DRAWING\DELIVERABLES\REPORTS\REPORT\PLAN\101\BAGLINE\REV\WFF\WFFURE_Z\L2_1000\WFF\MC\WZMG

A	FIRST ISSUE	ELCF	12/12
Rev	Description	By	Date

Consultant

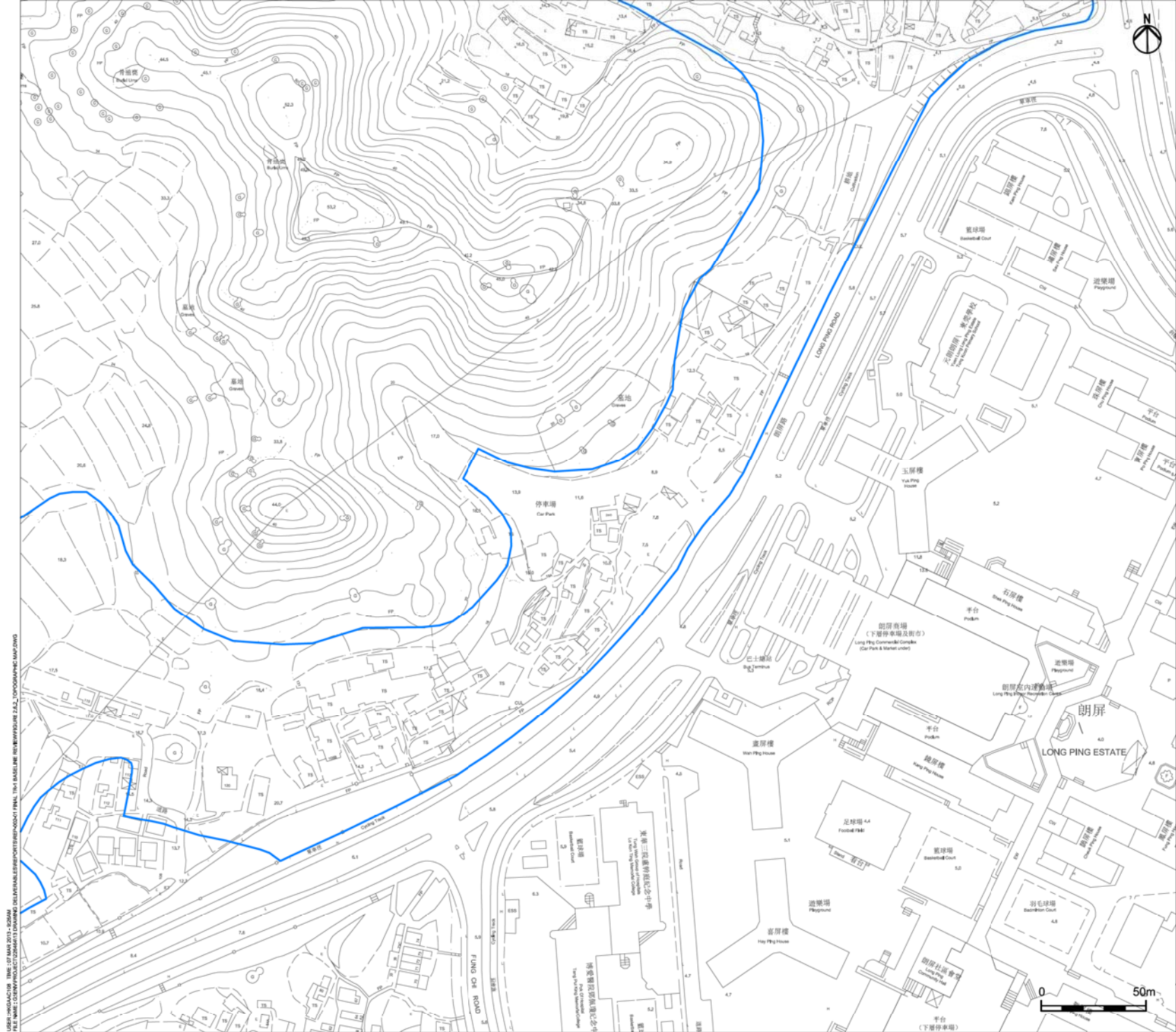
ARUP




Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site
 and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Topographic Map (1:1,000)
 (Sheet 2 of 6)

Drawing no.	Figure 2.6.2b		Rev.	A
Drawn	ELCF	Date	12/12	Checked
Scale	AS SHOWN	Status	PRELIMINARY	Approved
COPYRIGHT RESERVED				





- Legend**
-  Study Area
 -  Potential Public Housing Development Site
 -  Yuen Long Industrial Estate Extension

USER: HKOAA0108 TIME: 07 MAR 2013 12:28AM
 FILE NAME: C:\CONPROJECT\2012\6611\DRAWING\DELIVERABLES\REPORTS\REPORT_FINAL_T101\BASELINE_RISEVIEW\VIEW_2_2_1_CROSSSECTION.MXD

A	FIRST ISSUE	ELCF	12/12
Rev	Description	By	Date

Consultant

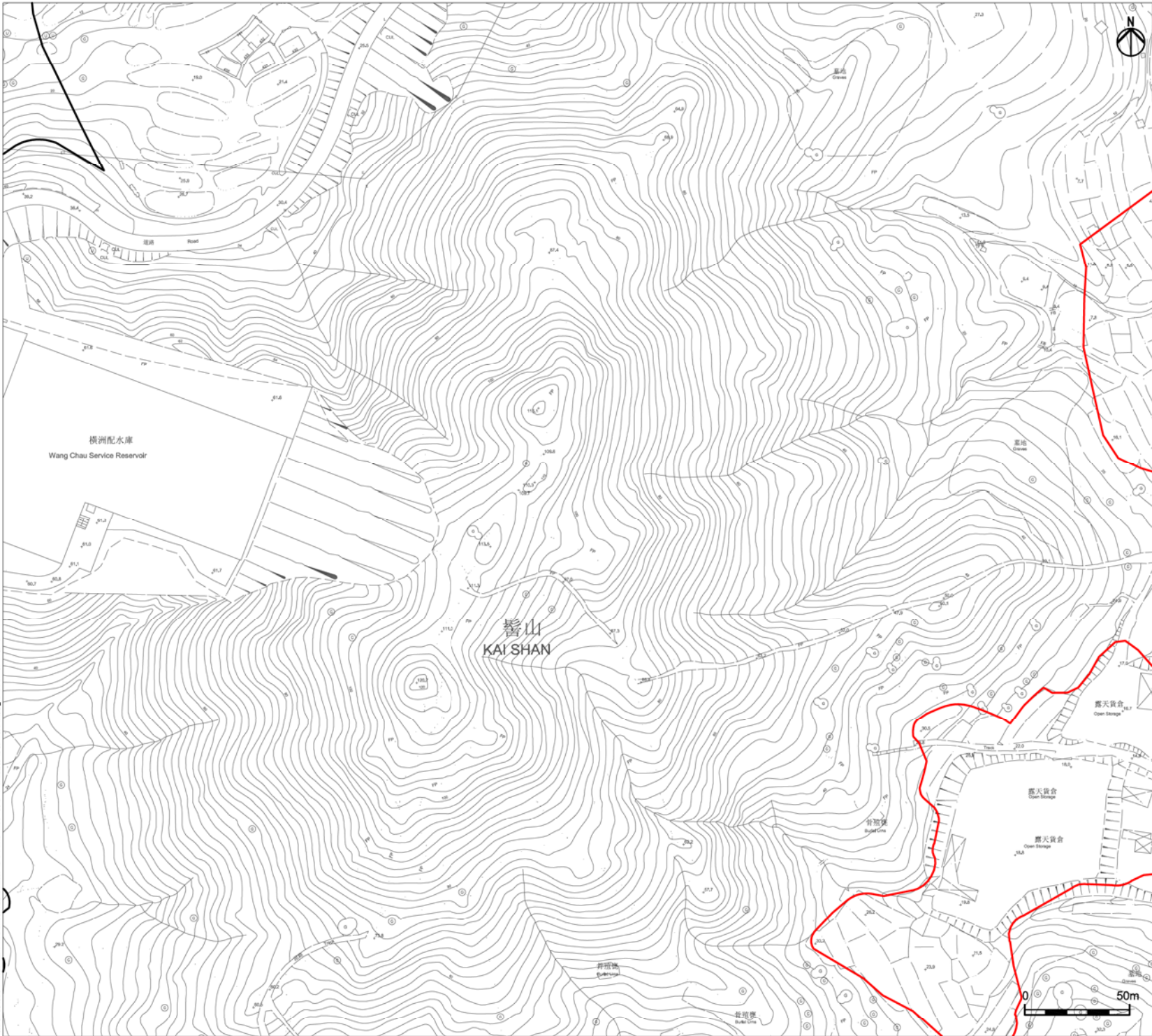
ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau




Drawing title
 Topographic Map (1:1,000)
 (Sheet 3 of 6)

Drawing no.	Figure 2.6.2c		Rev.	A
Drawn	ELCF	Date	12/12	Checked
Scale	AS SHOWN	Status	PRELIMINARY	Approved
COPYRIGHT RESERVED				





Legend

-  Study Area
-  Potential Public Housing Development Site
-  Yuen Long Industrial Estate Extension

USER: HKCAD108 TIME: 07 MAR 2013 - 08:34M
 FILE NAME: C:\CONVID\2012060513\DRAWING\DELIVERABLES\REPORTS\REPORT1.PML Title: BASELINE REVIEW\WANG CHAU TOPOGRAPHIC MAP.DWG

A	FIRST ISSUE	ELCF	12/12
Rev	Description	By	Date

Consultant

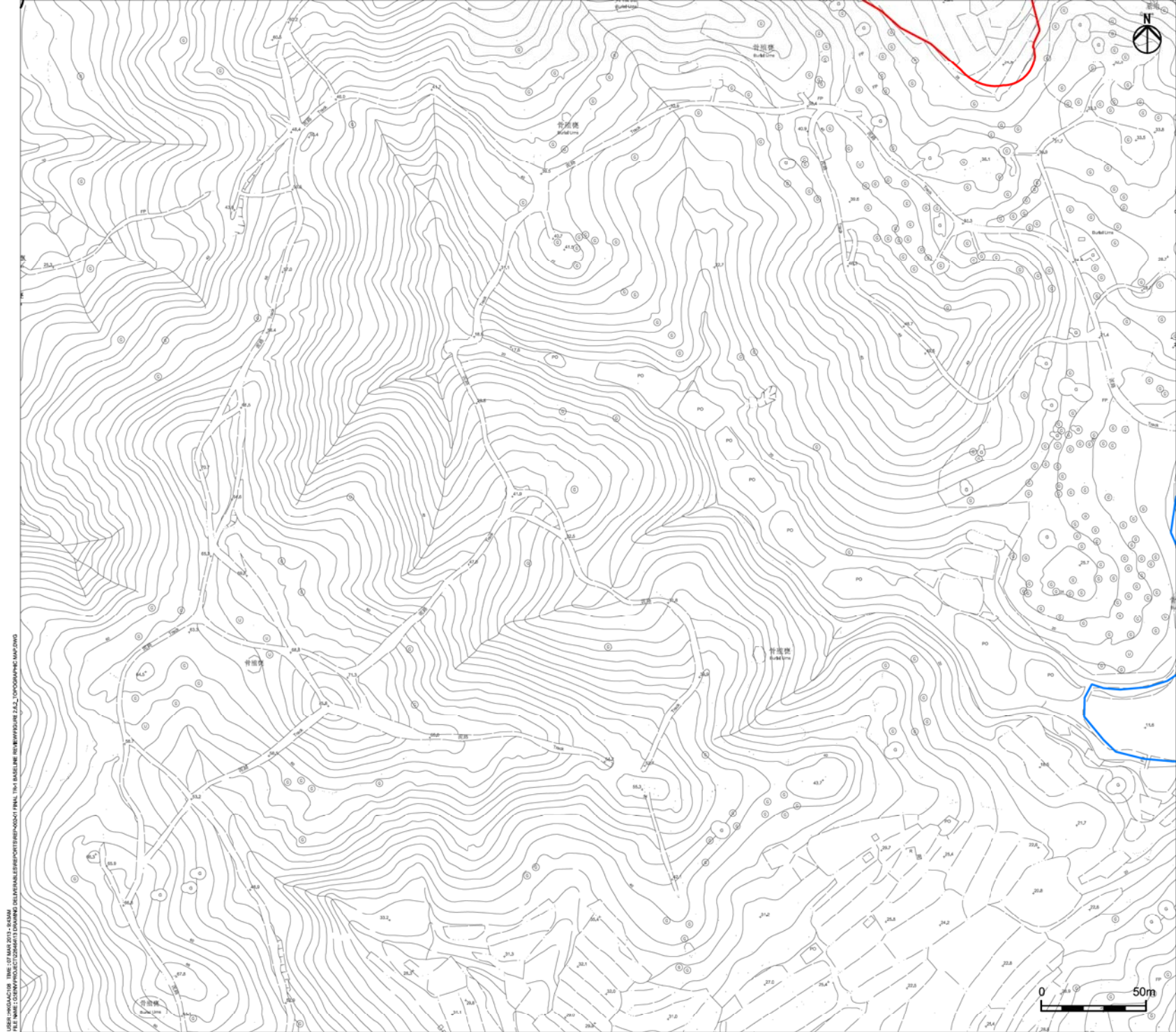
ARUP


Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
Topographic Map (1:1,000)
 (Sheet 4 of 6)

Drawing no.	Figure 2.6.2d		Rev.	A
Drawn	ELCF	Date	Checked	IL
Scale	AS SHOWN	Status	PRELIMINARY	Approved
COPYRIGHT RESERVED				



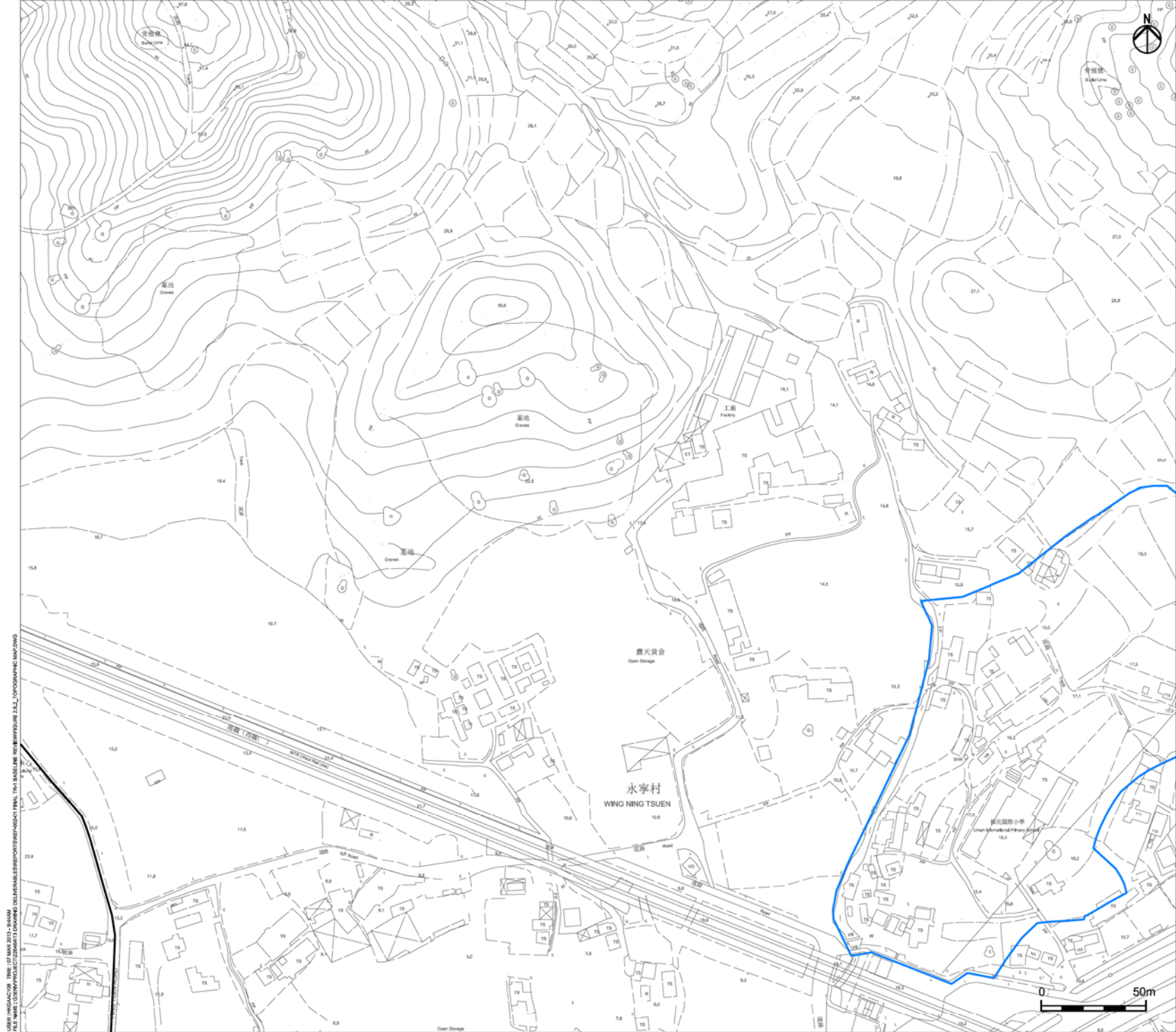


- Legend**
-  Study Area
 -  Potential Public Housing Development Site
 -  Yuen Long Industrial Estate Extension

A	FIRST ISSUE	ELCF	12/12
Rev	Description	By	Date
Consultant			
ARUP			
Project title			
Agreement No. CB20120293 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau			
Drawing title			
Topographic Map (1:1,000) (Sheet 5 of 6)			
Drawing no.	Figure 2.6.2e		Rev. A
Drawn	ELCF	Date 12/12	Checked IL
Scale	AS SHOWN	Status	PRELIMINARY
COPYRIGHT RESERVED			



USER: HKCAD108 TIME: 07 MAR 2013 - 02:44
 FILE NAME: C:\CONTRACT\2012\03\DRAWING\DELIVERABLES\REPORTS\REPORT_FINAL_T101\BASELINE_ISSUE\WAPURE_ZAL_TOPOGRAPHIC.MXD



Legend

- Study Area
- Potential Public Housing Development Site
- Yuen Long Industrial Estate Extension

A	FIRST ISSUE	ELCF	12/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Topographic Map (1:1,000)
 (Sheet 6 of 6)

Drawing no. Figure 2.6.2f Rev. A

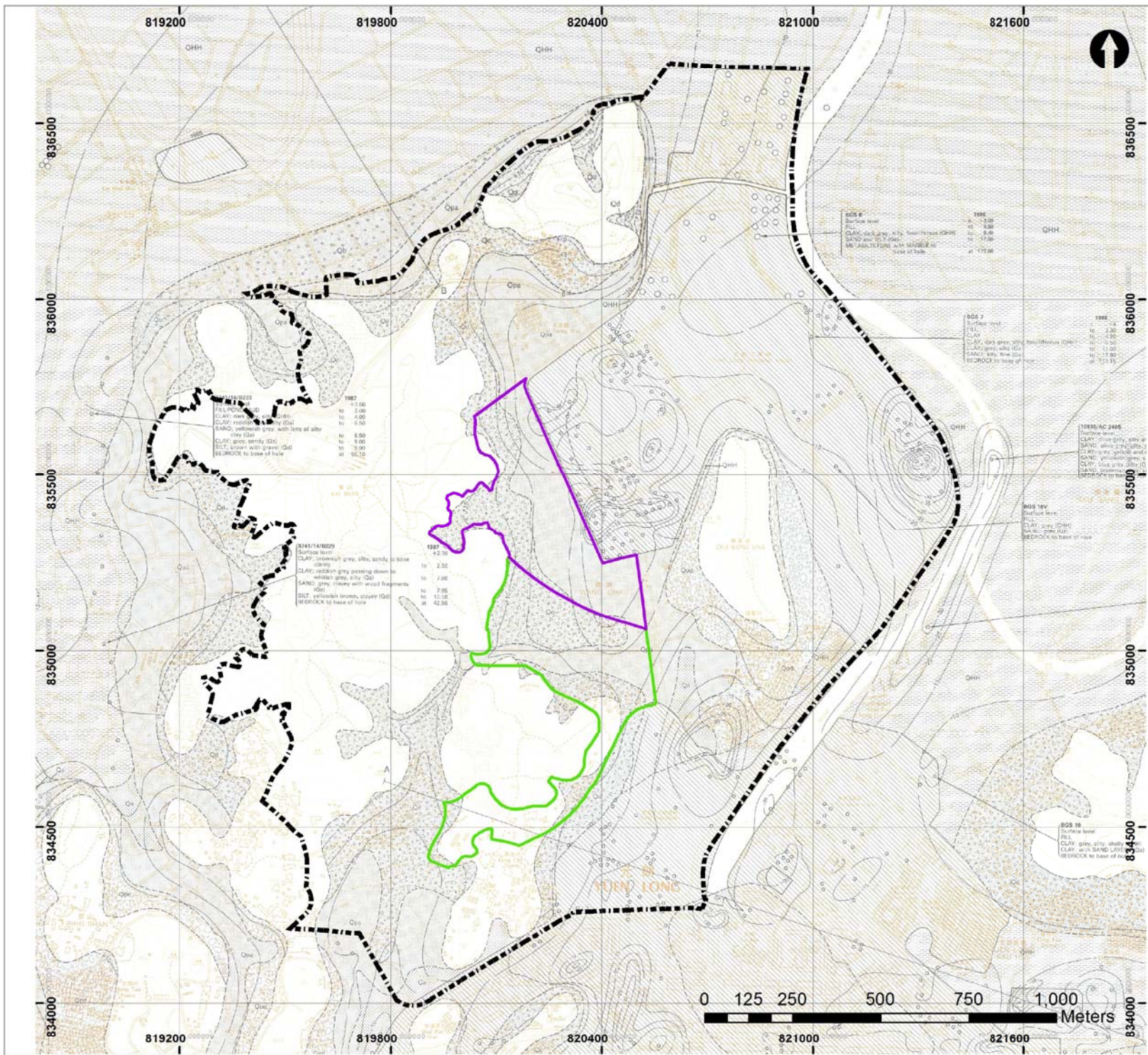
Drawn	ELCF	Date	12/12	Checked	IL	Approved	ST
-------	------	------	-------	---------	----	----------	----

Scale	AS SHOWN	Status	PRELIMINARY
-------	----------	--------	-------------

COPYRIGHT RESERVED



USER: HKCADACT08 TIME: 07 MAR 2013 - 8:44AM
 FILE NAME: C:\GDP\PROJECT\20120293\DRAWING\DELIVERABLES\REPORTS\REPORT_FINAL_T101\BASICLINE\REV\WPP\FIGURE_2.6.2f_TOPOGRAPHIC_MAP.DWG



Legend

- Study Area
- Proposed YLIEE
- Proposed PHD Site

For geological legend please make reference to: **Figure 2.6.5**

A	FIRST ISSUE	RHL	09/12
Rev	Description	By	Date

Consultant
ARUP

Project title
Agreement No. CB20120293
Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
Published 1:5,000 Superficial Geological Map

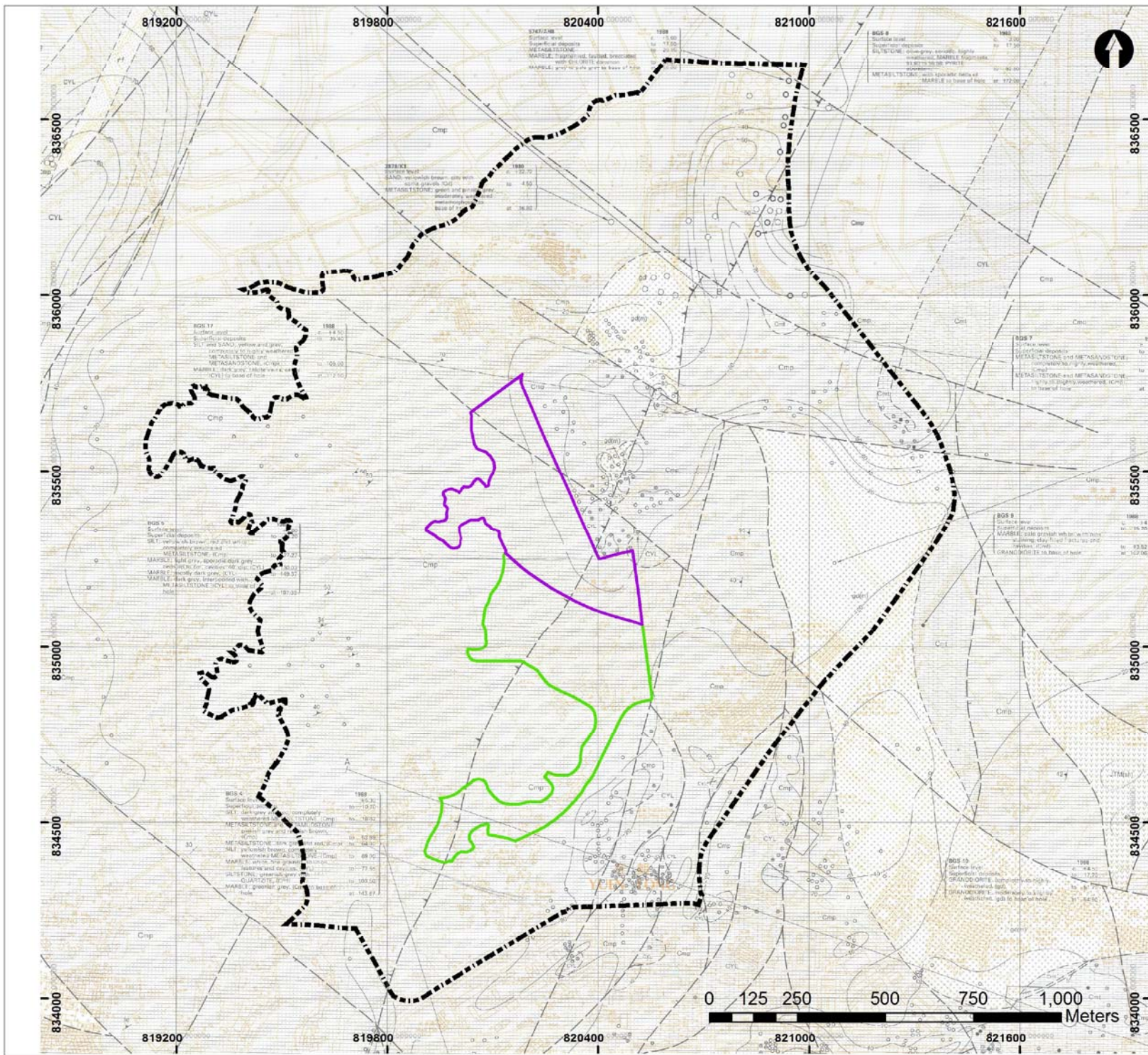
Drawing no.	Figure 2.6.3	Rev.	A
-------------	--------------	------	---

Drawn	RHL	Date	09/12	Checked	JH	Approved	SWM
-------	-----	------	-------	---------	----	----------	-----

Scale	AS SHOWN	Status	PRELIMINARY
-------	----------	--------	-------------

COPYRIGHT RESERVED





Legend

- Study Area
- Proposed YLIEE
- Proposed PHD Site

For geological legend please make reference to: **Figure 2.6.5**

A	FIRST ISSUE	RHL	09/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB2012093
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Published 1:5,000 Solid Geological Map

Drawing no.	Figure 2.6.4	Rev.	A
-------------	--------------	------	---

Drawn	RHL	Date	09/12	Checked	JH	Approved	SWM
-------	-----	------	-------	---------	----	----------	-----

Scale	AS SHOWN	Status	PRELIMINARY
-------	----------	--------	-------------

COPYRIGHT RESERVED



SOLID GEOLOGY 基岩地質

SEDIMENTARY AND VOLCANIC ROCKS 沉積岩和火山岩

NAMED ROCK DIVISIONS 地層單位名稱 主要岩石類型 / 特徵 PRINCIPAL ROCK TYPES/CHARACTERS

中生界 MESOZOIC	上侏羅統 UPPER JURASSIC	滙水溪群 VOLCANIC GROUP	Tai Mo Shan Formation, undivided 大帽山組 (未分)	粗火山灰晶質凝灰岩 (變質)	Coarse ash crystal tuff (metamorphosed)	
			Tuen Mun Formation 屯門組	變質的互層凝灰岩、凝灰質 凝灰岩和凝灰質的砂岩與大理石、 石英和凝灰岩結核質	Interbedded tuff-breccia/tuffaceous conglomerate and tuffaceous siltstone; with clasts of marble, quartz, and tuff; metamorphosed	
古生界 PALAEOZOIC	石炭系 CARBONIFEROUS	新田群 SAN TIN GROUP	Lok Ma Chau Formation 洛馬洲組	Mai Po Member 茅埔段	千枚岩、變質粉砂岩及 變質砂岩和石英片岩	Phyllite, metasiltstone with metasandstone and graphite schist
			Yuen Long Formation 元朗組	Undivided (未分)	大理石、互層的 大理石和粉砂岩	Marble and interbedded marble and siltstone
			Ma Tin Member 馬田段	深灰色至灰白色塊狀大理石	Marble, pale grey to off-white, massive	

MAJOR INTRUSIVE IGNEOUS ROCKS 主要侵入火成岩

中生代 MESOZOIC	侏羅-白堊紀 JURASSIC- CRETACEOUS	細粒花崗岩、粗粒變質 花崗閃長岩、粗粒變質	Fine-grained granita, metamorphosed in part Granodiorite, metamorphosed in part
-----------------	-----------------------------------	--------------------------	---

MINOR INTRUSIVE IGNEOUS ROCKS 次要侵入火成岩 (脈岩)

MESOZOIC TO TERTIARY	中生代 第三紀	變質安山岩 輝綠岩	Andesite, metamorphosed Basalt
----------------------	------------	--------------	-----------------------------------

METAMORPHIC ROCKS 變質岩

(m)	變質的	Metamorphosed
(sh)	片岩	Schistose

GEOLOGICAL LINES 地質界綫

Geological boundary, solid rock	———*	基岩地質界綫
Fault (crossmark indicates downthrow side)	———*	斷裂 (標記指示下盤)
Thrust fault (barbs on upper plate)	———*	逆斷裂; 斷層向上盤
Contours on base of completely weathered rock, in metres relative to P.D.	———20———*	全風化岩石的展層等高綫以 米為單位, 由水平基準算起

Broken lines on map face denote uncertainty. * 圖內虛綫表示推測界綫

STRUCTURAL SYMBOLS 構造符號

Bedding	傾斜 Inclined	20	層理
Foliation	20	葉理	
Jointing	20	節理	

All dips and plunges measured in degrees from horizontal. 所有傾角和傾伏角的角度均從水平位置起計

BOREHOLE SYMBOLS 鑽孔符號

Borehole proving marble	○	證明有大理岩的鑽孔
Borehole proving marble with cavities beneath the Karst Zone	●	證明有岩溶帶下有溶洞的大理岩的鑽孔
Borehole proving strata other than marble	○	證明有除大理岩以外地層的鑽孔

Geological details are shown for representative boreholes with GIU reference number quoted, followed by the borehole number of that report. Boreholes with BGS prefix are specially commissioned holes for Geological Survey.
地質詳情由代表性鑽孔表示, 該鑽孔編號附有關土工程資料室的鑽探報告編號。有BGS編號的鑽孔, 專供地質調查使用。

All borehole depths are in metres below surface.
所有鑽孔的深度均以米為單位, 由地面以下計算。

Where the borehole density is too great to show all individual locations at this scale the ground investigation areas are shown in outline only.
如鑽孔過密, 本圖難以表示每一鑽孔位置時, 則只畫出該勘探地區的輪廓。

SUPERFICIAL DEPOSITS 表土沉積

GENETIC CLASSIFICATION OR NAMED DIVISIONS 成因類型或地層名稱	主要物質成份	PRINCIPAL MATERIALS		
Fill 填土	填土和廢物	Natural earth and waste		
Alluvium 沖積物	分選性良好至中等的黏土/粉砂、砂和礫石	Clay/silt, sand gravel; well-sorted to semi-sorted		
Beach deposits 海灘沉積物	砂	Sand		
第四系 QUATERNARY	全新統 HOLOCENE	洪口組 HANG HAU FORMATION	Undivided, mainly dark grey marine mud	
		更新世-全新統 PLEISTOCENE AND HOLOCENE	Debris flow deposits 堆積、洪積物	未分選的砂、礫石、粗砂、 基質為黏土/粉砂
第四系 QUATERNARY	更新世 PLEISTOCENE	Terraced alluvium 階地沖積物	分選性良好至中等的 礫質、砂質黏土/粉砂	Clay/silt, gravelly sandy, well-sorted to semi-sorted
		Debris flow deposits 堆積、洪積物	未分選、夾中礫和粗礫的 礫質、黏土質粉砂/砂	Silt/sand, clayey with cobbles and boulders; unsorted

SOLID GEOLOGY 基岩地質

Not shown; refer to Solid Geology Map. 有關基岩地質資料, 請參閱基岩地質圖。

GEOLOGICAL LINES 地質界綫

Geological boundary, superficial deposit	———*	表土沉積地質界綫
Fill boundary, with limit of reclamation at date shown	———1980———*	填土區界綫, 附填土年份
Contours on the base of the superficial deposits in metres relative to P.D., crossmarks indicate deep side of closed contours.	———+5———*	表土沉積底部的等高綫, 以米為單位, 由水平基準算起; 短劃指向裝密等高綫深側

Broken lines on map face denote uncertainty * 圖內虛綫表示推測界綫


BOREHOLE SYMBOLS 鑽孔符號

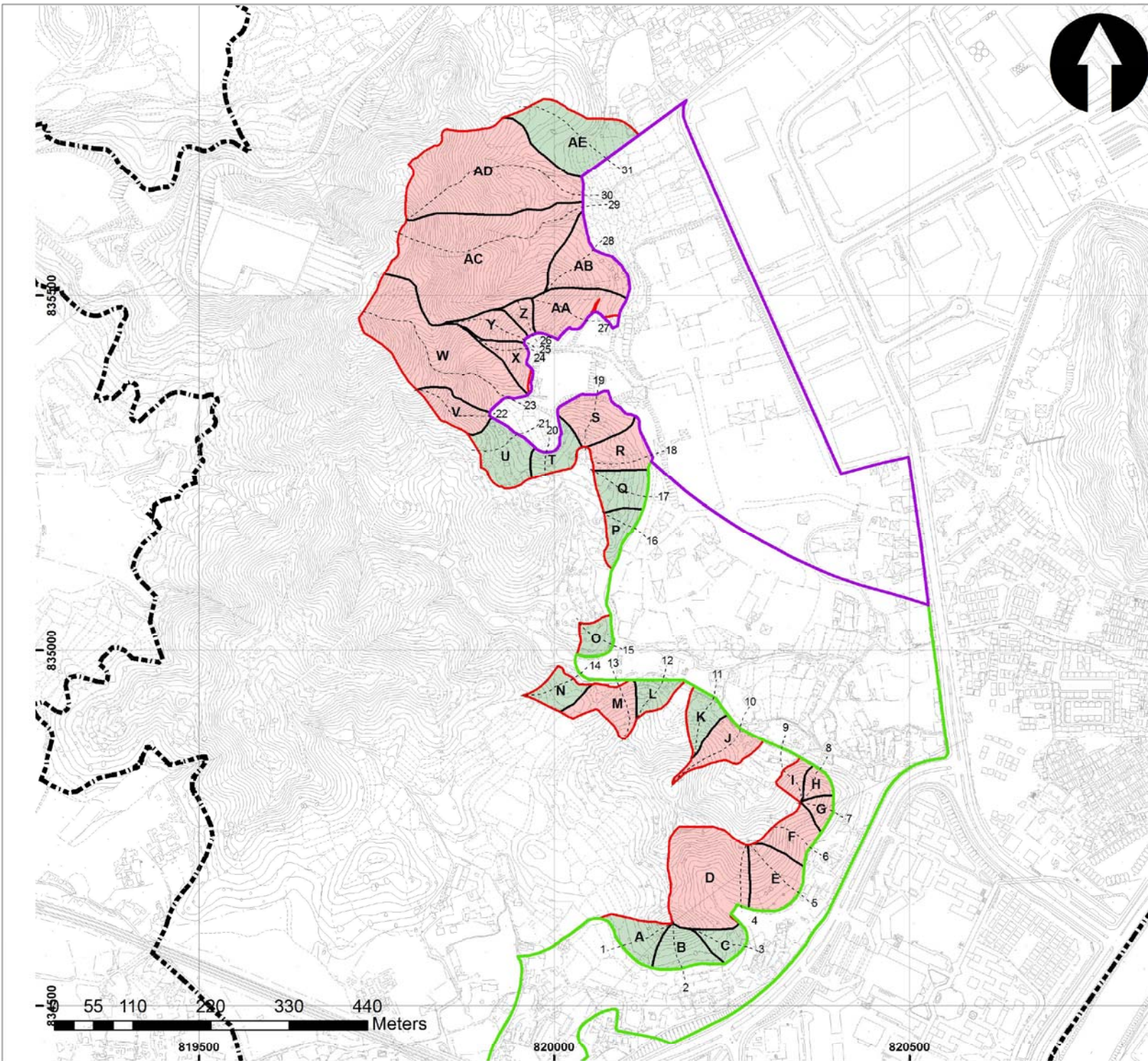
Borehole proving superficial deposits	○	證明有表土沉積的鑽孔
---------------------------------------	---	------------

Geological details are shown for representative boreholes with GIU reference number quoted, followed by the borehole number of that report. Boreholes with BGS prefix are specially commissioned boreholes for geological survey purpose.
地質詳情由代表性鑽孔表示, 該鑽孔編號附有關土工程資料室的鑽探報告編號。有BGS編號的鑽孔, 專供地質調查使用。

All borehole depths are in metres below surface.
所有鑽孔的深度均以米為單位, 由地面以下計算。

Where the borehole density is too great to show all individual locations at this scale the site investigation areas are shown in outline only.
如鑽孔過密, 本圖難以表示每一鑽孔位置時, 則只畫出該勘探地區的輪廓。

A	FIRST ISSUE	RHL	09/12
Rev	Description	By	Date
Consultant			
ARUP			
Project title			
Agreement No. CB20120293 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau			
Drawing title			
Legend for Published 1:5,000 Solid and Superficial Geological Map			
Drawing no.		Rev.	
Figure 2.6.5		A	
Drawn	RHL	Date	09/12
Checked	JH	Approved	SWM
Scale	NTS	Status	PRELIMINARY
COPYRIGHT RESERVED			
 HONG KONG HOUSING AUTHORITY			



Legend

- Study Area
- Proposed YLIEE Site
- Proposed PHD Site
- NTHS Study Area
- NTHS Screening**
- NTHS not required
- NTHS required
- NT catchment boundaries
- Screening section lines

Note: NTHS required where sub-catchment meets the inclusion criteria set out in GEO Report 138.

Rev	Description	By	Date
A	FIRST ISSUE	RHL	09/12

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 NTH Screening along boundary of proposed YLIEE and PHD

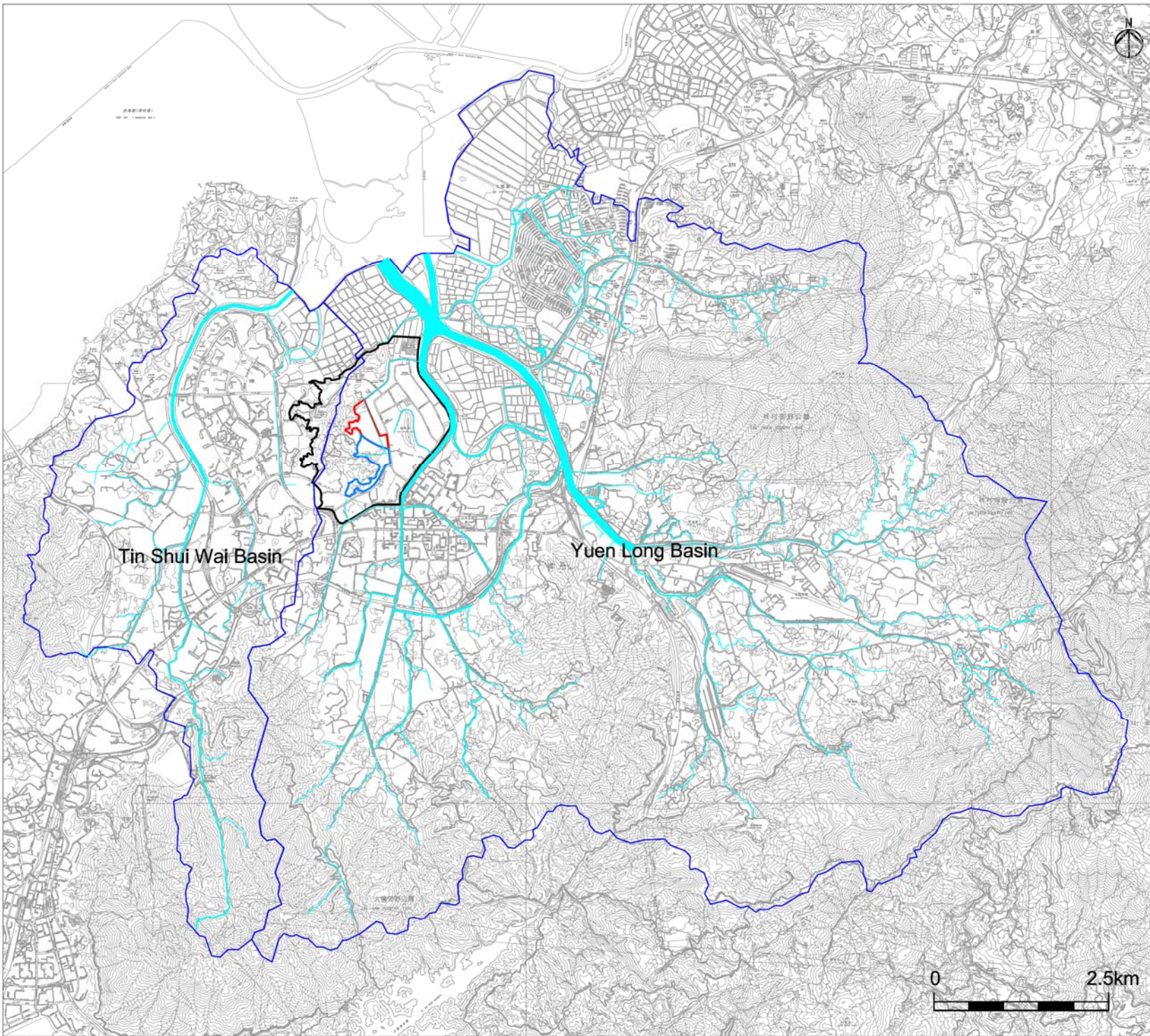
Drawing no. Rev. A
Figure 2.6.6

Drawn	RHL	Date	09/12	Checked	JH	Approved	SWM
-------	-----	------	-------	---------	----	----------	-----




Scale	AS SHOWN	Status	PRELIMINARY
-------	----------	--------	-------------

COPYRIGHT RESERVED





Legend

-  Study Area
-  Potential Public Housing Development Site
-  Yuen Long Industrial Estate Extension

B	SECOND ISSUE	GL	01/13
A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant
ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 General Boundary of Yuen Long Basin and Tin Shui Wai Basin

Drawing no.	Figure 2.7.1			Rev.	B
Drawn	GL	Date	01/13	Checked	IL
				Approved	ST
Scale	AS SHOWN	Status	PRELIMINARY		

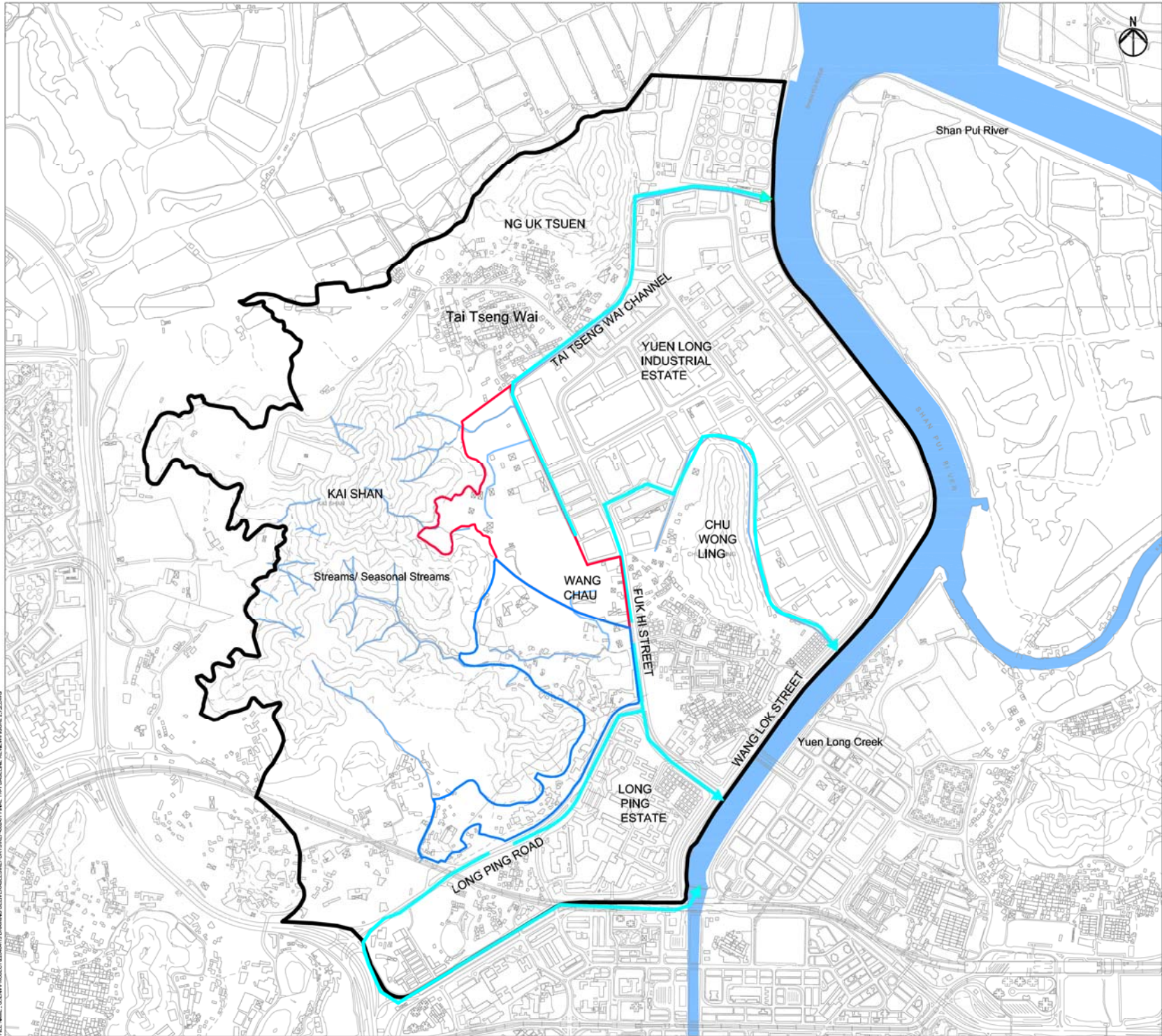
COPYRIGHT RESERVED



HONG KONG HOUSING AUTHORITY

USER: HKCADACT08 TIME: 07 MAR 2013 - 09:04 AM
 FILE NAME: C:\GDP\PROJECT\20120293\DRAWING\DELIVERABLES\REPORTS\PRODCAD\FINAL\TIN SHUI WAI BASIN\WAP01001P01.dwg





- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Existing Drainage
 - Watercourse

B	SECOND ISSUE	GL	12/12
A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant
ARUP

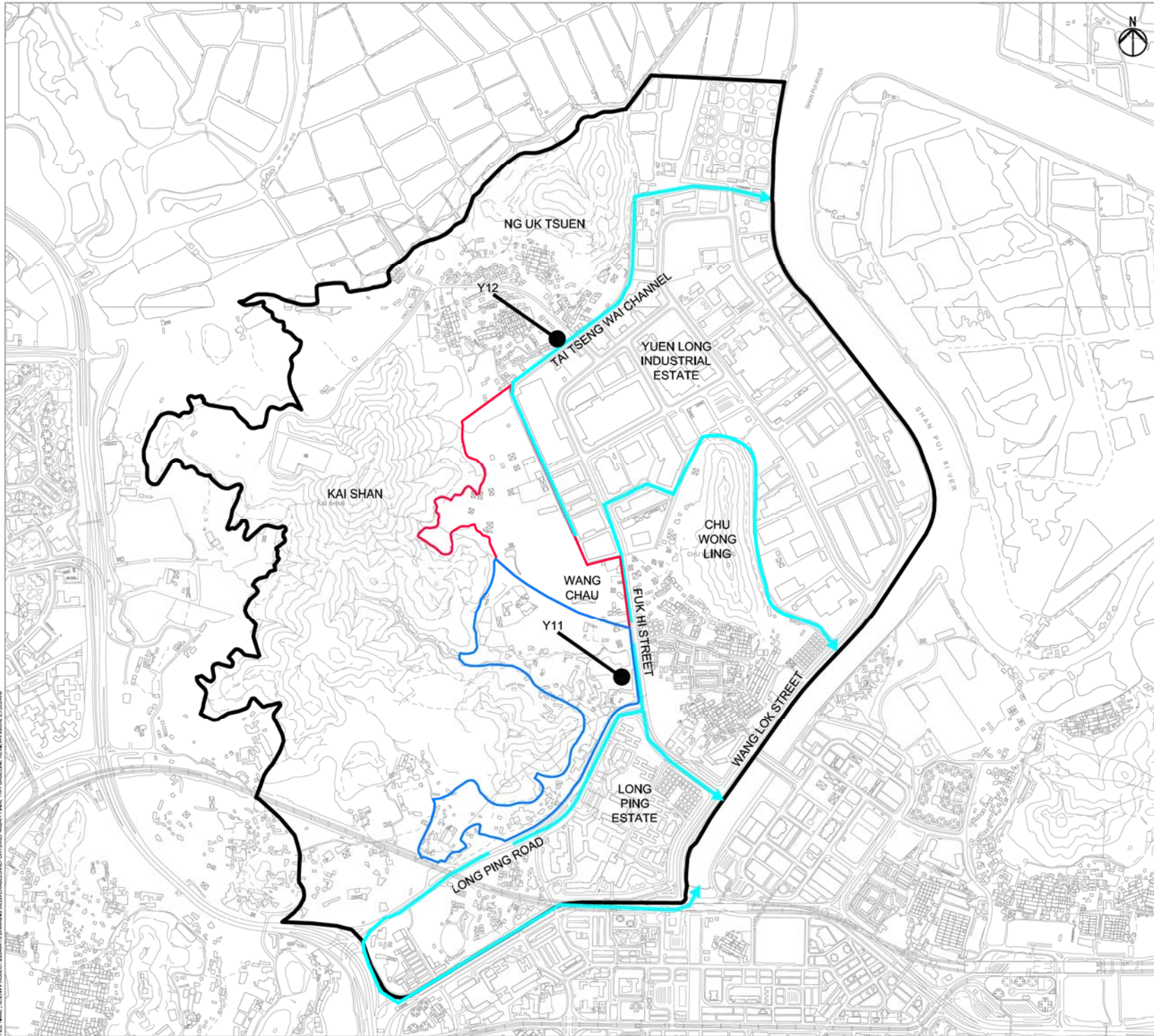
Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Main Drainage Systems in the Vicinity of Project Site


Drawing no.	Figure 2.7.2			Rev.	B
Drawn	GL	Date	12/12	Checked	IL
Scale	NTS		Status	PRELIMINARY	
COPYRIGHT RESERVED					



USER: HKCAD108 TIME: 07 MAR 2013 - 09:00
 FILE NAME: C:\CONTRACT\2012\0293\DRAWING\DELIVERABLES\REPORTS\REPORT\FINAL_T101_BASISLINE_REV00\WP04R01_27.DWG



Legend

-  Study Area
-  Potential Public Housing Development Site
-  Yuen Long Industrial Estate Extension
-  Existing Drainage

Problematic Flooding Location

- Y11 Ting Fook Villas
- Y12 Tai Tseng Wai

B	SECOND ISSUE	GL	01/13
A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant
ARUP

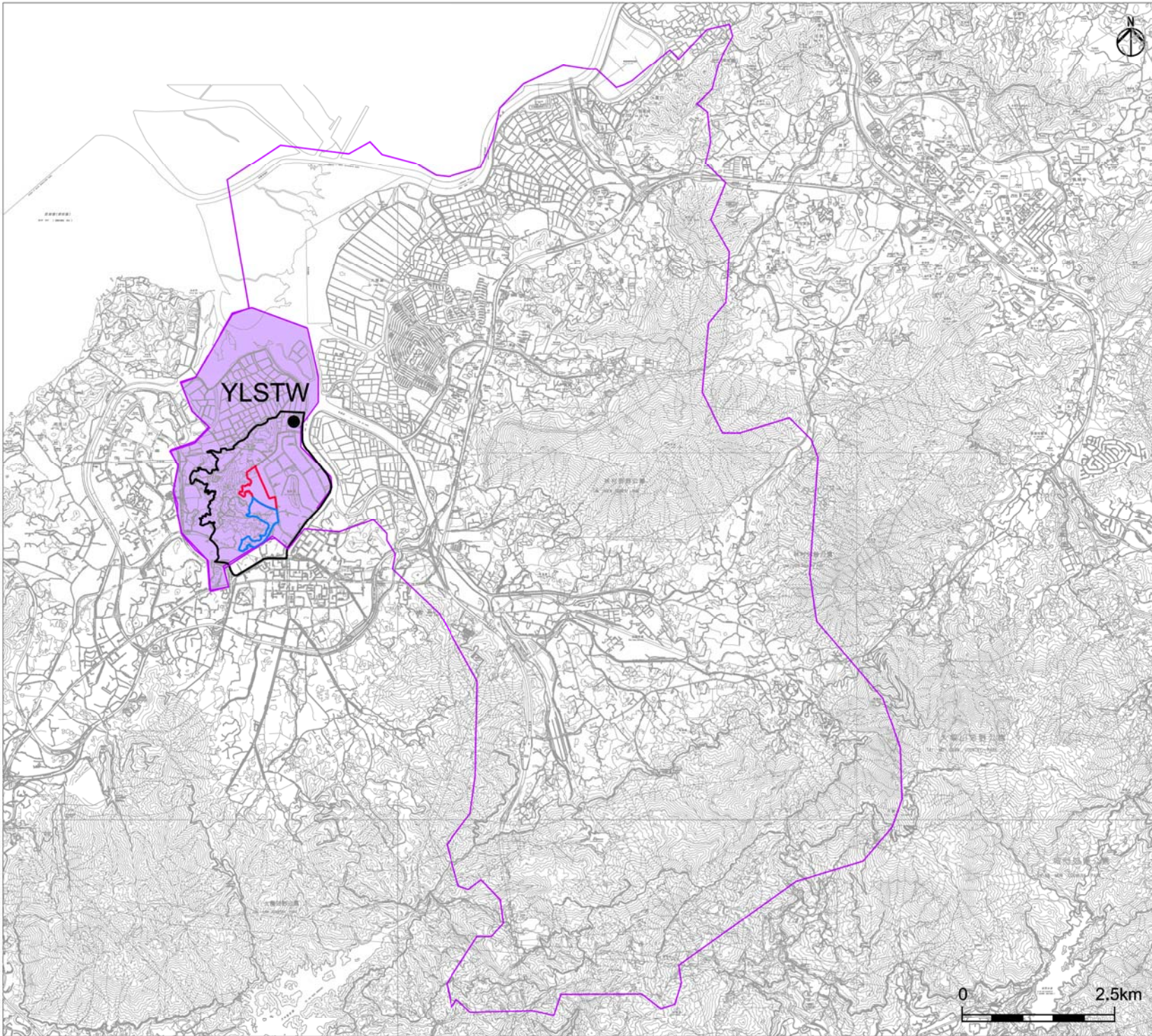
Project title
Agreement No. CB20120293
Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
Problematic Flooding Location in the Vicinity of Proposed Developments

Drawing no.	Figure 2.7.3			Rev.	B
Drawn	GL	Date	01/13	Checked	IL
Scale	NTS		Status	PRELIMINARY	
COPYRIGHT RESERVED					



USER: HKCAD108 TIME: 07 MAR 2013 - 05:04M
 FILE NAME: C:\CONV\PROJECT\20120293\DRAWING\DELIVERABLES\REPORTS\REPORT\FINAL_T101_BASISLINE_REV00\WP0409_27.DWG



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - 2002 Yuen Long Sewerage Catchment
 - 2016 Yuen Long Sewerage Catchment
 - Existing Sewage Treatment Works (STW)

B	SECOND ISSUE	GL	01/13
A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant
ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 General Layout of Yuen Long Sewerage Catchment and Location of YLSTW

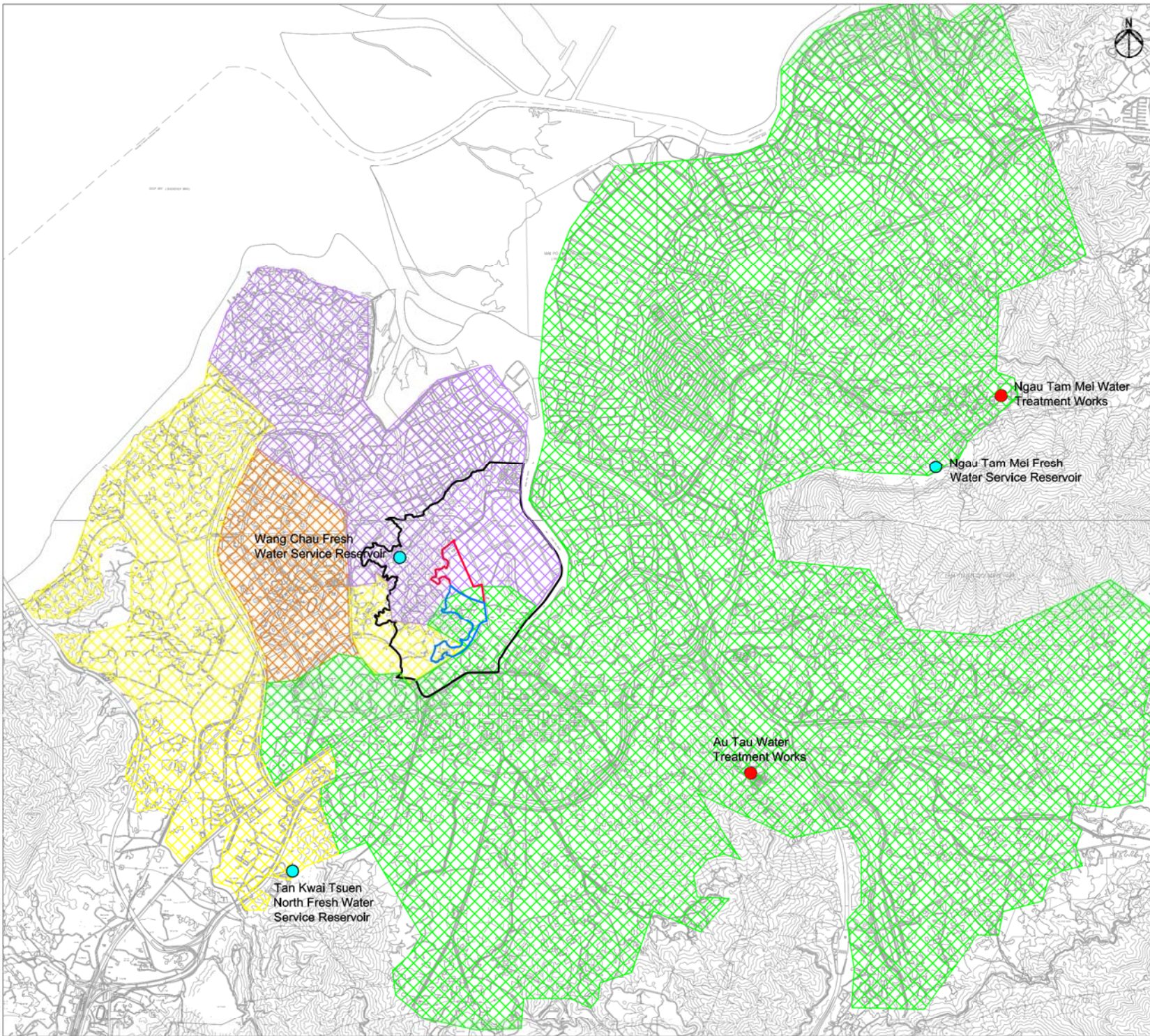
Drawing no.	Figure 2.8.1			Rev.	B
Drawn	GL	Date	01/13	Checked	IL
				Approved	ST
Scale	AS SHOWN		Status	PRELIMINARY	

COPYRIGHT RESERVED

HONG KONG HOUSING AUTHORITY

USER: HKHQA0108 TIME: 07 MAR 2013 - 05:44M
 FILE NAME: C:\CONV\PROJECT\2012\DRAWING\GENERAL\GENERAL\SPOTS\SPOTS\FINAL_T101_BASLINE_SIS\WAPPAUN_2A.DWG





- Legend**
-  Study Area
 -  Potential Public Housing Development Site
 -  Yuen Long Industrial Estate Extension
 -  Wang Chau Fresh Water Service Reservoir Supply Zone
 -  Tan Kwai Tsuen North Fresh Water Service Reservoir Supply Zone
 -  Joint Wang Chau and Tan Kwai Tsuen North Fresh Water Service Reservoir Supply Zone
 -  Ngau Tam Mei Fresh Water Primary Service Reservoir Supply Zone
 -  Existing Fresh Water Service Reservoirs
 -  Water Treatment Works

B	SECOND ISSUE	GL	12/12
A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant
ARUP

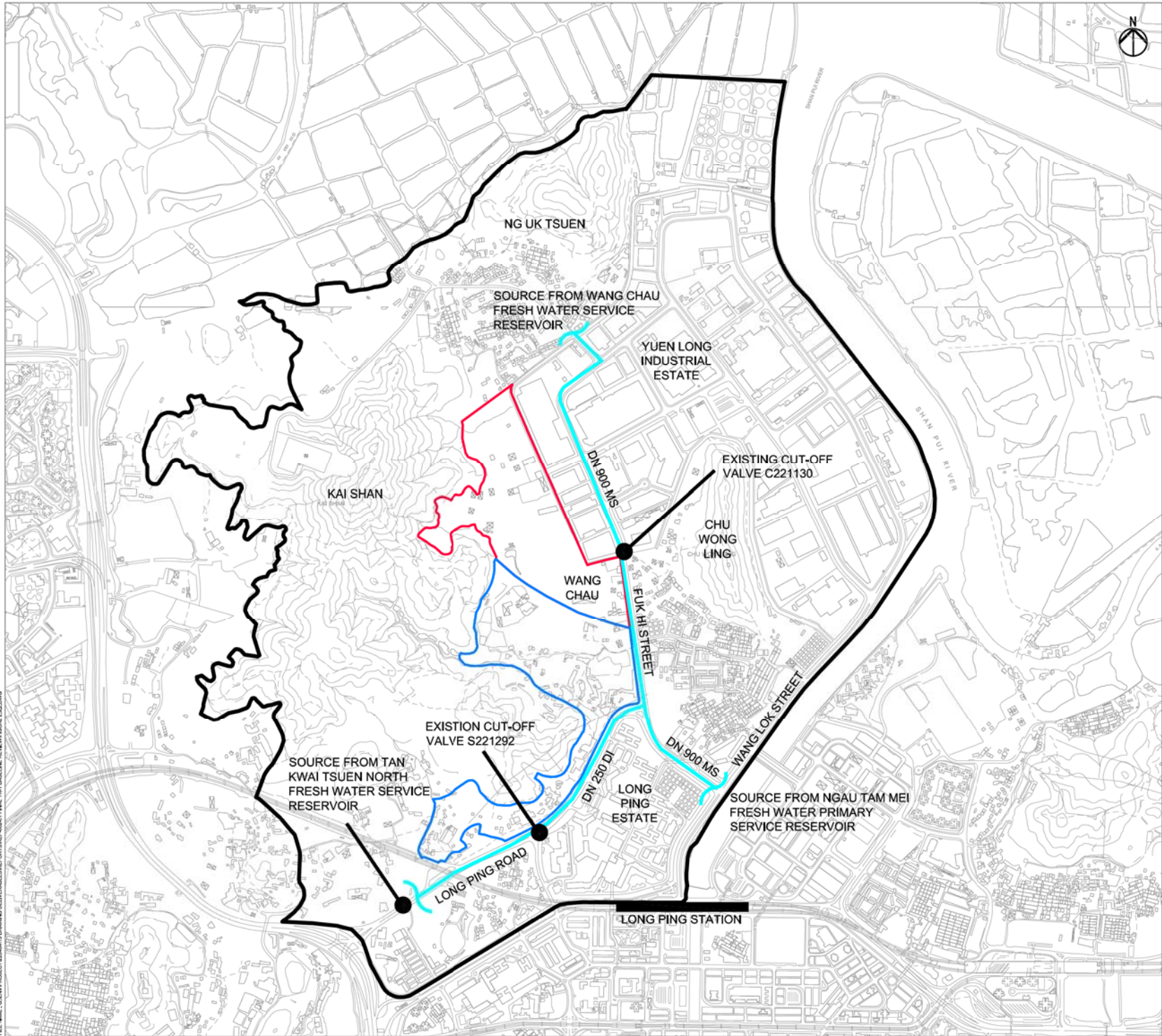
Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
Key Waterworks and Fresh Water Service Reservoir Supply Zones

Drawing no.	Figure 2.9.1			Rev.	B
Drawn	GL	Date	12/12	Checked	IL
Scale	NTS		Status	PRELIMINARY	

COPYRIGHT RESERVED
 HONG KONG HOUSING AUTHORITY

USER: H:\PROJECTS\108 - TIME: 07 MAR 2013 - 05:56AM
 FILE NAME: C:\CONV\PROJECT\02\04\01\DRAWING\DELIVERABLES\REPORTS\REPORT_FINAL_T101_BASISLINE_REV00\WSPRINTING_2.0.DWG



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Existing Fresh Water Distribution

B	SECOND ISSUE	GL	12/12
A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant
ARUP

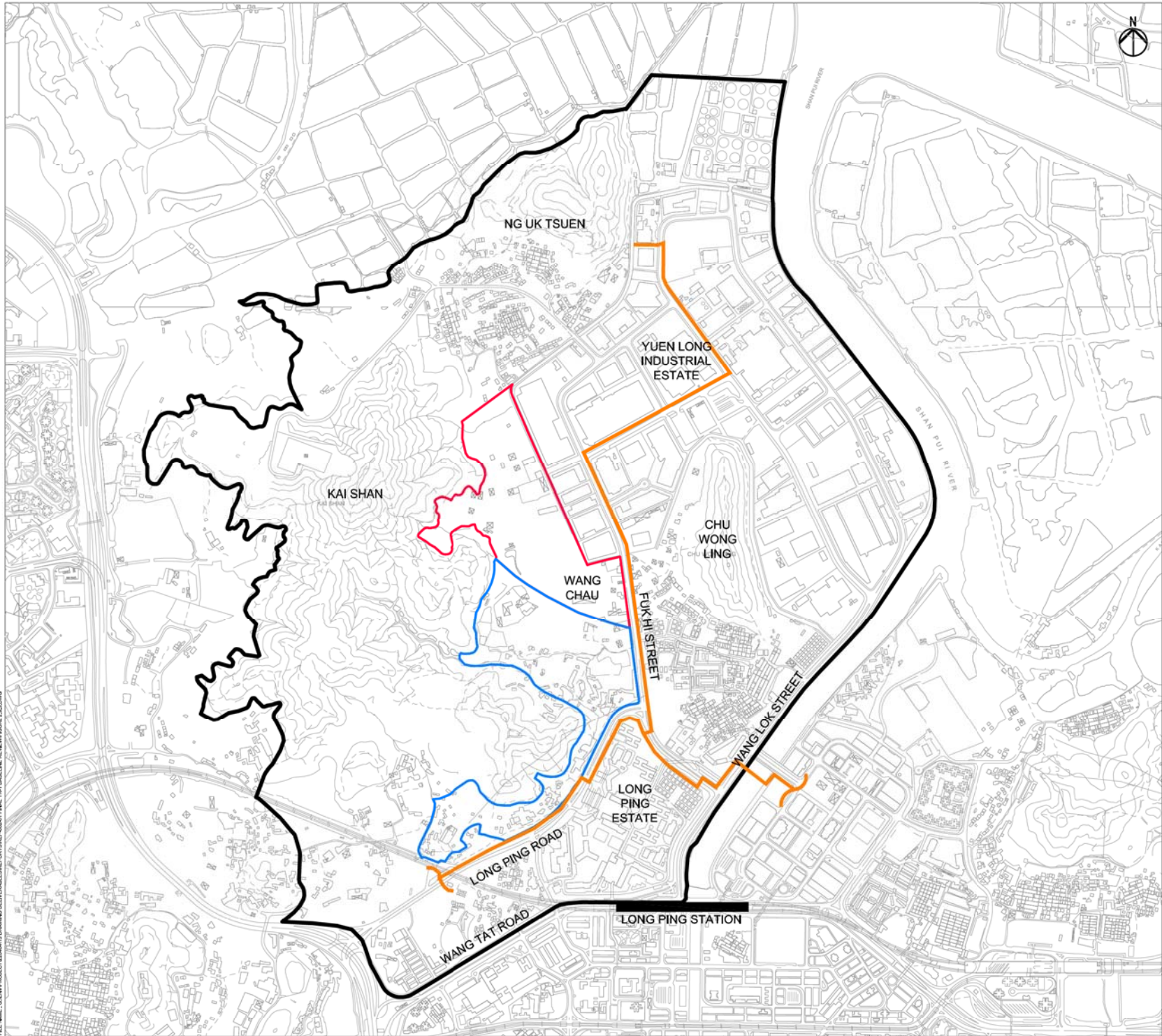
Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Existing Fresh Water Distribution Main in the Vicinity of Project Site

Drawing no.	Figure 2.9.2			Rev.	B
Drawn	GL	Date	12/12	Checked	IL
Scale	NTS		Status	PRELIMINARY	
COPYRIGHT RESERVED					



USER: HKCAD108 TIME: 07 MAR 2013 - 10:00AM
 FILE NAME: C:\CONV\PROJECT\2012\HKS\DRAWING\DELIVERABLES\REPORTS\REPORT_FINAL_T101_BASLINE_REV\WATERMAIN_232.DWG



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Existing Medium Pressure (MP) Gas Main

B	SECOND ISSUE	GL	12/12
A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant
ARUP

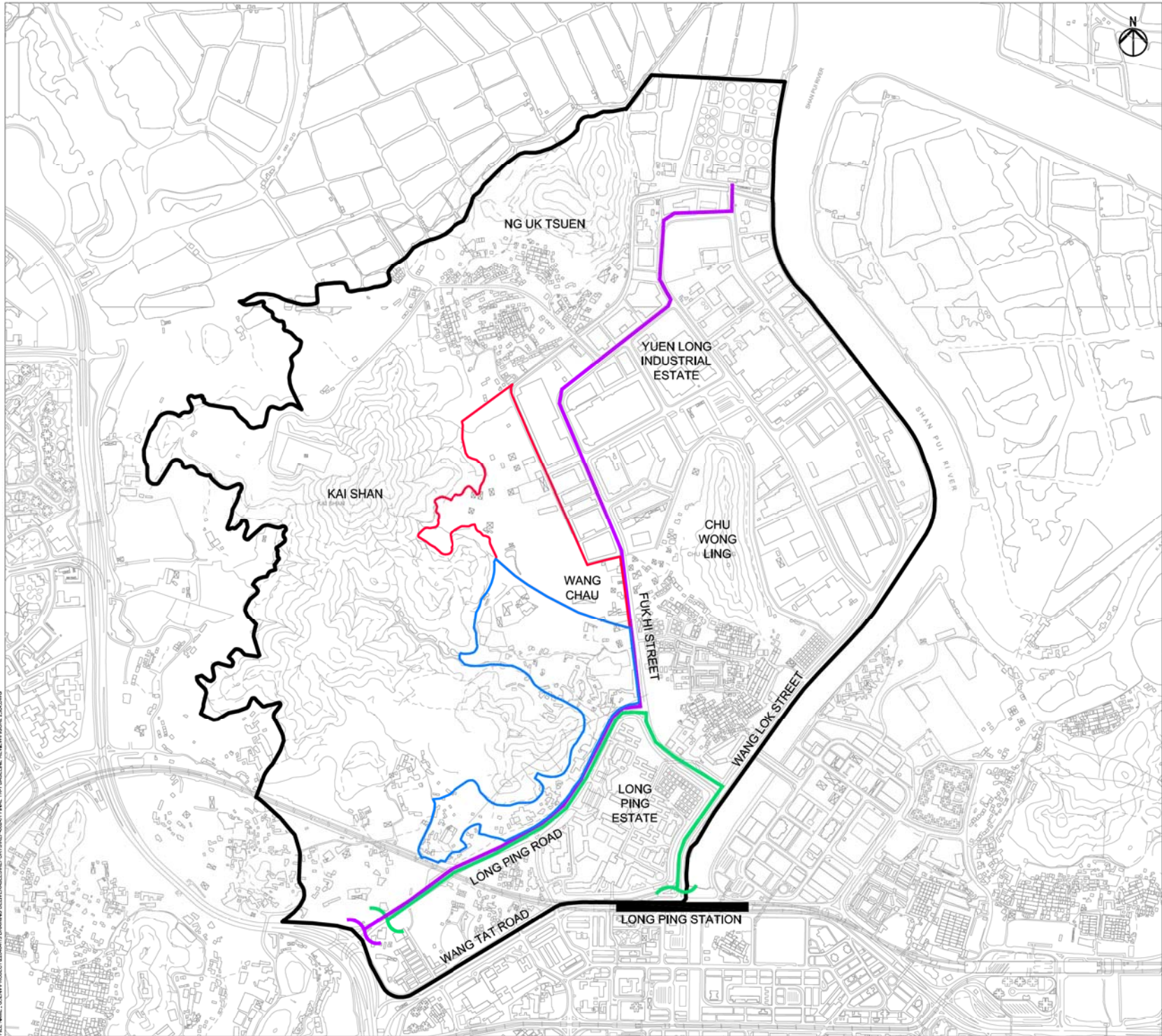
Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Existing Gas Main in the Vicinity of Project Site

Drawing no.	Figure 2.9.3			Rev.	B
Drawn	GL	Date	12/12	Checked	IL
Scale	NTS		Status	PRELIMINARY	



USER: HKCAD108 TIME: 07 MAR 2013 - 10:54AM
 FILE NAME: C:\CONV\PROJECT\20120293\DRAWING\DELIVERABLES\REPORTS\REPORT_FINAL_T101\BASELINE_RIS/WW/P101R1_ZA.DWG



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Existing 132kV Power Cable
 - Existing 11kV Power Cable

B	SECOND ISSUE	GL	12/12
A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant
ARUP

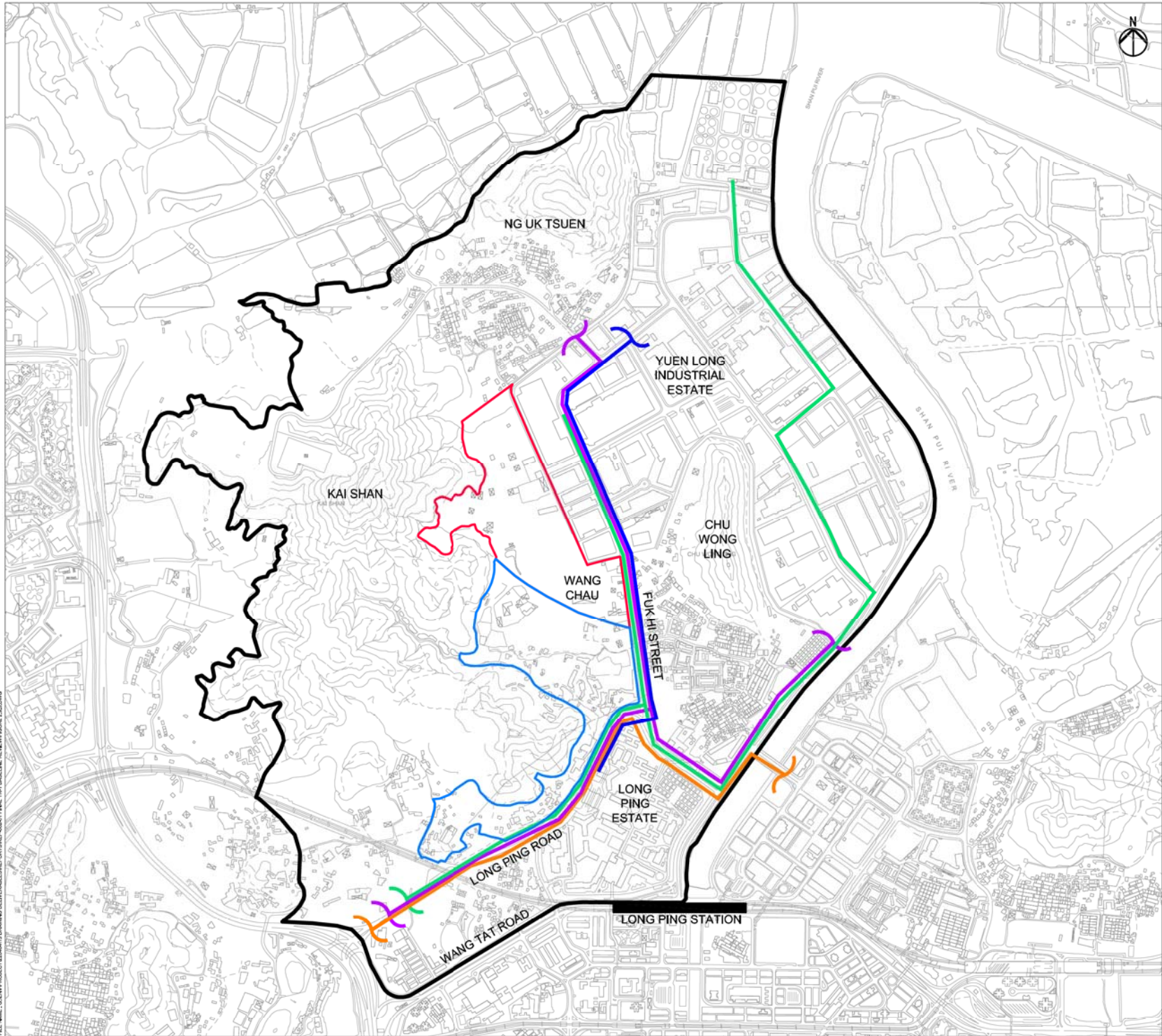
Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Existing Main Supply Circuits in the Vicinity of Project Site

Drawing no.	Figure 2.9.4				Rev.	B
Drawn	GL	Date	12/12	Checked	IL	Approved
Scale	NTS		Status	PRELIMINARY		
COPYRIGHT RESERVED						



USER: HKCAD108 TIME: 07 MAR 2013 - 10:58AM
 FILE NAME: C:\CONV\PROJECT\20120293\DRAWING\DELIVERABLES\REPORTS\REPORT\FINAL_T101\BASELINE_RIS/WWP/090123.DWG



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Existing HGC Cable
 - Existing PCCW Cable
 - Existing Cable TV Cable
 - Existing Wharf T&T Cable

B	SECOND ISSUE	GL	12/12
A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant
ARUP

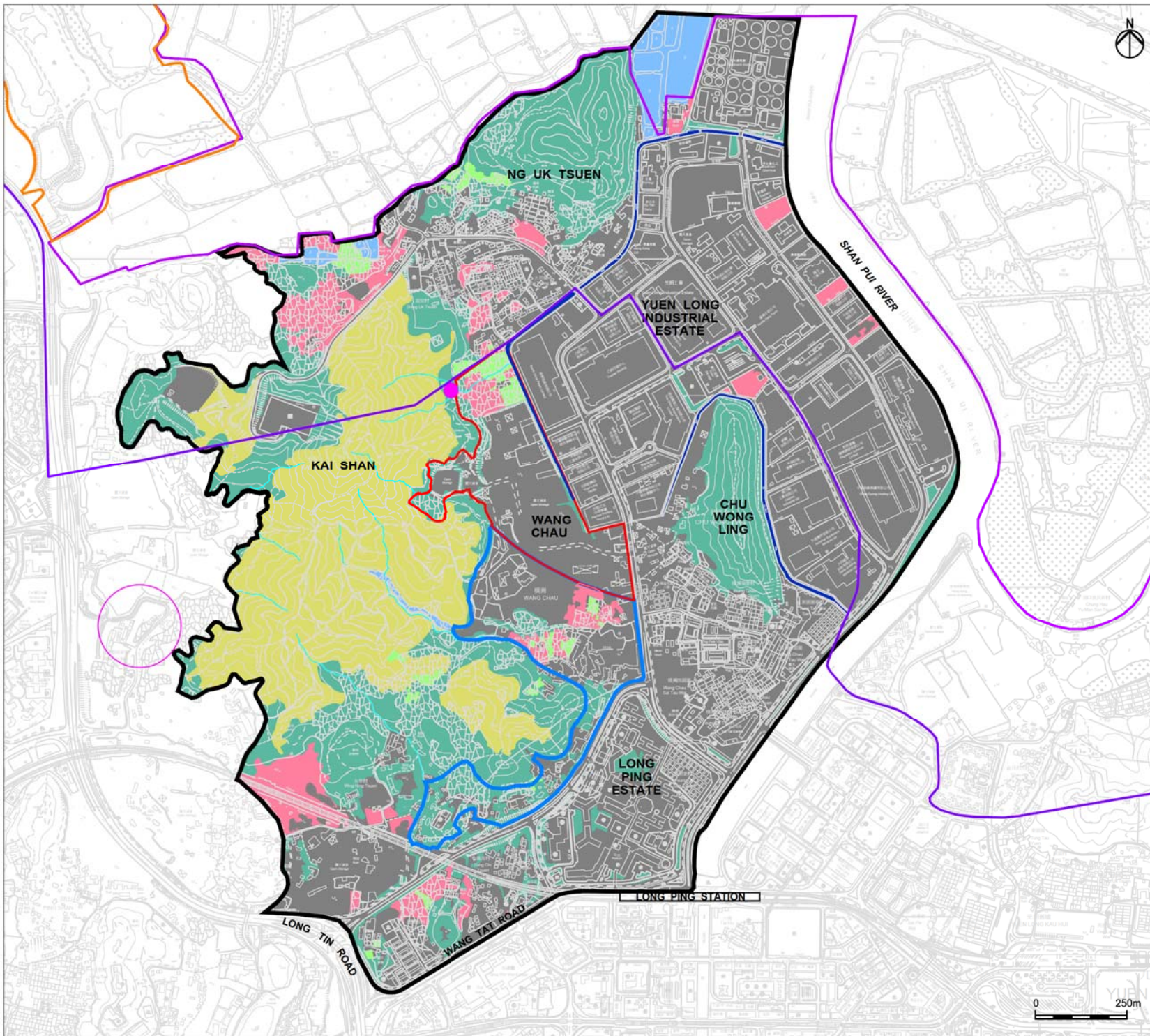
Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Existing Main Communication Cables in the Vicinity of Project Site

Drawn no.	Figure 2.9.5			Rev.	B
Drawn	GL	Date	12/12	Checked	IL
				Approved	ST
Scale	NTS		Status	PRELIMINARY	
COPYRIGHT RESERVED					



USER: HKCAD108 TIME: 07 MAR 2013 - 10:00AM
 FILE NAME: C:\CONV\PROJECT\20120293\DRAWING\DELIVERABLES\REPORTS\REPORT_FINAL_T101_BASISLINE_REV\WAP10101_21.DWG



- Legend**
- Potential PHD Site
 - Potential Yuen Long Industrial Estate Extension Site
 - Study Area
 - Wetland Conservation Area (WCA)
 - Wetland Buffer Area (WBA)
 - Hong Kong Wetland Park Special Area
 - Pond
 - Watercourse/ Ditch
 - Channelised Watercourse
 - Agricultural Land
 - Grassland/ Shrubland
 - Wooded Area
 - Ruderal Vegetation
 - Developed Area
 - Location of Small Snakehead Recorded during the Site Visit Conducted in September 2012
 - Approximate Location of the Abandoned Egretty at Ha Mei San Tsuen

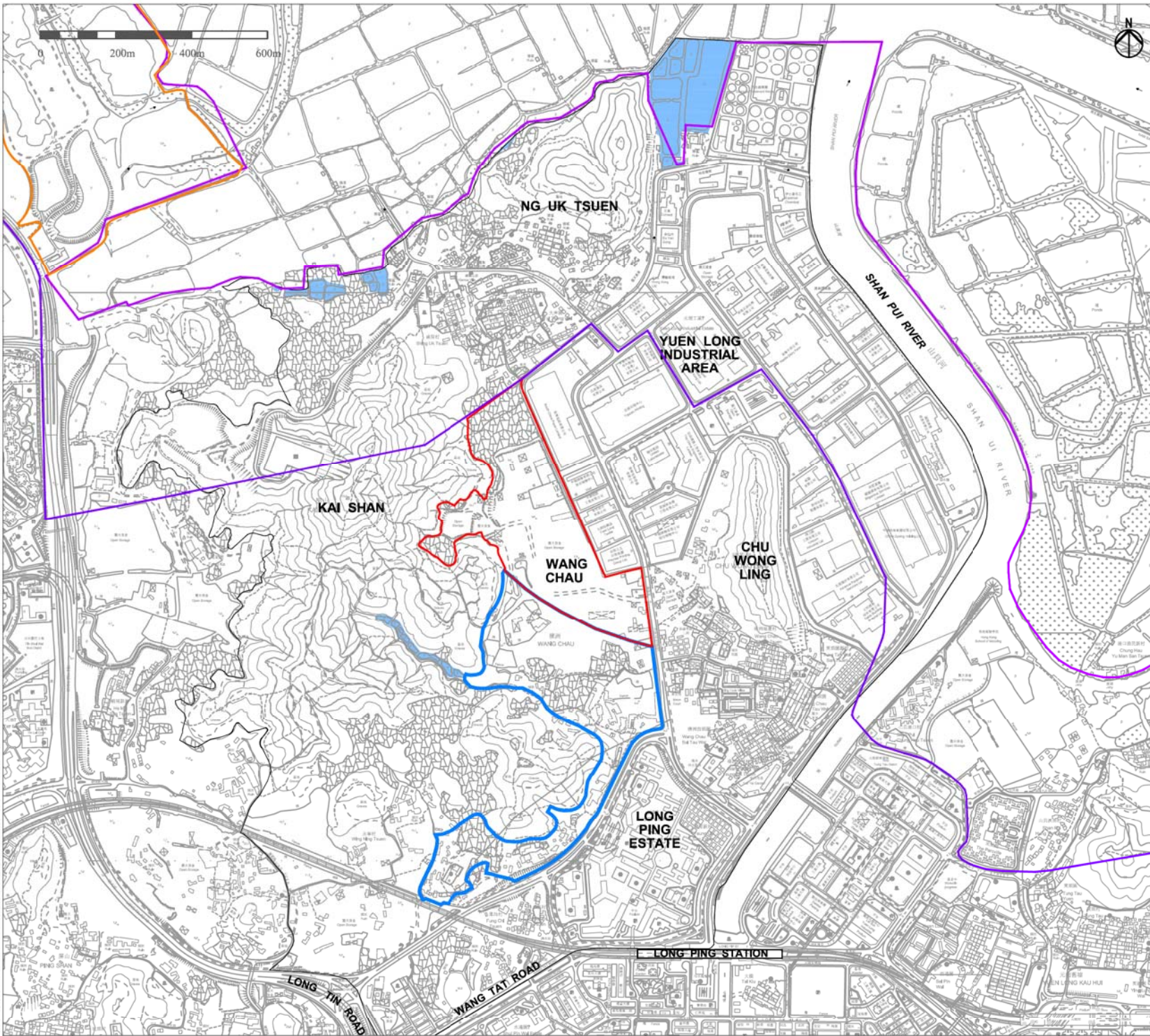
B	SECOND ISSUE	EW	12/12
A	FIRST ISSUE	EW	10/12
Rev	Description	By	Date

Consultant
ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Preliminary Habitat Map of the Study Area

Drawing no.	Figure 2.10.1			Rev.	B
Drawn	EW	Date	12/12	Checked	MRL
				Approved	ST
Scale	AS SHOWN		Status	PRELIMINARY	



- Legend:
- Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Study Area
 - Wetland Conservation Area (WCA)
 - Wetland Buffer Area (WBA)
 - Hong Kong Wetland Park Special Area
 - Pond

B	SECOND ISSUE	EW	01/13
A	FIRST ISSUE	EW	10/12
Rev	Description	By	Date

Consultant

ARUP

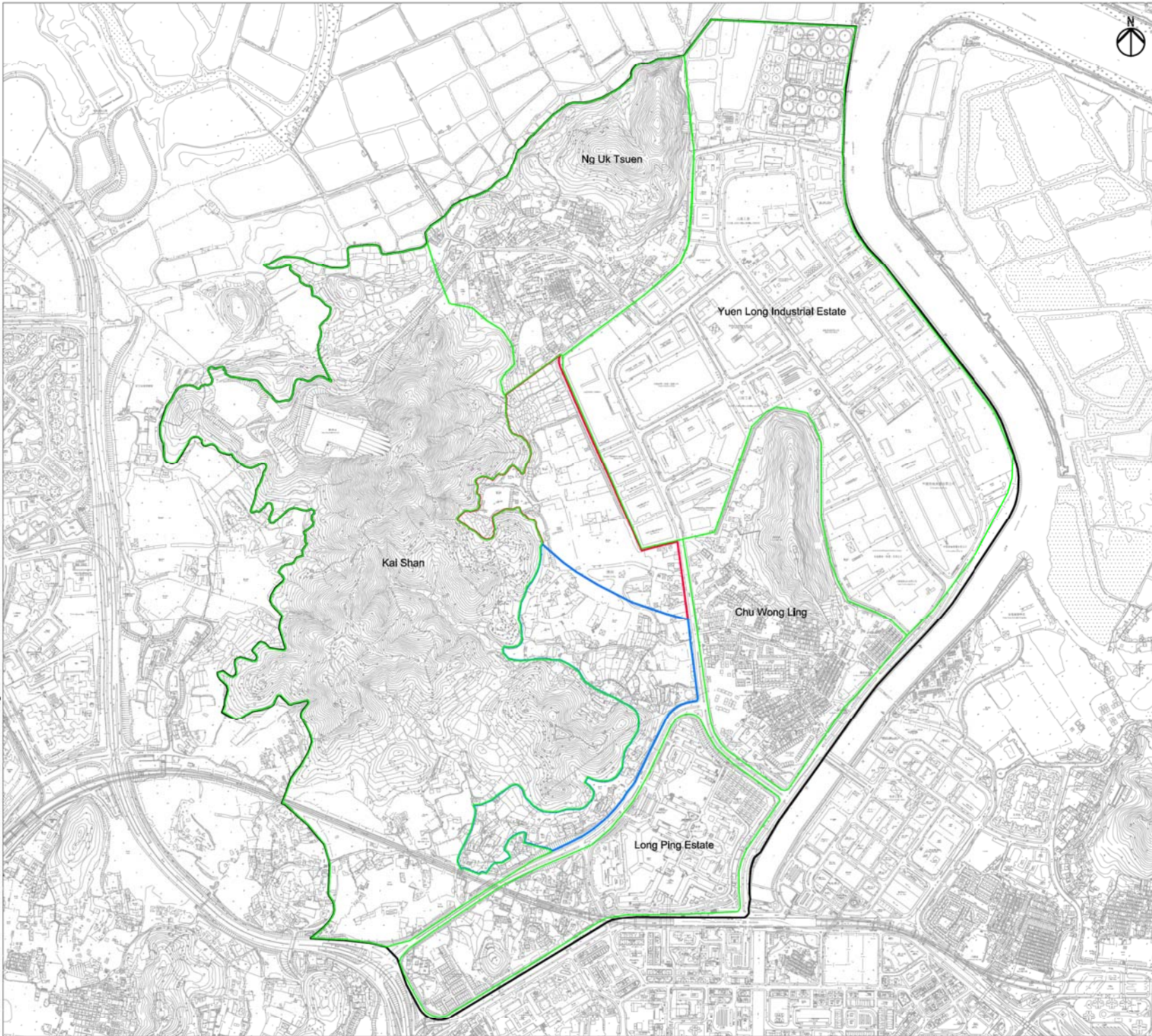
Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Location of Ponds within the Study Area (based on draft habitat map)

Drawing no.	Figure 2.10.2			Rev.	B
Drawn	EW	Date	01/13	Checked	MRL
Scale	AS SHOWN	Status	PRELIMINARY	Approved	ST
COPYRIGHT RESERVED					



USER: HKHQA0108 TIME: 11 MAR 2013 - 2:45PM
 FILE NAME: C:\CONV\PROJECT\20120293\DRAWING\DELIVERABLES\REPORTS\REPORT\HABITAT\HABITAT\BASELINE\RENEWAL\FIGURE 2.10.2.DWG



- Legend**
-  Study Area
 -  Potential Public Housing Development Site
 -  Yuen Long Industrial Estate Extension
 -  Other Area

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

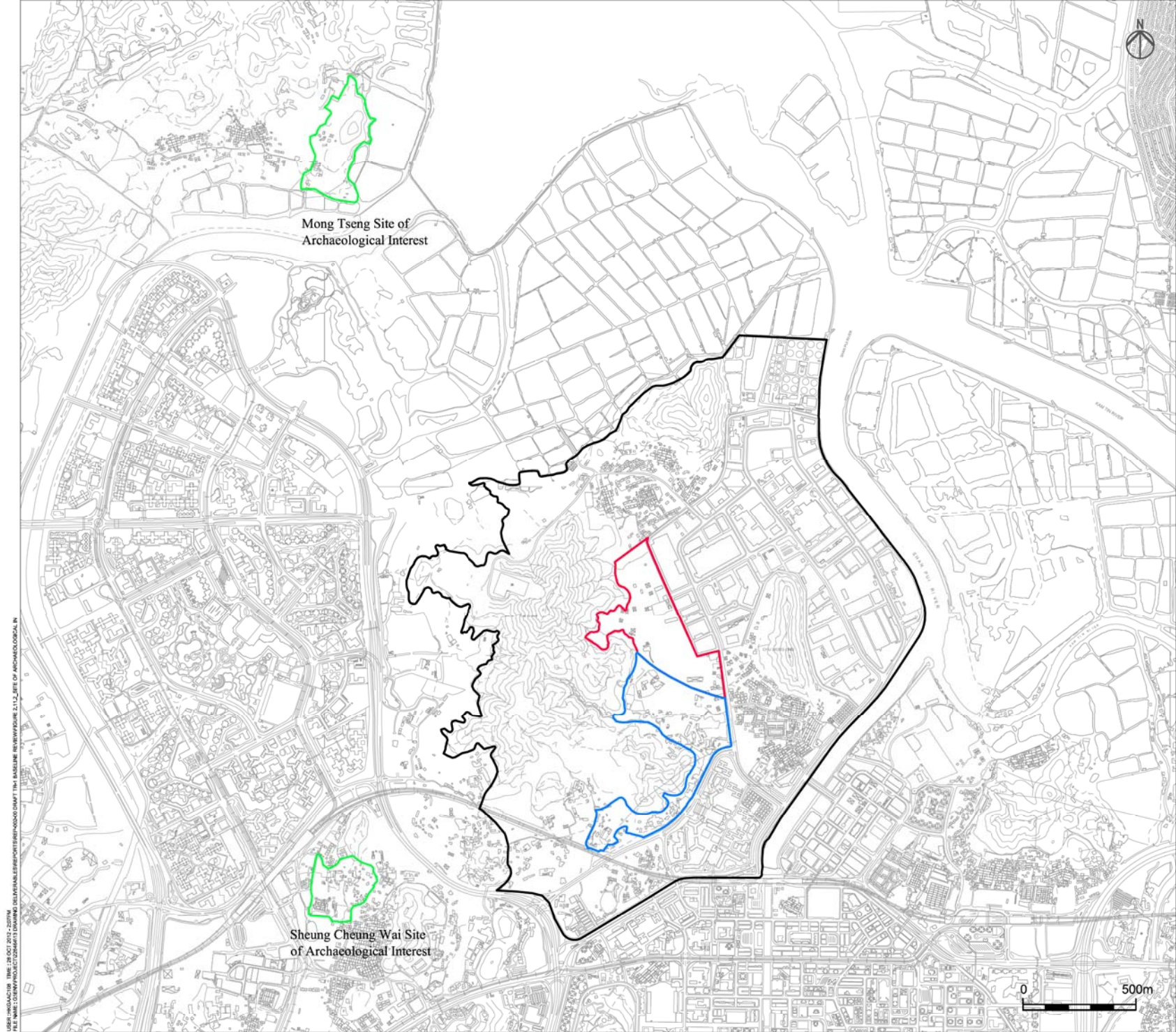
Drawing title
 Assessment Area for Cultural Heritage

Drawing no.	Figure 2.11.1			Rev.	A
Drawn	GL	Date	10/12	Checked	IL
				Approved	ST
Scale	1:10000 (A3)		Status	PRELIMINARY	

COPYRIGHT RESERVED



USER: HKHQA0108 TIME: 27 OCT 2012 4:58PM
 FILE NAME: C:\CONTRACT\PROJECT\2012\11\DRAWING\DELIVERABLES\REPORTS\REPORTS\DIAMT\THM\BASELINE\REV\VIEW\DWG\2_11_1_ASSESSMENT_AREA_FOR_CULT.DWG



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Site of Archaeological Interest

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant
ARUP

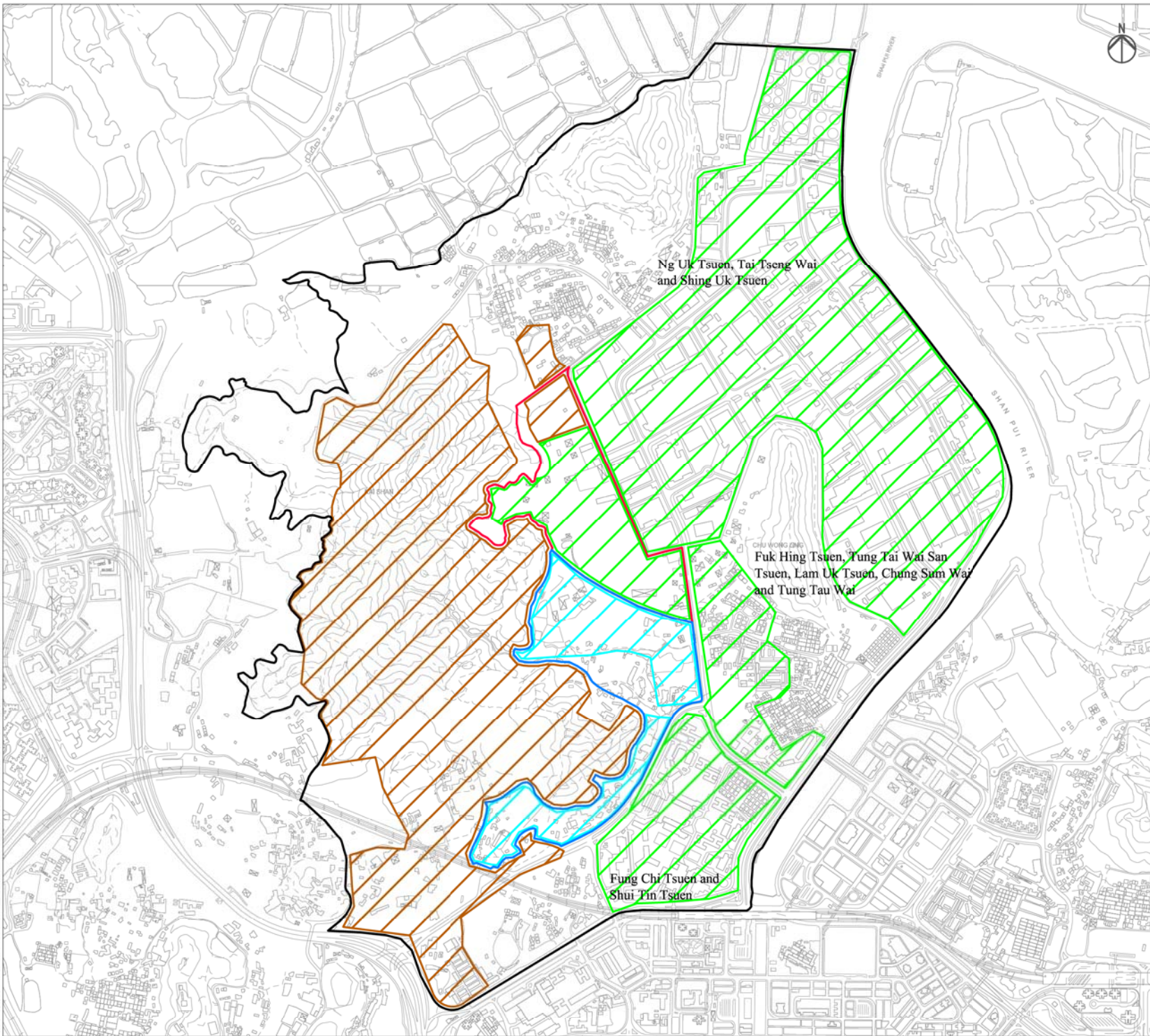
Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Mong Tseng and Sheung Cheung Wai Sites of Archaeological Interest

Drawing no.	Figure 2.11.2	Rev.	A
Drawn	GL	Date	10/12
Checked	IL	Approved	ST
Scale	AS SHOWN	Status	PRELIMINARY

COPYRIGHT RESERVED
 HONG KONG HOUSING AUTHORITY

USER: HKHACT08 TIME: 28 OCT 2012 - 2:57PM
 FILE NAME: C:\ENVIRONMENT\PROJECTS\HONGKONG\DRAWING\DELIVERABLES\REPORTS\HONGKONG\DRAWING\2.11.2_SITES OF ARCHAEOLOGICAL IN



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - No Archaeological Potential
 - Very Low Archaeological Potential
 - Low Archaeological Potential

B	SECOND ISSUE	GL	02/13
A	FIRST ISSUE	GL	09/12
Rev	Description	By	Date

Consultant
ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Map Showing Areas of No, Low and Very Low Archaeological Potential

Drawing no.	Figure 2.11.2a	Rev.	B
-------------	----------------	------	---

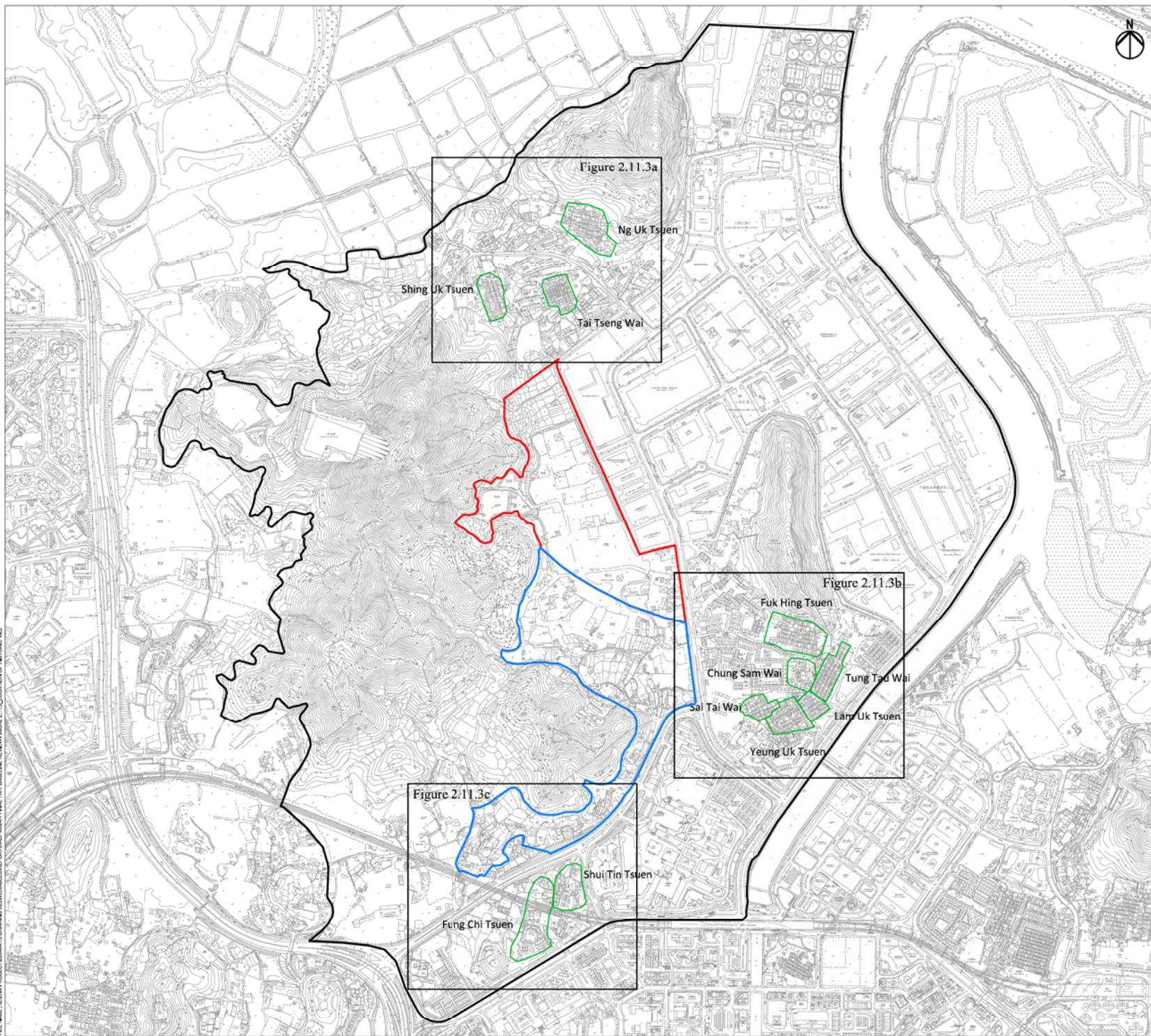
Drawn	GL	Date	02/13	Checked	IL	Approved	ST
-------	----	------	-------	---------	----	----------	----

Scale	NTS	Status	PRELIMINARY
-------	-----	--------	-------------



USER: HKCAD108 TIME: 09 MAR 2013 - 09:54M
 FILE NAME: C:\GDP\PROJECT\20120293\DRAWING\DELIVERABLES\REPORTS\REPORT\FINAL_T101_BASISLINE_REV000\FIGURE 2.11.2A.DWG

USER: HKCAD112 TIME: 09 MAR 2013 - 11:50AM
 FILE NAME: C:\CONTRACT\2012\112\DRAWING\DELIVERABLES\REPORTS\REPORT\FINAL\T111\BASELINE\ISDW\FIGURE 2.11.3_LOCATION OF HISTORIC VILLAGES

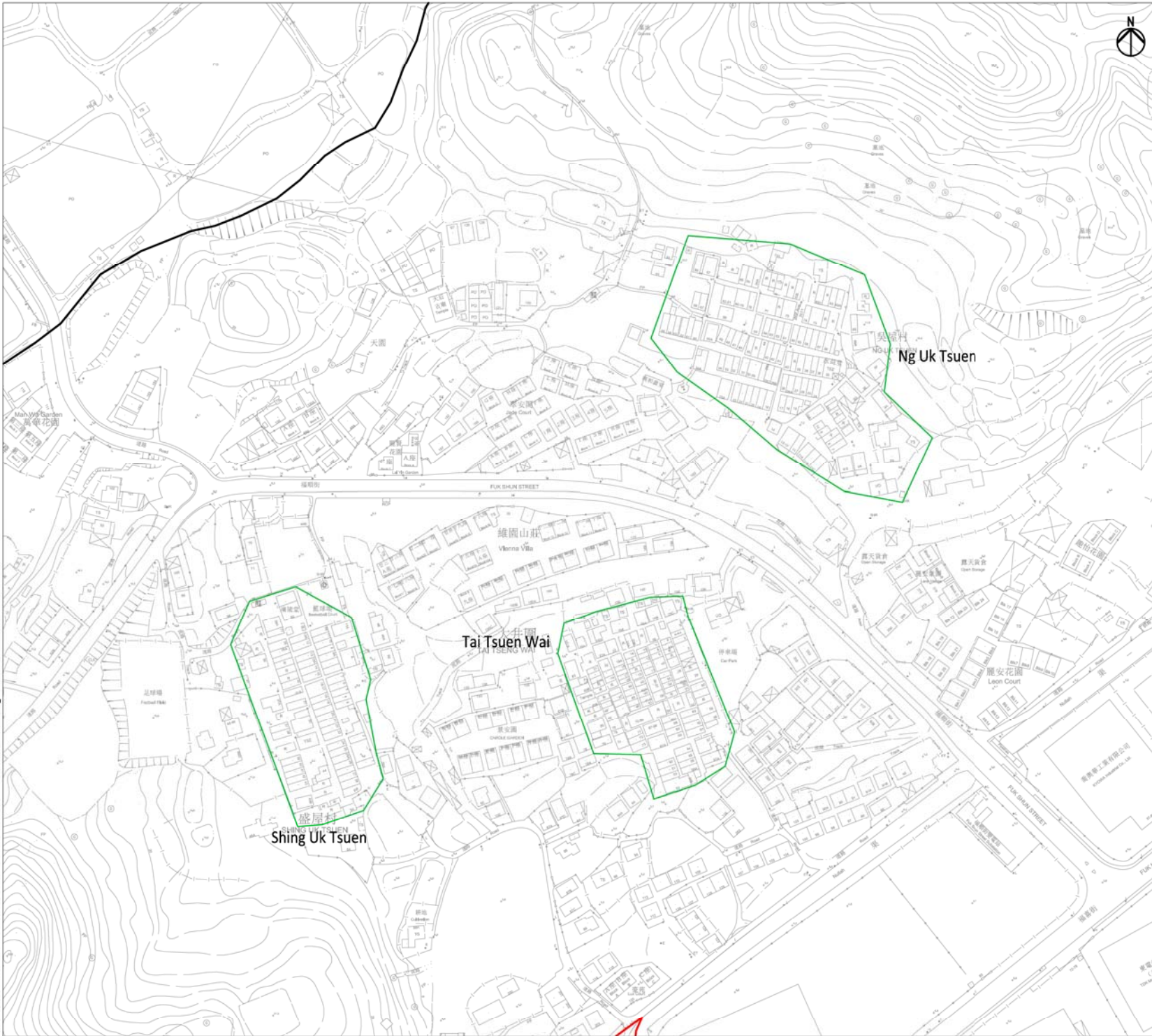


Legend

- Study Area
- Potential Public Housing Development Site
- Yuen Long Industrial Estate Extension
- Historic Villages

A	FIRST ISSUE	GL	10/12		
Rev	Description	By	Date		
Consultant					
<h1 style="margin: 0;">ARUP</h1>					
Project title					
Agreement No. CB20120293 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau					
Drawing title					
Location of Historic Villages					
Drawing no.					
Figure 2.11.3				Rev.	A
Drawn	GL	Date	10/12	Checked	IL
			Approved	ST	
Scale			Status		
1:10000 (A3)			PRELIMINARY		
COPYRIGHT RESERVED					





- Legend**
-  Study Area
 -  Potential Public Housing Development Site
 -  Yuen Long Industrial Estate Extension
 -  Historic Villages

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date
Consultant			

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

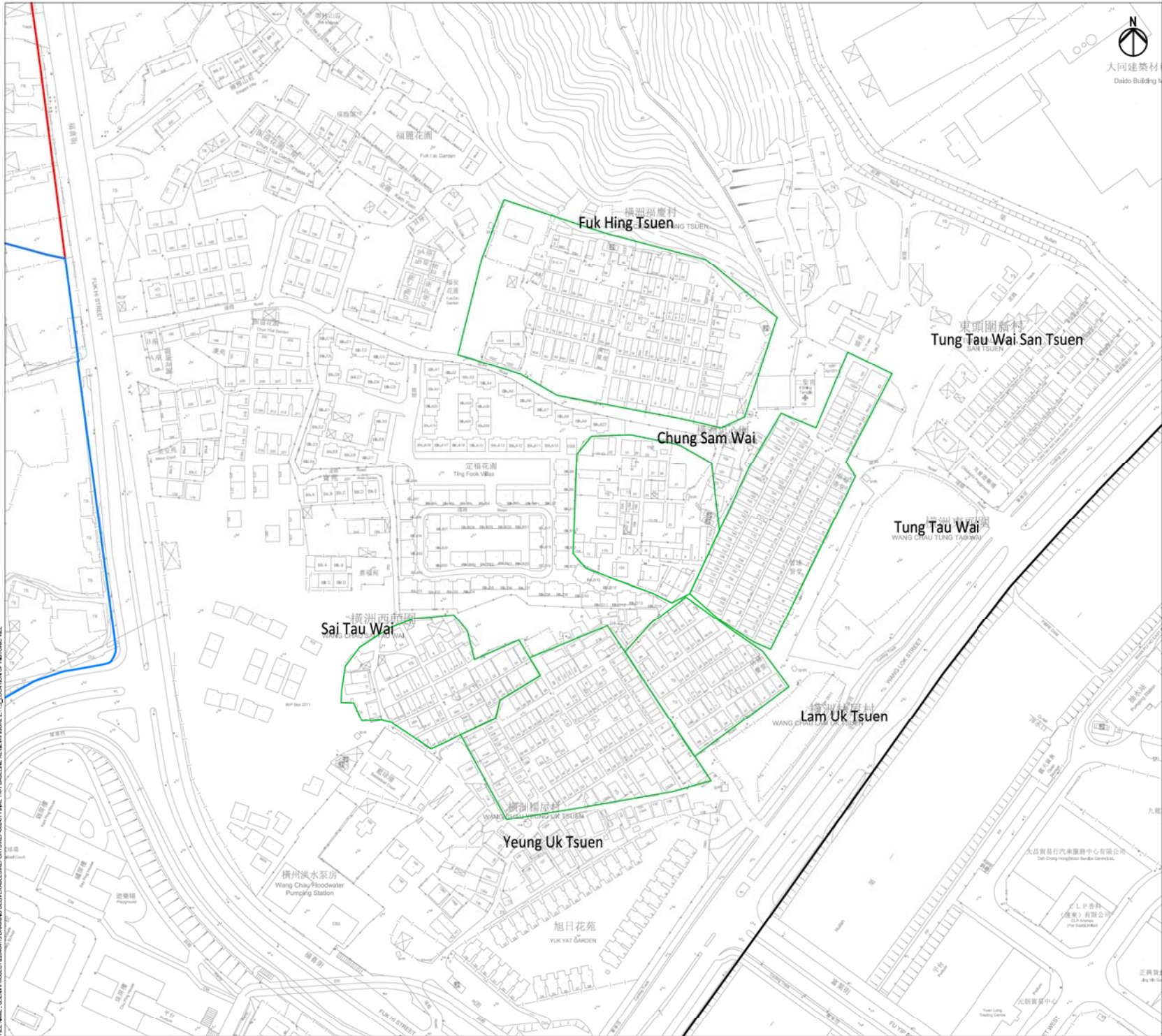
Drawing title
 Location of Historic Villages

Drawing no.	Figure 2.11.3a			Rev.	A
Drawn	GL	Date	10/12	Checked	IL
Scale	1:2000(A3)		Status	PRELIMINARY	

COPYRIGHT RESERVED



USER: HKCAD112 TIME: 09 MAR 2013 - 11:54AM
 FILE NAME: C:\CONV\PROJECT\20120293\DRAWING\DELIVERABLES\REPORTS\REPORT\FINAL\1101_BASELINE_REV\WPP\Figure 2.11.3_Location of Historic Vill

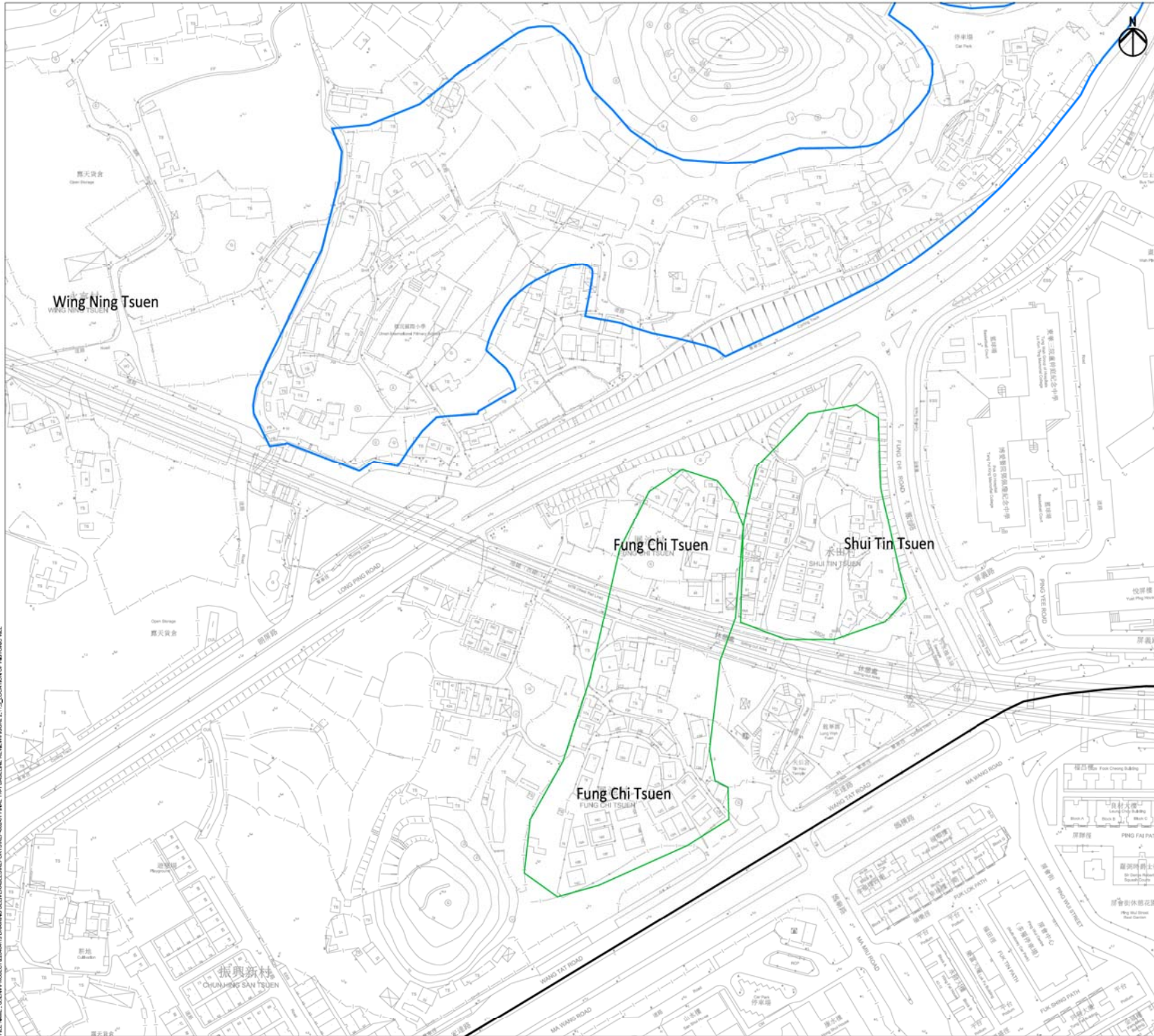


- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Historic Villages

A	FIRST ISSUE	GL	10/12		
Rev	Description	By	Date		
ARUP					
Project title Agreement No. CB20120293 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau					
Drawing title Locations of Historic Villages					
Drawing no.	Figure 2.11.3b				Rev. A
Drawn	GL	Date	10/12	Checked	IL
			Approved ST		
Scale			Status		
1:2000(A3)			PRELIMINARY		
COPYRIGHT RESERVED					




USER: HKOMACT12 TIME: 09 MAR 2013 - 11:04AM
 FILE NAME: C:\CONV\PROJECT\20120293\DRAWING\DELIVERABLES\REPORTS\REPORT\PHL\T101\BASELINE\REV\SWP\FIGURE 2.11\LOCATIONS OF HISTORIC VIL

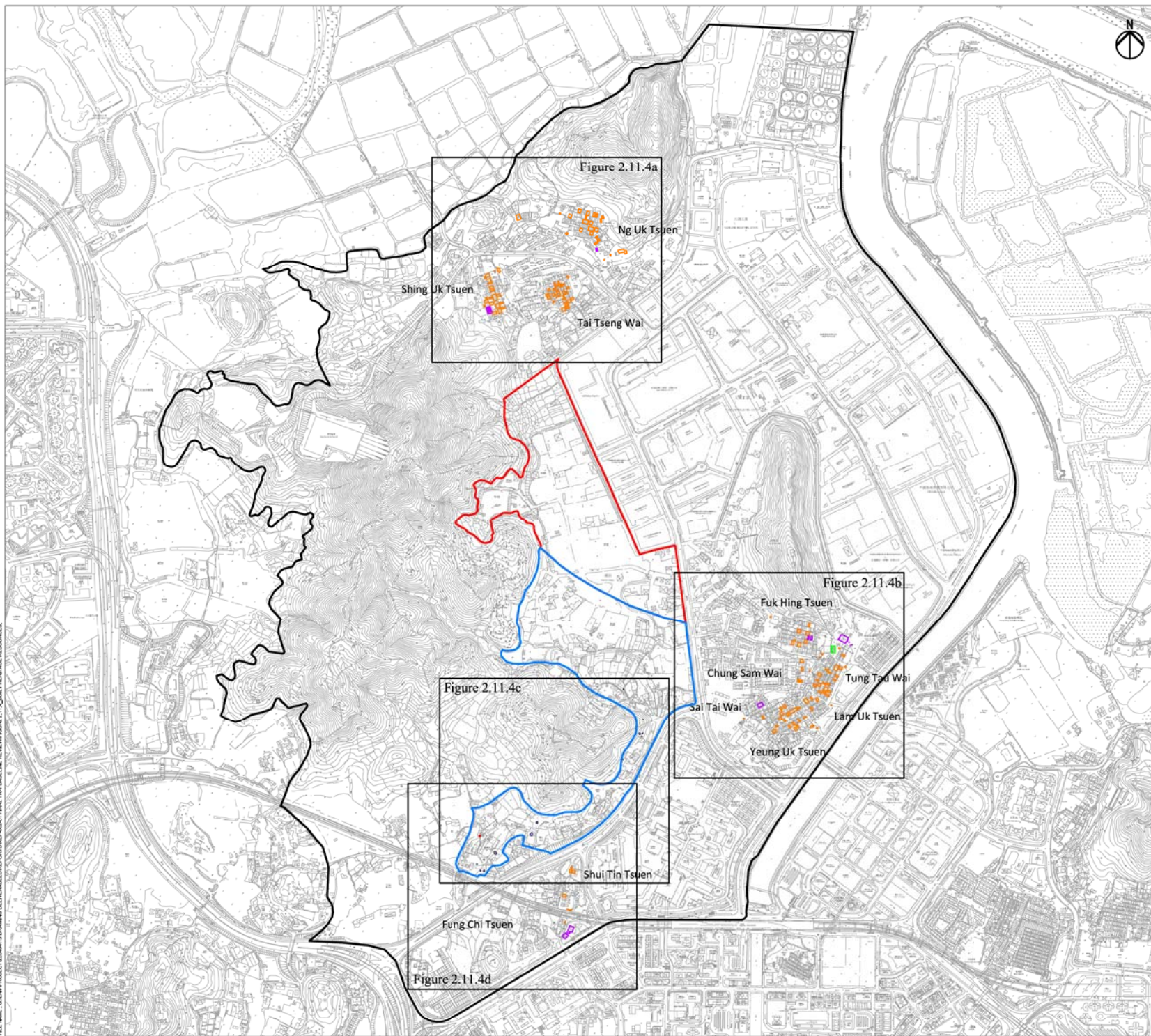


- Legend**
-  Study Area
 -  Potential Public Housing Development Site
 -  Yuen Long Industrial Estate Extension
 -  Historic Villages

USER: HKCADACT12 TIME: 09 MAR 2013 - 11:04AM
 FILE NAME: C:\CONV\PROJECT\2012\613\DRAWING DELIVERABLES\REPORTS\REPORT\FINAL\T101\BASELINE\REVIEWS\FIGURE 2.11.3_LOCATION OF HISTORIC VIL

A		FIRST ISSUE	GL	10/12
Rev		Description	By	Date
Consultant				
ARUP				
Project title				
Agreement No. CB20120293 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau				
Drawing title				
Location of Historic Villages				
Drawing no.		Figure 2.11.3c	Rev.	A
Drawn	GL	Date	10/12	Checked
				IL
Scale	1:2000(A3)		Status	PRELIMINARY
COPYRIGHT RESERVED				
 HONG KONG HOUSING AUTHORITY				

USER: HKCAD108 TIME: 07 MAR 2013 - 10:44 AM
 FILE NAME: C:\COPYPROJECT\2012\B1\DRAWING\2114\BUILTHERITAGERESOURCES.DWG
 USER: HKCAD108 TIME: 07 MAR 2013 - 10:44 AM
 FILE NAME: C:\COPYPROJECT\2012\B1\DRAWING\2114\BUILTHERITAGERESOURCES.DWG



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Declared Monuments (DM)
 - Graded Historic Buildings (GB)
 - Ungraded Built Heritage Resources (HB)
 - Grave (G)
 - Shrine (S)
 - Well and Shrine (W)

B	SECOND ISSUE	GL	12/12
A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

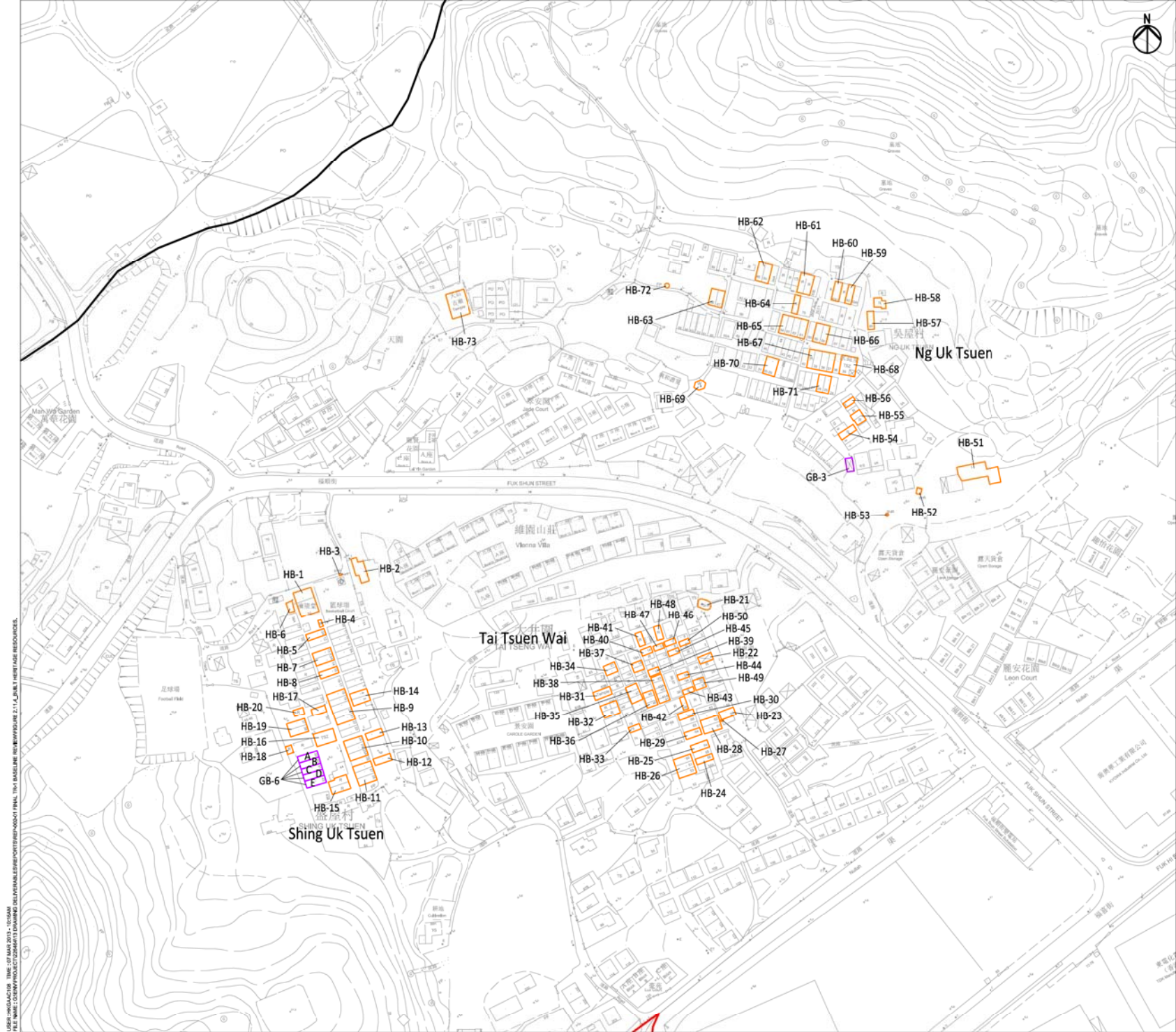
ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site
 and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
Built Heritage Resources

Drawing no.	Figure 2.11.4	Rev.	B
Drawn	GL	Date	12/12
Checked	IL	Approved	ST
Scale	1:10000 (A3)		Status
			PRELIMINARY





- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Declared Monuments (DM)
 - Graded Historic Buildings (GB)
 - Ungraded Built Heritage Resources (HB)
 - Grave (G)
 - Shrine (S)
 - Well and Shrine (W)

B	SECOND ISSUE	GL	12/12
A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant

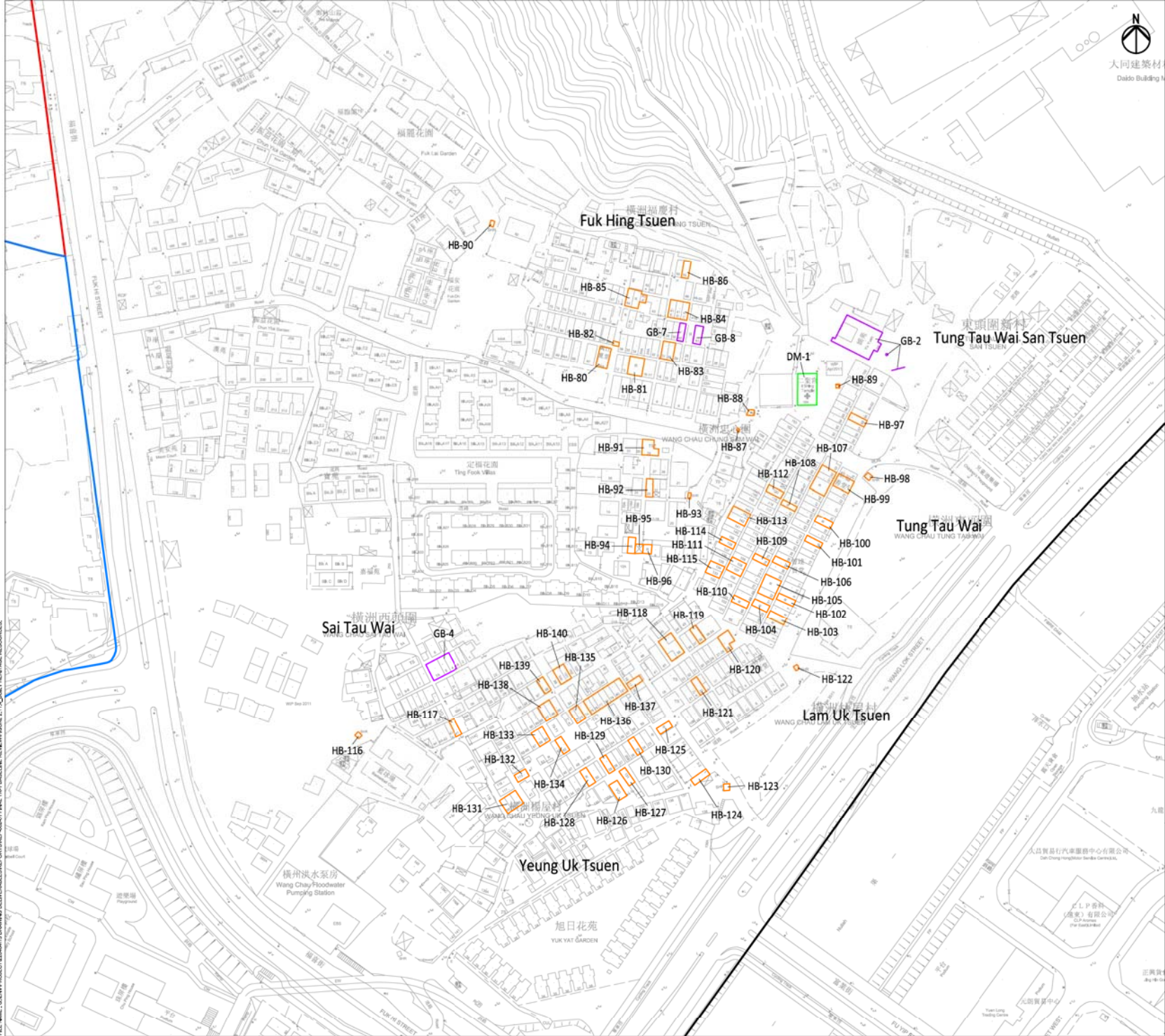
ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
Built Heritage Resources

Drawing no.		Figure 2.11.4a		Rev.		B	
Drawn	GL	Date	12/12	Checked	IL	Approved	ST
Scale		1:2000(A3)		Status		PRELIMINARY	

USER: HKCAD108 TIME: 07 MAR 2013 - 10:44AM
 FILE NAME: C:\GDP\PROJECT\20120293\DRAWING\20120293\BUILTHERITAGERESOURCES.DWG
 USER: HKCAD108 TIME: 07 MAR 2013 - 10:44AM
 FILE NAME: C:\GDP\PROJECT\20120293\DRAWING\20120293\BUILTHERITAGERESOURCES.DWG



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Declared Monuments (DM)
 - Graded Historic Buildings (GB)
 - Ungraded Built Heritage Resources (HB)
 - Grave (G)
 - Shrine (S)
 - Well and Shrine (W)

B	SECOND ISSUE	GL	12/12
A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant
ARUP

Project title
Agreement No. CB20120293
Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

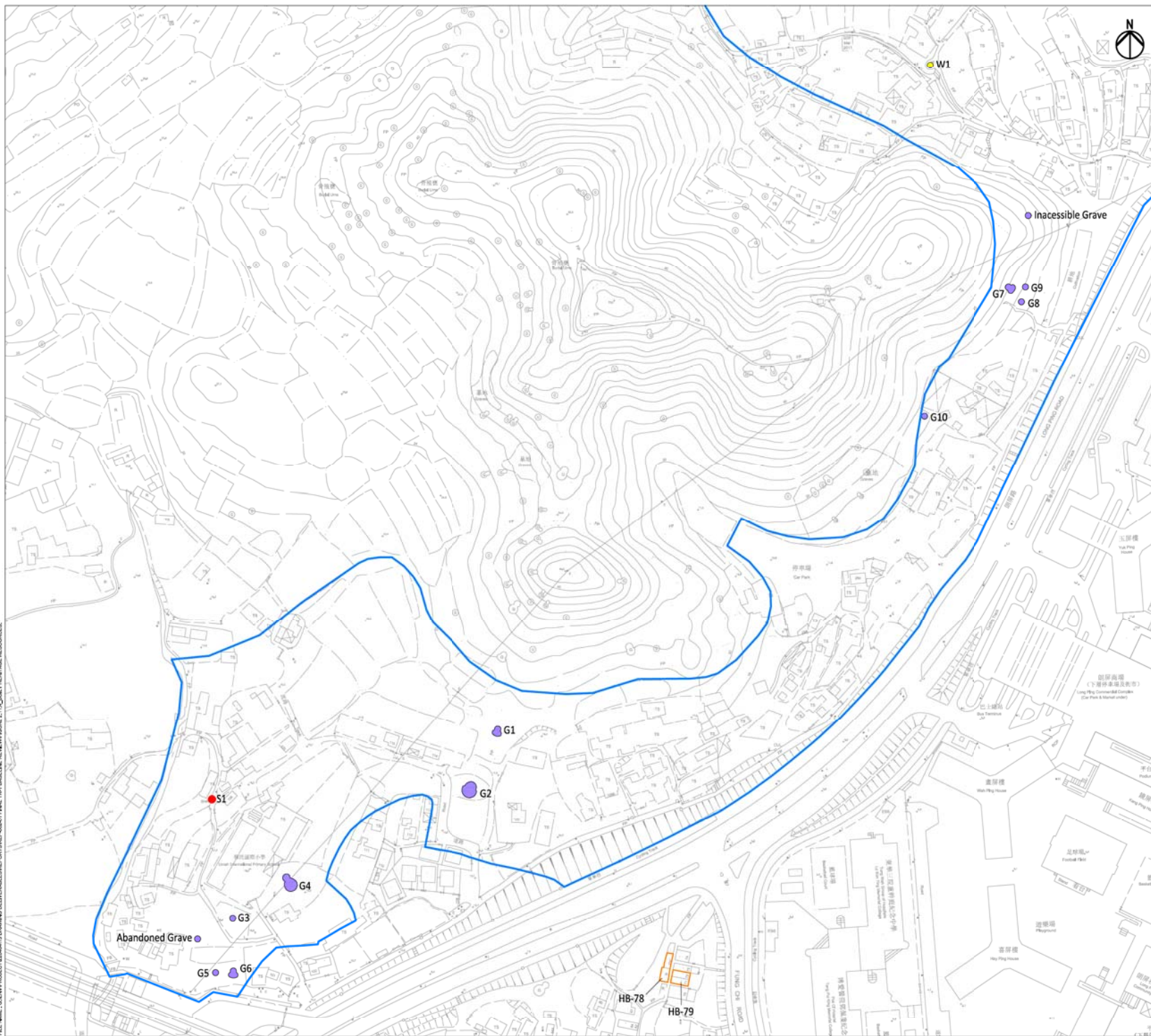
Drawing title
Built Heritage Resources

Drawing no.	Figure 2.11.4b		Rev.	B			
Drawn	GL	Date	12/12	Checked	IL	Approved	ST
Scale	1:2000(A3)		Status	PRELIMINARY			
COPYRIGHT RESERVED							



USER: HKCAD108 TIME: 07 MAR 2013 - 10:11AM
 FILE NAME: C:\CONTRACT\PROJECT\20120293\DRAWING\DELIVERABLES\REPORTS\REPORT_FINAL_T101\BASELINE_RESOURCE\WPP\FIGURE 2.11_4_BUILT HERITAGE RESOURCES

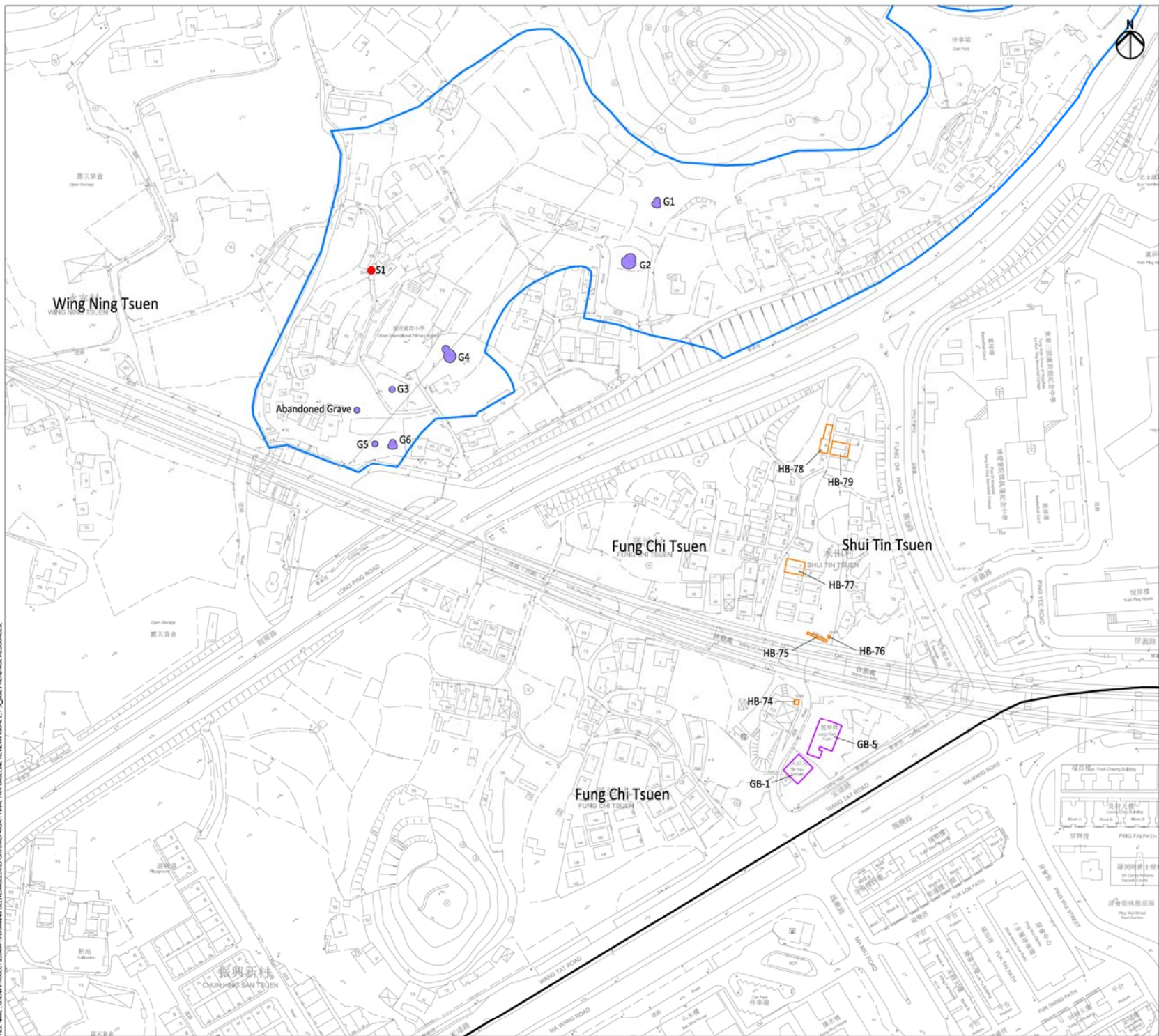
USER: HKCAD108 TIME: 07 MAR 2013 - 10:44AM
 FILE NAME: C:\COPYPROJECT\20120616\3 DRAWING DELIVERABLES\REPORTS\REPORT\PLAN_T101\BASELINE\REV\SWP\PLANE 2:11\SUB 11\HERITAGE RESOURCES



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Declared Monuments (DM)
 - Graded Historic Buildings (GB)
 - Ungraded Built Heritage Resources (HB)
 - Grave (G)
 - Shrine (S)
 - Well and Shrine (W)

B	SECOND ISSUE	GL	12/12	
A	FIRST ISSUE	GL	10/12	
Rev	Description	By	Date	
Consultant				
<h1>ARUP</h1>				
Project title				
Agreement No. CB20120293 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau				
Drawing title				
Built Heritage Resources				
Drawing no.		Figure 2.11.4c		Rev.
Drawn	GL	Date	12/12	Checked
				IL
Scale	1:2000(A3)		Status	PRELIMINARY
COPYRIGHT RESERVED				
HONG KONG HOUSING AUTHORITY				

USER: HKCAD108 TIME: 07 MAR 2013 - 10:20AM
 FILE NAME: C:\CONV\PROJECT\20120616\DRAWING\DELIVERABLES\REPORTS\REPORT\FINAL_T101_BASELINE_RS\WPP\FIGURE 2.11_4_BUILT HERITAGE RESOURCES.



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Declared Monuments (DM)
 - Graded Historic Buildings (GB)
 - Ungraded Built Heritage Resources (HB)
 - Grave (G)
 - Shrine (S)
 - Well and Shrine (W)

B	SECOND ISSUE	GL	12/12
A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

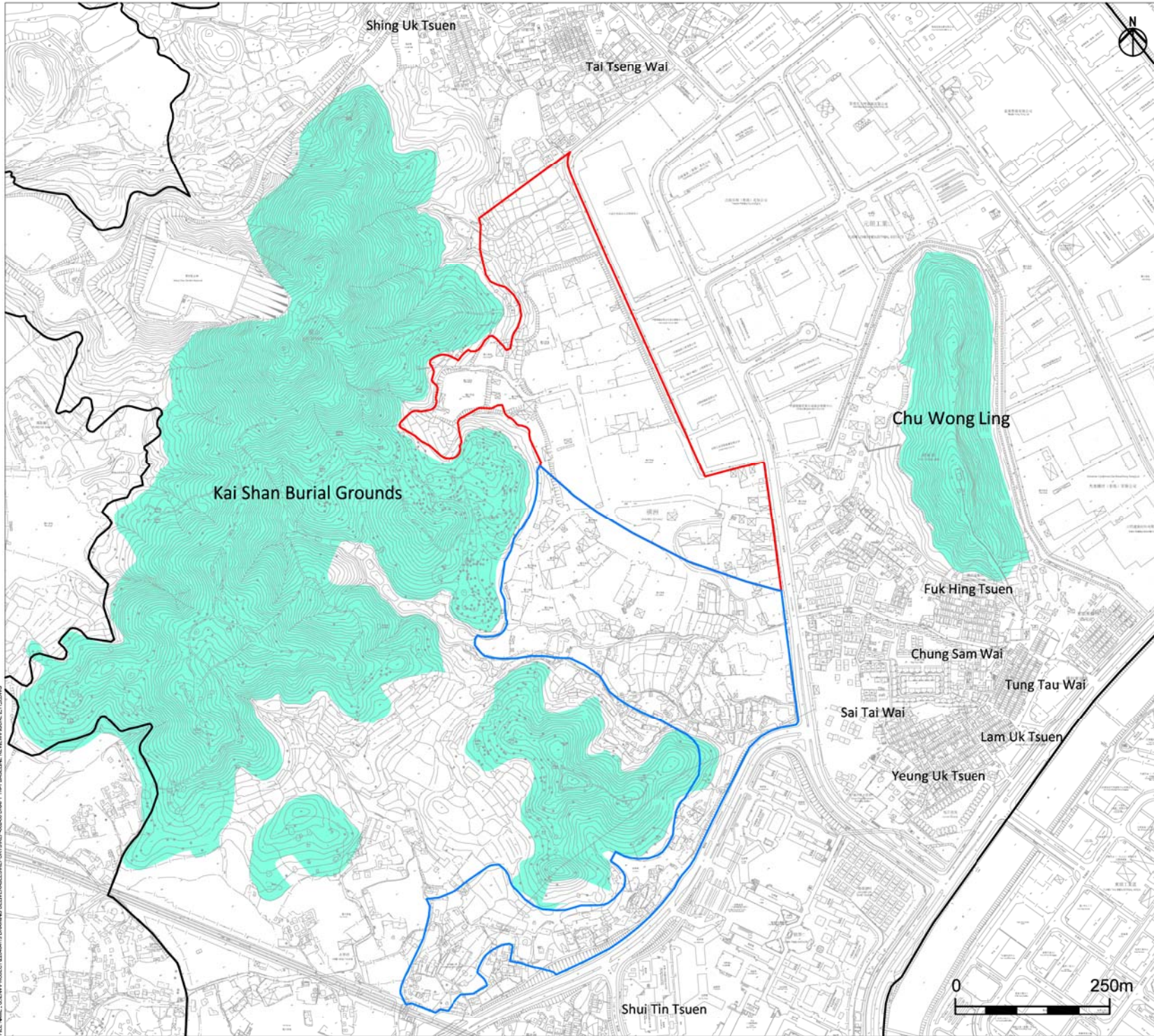
Consultant **ARUP**

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
Built Heritage Resources

Drawing no.	Figure 2.11.4d			Rev.	B
Drawn	GL	Date	12/12	Checked	IL
Scale	1:2000(A3)		Status	PRELIMINARY	





- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Burial Grounds

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant
ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Burial Grounds

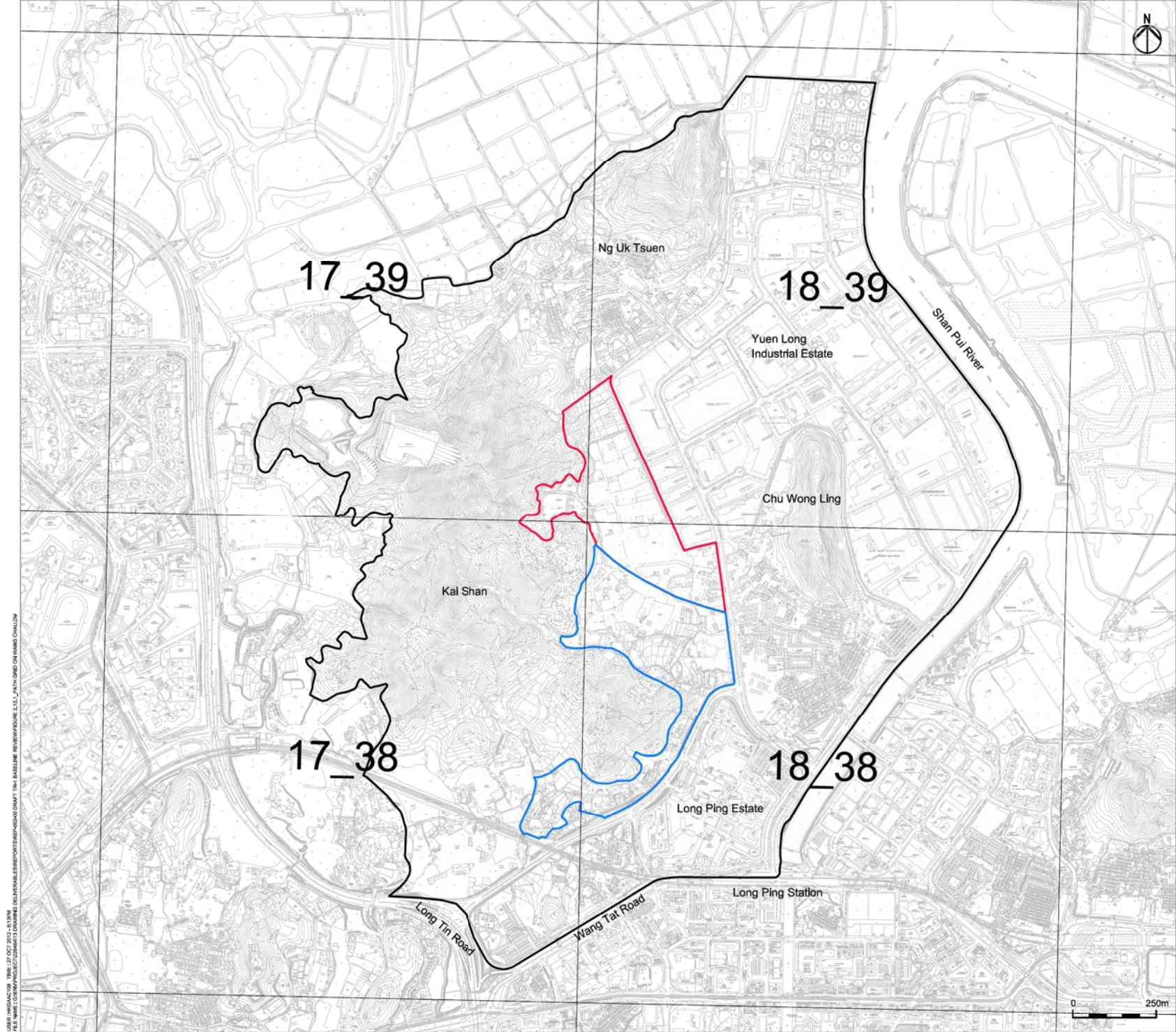
Drawing no.	Figure 2.11.5	Rev.	A
-------------	---------------	------	---

Drawn	GL	Date	10/12	Checked	IL	Approved	ST
-------	----	------	-------	---------	----	----------	----

Scale	AS SHOWN	Status	PRELIMINARY
-------	----------	--------	-------------



USER: HK06ACT12 TIME: 20 OCT 2012 22:58:04
 FILE NAME: C:\ENVIRONMENT\PROJECTS\HONGKONG\DRAWING\DELIVERABLES\REPORTS\HONGKONG\DRAWING\THIN BASELINE\REVIEWS\DWG\2.11.5.DWG

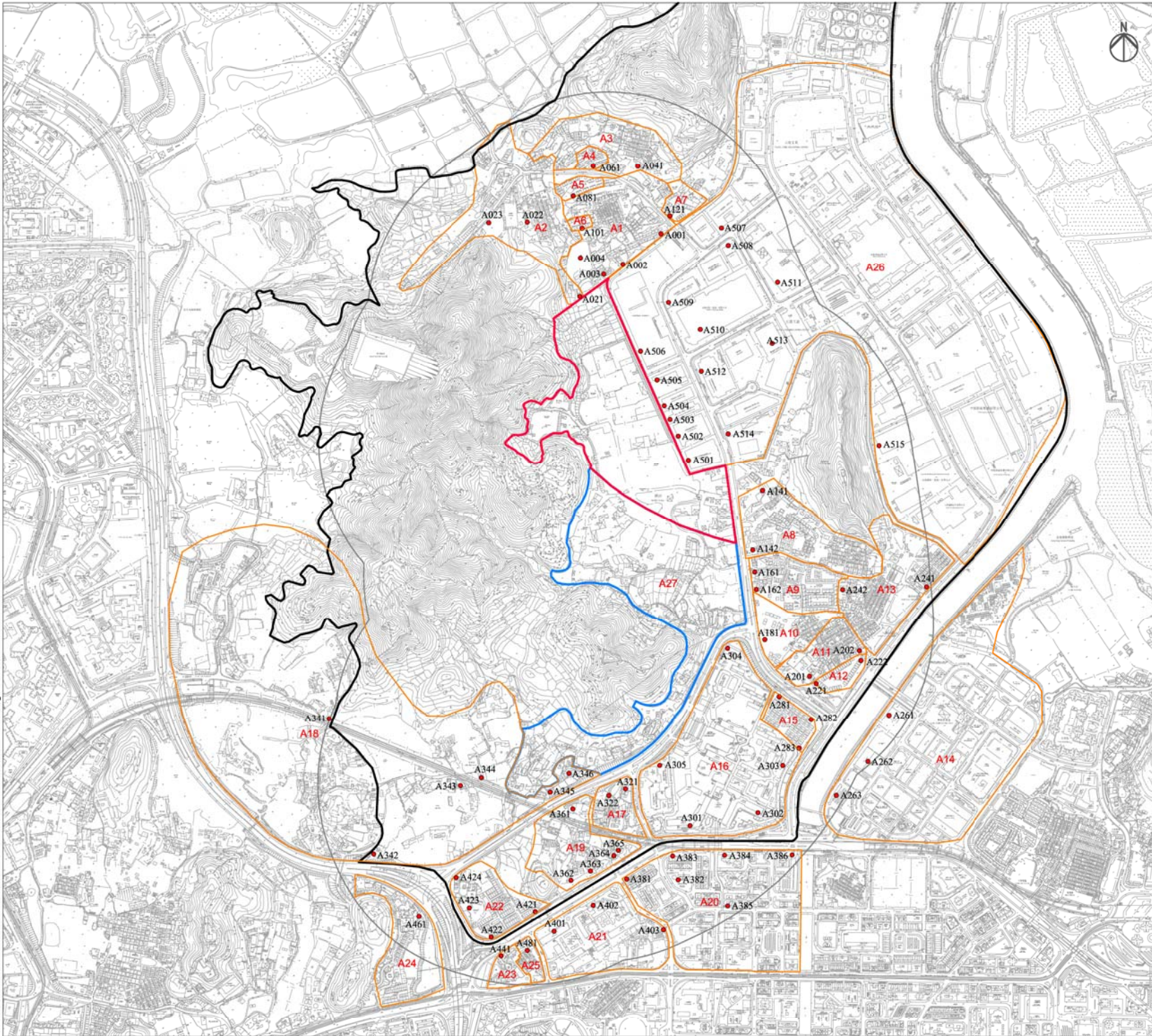


- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension

USER: HKHQA0108 TIME: 27 OCT 2012 - 4:15:36
 FILE NAME: C:\CONTRACT\PROJECT\2012\10\13\DRAWING\DELIVERABLES\REPORTS\REPORT\000\DMPT\THM\BASELINE\REVIEWS\FIGURE_2.12.1_PATH_GRID_ON_WANG_CHAU.DWG

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date
Consultant			
ARUP			
Project title			
Agreement No. CB20120293			
Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau			
Drawing title			
PATH Grid of Wang Chau			
Drawing no.			
Figure 2.12.1			Rev. A
Drawn	GL	Date	10/12
Checked	IL	Approved	ST
Scale		Status	
NTS		PRELIMINARY	
COPYRIGHT RESERVED			





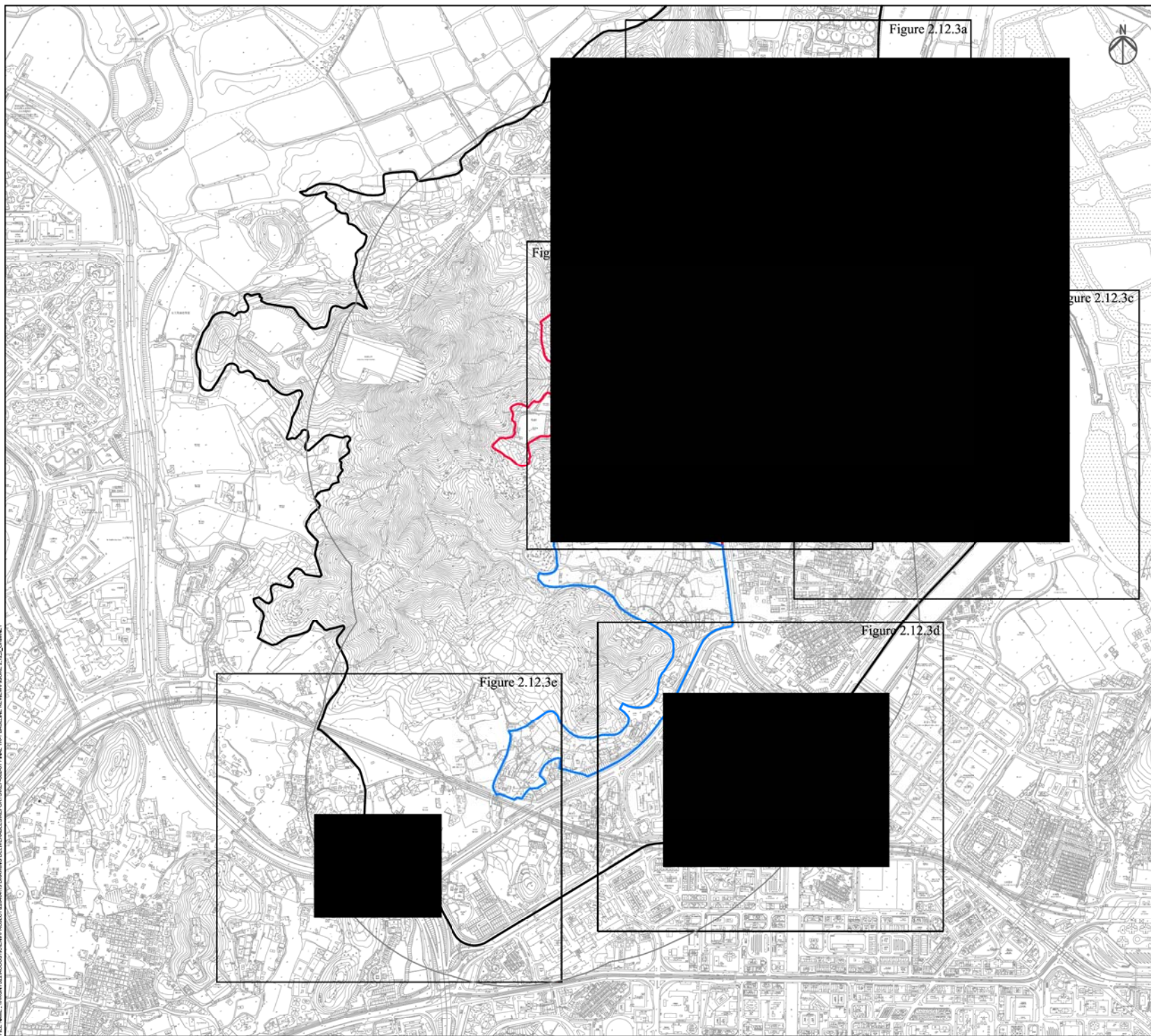
- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - 500m Assessment Area
 - Air Sensitive Receiver
 - Air Assessment Point

USER: HKHQA0108 TIME: 27 OCT 2012 4:09PM
 FILE NAME: C:\CONVEY\PROJECT\2012\11\DRAWING\DELIVERABLE\REPORTS\REPORTS\HQA0108\11\BASELINE REVIEW\FIGURE_2.12.2_AIR AND ASSESSMENT POINTS

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date
Consultant			
ARUP			
Project title			
Agreement No. CB20120293 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau			
Drawing title			
Locations of Air Sensitive Receivers and Air Assessment Points			
Drawing no.	Figure 2.12.2	Rev.	A
Drawn	GL	Date	10/12
Checked	IL	Approved	ST
Scale	1:10000 (A3)	Status	PRELIMINARY
COPYRIGHT RESERVED			



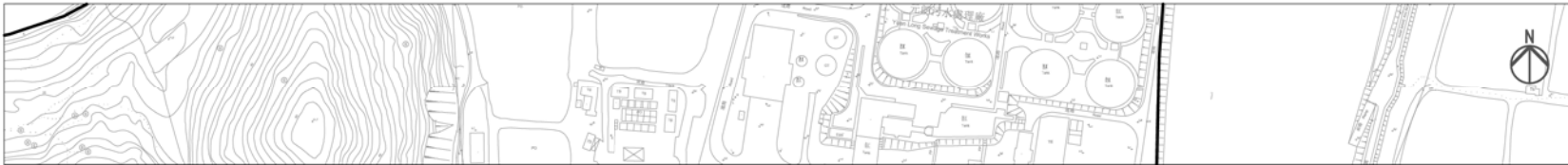
USER: HKCADACT12 TIME: 09 MAR 2012 - 13:56 PM
 FILE NAME: \\HONGKONGSD01\PROJECTS\2012\201203\20120301\DRAWING\20120301\20120301_2123_01.DWG



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - 500m Assessment Area

A	FIRST ISSUE	GL	10/12		
Rev	Description	By	Date		
ARUP					
Project title Agreement No. CB20120293 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau					
Drawing title Chimney Locations					
Drawing no. Figure 2.12.3					Rev. A
Drawn	GL	Date	10/12	Checked	IL
			Approved	ST	
Scale			Status		
1:10000 (A3)			PRELIMINARY		
COPYRIGHT RESERVED					





Legend

-  Study Area
-  Potential Public Housing Development Site
-  Yuen Long Industrial Estate Extension
-  500m Assessment Area
-  Industrial Premises
-  Chimney currently in use
-  Chimney for emergency
-  Chimney not used



A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant
ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Chimney Locations

Drawing no.		Figure 2.12.3a		Rev.	
Drawn	Date	Checked	Approved		
GL	1012	IL	ST		
Scale		Status			
1:3000 (A3)		PRELIMINARY			

COPYRIGHT RESERVED





USER: PROJECT12 TIME: 09 MAR 2013 10:09:00
 FILE NAME: C:\WORK\PROJECT12\DRAWING\DELIVERABLES\REPORTS\REPORT\FINAL\11011_BASELINE_SCREENSHOTS\2.12.3a_CHIMNEY_LOCATIONS.DWG

黃道益活絡油

香港生力啤酒廠
San Miguel Brewery

雀巢香港
Nestle Hong Kong

Legend

-  Study Area
-  Potential Public Housing Development Site
-  Yuen Long Industrial Estate Extension
-  500m Assessment Area
-  Industrial Premises
-  Chimney currently in use
-  Chimney for emergency
-  Chimney not used

Rev	Description	By	Date
A	FIRST ISSUE	GL	10/12

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
Chimney Locations

Drawing no. **Figure 2.12.3b** Rev. **A**

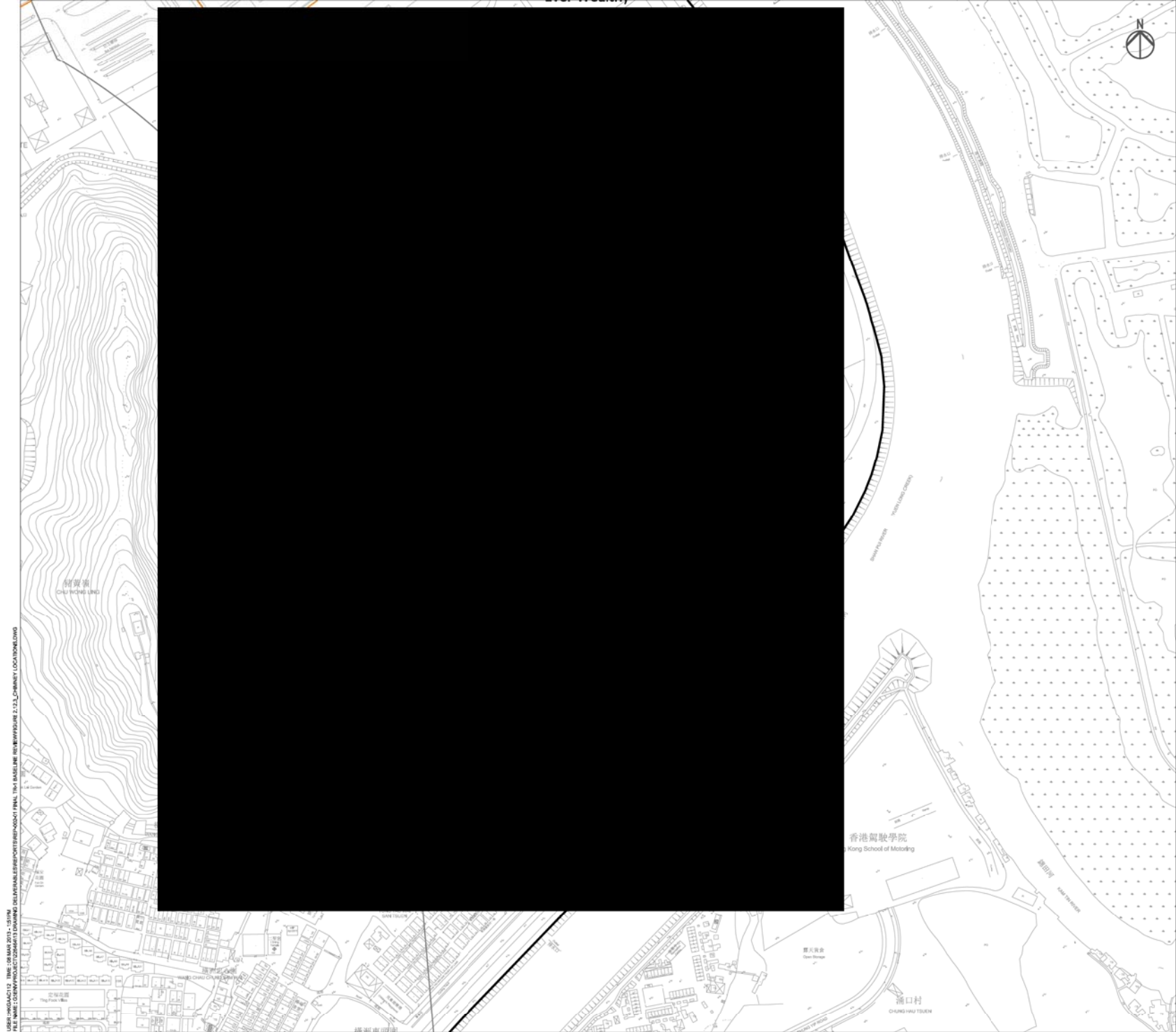
Drawn	GL	Date	10/12	Checked	IL	Approved	ST
-------	----	------	-------	---------	----	----------	----

Scale **1:3000 (A3)** Status **PRELIMINARY**

COPYRIGHT RESERVED



USER: HK06A0112 TIME: 09 MAR 2013 - 15:04
 FILE NAME: C:\CONTRACT\2012\DRAWING\DELIVERABLES\REPORTS\REPORT\PHL1\PH1\BACKLINE_DRAWING\2012\CHIMNEY_LOCATION.DWG



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - 500m Assessment Area
 - Industrial Premises
 - Chimney currently in use
 - Chimney for emergency
 - Chimney not used

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant
ARUP

Project title
Agreement No. CB20120293
Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
Chimney Locations

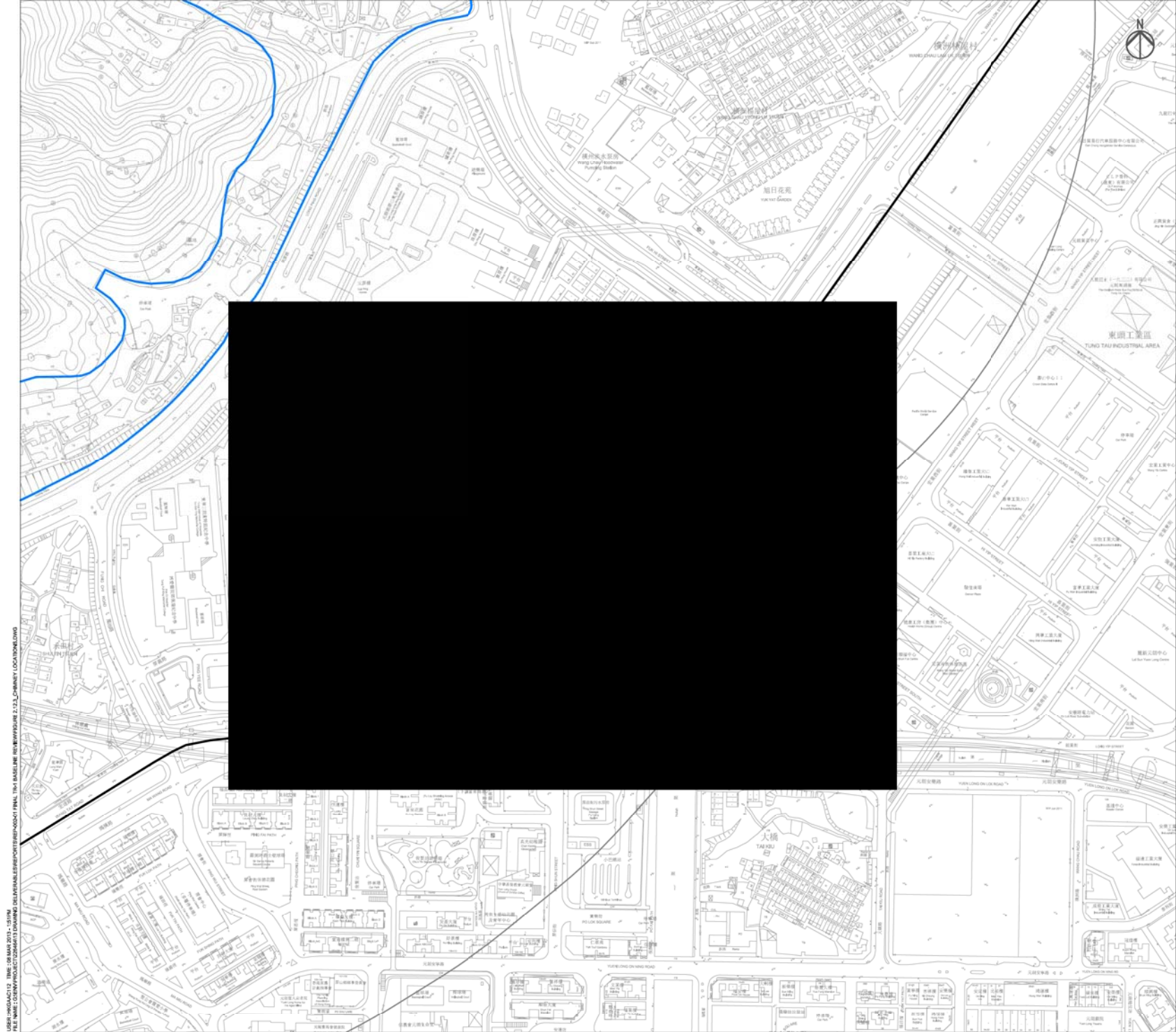
Drawing no.	Figure 2.12.3c	Rev.	A
-------------	----------------	------	---

Drawn	GL	Date	10/12	Checked	IL	Approved	ST
-------	----	------	-------	---------	----	----------	----

Scale	1:3000 (A3)	Status	PRELIMINARY
-------	-------------	--------	-------------



USER: HK06AC12 TIME: 09 MAR 2013 - 15:58
 FILE NAME: C:\GDP\PROJECT\2012\12\DRAWING DELIVERABLES\REPORTS\REPORT_FINAL_T101_BASISLINE ISV\WPP\FIGURE 2.12.3_CHEMNEY LOCATIONS.DWG



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - 500m Assessment Area
 - Industrial Premises
 - Chimney currently in use
 - Chimney for emergency
 - Chimney not used

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant

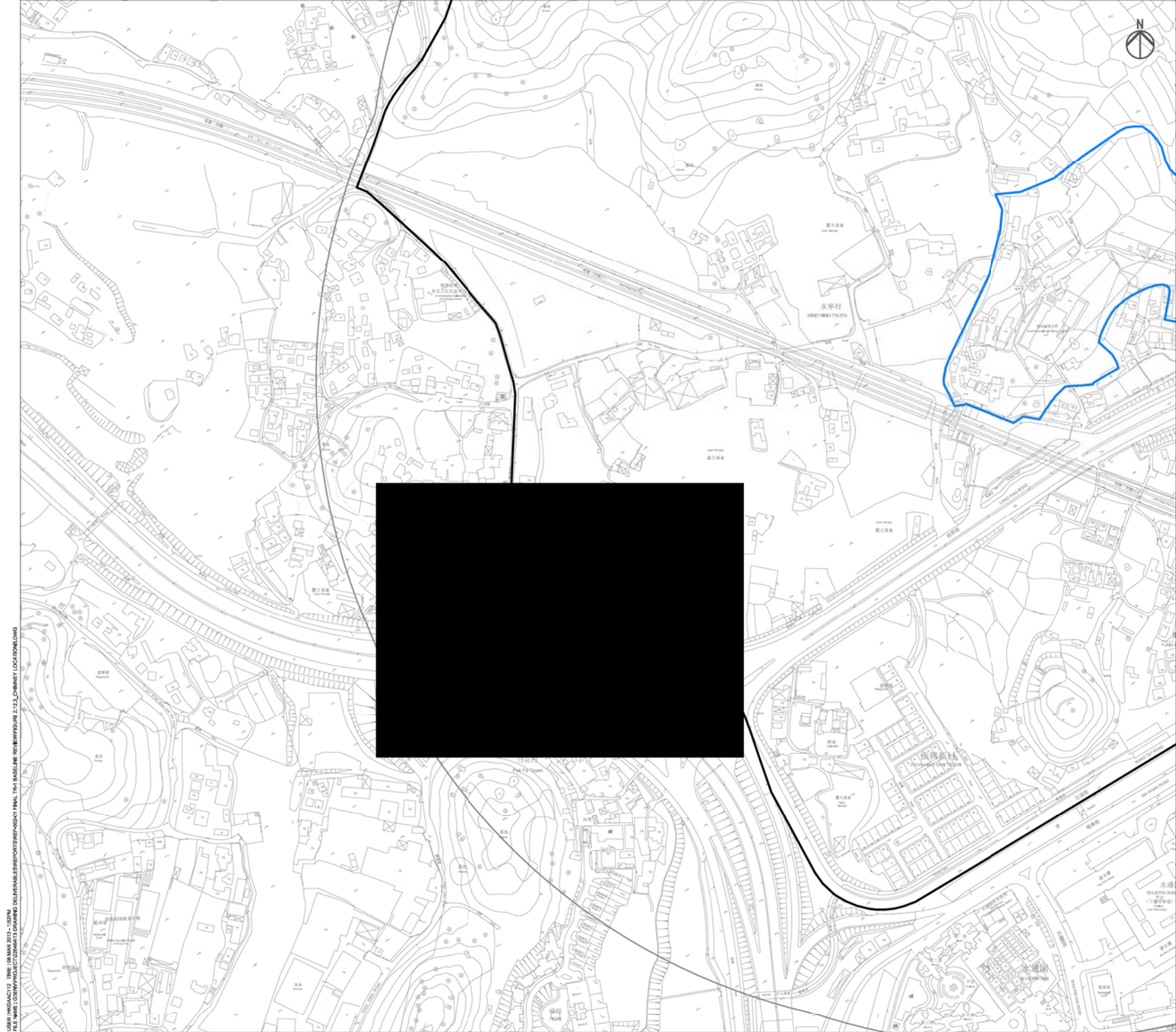
Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Chimney Locations

Drawing no.	Figure 2.12.3d			Rev.	A
Drawn	GL	Date	10/12	Checked	IL
Scale	1:3000 (A3)		Status	PRELIMINARY	



USER: HK04AC112 TIME: 09 MAR 2013 - 15:10M
 FILE NAME: C:\CONV\PROJECT\20120293\DRAWING\DELIVERABLES\REPORT\EMPHASIS\FINAL\TIN\BACKLINE\REV\WPP\FIGURE 2.12.3_CHIMNEY LOCATIONS.LWD



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - 500m Assessment Area
 - Industrial Premises
 - Chimney currently in use
 - Chimney for emergency
 - Chimney not used

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant

ARUP

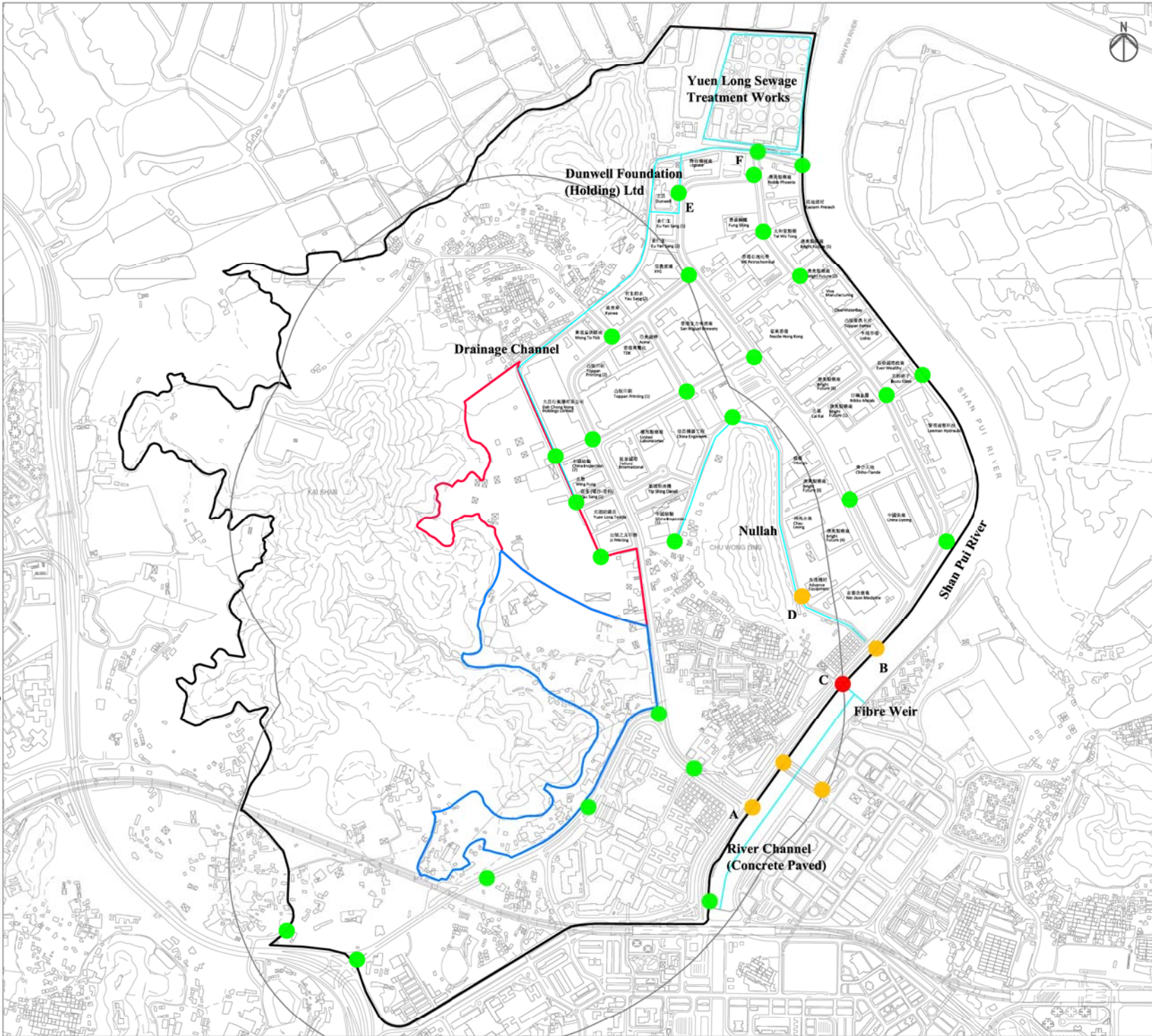
Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
Chimney Locations

Drawing no.		Figure 2.12.3e		Rev.	A
Drawn	GL	Date	10/12	Checked	IL
			Status	PRELIMINARY	
COPYRIGHT RESERVED					



USER: HKCADACT12 TIME: 09 MAR 2013 - 15:28:04
 FILE NAME: C:\GDP\PROJECT\20120293\DRAWING\DELIVERABLES\REPORTS\REPORT\FINAL\TIN1\BASELINE_REVIEWS\FIGURE 2.12.3 CHIMNEY LOCATIONS.DWG



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - 500m Assessment Area
 - Potential Source
 - Noticeable Odour
 - Mild/ Occasional Odour
 - No Odour

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant

ARUP

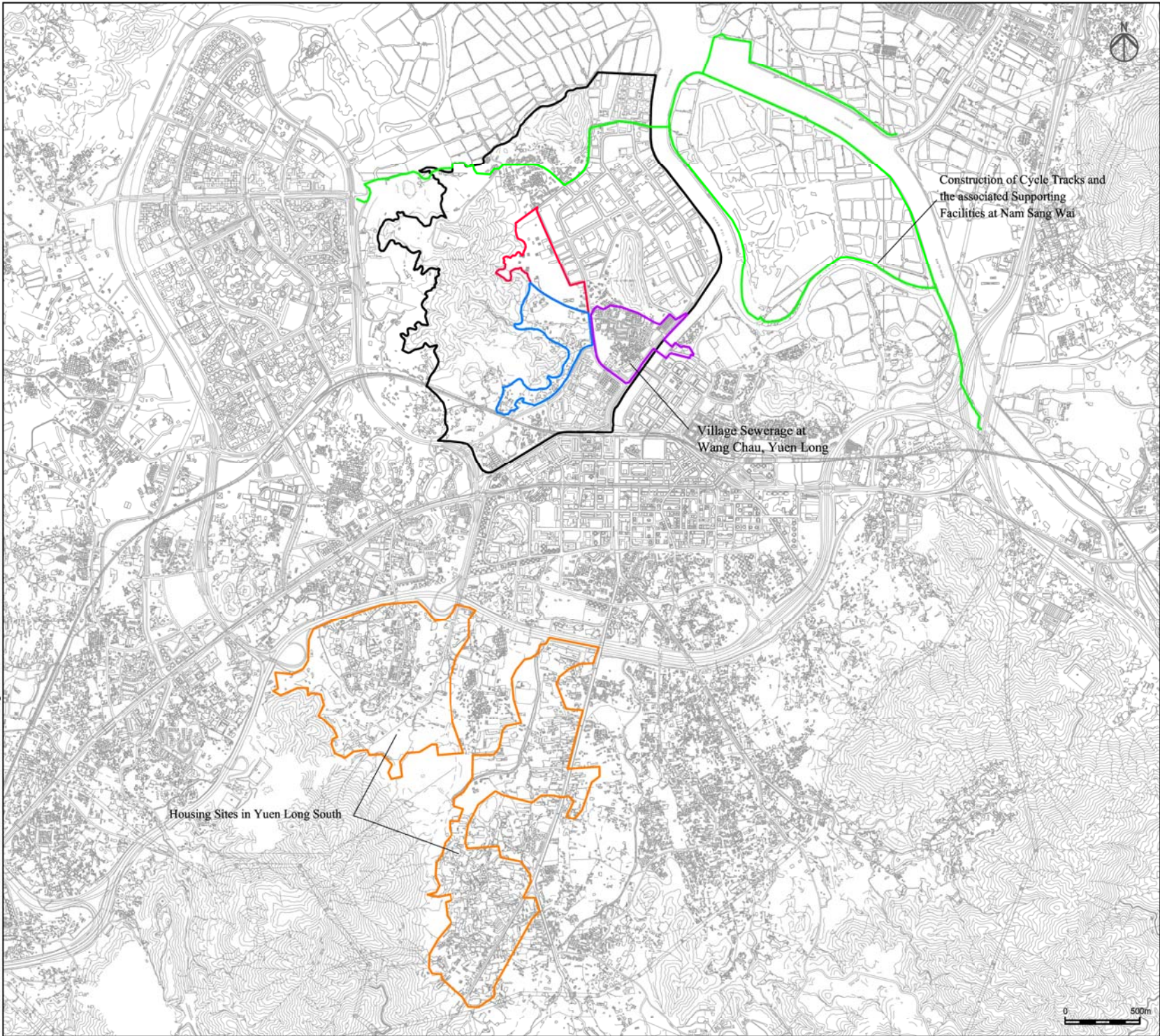
Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Odour Survey Findings

Drawing no.	Figure 2.12.4			Rev.	A
Drawn	GL	Date	10/12	Checked	IL
Scale	1:10000 (A3)		Status	PRELIMINARY	



USER: HKHQA0108 TIME: 01 NOV 2012 - 10:28AM
 FILE NAME: C:\CONV\PROJECT\208661\DRAWING\DELIVERABLES\REPORTS\REPORT\WOOD\DMPT\TH\BASELINE\REVIEWS\DWG\Z_LA_L000R_SURVEY.DWG



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension

Construction of Cycle Tracks and the associated Supporting Facilities at Nam Sang Wai

Village Sewerage at Wang Chau, Yuen Long

Housing Sites in Yuen Long South

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Concurrent Projects

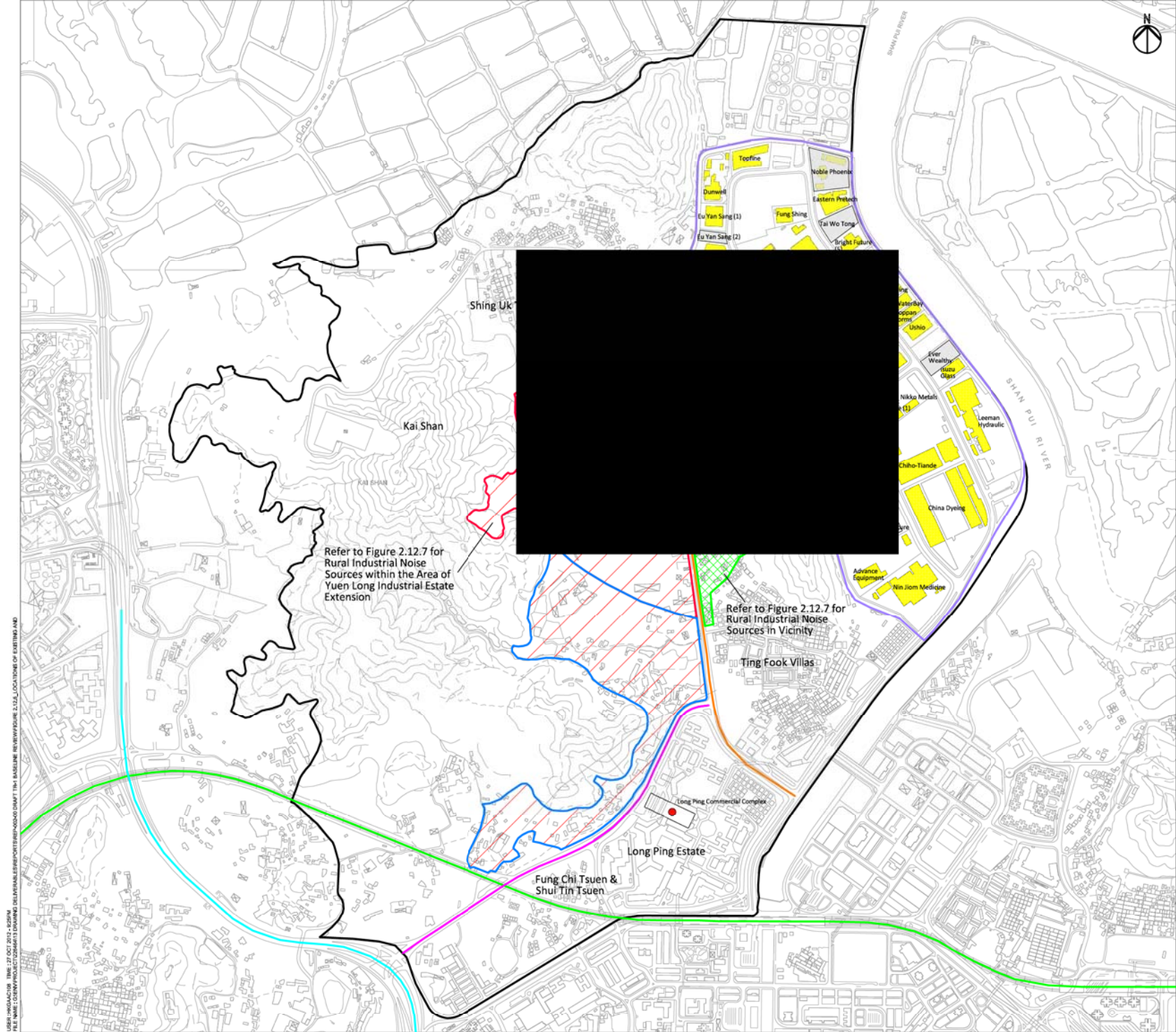
Drawing no.	Figure 2.12.5			Rev.	A
Drawn	GL	Date	10/12	Checked	IL
Scale	AS SHOWN	Status	PRELIMINARY	Approved	ST

COPYRIGHT RESERVED



USER: HKHACT12 TIME: 20 OCT 2012 - 11:04AM
 FILE NAME: C:\ORH\PROJECT\2012\DRAWING\CONCURRENT PROJECTS\2.12.5\CONCURRENT PROJECTS.DWG





- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Yuen Long Industrial Estate
 - Planned Internal Road
 - Identified Existing Industrial Buildings within YLIE
 - Inactive Site/ Under Construction within YLIE
 - Other Identified Rural Industrial Noise Sources in vicinity of Project Site
 - Other Individual Fixed Noise Sources
 - West Rail Line
 - Long Tin Road
 - Long Ping Road
 - Fuk Hi Street

Remarks: Isolated industrial operations scattered in the vicinity of Wang Chau area.

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant **ARUP**

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Locations of Existing and Planned Noise Sources

Drawing no.	Figure 2.12.6			Rev.	A
Drawn	GL	Date	10/12	Checked	IL
Scale	1:10000 (A3)		Status	PRELIMINARY	

USER: HKHQA/CB2012_127 OCT 2012 12:52:58 PM
 FILE NAME: C:\CONY\PROJECT\2012\127\DRAWING\DELIVERABLES\REPORTS\REPORTS\DMPT\TIN BASELINE REVIEW\NOISE\2.12.6 LOCATIONS OF EXISTING AND

USER: PRODUCTION TIME: 27 OCT 2012 12:42:00
 FILE NAME: C:\CONV\PROJECT\2012\DRAWING\2012\BASELINE REVIEW\FIGURE 2.12.7_LOCATION OF RURAL INDUSTRIAL



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Rural Industrial Noise Sources

A	FIRST ISSUE	GL	10/12	
Rev	Description	By	Date	

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Location of Rural Industrial Noise Sources within Project Site and its Vicinity

Drawing no. Rev. A
Figure 2.12.7

Drawn	GL	Date	10/12	Checked	IL	Approved	ST
-------	----	------	-------	---------	----	----------	----

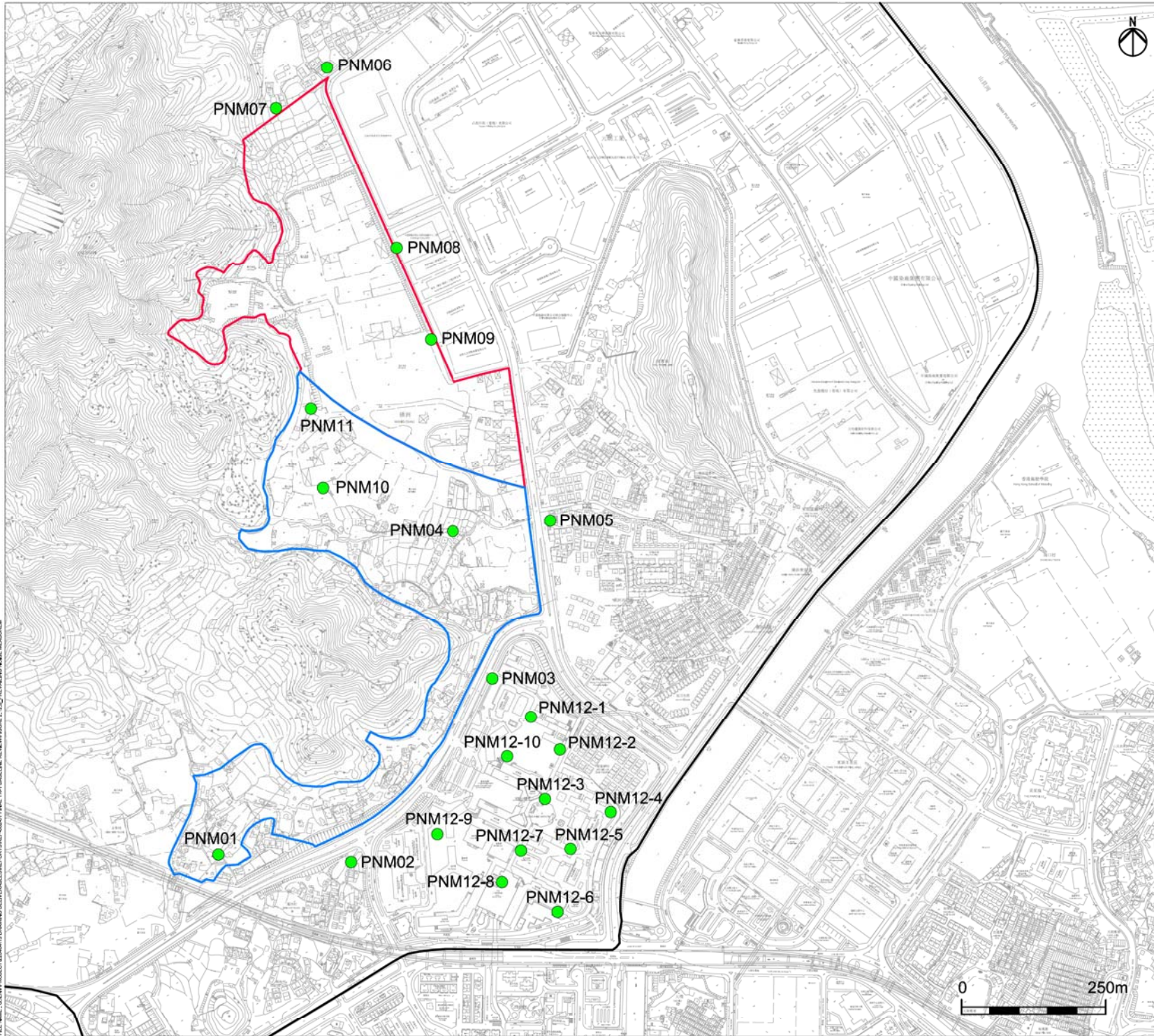
Scale	Status
AS SHOWN	PRELIMINARY

COPYRIGHT RESERVED



HONG KONG HOUSING AUTHORITY

USER: HKCAD108 TIME: 07 MAR 2013 - 10:00AM
 FILE NAME: C:\CONPROJECT\20120293\DRAWING\DELTA\DELTA\PRELIMINARY\2_12_8_PREVALLING NOISE MEASUREMENT



Legend

- Study Area
- Potential Public Housing Development Site
- Yuen Long Industrial Estate Extension
- Prevailing Noise Measurement Location

B	SECOND ISSUE	GL	02/13
A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

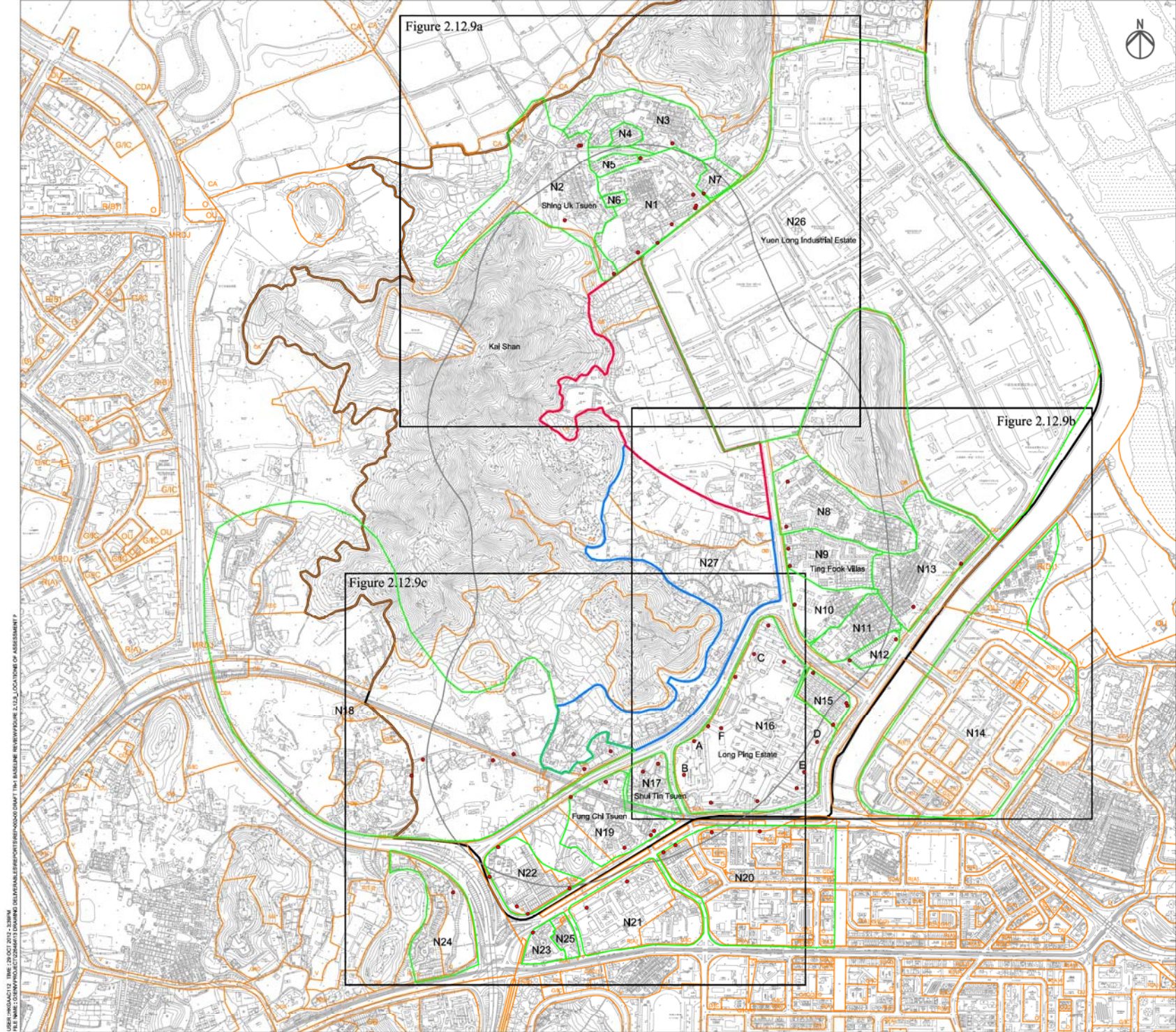
Drawing title
 Prevailing Noise Measurement Locations

Drawing no.	Figure 2.12.8			Rev.	B
Drawn	GL	Date	02/13	Checked	IL
				Approved	ST
Scale	N.T.S.		Status	PRELIMINARY	

COPYRIGHT RESERVED

HONG KONG HOUSING AUTHORITY





- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - 300m Assessment Area
 - Noise Sensitive Receiver Zone
 - AGR Agriculture
 - CA Conservation Area
 - G/IC Government/ Institution/ Community
 - GB Green Belt
 - OU Other Specified Used
 - R(D) Residential (D)
 - U Undetermined
 - V Village Type Development
 - MRDJ Road
 - Noise Assessment Point

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant

ARUP

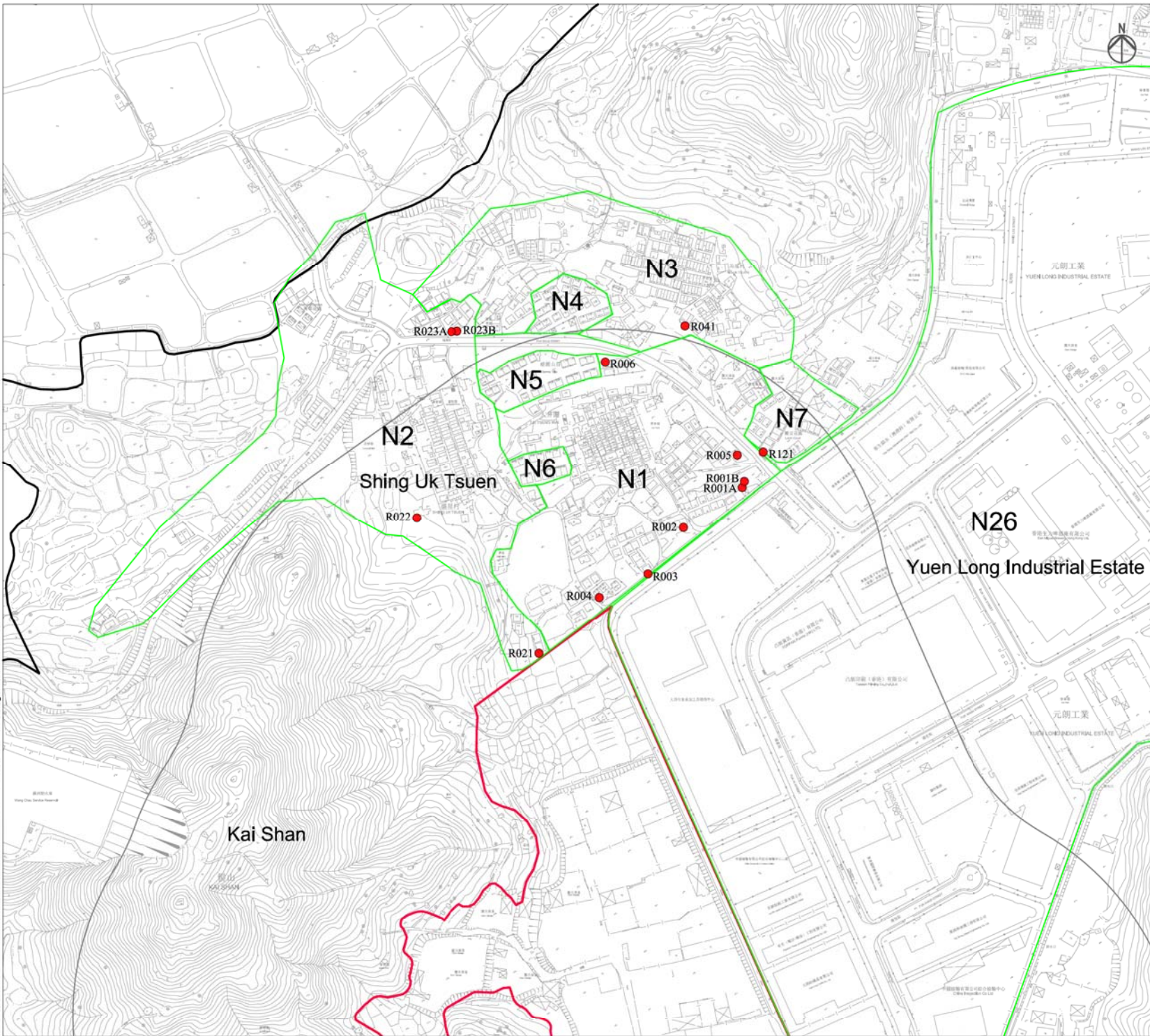
Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Locations of Noise Sensitive Receivers and Noise Assessment Points

Drawing no.	Figure 2.12.9	Rev.	A
Drawn	GL	Date	10/12
Checked	IL	Approved	ST
Scale	1:10000 (A3)		Status
			PRELIMINARY
COPYRIGHT RESERVED			



USER: HKHQA012 TIME: 20 OCT 2012 - 22:38M
 FILE NAME: C:\ENVIRONMENT\PROJECTS\HONGKONG\DRAWING\DELIVERABLES\REPORTS\HONGKONG\DRAWING\2.12.9\LOCATIONS OF ASSESSMENT.PDF



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - 300m Assessment Area
 - Noise Assessment Point
 - Noise Sensitive Receiver Zone

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

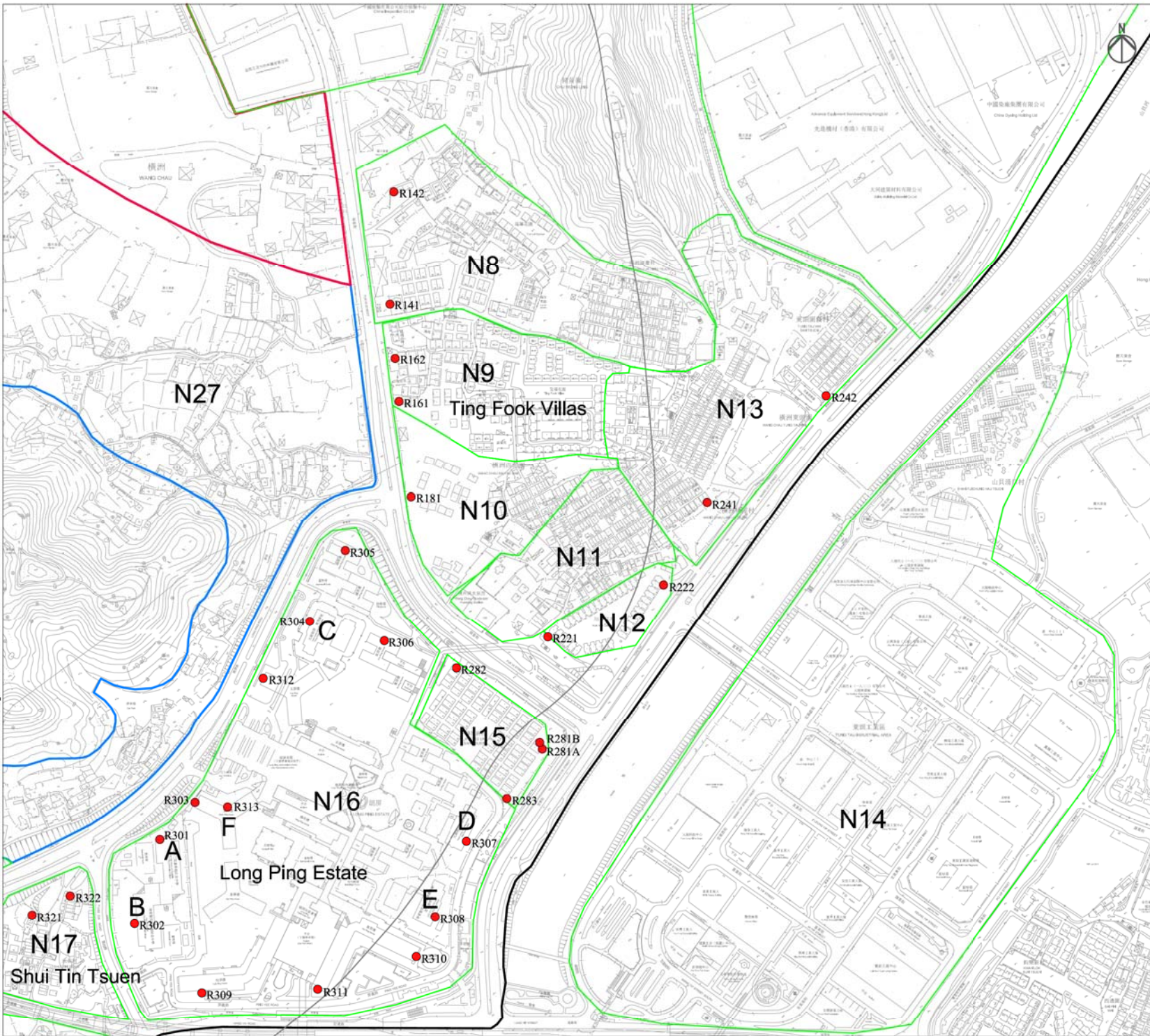
Drawing title
 Locations of Noise Assessment Points

Drawing no.	Figure 2.12.9a		Rev.	A			
Drawn	GL	Date	10/12	Checked	IL	Approved	ST
Scale	1:4000 (A3)		Status	PRELIMINARY			

COPYRIGHT RESERVED

HONG KONG HOUSING AUTHORITY

USER: HKHQA0108 TIME: 27 OCT 2012 12:45:58 PM
 FILE NAME: C:\CONV\PROJECT\2012\12\DRAWING\DELIVERABLE\REPORTS\REPORTS\0000\DMPT\THM\BASELINE\REVIEW\DWG\2.12.9A_LOCATIONS_OF_NOISEASSESSMENT.P



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - 300m Assessment Area
 - Assessment Point
 - Noise Sensitive Receiver Zone

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

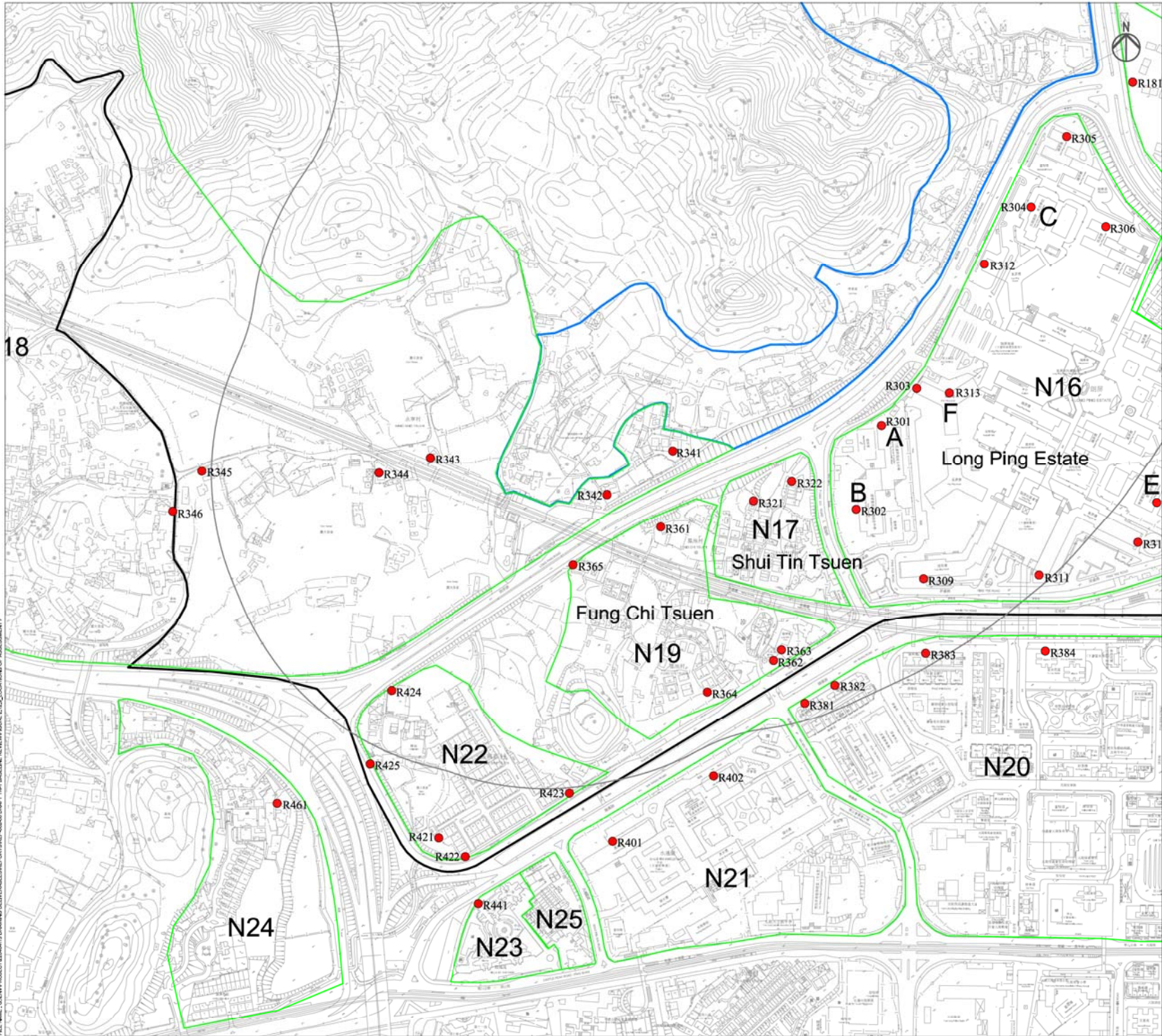
Drawing title
 Locations of Noise Assessment Points

Drawing no.	Figure 2.12.9b	Rev.	A
Drawn	GL	Date	10/12
Checked	IL	Approved	ST

Scale 1:4000 (A3) Status PRELIMINARY
 COPYRIGHT RESERVED



USER: HKHQA0108 TIME: 27 OCT 2012 4:58PM
 FILE NAME: C:\CONV\PROJECT\02081611\DRAWING\DELIVERABLE\REPORT\REPORT\0000\0000\DMPT\TIN_BASIS\REVIEW\WORKING_ZONAL_LOCATION_OF_ASSESSMENT.P



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - 300m Assessment Area
 - Assessment Point
 - Noise Sensitive Receiver Zone

A	FIRST ISSUE	GL	10/12	
Rev	Description	By	Date	
Consultant				

ARUP

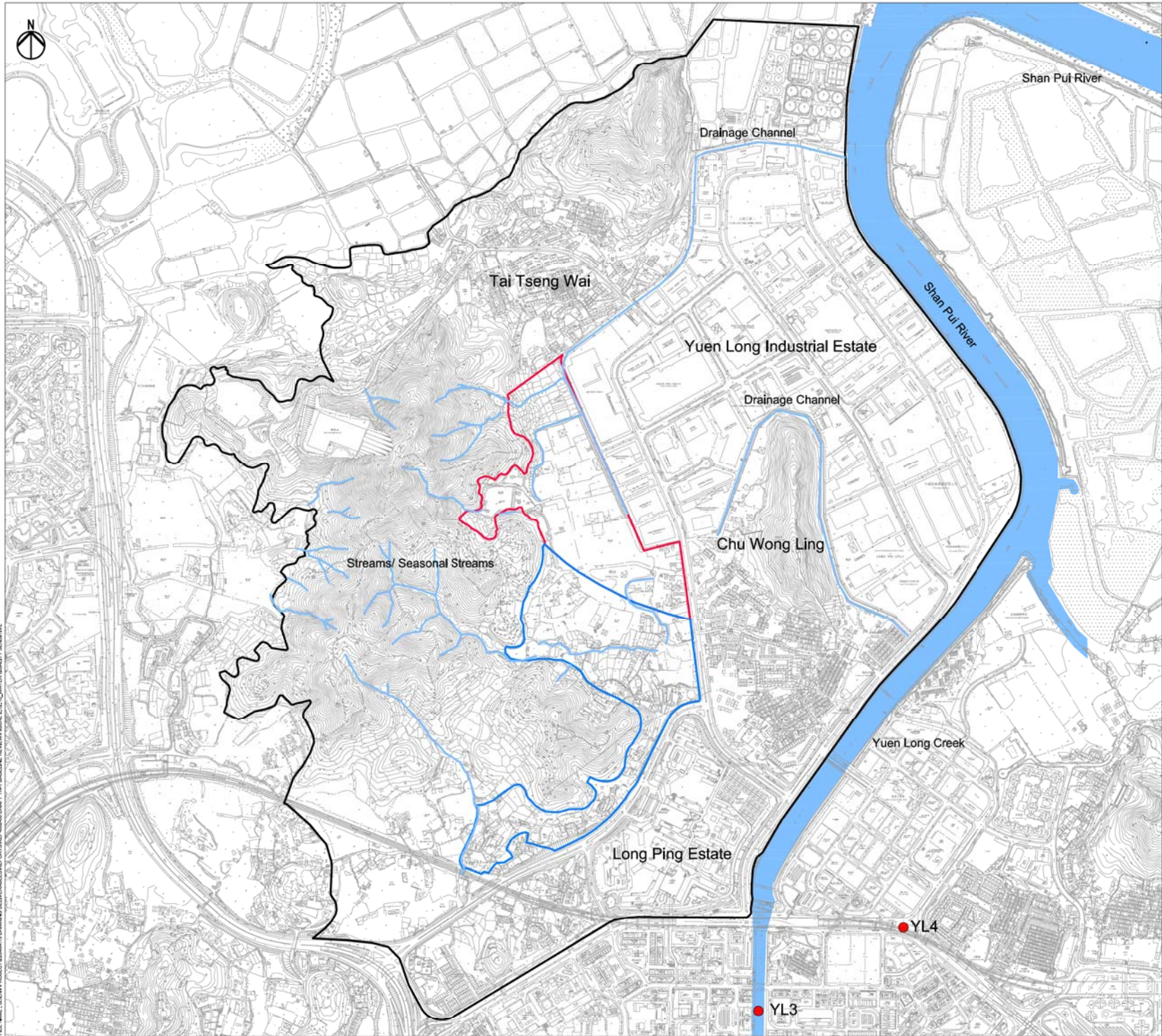
Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Locations of Noise Assessment Points

Drawing no.	Figure 2.12.9c	Rev.	A
Drawn	Date	Checked	Approved
GL	10/12	IL	ST
Scale	1:4000 (A3)	Status	PRELIMINARY
COPYRIGHT RESERVED			



USER: HKCAD2008 TIME: 27 OCT 2012 10:20:58 PM
 FILE NAME: C:\COPY\PROJECT\2012\10\12\DRAWING\DELIVERABLES\REPORTS\REPORTS\DMPT\THIN\BASELINE REVIEW\FIGURE 2.12.9C_LOCATIONS OF ASSESSMENT.PDF



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Watercourses
 - River Water Quality Monitoring Station

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant

ARUP

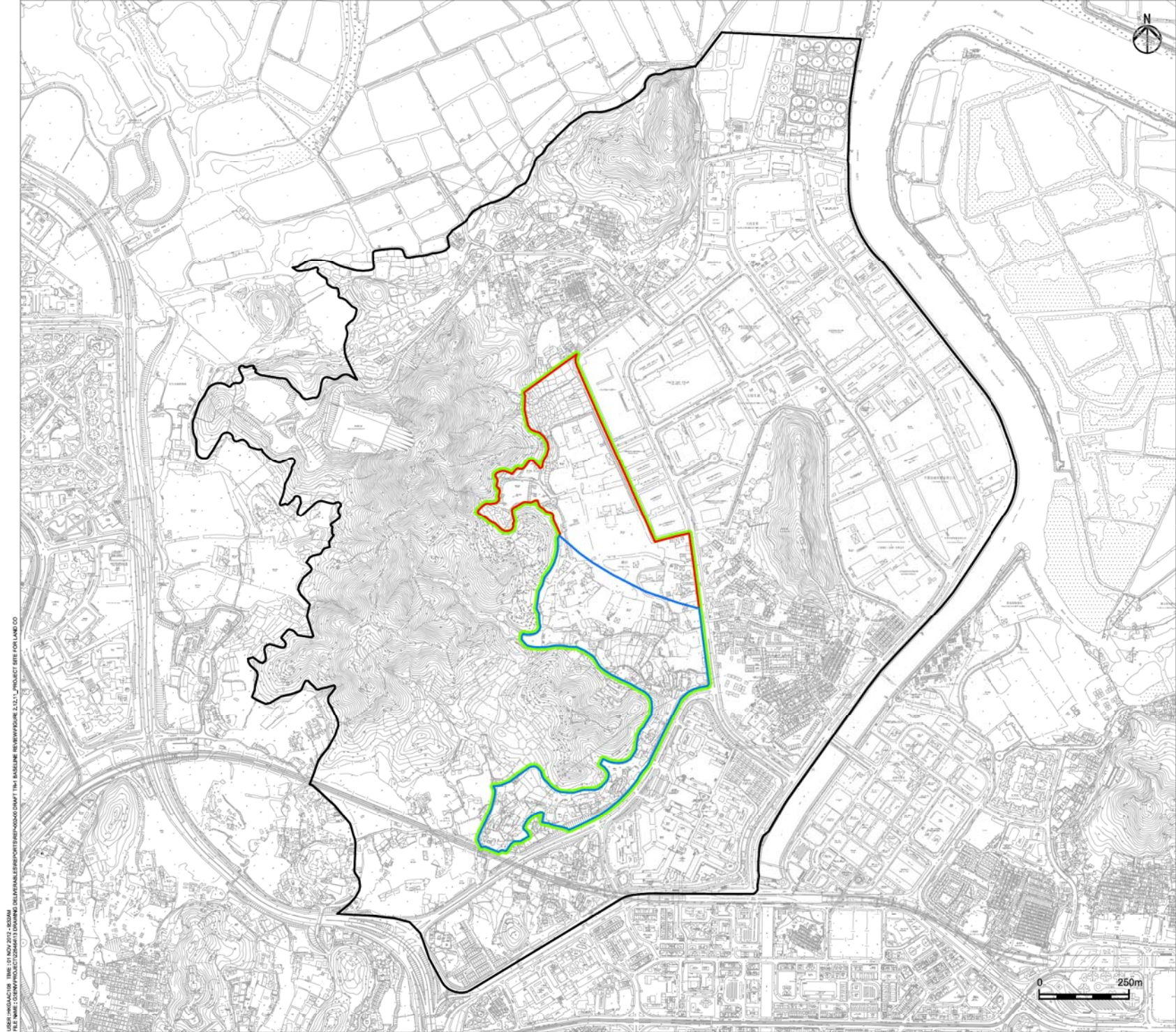
Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Water Quality Sensitive Receivers

Drawing no.	Figure 2.12.10			Rev.	A
Drawn	GL	Date	10/12	Checked	IL
				Approved	ST
Scale	1:10000 (A3)		Status	PRELIMINARY	



USER: HKOMACT12 TIME: 29 OCT 2012 - 11:53AM
 FILE NAME: C:\CONV\PROJECT\20120293\DRAWING\20120293\WATER\WQSR\WQSR_21210.DWG



Legend

-  Study Area
-  Potential Public Housing Development Site
-  Yuen Long Industrial Estate Extension
-  Project Site

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Project Site for Land Contamination Assessment

Drawing no.	Figure 2.12.11			Rev.	A
Drawn	GL	Date	10/12	Checked	IL
Scale	1:10000 (A3)		Status	PRELIMINARY	

COPYRIGHT RESERVED



USER: HKHQA0108 TIME: 01 NOV 2012 - 02:04 AM
 FILE NAME: C:\CONTR\PROJECT\2012\11\DRAWING\DELIVERABLES\REPORTS\REPORTS\02\DMT\THM\BASELINE\REV\REV\DWG\ZL12_11_PROJECT SITE FOR LAND CO





Legend

- Study Area
- Project Site
- Surveyed Site

USER: PRODUCTION TIME: 01 NOV 2012 - 02:44 AM
 FILE NAME: C:\ENVIRONMENTAL\PROJECTS\WANGCHAU\DRAWING\DETAILED\REPORTS\REPORTS\WANGCHAU\DRAWING\2.12.12_LOCATION_OF_SURVEYED_SIT

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site
 and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Location of Surveyed Sites for
 Land Contamination Assessment

Drawing no.	Figure 2.12.12	Rev.	A
-------------	----------------	------	---

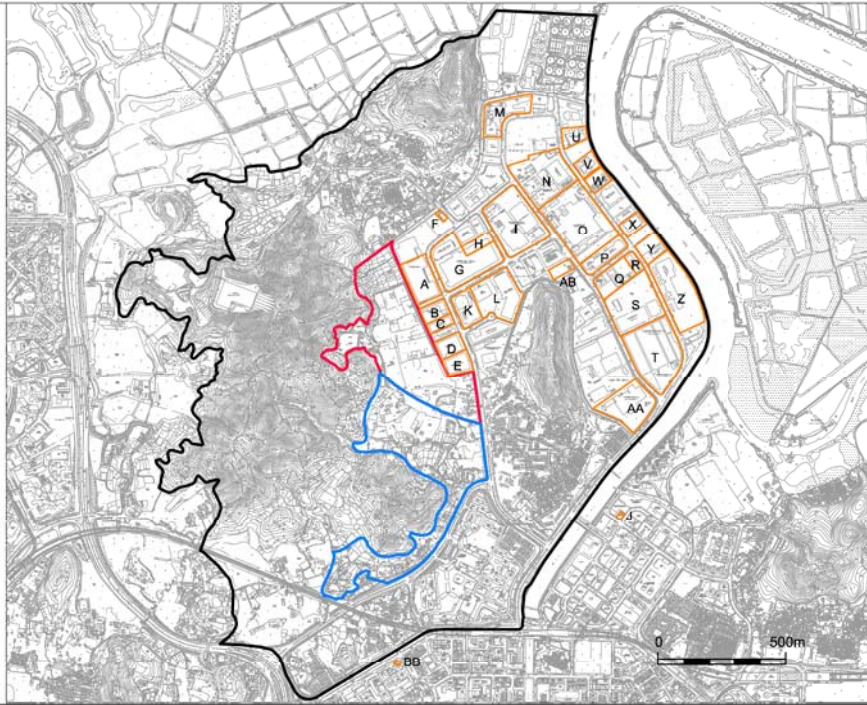
Drawn	GL	Date	10/12	Checked	IL	Approved	ST
-------	----	------	-------	---------	----	----------	----

Scale	AS SHOWN	Status	PRELIMINARY
-------	----------	--------	-------------

COPYRIGHT RESERVED

HONG KONG HOUSING AUTHORITY

Dangerous goods stored in underground tank in the Neighbourhood							
Category	Cat. 5						Cat. 2
	C1.1	Various Classes	C1.3	C1.1	C1.1	C1.1	C1.2
Area	Acetone / m ³	Cat. 5 D.G. / m ³	Diesel / m ³	Light Ends / m ³	Methanol / m ³	Toluene / m ³	LPG/m ³
A			136.4				
B			159.1				
C			13.6				
D			18.2				
E			20.0				
I			45.5				
K			27.3				
M			22.5	45.0			
N		240.0	5.0				
O			50.0				
Q	10.0				10.0	20.0	
T			113.7				
V			20.0				
Z			227.3				
AA			45.5				
BB							20
Total	10.0	240.0	903.9	45.0	10.0	20.0	20



Legend

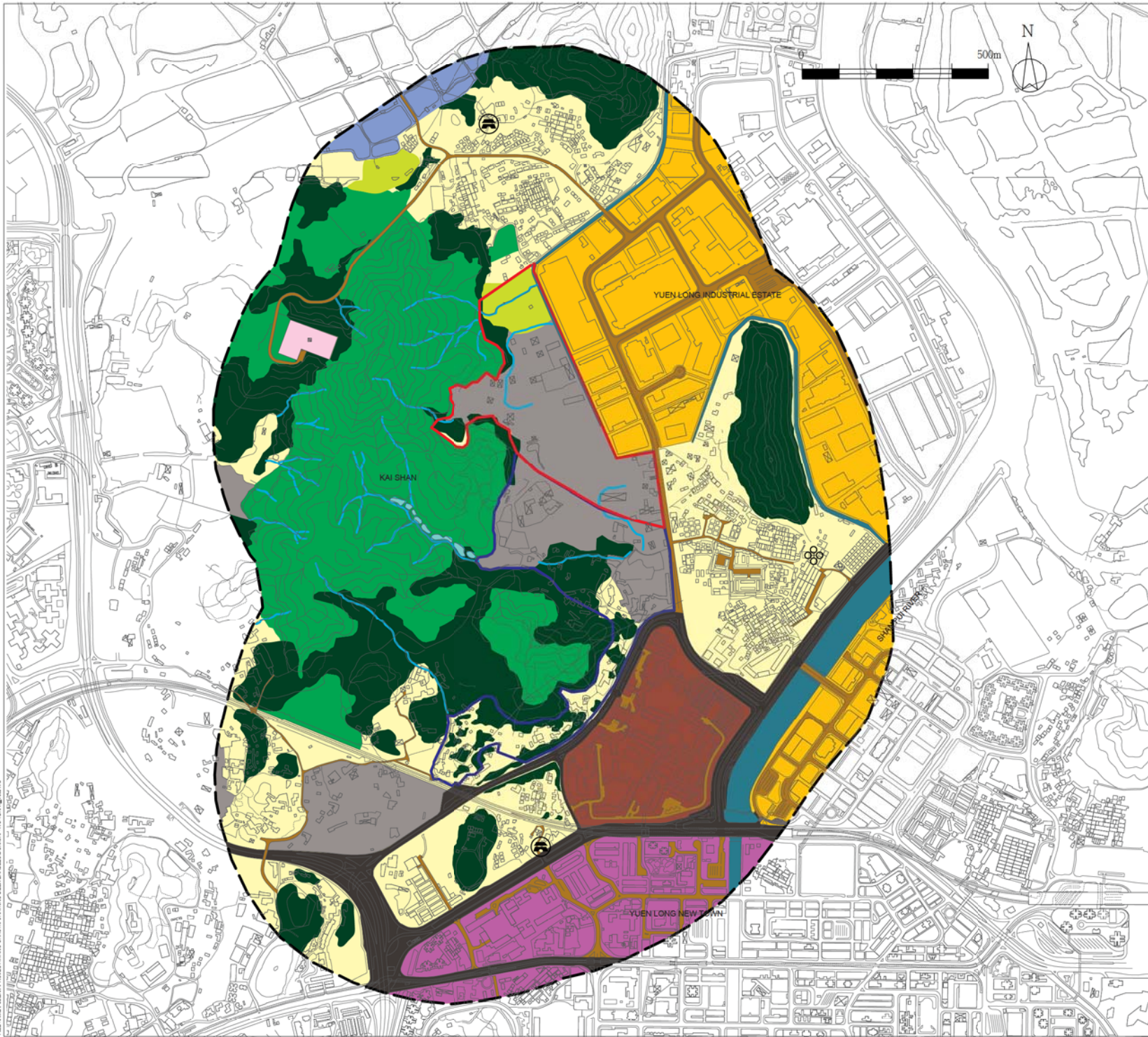
- Study Area
- Potential Public Housing Development Site
- Yuen Long Industrial Estate Extension
- Areas with Dangerous Goods (from FSD's information)

Dangerous goods stored in above ground tank or ground level store in the Neighbourhood

Category	Cat.2		Cat.4		Cat.5										Other ^a						
	C1.3	C1.2	C1.2	C1.1	C1.1	C1.1	C1.1 / C1.2	C1.3	C1.2	C1.2	C1.1	C1.2	C1.1 / C1.2	C1.1 / C1.2	C1.1	C1.1	C1.1 / C1.2	C1.2	Various Class	Various Class	
Area	Acetylene / Cylinders	Ammonia / Ton	Chlorine / Cylinders	Hydrogen / Cylinders	Hydrogen / m ³	Methylene Dichloride / m ³	Tetrachloroethane / m ³	Alcohol / m ³	Diesel / m ³	Ethylbenzene / m ³	Eucalyptus Oil / m ³	Isopropyl Alcohol / m ³	Kerosene / m ³	Paint / m ³	Paint and Thinner / m ³	Petrol / m ³	Styrene / m ³	Thinner / m ³	Turpentine / m ³	Methanol, Isopropanol, Sodium Methylate (25%), Acrylic Acid, Dimethylamino-propylamine, Romol HT, Emulsogen IT / Ton	Benzyl Chloride, Shellisol A, Vinyl Acetate, Xylene, Petroleum Ether (60-80 C Boiling Range) / Ton
A	10								2.4												
B									8.5												
C									0.5												
D									14.1												
E									0.4												
F						0.7															
G												6.6									
H													5.5			0.4		0.8			
I		27.6	6						25.2				0.1								
J														250.0				2.7			
K								2.5													
L	20													0.1				0.1			
N				5						100.0	100.0										
O		18.0								0.4							1,866.5				
P																		1.7			
Q										20.5											
R																					
S	24													4.0							
T																					
U										23.2											
V										0.5											
W											1.2							1.5		12.0	20.0
X					1,116.0		0.4														
Y										14.1											
Z										5.0											
AB	18																				
Total	72	45.6	6	5	1,116.0	0.7	0.4	2.5	215.6	100.0	1.2	6.6	5.6	0.1	254.0	0.4	1,866.5	5.2	1.5	12.0	20.0

Note: # - Only some of the substances listed belonging Category 5 dangerous goods

B	SECOND ISSUE	GL	03/13
A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date
Consultant			
<h1>ARUP</h1>			
Project title			
Agreement No. CB20120293 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau			
Drawing title			
Areas with Dangerous Goods (from FSD's and EMSD's information)			
Drawing no.		Rev.	
Figure 2.12.13		B	
Drawn	GL	Date	03/13
Checked	IL	Approved	ST
Scale	Status		PRELIMINARY
1:20000 (A3)			
COPYRIGHT RESERVED			
HONG KONG HOUSING AUTHORITY			



Legend

- PHD Site Boundary
- YLIEE Site Boundary
- Study Area (500M Offset From Site Boundary)
- Heritage Feature
- Temple

Landscape Resources (LRs)
Total area of LR within the study area shown in hectares (ha) below.

1. Industrial Area (53ha)
2. Village Area (57ha)
3. Agricultural Land (3ha)
4. Open Storages (31ha)
5. Mixed Woodland, Shrubs And Grassland (66ha)
6. Woodland (68ha)
7. Residential Area (16ha)
8. Major Transportation Corridor (18ha)
9. Roads And Urban Infrastructure (16ha)
10. Streams (5452m)
11. Ponds (0.3ha)
12. Wetlands / Fishponds (4ha)
13. Artificial Channel (8ha)
14. Urban Area (23ha)
15. Utilities (1ha)

Rev	Description	By	Date
A	First Issue	PL	10/12

ARUP

Project title
Agreement No. CB20120293
Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
Landscape Resources Plan

Drawing no.	Fig. 2.12.14		Rev.	A			
Drawn	PL	Date	10/12	Checked	JC	Approved	ST
Scale	1:10,000 (A3)		Status	Preliminary			

COPYRIGHT RESERVED



USER: HKCAD2009 TIME: 18 AUG 2012 2:20PM
 FILE NAME: C:\COMP\PROJECT\HKS\DRAWING\ELU\LANDRESOURCES\DWG\HKT\2.12.14.DWG

LR 1: Industrial Area



LR 2: Village Area



LR 3: Agriculture Land



USER: HKCACTV08 TIME: 18 AUG 2012 1:20PM
 FILE NAME: C:\GDM\PROJECT\HWANG CHAN\13 DRAWING DELIVERABLES\08\HWANG CHAN\13.DWG

A	First Issue	PL	10/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site
 and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title

Landscape Resource 1, 2 & 3

Drawing no.	Fig. 2.12.15	Rev.	A
-------------	--------------	------	---

Drawn	PL	Date	10/12	Checked	JC	Approved	ST
-------	----	------	-------	---------	----	----------	----

Scale	NTS	Status	Preliminary
-------	-----	--------	-------------

COPYRIGHT RESERVED



HONG KONG HOUSING AUTHORITY

LR 4: Open Storage



LR 5: Mixed Woodland, Shrubland and Grassland



LR 6: Woodland



USER: HKCACT09 TIME: 19 AUG 2012 1:20PM
 FILE NAME: C:\GDP\PROJECT\HWANG CHAU\3 DRAWING DELIVERABLES\09\HWANG CHAU\DWG

A	First Issue	PL	10/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site
 and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Landscape Resource 4, 5 & 6

Drawing no.	Fig. 2.12.16	Rev.	A
-------------	--------------	------	---

Drawn	PL	Date	10/12	Checked	JC	Approved	ST
-------	----	------	-------	---------	----	----------	----

Scale	NTS	Status	Preliminary
-------	-----	--------	-------------

COPYRIGHT RESERVED



LR 7: Residential Area



LR 8: Major Transportation Corridor



LR 9: Road and Urban Infrastructure



USER: HKCACTV08 TIME: 15 AUG 2012 1:20PM
 FILE NAME: C:\GDM\PROJECT\HWANG CHAN\13 DRAWING DELIVERABLES\08\HWANG CHAN\ACTUAL_VLD.DWG

A	First Issue	PL	10/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site
 and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title

Landscape Resource 7, 8 & 9

Drawing no.	Fig. 2.12.17			Rev.	A
Drawn	PL	Date	10/12	Checked	JC
				Approved	ST
Scale	NTS		Status	Preliminary	

COPYRIGHT RESERVED

HONG KONG HOUSING AUTHORITY

LR 10: Streams



LR 11: Ponds



LR 12: Wetlands / Fishponds



USER: HKCACT09; TIME: 15 AUG 2012 1:20PM
 FILE NAME: C:\GDP\PROJECT\HWANG CHAU\13 DRAWING DELIVERABLES\09\HWANG CHAU\13.DWG

A	First Issue	PL	10/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site
 and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title

Landscape Resource 10, 11 & 12

Drawing no. Fig. 2.12.18 Rev. A

Drawn	PL	Date	10/12	Checked	JC	Approved	ST
-------	----	------	-------	---------	----	----------	----

Scale	NTS	Status	Preliminary
-------	-----	--------	-------------

COPYRIGHT RESERVED



HONG KONG HOUSING AUTHORITY

LR 13: Artificial Channel



LR 14: Urban Area



LR 15: Utilities



USER: HKCAD2008 TIME: 15 AUG 2012 1:20PM
 FILE NAME: C:\GDM\PROJECT\HWANG CHAN\13 DRAWING DELIVERABLES\DRON\HWANG CHAN\13.DWG

A	First Issue	PL	10/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site
 and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Landscape Resource 13, 14 & 15

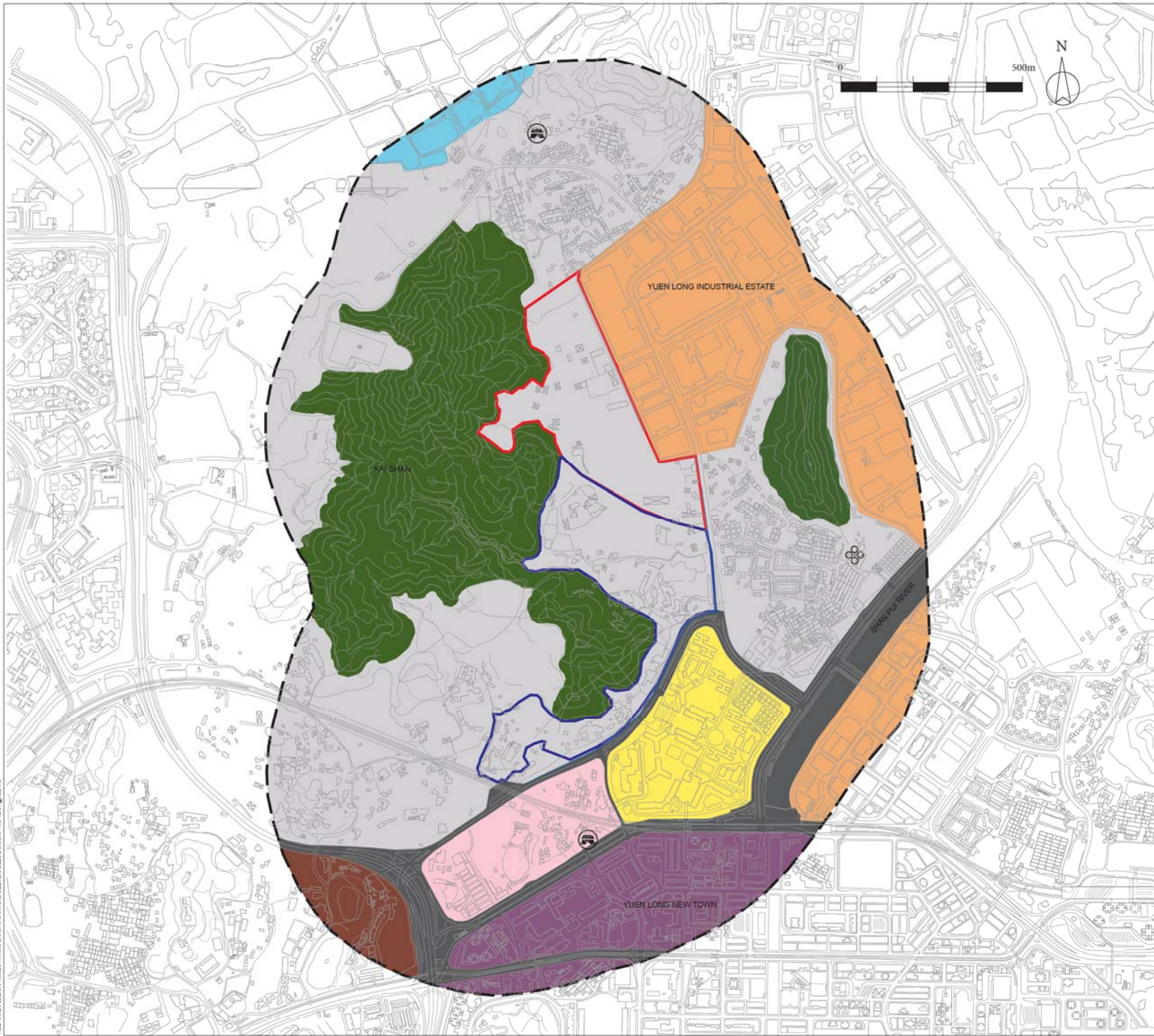
Drawing no.	Fig. 2.12.19	Rev.	A
-------------	--------------	------	---

Drawn	PL	Date	10/12	Checked	JC	Approved	ST
-------	----	------	-------	---------	----	----------	----






Scale	NTS	Status	Preliminary
-------	-----	--------	-------------

COPYRIGHT RESERVED














Legend

-  PHD Site Boundary
-  YLIEE Site Boundary
-  Study Area (500M Offset From Site Boundary)
-  Heritage Feature
-  Temple

Landscape Character Areas (Lca).
Total area of LCA within the study area shown in hectares (ha) below.

1.  Industrial Urban Landscape (54Ha)
2.  Miscellaneous Rural Fringe Landscape (158Ha)
3.  Upland And Hillside Landscape (70Ha)
4.  Residential Urban Landscape (16Ha)
5.  Transportation Corridor Landscape (23Ha)
6.  Urban Peripheral Village Landscape (12Ha)
7.  Miscellaneous Urban Fringe Landscape (7Ha)
8.  'Hui' Urban Landscape (24Ha)
9.  Rural Coastal Plain Landscape (5Ha)

Rev	Description	By	Date
A	First Issue	PL	10/12

Consultant **ARUP**

Project title
Agreement No. CB20120293
Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
Landscape Character Plan

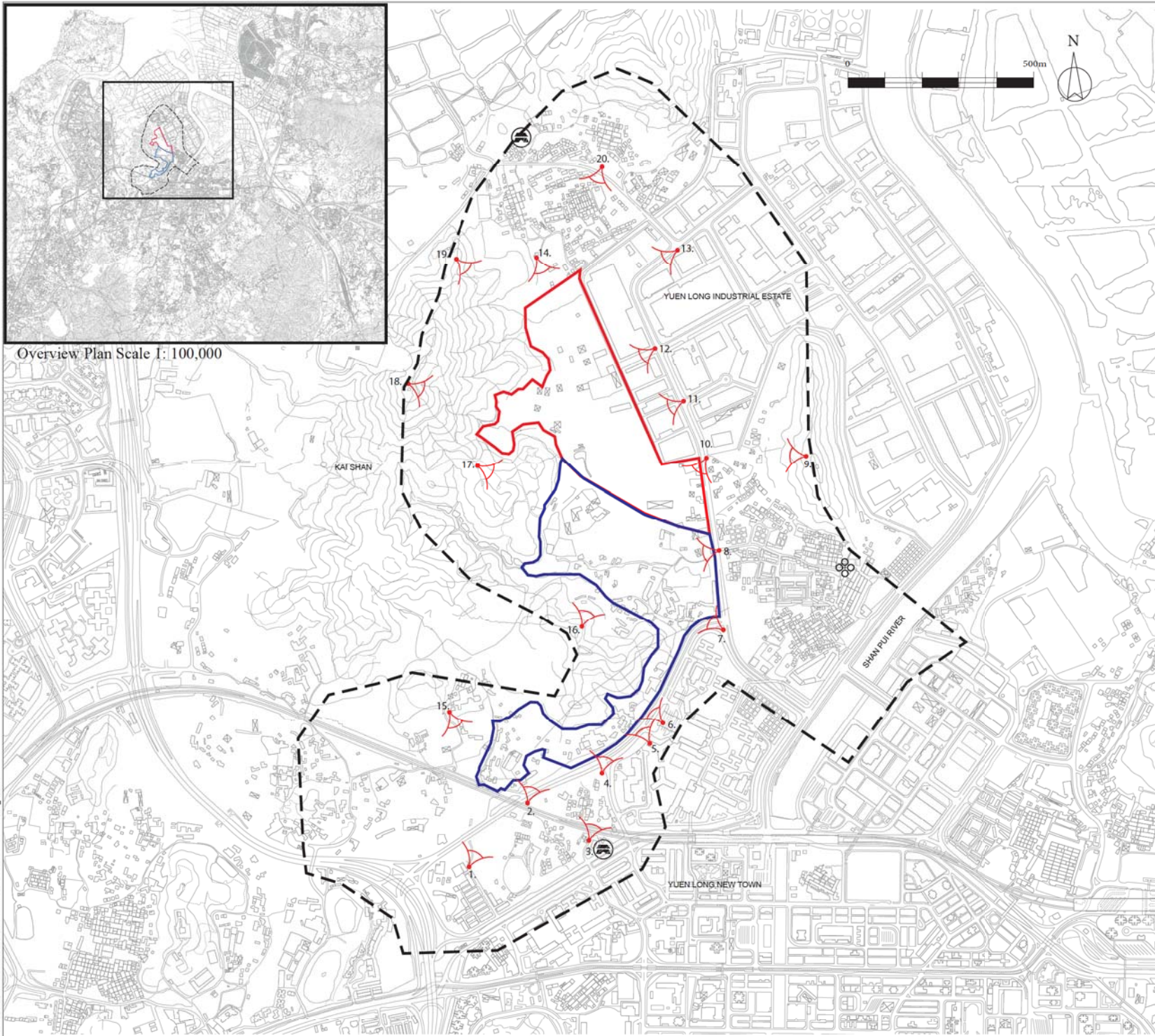
Drawing no.	Fig. 2.12.20	Rev.	A
-------------	--------------	------	---

Drawn	PL	Date	10/12	Checked	JC	Approved	ST
-------	----	------	-------	---------	----	----------	----

Scale	1:10,000 (A3)	Status	Preliminary
-------	---------------	--------	-------------

COPYRIGHT RESERVED





Overview Plan Scale 1:100,000

Legend

- Proposed Industrial Use
- Proposed Residential Use
- Zone of Visual Influence
- ▲ VSR Location
- Temple
- Heritage Feature

VSR ID.

- VSR 1 Chun Hing New Village
- VSR 2 Long Ping Road
- VSR 3 Fung Chi Tsuen
- VSR 4 Fung Chi Road Intersection
- VSR 5 Roof Garden of Long Ping Estate Market
- VSR 6 Wah Ping House
- VSR 7 Fuk Hi Street Intersection
- VSR 8 Ting Fook Villas
- VSR 9 Chu Wong Ling
- VSR 10 Fuk Hi Street adj. China Inspection Co. Ltd
- VSR 11 Fuk Hang Street
- VSR 12 Fuk Wang Street
- VSR 13 Fuk Shan Street Intersection
- VSR 14 Tai Tseng Wai
- VSR 15 Upland behind Wing Ning Tsuen
- VSR 16 Foothills above Yeung Uk San Tsuen
- VSR 17 Uphill Open Grassland -Kai Shan
- VSR 18 Kai Shan Peak - facing east
- VSR 19 High point above Shing Uk Tsuen
- VSR 20 Open area & Car Park, Ng Uk Tsuen

Rev	Description	By	Date
B	VSRs updated	PL	01/13
A	First Issue	PL	10/12

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
Visually Sensitive Receiver Plan

Drawing no.	Fig. 2.12.21			Rev.	B
Drawn	PL	Date	10/12	Checked	JC
				Approved	ST
Scale	1:10000 (A3)		Status	Preliminary	

COPYRIGHT RESERVED



HONG KONG HOUSING AUTHORITY

VSR 1: Chun Hing New Village



VSR 2: Long Ping Road



A	First Issue	PL	10/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site
 and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title

VSR 1 and 2

Drawing no.	Fig. 2.12.22	Rev.	A
-------------	--------------	------	---

Drawn	PL	Date	10/12	Checked	JC	Approved	ST
-------	----	------	-------	---------	----	----------	----

Scale	NTS	Status	Preliminary
-------	-----	--------	-------------

COPYRIGHT RESERVED



VSR 3: Fung Chi Tsuen



VSR 4: Fung Chi Road Intersection



A	First Issue	PL	10/12
Rev	Description	By	Date

Consultant

ARUP

Project title

Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site
 and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title

VSR 3 and 4

Drawing no.	Fig. 2.12.23	Rev.	A
-------------	--------------	------	---

Drawn	PL	Date	10/12	Checked	JC	Approved	ST
-------	----	------	-------	---------	----	----------	----

Scale	NTS	Status	Preliminary
-------	-----	--------	-------------

COPYRIGHT RESERVED



VSR 7: Fuk Hi Street Intersection



VSR 8: Ting Fook Villas



A	First Issue	PL	10/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site
 and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 VSR 7 and 8

Drawing no.	Fig. 2.12.25	Rev.	A
-------------	--------------	------	---

Drawn	PL	Date	10/12	Checked	JC	Approved	ST
-------	----	------	-------	---------	----	----------	----

Scale	NTS	Status	Preliminary
-------	-----	--------	-------------

COPYRIGHT RESERVED



VSR 13: Fuk Shun Street Intersection



VSR 14: Tai Tseng Wai



Rev	Description	By	Date
A	First Issue	PL	10/12

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site
 and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 VSR 13 and 14

Drawing no.	Fig. 2.12.28	Rev.	A
-------------	--------------	------	---

Drawn	PL	Date	10/12	Checked	JC	Approved	ST
-------	----	------	-------	---------	----	----------	----

Scale	NTS	Status	Preliminary
-------	-----	--------	-------------

COPYRIGHT RESERVED



VSR 15: Upland behind Wing Ning Tsuen



VSR 16: Foothills above Yeung Uk San Tsuen



WING NING TSUEN: 10/12/12; YEUNG UK SAN TSUEN: 10/12/12
 PREPARED BY: ARCHITECTURAL DESIGN AND PLANNING CONSULTANTS LIMITED

A	First Issue	PL	10/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site
 and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title

VSR 15 and 16

Drawing no.	Fig. 2.12.29	Rev.	A
-------------	--------------	------	---

Drawn	PL	Date	10/12	Checked	JC	Approved	ST
-------	----	------	-------	---------	----	----------	----

Scale	NTS	Status	Preliminary
-------	-----	--------	-------------

COPYRIGHT RESERVED



VSR 17: Uphill Open Grassland - Kai Shan



VSR 18: Kai Shan Peak - Facing east



A	First Issue	PL	10/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site
 and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 VSR 17 and 18

Drawing no.	Fig. 2.12.30	Rev.	A
-------------	--------------	------	---

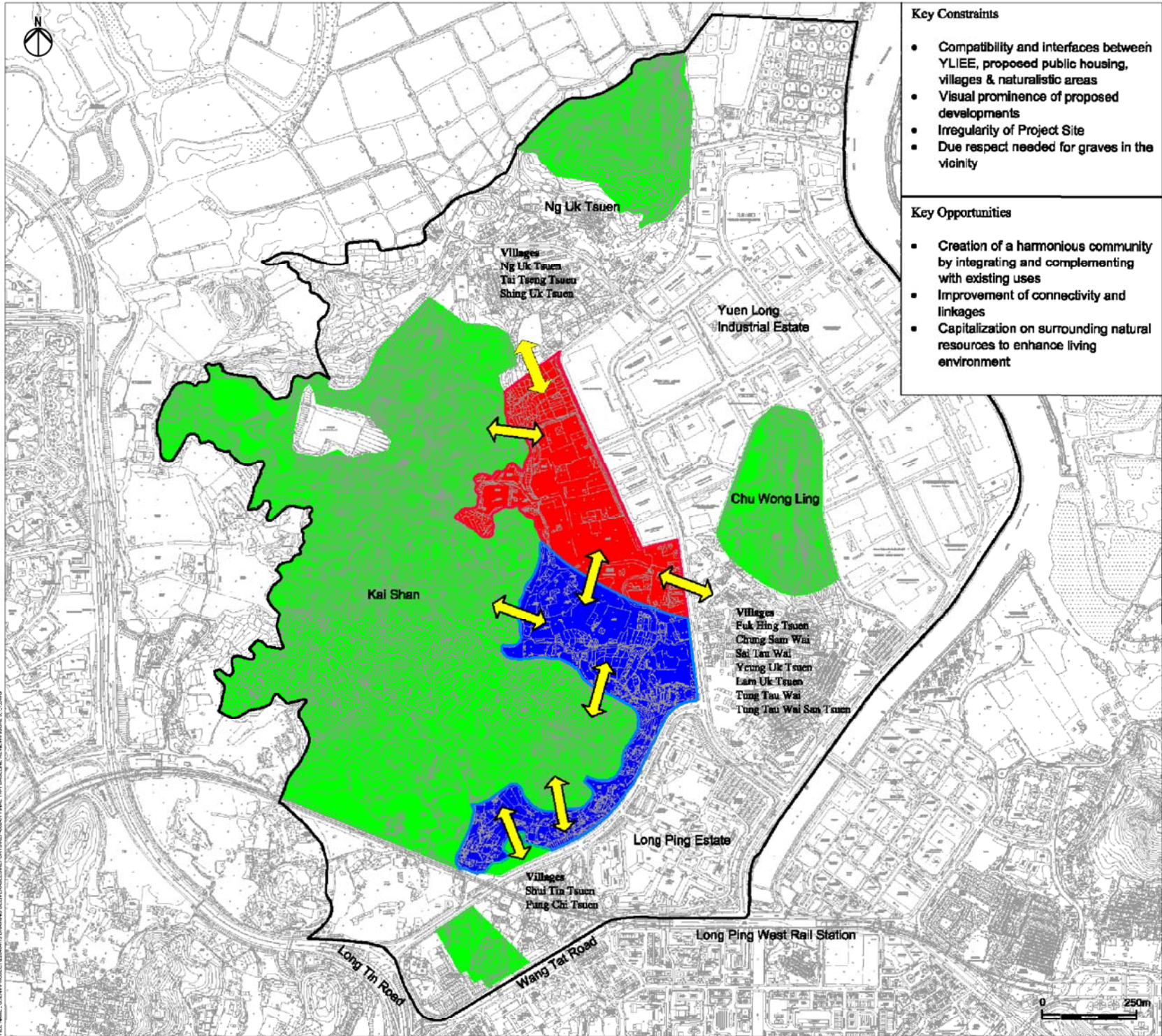
Drawn	PL	Date	10/12	Checked	JC	Approved	ST
-------	----	------	-------	---------	----	----------	----

Scale	NTS	Status	Preliminary
-------	-----	--------	-------------

COPYRIGHT RESERVED



HONG KONG HOUSING AUTHORITY



- Key Constraints**
- Compatibility and interfaces between YLIEE, proposed public housing, villages & naturalistic areas
 - Visual prominence of proposed developments
 - Irregularity of Project Site
 - Due respect needed for graves in the vicinity
- Key Opportunities**
- Creation of a harmonious community by integrating and complementing with existing uses
 - Improvement of connectivity and linkages
 - Capitalization on surrounding natural resources to enhance living environment

Legend

- Study Area
- Potential Public Housing Development Site
- Yuen Long Industrial Estate Extension
- "CA"/"GB" surrounding the Project Site
- Interface and Compatibility Issues

B	SECOND ISSUE	GL	01/13
A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

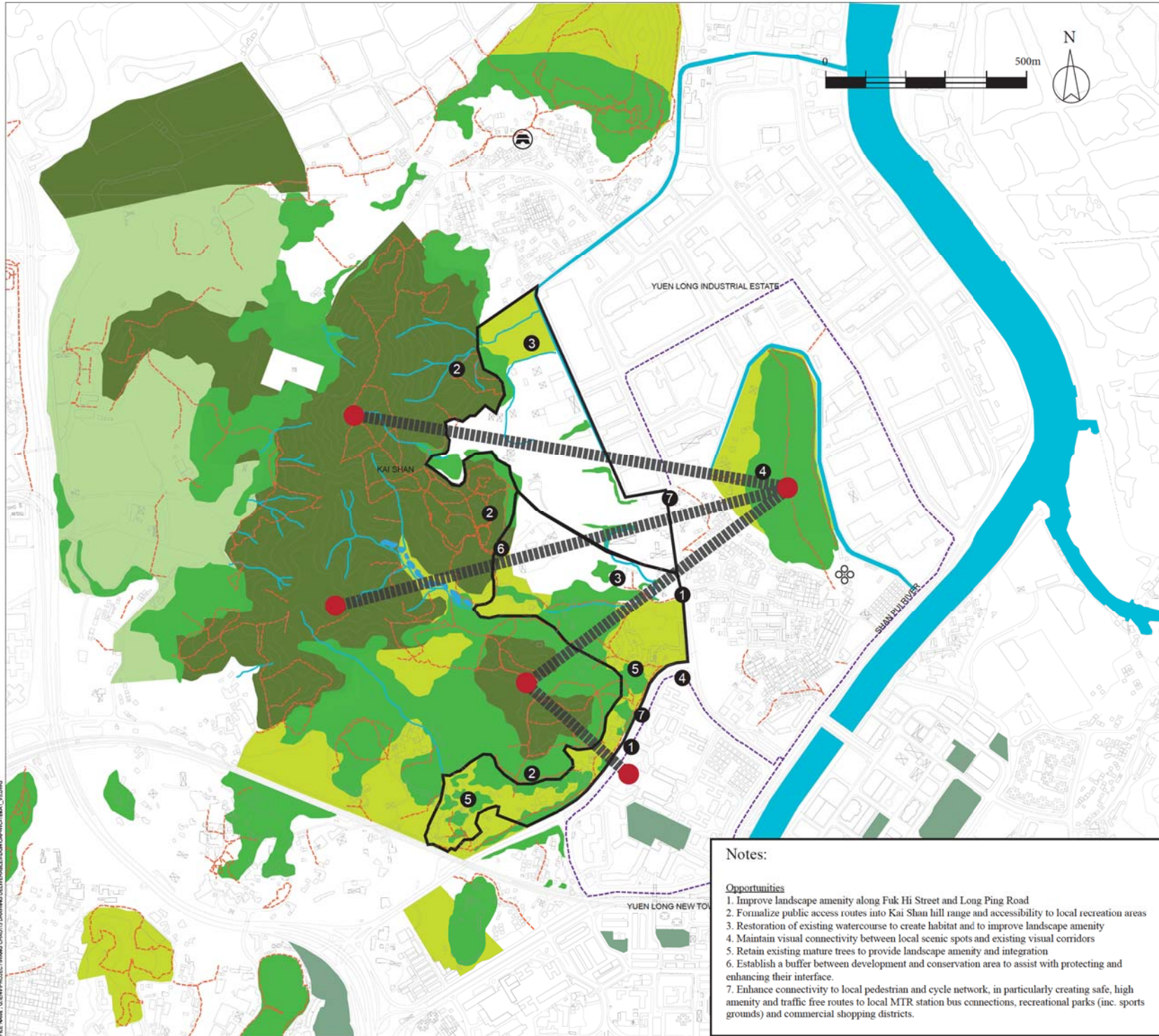
Consultant
ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Key Development Constraints and Opportunities in Land Use Planning

Drawing no.	Figure 3.1.1			Rev.	B
Drawn	GL	Date	01/13	Checked	IL
				Approved	ST
Scale	NTS		Status	PRELIMINARY	

USER: HKHOUSING\B08 - TIME: 07 MAR 2013 - 2:35PM
 FILE NAME: C:\ENVIRONMENT\PROJECTS\HONGKONG\H1\H1\1\BASELINE\ISDP\WAP\H1_3_1.DWG



- Legend**
- Project Site Boundary
 - Heritage Feature
 - Temple
 - 1. Conservation Area
 - 2. Green Belt
 - 3. Trees / Woodland
 - 4. Recreation
 - 5. Public Open Space (Parks, Sitting Out Area Etc.)
 - 6. Streams / Drainage
 - 7. Cycle Track
 - 8. Paths / Tracks
 - 9. Key Local Highpoints
 - 10. Potential Visual Connection
 - 11. See 'Notes' in relation to landscape opportunities.

Rev	Description	By	Date
B	Second Issue	PL	10/12
B	First Issue	PL	10/12

Consultant

ARUP

Project title
 Agreement No. CB2012093
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
Development Opportunities Plan

Drawing no. Fig. 3.3.1

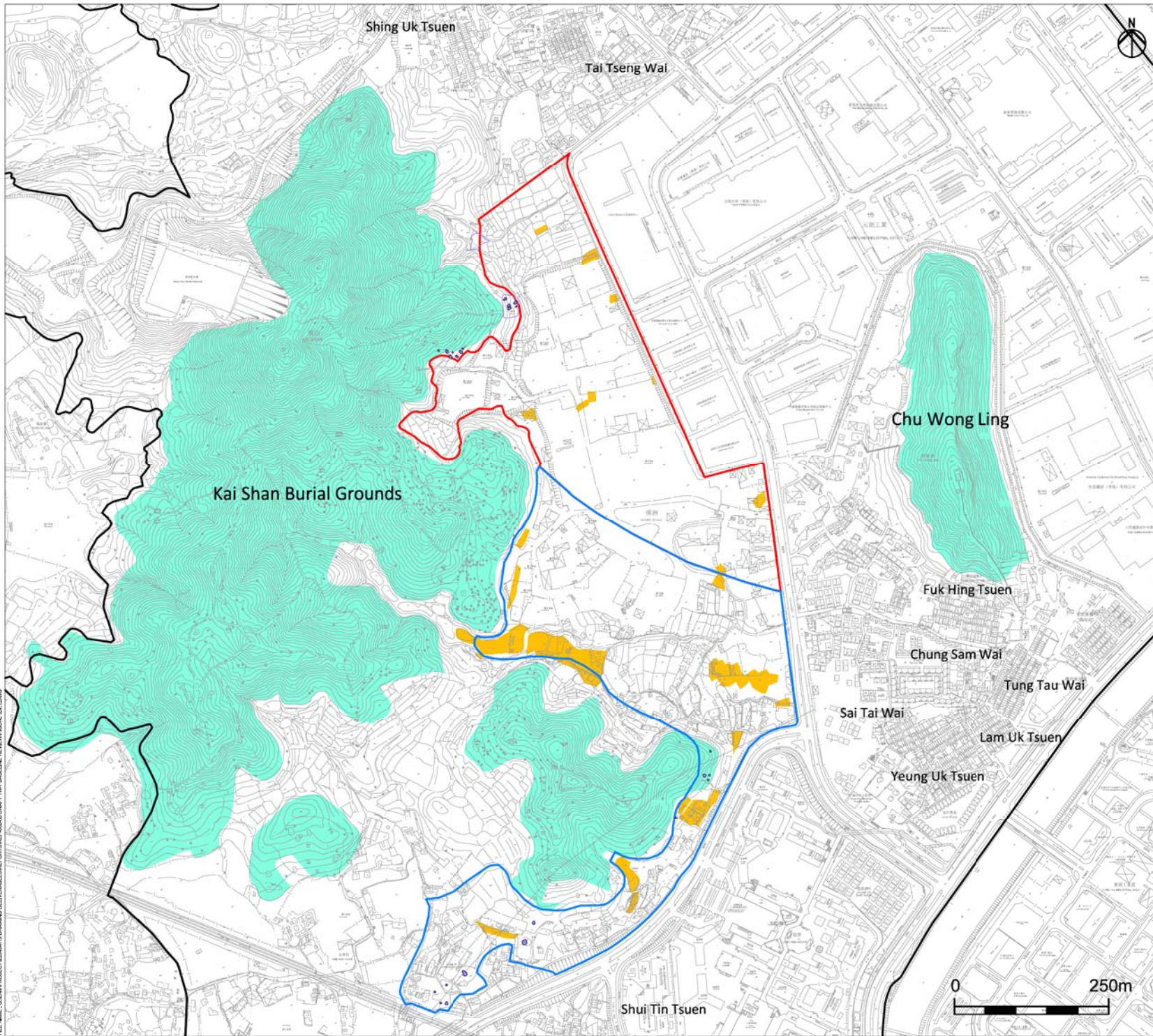
Drawn	PL	Date	10/12	Checked	JC	Approved	ST
Scale	1:10,000 (A3)		Status	Preliminary			

Notes:

Opportunities

1. Improve landscape amenity along Fuk Hi Street and Long Ping Road
2. Formalize public access routes into Kai Shan hill range and accessibility to local recreation areas
3. Restoration of existing watercourse to create habitat and to improve landscape amenity
4. Maintain visual connectivity between local scenic spots and existing visual corridors
5. Retain existing mature trees to provide landscape amenity and integration
6. Establish a buffer between development and conservation area to assist with protecting and enhancing their interface.
7. Enhance connectivity to local pedestrian and cycle network, in particularly creating safe, high amenity and traffic free routes to local MTR station bus connections, recreational parks (inc. sports grounds) and commercial shopping districts.

THE INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE. IT IS THE PROPERTY OF THE HONG KONG HOUSING AUTHORITY AND IS LOANED TO YOU BY IT. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF THE HONG KONG HOUSING AUTHORITY.



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Burial Ground (No-go Area)
 - Graves (Development Constraint)
 - Tso & Tong Lots (Development Constraint)

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date

Consultant

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Development Constraints and No-go Areas on Land Matters

Drawing no.	Figure 3.4.1	Rev.	A
-------------	--------------	------	---

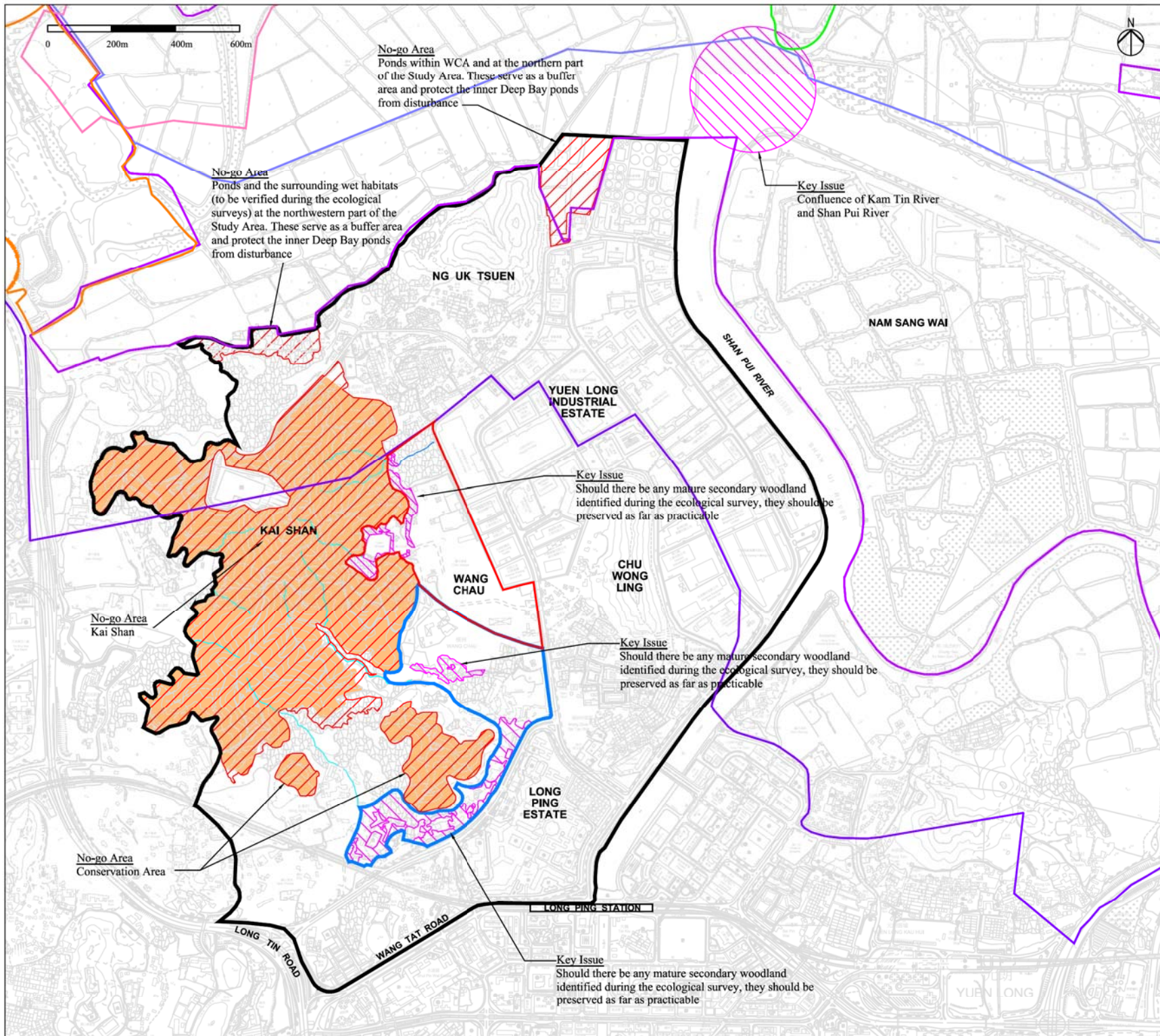
Drawn	GL	Date	10/12	Checked	IL	Approved	ST
-------	----	------	-------	---------	----	----------	----

Scale	Status
AS SHOWN	PRELIMINARY

COPYRIGHT RESERVED



USER: HKHQA0108 TIME: 02 NOV 2012 - 11:34AM
 FILE NAME: C:\ENVIRONMENT\PROJECTS\HONGKONG\DRAWING\THIN\BASELINE\REV\WORKSPACE\S.L.LONG



- Legend:
- Potential PHD Site
 - Potential Yuen Long Industrial Estate Extension Site
 - Study Area
 - Mai Po Inner Deep Bay Ramsar Site
 - Wetland Conservation Area (WCA)
 - Wetland Buffer Area (WBA)
 - Mai Po Marshes SSSI
 - Inner Deep Bay SSSI
 - Hong Kong Wetland Park Special Area
 - Conservation Area (Zoning in OZP)
 - No-go Area
 - Watercourse on Kai Shan

B	SECOND ISSUE	EW	12/12
A	FIRST ISSUE	EW	10/12
Rev	Description	By	Date

Consultant

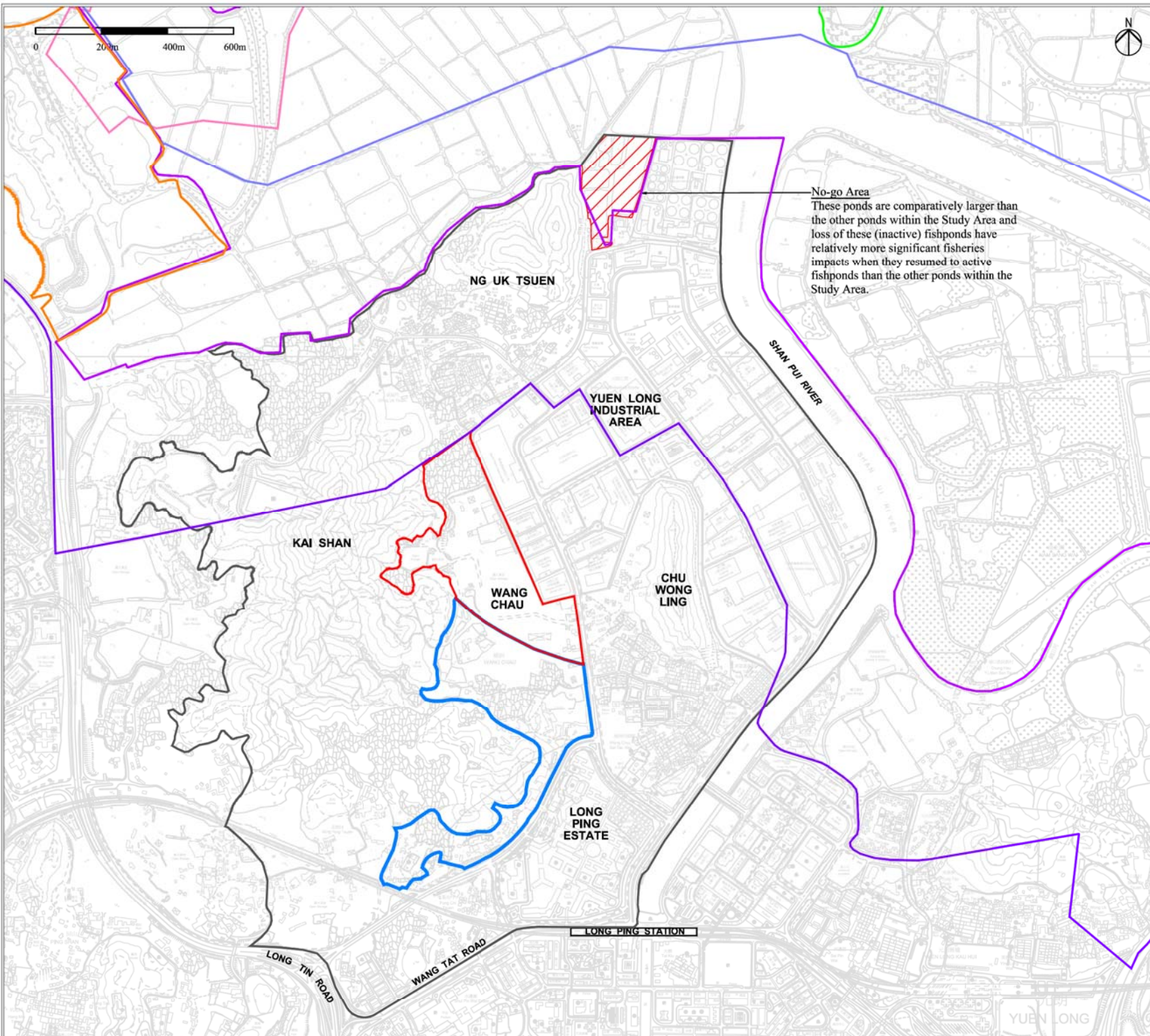
ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Ecological Key Issues in the Proximity of the Project Site and the Study Area and No-go Areas within the Study Area

Drawing no.	Figure 3.10.1			Rev.	B
Drawn	EW	Date	12/12	Checked	MRL
				Approved	ST
Scale	AS SHOWN		Status	PRELIMINARY	

COPYRIGHT RESERVED



No-go Area
 These ponds are comparatively larger than the other ponds within the Study Area and loss of these (inactive) fishponds have relatively more significant fisheries impacts when they resumed to active fishponds than the other ponds within the Study Area.

Legend:

- Potential PHD Site
- Yuen Long Industrial Estate Extension
- Study Area
- Mai Po Inner Deep Bay Ramsar Site
- Wetland Conservation Area (WCA)
- Wetland Buffer Area (WBA)
- Mai Po Marshes SSSI
- Inner Deep Bay SSSI
- Hong Kong Wetland Park Special Area

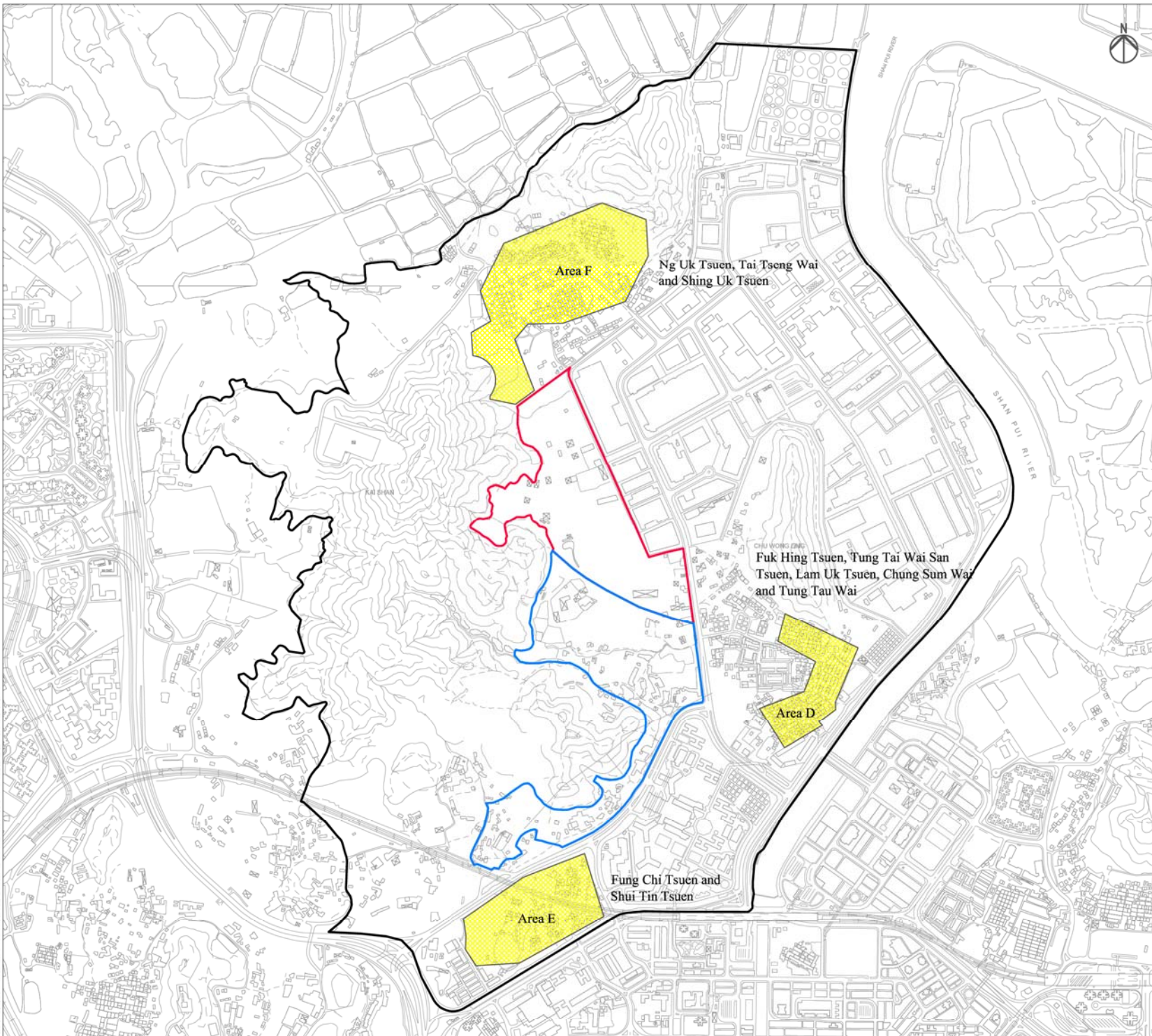
B	SECOND ISSUE	EW	12/12
A	FIRST ISSUE	EW	10/12
Rev	Description	By	Date

Consultant
ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 No-go Area because of Fisheries within the Study Area

Drawing no.	Figure 3.10.2	Rev.	B
Drawn	EW	Date	12/12
Checked	MRL	Approved	ST
Scale	AS SHOWN	Status	



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Historic Villages and Archaeological No-go Areas

B	SECOND ISSUE	GL	02/13
A	FIRST ISSUE	GL	09/12
Rev	Description	By	Date

Consultant
ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
 Historic Villages and Archaeological No-go Areas

Drawing no.	Figure 3.11.1a	Rev.	B
Drawn	GL	Date	02/13
Checked	IL	Approved	ST

Scale	NTS	Status	PRELIMINARY
COPYRIGHT RESERVED			



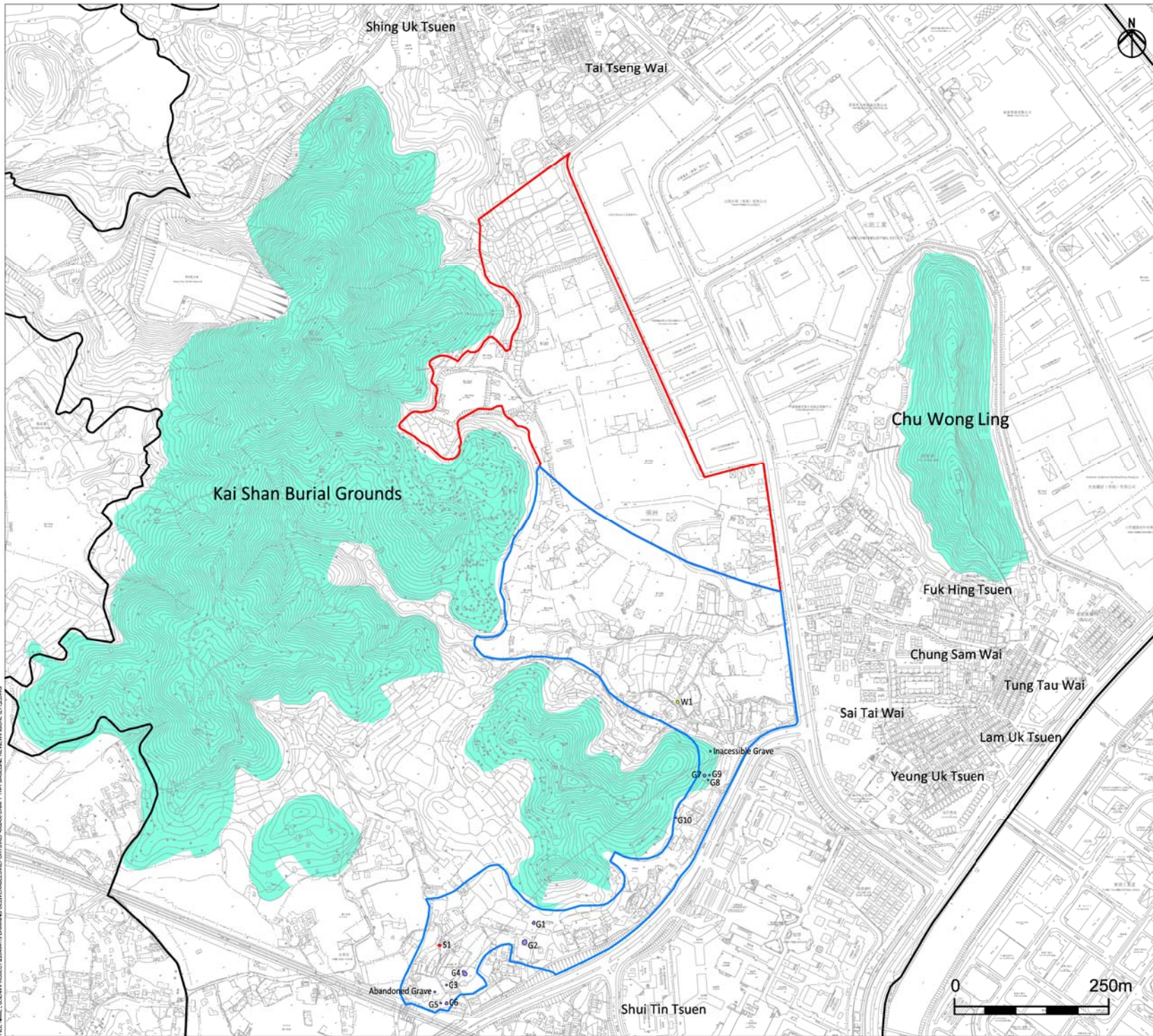
USER: HKCADACT08 TIME: 09 MAR 2013 - 10:09 AM
 FILE NAME: C:\GHP\PROJECT\20120293\DRAWING\DELIVERABLES\REPORTS\REPORT\FINAL_TPO\BASELINE\REV\WANGCHAU_3.11_1A.DWG

USER: HK01ACT12 TIME: 09 MAR 2013 - 11:05AM
 FILE NAME: C:\CONV\PROJECT\2012\DRAWING\DELIVERABLES\REPORTS\REPORT\FINAL\101\BASELINE\IS/EN/APP/FIGURE 3.11.1.DWG



- Legend**
- Study Area
 - Potential Public Housing Development Site
 - Yuen Long Industrial Estate Extension
 - Old Schedule Lot (OSL)
 - Old New Grant Lot (ONG)
 - New Grant Lot (NNG)
 - Short Term Tenancy (STT)
 - Government Land Licence (GLL)
 - Permanent Government Land Allocation (GLA)
 - Area of Interest within Project Boundary
 - Area of Interest Outside Project Boundary

B	SECOND ISSUE	GL	02/13	
A	FIRST ISSUE	GL	11/12	
Rev	Description	By	Date	
Consultant				
<h1>ARUP</h1>				
Project title				
Agreement No. CB20120293 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau				
Drawing title				
Area Identified for Archaeological Field Survey				
Drawing no.		Figure 3.11.1b		Rev.
				B
Drawn	GL	Date	02/13	Checked
				IL
Scale	AS SHOWN		Status	PRELIMINARY
COPYRIGHT RESERVED				
HONG KONG HOUSING AUTHORITY				



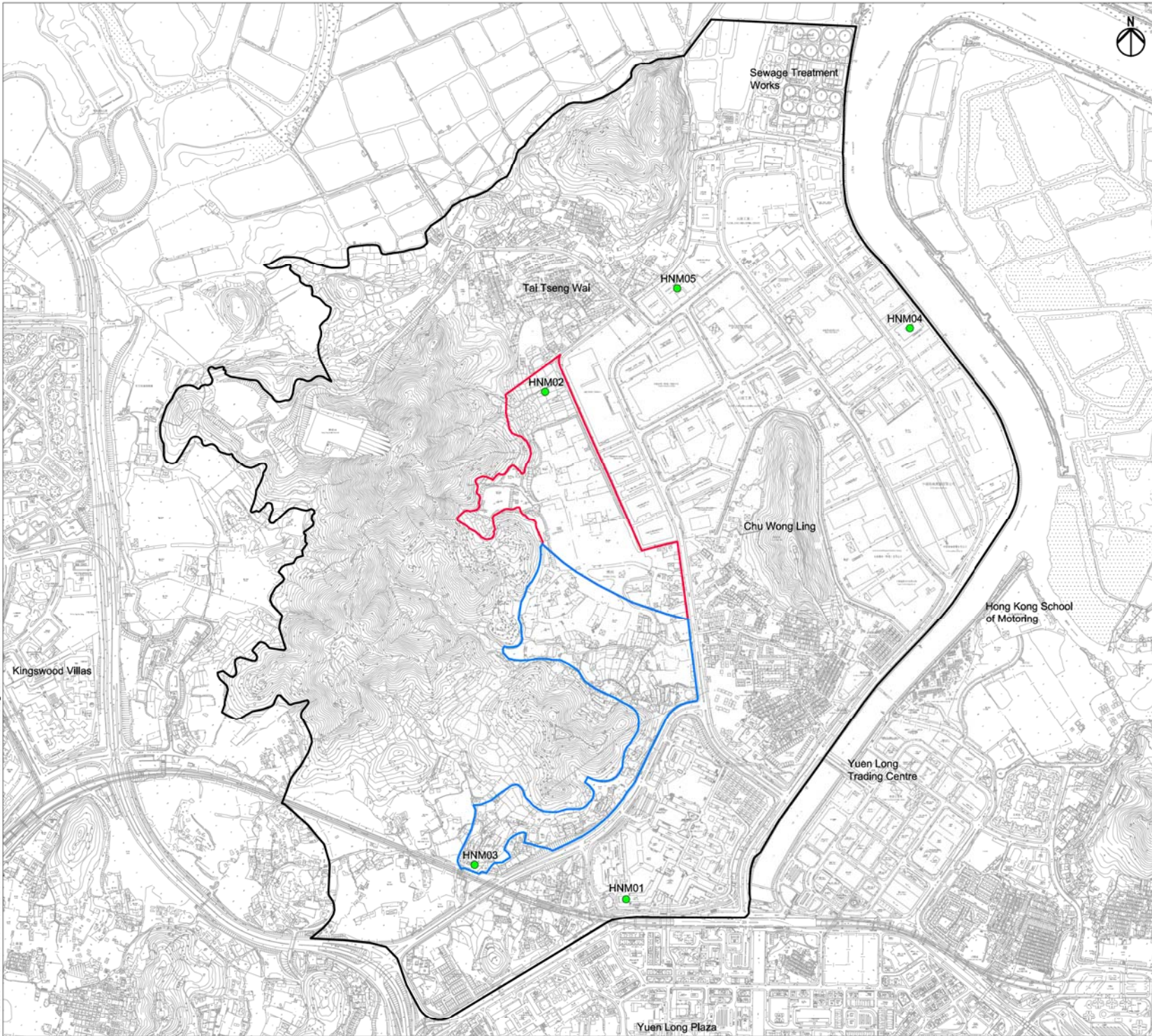
- Legend**
- Study Area
 - Potential Public Housing Site Development
 - Yuen Long Industrial Estate Extension
 - Burial Grounds (No-go Areas)
 - Grave (G)
 - Shrine (S)
 - Well and Shrine (W)

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date
Consultant			
ARUP			
Project title			
Agreement No. CB20120293 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau			
Drawing title			
Built Heritage No-go Areas and Development Constraints			
Drawing no.		Figure 3.11.2	
		Rev. A	
Drawn	GL	Date	10/12
		Checked	IL
		Approved	ST
Scale		Status	
NTS		PRELIMINARY	
COPYRIGHT RESERVED			



USER: H:\PROJECTS\108 - TIME: 09 NOV 2012 - 11:28AM
 FILE NAME: C:\NEWPROJECT\20120293\DRAWING\DELIVERABLES\REPORTS\REPORTS\DMPT\THM\BASELINE\REV\NOGOAREAS_S11.2.DWG





- Legend**
- Study Area
 - Potential Public Housing Site Development
 - Yuen Long Industrial Estate Extension
 - Helicopter Noise Measurement Location

USER: HK04M0112 TIME: 29 OCT 2012 - 11:51AM
 FILE NAME: C:\ENVIRONMENTAL\PROJECTS\HONGKONG\DRAWING\12\BASELINE\REV\REV001E_SLA_1_HELICOPTER_NOISE_MEASUREMENT.dwg

A	FIRST ISSUE	GL	10/12
Rev	Description	By	Date
Consultant			

ARUP

Project title
 Agreement No. CB20120293
 Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate Extension at Wang Chau

Drawing title
Helicopter Noise Measurement Locations

Drawing no.	Figure 3.12.1			Rev.	A
Drawn	GL	Date	10/12	Checked	IL
Scale	1:10000 (A3)		Status	PRELIMINARY	
COPYRIGHT RESERVED					

