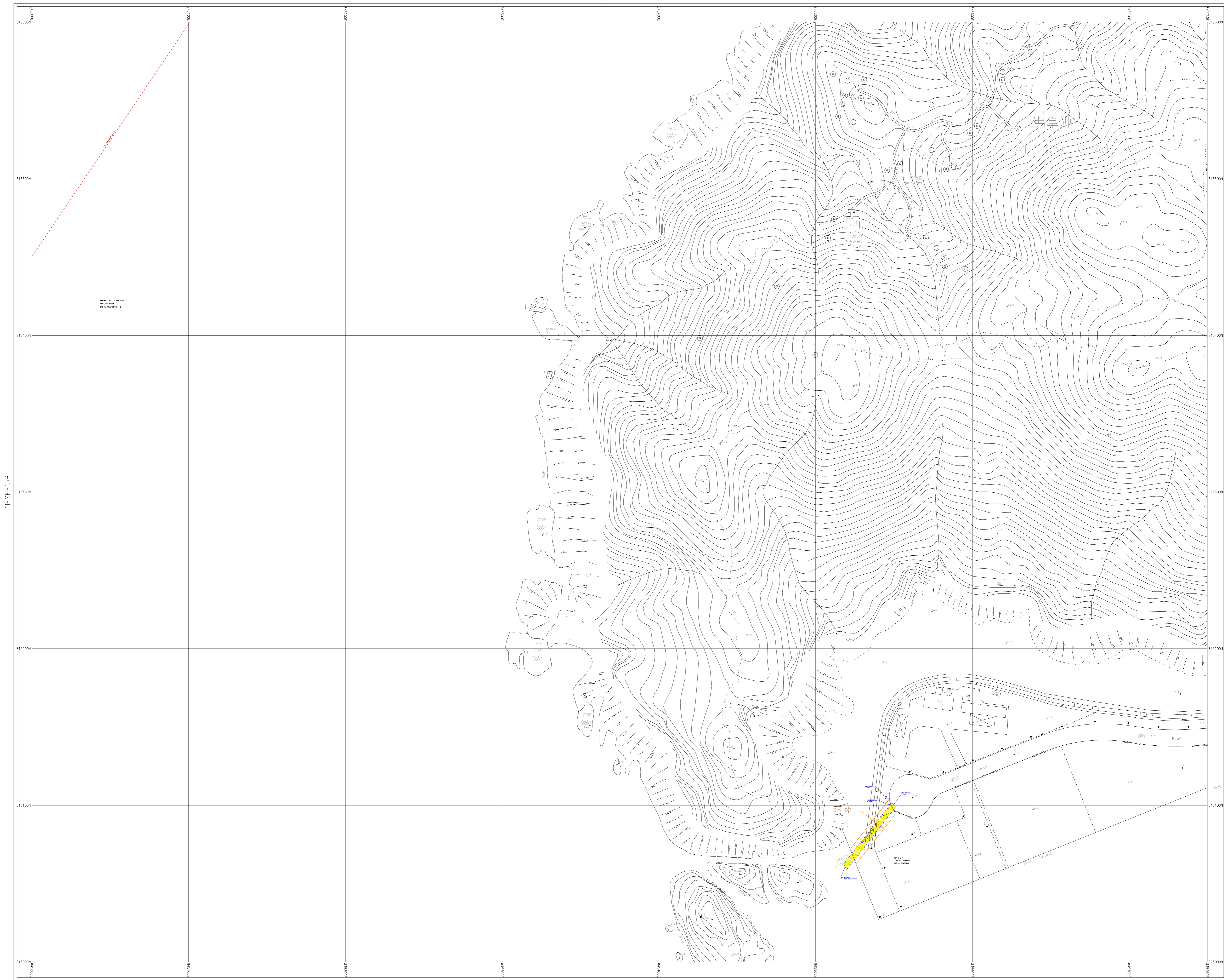


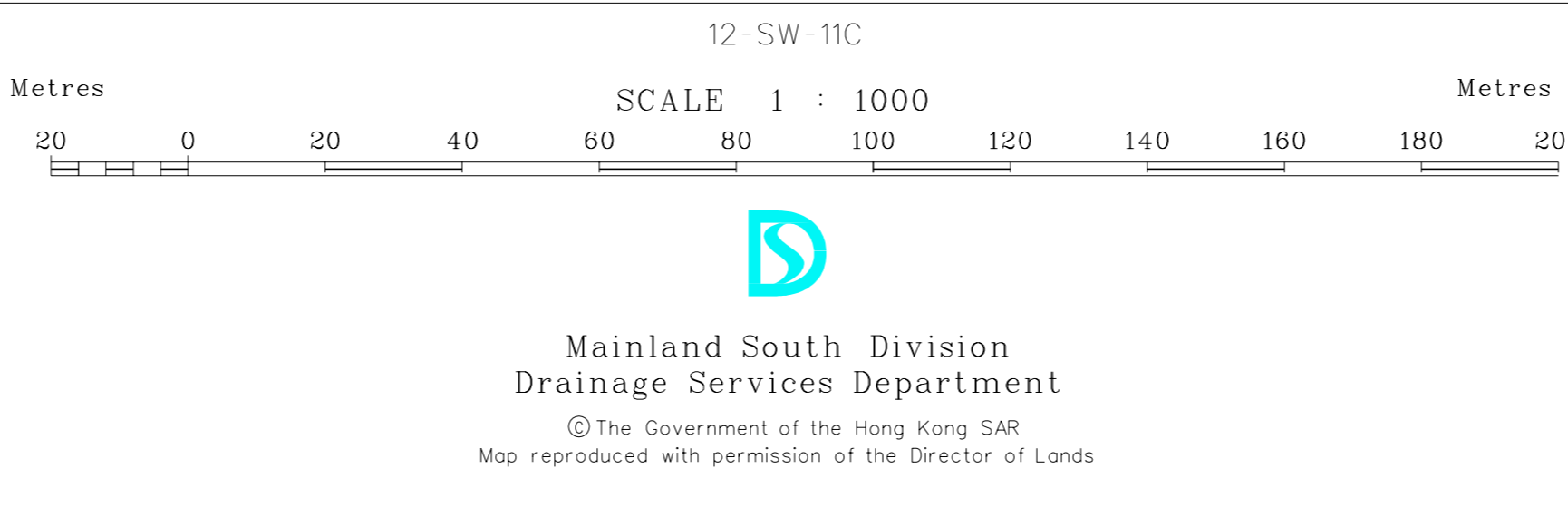
Annex 12C



11-SE-15B

12-SW-11B

Legend :

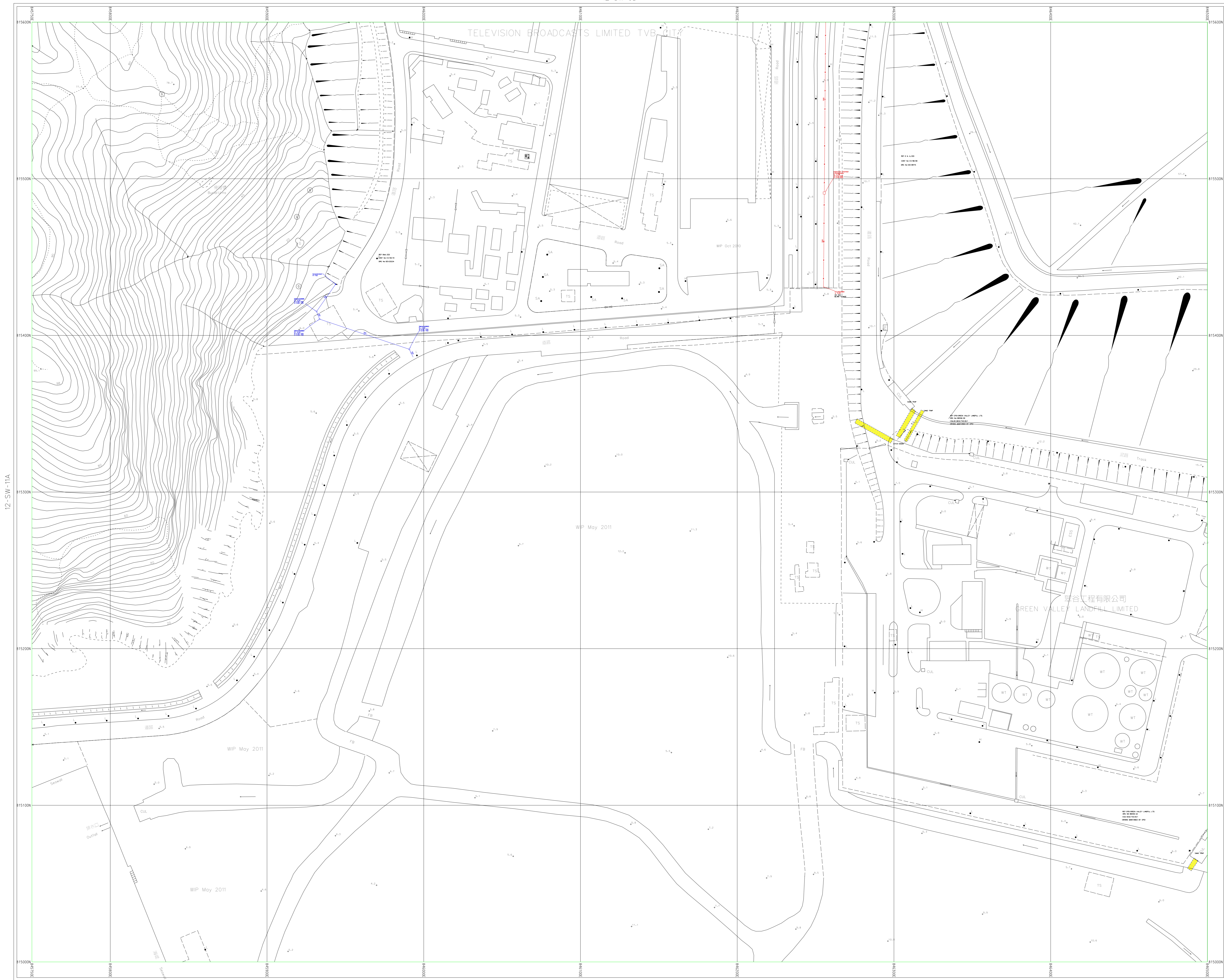


Notes :

- All levels are in mPD.
- All dimensions shown are in millimetres unless otherwise stated.
- The information shown on the record drawings are subject to verification on site and no guarantee can be given that this is a complete record.
- Abbreviations for Channels of width smaller or equal to 1200mm:
 - 900C = 900mm width Surface Channel
 - 900SC = 900mm width Stepped Channel
 - 900UC = 900mm width U Channel
 - 900DWFC = 900mm width Dry Weather Flow Channel
- The Incoming Pipes are marked A1, A2, A3, counting clockwise from the first Outgoing Pipe X1. Outgoing Pipes are marked X1, X2, X3, counting clockwise from North.
- Piling foundations on culverts may be present but not shown for brevity. Please refer to the relevant as-built drawings on details of the pile foundation.
- Drainage facilities maintained by other parties, if shown, are indicative only. It is no guarantee that these information are exact.

Drainage Record Sheet Number
12-SW-11A
Last Updating: 01-12-1997
Map data renewed on October 2010

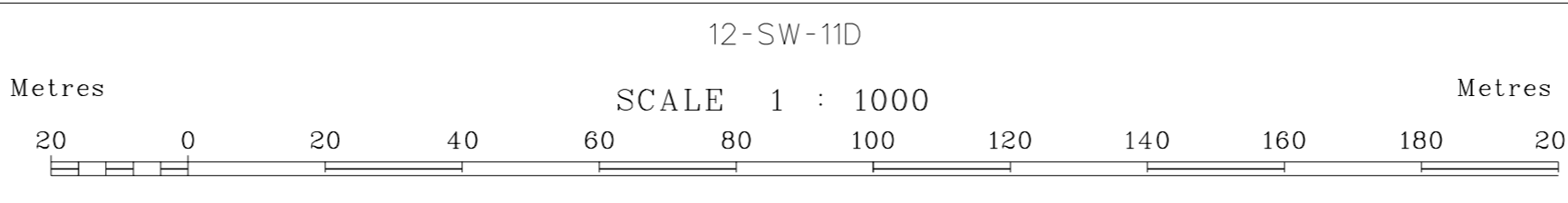
TELEVISION BROADCASTS LIMITED TVB CITY



12-SW-11A

12-SW-12A

Legend :



Mainland South Division
Drainage Services Department

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 - The information shown on the record drawings are subject to verification on site and no guarantee can be given that this is a complete record.
 - Abbreviations for Channels of width smaller or equal to 1200mm:
 - 900C - 900mm width Surface Channel
 - 900UC - 900mm width U Channel
 - 900DWC - 900mm width Dry Weather Flow Channel

5. The Incoming Pipes are marked A1, A2, A3, counting clockwise from the first Outgoing Pipe X1. Outgoing Pipes are marked X1, X2, X3 ... counting clockwise from North.
- eg.
6. Piling foundations on culverts may be present but not shown for brevity. Please refer to the relevant as-built drawings on details of the pile foundation.
7. Drainage facilities maintained by other parties, if shown, are indicative only. It is no guarantee that these information are exact.

Drainage Record Sheet Number

12-SW-11B

Last Updating : 25-01-2002

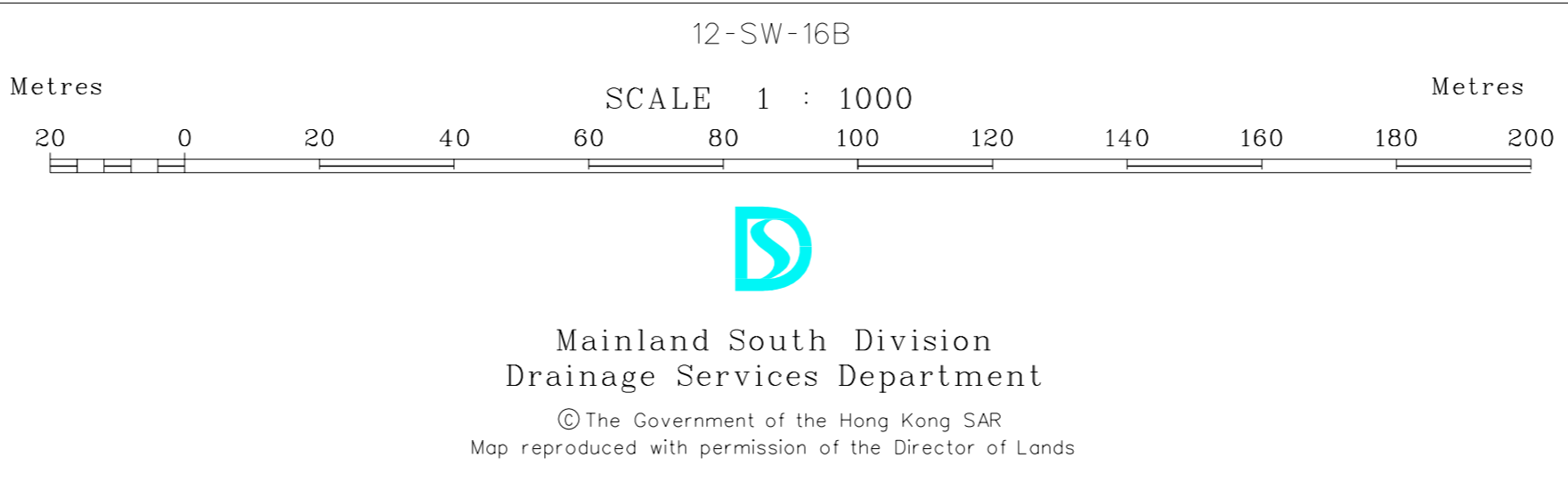
Map data renewed on October 2010



12-SW-11C

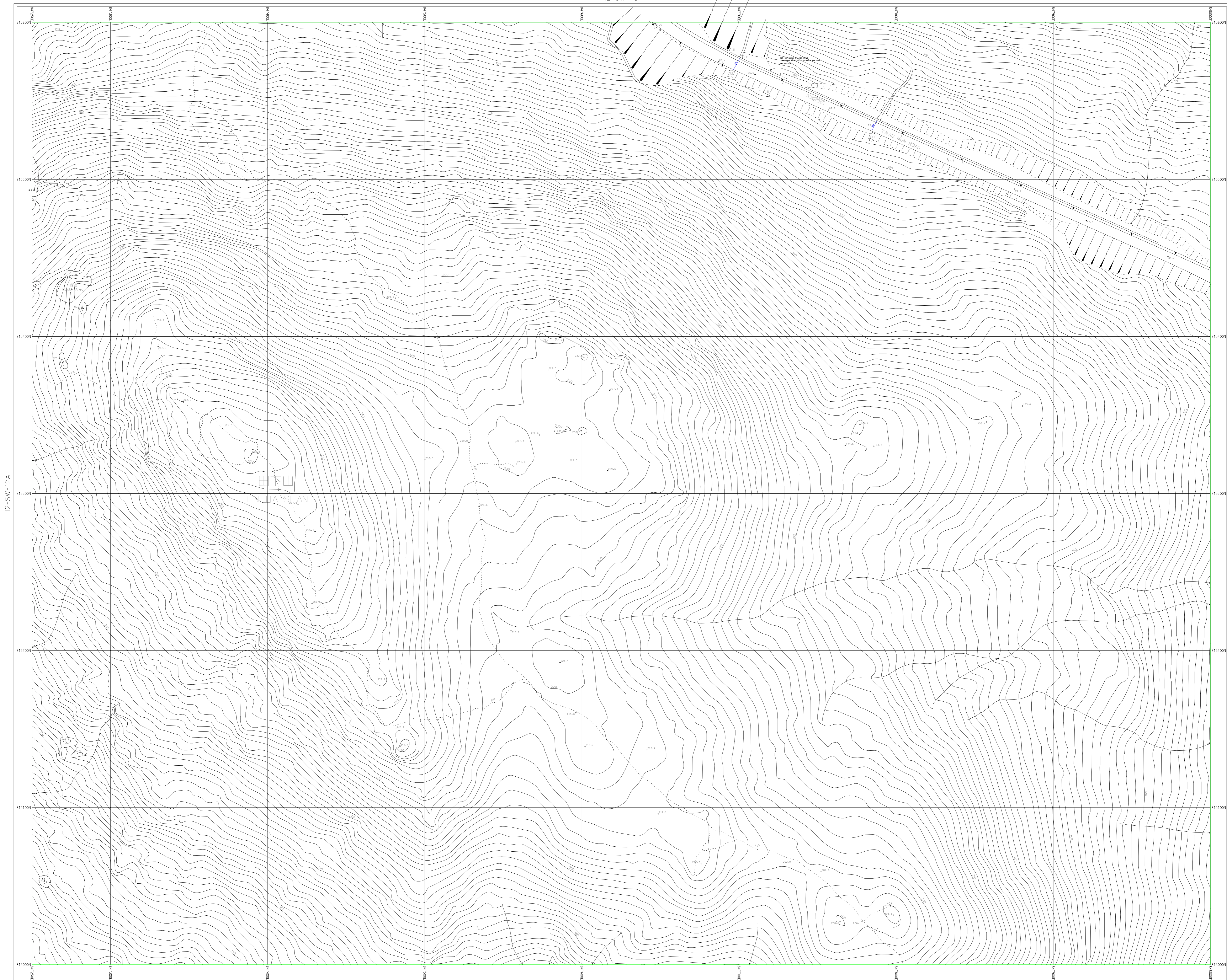
12-SW-12C

Legend :



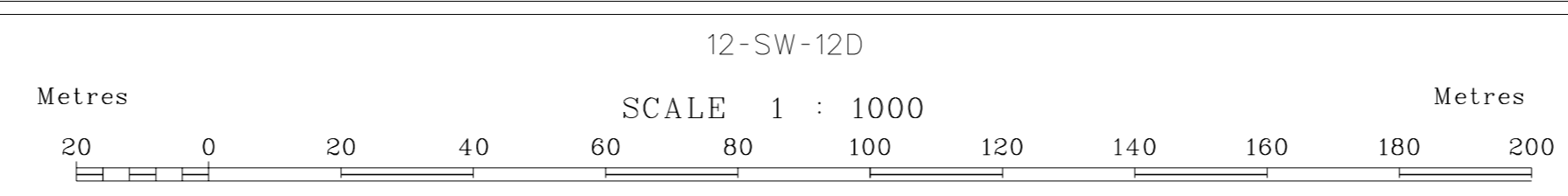
- Notes :**
- All levels are in mPD.
 - All dimensions shown are in millimetres unless otherwise stated.
 - The information shown on the record drawings are subject to verification on site and no guarantee can be given that this is a complete record.
 - Abbreviations for Channels of width smaller or equal to 1200mm:
 - 900C - 900mm width Surface Channel
 - 900SC - 900mm width Stepped Channel
 - 900UC - 900mm width U Channel
 - 900DFWC - 900mm width Dry Weather Flow Channel

- Drainage Record Sheet Number
- 12-SW-11D
- Last Updating : 08-06-2005
- Map data renewed on July 2011
- The Incoming Pipes are marked A1, A2, A3, counting clockwise from the first Outgoing Pipe X1. Outgoing Pipes are marked X1, X2, X3 ... counting clockwise from North.
-
- Piling foundations on culverts may be present but not shown for brevity. Please refer to the relevant as-built drawings on details of the pile foundation.
 - Drainage facilities maintained by other parties, if shown, are indicative only. It is no guarantee that these information are exact.



Legend :

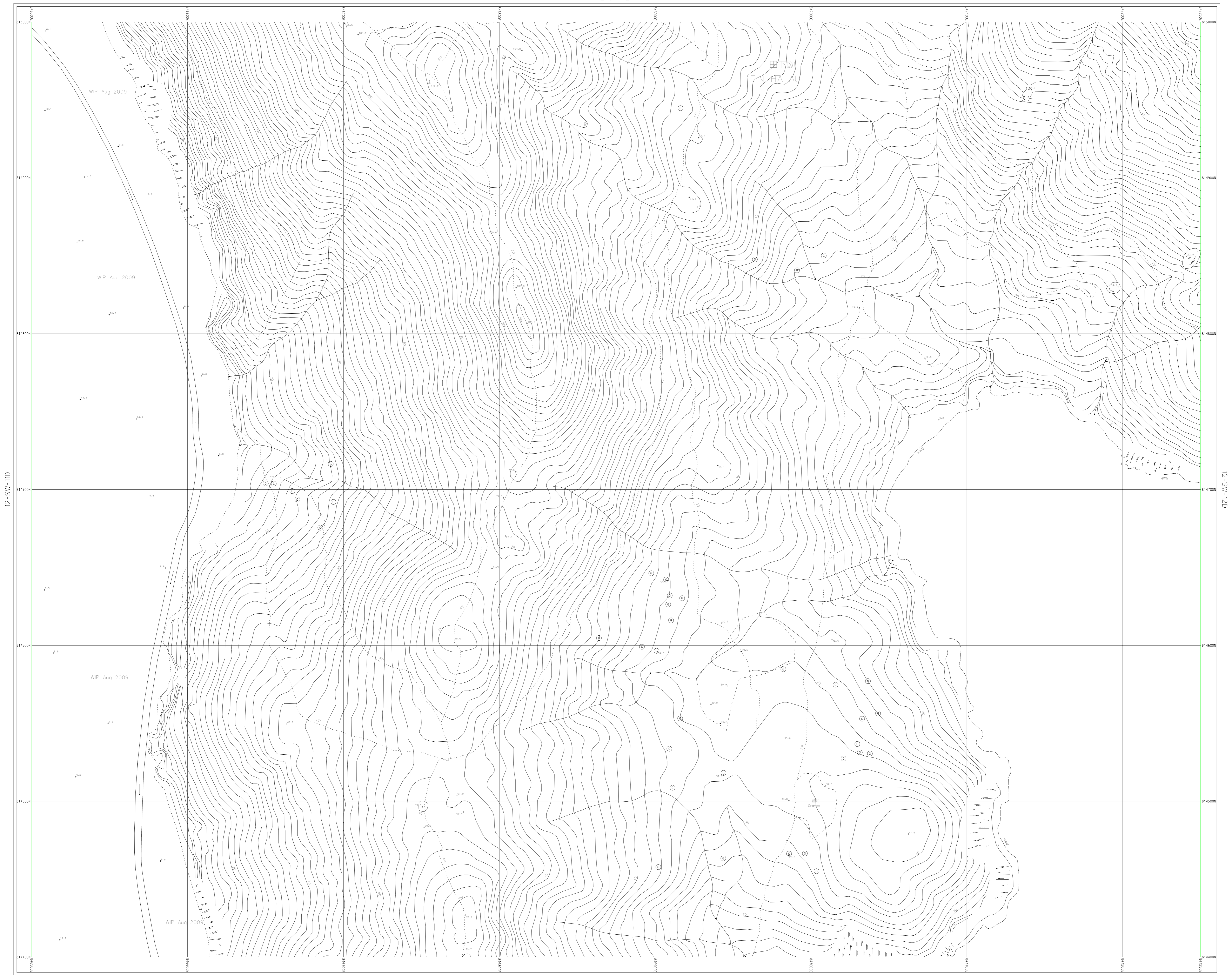
Storm Water Manhole	Existing Pipe (Storm/Sewer/Combined)	Gully Sump / Gully	Slope Sign Board
Storm Water Terminal Manhole	Existing Pipe (Storm/Sewer/Combined) (Planning / Identifying to be Abandoned)	Tapping Point (Storm/Sewer)	Slope Number
Sewer Manhole	Proposed Pipe (Storm/Sewer)	Overflow (Sewer/Combined)	Slope Boundary
Combined Manhole	Works In Progress Pipe (Storm/Sewer)	Interface Valve Chamber	200 SUBMARINE OUTFALL
Catchpit	Abandoned Pipe	Oil / Petrol Interceptor	200 SUBMARINE OUTFALL
Deshling Opening	Abandoned Pipe (Filled with Material)	Valve	200 SUBMARINE OUTFALL
Inspection Opening	Existing U Channel / Stepped Channel (Storm)	Water Gauge	200 SUBMARINE OUTFALL
Dry Weather Flow Interceptor	Proposed U Channel / Stepped Channel (Storm)	Spot Level (Storm/Sewer)	Works In Progress Submarine Outfall with Diffuser
Solid Trap	Works In Progress U Channel / Stepped Channel (Storm)	Existing Y-Junction (Storm/Sewer/Combined)	Harbour Area Treatment Scheme Sewage Tunnel Outer Protection Area (200m width)
Inlet	Rising Main	Spot Level (Storm/Sewer)	Harbour Area Treatment Scheme Sewage Tunnel Outer Protection Area (100m width)
Outlet	Vacuum Sewer	Spot Level (Storm/Sewer)	Harbour Area Treatment Scheme Sewage Tunnel Outer Protection Area (50m width)
Box Culvert (Storm/Sewer)	Drainage Reserve	Spot Level (Storm/Sewer)	Harbour Area Treatment Scheme Sewage Tunnel Outer Protection Area (20m width)



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Drainage Services Department**
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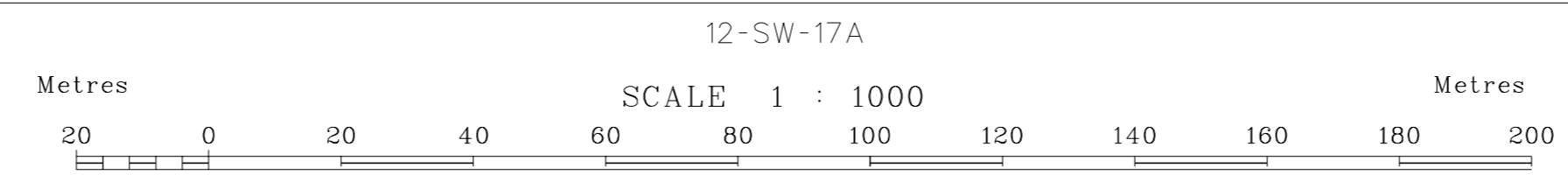
- Notes :**
- All levels are in mPD.
 - All dimensions shown are in millimetres unless otherwise stated.
 - The information shown on the record drawings are subject to verification on site and no guarantee can be given that this is a complete record.
 - Abbreviations for Channels of width smaller or equal to 1200mm:
900C - 900mm width Surface Channel
900SC - 900mm width Stepped Channel
900UC - 900mm width U Channel
900DWFC - 900mm width Dry Weather Flow Channel

- Drainage Record Sheet Number**
12-SW-12B
Last Updating : 01-07-1997
5. The Incoming Pipes are marked A1, A2, A3, ... counting clockwise from the first Outgoing Pipe X1. Outgoing Pipes are marked X1, X2, X3 ... counting clockwise from North.
-
6. Piling foundations on culverts may be present but not shown for brevity. Please refer to the relevant as-built drawings on details of the pile foundation.
7. Drainage facilities maintained by other parties, if shown, are indicative only. It is no guarantee that these information are exact.
- Map data renewed on May 2011



Legend :

<ul style="list-style-type: none"> ○ Storm Water Manhole ○ Storm Water Terminal Manhole ○ Sewer Manhole ○ Sewer Terminal Manhole ○ Combined Manhole ○ Catchpit ○ Dewatering Opening ○ Inspection Opening ○ Dry Weather Flow Interceptor ○ Sand Trap ○ Inlet ○ Outlet □□ Box Culvert (Storm/Sewer) 	<ul style="list-style-type: none"> — Existing Pipe (Storm/Sewer/Combined) — Existing Pipe (Storm/Sewer/Combined) (Planning / Identifying to be Abandoned) — Proposed Pipe (Storm/Sewer) — Works In Progress Pipe (Storm/Sewer) — Abandoned Pipe — Abandoned Pipe (Filled with Materials) — Existing U Channel / Stepped Channel (Storm) — Proposed U Channel / Stepped Channel (Storm) — Works In Progress U Channel / Stepped Channel (Storm) — Rising Main — Vacuum Sewer — Existing Y-Junction (Storm/Sewer/Combined) — Gully Sump / Gully — Tapping Point (Storm/Sewer) — Overflow (Sewer/Combined) — Interface Valve Chamber — Oil / Petrol Interceptor — Valve — Water Gauge — Spot Level (Storm/Sewer) — Existing Y-Junction (Storm/Sewer/Combined) 	<ul style="list-style-type: none"> ▲ Slope Sign Board ▲ Slope Boundary — 200 Submarine Outfall — 300 Submarine Outfall — 400 Submarine Outfall — Works In Progress Submarine Outfall with Diffuser — Harbour Area Treatment Scheme Sewage Tunnel Protection Area (100m width) — Harbour Area Treatment Scheme Sewage Tunnel Outer Protection Area (200m width)
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- Notes :**
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 - The information shown on the record drawings are subject to verification on site and no guarantee can be given that this is a complete record.
 - Abbreviations for Channels of width smaller or equal to 1200mm:
 - 900C - 900mm width Surface Channel
 - 900SC - 900mm width Stepped Channel
 - 900UC - 900mm width U Channel
 - 900DFC - 900mm width Dry Weather Flow Channel

Drainage Record Sheet Number

12-SW-12C

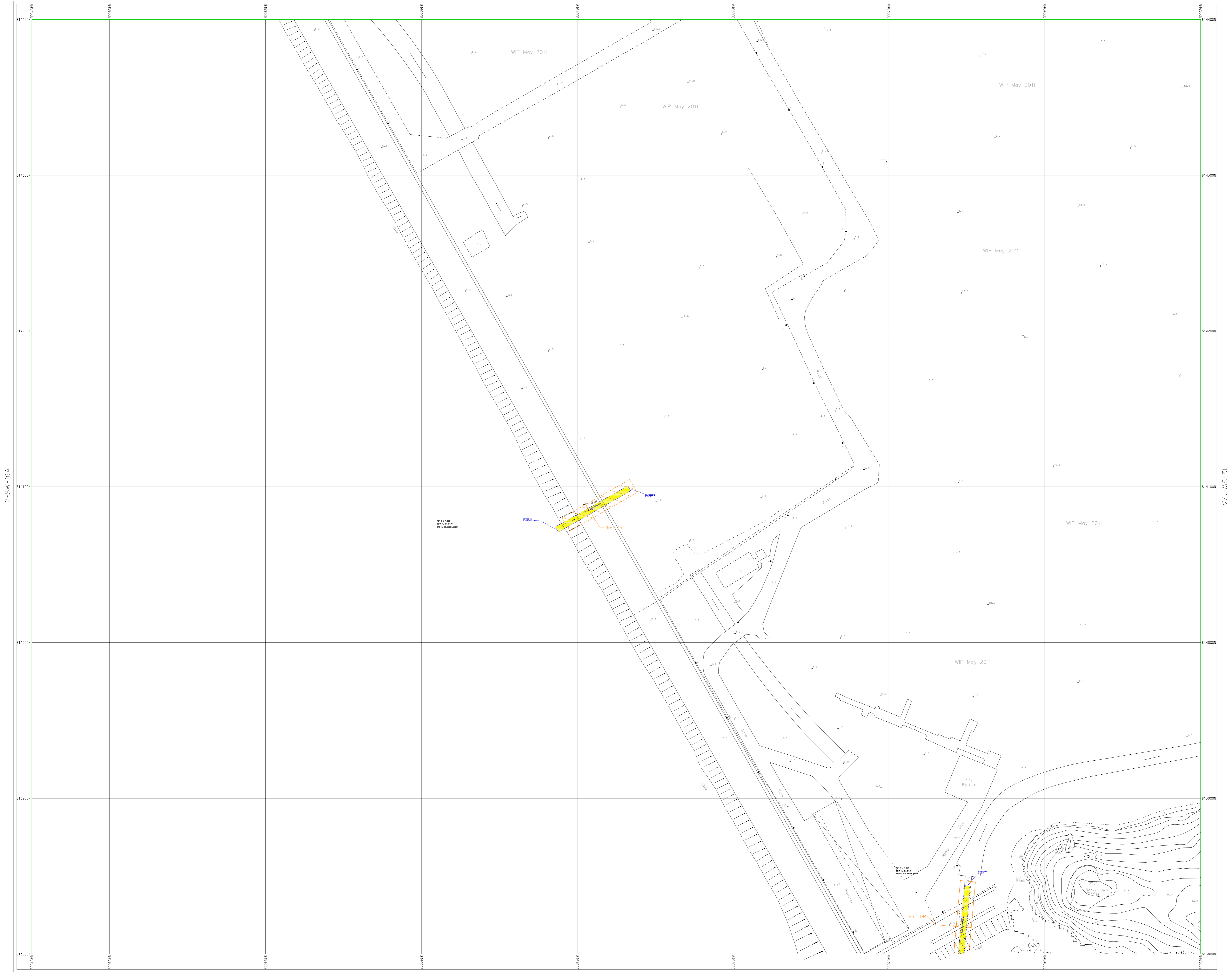
Last Updating : 24-05-2004

Map data renewed on December 2010

5. The Incoming Pipes are marked A1, A2, A3, counting clockwise from the first Outgoing Pipe X1. Outgoing Pipes are marked X1, X2, X3 ... counting clockwise from North.

6. Piling foundations on culverts may be present but not shown for brevity. Please refer to the relevant as-built drawings on details of the pile foundation.

7. Drainage facilities maintained by other parties, if shown, are indicative only. It is no guarantee that these information are exact.

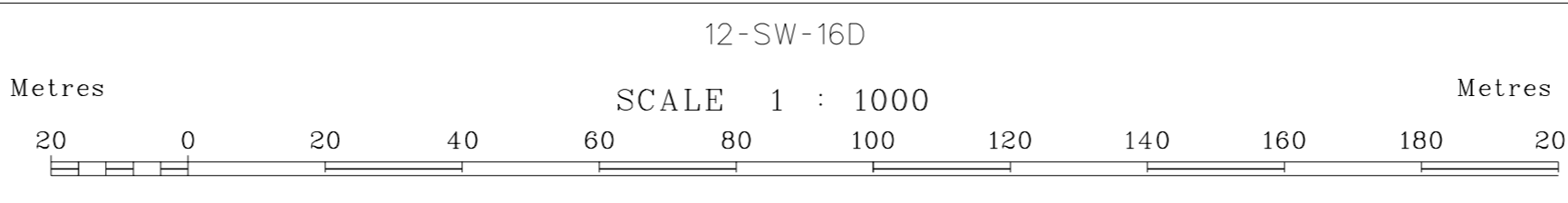


12-SW-16A

12-SW-17A

Legend :

<ul style="list-style-type: none"> Storm Water Manhole Storm Water Terminal Manhole Sewer Manhole Sewer Terminal Manhole Combined Manhole Catchpit Destling Opening Inspection Opening Dry Weather Flow Interceptor Sand Trap Inlet Outlet Box Culvert (Storm/Sewer) 	<ul style="list-style-type: none"> Existing Pipe (Storm/Sewer/Combined) Existing Pipe (Storm/Sewer/Combined) (Planning / Identifying to be Abandoned) Proposed Pipe (Storm/Sewer) Works In Progress Pipe (Storm/Sewer) Abandoned Pipe Abandoned Pipe (Filled with Materials) Existing U Channel / Stepped Channel (Storm) Proposed U Channel / Stepped Channel (Storm) Works In Progress U Channel / Stepped Channel (Storm) Rising Man Vacuum Sewer Drainage Reserve 	<ul style="list-style-type: none"> Gully Sump / Gully Tapping Point (Storm/Sewer) Overflow (Sewer/Combined) Interface Valve Chamber Oil / Petrol Interceptor Valve Water Gauge Spot Level (Storm/Sewer) Slope Sign Board Slope Number Slope Boundary Existing Submarine Outfall with Diffuser Proposed Submarine Outfall with Diffuser Works In Progress Submarine Outfall with Diffuser Harbour Area Treatment Scheme Sewage Tunnel Protection Area (100m width) Proposed Submarine Outfall Proposed Submarine Outfall Works In Progress Submarine Outfall with Diffuser Harbour Area Treatment Scheme Sewage Tunnel Outer Protection Area (200m width) Proposed Submarine Outfall Proposed Submarine Outfall
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 Drainage Services Department
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- Notes :**
- All levels are in mPD.
 - All dimensions shown are in millimetres unless otherwise stated.
 - The information shown on the record drawings are subject to verification on site and no guarantee can be given that this is a complete record.
 - Abbreviations for Channels of width smaller or equal to 1200mm:
 - 900C - 900mm width Surface Channel
 - 900UC - 900mm width U Channel
 - 900DFC - 900mm width Dry Weather Flow Channel

- Drainage Record Sheet Number**
- 12-SW-16B**
- Last Updating : 07-11-2003
- Map data renewed on December 2010
- The Incoming Pipes are marked A1, A2, A3, counting clockwise from the first Outgoing Pipe X1. Outgoing Pipes are marked X1, X2, X3 ... counting clockwise from North.
-
- Piling foundations on culverts may be present but not shown for brevity. Please refer to the relevant as-built drawings on details of the pile foundation.
 - Drainage facilities maintained by other parties, if shown, are indicative only. It is no guarantee that these information are exact.



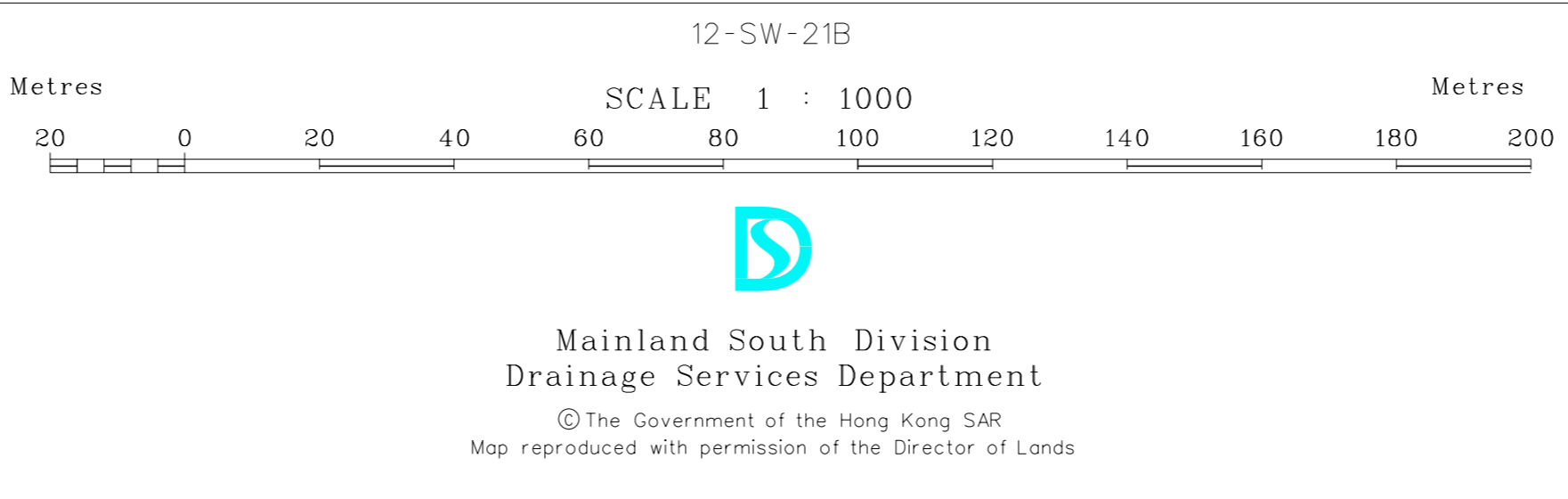
12-SW-16C

12-SW-17C

TATHONG CHANNEL
雷塘海峡

Legend :

Storm Water Manhole	Existing Pipe (Storm/Sewer/Combined)	Gully Sump / Gully	Slope Sign Board
Storm Water Terminal Manhole	Existing Pipe (Storm/Sewer/Combined) (Planning / Identifying to be Abandoned)	Tapping Point (Storm/Sewer)	Slope Number
Sewer Manhole	Proposed Pipe (Storm/Sewer)	Overflow (Sewer/Combined)	Slope Boundary
Sewer Terminal Manhole	Works In Progress Pipe (Storm/Sewer)	Interface Valve Chamber	200 SUBMERGED OUTFALL
Combined Manhole	Abandoned Pipe	Oil / Petrol Interceptor	200 SUBMERGED OUTFALL
Catchpit	Abandoned Pipe (Filled with Materials)	Valve	200 SUBMERGED OUTFALL
Destling Opening	Existing U Channel / Stepped Channel (Storm)	Water Gauge	200 SUBMERGED OUTFALL
Inspection Opening	Proposed U Channel / Stepped Channel (Storm)	Spot Level (Storm/Sewer)	200 SUBMERGED OUTFALL
Dry Weather Flow Interceptor	Works In Progress U Channel / Stepped Channel (Storm)	Sewage Tunnel Protection (200m width)	200 SUBMERGED OUTFALL
Sand Trap	Rising Main	Sewage Tunnel Protection (100m width)	200 SUBMERGED OUTFALL
Inlet	Vacuum Sewer	Harbour Area Treatment Scheme Sewage Tunnel Outer Protection Area (200m width)	200 SUBMERGED OUTFALL
Outlet	Existing Y-Junction (Storm/Sewer/Combined)	Harbour Area Treatment Scheme Sewage Tunnel Outer Protection Area (100m width)	200 SUBMERGED OUTFALL
Box Culvert (Storm/Sewer)	Drainage Reserve	Please note that proposed areas within the 400m Sewage Tunnel Protection Area have to be completed with the requirements in the Environment, Transport and Works Bureau Technical Circular Memo No. 26/2002 or the Purview Note for Abandoned Persons and Registered Structural Engineers No. 62 issued by the Building Department.	



- Notes :**
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 - 900C - 900mm width Surface Channel
 - 900SC - 900mm width Stepped Channel
 - 900UC - 900mm width U Channel
 - 900DFC - 900mm width Dry Weather Flow Channel

Drainage Record Sheet Number

12-SW-16D

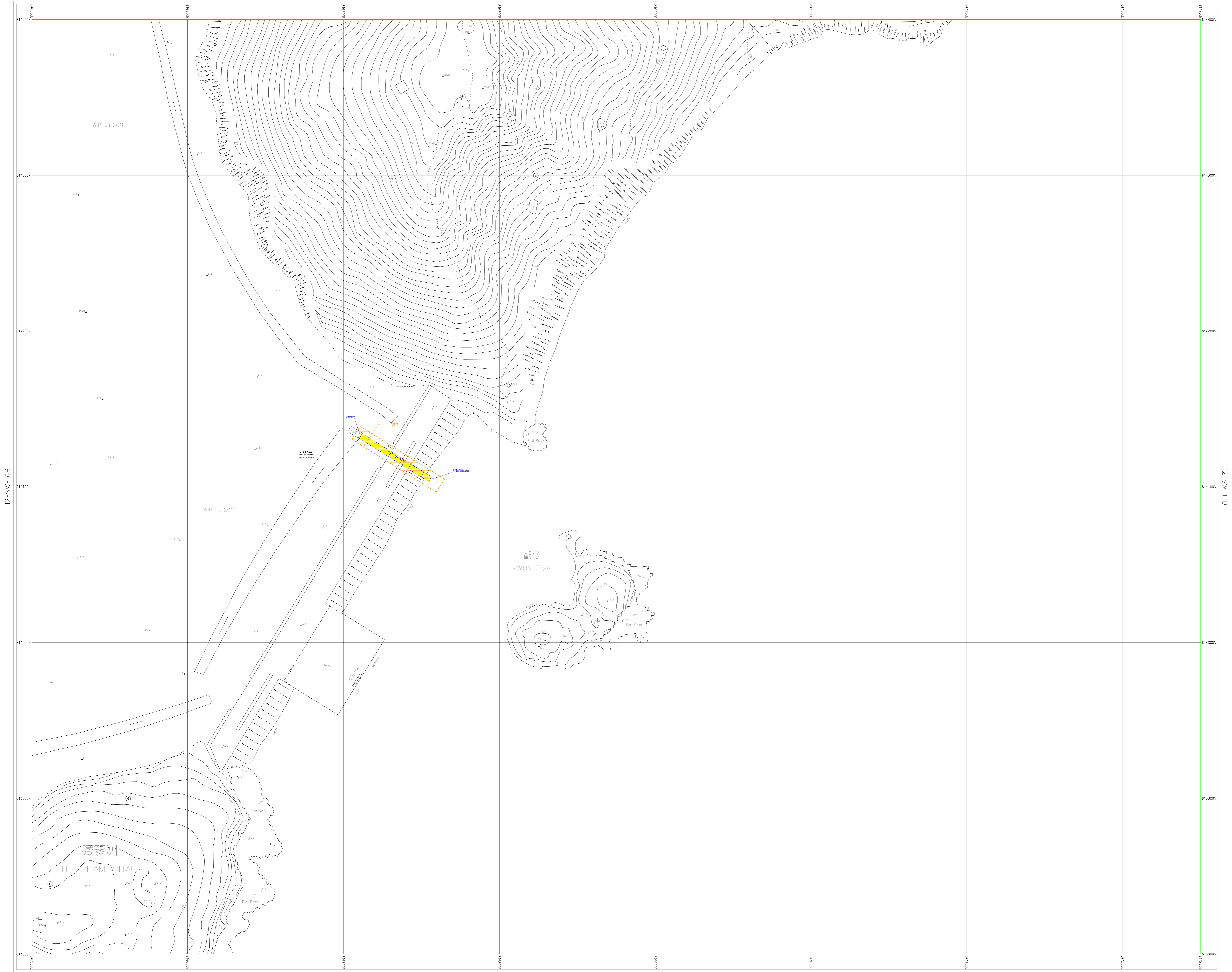
Last Updating : 11-09-2003

Map data renewed on January 2011

5. The Incoming Pipes are marked A1, A2, A3, counting clockwise from the first Outgoing Pipe X1. Outgoing Pipes are marked X1, X2, X3 ... counting clockwise from North.

6. Piling foundations on culverts may be present but not shown for brevity. Please refer to the relevant as-built drawings on details of the pile foundation.

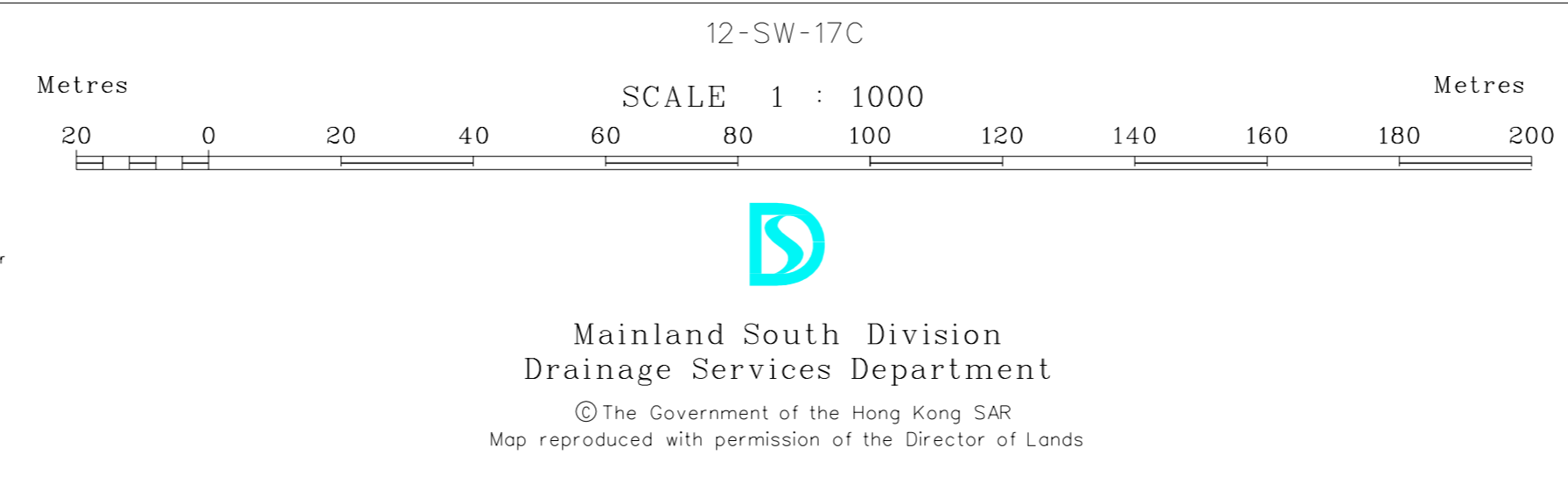
7. Drainage facilities maintained by other parties, if shown, are indicative only. It is no guarantee that these information are exact.



12-SW-16B

12-SW-17B

Legend :



- Notes :**
- All levels are in mPD.
 - All dimensions shown are in millimetres unless otherwise stated.
 - The information shown on the record drawings are subject to verification on site and no guarantee can be given that this is a complete record.
 - Abbreviations for Channels of width smaller or equal to 1200mm:
 - 900C - 900mm width Surface Channel
 - 900UC - 900mm width U Channel
 - 900DFC - 900mm width Dry Weather Flow Channel

Drainage Record Sheet Number

12-SW-17A

Last Updating : 20-09-1995

Map data renewed on July 2011

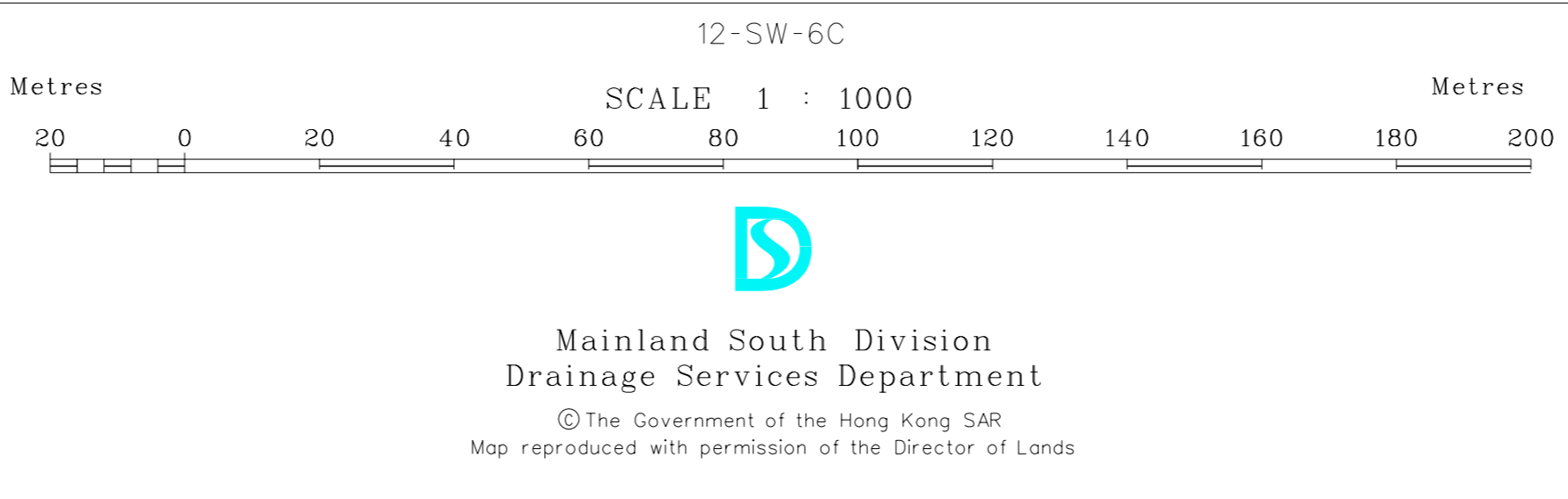
5. The Incoming Pipes are marked A1, A2, A3, counting clockwise from the first Outgoing Pipe X1. Outgoing Pipes are marked X1, X2, X3 ... counting clockwise from North.

6. Piling foundations on culverts may be present but not shown for brevity. Please refer to the relevant as-built drawings on details of the pile foundation.

7. Drainage facilities maintained by other parties, if shown, are indicative only. It is no guarantee that these information are exact.



Legend :



- Notes :**
- All levels are in mPD.
 - All dimensions shown are in millimetres unless otherwise stated.
 - The information shown on the record drawings are subject to verification on site and no guarantee can be given that this is a complete record.
 - Abbreviations for Channels of width smaller or equal to 1200mm:
 - 900C - 900mm width Surface Channel
 - 900SC - 900mm width Stepped Channel
 - 900UC - 900mm width U Channel
 - 900WFC - 900mm width Dry Weather Flow Channel

Drainage Record Sheet Number

12-SW-6A

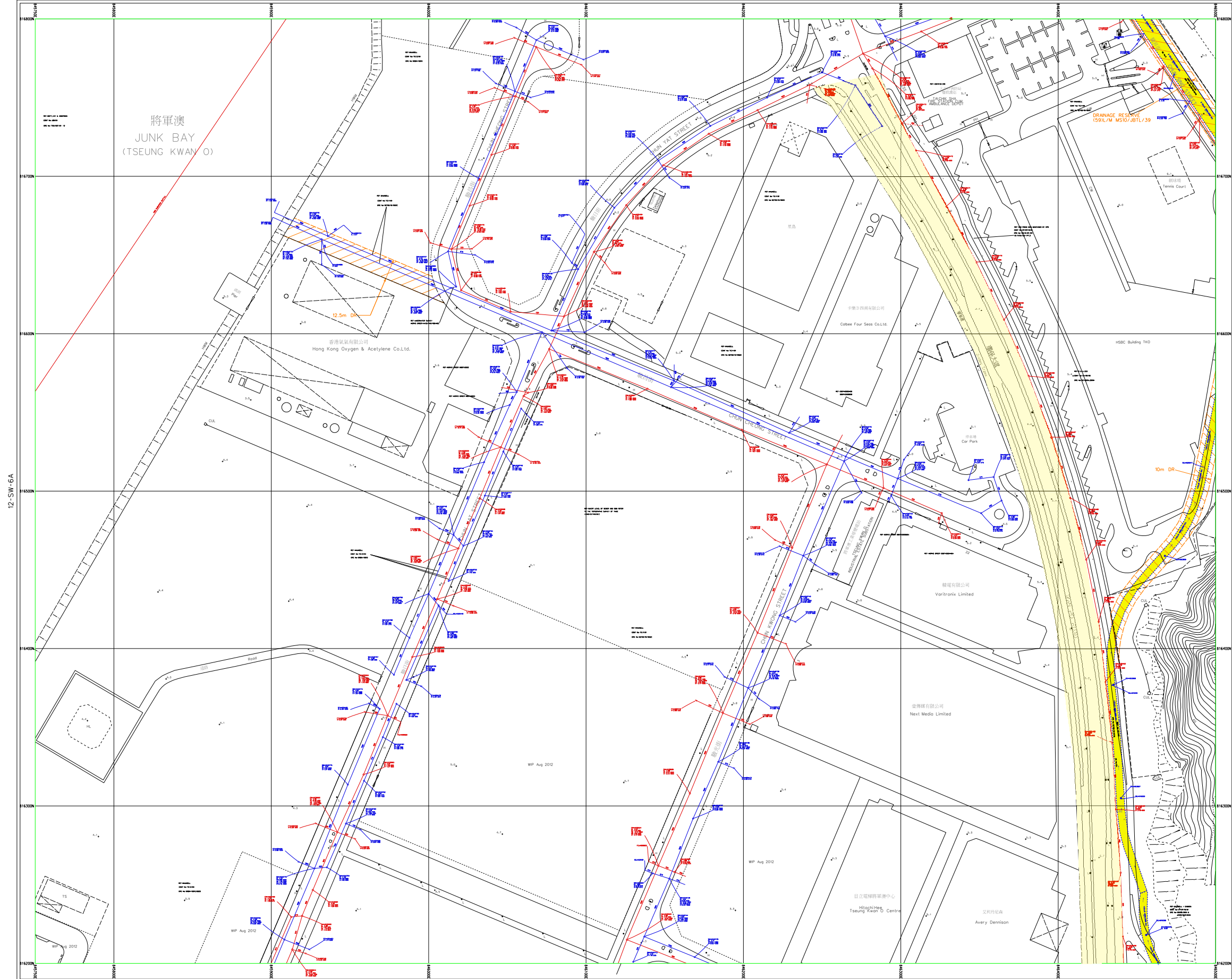
Last Updating : 01-09-1997

Map data renewed on June 2011

5. The Incoming Pipes are marked A1, A2, A3, counting clockwise from the first Outgoing Pipe X1. Outgoing Pipes are marked X1, X2, X3 ... counting clockwise from North.

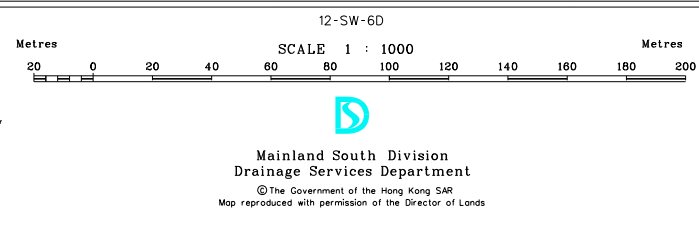
6. Piling foundations on culverts may be present but not shown for brevity. Please refer to the relevant as-built drawings on details of the pile foundation.

7. Drainage facilities maintained by other parties, if shown, are indicative only. It is no guarantee that these information are exact.



Legend:

Storm Water Manhole	Existing Pipe (Storm/Sewer/Combined)	Gully / Gully	Slope Sign Board
Storm Water Terminal Manhole	Existing Pipe (Storm/Sewer/Combined) (Planning / Identifying to be Abandoned)	Tapping Point (Storm/Sewer)	Slope Number
Sewer Terminal Manhole	Proposed Pipe (Storm/Sewer)	Interface Valve Chamber	Proposed Submarine Outfall with Diffuser
Combined Manhole	Works in Progress Pipe (Storm/Sewer)	GI / Polyinterceptor	Proposed Submarine Outfall with Diffuser
Catchpit	Abandoned Pipe	Valve	Works in Progress Submarine Outfall with Diffuser
Destating Opening	Abandoned Pipe (Filled with Materials)	Water Gauge	Works in Progress Submarine Outfall with Diffuser
Inspection Opening	Existing U Channel / Stepped Channel (Storm)	Spot Level (Storm/Sewer)	Neighbour Area Treatment Scheme
Dry Weather Flow Interceptor	Proposed U Channel / Stepped Channel (Storm)	Existing Y-Junction (Storm/Sewer/Combined)	Sewage Tunnel Protection Area (100m width)
Trap	Works in Progress U Channel / Stepped Channel (Storm)	Water Gauge	Sewage Tunnel Protection Area (120m width)
Sand Trap	Rising Main	Drainage Reserve	Neighbour Area Treatment Scheme
Man	Vacuum Sewer		Sewage Tunnel Protection Area (100m width)
Outlet			Sewage Tunnel Protection Area (120m width)
Box Culvert (Storm/Sewer)			Neighbour Area Treatment Scheme

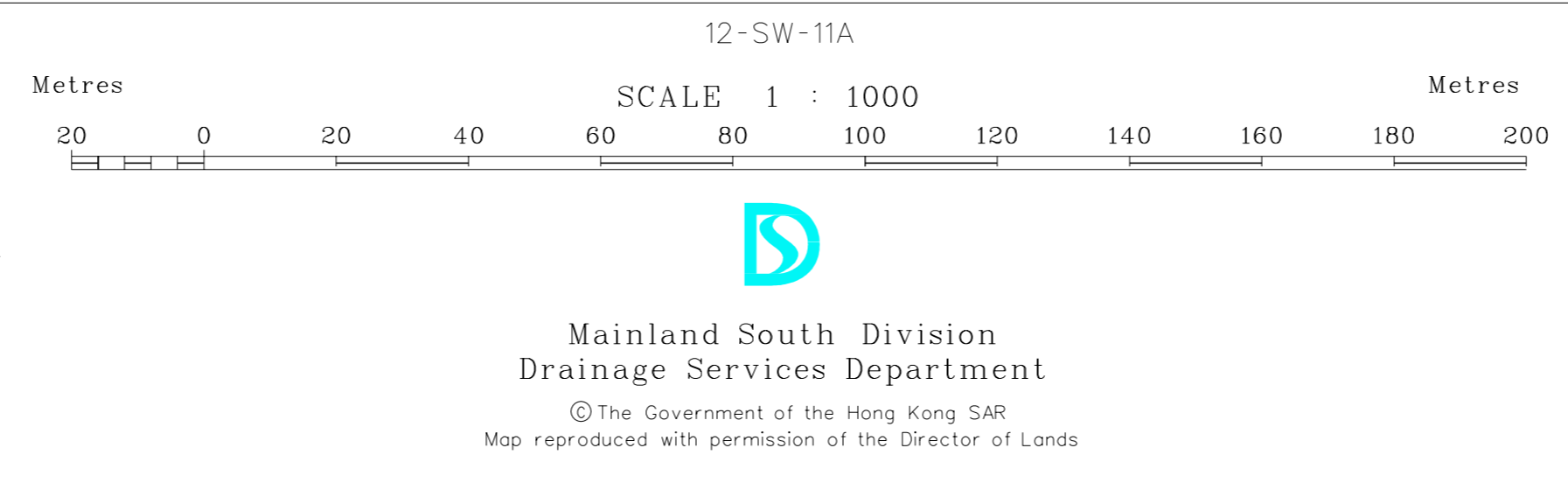


- Notes:**
- All levels are in mPD.
 - All dimensions shown are in millimetres unless otherwise stated.
 - The information shown on the record drawings are subject to verification on site and no guarantee can be given that this is a complete record.
 - Abbreviations for Channels of width smaller or equal to 1200mm:
900SC - 900mm width Surface Channel
900UC - 900mm width U Channel
900DFC - 900mm width Dry Weather Flow Channel
 - The Incoming Pipes are marked A1, A2, A3, ... counting clockwise from the first Outgoing Pipe X1. Outgoing Pipes are marked X1, X2, X3 ... counting clockwise from North.
 - Piling foundations on culverts may be present but not shown for brevity. Please refer to the relevant as-built drawings on details of the pile foundation.
 - Drainage facilities maintained by other parties, if shown, are indicative only. It is no guarantee that these information are exact.
- Drainage Record Sheet Number
12-SW-6B
Last Updating: 02-04-2013
Map data released on October 2012



Legend :

<ul style="list-style-type: none"> Storm Water Manhole Storm Water Terminal Manhole Sewer Manhole Sewer Terminal Manhole Combined Manhole Catchpit Desludging Opening Inspection Opening Dry Weather Flow Interceptor Sand Trap Wlet Outlet Box Culvert (Storm/Sewer) 	<ul style="list-style-type: none"> Existing Pipe (Storm/Sewer/Combined) Existing Pipe (Storm/Sewer/Combined) (Planning / Identifying to be Abandoned) Proposed Pipe (Storm/Sewer) Works In Progress Pipe (Storm/Sewer) Abandoned Pipe Abandoned Pipe (Filled with Materials) Existing U Channel / Stepped Channel (Storm) Proposed U Channel / Stepped Channel (Storm) Works In Progress U Channel / Stepped Channel (Storm) Sliding Man Vacuum Sump Drainage Reserve 	<ul style="list-style-type: none"> Gully Sump / Gully Tapping Point (Storm/Sewer) Overflow (Sewer/Combined) Interface Valve Chamber Oil / Petrol Interceptor Valve Water Gauge Spot Level (Storm/Sewer) 	<ul style="list-style-type: none"> Slope Sign Board Slope Boundary 200 Submarine Outfall Existing Submarine Outfall with Diffuser 200 Submarine Outfall Proposed Submarine Outfall with Diffuser 200 Submarine Outfall Works In Progress Submarine Outfall with Diffuser Harbour Area Treatment Scheme Sewage Tunnel Protection Area (100m width) 200 Submarine Outfall 200 Submarine Outfall Harbour Area Treatment Scheme Sewage Tunnel Protection Area (200m width) 200 Submarine Outfall 200 Submarine Outfall
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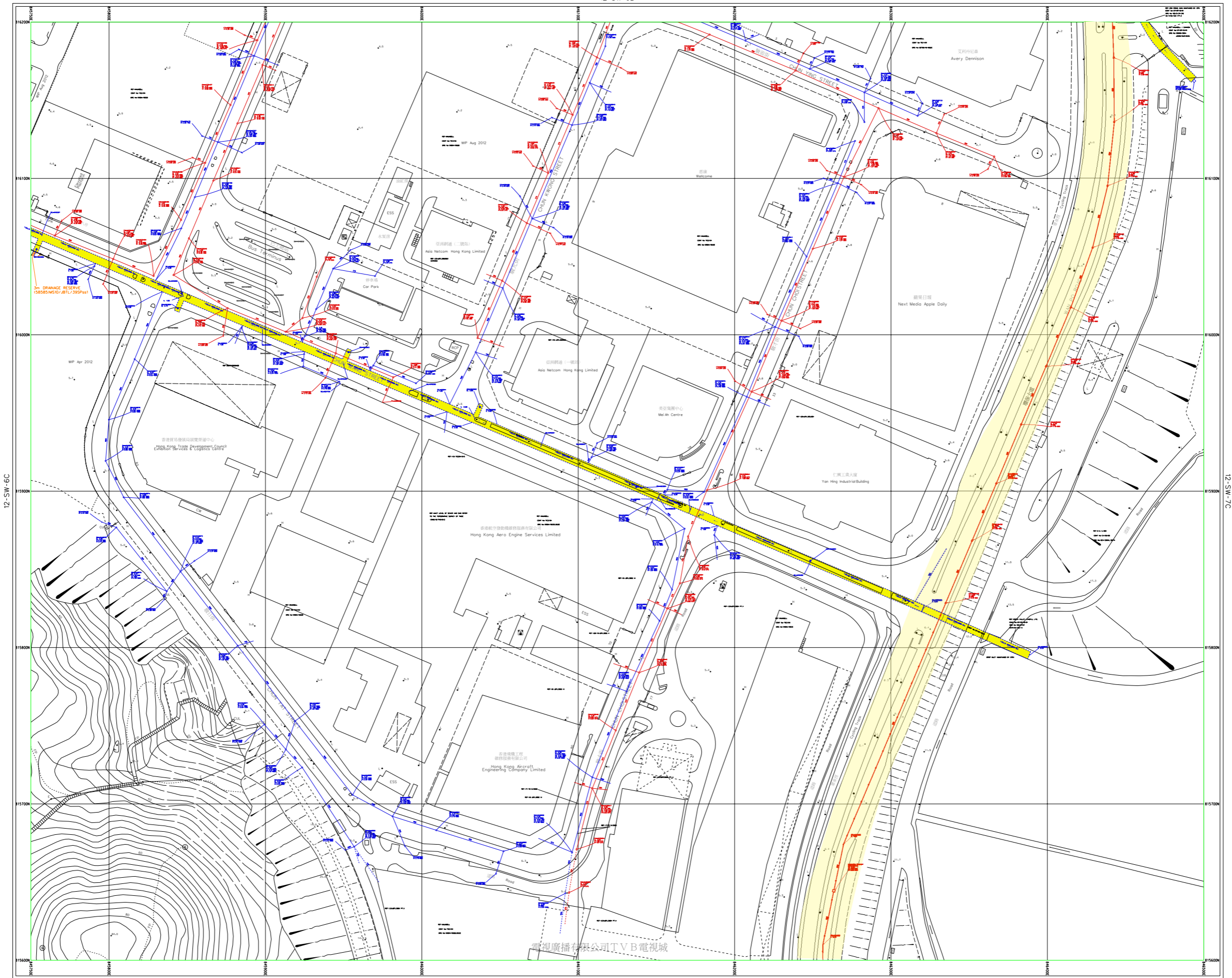


Notes :

- All levels are in mPD.
- All dimensions shown are in millimetres unless otherwise stated.
- The information shown on the record drawings are subject to verification on site and no guarantee can be given that this is a complete record.
- Abbreviations for Channels of width smaller or equal to 1200mm:
 - 900C - 900mm width Surface Channel
 - 900UC - 900mm width U Channel
 - 900DWC - 900mm width Dry Weather Flow Channel
- The Incoming Pipes are marked A1, A2, A3, ... counting clockwise from the first Outgoing Pipe X1. Outgoing Pipes are marked X1, X2, X3 ... counting clockwise from North.

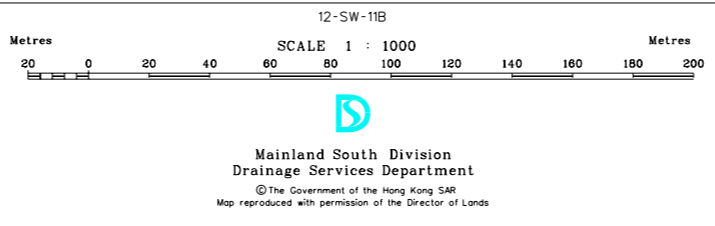
Drainage Record Sheet Number
12-SW-6C
Last Updating : 27-09-2007
Map data renewed on June 2011

- Piling foundations on culverts may be present but not shown for brevity. Please refer to the relevant as-built drawings on details of the pile foundation.
- Drainage facilities maintained by other parties, if shown, are indicative only. It is no guarantee that these information are exact.



Legend:

Storm Water Manhole	Existing Pipe (Storm/Sewer/Combined)	Manhole	Spot Level (Storm/Sewer)
Storm Water Terminal Manhole	Existing Pipe (Storm/Sewer/Combined) (Planning / Identifying to be Abandoned)	Proposed Pipe (Storm/Sewer)	Works in Progress U Channel / Stepped Channel (Storm)
Sewer Manhole	Abandoned Pipe	Abandoned Pipe (Filled with Materials)	Works in Progress U Channel / Stepped Channel (Storm)
Sewer Terminal Manhole	Works in Progress Pipe (Storm/Sewer)	Existing U Channel / Stepped Channel (Storm)	Proposed U Channel / Stepped Channel (Storm)
Combined Manhole	Abandoned Pipe (Filled with Materials)	Proposed U Channel / Stepped Channel (Storm)	Works in Progress U Channel / Stepped Channel (Storm)
Calcipit	Existing U Channel / Stepped Channel (Storm)	Proposed U Channel / Stepped Channel (Storm)	Works in Progress U Channel / Stepped Channel (Storm)
Destating Opening	Proposed U Channel / Stepped Channel (Storm)	Works in Progress U Channel / Stepped Channel (Storm)	Works in Progress U Channel / Stepped Channel (Storm)
Dry Weather Flow Interceptor	Works in Progress U Channel / Stepped Channel (Storm)	Works in Progress U Channel / Stepped Channel (Storm)	Works in Progress U Channel / Stepped Channel (Storm)
Sand Trap	Works in Progress U Channel / Stepped Channel (Storm)	Works in Progress U Channel / Stepped Channel (Storm)	Works in Progress U Channel / Stepped Channel (Storm)
Wet	Works in Progress U Channel / Stepped Channel (Storm)	Works in Progress U Channel / Stepped Channel (Storm)	Works in Progress U Channel / Stepped Channel (Storm)
Outlet	Works in Progress U Channel / Stepped Channel (Storm)	Works in Progress U Channel / Stepped Channel (Storm)	Works in Progress U Channel / Stepped Channel (Storm)
Box Culvert (Storm/Sewer)	Works in Progress U Channel / Stepped Channel (Storm)	Works in Progress U Channel / Stepped Channel (Storm)	Works in Progress U Channel / Stepped Channel (Storm)
	Works in Progress U Channel / Stepped Channel (Storm)	Works in Progress U Channel / Stepped Channel (Storm)	Works in Progress U Channel / Stepped Channel (Storm)



Notes:

- All levels are in mPD.
- All dimensions shown are in millimetres unless otherwise stated.
- The information shown on the record drawings are subject to verification on site and no guarantee can be given that this is a complete record.
- Abbreviations for Channels of width smaller or equal to 1200mm:
 - 900C - 900mm width Surface Channel
 - 900SC - 900mm width Stepped Channel
 - 900UC - 900mm width U Channel
 - 900WFC - 900mm width Dry Weather Flow Channel
- The incoming Pipes are marked A1, A2, A3, ... counting clockwise from the first Outgoing Pipe X1. Outgoing Pipes are marked X1, X2, X3 ... counting clockwise from North.
- Piling foundations on culverts may be present but not shown for brevity. Please refer to the relevant as-built drawings on details of the pile foundation.
- Drainage facilities maintained by other parties, if shown, are indicative only. It is no guarantee that these information are exact.

Drainage Record Sheet Number
12-SW-6D
Last Updating: 21-01-2013
Map data renewed on May 2012



12-SW-6B

12-SW-7B

Legend:

12-SW-7C

Metres

SCALE 1 : 1000

Metres

Mainland South Division
Drainage Services Department
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Notes:

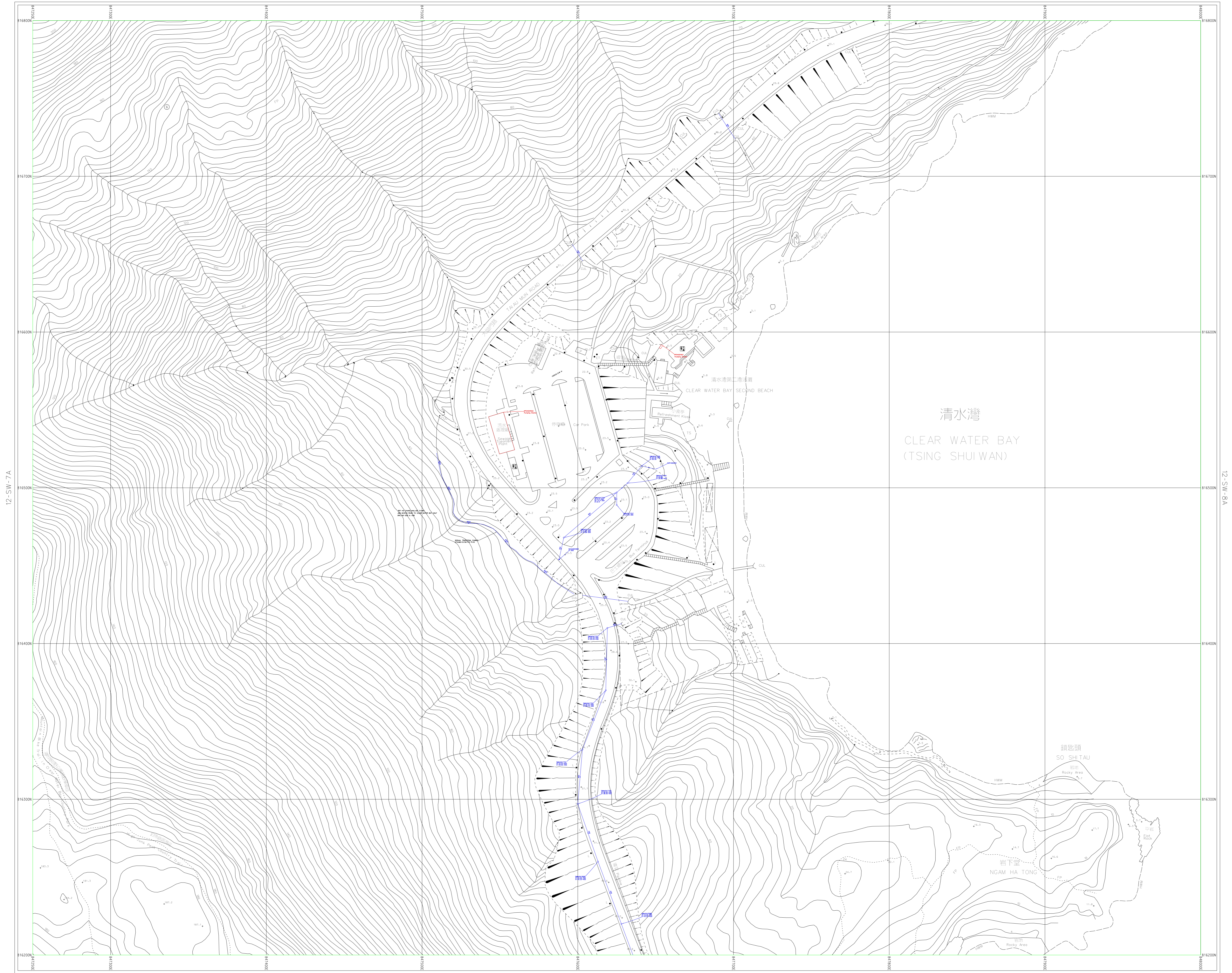
- All levels are in mPD.
- All dimensions shown are in millimetres unless otherwise stated.
- The information shown on the record drawings are subject to verification on site and no guarantee can be given that this is a complete record.
- Abbreviations for Channels of width smaller or equal to 1200mm:
 900C - 900mm width Surface Channel
 900SC - 900mm width Stepped Channel
 900UC - 900mm width U Channel
 900DWFC - 900mm width Dry Weather Flow Channel
- The Incoming Pipes are marked A1, A2, A3, ... counting clockwise from the first Outgoing Pipe X1. Outgoing Pipes are marked X1, X2, X3 ... counting clockwise from North.
- Piling foundations on culverts may be present but not shown for brevity. Please refer to the relevant as-built drawings on details of the pile foundation.
- Drainage facilities maintained by other parties, if shown, are indicative only. It is no guarantee that these information are exact.

Drainage Record Sheet Number

12-SW-7A

Last Updating: 09-06-2006

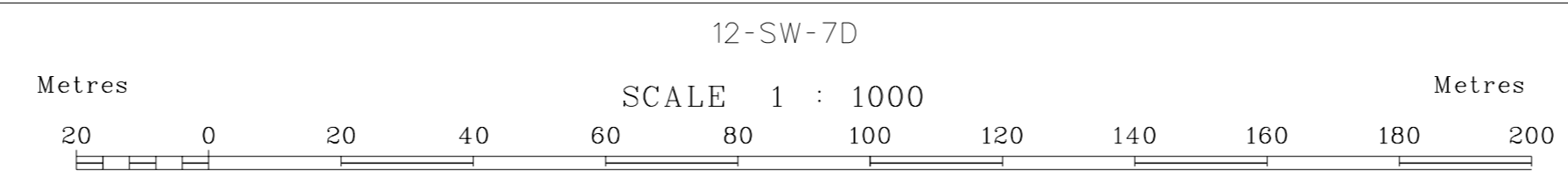
Map data renewed on December 2010



12-SW-7A

12-SW-8A

Legend :

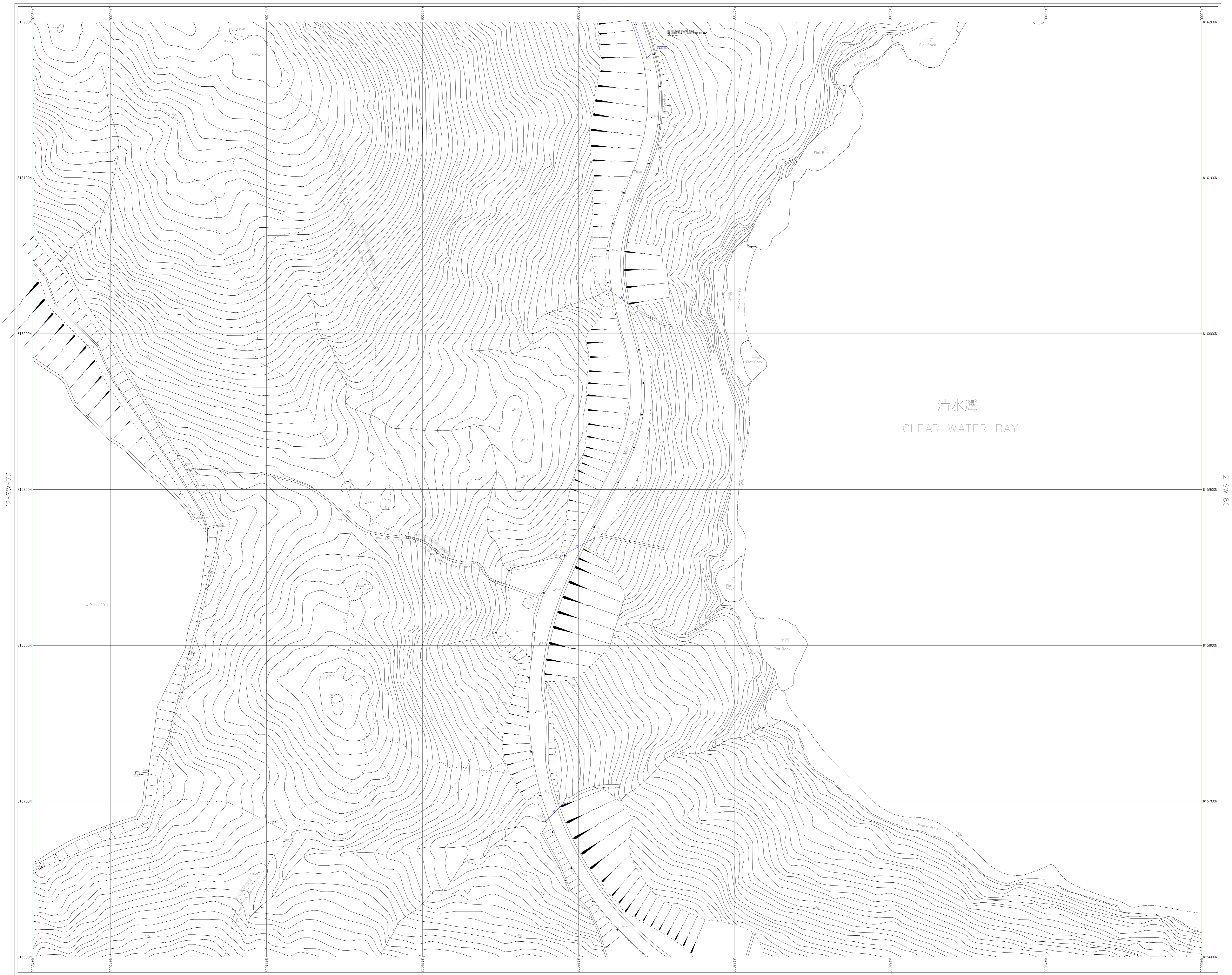


**Mainland South Division
Drainage Services Department**

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- Notes :**
- All levels are in mPD.
 - All dimensions shown are in millimetres unless otherwise stated.
 - The information shown on the record drawings are subject to verification on site and no guarantee can be given that this is a complete record.
 - Abbreviations for Channels of width smaller or equal to 1200mm:
 - 900C - 900mm width Surface Channel
 - 900SC - 900mm width Stepped Channel
 - 900UC - 900mm width U Channel
 - 900DFWC - 900mm width Dry Weather Flow Channel

- Drainage Record Sheet Number**
- 12-SW-7B
- Last Updating : 01-08-2002
- Map data renewed on October 2011
- The Incoming Pipes are marked A1, A2, A3, counting clockwise from the first Outgoing Pipe X1. Outgoing Pipes are marked X1, X2, X3 ... counting clockwise from North.
 - Manhole number
 - Cover Level or Ground Level
 - 225mm dia. Incoming Pipe Invert Level
 - 375mm dia. Incoming Pipe Invert Level
 - 525mm dia. Outgoing Pipe Invert Level
 - Piling foundations on culverts may be present but not shown for brevity. Please refer to the relevant as-built drawings on details of the pile foundation.
 - Drainage facilities maintained by other parties, if shown, are indicative only. It is no guarantee that these information are exact.



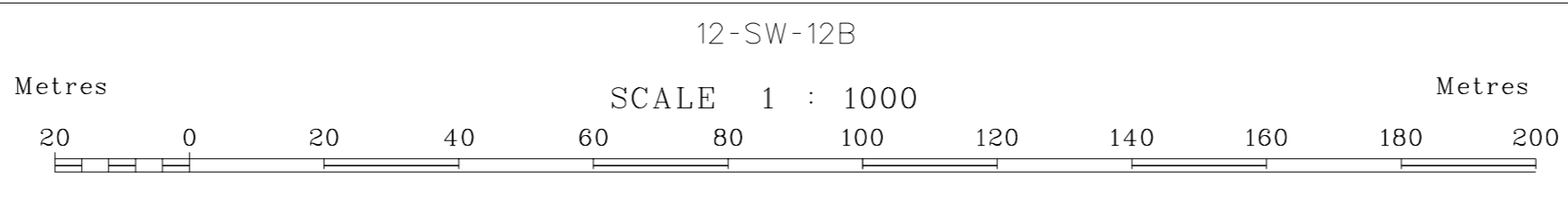
12-SW-7C

12-SW-8C

清水灣
CLEAR WATER BAY

Legend :

<ul style="list-style-type: none"> Storm Water Manhole Storm Water Terminal Manhole Sewer Manhole Sewer Terminal Manhole Combined Manhole Catchpit Desludging Opening Inspection Opening Dry Weather Flow Interceptor Sand Trap Wicket Outlet Box Culvert (Storm/Sewer) 	<ul style="list-style-type: none"> Existing Pipe (Storm/Sewer/Combined) Existing Pipe (Storm/Sewer/Combined) (Planning / Identifying to be Abandoned) Proposed Pipe (Storm/Sewer) Works in Progress Pipe (Storm/Sewer) Abandoned Pipe Abandoned Pipe (Filled with Material) Existing U Channel / Stepped Channel (Storm) Proposed U Channel / Stepped Channel (Storm) Works in Progress U Channel / Stepped Channel (Storm) Rising Man Vacuum Sewer Drainage Reserve 	<ul style="list-style-type: none"> Gully Sump / Gully Tapping Point (Storm/Sewer) Overflow (Sewer/Combined) Interface Valve Chamber Oil / Petrol Interceptor Valve Water Gauge Spot Level (Storm/Sewer) Slope Sign Board Slope Number Slope Boundary 300 Submarine Outfall 400 Submarine Outfall 500 Submarine Outfall Existing Submarine Outfall with Diffuser Proposed Submarine Outfall with Diffuser Works in Progress Submarine Outfall with Diffuser Harbour Area Treatment Scheme Sewage Tunnel Protection Area (120m width) Works in Progress Sewage Tunnel Protection Area (120m width) Harbour Area Treatment Scheme Sewage Tunnel Outer Protection Area (220m width) Works in Progress Sewage Tunnel Outer Protection Area (220m width)
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**Mainland South Division
Drainage Services Department**
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- Notes :**
- All levels are in mPD.
 - All dimensions shown are in millimetres unless otherwise stated.
 - The information shown on the record drawings are subject to verification on site and no guarantee can be given that this is a complete record.
 - Abbreviations for Channels of width smaller or equal to 1200mm:
 - 900C - 900mm width Surface Channel
 - 900SC - 900mm width Stepped Channel
 - 900UC - 900mm width U Channel
 - 900DWFC - 900mm width Dry Weather Flow Channel

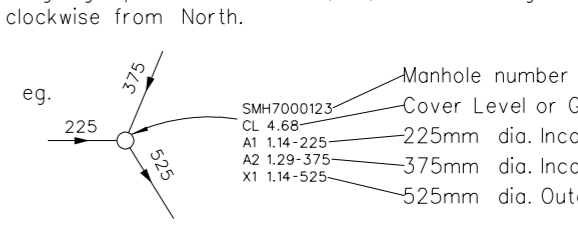
Drainage Record Sheet Number

12-SW-7D

Last Updating - 01-07-1997

Map data renewed on December 2010

5. The Incoming Pipes are marked A1, A2, A3, counting clockwise from the first Outgoing Pipe X1. Outgoing Pipes are marked X1, X2, X3 ... counting clockwise from North.

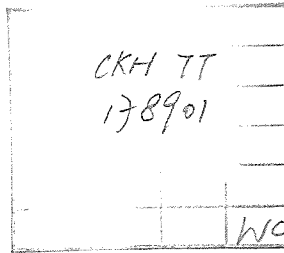


6. Piling foundations on culverts may be present but not shown for brevity. Please refer to the relevant as-built drawings on details of the pile foundation.

7. Drainage facilities maintained by other parties, if shown, are indicative only. It is no guarantee that these information are exact.

06 September, 2013

Black & Veatch HK Ltd
25/F, Millennium City 6
392 Kwun Tong Road
Kowloon



中華電力有限公司
CLP Power Hong Kong Limited

東西區
East & West Region

香港九龍佐敦道華路一號百周年大樓
Centenary Building, 1 To Wah Road
Jordan, Kowloon, Hong Kong

電話 Tel (852) 2678 3838
傳真 Fax (852) 2678 3737
電郵 Email we@clp.com.hk
網址 Website www.clpgroup.com

13 SEP 11 15:44

Attention : Christina K. Hartinger

Our ref.: W-2013-3276
Your ref.: 178901-0074

Dear Sir/Madam,

Agreement No. CE21/2012 (WS)
Desalination Plant at Tseung Kwan O - Feasibility Study
Project Interface

We refer to your letter dated 27 August, 2013 and enclose herewith our record sheet(s) showing the present location(s) of this Company's underground cables and / or overhead lines. Also shown is our proposed new equipment as currently planned. The alignments of the cables and overhead lines could be altered in the future to meet the requirements of our power system.

You will find certain measurements, dimensions and distances marked on these record sheets. Although these figures are accurate to the best of our knowledge, information and belief, site conditions may have been altered since the measurements were taken. As such, CLP Power's record sheets are sent to you on the express condition that the locations of the underground cables and / or overhead lines and all measurements are our best approximation only, and should not be taken as accurate.

We request you, for the sake of safety, not to disturb any part of our equipment and not to construct manholes over and on top of our cable joints. No work or excavation shall be done in close proximity to any of this equipment without giving prior notice to us. We shall hold you responsible for any damage caused to our equipment.

You are advised to contact our Operations Engineer - SK & TKO, M.F. Wu on telephone number 2678 1561 as soon as you are ready to commence work. To facilitate site co-ordination, please provide us with the name(s) of the responsible person(s), contact telephone number and tentative work commencement date.

2/.....

Cont. Page 2 of 2
Our ref. : W-2013-3276

Please be informed that the record of public lighting within your work site should be referred to Lighting Division of Highways Department on telephone number 2370 4830 for details.

Yours faithfully,
For and on behalf
CLP Power Hong Kong Limited

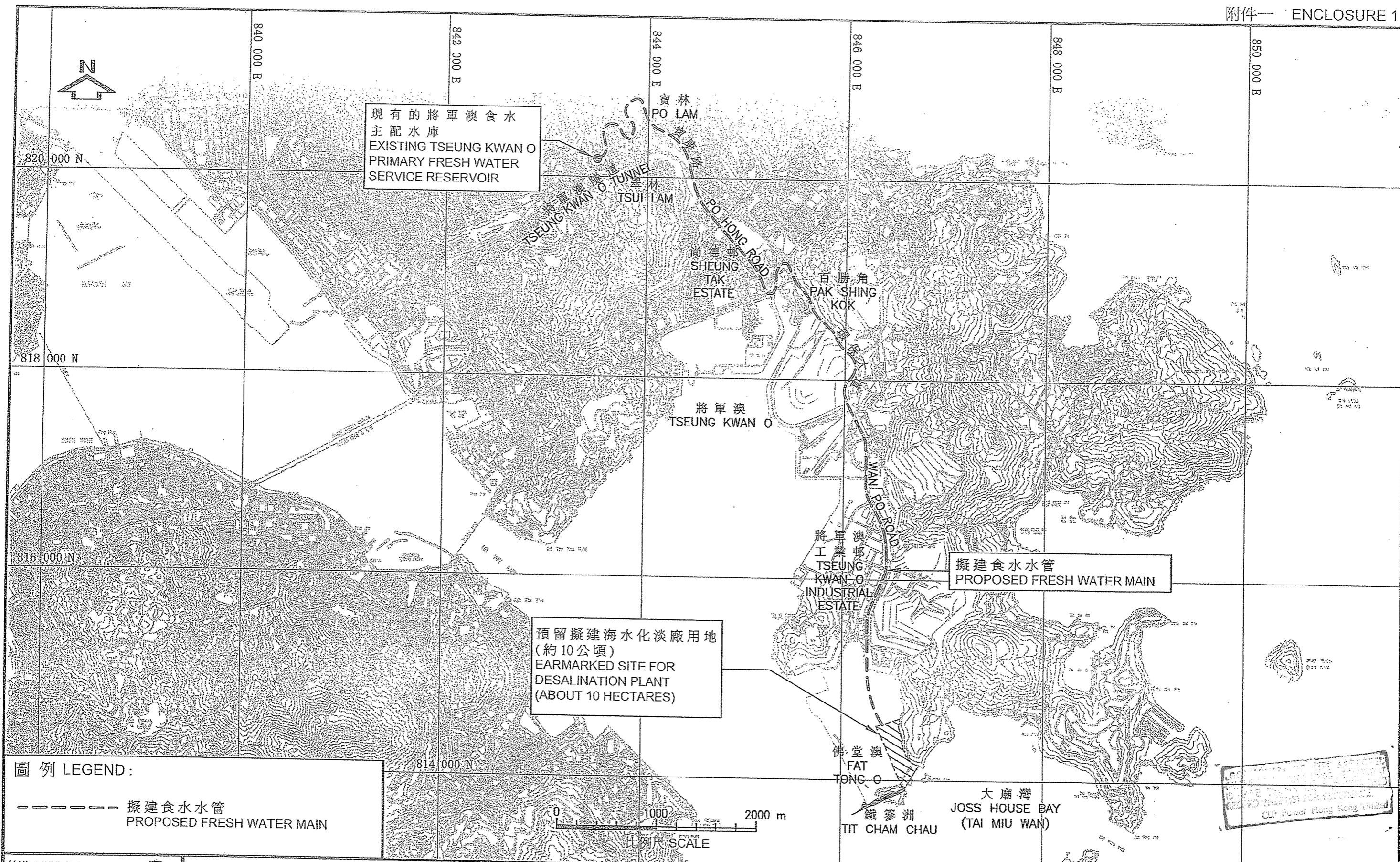


K.L. Kwan
for Senior Planning & Design Manager
(East & West Region)

cc. Maintenance - PAK CHI WA

- Encl.:1. Guidelines For Contractors Working In The Vicinity Of Electricity Cables
And Overhead Lines
2. EMSD Reference Document No. NU/26/01
3. Drawing Reference No. : W-2013-3276-001 to W-2013-3276-006

P.S. You are advised to note a Video For Contractors Working In The Vicinity Of
Electricity Cables And Overhead Lines via a link of ([https://www.clp.com.hk/
ourvalues/social/qualityandsafety/contractorsafety/Documents/EMSD.aspx](https://www.clp.com.hk/ourvalues/social/qualityandsafety/contractorsafety/Documents/EMSD.aspx))



圖例 LEGEND:

----- 擬建食水水管
PROPOSED FRESH WATER MAIN

核准 APPROVED

總工程師/專門工程師管理 CE/CM

314/2012

工務計劃項目第 345WF 號 --- 將軍澳海水化淡廠工程策劃及勘查研究

P.W.P. ITEM NO. 345WF --- PLANNING AND INVESTIGATION STUDY OF DESALINATION PLANT AT TSEUNG KWAN O

水務署
WATER SUPPLIES DEPARTMENT

草圖編號
SKETCH NO. SK 62011 / 500



REV.	DESCRIPTION	DATE	CHK.
------	-------------	------	------

ENGINEERING PROJECTS

DESIGNED:	SIMON SO	2 / 9 / 2013
DRAWN:	C. M. CEHN	3 / 9 / 2013
CHECKED:	SIMON SO	4 / 9 / 2013
APPROVED:	KEVIN CHAN	5 / 9 / 2013

PROJECT NO.: 04570

LOCATION: TSEUNG KWAN O

TITLE:
 PROPOSED 132KV CABLE ROUTES FOR ESTABLISHMENT OF CHUN YAT STREET SUBSTATION
 (1) CLR-TKM RMU No.2
 (2) CYS-TKE
 (3) CLR-CYS No.1&2
 (KEY PLAN)

SHEET IN SET: 8 SHEET NO.: 01

SCALE: 1 : 5000 (A1)

CONTRACTOR/SUPPLIER:

CONTRACT NO.:

CONTRACTORS/SUPPLIERS DRAWING NO.:

DRAWING NO. T C Y S 1 0 5 5 0 D E 3 3 8 0 0 0 0 1 - S



Legend

10KV CABLE SUBMERSE CABLES	10KV OVERHEAD LINE	10KV OVERHEAD LINE (PHASE)	TEMPERATURE SENSING CABLE (TSC)
THROUGH DUCT 10KV CABLE	10KV OVERHEAD LINE (INSULATED)	10KV OVERHEAD LINE (PHASE)	APICAL SWATH WIRE (ASW)
AS BUILT 10KV CABLE	10KV OVERHEAD LINE (INSULATED)	10KV OVERHEAD LINE (PHASE)	OVERHEAD LINE FIBRE OPTIC
10KV OVERHEAD LINE TOWER	10KV OVERHEAD LINE (INSULATED)	10KV OVERHEAD LINE (PHASE)	INSULATED CABLE METALLIZATION
10KV OVERHEAD LINE TOWER	10KV OVERHEAD LINE (INSULATED)	10KV OVERHEAD LINE (PHASE)	CLP AIR TERMINAL SUBSTATION
10KV OVERHEAD LINE TOWER	10KV OVERHEAD LINE (INSULATED)	10KV OVERHEAD LINE (PHASE)	CLP AIR TERMINAL SUBSTATION
10KV OVERHEAD LINE TOWER	10KV OVERHEAD LINE (INSULATED)	10KV OVERHEAD LINE (PHASE)	CLP AIR TERMINAL SUBSTATION
10KV OVERHEAD LINE TOWER	10KV OVERHEAD LINE (INSULATED)	10KV OVERHEAD LINE (PHASE)	CLP AIR TERMINAL SUBSTATION
10KV OVERHEAD LINE TOWER	10KV OVERHEAD LINE (INSULATED)	10KV OVERHEAD LINE (PHASE)	CLP AIR TERMINAL SUBSTATION
10KV OVERHEAD LINE TOWER	10KV OVERHEAD LINE (INSULATED)	10KV OVERHEAD LINE (PHASE)	CLP AIR TERMINAL SUBSTATION

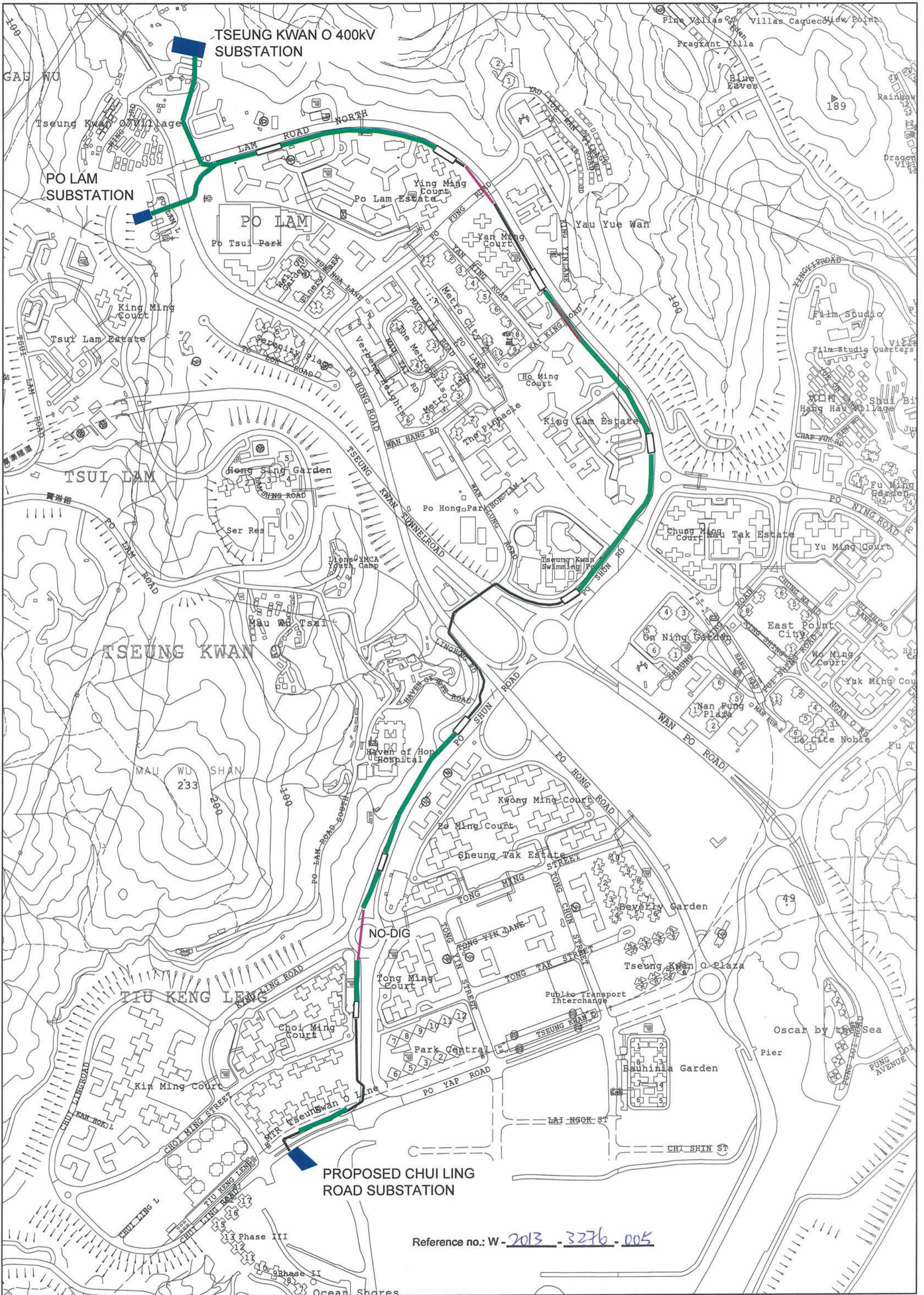


ALL LOCATIONS, MEASUREMENTS, DIMENSIONS AND DISTANCES ARE FOR CLP POWER INTERNAL USE ONLY. THEY SHOULD NOT BE SCALED AND ASSUMED ACCURATE. CLP POWER ACCEPTS NO RESPONSIBILITY IN THE EVENT OF ANY INACCURACY. EXTREME CARE MUST BE EXERCISED WHEN WORKING IN CLOSE PROXIMITY TO OUR EQUIPMENT. PLEASE CONTACT OUR REGIONAL OFFICE AS SOON AS YOU ARE READY TO COMMENCE WORK.

CLP Facility Records Map

11NE20D 12NW22C
12SW01C 12NW16A

Scale: (1:2000)
Printed On: 03-09-2013



Reference no.: W - 2013 - 3276 - 005



Towngas

The Hong Kong and China Gas Company Limited

	o/R		
	CKH TT		
	178901		
			WC

04 July 2013

Your Ref.: 178901-0056

Our Ref. : UNE2013/02319/K

Black & Veatch Hong Kong Limited
25/F, Millennium City 6
392 Kwun Tong Road
Kowloon

Attn. : CHRISTINA K HARTINGER

In view of safety, HKCG provides FREE service to assist the road opening parties to locate the approximate gas pipe alignment on site, Please call **29631811** before work starts.

Dear Sirs

Re: AGREEMENT NO. CE 21/2012 (WS) DESALINATION PLANT AT TSEUNG KWA O - FEASIBILITY STUDY PROJECT INTERFACE

We received your letter of 20 June 2013 requesting drawings on the location of Towngas pipelines. We are attaching the drawings for the location of existing/proposed pipelines that you requested. These drawings are only approximate. The pipes may be located in different positions and depths due to continual road development, system alterations and underground obstructions. Therefore, the exact location may be altered from point to point. There is the possibility that some gas pipes particularly those laid long time ago or laid by other Registered Gas Contractors may not appear in our records. In the case of some unknown pipes being exposed during your construction work, please contact us immediately.

We suggest that you do not work too close to the pipes as any damage to them could create a hazardous accident. You should be very careful when excavating the area. You should locate the exact position and depth of the pipes by making a series of hand-dug trial holes. Heavy machinery such as drills or mechanical excavators cannot be used to do this. If your company damages our pipelines, you will be responsible for all resultant costs.

We would also like to remind you not to disturb any part of Towngas pipeline or their associated properties and not to temporarily or permanently encase part or all of our gas pipes in any form of concrete structures. Please provide steel gas pipes a clearance of 600mm and other gas pipes a clearance of 300mm. This space is necessary for future maintenance.

If your work involves construction of new manholes or performing operation in existing manholes, we recommend sealing off all the duct openings in new/existing manholes, to avoid accumulation of hazardous gas in manholes, which might create a dangerous explosive environment.

Should your proposed works involving any kind of trenchless technology, you should approach HKCG to discuss the protective and safety precautionary measures before your work commences, as well as the monitoring procedures to be implemented throughout the entire construction period in order to ensure the integrity of existing gas facilities will not be affected.

If you want to divert gas pipes, we must have at least two months and six months notice respectively for distribution and transmission networks before commencing our planning works. Your company will be responsible for the full cost of any diversion. A written agreement will be required before we begin any diversion.

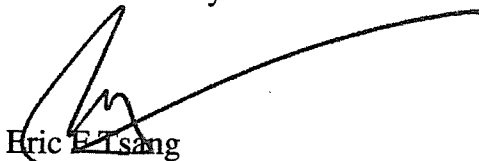
SAFETY:

1. If a gas pipe is damaged or a leak is suspected, phone the Emergency Services Hotline, 28806999, immediately. Also, keep all ignition sources away from the site.
2. Cigarette smoking is prohibited when working near the pipelines.
3. In case of a leak, stop work, evacuate all employees and the public from the area.
4. Construction activities require naked fire must not be applied within 3 meters proximity of exposed gas pipes without prior approval under proper management procedures, such as permit to work, etc.

Please contact Mr Chan Yuen Lok on 2963 1811 for the matters related to existing pipeline or to arrange for a joint site inspection regarding the pipe location. Further, you must notify us at least one week before beginning work on site. For enquiry of proposed pipeline, if any, or availability of gas supply, please contact Mr Y L Lau on 2963 1830.

You may provide us your E-mail address so that we can send the drawings to you by E-mail. If you want further information or the drawings in different scale, you can write to us by quoting the reference of this letter.

Yours faithfully


Eric E. Tsang
System Development Manager

ET/une

Encl. Get All Safe Leaflet

General Requirements For Construction Work In The Vicinity Of Gas Main
General Requirements of Construction Works Adjacent to the Existing Gas Station (GS)
Avoiding Danger from Underground Gas Pipes and Electricity Cables Leaflet

General Requirements of Construction Works Adjacent to the Existing Gas Station (GS)

1. Contact HKCG at least one month in advance for site inspection before commencement of construction work adjacent to the GS.
2. Should any vibration is induced by the construction works, the vibration force acting on the gas facilities inside GS should not be more than 13mm/s PPV and 0.1mm vibrational amplitude.
3. The station access shall be maintained at all time.
4. The site should be kept reasonably level, adequately drained and free from flooding, landslip and subsidence.
5. The contractor should keep clear of the existing drainage system for preventing the station from flooding throughout the construction period.
6. Minimum clearance from inlet and outlet gas pipeline of GS shall be 2.5 metres and the span of exposed pipe section should not be longer than 8 metres and 2.2 metres for steel and D.I. gas pipes respectively.
7. Minimum clearance from the station boundary shall be 1.0 metre from the toe wall of palisade fence and the fence should never be used as a path or a conductor for welding process.
8. Operating range of any tower crane or lifting appliances should be outside GS. Risk assessment should be conducted so that the gas facilities inside GS will not be affected even in case the worst of tower crane / high-rise scaffolding collapse especially during strong wind season.
9. In case of emergency, contact HKCG at 2880 6999 which is manned 24 hours.



Towngas

The Hong Kong and China Gas Company Limited

[此乃中文譯本，內容以英文本為準]

來函編號：_____

本函編號：_____

_____先生/小姐

查詢煤氣管道

茲收到貴公司於____年__月__日發出的函件，索取有關煤氣管道位置的圖則。現隨函附上一份現有及擬建管道位置的圖則，此等圖則只作工程參考之用，管道的實際位置和深度可能因為道路的發展、系統的改變及地下設施的阻礙而與圖則所示有些微差距。另外，部分現有的管道是由其他的註冊氣體工程承辦商鋪設或是建於很久之前，以致本公司沒有相關的記錄。貴公司在施工期間如發現來歷不明的管道，請即與本公司聯絡。

本公司建議貴公司切勿在煤氣管道附近施工，以免引起嚴重意外，在施工期間務必要加倍小心。貴公司須以人手開挖探孔來確定煤氣管道的位置及深度，不能使用重型機械如機動探孔機或挖土機。如貴公司損毀本公司的煤氣管道，一切因事故所引致的支出及費用，將全部由貴公司承擔。

請注意不要移動煤氣管道以及相關的配件，也不可以用任何混凝土結構臨時或永久套入部分或全部煤氣管道。為方便本公司日後進行維修保養工作，貴公司的設施與氣體鋼管之間須保留 600 毫米的間距，與其他氣體管道之間也要保留 300 毫米的間距。

如貴公司的工程包括新建沙井或於現有沙井內進行，本公司建議將沙井內所有導管接口密封，避免積聚危險氣體而可能引致爆炸。

如貴公司的工程採用無坑挖掘方法，在開工前，請聯繫本公司，以便能與貴公司討論在整個施工過程時應採取的保護煤氣管道措施和監察行動，確保煤氣設施的完整性不受影響。

貴公司如需要改動煤氣管道的路線：如屬配氣管道，請於施工前至少兩個月以書面通知本公司；如屬輸氣管道，則須於施工前至少 6 個月發出書面通知，以便作出安排，一切相關費用須由貴公司支付。

安全事項：

1. 如有損毀煤氣管道或懷疑有氣體洩漏，請即致電緊急服務熱線 28806999。此外，也須盡快熄滅所有火種。
2. 在煤氣管道附近工作時嚴禁吸煙。
3. 如有氣體洩漏，請立刻停止工作，並把所有工作人員及公眾人士撤離事發地點。
4. 在外露的煤氣管道 3 米範圍內，不可進行任何使用明火的工序。但於施工前經認可途徑申請並獲有關管理單位批准（如獲發工作准許證等）的工序，則作別論。

關於現有喉管的事宜或如需要本公司就管道位置安排工地視察，請致電 29631811 與陳遠樂先生聯絡。另外，貴公司須在施工前至少一星期通知本公司有關工程的開展日期。如須查詢有關擬建管道或煤氣供應的事宜，請致電 29631830 與劉潤良先生聯絡。

貴公司可提供電郵地址，方便本公司把圖則以電郵傳遞。如貴公司需要更多相關資料或其他比例的圖則，請來函提出並註明本函編號。

系統發展經理

曾帆 謹啟

(日期)

如須查詢本函或管道位置圖上的資料，請致電 29361321 與盧偉生先生聯絡。

輸氣操作部

香港北角渣華道 363 號 20 樓

電話：29631166

圖文傳真：31060527

電子郵件：une@towngas.com

General Requirements For Construction Work In The Vicinity Of Gas Main

1. Notification of work should be circulated as stipulated in the Excavation Permit issued by Highways. The same procedure should also be followed for construction site other than Highways' area.
2. Contact HKCG at least 3 days in advance for excavation adjacent to gas pipe. Site meeting to be arranged whenever required. HKCG could be contacted via 29631811 or 28806999 in case of emergency.
3. When excavation is to be carried out adjacent to a gas main, the exact alignment and profile must be ascertained by a series of hand-dug trial holes.
4. BORING AND DRILLING IN THE VICINITY OF GAS MAIN IS STRICTLY PROHIBITED. HKCG must be consulted first should this work be required.
5. No excavator is allowed for excavation at 1 metre around the gas pipe.
6. No naked flame is allowed adjacent to the gas pipe.
7. Do not encase, even temporarily, part or all of our gas pipes in any form of concrete structure.
8. No machinery should sit directly above our C.I. gas pipes.
9. The velocity and amplitude of vibration acting on the gas pipe by the work must not exceed 25mm/s peak particle velocity and 0.2mm respectively.
10. The velocity and amplitude of vibration acting on the gas governor by the work must not exceed 13mm/s peak particle velocity and 0.1mm respectively.
11. Vibration monitoring records should be forwarded to HKCG for reference.
12. Excavation running close and parallel to the gas pipe should be avoided. Should such excavation be required, discussion/agreement must be sought from HKCG.
13. Suspension of gas pipe to be agreed with HKCG.
14. The gas pipe would normally have a cover of 450mm and 900mm in footpath and carriageway respectively. However, there are cases where gas mains have cover less than the before stated figures. Steel protection plates would normally be laid on top of shallow cover pipe. Due care should be given in subsequent excavation with the presence of steel plate.
15. Report any damage, even superficial, to HKCG for remedial action.
16. Access to HKCG's installations should be maintained at all times for regular inspection and emergency repair.
17. The work should not leave any gas pipe being enclosed in confined spaces.

For Reference Only

18. Sufficient clearance to be maintained for both safety and maintenance purpose. Normally, 600mm and 300mm clearance is required for steel and all other gas pipe respectively.
19. Exposure of PE pipes should be avoided as far as practicable. Where exposure of PE pipes is inevitable, fire resistance protection wrapping of the exposed PE pipes should be installed and agreed with HKCG prior to application.
20. In case of emergency, contact HKCG at 28806999 which is manned 24 hours. If a gas leak is suspected, immediately stop work and evacuate the site personnel from the trenches. It should be noted that gas might travel through underground drains or conduits to other areas of the site. Evacuate the personnel from these areas if this is suspected.
21. HKCG should be consulted prior to any cutting or removal of a decommissioned gas pipe. As there may be residue gas inside a decommissioned gas pipe, cutting should only be employed by mechanical cutter or hack saw. In all circumstances, oxy-acetylene cutting SHOULD NOT be employed for cutting a decommissioned gas pipe.
22. Should there be settlement expected to be caused by the work, the predicted settlement contour should be forwarded to HKCG for assessment of the impact.
23. For plantation work with tree guard installation, the exact location and depth of the gas pipe should be confirmed by hand-dug trial holes prior to the driven of the tree guard into the ground to avoid damage of gas pipe underneath.
24. Due care should be given to the ancillary equipment attached to the gas main. Cathodic protection is installed for corrosion-resistant purpose and it has some cables linking from the gas pipe to the anodes and connected in a junction box placed in a pit. The anodes are normally installed at 1m away from the pipe whilst the anodes junction boxes would be installed at footpath at a distance from those gas main laid under carriageway.
25. The Code of Practice "Avoiding danger from gas pipes" has been prepared by the Gas Authority and approved and brought into effect in accordance with the provisions of section 9 of the Gas Safety Ordinance Cap 51 (the Ordinance). Its purpose is to provide practical guidance in respect of the requirements of the Ordinance and the Gas Safety (Gas Supply) Regulations (the regulations) concerning the avoidance of damage to gas pipes. These requirements are more specifically defined in regulation 23A of the regulations as follows-

"23A. Works in the vicinity of gas pipes"

- 1) *No person shall carry out, or permit to be carried out, any works in the vicinity of a gas pipe unless he or the person carrying out the works has, before commencing the works, taken all reasonable steps to ascertain the location and position of the gas pipe.*
- 2) *A person who carries out, or who permits to be carried, any works in the vicinity of a gas pipes shall ensure that all reasonable measures are taken to protect the gas pipe from damage arising out of the works that would be likely to prejudice safety."*



煤氣
Towngas
香港中華煤氣有限公司
The Hong Kong And China Gas Company Limited

輸氣操作部

時間: 14:58:5

比例: 1:1500

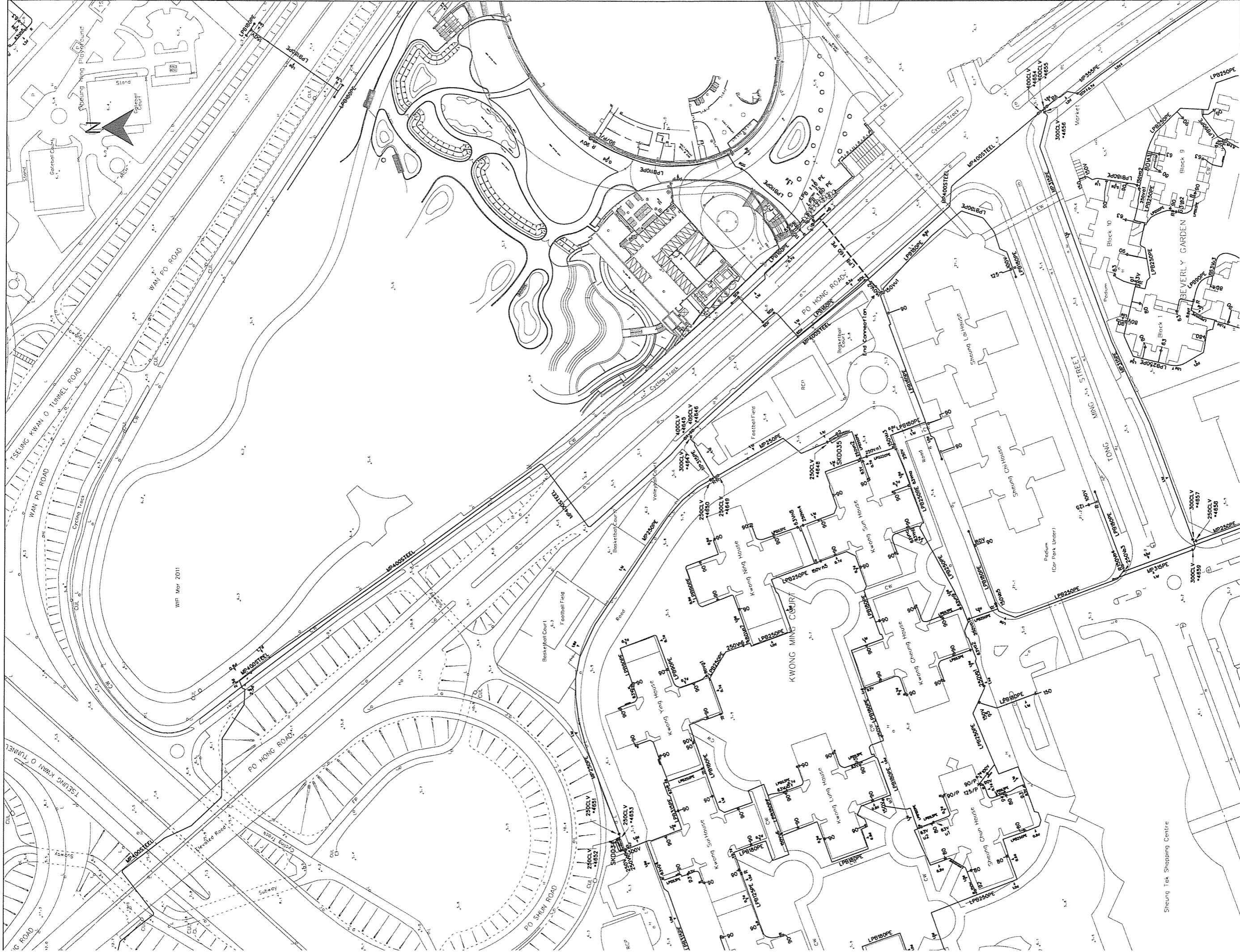
圖例:

- LPA 現有低壓煤氣管 (7千呎以下)
- LRB 現有低壓煤氣管 (7-1.5千呎)
- IP 現有中壓煤氣管 (1.5-40千呎)
- IPB 現有次高壓煤氣管 (40-100千呎)
- IPC 現有最高壓煤氣管 (100千呎以上)
- PE 設有可探測煤氣洩出的聚乙烯煤氣管
- PEE 沒有可探測煤氣洩出的聚乙烯煤氣管
- PP 專用煤氣管

- 雙管線 雙管線
- 市煤氣管 市煤氣管
- 雙管線或煤氣管/煤氣管 雙管線或煤氣管/煤氣管
- 門 門
- 喉井 喉井
- 喉管保護套 喉管保護套
- 煤氣管 煤氣管
- 大樹深 (米) 大樹深 (米)
- 管間距離 管間距離

圖則顯示的管道位置只作參考之用。
其實際位置及深度仍須以人手開挖
探孔確定。在煤氣管道設施附近施
工期間，必須加倍小心。

檢查日期: Jul 3 2013



輸氣操作部

時間: 15:126

比例: 1:1500

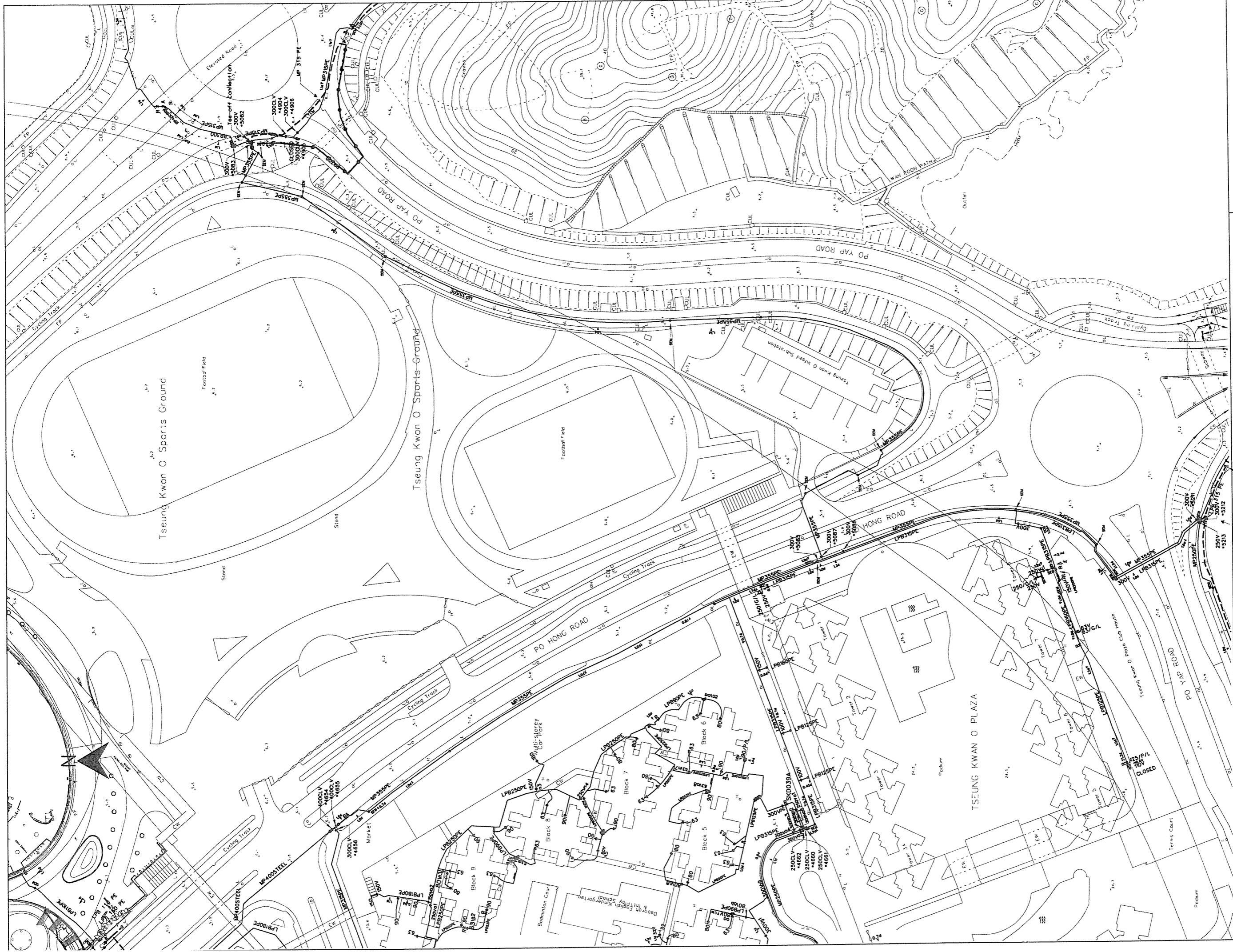
圖例:

- 現有低壓大管徑 (2千呎以下)
- 現有低壓中管徑 (2.5-7.5千呎)
- 現有中壓管徑 (7.5-10千呎)
- 現有次高壓大管徑 (210-400千呎)
- 現有次高壓中管徑 (400-700千呎)
- 現有可拆換管徑的聚乙烯管
- 沒有可拆換管徑的聚乙烯管
- 備用管

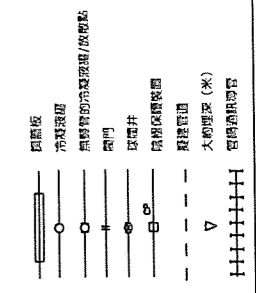
- 閘板
- 水喉接頭
- 無管帶的高壓鋼管/假管點
- 閘門
- 煤氣井
- 煤氣吹掃管
- 閘板
- 大的煤氣 (米)
- +++++ 包括煤氣管

圖則顯示的管道位置只作參考之用。其實際位置及深度仍須以人手開挖探孔確定。在煤氣管道設施附近施工期間，必須更加小心。

檢查日期: Jul 3 2013



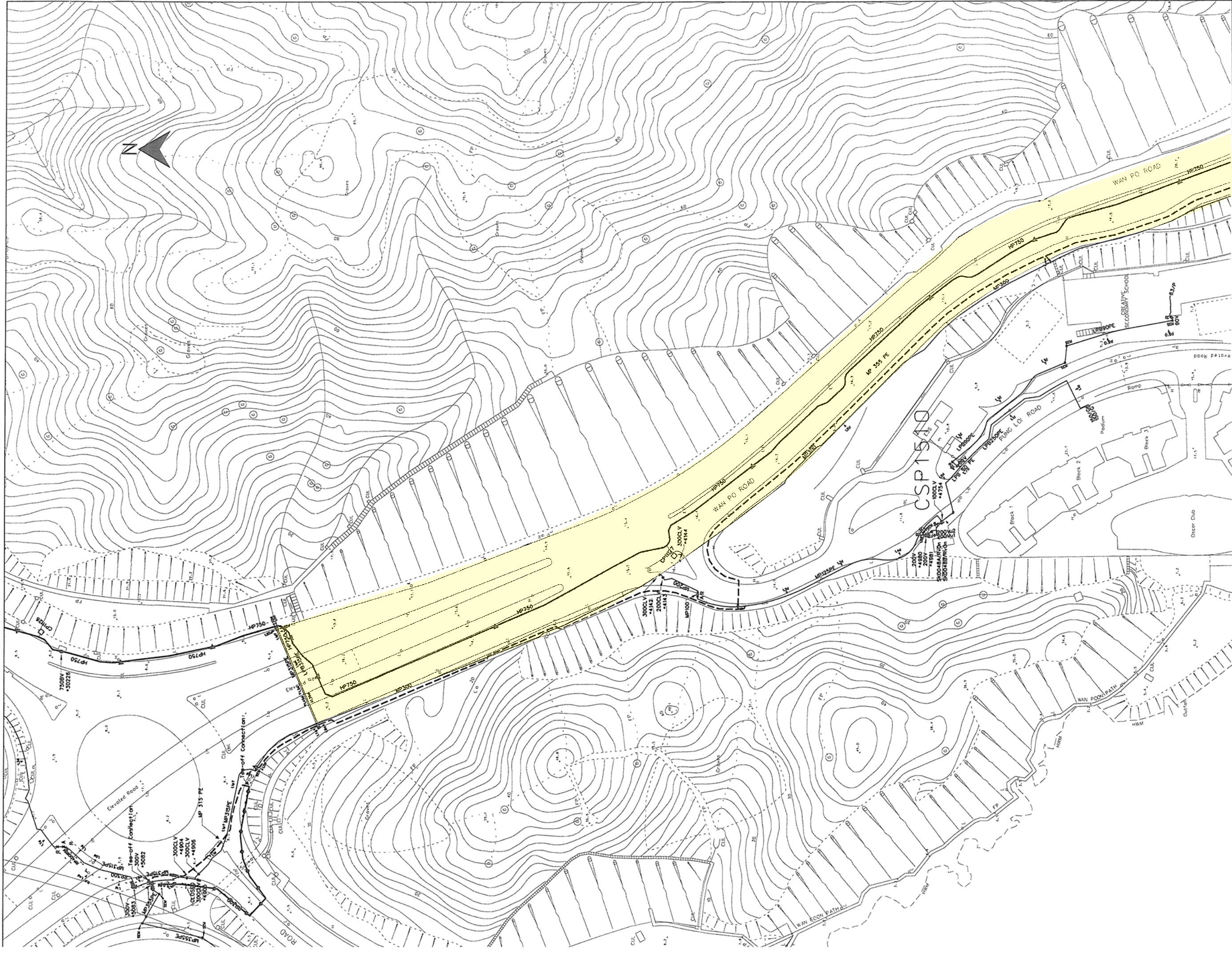
圖則顯示的管道位置只作參考之用。
其實際位置及深度仍須以人手開挖
探孔確定。在煤氣管道設施附近施
工期間，必須加倍小心。



輸氣操作部
時間： 15:1:58
比例： 1:1500

煤氣
Towngas
香港中華煤氣有限公司
The Hong Kong And China Gas Company Limited

檢查日期： Jul 3 2013



輸氣操作部

時間: 15:2:20

比例: 1:1500

圖例:

- LCA
- LCB
- MP
- IPA
- IPB
- IP
- PE
- RP

- 現有低壓管綫 (4千呎以下)
- 現有中壓管綫 (2-7.5千呎)
- 現有次高壓管綫 (7.5-40千呎)
- 現有次高壓管綫 (40-100千呎)
- 現有最高管綫 (100千呎以上)
- 政府可採掘管綫的聚乙烯管綫
- 政府可採掘管綫的聚乙烯管綫
- 備用管綫

- 閘門
- 帶放氣閘
- 無管綫的帶放氣閘/放氣站
- 閘門
- 球閘井
- 球閘保護閘
- 球閘管綫
- 大管徑管 (米)
- 管綫保護管

圖則顯示的管道位置只作參考之用。其實際位置及深度仍須以人手開挖探孔確定。在煤氣管道設施附近施工期間，必須加倍小心。

檢查日期: Jul 3 2013



輸氣操作部

時間：15:9:26

比例：1:1500

圖例：

UA	現有低壓A管線 (1千呎以下)
UB	現有低壓B管線 (1-1.5千呎)
UP	現有中壓管線 (1.5-10千呎)
UPA	現有次高壓A管線 (10-40千呎)
UPB	現有次高壓B管線 (40-100千呎)
UPC	現有最高壓管線 (100千呎以上)
PE	設有可探測管線的聚乙烯管線
RP	沒有可探測管線的聚乙烯管線
...	備用管線

	窰蓋板
	煤氣表
	煤氣表的煤氣總閥/煤氣閥
	閘門
	窰蓋
	窰蓋與深度
	窰蓋與深度 (米)
	窰蓋與深度 (米)

圖則顯示的管道位置只作參考之用。其實際位置和深度仍須以人手開挖探孔確定。在煤氣管道設施附近施工期間，必須加倍小心。

檢查日期：Jul 3 2013




煤氣
Towngas
 香港中華煤氣有限公司
 The Hong Kong And China Gas Company Limited

輸氣操作部

時間: 15:10:26

比例: 1:1500

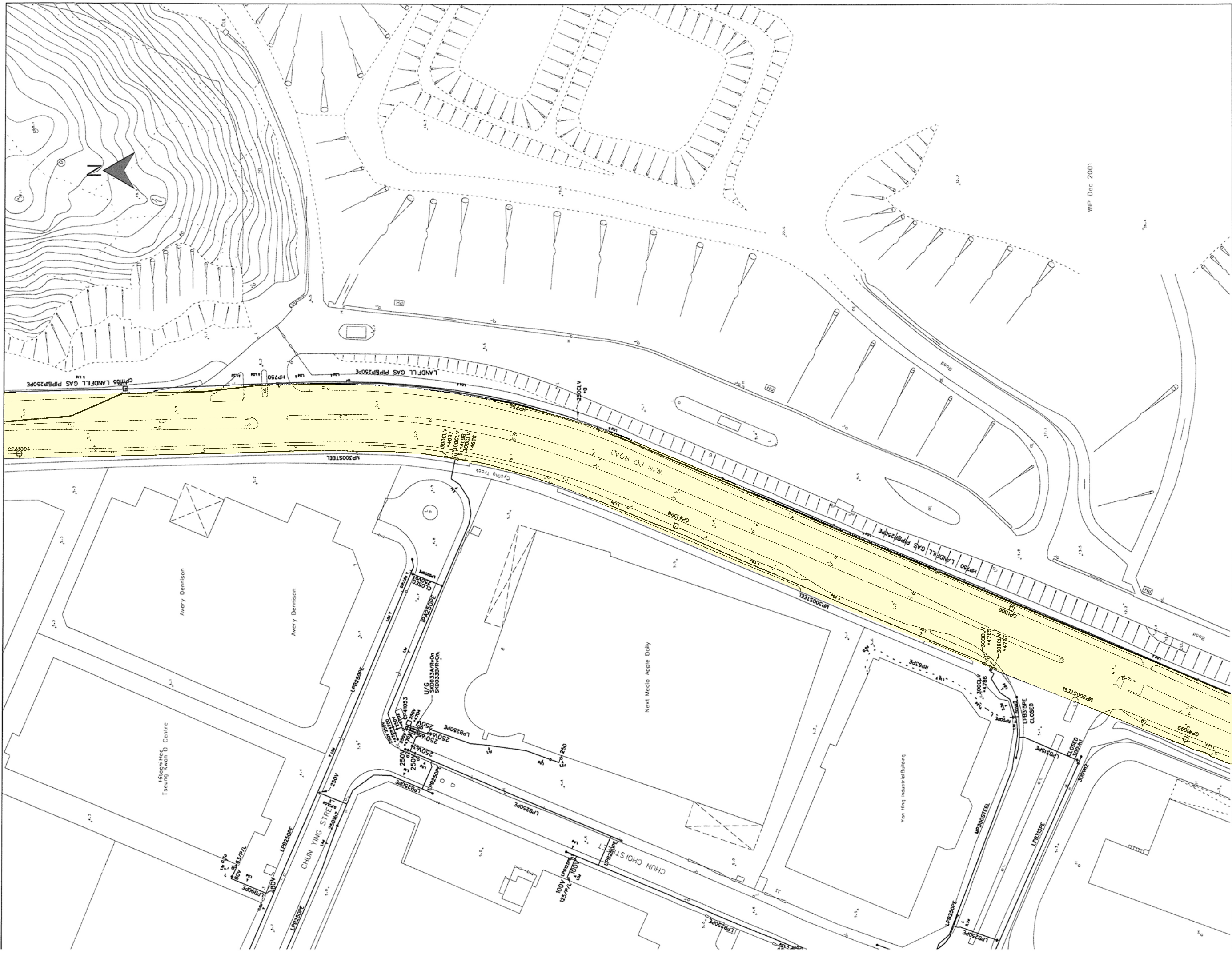
圖例:

- LCA 現有低壓A管渠 (2千呎以下)
- LEH 現有低壓B管渠 (2-3.5千呎)
- MP 現有中壓管渠 (3.5-748千呎)
- IPA 現有次高壓A管渠 (748-400千呎)
- IPB 現有次高壓B管渠 (400-104千呎)
- MP 現有高壓管渠 (104千呎以上)
- PE 設有可探測管首的聚乙烯管渠
- PE 沒有可探測管首的聚乙烯管渠
- RP 備用管渠

- 開渠線 開渠線
- 水渠線 水渠線
- 無障礙的過路渠/溝渠 無障礙的過路渠/溝渠
- 閘門 閘門
- 跌管井 跌管井
- 除塵保潔裝置 除塵保潔裝置
- 埋地管渠 埋地管渠
- 大約深度 (米) 大約深度 (米)
- 管渠埋深 管渠埋深

圖則顯示的管道位置只作參考之用。其實際位置及深度仍須以人手開挖探孔確定。在煤氣管道設施附近施工期間，必須要加倍小心。

檢查日期: Jul 3 2013



W/P Dec 2001

輸氣操作部

時間: 15:12:44

比例: 1:1500

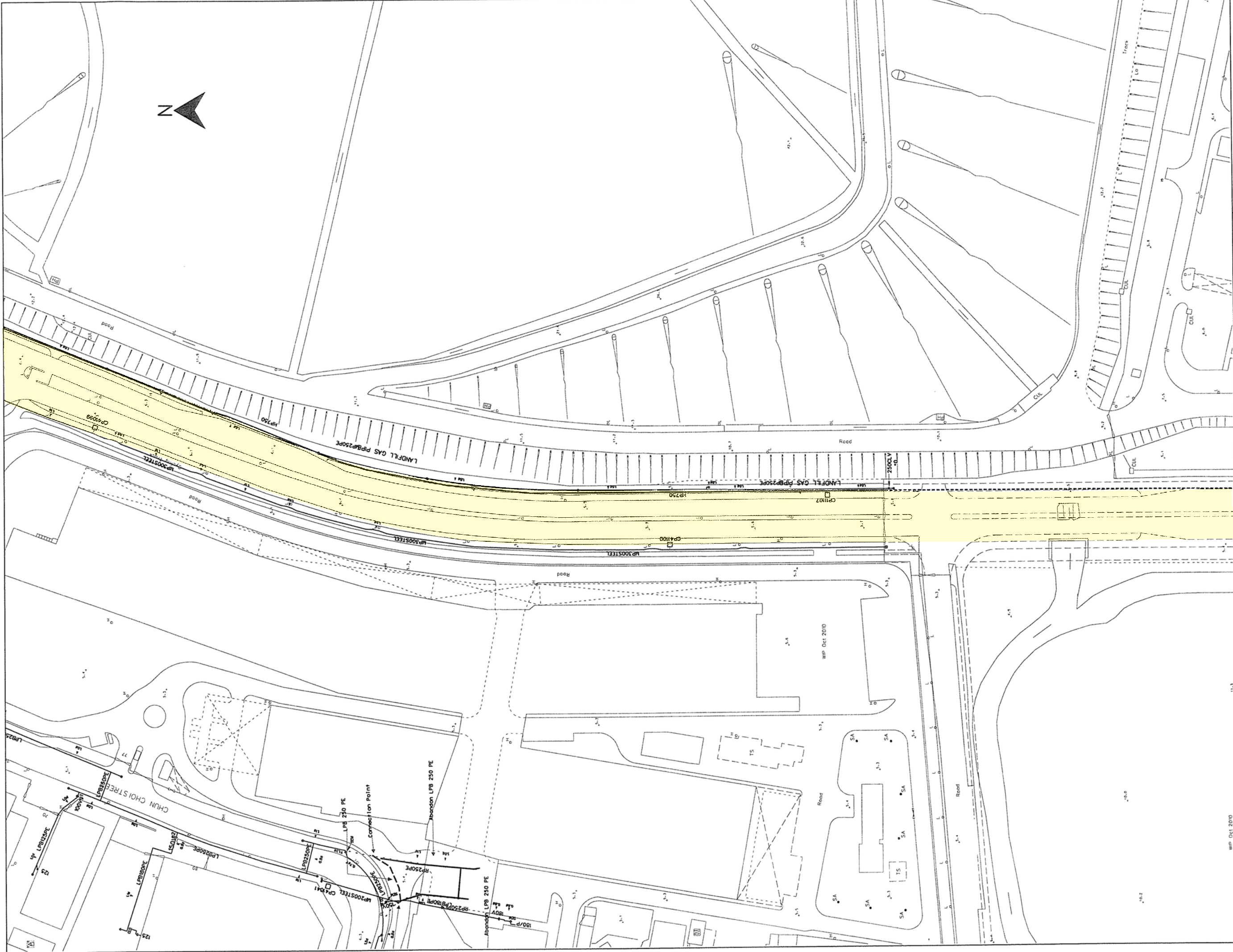
香港中華煤氣有限公司
The Hong Kong and China Gas Company Limited

- 圖例:
- LPA 現有煤氣管線 (7千呎以下)
 - LPR 現有煤氣管線 (7-7.5千呎)
 - IPA 現有煤氣管線 (7.5-14呎)
 - IPB 現有煤氣管線 (140-400千呎)
 - IP 現有煤氣管線 (400-700千呎)
 - PE 設有可探測管路的煤氣管線
 - IP 沒有可探測管路的煤氣管線

- 埋藏板
- 冷浸深溝
- 埋藏管線的沉埋/改埋
- 窰門
- 窰井
- 窰位/窰位
- 窰位/窰位
- 窰位/窰位
- 窰位/窰位
- 窰位/窰位
- 窰位/窰位

圖則顯示的管道位置只作參考之用。其實際位置和深度仍須以人手開挖探孔確定。在煤氣管道設施附近施工期間，必須加倍小心。

檢查日期: Jul 3 2013



煤氣
TOWINGAS

香港中華煤氣有限公司
The Hong Kong And China Gas Company Limited

輸氣操作部

時間: 15:13:27

比例: 1:1500

圖例:

- | | | | |
|-----|----------------------|----|-------------|
| LEA | 現有低壓A管 (1千呎以下) | —— | 磚蓋板 |
| LCB | 現有低壓B管 (1-1.5千呎) | —— | 沙坑邊線 |
| LP | 現存中壓管 (1.5-140千呎) | ○ | 帶標記的消氣器/探氣點 |
| PPA | 現存次高壓A管 (140-400千呎) | ○ | 閘門 |
| LPB | 現存次高壓B管 (400-1000千呎) | ○ | 探氣井 |
| PP | 現存高壓管 (1000千呎以上) | ○ | 探氣儀位置 |
| PE | 設有可探氣儀位置的聚乙烯管 | ○ | 探氣儀位置 |
| PE# | 沒有可探氣儀位置的聚乙烯管 | ○ | 大地面深 (米) |
| RP | 備用管 | ○ | 警網邊線 |

圖則顯示的管道位置只作參考之用。其實際位置和深度仍須以人手開挖探孔確定。在煤氣管道設施附近施工期間，必須要加倍小心。

檢查日期: Jul 3 2013




煤氣
TOWNGAS
 香港中華煤氣有限公司
 The Hong Kong And China Gas Company Limited

輸氣操作部

時間: 15:4:24

比例: 1:1500

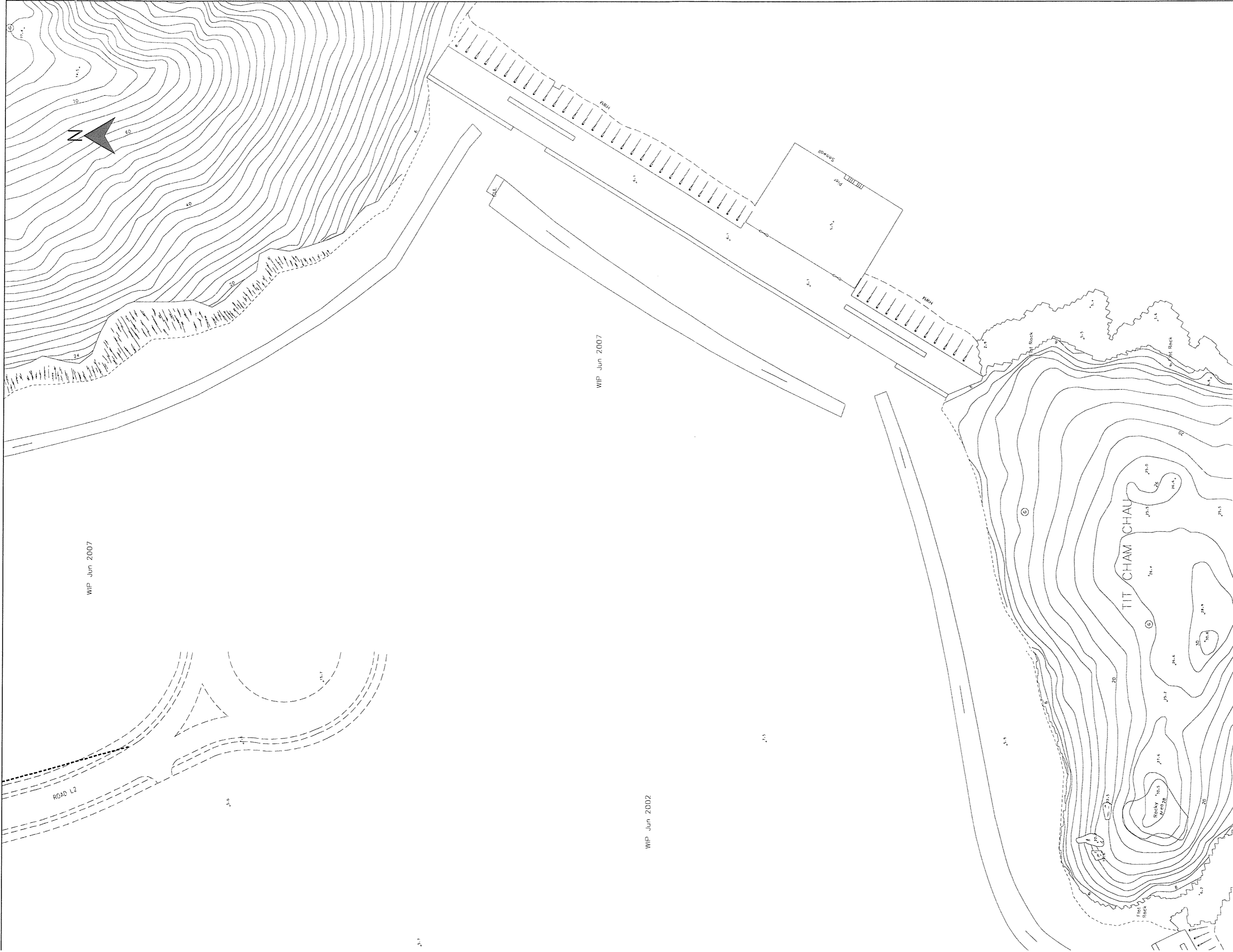
圖例:

- LPA 現有低壓A管渠 (1千呎以下)
- LPB 現有低壓B管渠 (1-1.5千呎)
- MP 現有中壓管渠 (1.5-240千呎)
- IPA 現有次高壓A管渠 (240-400千呎)
- IPB 現有次高壓B管渠 (400-100千呎)
- HP 現有超超管渠 (100千呎以上)
- PE 設有可採集管渠的煤氣管渠
- PE* 設有可採集管渠的煤氣管渠
- RP 專用管渠

- 鋼線板
- 水泥浸印
- 無砂墊的泥凝塊鋪設/路牌點
- 窰門
- 窰筒井
- 窰筒及窰蓋
- 窰蓋管頂
- 大窰埋深 (米)
- 窰筒埋深

圖則顯示的管道位置只作參考之用。其實際位置及深度仍須以人手開挖探孔確定。在煤氣管道設施附近施工期間，必須要加倍小心。

檢查日期: Jul 3 2013



煤氣

Towngas

 香港中華煤氣有限公司

 The Hong Kong And China Gas Company Limited

輸氣操作部

時間: 15:14:47
 比例: 1:1500

圖例:

- LEA 現有低壓管線 (7千帕以下)
- LPR 現有低壓管線 (3-7.5千帕)
- IP 現有中壓管線 (1.5-3.0千帕)
- IPA 現有次高壓管線 (3.0-4.0千帕)
- IPB 現有次高壓管線 (4.0-10.0千帕)
- IP 現有高壓管線 (10.0千帕以上)
- PE 設有可探測管損的聚乙烯管線
- RP 無用管線

- 閘板
- 消氣器
- 無聲的氣路接駁/廢氣點
- 閘門
- 煤閘井
- 煤閘管線
- 煤閘管線
- 大的煤氣 (米)
- 管線煤氣管

圖則顯示的管道位置只作參考之用。
 其實際位置和深度仍須以人手開挖
 探孔確定。在煤氣管道設施附近施
 工期間，必須加倍小心。

檢查日期: Jul 3 2013



**towngas
telecom**

S

Ref: TGT/ MP/ 1011 /13

11 March 2013

Black & Veatch Hong Kong Limited
25/F., Millennium City 6
392 Kwun Tong Road
Hong Kong

Fax : 26013988

13 MAR 14 17:10

Attn.: Christina K Hartinger
Project Manager

Dear Sir,

**Re: Request for Underground Utilities Plant Record
Agreement No. CE21/2012(WS) Tseung Kwan O**

ACTION REQUIRED BY	CKH TT
FILE	178901
REPLY BY	DATE
TO SEE	
	WC


I refer to you letter of 11-Jan-13, ref no. 178901-0004, regarding the captioned.

I return herewith a copy of our plan(s) showing approximate location of our existing plant for your reference. Please note that the alignment of our plant shown is indicative only. You are requested to advise your contractor to exercise care and to take all necessary precautions to protect our plant during your excavation. The exact lines and levels of which should be ascertained by hand dug trial pits on site. Please also note that you should take all necessary precautions to avoid any damage to our plant. Otherwise, you will be held responsible for any resultant costs incurred.

Should you require further information, please feel free to contact our Anthony Wu at Tel. 2963 3534 /9520 3433 or fax no. 2963 3524 or email address sl.wu@towngastelecom.com.

Yours Faithfully,

Towngas Telecommunications Fixed Network Ltd.


Eric Kot

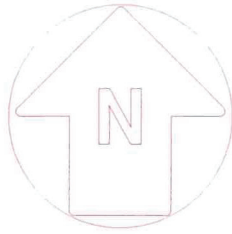
Manager


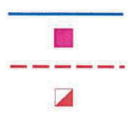

EK/aw

Encl. Drawing No. TGT/MP/ 1011

21st Floor, 363 Java Road, Hong Kong

Towngas Telecommunications Fixed Network
Limited Member of The Hong Kong and China
Gas Group

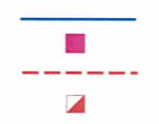


	LOCALITY			
	TITLE			
LEGEND : EXISTING DUCT ROUTE EXISTING JOINT BOX PROPOSED DUCT ROUTE PROPOSED JOINT BOX		CROSS SECTIONAL DIMENSIONS OF TYPICAL DUCT ROUTE FORMATIONS 		F/W C/W C/T TOTAL LENGTH
		ALL DUCT UNLESS OTHERWISE STATED IS PVC 114mm EXTERNAL DIAMETER MULTIPLE WAY DUCT ROUTES CAN BE FORMED IN EITHER EARTH OR CONCRETE. IN ACCORDANCE WITH HIGHWAYS OFFICE 'CONDITIONS OF PERMIT' THE PROPOSED MINIMUM DEPTH OF DUCT WILL BE 450mm IN FOOTWAY AND 900mm IN CARRIAGEWAY. HOWEVER THE ACTUAL COURSE DEPTH AND FORMATION OF PROPOSED DUCT ROUTES MAY BE SUBJECT TO DEVIATION DUE TO UNFORESEEN OBSTRUCTIONS.		LAY DUCT (m) JOINT-BOX
START DATE : END DATE : SURVEY MAP NO.			NELSON LIU N.T.S. CKD DATE TGT/MP/1011-1	



LEGEND :

- EXISTING DUCT ROUTE
- EXISTING JOINT BOX
- PROPOSED DUCT ROUTE
- PROPOSED JOINT BOX



START DATE :

END DATE :

SURVEY MAP NO.

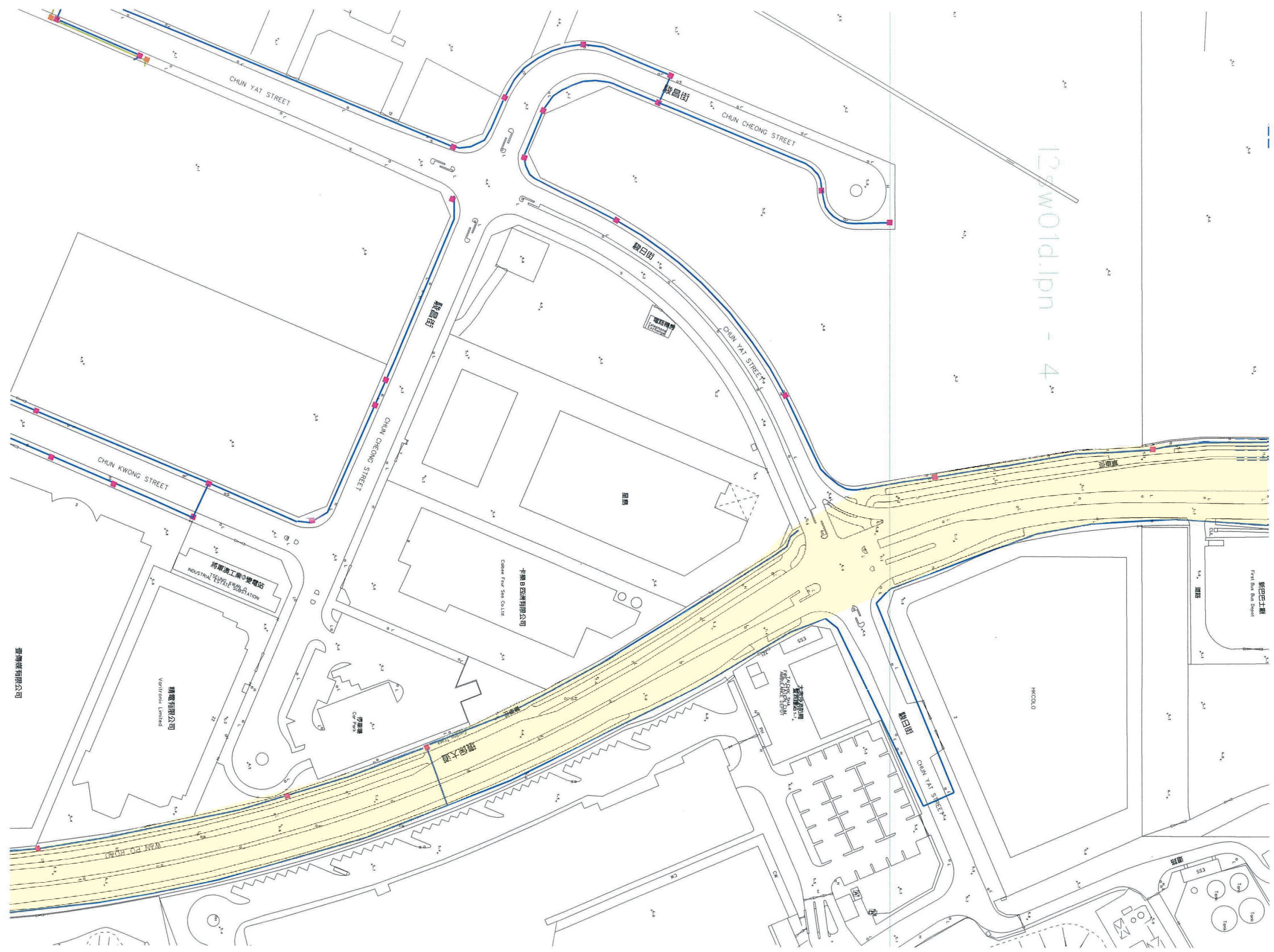
CROSS SECTIONAL DIMENSIONS OF TYPICAL DUCT ROUTE FORMATIONS



ALL DUCT UNLESS OTHERWISE STATED IS PVC 114mm EXTERNAL DIAMETER MULTIPLE WAY DUCT ROUTES CAN BE FORMED IN EITHER EARTH OR CONCRETE.

IN ACCORDANCE WITH HIGHWAYS OFFICE 'CONDITIONS OF PERMIT' THE PROPOSED MINIMUM DEPTH OF DUCT WILL BE 450mm IN FOOTWAY AND 900mm IN CARRIAGEWAY. HOWEVER THE ACTUAL COURSE DEPTH AND FORMATION OF PROPOSED DUCT ROUTES MAY BE SUBJECT TO DEVIATION DUE TO UNFORESEEN OBSTRUCTIONS.

LOCALITY				
TITLE				
LAY DUCT (m)	P/W	C/W	C/T	TOTAL LENGTH
JOINT-BOX			NIL	
			NIL	
DRN	NELSON LIU		CKD	
SCALE	N.T.S.		DATE	
OFTA REF NO.				
PLAN NO.				
DRAWING NO. TGT/MP/1011-2				



12sw01d.lpn - 4



LEGEND :

- EXISTING DUCT ROUTE —
- EXISTING JOINT BOX ■
- PROPOSED DUCT ROUTE - - -
- PROPOSED JOINT BOX ▣

START DATE :

END DATE :

SURVEY MAP NO.

CROSS SECTIONAL DIMENSIONS OF TYPICAL DUCT ROUTE FORMATIONS



ALL DUCT LINES OTHERWISE STATED IS PVC 110mm EXTERNAL DIAMETER MULTIPLE WAY DUCT ROUTES CAN BE FORMED IN EITHER EARTH OR CONCRETE.

IN ACCORDANCE WITH HIGHWAYS OFFICE CONDITIONS OF REPORT THE PROPOSED MINIMUM DEPTH OF DUCT SHALL BE AS SHOWN IN FOOTWAY AND ROADWAY IN CORRIDORWAY, HOWEVER THE ACTUAL COURSE DEPTH AND FORMATION OF PROPOSED DUCT ROUTES MAY BE SUBJECT TO DEVIATION DUE TO UNFORESEEN OBSTRUCTIONS.

LOCALITY
TITLE

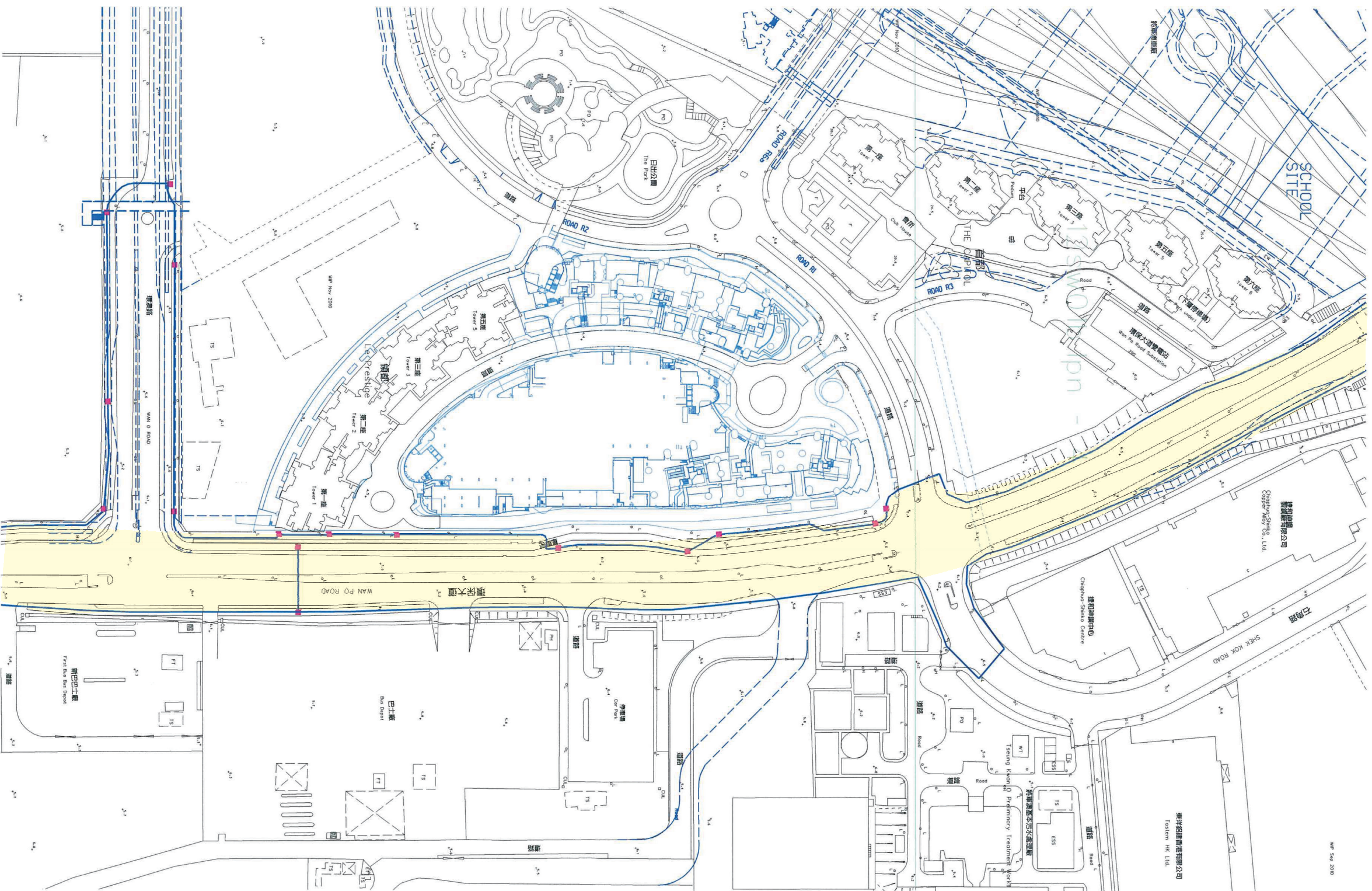
LAY DUCT (m)	F/W	C/W	C/T	TOTAL LENGTH
JOINT-BOX			NIL	
DRN			NIL	

SCALE N.T.S.

OPTA REF NO.

PLAN NO.

DRAWING NO. TGT/MP/1011-3



LEGEND :

- EXISTING DUCT ROUTE —
- EXISTING JOINT BOX ■
- PROPOSED DUCT ROUTE - - -
- PROPOSED JOINT BOX □

START DATE :

END DATE :

SURVEY MAP NO.

CROSS SECTIONAL DIMENSIONS OF TYPICAL DUCT ROUTE FORMATIONS



ALL DUCT UNLESS OTHERWISE STATED IS PVC 114mm EXTERNAL DIAMETER MULTIPLE WAY DUCT ROUTES CAN BE FORGED IN EITHER EARTH OR CONCRETE.

IN ACCORDANCE WITH HIGHWAYS OFFICE CONDITIONS OF PERMIT, THE PROPOSED MINIMUM DEPTH OF DUCT WILL BE 450mm IN FOOTWAY AND 900mm IN CARRIAGEWAY, HOWEVER THE ACTUAL COURSE DEPTH MAY VARY DUE TO UNFORESEEN OBSTRUCTIONS.

LOCALITY
TITLE

	F/W	C/W	C/T	TOTAL LENGTH
LAY DUCT (m)			NIL	
JOINT-BOX			NIL	

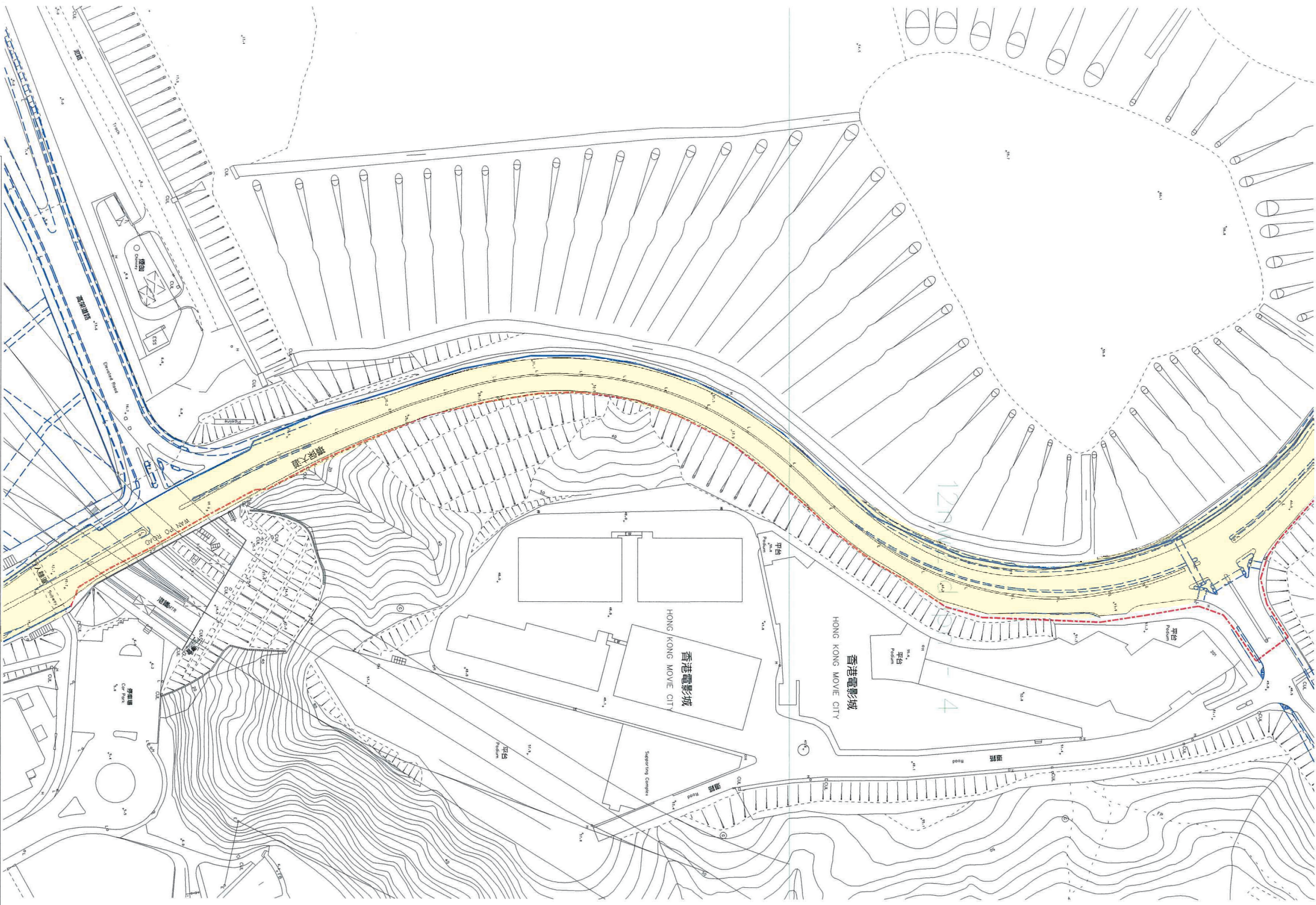
DRN NELSON LIU CKD

SCALE N.T.S. DATE

OFTA REF NO.

PLAN NO.

DRAWING NO. T&T/MP/1011-4



LEGEND :

- EXISTING DUCT ROUTE —
- EXISTING JOINT BOX ■
- PROPOSED DUCT ROUTE - - -
- PROPOSED JOINT BOX ■

START DATE :
 END DATE :
 SURVEY MAP NO.

CROSS SECTIONAL DIMENSIONS OF
 TYPICAL DUCT ROUTE FORMATIONS



ALL DUCT UNLESS OTHERWISE STATED IS PVC 114mm EXTERNAL DIAMETER MULTIPLE WAY DUCT ROUTES CAN BE FORMED IN EITHER EARTH OR CONCRETE.
 IN ACCORDANCE WITH HIGHWAYS OFFICE 'CONDITIONS OF PERMIT' THE PROPOSED MINIMUM DEPTH OF DUCT WILL BE 450mm IN FOOTWAY AND FORMATION OF PROPOSED DUCT ROUTES MAY BE SUBJECT TO DEVIATION DUE TO UNDISCOVERED OBSTRUCTIONS.

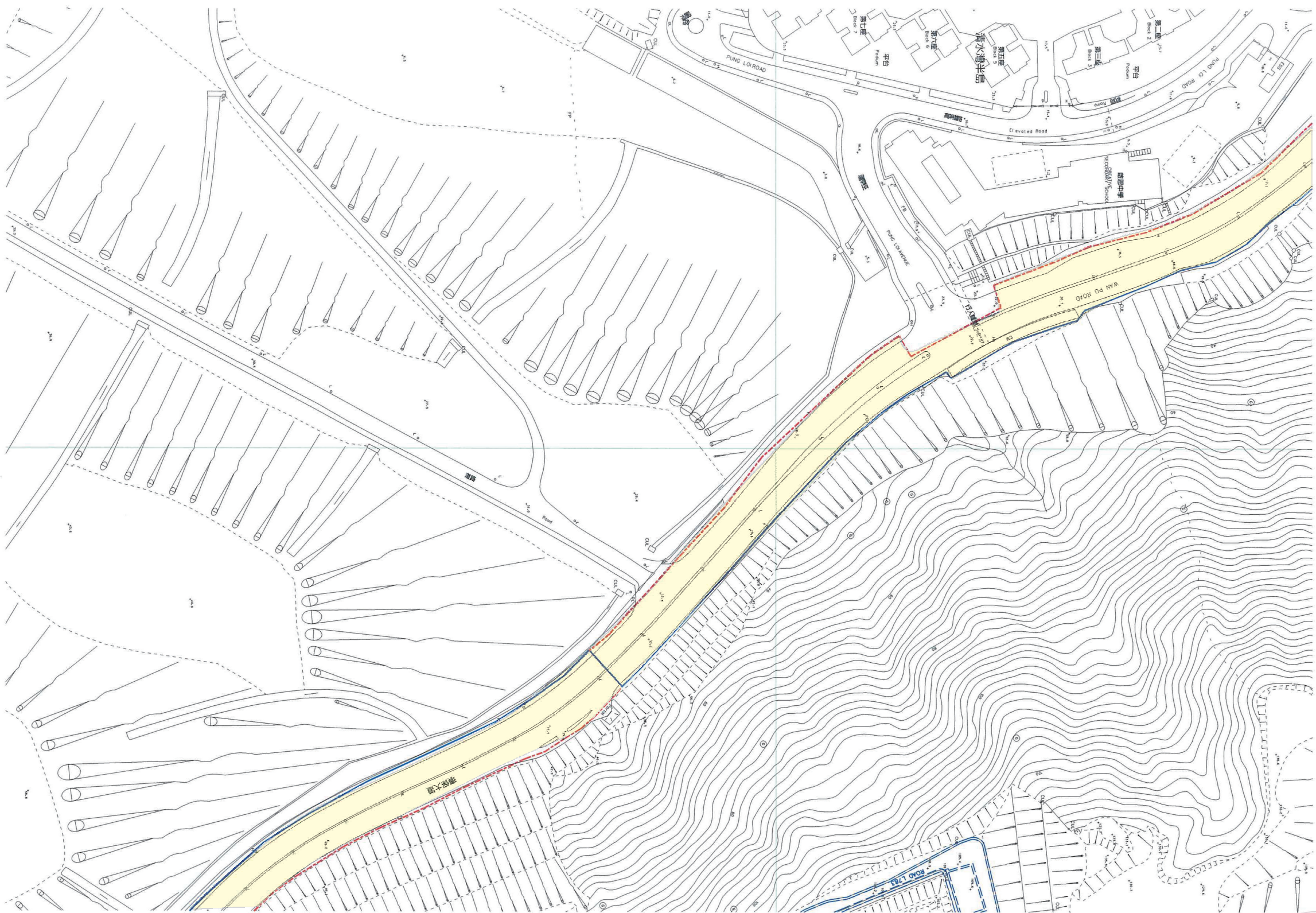
LOCALITY
 TITLE

LAY DUCT (m)	F/W	C/W	C/T	TOTAL LENGTH
JOINT BOX			NIL	
			NIL	

DRN NELSON LIU CKD
 SCALE N.T.S.
 OFTA REF NO.

PLAN NO.

DRAWING NO. T&T/MP/1011-5



LEGEND :

- EXISTING DUCT ROUTE —
- EXISTING JOINT BOX ■
- PROPOSED DUCT ROUTE - - -
- PROPOSED JOINT BOX ▣

START DATE :

END DATE :

SURVEY MAP NO.

CROSS SECTIONAL DIMENSIONS OF
TYPICAL DUCT ROUTE FORMATIONS



ALL DUCT UNLESS OTHERWISE STATED IS PVC 114mm EXTERNAL DIAMETER AND JOINT BOXES CAN BE FORMED IN EITHER EARTH OR CONCRETE.
IN ACCORDANCE WITH APPLICABLE SPECIFIC CONDITIONS OF REPORT, THE PROPOSED MINIMUM DEPTH OF DUCT SHALL BE AS SHOWN IN FOOTING AND FORMATION OF PROPOSED DUCT ROUTES MAY BE SUBJECT TO DEVIATION DUE TO UNPREDSEEN OBSTRUCTIONS.

LOCALITY

TITLE

F/W	C/W	C/T	TOTAL LENGTH
LAY DUCT (m)		NIL	
JOINT BOX		NIL	

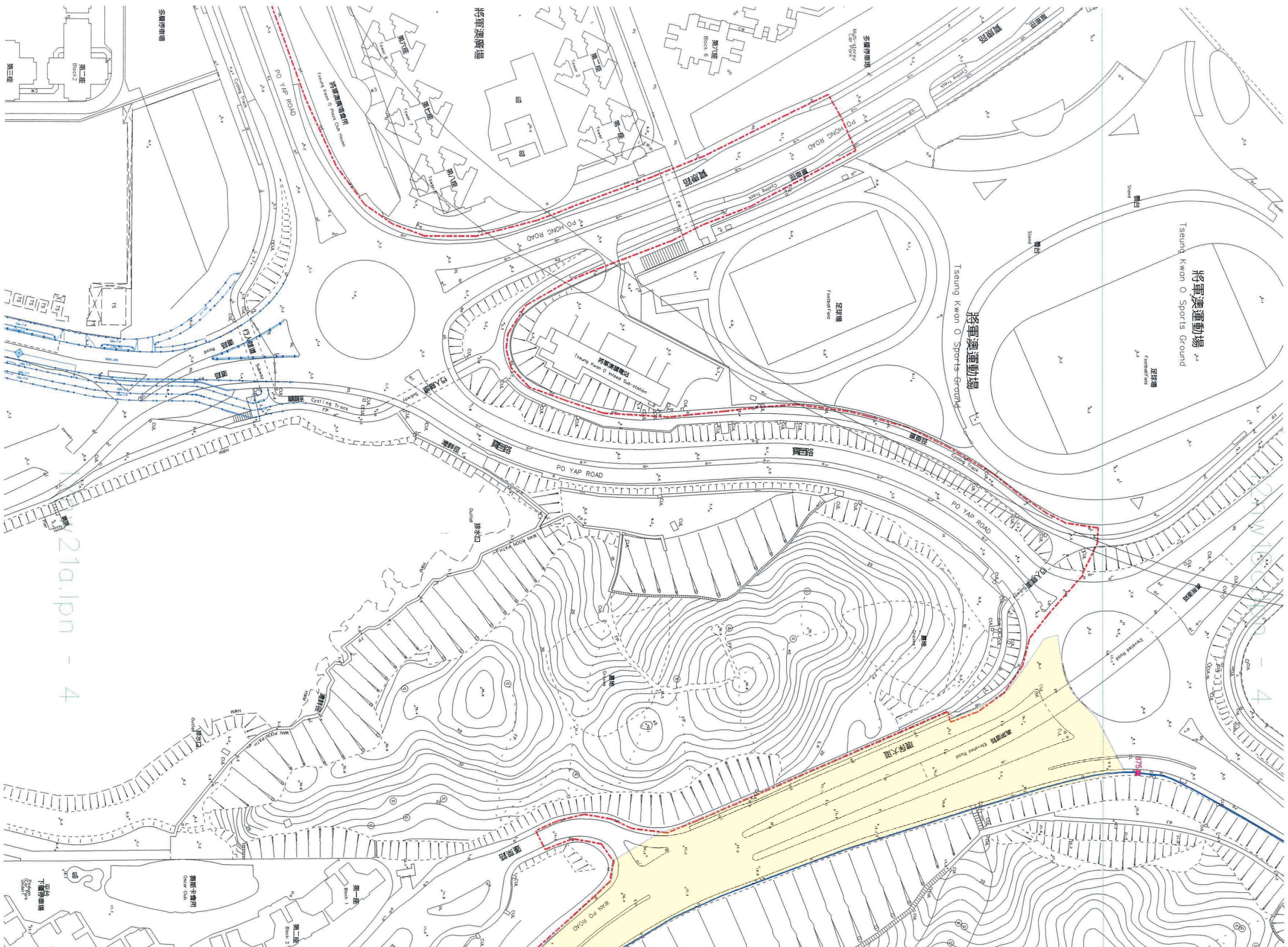
DRN NELSON LIU CKD

SCALE N.T.S. DATE

OP'TA REF NO.

PLAN NO.

DRAWING NO. TGT/MP/11011-6



LEGEND :

- EXISTING DUCT ROUTE —
- EXISTING JOINT BOX ■
- PROPOSED DUCT ROUTE - - -
- PROPOSED JOINT BOX □

START DATE :

END DATE :

SURVEY MAP NO.

CROSS SECTIONAL DIMENSIONS OF TYPICAL DUCT ROUTE FORMATIONS



ALL DUCT UNLESS OTHERWISE STATED IS PVC 114mm EXTERNAL DIAMETER MULTIPLE WAY DUCT ROUTES CAN BE FORGED IN EITHER EARTH OR CONCRETE.

IN ACCORDANCE WITH HIGHWAYS OFFICE CONDITIONS OF PERMIT, THE PROPOSED MINIMUM DEPTH OF DUCT SHALL BE 450mm IN FOOTWAY AND FORMATION OF PROPOSED DUCT ROUTES MAY BE SUBJECT TO DEVIATION DUE TO UNFORESEEN OBSTRUCTIONS.

LOCALITY

TITLE

F/W	C/W	C/T	TOTAL LENGTH
LAY DUCT (m)		NIL	
JOINT-BOX		NIL	

DRN NELSON LIU CKD

SCALE N.T.S. DATE

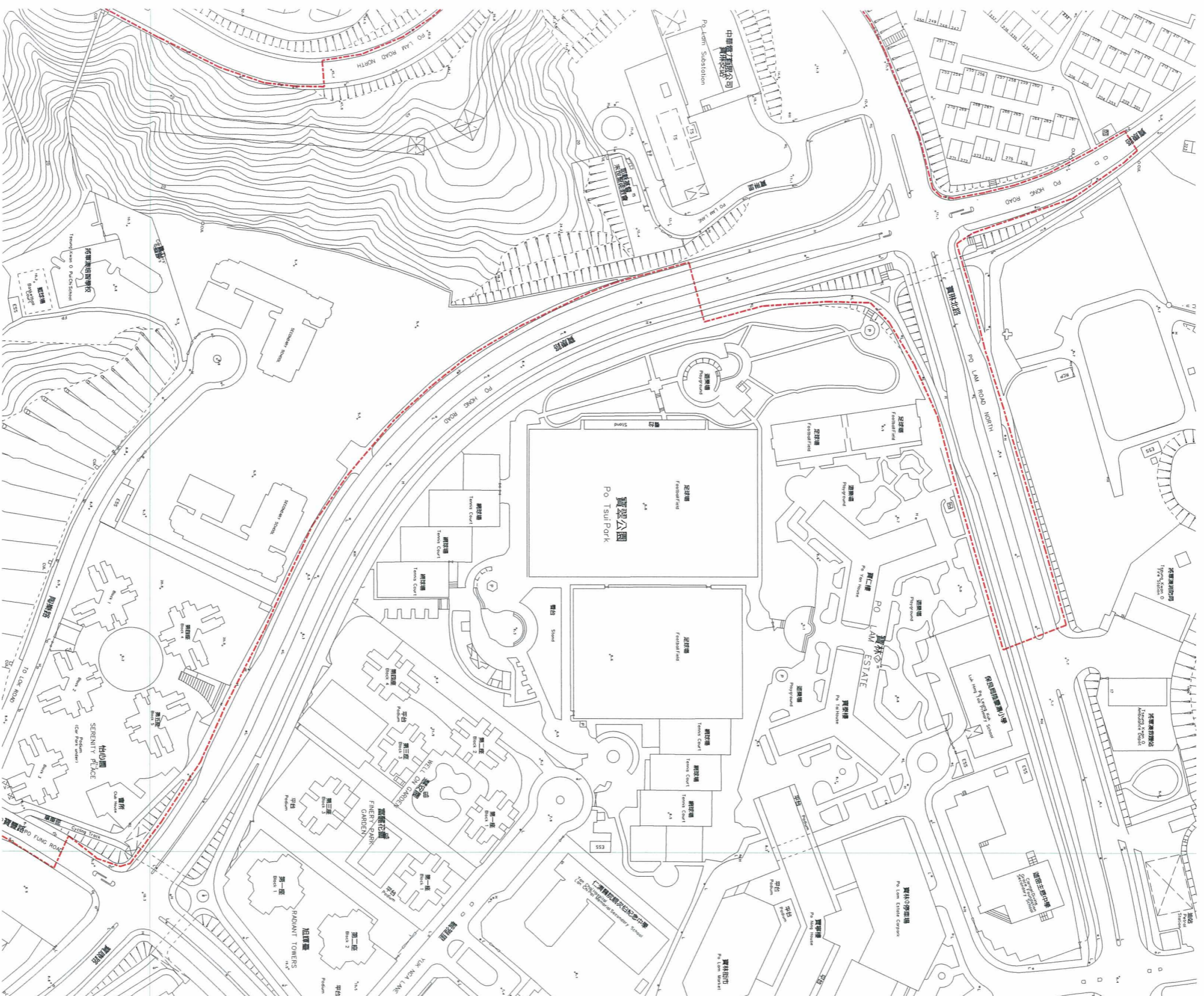
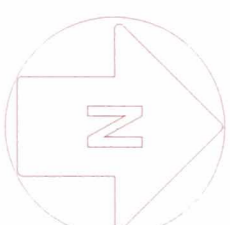
OPTA REF NO.

PLAN NO.

DRAWING NO.

T&I/MP/16/11-7

21a.lpn - 4



- LEGEND :
- EXISTING DUCT ROUTE —
 - EXISTING JOINT BOX ■
 - PROPOSED DUCT ROUTE - - -
 - PROPOSED JOINT BOX □

START DATE :
 END DATE :
 SURVEY MAP NO.

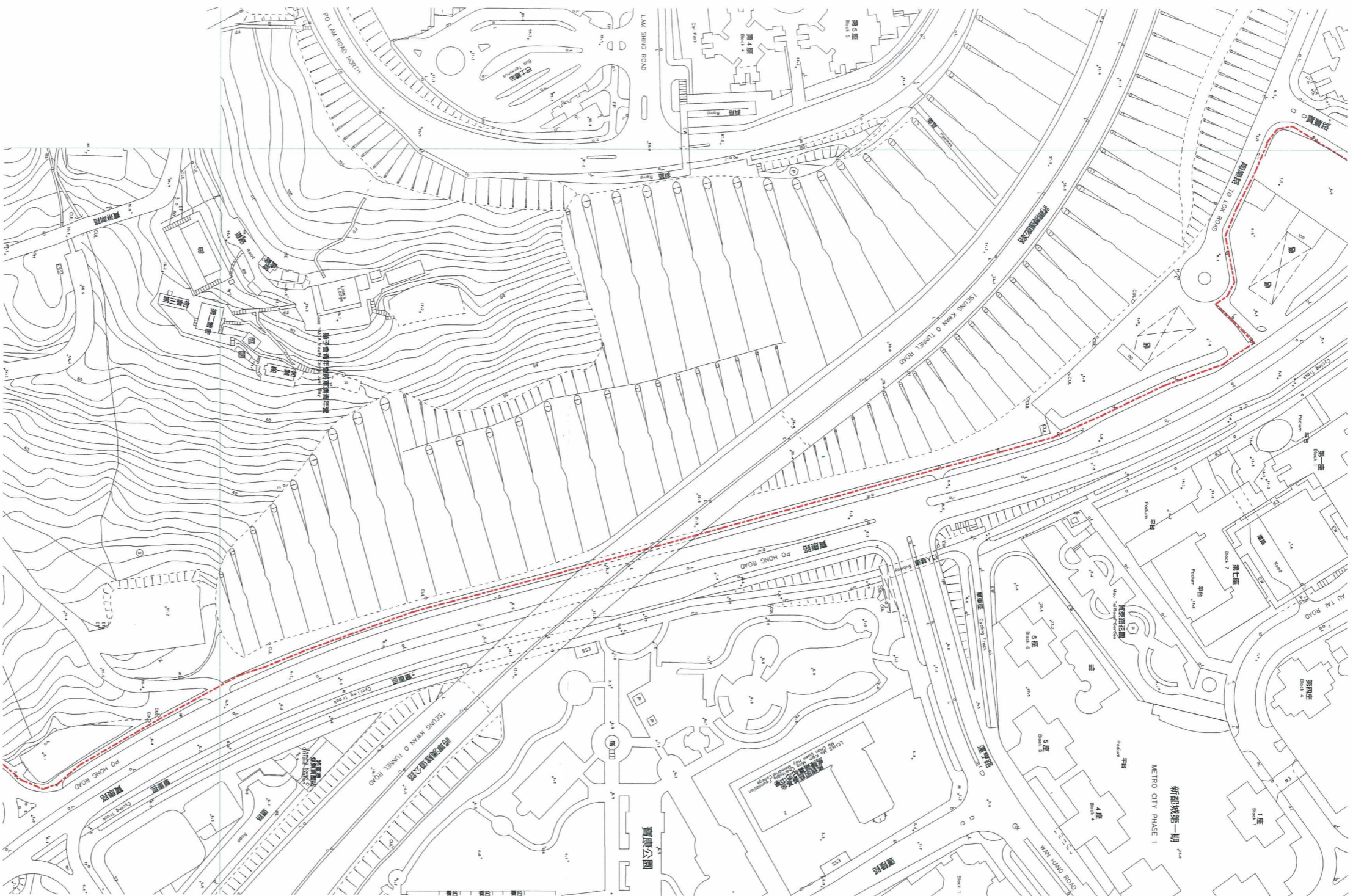
CROSS SECTIONAL DIMENSIONS OF
 TYPICAL DUCT ROUTE FORMATIONS



ALL DUCT UNLESS OTHERWISE STATED IS PVC 114mm EXTERNAL DIAMETER MULTIPLE VAN DUCT ROUTES CAN BE FORMED IN EITHER EARTH OR CONCRETE.

IN ACCORDANCE WITH HIGHWAYS OFFICE CONDITIONS OF PERMIT, THE PROPOSED MINIMUM DEPTH OF DUCT SHALL BE 400mm IN ROADWAY AND FORMATION OF PROPOSED DUCT ROUTES MAY BE SUBJECT TO DEVIATION DUE TO UNPREDSEEN OBSTRUCTIONS.

LOCALITY		TITLE		TOTAL LENGTH	
P/W	C/W	C/T			
LAY DUCT (m)		NIL			
JOINT-BOX		NIL			
DRN	NELSON LIU	CKD			
SCALE	N.T.S.	DATE			
OFTA REF NO.					
PLAN NO.					
DRAWING NO.	TG/IMP/101-8				



LEGEND :

- EXISTING DUCT ROUTE —
- EXISTING JOINT BOX ■
- PROPOSED DUCT ROUTE - - -
- PROPOSED JOINT BOX ■

START DATE :

END DATE :

SURVEY MAP NO.

CROSS SECTIONAL DIMENSIONS OF TYPICAL DUCT ROUTE FORMATIONS



ALL DUCT UNLESS OTHERWISE STATED IS PVC 114mm EXTERNAL DIAMETER MULTIPLE WAY DUCT ROUTES CAN BE FINED IN EITHER EARTH OR CONCRETE.
 IN ACCORDANCE WITH HIGHWAYS OFFICE CONDITIONS OF PERMIT, THE PROPOSED MINIMUM DEPTH OF DUCT WILL BE 450mm IN FOOTWAY AND 600mm IN CARRIAGEWAY, HOWEVER THE ACTUAL COURSE DEPTH MAY BE SUBJECT TO UNPREDSEEN OBSTRUCTIONS.

LOCALITY

TITLE

F/W	C/W	C/T	TOTAL LENGTH
LAY DUCT (m)		NIL	
JOINT BOX		NIL	

DRN NELSON LIU CKD

SCALE N.T.S. DATE

OFTA REF NO.

PLAN NO.

DRAWING NO.

TGT/MP/10/11-9



LEGEND :

- EXISTING DUCT ROUTE —
- EXISTING JOINT BOX ■
- PROPOSED DUCT ROUTE - - -
- PROPOSED JOINT BOX ■

START DATE :
 END DATE :
 SURVEY MAP NO.

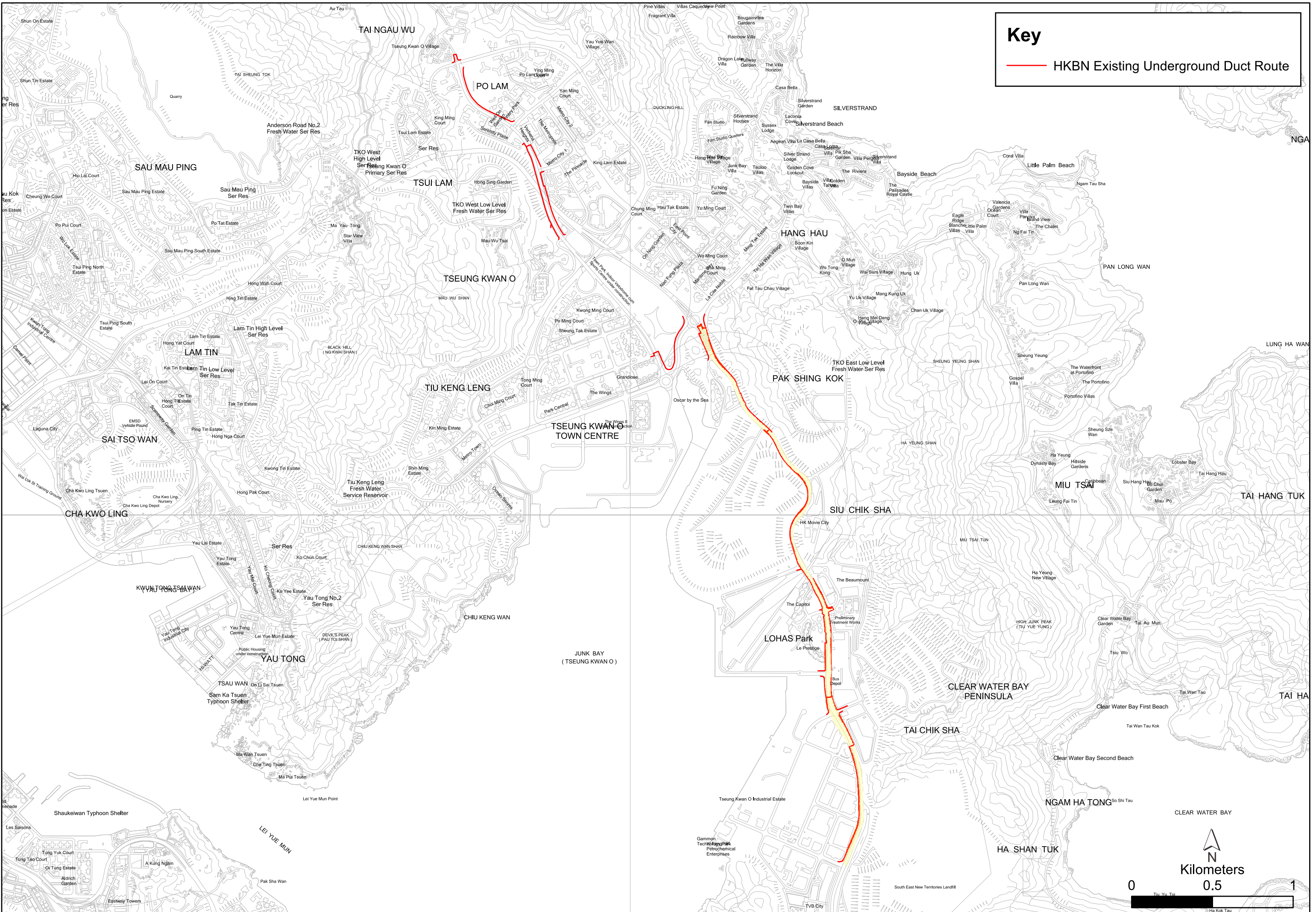
CROSS SECTIONAL DIMENSIONS OF TYPICAL DUCT ROUTE FORMATIONS



ALL DUCT UNLESS OTHERWISE STATED IS PVC 110mm EXTERNAL DIAMETER MULTIPLE MAY DUCT ROUTES CAN BE FORMED IN EITHER EARTH OR CONCRETE.
 IN ACCORDANCE WITH HIGHWAYS OFFICE CONDITIONS OF PAVEMENT THE PROPOSED MINIMUM DEPTH OF DUCT WILL BE 450mm IN FOOTWAY AND 600mm IN CARBONDEWAY, HOWEVER THE ACTUAL COVER DEPTH MAY VARY FROM 100mm TO 200mm AND THESE MAY BE SUBJECT TO DEVIATION DUE TO UNPREDICTED OBSTRUCTIONS.

LOCALITY
 TITLE

LAY DUCT (m)	P/W	C/W	C/T	TOTAL LENGTH
JOINT-BOX			NIL	
DRN	NELSON LIU		CKD	
SCALE	N.T.S.		DATE	
OPTA REF NO.				
PLAN NO.				
DRAWING NO.	TG/TMP/1011-11			



Key

— HKBN Existing Underground Duct Route

N

Kilometers

0 0.5 1

Date : 26 February 2013

Our Ref : RW/TKO/13/0165(N)
Your Ref : 178901-0004

Black & Veatch Hong Kong Limited
25th Floor, Millennium City 6
392 Kwun Tong Road
Kwun Tong, Kowloon
Hong Kong

Attn: Ms. Christina K. Hartinger

Dear Ms. K. Hartinger,

RE: Agreement No. CE 21/2012 (WS)
Desalination Plant at Tseung Kwan O

TO	
BY	CKH TT
FILE	178901
REPLY BY	DATE
DATE	
	WC


Thank you for your letter dated 11 January 2013 regarding the captioned subject.

We enclose a plan Dwg. no. RW/TKO/13/0165(N)1/1 showing our plant record in the vicinity of your construction site.

Please note that the depth of the plant may vary for various reasons. Therefore, you may expect to find the plant located at any depth below surface level on site. We advise you to take utmost caution when excavating in the area and the plant should be located by hand excavation prior to the commencement of work. In the event that any damage occurs to the plant as a result of your operations, you will be held liable and shall indemnify us for all such as losses, costs and damages arising from your actions.

For further information, please contact our Mr. Patrick Cheng on telephone no. 2128 3594 or fax no. 2122 9403.

Yours sincerely,
Hutchison Global Communications Limited


April Chan
Admin. Officer

AC/PC/jn
c.c. Mr. H K Chin - TEI



1. THE POSITION OF PLANT INDICATED ON THIS DRAWING IS APPROXIMATE ONLY.
 2. THE DEPTH OF OUR EXISTING PLANT MAY VARY DUE TO UNDERGROUND OBSTRUCTIONS.

Legend

- Existing Duct
- Proposed Duct
- Existing Joint Box
- ▣ Proposed Joint Box
- ⊖ Adjust joint box cover / Replace joint box frame & cover to paving block type

Survey Map No. :	N/A	Drawn By :	P C NIP	Checked By :	H K CHIN
Drawing No. :	RW/TKO/13/0165(N)/1	Date :	21 FEB 2013	Date :	22 FEB 2013

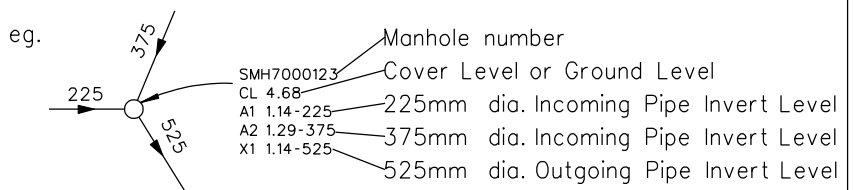
Legend for Drainage Record Plan

<ul style="list-style-type: none"> Storm Water Manhole Storm Water Terminal Manhole Sewer Manhole Sewer Terminal Manhole Combined Manhole Catchpit Desilting Opening Inspection Opening Dry Weather Flow Interceptor Sand Trap Inlet Outlet Gully Sump / Gully Tapping Point (Storm/Sewer) Overflow (Sewer/Combined) Interface Valve Chamber Oil / Petrol Interceptor Valve Water Gauge Spot Level (Storm/Sewer) Box Culvert (Storm/Sewer) Drainage Reserve Existing Y-Junction (Storm/Sewer/Combined) 	<ul style="list-style-type: none"> Existing Pipe (Storm/Sewer/Combined) Existing Pipe (Storm/Sewer/Combined) (Planning / Identifying to be Abandoned) Proposed Pipe (Storm/Sewer) Works In Progress Pipe (Storm/Sewer) Abandoned Pipe Abandoned Pipe (Filled with Materials) Existing U Channel / Stepped Channel (Storm) Proposed U Channel / Stepped Channel (Storm) Works In Progress U Channel / Stepped Channel (Storm) Rising Main Vacuum Sewer Slope Sign Board Slope Number Slope Boundary Existing Submarine Outfall with Diffuser Proposed Submarine Outfall with Diffuser Works In Progress Submarine Outfall with Diffuser Harbour Area Treatment Scheme Sewage Tunnel Protection Area (100m width) <small>(Please note that all proposed works within the HATS Sewage Tunnel Protection Area have to be complied with the requirements in the Environment, Transport and Works Bureau Technical Circular (Works) No.28/2003 or the Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers No. APP-62 issued by the Buildings Department)</small> Harbour Area Treatment Scheme Sewage Tunnel Outer Protection Area (200m width) <small>(Please note that all proposed works within the HATS Sewage Tunnel Protection Area have to be complied with the requirements in the Environment, Transport and Works Bureau Technical Circular (Works) No.28/2003 or the Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers No. APP-62 issued by the Buildings Department)</small>
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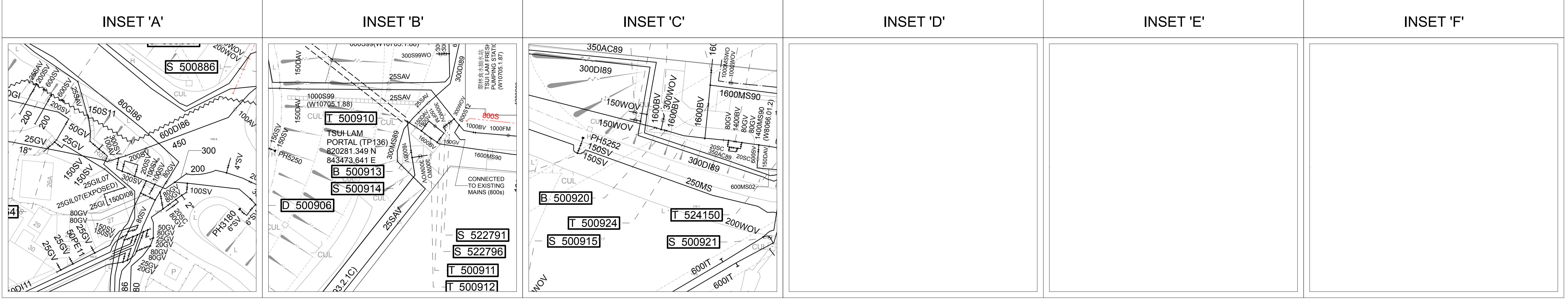
Notes :

1. All levels are in mPD.
2. All dimensions shown are in millimetres unless otherwise stated.
3. The information shown on the record drawings are subject to verification on site and no guarantee can be given that this is a complete record.
4. Abbreviations for Channels of width smaller or equal to 1200mm:
 900C = 900mm width Surface Channel
 900SC = 900mm width Stepped Channel
 900UC = 900mm width U Channel
 900DWFC = 900mm width Dry Weather Flow Channel

5. The Incoming Pipes are marked A1, A2, A3, ... counting clockwise from the first Outgoing Pipe X1. Outgoing Pipes are marked X1, X2, X3 ... counting clockwise from North.



6. Piling foundations on culverts may be present but not shown for brevity. Please refer to the relevant as-built drawings on details of the pile foundation.
7. Drainage facilities maintained by other parties, if shown, are indicative only. It is no guarantee that these information are exact.



NOTES:
 1. FOR MAINS RECORDS SIGN CONVENTIONS AND DESIGNATIONS SEE SKETCH NO.3988.
 2. DIMENSIONS OF MAINS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
 3. ALL LEVELS ARE IN METRES ABOVE PRINCIPAL DATUM.

SCALE 1:1 000
 METRES 0 20 40 60 80 100

11-NE-19D

FRESH WATER MAINS RECORD PLAN

MA YAU TONG, SAU MAU PING SOUTH

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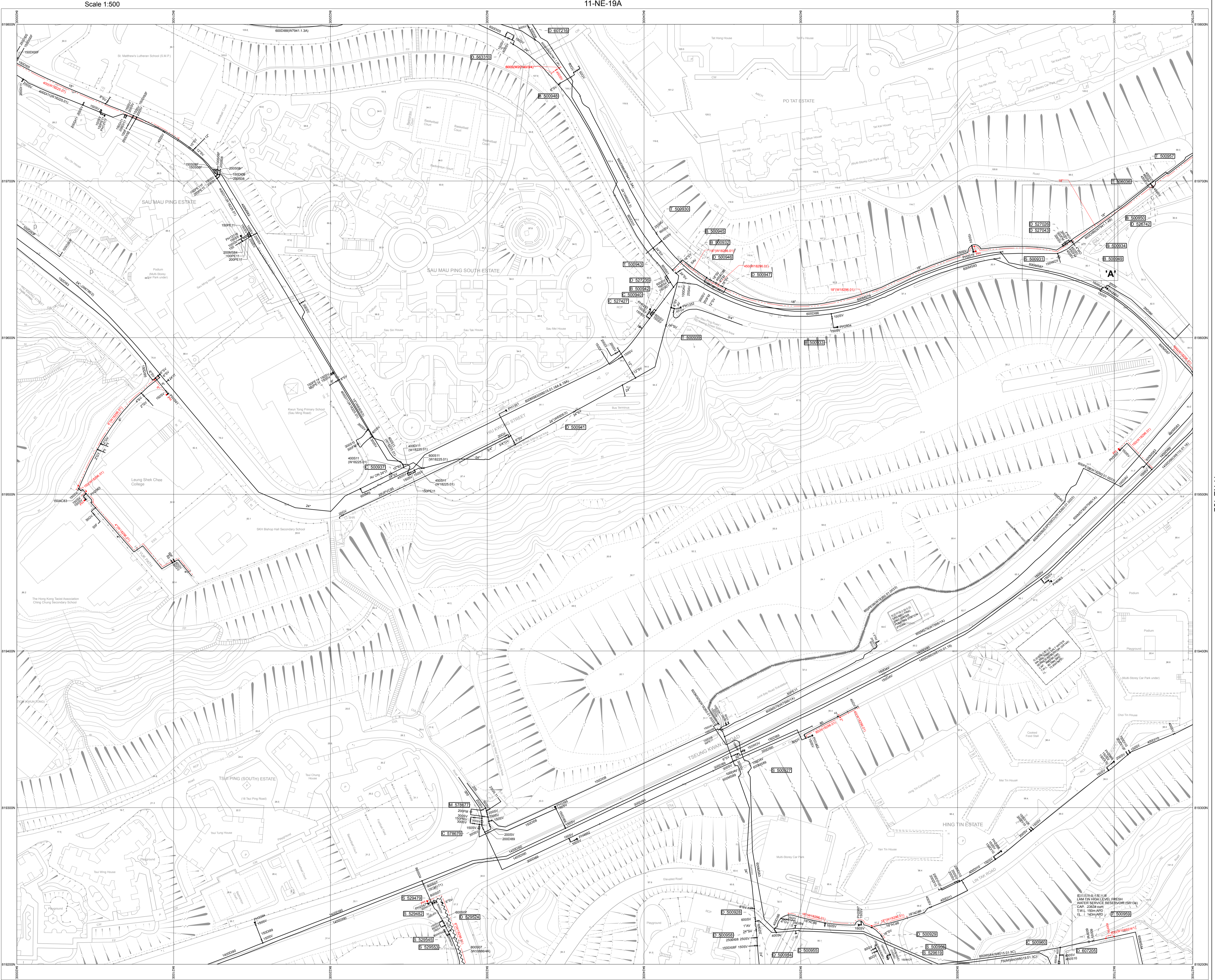
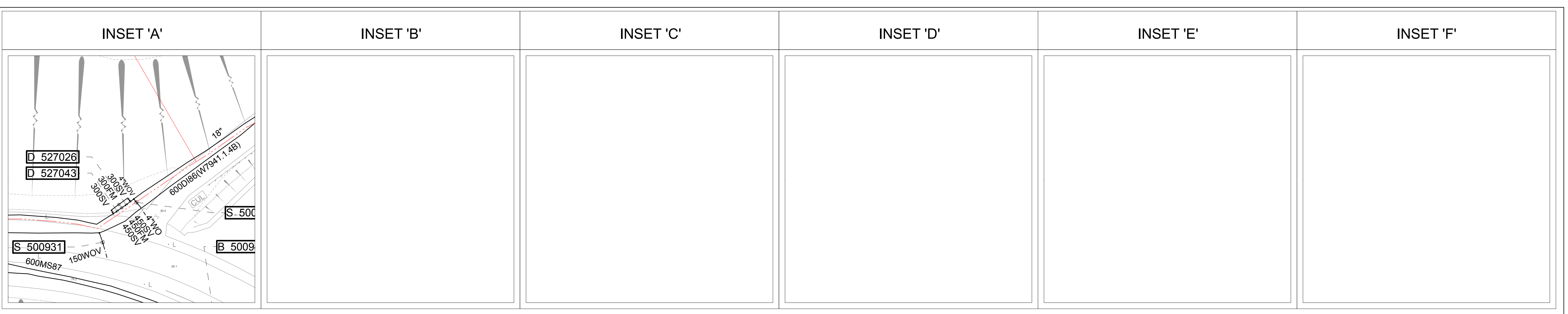
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DATE REVISED : 25/04/2013

SIGNED C.H. NG
 CE/MSE
 DATE: 10/06/1999

DRAWING NO.
W67880/ 11-NE-19B

Water Supplies Department
 HONG KONG



NOTES:
 1. FOR MAINS RECORDS SIGN CONVENTIONS AND DESIGNATIONS SEE SKETCH NO.3988.
 2. DIMENSIONS OF MAINS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
 3. ALL LEVELS ARE IN METRES ABOVE PRINCIPAL DATUM.

SCALE 1:1 000

METRES 0 20 40 60 80 100

11-NE-24A

FRESH WATER MAINS RECORD PLAN

SAU MAU PING, KWUN TONG

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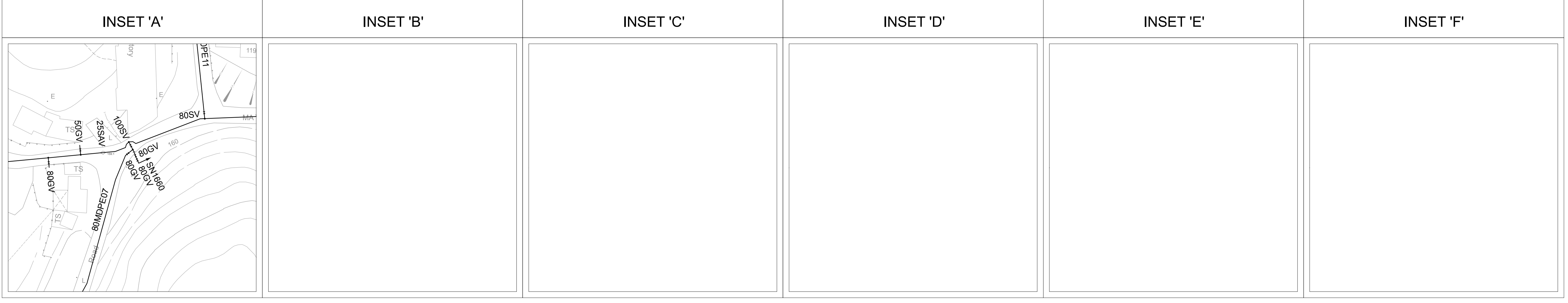
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DATE REVISED : 25/04/2013

SIGNED C.H. NG
CE/MSE
DATE: 10/06/1999

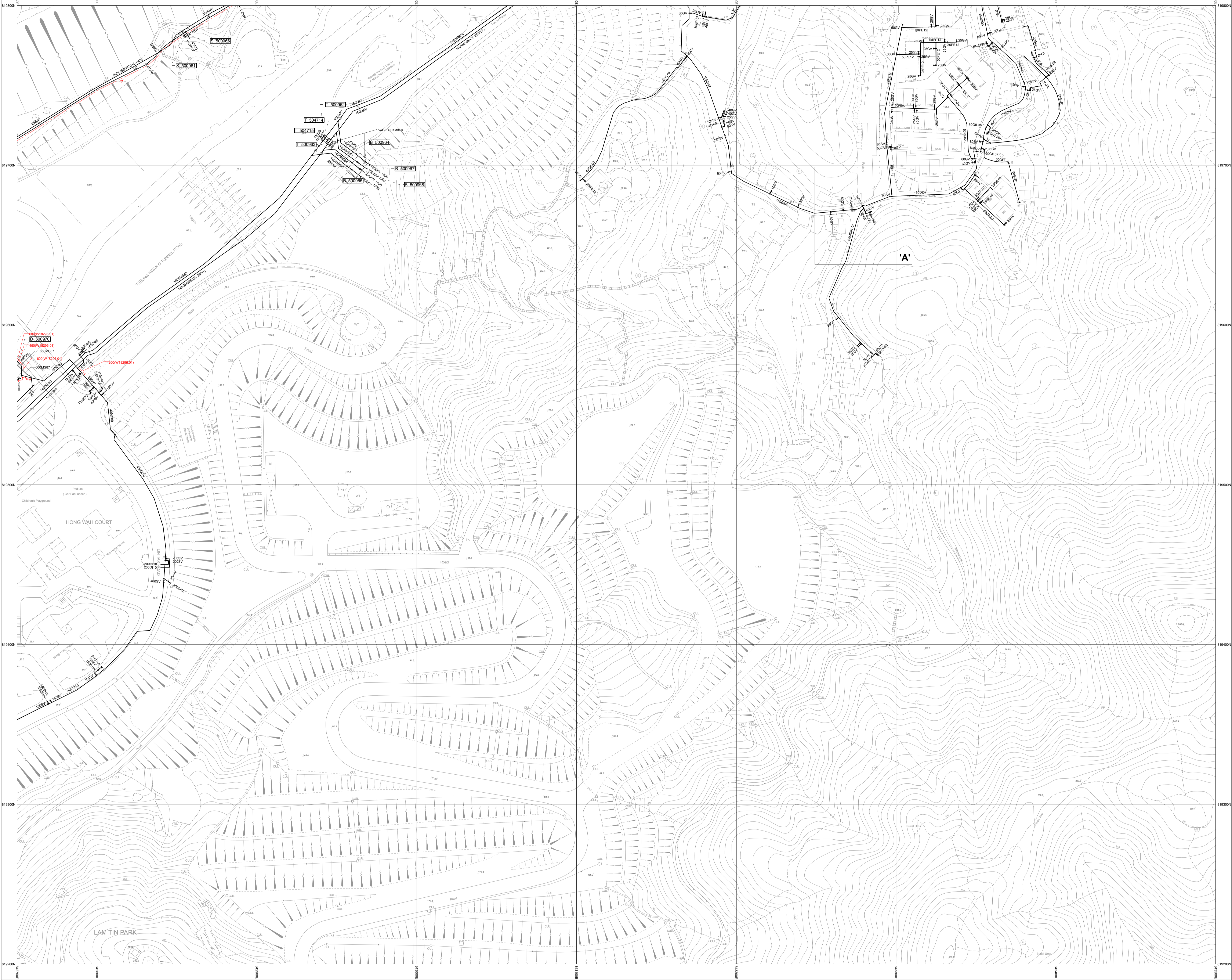
DRAWING NO.
W67880/ 11-NE-19C

Water Supplies Department
HONG KONG



Scale 1:500

11-NE-19B



11-NE-19C

11-NE-20C

11-NE-24B

NOTES:
 1. FOR MAINS RECORDS SIGN CONVENTIONS AND DESIGNATIONS SEE SKETCH NO.3988.
 2. DIMENSIONS OF MAINS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
 3. ALL LEVELS ARE IN METRES ABOVE PRINCIPAL DATUM.

SCALE 1:1 000

METRES 0 20 40 60 80 100 METRES

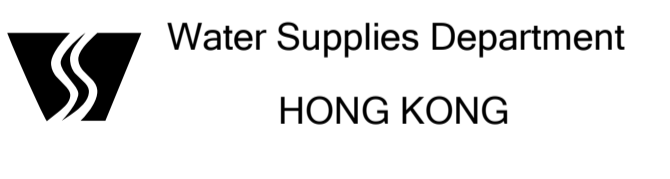
FRESH WATER MAINS RECORD PLAN
 MA YAU TONG

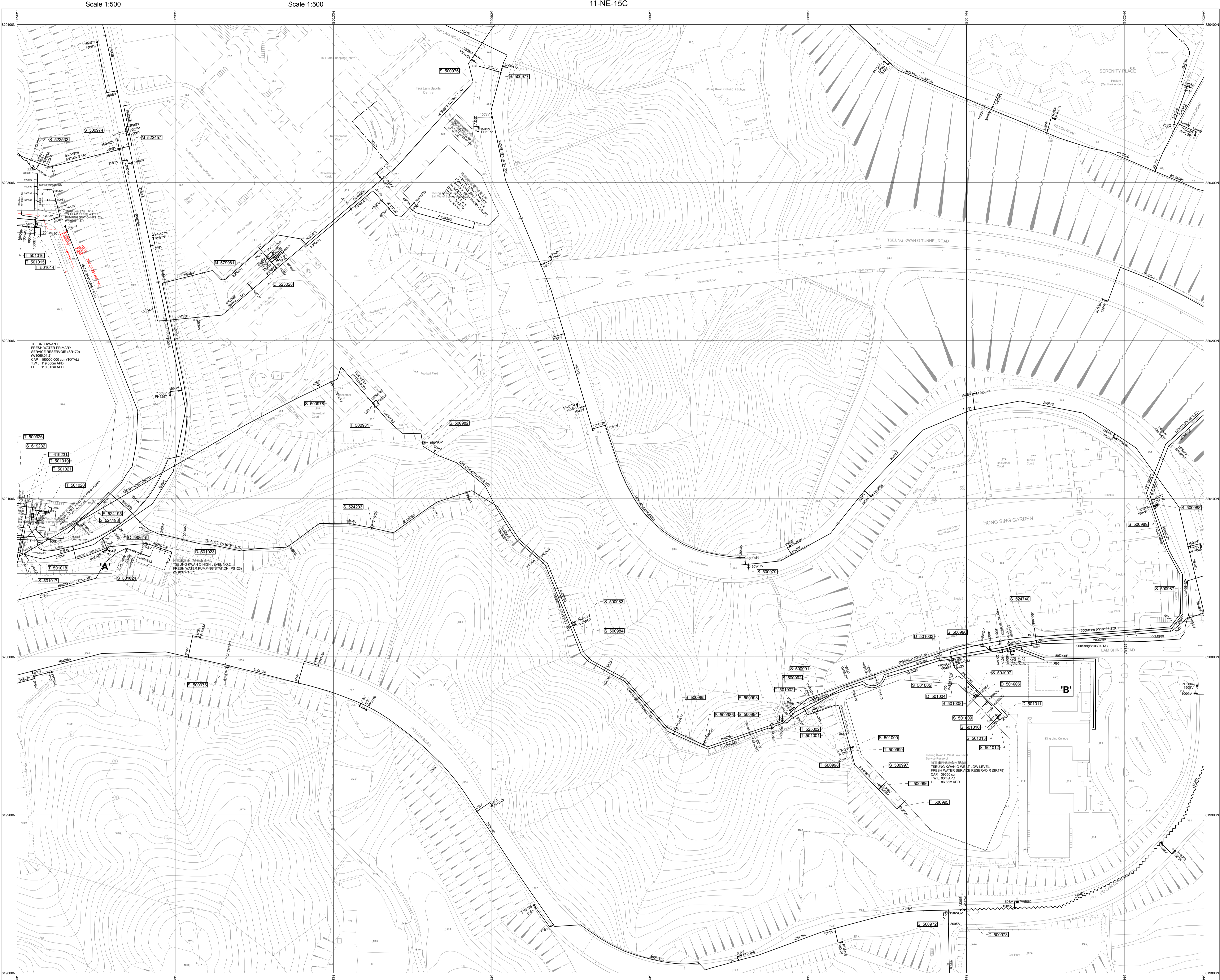
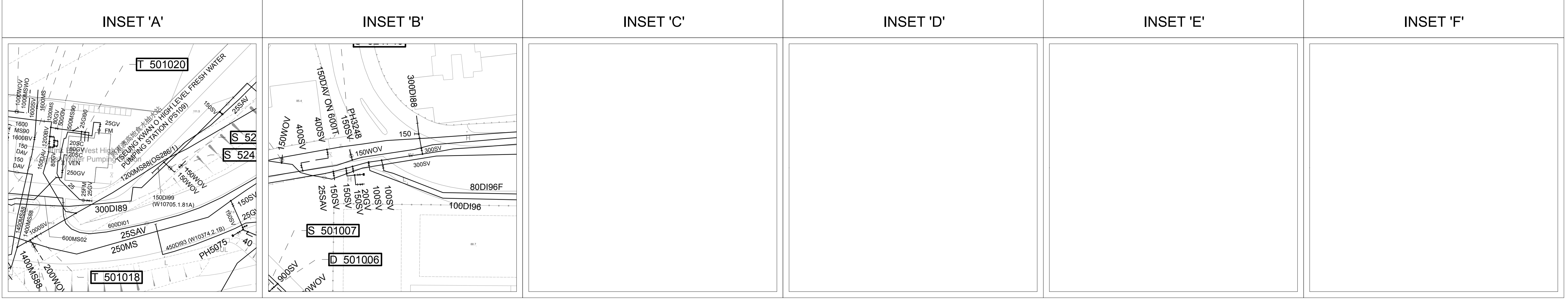
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 DATE: 10/06/1999





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2. DIMENSIONS OF MAINS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
3. ALL LEVELS ARE IN METRES ABOVE PRINCIPAL DATUM.

SCALE 1:1 000

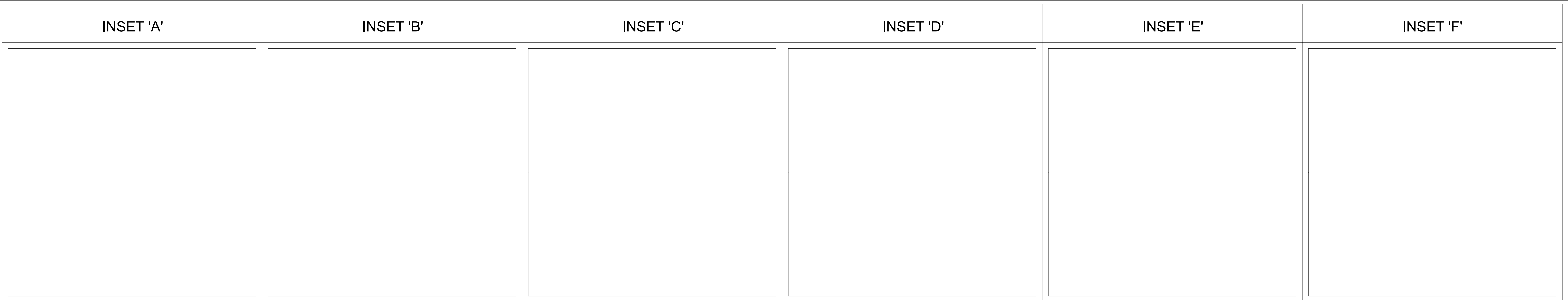
METRES 0 20 40 60 80 100 METRES

11-NE-20C

FRESH WATER MAINS RECORD PLAN

HONG SING GARDEN, TSUI LAM ESTATE

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	DATE REVISED : 24/04/2013	
	SIGNED C.H. NG CE/MSE DATE: 10/06/1999	Water Supplies Department HONG KONG



11-NE-15D



11-NE-20D

NOTES:
 1. FOR MAINS RECORDS SIGN CONVENTIONS AND DESIGNATIONS SEE SKETCH NO.3988.
 2. DIMENSIONS OF MAINS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
 3. ALL LEVELS ARE IN METRES ABOVE PRINCIPAL DATUM.

SCALE 1:1 000
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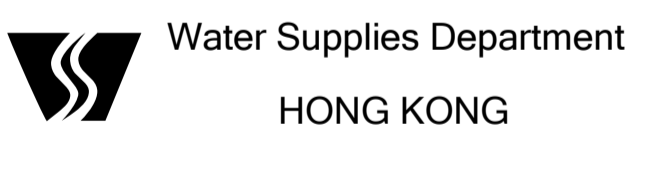
FRESH WATER MAINS RECORD PLAN
 KING LAM ESTATE, TSEUNG KWAN O

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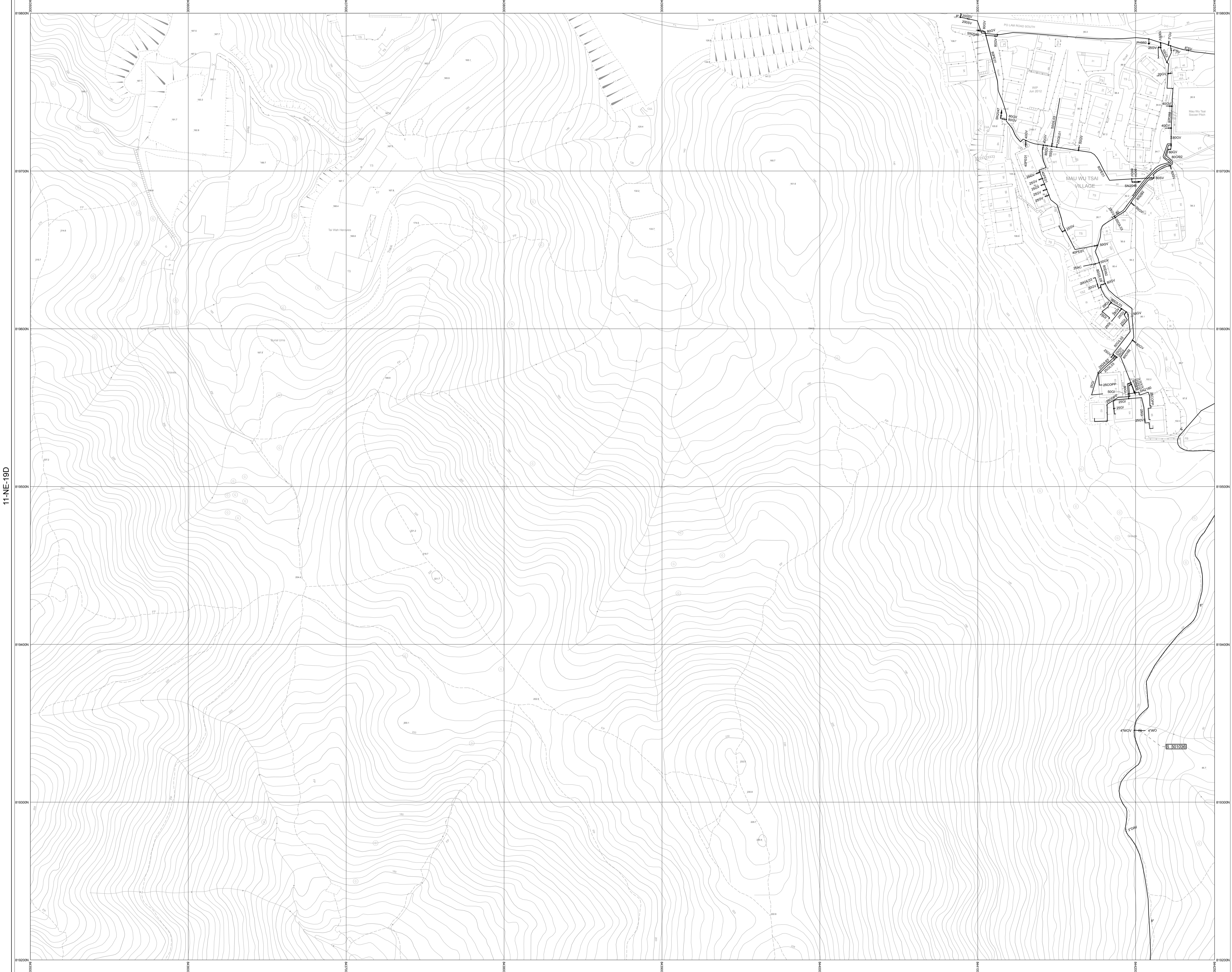
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W67880/ 11-NE-20B

SIGNED
 C.H. NG
 CE/MSE
 DATE: 10/06/1999



INSET 'A'	INSET 'B'	INSET 'C'	INSET 'D'	INSET 'E'	INSET 'F'
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11-NE-20A



11-NE-19D

11-NE-20D

11-NE-25A

NOTES:
 1. FOR MAINS RECORDS SIGN CONVENTIONS AND DESIGNATIONS SEE SKETCH NO.3988.
 2. DIMENSIONS OF MAINS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
 3. ALL LEVELS ARE IN METRES ABOVE PRINCIPAL DATUM.

SCALE 1:1 000

METRES 20 0 20 40 60 80 100 METRES

FRESH WATER MAINS RECORD PLAN

MAU WU TSAI MA YAU TONG

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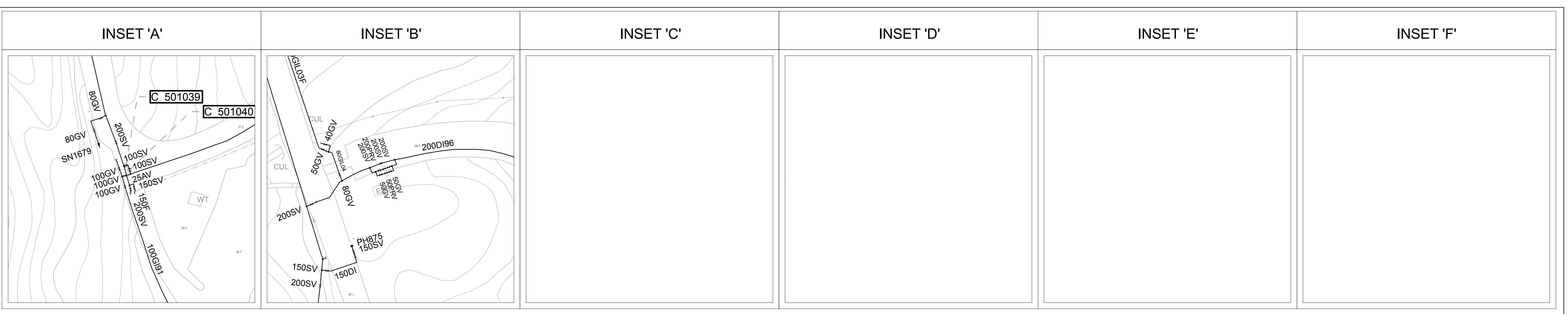
DATE REVISED : 24/04/2013

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DATE: 10/06/1999

DRAWING NO.

W67880/ 11-NE-20C

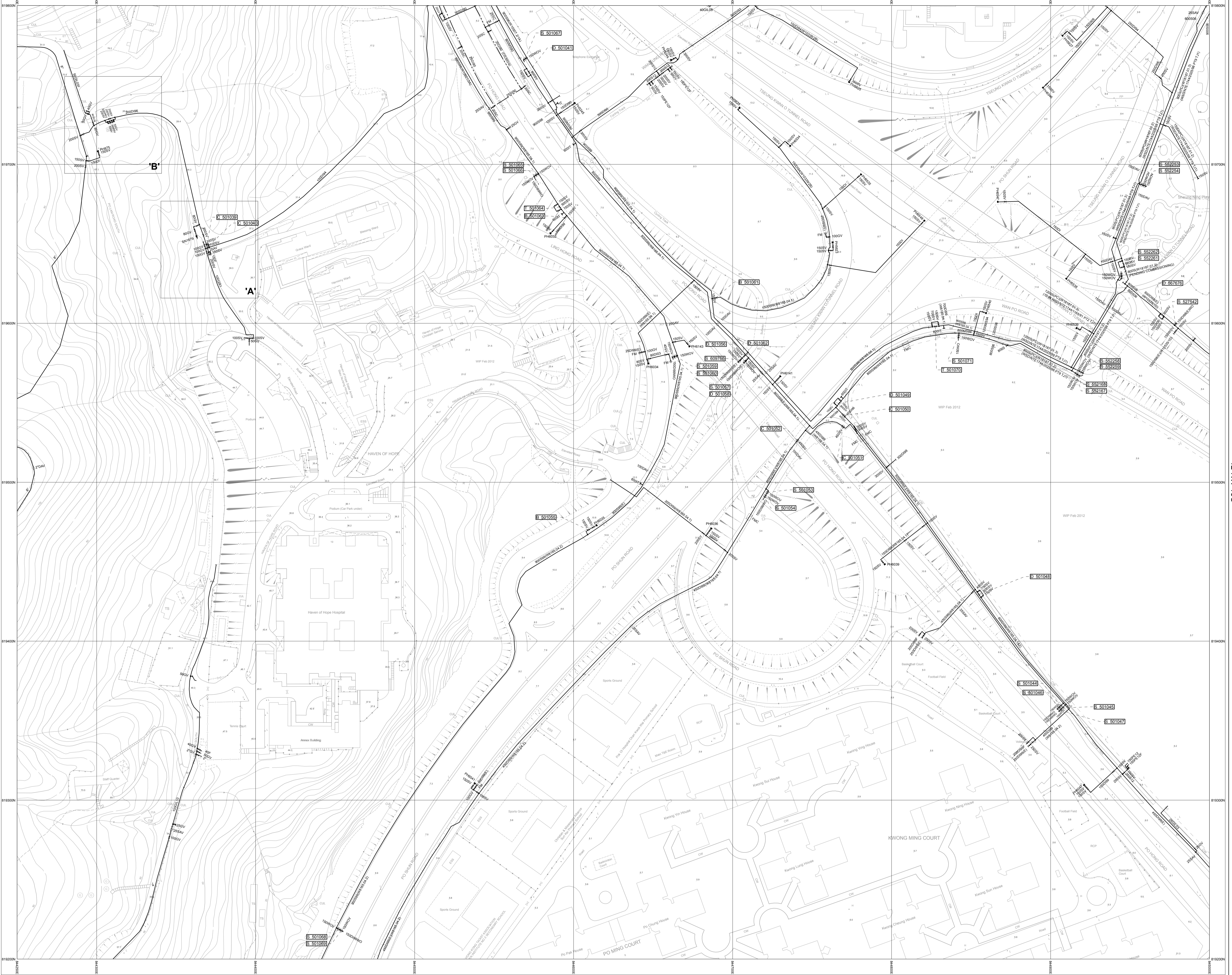
Water Supplies Department
HONG KONG



Scale 1:500

Scale 1:500

11-NE-20B



11-NE-25B

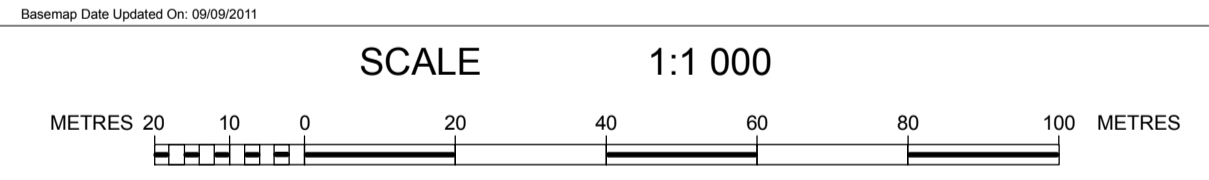
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 2. DIMENSIONS OF MAINS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
 3. ALL LEVELS ARE IN METRES ABOVE PRINCIPAL DATUM.

FRESH WATER MAINS RECORD PLAN
 HAVEN OF HOPE SANATORIUM, TSUENG KWAN O

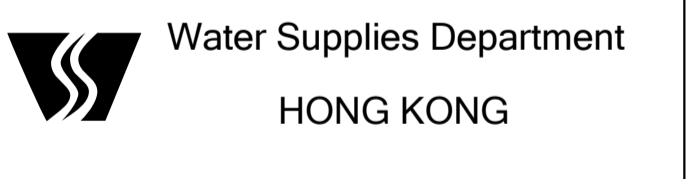
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SIGNED
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 CE/MSE
 DATE: 10/06/1999



INSET 'A'

INSET 'B'

INSET 'C'

INSET 'D'

INSET 'E'

INSET 'F'

11-NE-20C

11-NE-24B

11-NE-25B



11-NE-25C

NOTES:
 1. FOR MAINS RECORDS SIGN CONVENTIONS AND DESIGNATIONS SEE SKETCH NO.3988.
 2. DIMENSIONS OF MAINS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
 3. ALL LEVELS ARE IN METRES ABOVE PRINCIPAL DATUM.

FRESH WATER MAINS RECORD PLAN
 PO LAM ROAD, TIU KENG LENG

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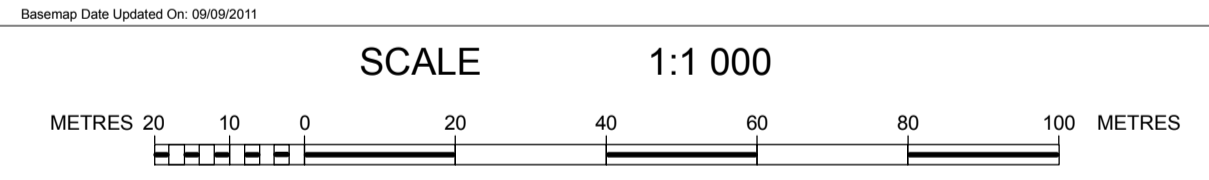
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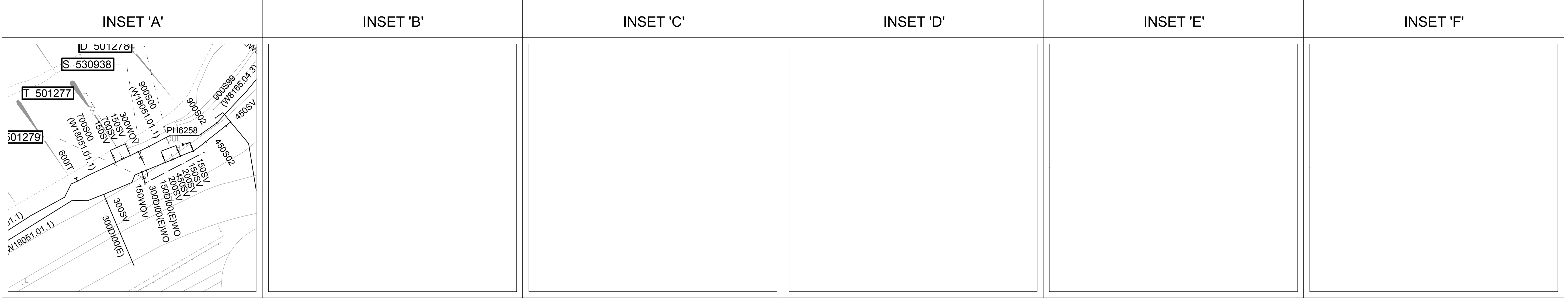
DRAWING NO.
W67880/ 11-NE-25A

DATE REVISED : 24/04/2013

SIGNED
C.H. NG
CE/MSE
DATE: 10/06/1999

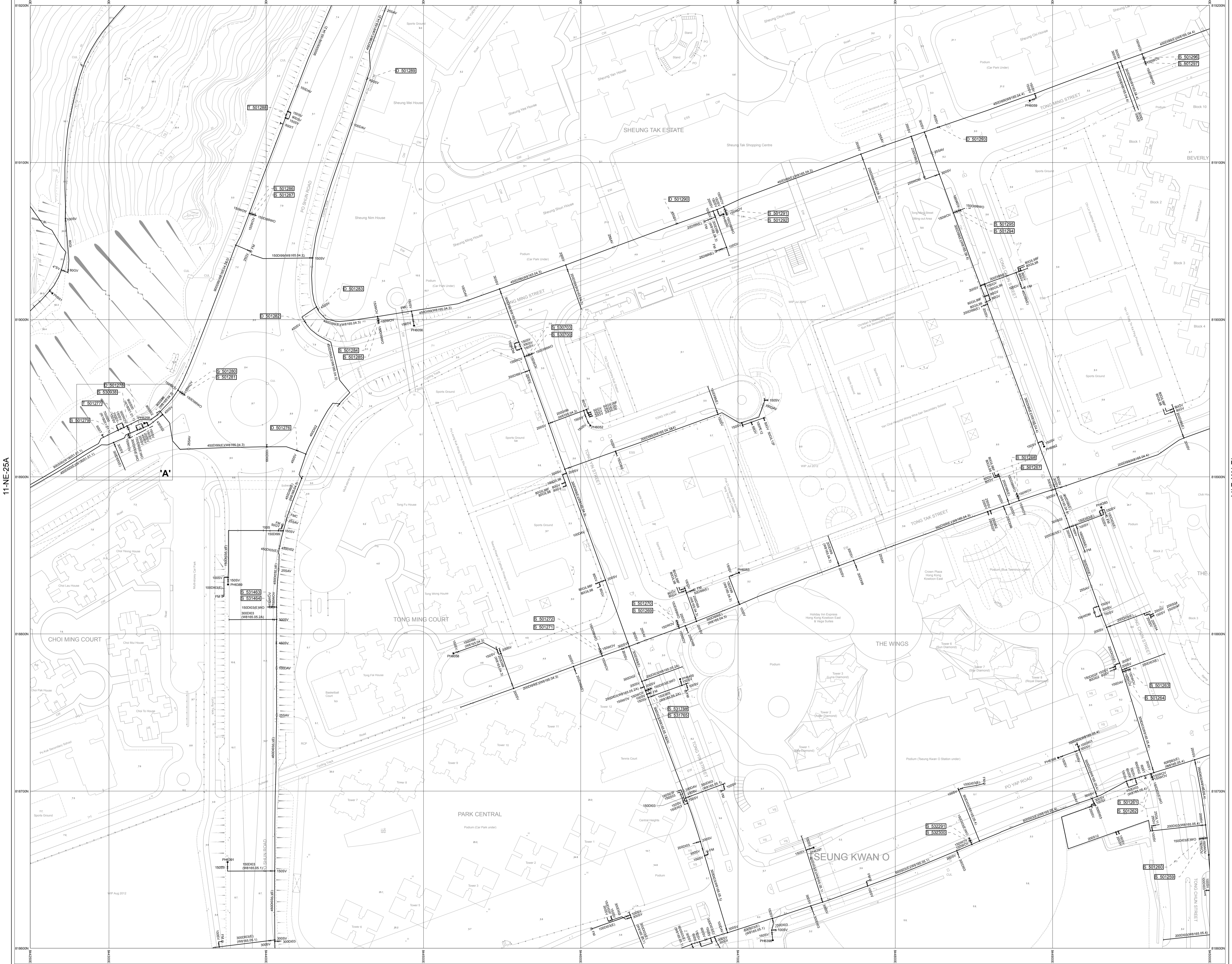
Water Supplies Department
HONG KONG





Scale 1:500

11-NE-20D



11-NE-25D

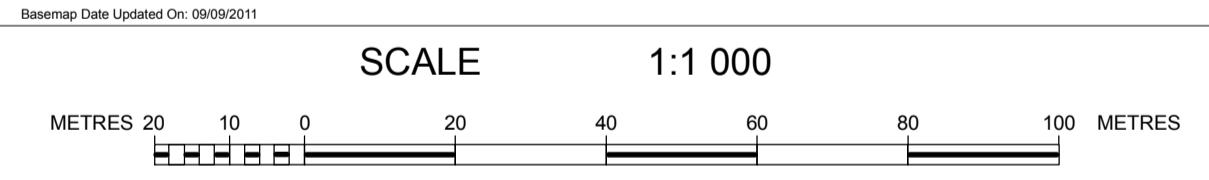
NOTES:
 1. FOR MAINS RECORDS SIGN CONVENTIONS AND DESIGNATIONS SEE SKETCH NO.3988.
 2. DIMENSIONS OF MAINS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
 3. ALL LEVELS ARE IN METRES ABOVE PRINCIPAL DATUM.

FRESH WATER MAINS RECORD PLAN
 PO LAM ROAD, TIU KENG LENG

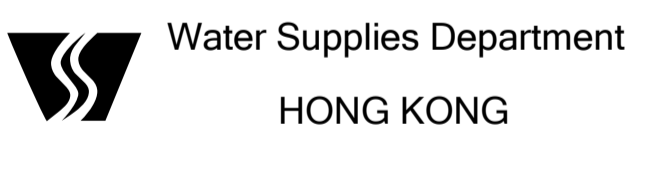
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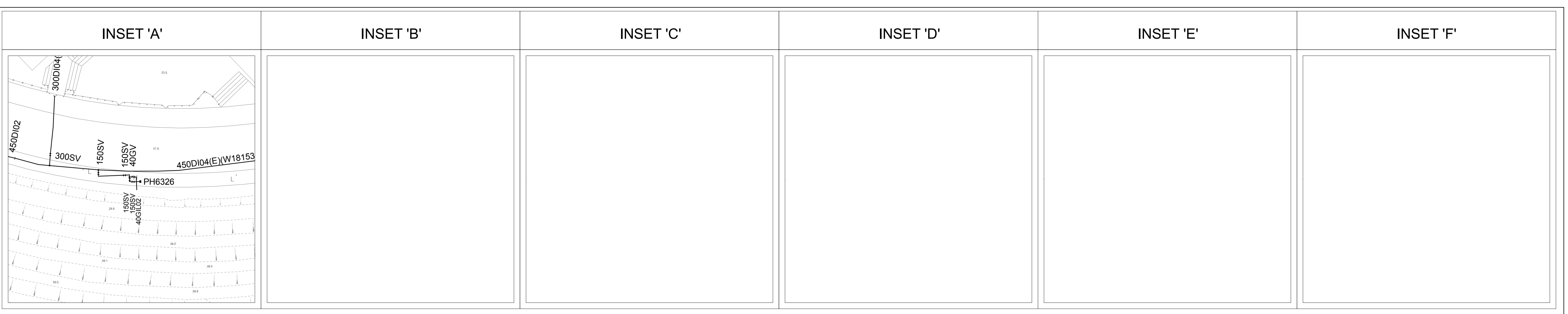
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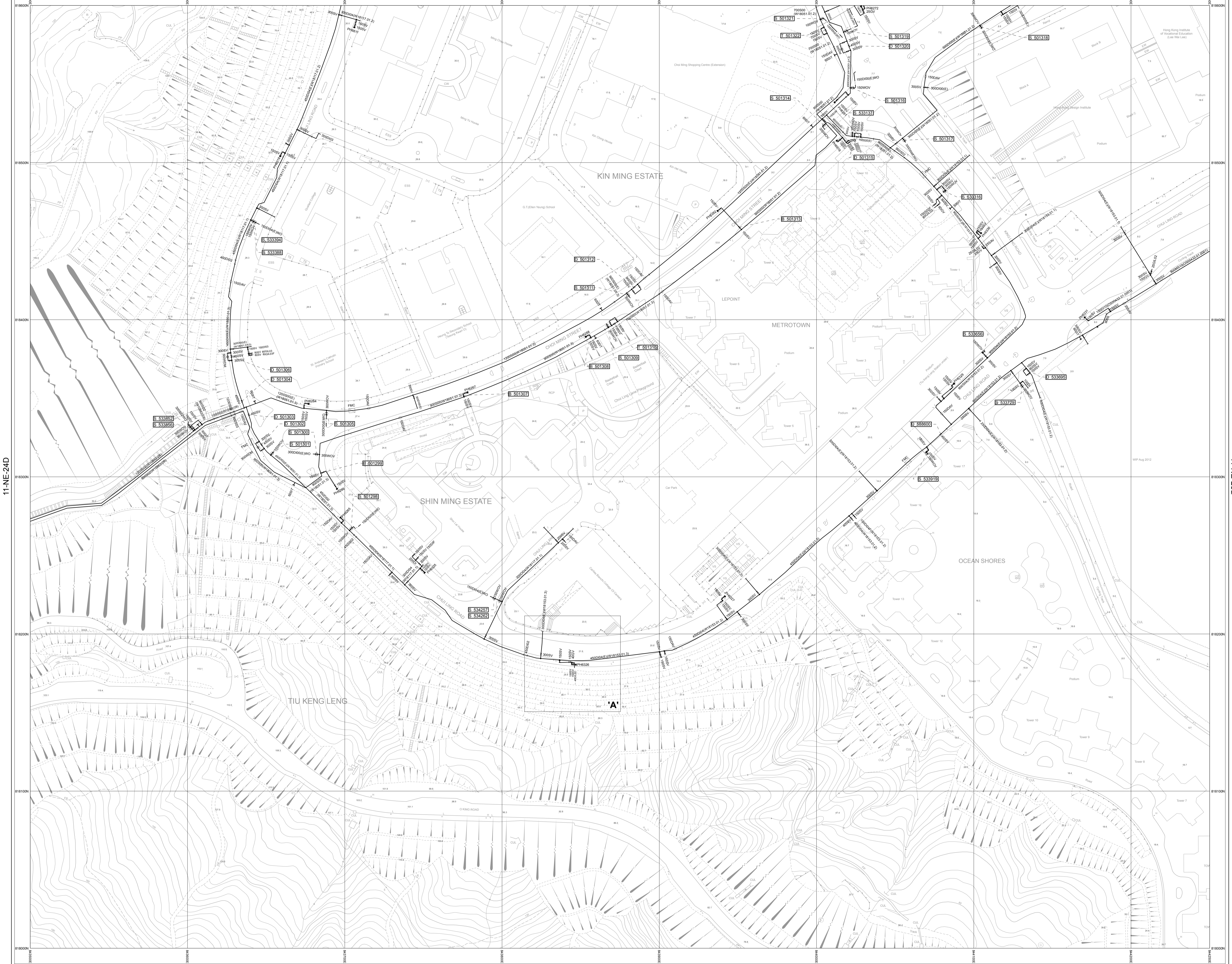
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Scale 1:500

11-NE-25A



11-SE-5A

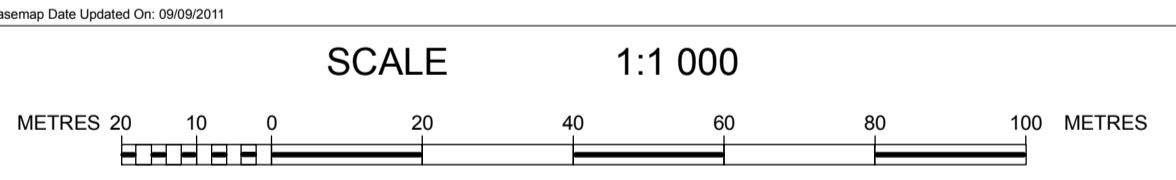
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 3. ALL LEVELS ARE IN METRES ABOVE PRINCIPAL DATUM.

FRESH WATER MAINS RECORD PLAN
 TAI WAN SAN TSUEN, TIU KENG LENG

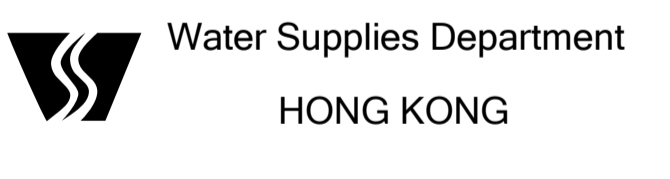
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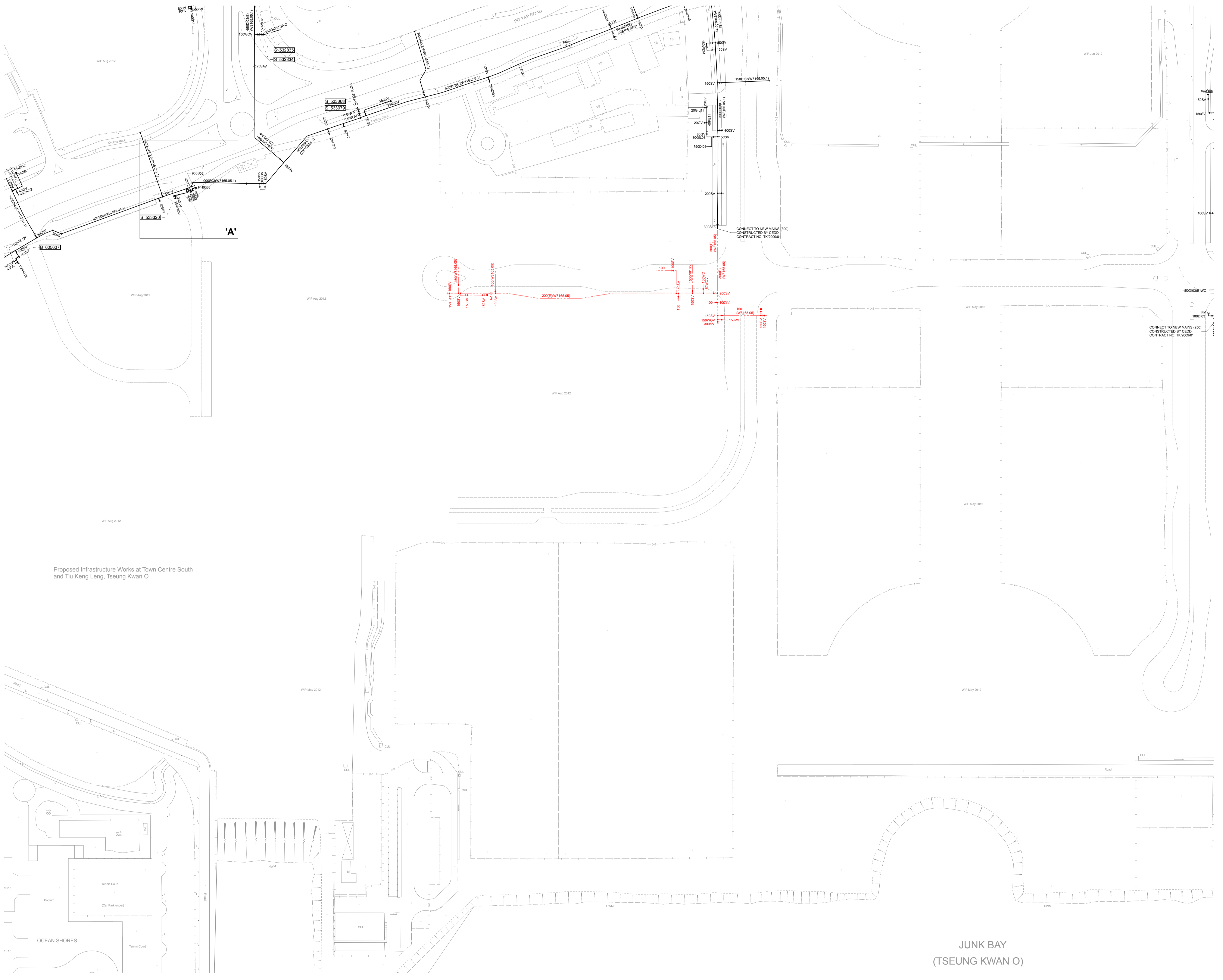
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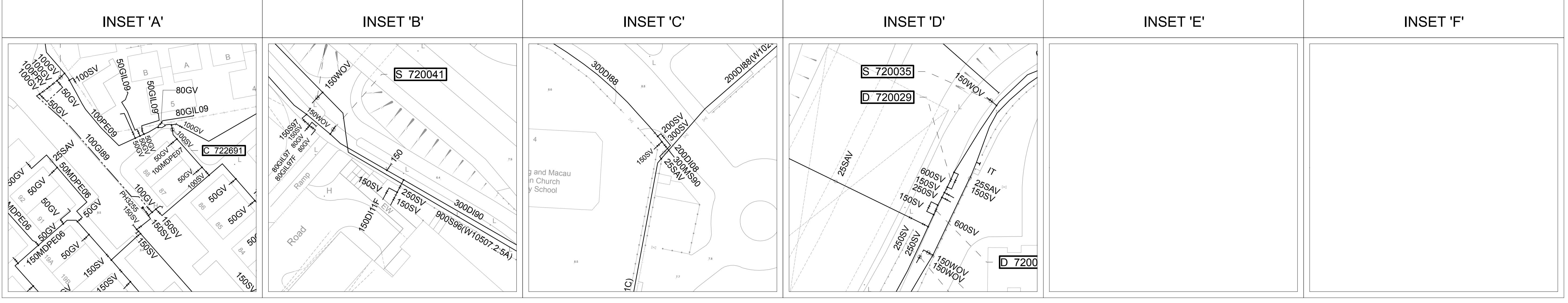
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Proposed Infrastructure Works at Town Centre South
and Tiu Keng Leng, Tseung Kwan O

JUNK BAY
(TSEUNG KWAN O)



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SCALE 1:1 000

METRES 20 10 0 20 40 60 80 100 METRES

FRESH WATER MAINS RECORD PLAN

HANG HAU TOWN, TSEUNG KWAN O

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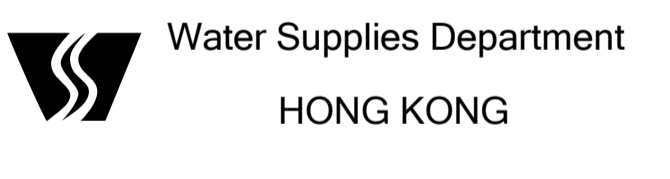
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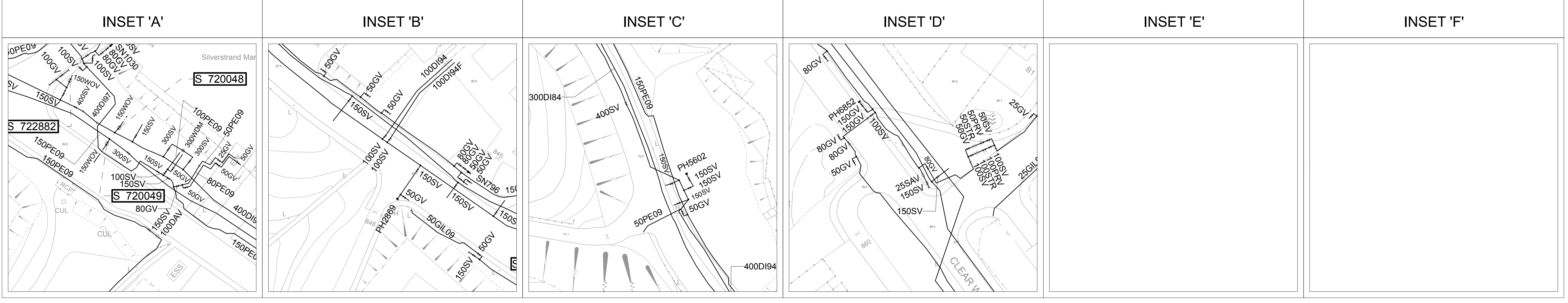
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SCALE 1:1 000

METRES 20 0 20 40 60 80 100 METRES

FRESH WATER MAINS RECORD PLAN

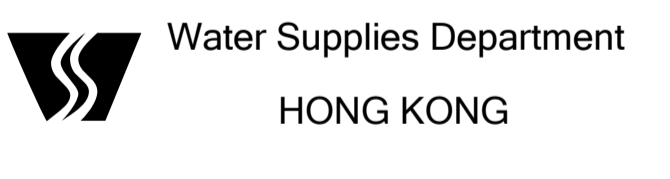
HANG HAU, NGAU MEI HOI

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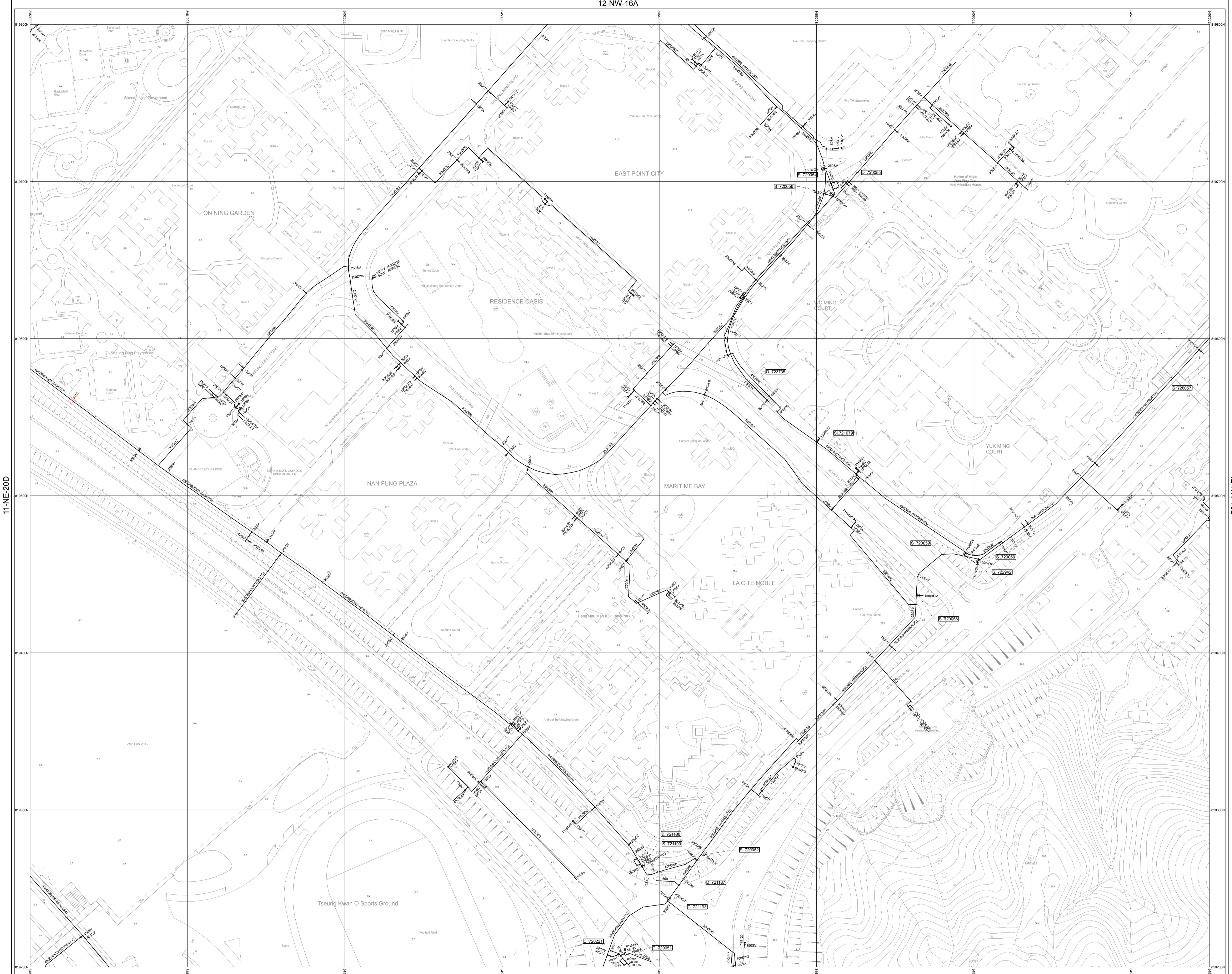
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INSET 'A'	INSET 'B'	INSET 'C'	INSET 'D'	INSET 'E'	INSET 'F'
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SCALE 1:1 000

METRES 0 20 40 60 80 100

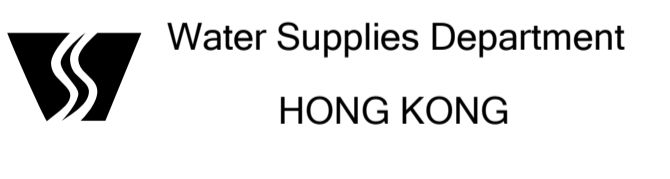
FRESH WATER MAINS RECORD PLAN
HANG HAU ROAD, TSEUNG KWAN O

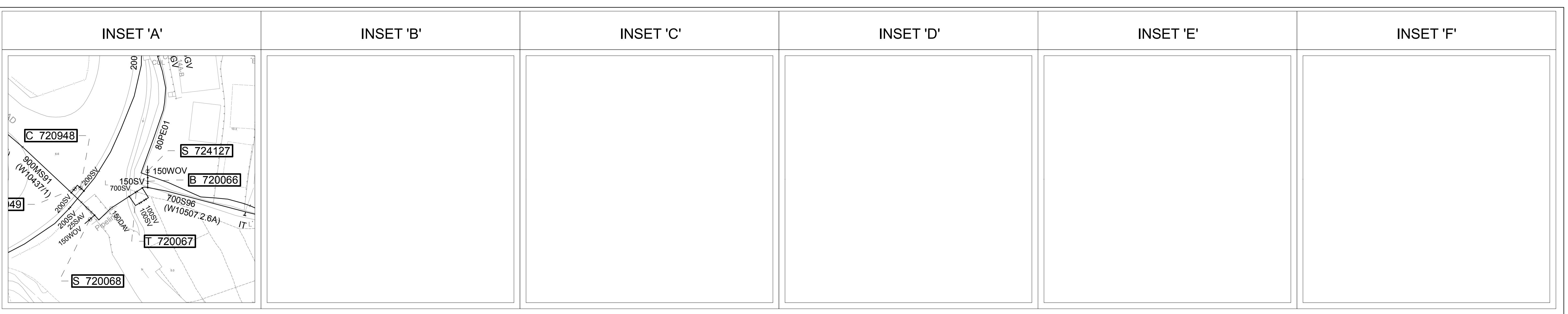
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12-NW-16B



12-NW-16C

12-NW-17C

12-NW-21B

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SCALE 1:1 000
 METRES 0 20 40 60 80 100

FRESH WATER MAINS RECORD PLAN
 WO TONG KONG, TSEUNG KWAN O

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