

計劃於伯公坳南大嶼山郊野公園
安裝流動電話收發站

工程項目簡介

香港移動通訊有限公司

由測建行有限公司制定

二零零九年十一月

基本資料

工程項目名稱

- 1 計劃於伯公坳南大嶼山郊野公園安裝流動電話收發站。

工程項目的目的及性質

- 2 本工程項目是由香港移動通訊有限公司流動電話網絡商進行，旨在為遠足人士及郊野公園的旅遊人士提供另一種的通訊方法和在危急的情況下確保旅遊人士可以使用通訊服務，因此需要於伯公坳南大嶼山郊野公園安裝流動電話收發站。

工程項目倡議人名稱

- 3 香港移動通訊有限公司

工程項目的地點及規模

- 4 擬建的無線電收發站將在附件一的位置圖所顯示的南大嶼山郊野公園範圍內興建，地點共佔 23.2 平方米的郊野公園用地[5.8 米 (長度) x 4.0 米 (闊度)] 並興建於山上(+343.465mPD)。工程將包括裝置一個混凝土平台裝置六(6)個無線電話儀器與一支 12 米高的天線桿及其他設備包括電力供應及電話線。位於混凝土平台的底部前方是一個大塊混凝土[5.6 米 (長度) x 2.8 米 (闊度)]。以上裝置將會被鐵絲網包圍。所有建築材料、天線桿、天線和設備基台將由工人運送，而廢料亦會由工人直接運走。上述工程不會興建小徑。
- 5 地政總署已同意在建議地點興建一個綜合流動電話收發站。是項工程項目主管，香港移動通訊有限公司，已接受由離島地政處提出的短期租約(STT No.CX1913)(副本和位置圖載於附件二)
- 6 公共設施包括電力供應及電話線將會安裝在本流動電話收發站內。
- 7 電訊覆蓋範圍及對環境的影響是選址的重要因素，建議地點被認為是提供南大嶼山郊野公園覆蓋範圍的最佳地點。其他地點亦曾被考慮，但覺得不適合。

指定工程項目

- 8 是項工程是於附件一中所指的擬建工地上興建無線電收發站。根據環境影響評估條例附表 2 第 I 部 Q1 項，基於是項工程含有在自然保育區範圍內進行建築工程，故此是項工程乃指定工程項目，並不列入 Q1 項 (a) 至 (j) 的例外工程中。

聯絡人的姓名及電話號碼

- 9 工程之聯絡人為香港移動通訊有限公司李威豪先生，聯絡電話 2888 3655，傳真號碼 2962 5144。

規劃大綱及工程項目的執行

- 10 是項工程項目是由香港移動通訊有限公司規劃及管理，目的在建議地點裝置電訊設備以提供網絡。
- 11 在取得離島區地政處批出短期租約及由環保署所發出的許可證和屋宇署的開工同意書後，工程項目主管，香港移動通訊有限公司，將會根據工程編制表展開及完成工程。修訂結構圖則預計於 2009 年 11 月下旬遞交于屋宇署審批，並估計會在 2009 年 12 月下旬獲得批核。

工程項目時間表

- 12 預期工程，包括安裝天線及電訊設備將預期於 2010 年 3 月中動工，為期三個月，並預期於 2010 年 7 月中完工。預計電話收發站將於 2010 年 8 月尾投入服務。工程編制表載於附件三。

泥頭將會由工人盡快運走。避免積水和山泥傾瀉開坑的地方將會用英泥沙或草鞋蓋上。

在豪雨期間進行挖坑工程所需採取的預防措施，以減低受山泥傾瀉影響的機會：

- a) 從相鄰地流入工地的地面水，應攔截和引導到指定安全排水口；
- b) 避免積水和山泥傾瀉，所有挖坑地方應封蓋好；
- c) 為了減小外露的泥土，應選用一種較合適的挖坑方法；
- d) 外露的挖坑工程應用帆布遮蓋。如挖坑工程外露多於兩星期，應用英泥沙或草鞋蓋上和提供臨時的排水系統。

對環境可能造成的影響 建築期間

- 13 有關建築期間直至完工之環境及視覺影響，請參閱第 22, 23 項。
- 14 有關建築期間直至完工之所產生的噪音將會減至最少，詳情請參閱第 24 項。

- 15 有關建築期間直至完工之廢料管理影響，包括建築及多餘物料將會減至最少，詳情請參閱第 25 項。
- 16 有關建築期間所產生的沙塵將會減至最少，詳情請參閱第 26 項。
- 17 由於挖掘深度不足 925 毫米及不需岩石爆破，此項目並不涉及大形挖泥工程或泥土運輸。
- 18 是項工程並不需要晚間工作。
- 19 預料建築期間直至完工，將不會對生態或環境造成任何影響。

運作期間

- 20 該流動電話收發站竣工後將不會對周圍環境造成嚴重影響。結構圖則及有關相片載於附件四和六。有關相似的流動電話收發站的相片載於附件五。

周圍環境的主要元素

背景

- 21 設備基台位於斜坡上。基台給雜草、大樹和矮樹叢圍繞。位於北方是一條小徑，而越過小徑是主要大路。基台的四方是斜坡。設備基台的範圍和鄰近沒有溪流。

目前該處並無已落成或籌劃中的噪音監測站。另外，該處亦無輻射監測站，空氣監測站，噪音監測站，生態監測站及古蹟監測站。因此，是項工程並不會影響自然保育區的現狀。

擬建工地被一般在香港常見的雜草、樹木和矮樹包圍，如籐欖花椒，酸藤子，芒萁，鏽毛莓和台灣相思。因佔地很少(約 23.2 平方米)，擬建的綜合流動電話收發站不會影響上述的植物。興建無線電收發站並不需要砍伐樹木。

對園林之影響

- 22 擬建的無線電收發站包括六(6)個 3 米高的無線電話設備基台與一支 12 米高的天線桿興建於斜坡上(+343.465MPD)。無線電收發站的最高點是 +356.39MPD 而 山頂的最高點是+370.1MPD。無線電收發站的面積小被樹木、矮樹和雜草包圍，所以無線電收發站並不明顯。

將採取的環保措施

- 23 電訊設備之位置及設計會附合郊野公園及海岸公園管理局之意見。為了減低周圍環境造成視覺及景觀影響，天線及電訊設備將髹上油漆

“Antique”(B.S. 10B25 or Pantone 462U)或近似的顏色以配合周圍環境。

- 24 擬建工程只會使用輕巧工具，大形工具不會使用。加上噪音監測站離開工地多於 600 米，所以工程項目將不會產生顯著的噪音影響。工程亦只會於日間(上午九時至下午七時)進行。由於星期六、日及公眾假期時，遊人會較多，因此，於上述日子將會暫停有關的建築工程。
- 25 工程所產生的建築廢料將會由工人盡快運走。
- 26 擬建工地將會保持濕潤以防止於工程中產生塵埃。
- 27 是項工程中將會導入” Standard Pollution Mitigation Measures”。流動電話收發站之運作無須任何工作人員，因此將不會產生噪音或對空氣或水質造成影響。
- 28 流動電話收發站之運作將會遵守電訊管理局所發出之 ”Code of Practice for the Protection of Workers and Members of Public Against Non-Ionizing Radiation Hazards from Radio Transmitting Equipment”。擬建工地遠離遊人活動範圍。另外，收發站的訊息所發放儀器位於遊人頭頂水平上最少 12 米以上。因此，收發站所發放的幅射將不會對公眾造成影響。
- 29 如有需要，香港移動通訊有限公司將會派人每年清潔流動電話收發站及重新上油。除非當收發站發生問題或需要緊急維修，將會在第一年派人每三個月一次及往後每年一次進行定期檢查。如此低密度的維修將不會對環境造成明顯的影響。

附件

- | | |
|------|----------------|
| 附件 一 | 工地位置圖及局部平面圖 |
| 附件 二 | 由地政總署發出擬建工地位置圖 |
| 附件 三 | 工程編制表 |
| 附件 四 | 地理位置相片 |
| 附件 五 | 一般相似的流動電話收發站相片 |
| 附件 六 | 修訂結構圖則 |

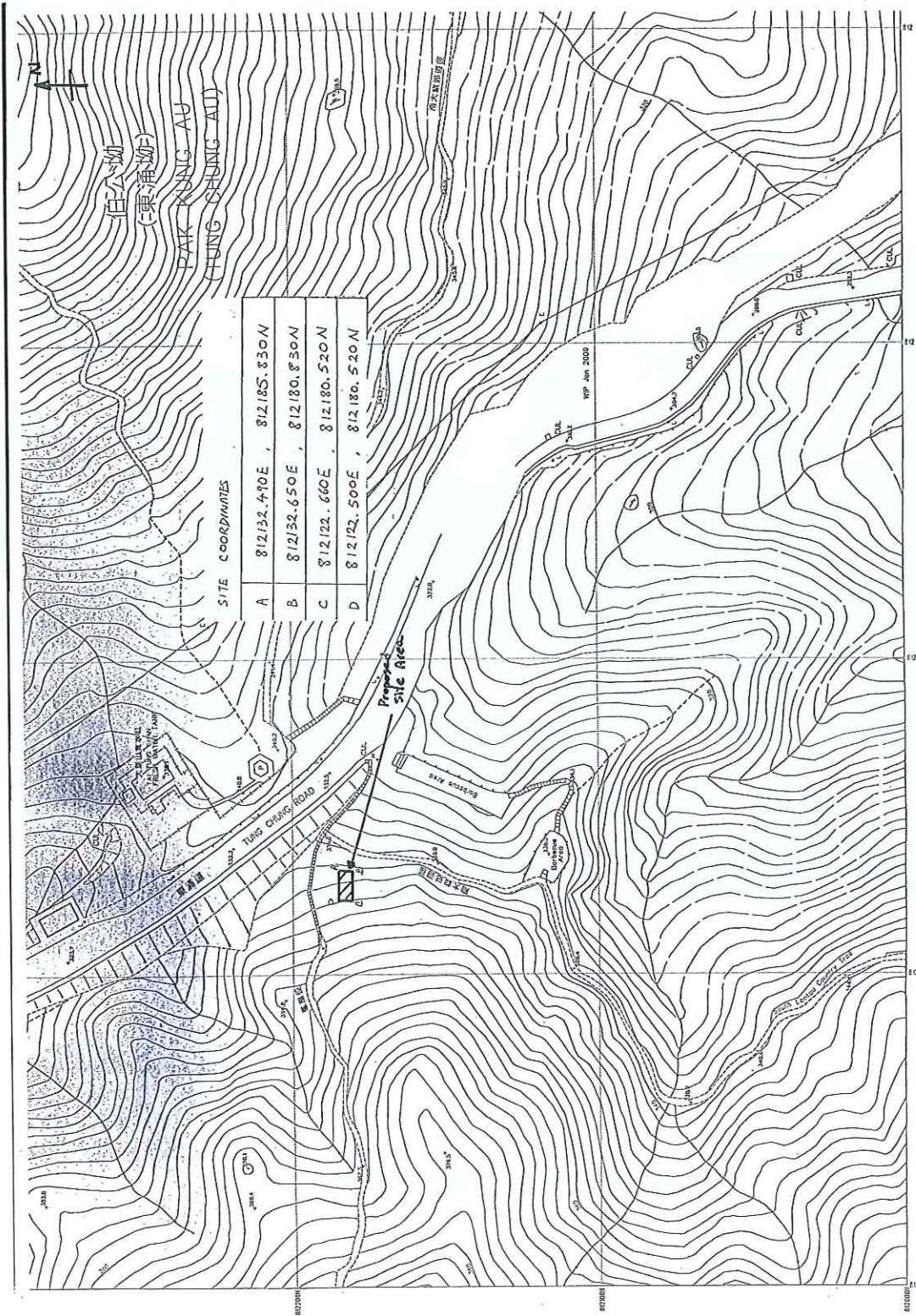
附件 一

工地位置圖及局部平面圖



Proposed Site Area

SITE LOCATION PLAN



SITE PLAN

附件二

由地政總署發出擬建工地位置圖

電話 Tel: 2852 3573
圖文傳真 Fax: 2850 5104
電郵地址 Email: gendlois@landsd.gov.hk
本署檔號 Our Ref.: (42) in DLO/IS CX 1913
來函檔號 Your Ref.:



地政總署
離島地政處
DISTRICT LANDS OFFICE, ISLANDS
LANDS DEPARTMENT
香港統一碼頭道38號海港政府大樓十九樓
19/F., HARBOUR BUILDING,
38 PIER ROAD, HONG KONG.

我們矢志努力不懈，提供盡善盡美的土地行政服務
We strive to achieve excellence in land administration.

Please quote my file reference when reply

By Recorded Delivery

Date: 30 June 2009

CSL Limited
Unit 501-8, 5/F,
Cyberport 3,
100 Cyberport Road,
Hong Kong.

Dear Sirs,

**Proposed Short Term Tenancy (STT) CX1913
For Installation of Radio Base Station
at Pak Kung Au, Lantau Island**

I have been instructed to offer you a Short Term Tenancy in respect of the captioned Government land which will allow you to use the land for the purpose of Radio Base Station only.

The basic terms are as follows :-

- Term : Two years certain and thereafter quarterly (subject to three months' notice of termination by either party)
- Area : 50 m² (about) (subject to survey) as shown coloured pink on the attached plan No. ISM1691-C /
- Rent : \$ 1.00 p.a. (if demanded)
- Administrative Fee : \$ 72,590.00 (subject to revision)
- Deposit : Nil
- Permitted Structures : (i) A concrete slab occupying an area of 32 square metres;
- (ii) Not more than eight equipment shelters each having a height not exceeding 3 metres installed on the concrete slab; and /



- (iii) Twelve antennae to be mounted on one antenna pole having a height of 12 metres (excluding the lightning rod of length not more than 0.5 metres) installed on the concrete slab. ✓

Other Conditions

- : (i) As and when required by the Telecommunications Authority ("TA"), underlet the Premises to other authorized telecommunication service providers "Authorized Persons".
- (ii) Arrange for shared use of the relevant facilities and improvement of the Premises with the Authorized Persons to the satisfaction of the TA.
- (iii) Enter into a written agreement with the Authorized Persons concerning the shared use of the relevant facilities and improvement of the Premises to the satisfaction of TA.
- (iv) Observe and comply with all relevant laws, By-laws and Regulations; and to obtain all relevant licenses as required.
- (v) No advertisement is allowed.
- (vi) Fire prevention measures as required by the Director of Fire services.
- (vii) Protective drainage measures, maintenance etc. as required by the Director of Water Supplies.
- (viii) To make arrangement to obtain fresh water supply subject to the approval of the Director of Water Supplies.
- (ix) No right of ingress or egress to or from the Premises for the passage of motor vehicles will be permitted.
- (x) Observe and comply with all the approved conditions as given by the Director of Agriculture, Fisheries and Conservation.
- (xi) Subject to such final terms and conditions as will be contained in the tenancy agreement.

If you wish to take up the offer of the new Short Term Tenancy, I should be grateful if you would complete the docket on page 4 and return it to me within 21 days from the date of this letter whereupon the tenancy agreement will be prepared for your signature. An additional copy of this letter is enclosed for your retention. I must emphasize that there is no agreement binding on the Government of the Hong Kong Special Administrative Region ("the Government") unless and until a formal tenancy agreement between you and the Government has been duly signed after your completion settlement of all outstanding rent/fees.



The proposed Short Term Tenancy may be withdrawn, or if subsequently completed, will be subject to such final terms and conditions as will be contained in the tenancy agreement prepared and issued to you for execution by you and any expenses which you may incur in respect of the proposed tenancy before execution of the tenancy agreement will be at your own risk and the Government will accept no liability for them.

I would further advise that if you do not wish to avail yourself of the offer of the new Short Term Tenancy you are required to inform me in writing within 21 days from today of your decision.

Should you be in doubt about the contents of this letter, please contact Mr. K. K. YUEN at District Lands Office, Islands (Tel. No. 2852 4254).

Yours faithfully,



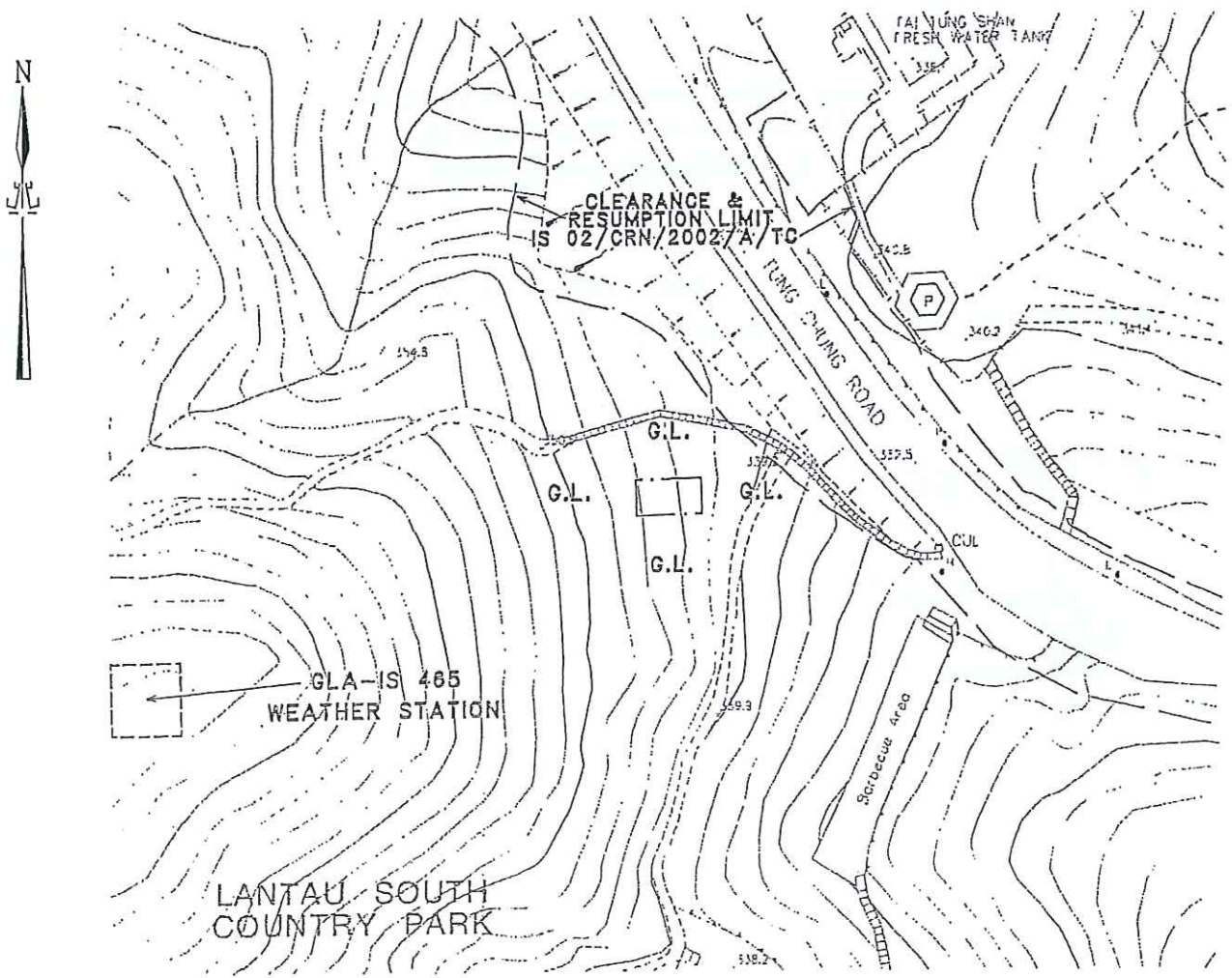
(M. K. CHEUNG)
for District Lands Officer, Islands

Encls.

c.c. C.R.V.



SHORT TERM TENANCY No. CX 1913
AT PAK KUNG AU, LANTAU ISLAND

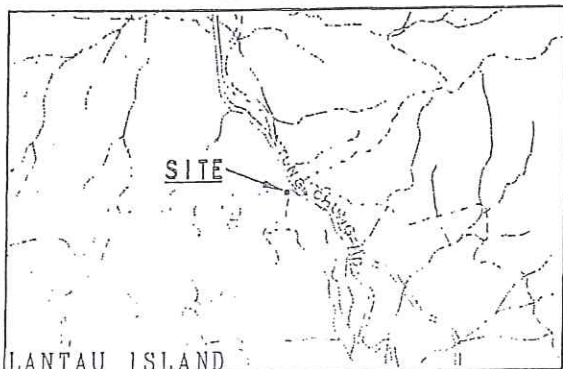


COLOURED PINK AREA ----- SQUARE METRES (ABOUT)

SCALE 1 : 1000



LOCATION



SCALE 1 : 20000

LEGEND

PROP. STT AREA 50 m² (ABOUT)

SITE WITHIN LANTAU SOUTH COUNTRY PARK
AND WATER GATHERING GROUNDS (WWO
2/1663/65 VIII)

FOR IDENTIFICATION PURPOSES ONLY

File No. L/M(1) to DLO/IS CX1913

Survey Sheet No. 9-SE-24C

Layout Plan No. -----

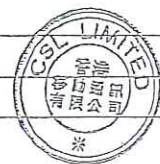
Reference Plan No. -----

PLAN No. ISM1691-C



District Lands Office, Islands
Lands Department

Plan Prepared by District Survey Office, Islands



Date : 23.3.2009

To : District Lands Officer, Islands

Proposed Short Term Tenancy (STT) CX1913
For Installation of Radio Base Station
at Pak Kung Au, Lantau Island

I accept the terms for a Short Term Tenancy as set out in your letter
ref. (42) in DLO/IS CX 1913 dated 30 June 2009.

For and on behalf of
CSL LIMITED

Authorized Signature(s)

K. F. Luk
Director
Network Operations



(Seal of CSL Limited

and signatures and names in block letters of its attesting officers
and description of their offices)

in the presence of :

(Full Name) DEREK SUNG (Signature)

Address : 18/F, Manhattan Centre, 8 Kwai Cheung Road, Kwai Chung, N-T.

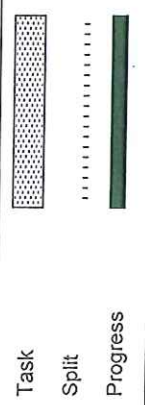
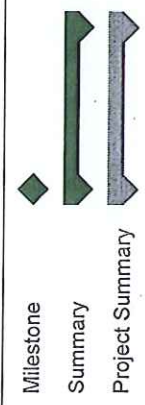
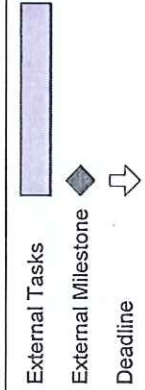
Date : _____



附件 三
工程編制表

Proposed Installation of Integrated Mobile Radio Base Station at Lantau South Country Park, Pak Kung Au, N.T.

ID	Task Name	Duration	Start	Finish	2010																		
					Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct							
1	Amendment submission for approval by Buildings Department (BD)	30 days	Mon 30/11/09	Tue 29/12/09																			
2	Submission of Project Profile (PP) / Apply for permission to apply directly for Environmental Permit (EP)	45 days	Thu 26/11/09	Sat 9/1/10																			
3	Permission from EPD for apply for EP directly	5 days	Sun 10/1/10	Thu 14/1/10																			
4	Apply for EP	30 days	Fri 15/1/10	Sat 13/2/10																			
5	Apply for consent and submission of SSP	30 days	Sun 14/2/10	Mon 15/3/10																			
6	Mobilization	7 days	Tue 16/3/10	Mon 22/3/10																			
7	Carry out excavation work	60 days	Tue 23/3/10	Fri 21/5/10																			
8	Construction of footing	55 days	Sat 22/5/10	Thu 15/7/10																			
9	Equipment and Antenna installation	17 days	Fri 16/7/10	Sun 1/8/10																			
10	Testing and Commission	30 days	Mon 2/8/10	Tue 31/8/10																			




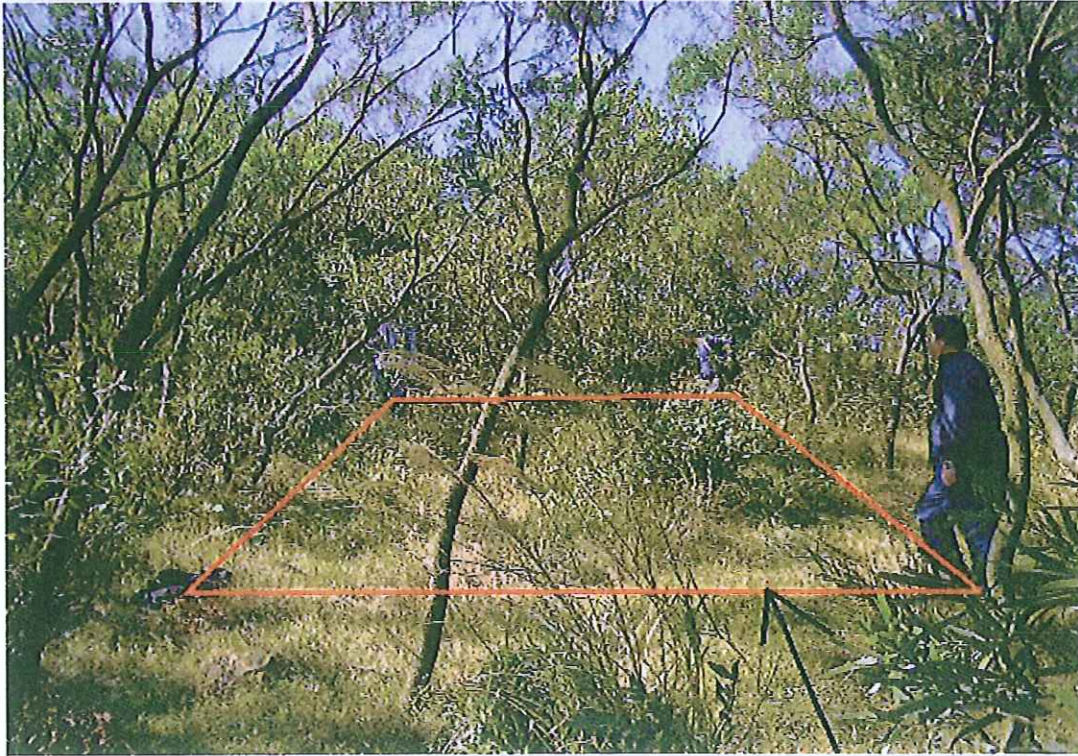
Project: works schedule_1
Date: Wed 25/11/09



附件 四

地理位置相片





Proposed Site Area

Photo 1: General view of the proposed area



Proposed Site Area

Photo 2: General view of the proposed area



Proposed
Site Area

Photo 3: General view of the proposed area

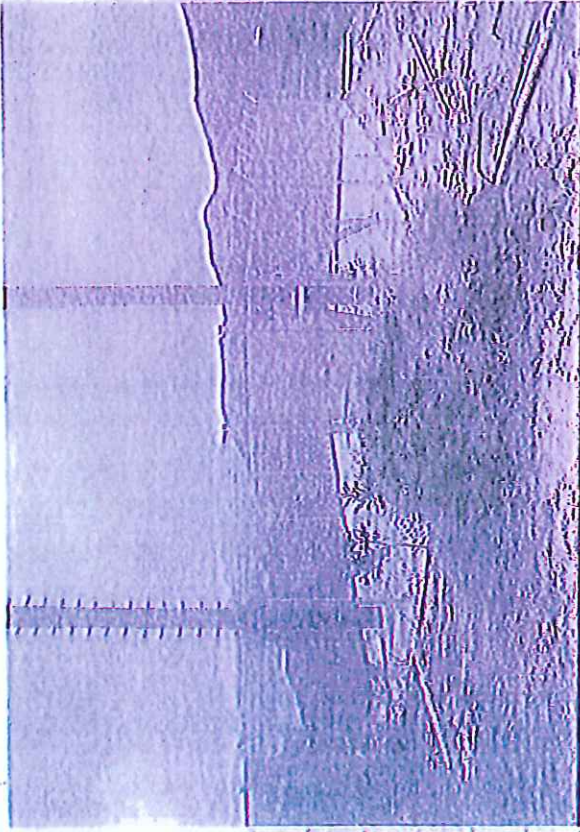
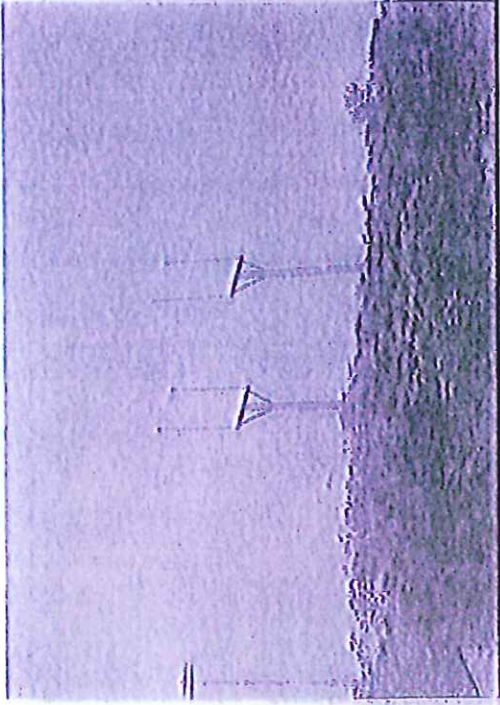


附件 五

一般相似的流動電話收發站相片

Country Park

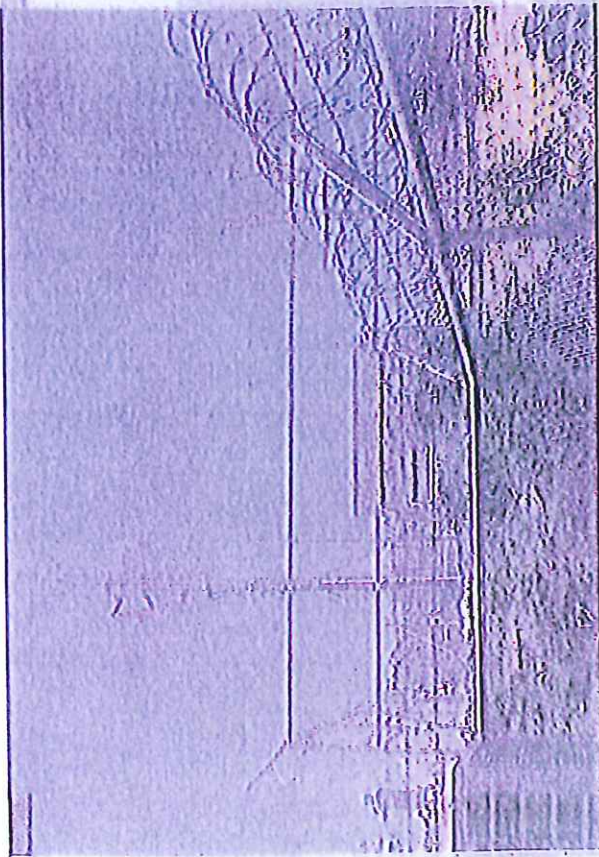
Duty: Design the equipment shelter and antennas, Submission to Buildings Department for approval, Site supervision to the works



YUEN NG FAN

Country Park

Duty: Design the equipment shelter and antennas, Submission to Buildings Department & Environmental Department for approval, Site supervision to the works,



SOUTH LANTAU ISLAND COUNTRY
PARK, MAN CHEUNG PO, TAI O

附件 六
修訂結構圖則

GENERAL NOTES:

STRUCTURAL WORKS

- The design of superstructure is in accordance with "Building (Construction) Regulation 1990", "The Structural Use of Steel 2005, Hong Kong" and "The Structural Use of Concrete 2004".
- The wind analysis to be in accordance with "Code of Practice on Wind Effects, Hong Kong -- 2004".
- All structural steel shall be Grade S275 for hollow section and complies with BS EN 10210-1:2004. All reinforced concrete works shall comply with the Hong Kong Building (Construction) 1985.
- All structural steel to be Grade S275 and complies with BS EN 10025:2004.
- The structural steel shall be hot-dip galvanized to BS EN ISO 1461:1999.
- The fabrication, erection and welding of structural steel shall conform to the Hong Kong Building (Construction) Regulations 1990 and Code of Practice for Structural Use of Steel 2005.
- All welding shall conform to B.S. 639 and B.S. 5135 (1984). All welding shall thereafter be applied with two coats of Zinc rich epoxy primer.
- All welding shall be carried out by qualified welders having satisfactorily completed the appropriate welding tests specified in B.S. 4871 (1985) prior to the commencement of structural steelwork.
- Except where otherwise stated in the drawings, 6mm continuous fillet welds shall be used.
- All weld shall be tested in accordance with B.S.3923 (1986).
- Certificate of origin and chemical composition of the structural steel to be used shall be submitted to the Engineer prior to the commencement of fabrication work.
- Adequate supervision shall be carried out by the Engineer during execution of the proposed works.
- Test reports on bolts and weldings shall be submitted to the CSL office for record purpose.
- The Contractor shall appoint a professionally qualified and technical competent person to supervise the execution of works.
- All bolts and nuts shall comply with the appropriate provisions of B.S. EN. ISO 3506-1: 1998 & 3506-2:1998
- All stainless steel bolts and nuts shall be grade A2-50 and complies with BS 6105.
- All non-shrinkage grout shall be complied with SAA MP20 part 3.
- SOIL BEARING CAPACITY = 75 kPa. FOOTING FOUNDED ON COMPACTED FILL MATERIALS
- MATERIAL: a) CONCRETE: GRADE 30 TO CSI
 $f_{ck} = 10.0 \text{ mPa}$
 $f_{yk} = 7.5 \text{ mPa}$
 $f_{td} = 1.0 \text{ mPa}$
 b) REINFORCEMENT: HIGH TENSILE STEEL TO CS2
 $f_{yk} = 230.0 \text{ mPa}$
 $f_{td} = 175.0 \text{ mPa}$
- GI REPORT SHALL SUBMIT TO BD PRIOR TO CONSENT APPLICATION.

FIRE SERVICES NOTES:

- No F.S. equipment installation is required.
- COMPACTION :
 The in-situ field dry densities of compacted materials shall not be less than 95% of the maximum dry density described

TABLE 1:

FILL IN EXCAVATIONS	0-100m ²	100-500m ²	EXCEEDING 500m ²
	3	2	1
	For each 100m or part thereof		

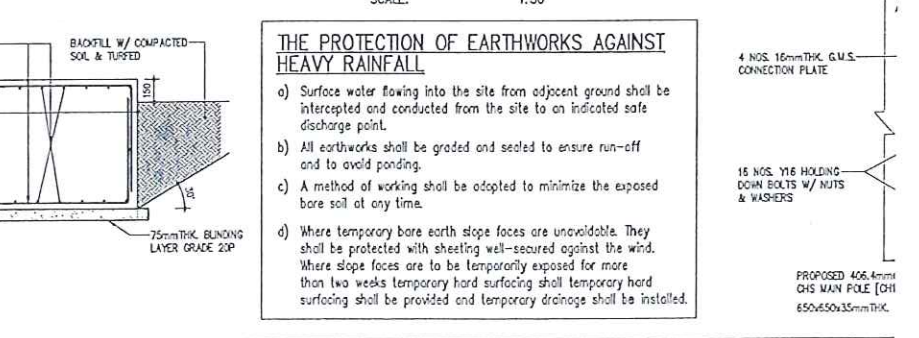
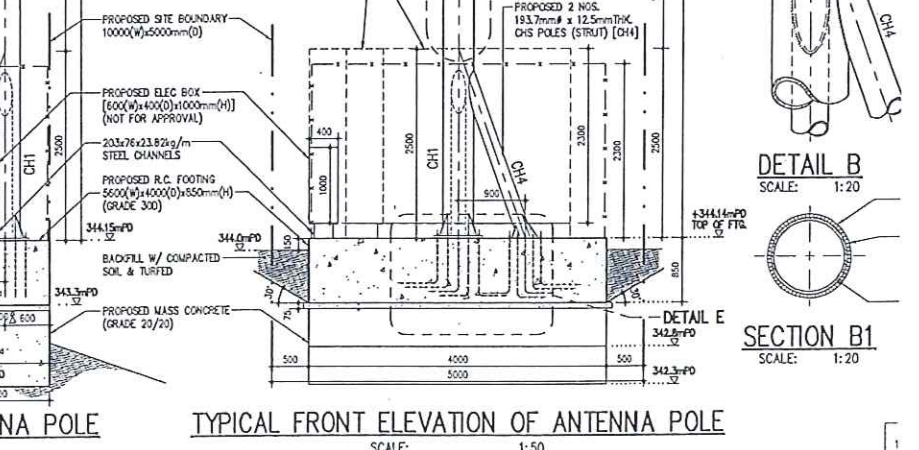
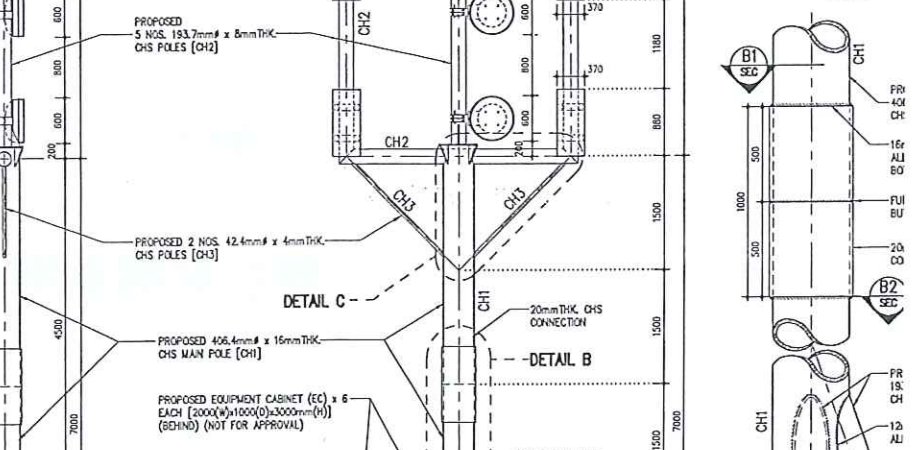
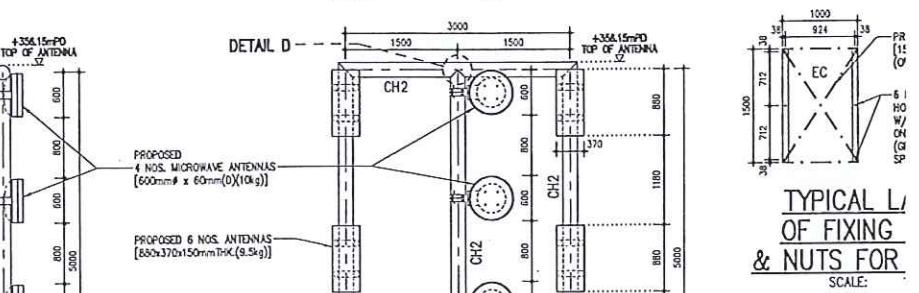
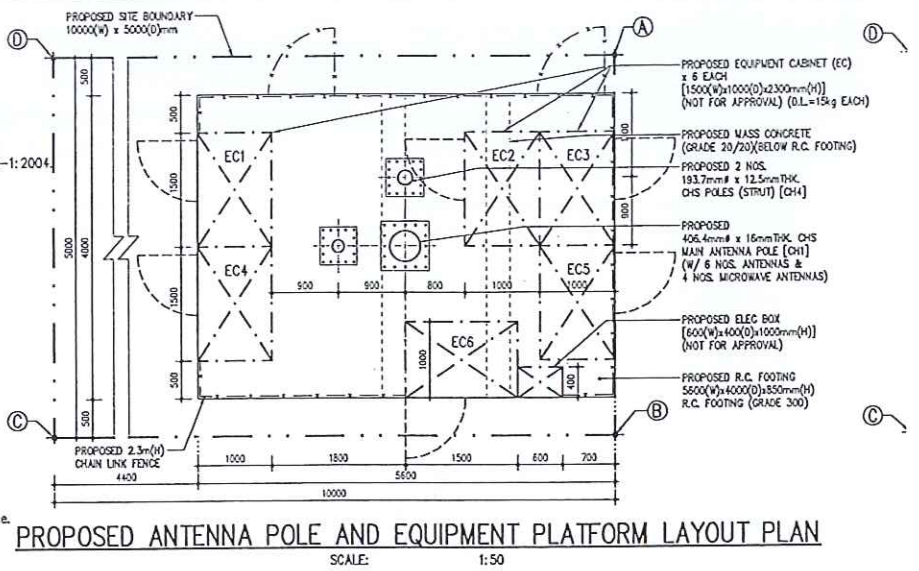
* A Batch of fill material is any quantity of fill material of the same type and has similar properties throughout

- Tenancy Area = 50m² (Tenancy No. SIT CX 1913)
- Proposed Site Coverage = $\frac{9.24}{50} \times 100\% = 18.48\%$

Area of Cabinets:

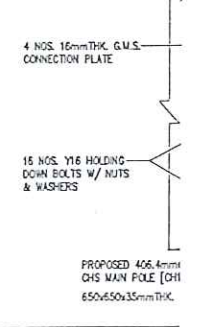
EC1	1.5m ²
EC2	1.5m ²
EC3	1.5m ²
EC4	1.5m ²
EC5	1.5m ²
EC6	1.5m ²
Elec Box	0.24m ²
	9.24m ²

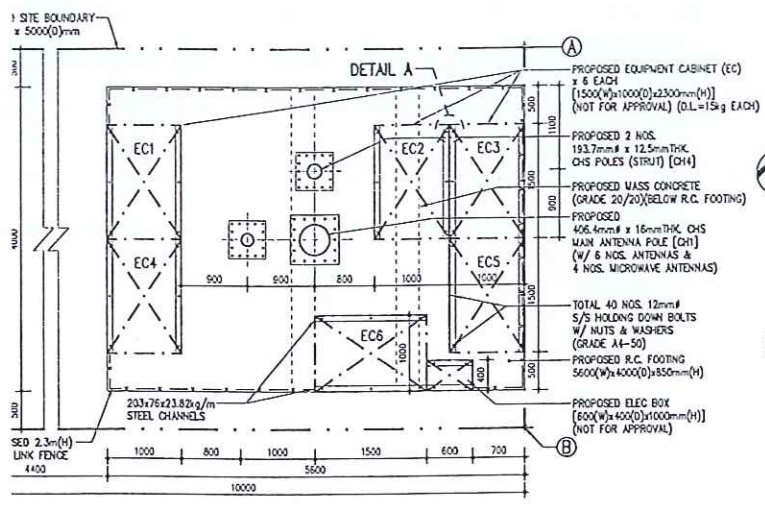
- Height of Antenna Pole is 12m, height of Cabinet 2.3m.
- All antenna poles should be painted in Pantone 452U, BS 10825 or similar subtle colours upon completion to match with the surrounding environment.



THE PROTECTION OF EARTHWORKS AGAINST HEAVY RAINFALL

- Surface water flowing into the site from adjacent ground shall be intercepted and conducted from the site to an indicated safe discharge point.
- All earthworks shall be graded and sealed to ensure run-off and to avoid ponding.
- A method of working shall be adopted to minimize the exposed bore soil at any time.
- Where temporary bare earth slope faces are unavoidable. They shall be protected with sheeting well-secured against the wind. Where slope faces are to be temporarily exposed for more than two weeks temporary hard surfacing shall temporary hard surfacing shall be provided and temporary drainage shall be installed.

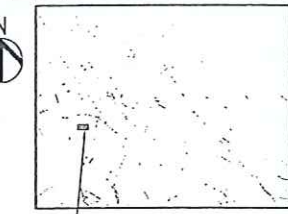




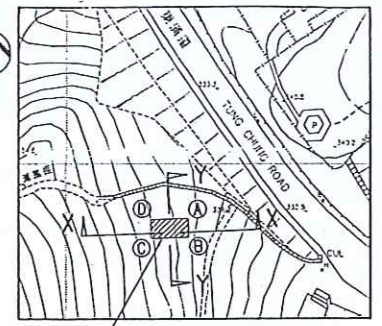
PROPOSED EQUIPMENT FRAMING PLAN
SCALE: 1:50

SITE COORDINATES :

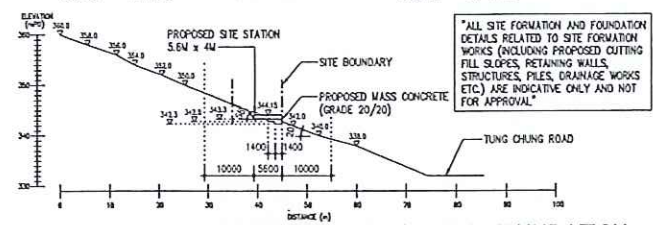
(A)	812132.490E	812185.830N
(B)	812132.650E	812180.830N
(C)	812122.660E	812180.520N
(D)	812122.500E	812185.520N



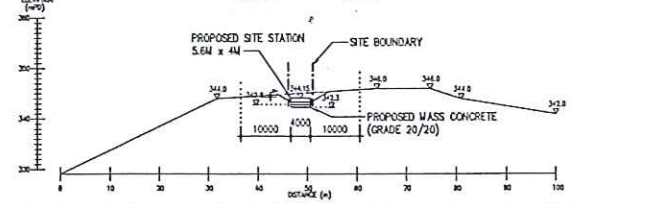
KEY PLAN
SCALE: N. T. S.



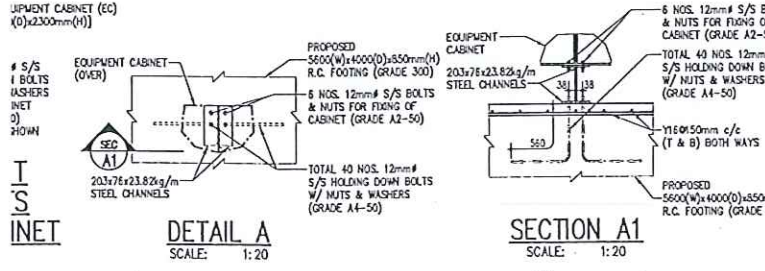
BLOCK PLAN
SCALE: N. T. S.



CUT-SECTION X-X SHOWING TYPICAL SITE FOUNDATION
SCALE: 1:500

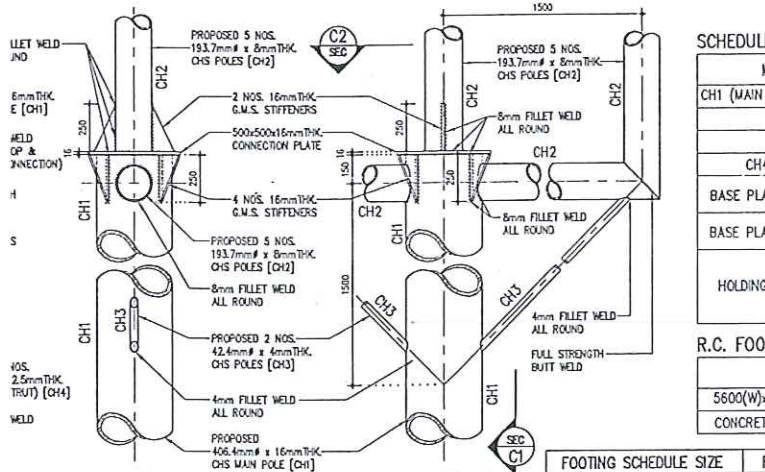


CUT-SECTION Y-Y SHOWING TYPICAL SITE FOUNDATION
SCALE: 1:500



DETAIL A
SCALE: 1:20

SECTION A1
SCALE: 1:20



SECTION C1
SCALE: 1:20

DETAIL C
SCALE: 1:20

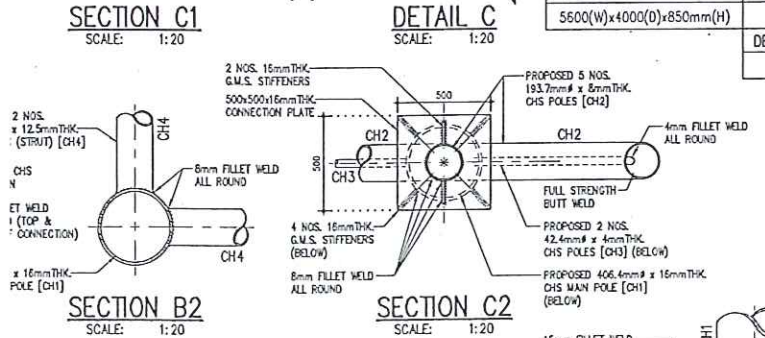
SCHEDULE OF STEEL MEMBERS FOR ANTENNA TOWER

MARKS	SIZES
CH1 (MAIN ANTENNA POLE)	406.4mm x 16mm THK. C.H.S.
CH2	193.7mm x 8mm THK. C.H.S.
CH3	42.4mm x 4mm THK. C.H.S.
CH4 (STRUT)	193.7mm x 12.5mm THK. C.H.S.
BASE PLATES (FOR CH1)	650x650x35mm THK. G.M.S. PLATES = 1 PCS.
BASE PLATES (FOR CH4)	500x500x12mm THK. G.M.S. PLATES = 2 PCS.
HOLDING DOWN BOLTS	16 NOS. ON BASE PLATE FOR CH1 & 16 NOS. ON EACH BASE PLATE FOR CH4 16mm# HOLDING DOWN BOLTS W/ NUTS & WASHERS = 48 TOTAL NOS.

R.C. FOOTING SCHEDULE

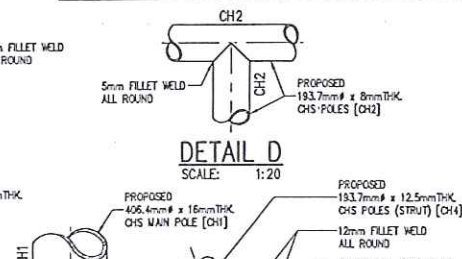
SIZE	TOP & BOTTOM BARS
5600(W)x4000(D)x850mm(H)	Y16@150mm c/c (T & B) BOTH WAYS

FOOTING SCHEDULE SIZE	FOUNDATION LEV.	TOTAL D.L.	LIVE LOAD
5600(W)x4000(D)x850mm(H)	+343.3 mPD	554.76 kN	5 kPa
	DESIGN PRESSURE	ALLOWABLE DESIGN PRESSURE (W/ WND)	
	65.49 kPa	75 kPa	

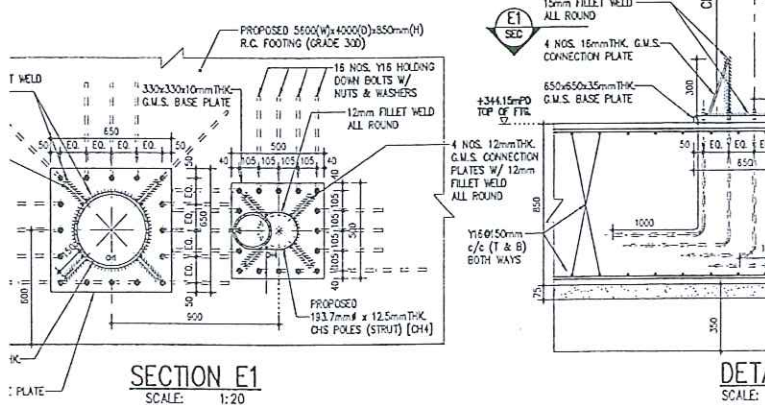


SECTION B2
SCALE: 1:20

SECTION C2
SCALE: 1:20



DETAIL D
SCALE: 1:20



SECTION E1
SCALE: 1:20

DETAIL E
SCALE: 1:20

CLIENT :

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PROJECT TITLE :

PROPOSED MOBILE BASE STATION AT PAK KUNG AU, STT CX 1913

DRAWING TITLE :

GENERAL NOTES, BLOCK PLAN, KEY PLAN, ELEVATIONS, SECTIONS & DETAILS OF PROPOSED ANTENNAS & EQUIPMENT PLATFORM

DATE	DRAWN	DESIGNED	CHECKED	SCALE
24/11/09	MSU	A	DW	AS SHOWN

JOB NO. : B2376

DRAWING NO. : B2376-S1A

FILING CODE: N:\Louis\NOV-2009\B2376-S1A(revised)

STATUS : AMENDMENT A

