

**Civil Engineering and Development Department  
N.T. East Development Office**

**Sha Tin New Town, Stage II  
Contract No. ST89/02  
Sha Tin Heights Tunnel and Approaches**

**Audit Report on  
Condition 2.4 of  
Environmental Permit (EP) No. EP-104/2001/D  
September 2009**

**AECOM Asia Co. Ltd.**

**Civil Engineering and Development Department  
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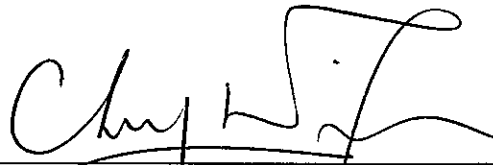
**September 2009**

**AECOM Asia Co. Ltd.**

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Report Certified By



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(Environmental Team Leader)  
(Cinotech Consultants Limited)

Report Verified By



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(Independent Environmental Checker)  
(CH2M HILL Hong Kong Limited)

## 1. INTRODUCTION

- The Civil Engineering and Development Department has completed Contract No. ST89/02 – Sha Tin Heights Tunnel and Approaches which covers the Sha Tin section of Route 8 (Entrusted Portion), comprising Sha Tin Heights Tunnel and Approaches. Route 8 is a major trunk road linking Chek Lap Kok and Sha Tin via Tsing Yi and Lai Chi Kok. The Works under this Contract comprises mainly construction of 1.0km of dual 3-lane vehicular tunnel at Sha Tin Heights, 1.0km of two single lane slip road bridges connecting to Che Kung Miu Road, 0.6km of dual 2-lane carriageway of approach road at Sha Tin Heights inclusive of 0.3km long reinforced concrete full enclosure, site formation for toll plaza, realignment of a section of the existing Che Kung Miu Road, construction of noise barriers and noise enclosure and slope works, retaining walls, drainage and landscape works and other miscellaneous works.
- The Director of Environmental Protection (the Director) granted the Environmental Permit to NT East Development Office, Civil Engineering and Development Department (the Permit Holder) for the construction and operation of this Shatin section of Route 8. A copy of the Environmental Permit No. EP-104/2001/D is enclosed in **Appendix A**.
- According to Condition 2.4 of the Environmental Permit, the Permit Holder shall prior to commencement, deposit with the Director 3 copies of the landscape proposal certified by the ET Leader and verified by the IEC, to show the compensatory replanting areas for permanent woodland loss and reinstated areas for temporary woodland loss. The landscape proposal was submitted to EPD on 1 November 2002 via CH2MHILLs letter ref. L144.02 and accepted by EPD via EPD's letter ref. (12) in An(1) to EP2/N1/A/24 V dated 27 November 2002.
- According to Condition 5.2 of the Environmental Permit, the Permit Holder shall deposit with the Director 3 copies of an Audit Report, certified by the ET Leader and verified by the IEC, demonstrating the satisfactory completion of measures recommended in the Landscape Proposal submission approved under Condition 2.4 of the Environmental Permit.
- This audit report serves to demonstrate the satisfactory completion of the proposed landscape works.
- The As-built drawings for Planting Plan and Planting Schedule for this Contract are enclosed in **Appendix B**.

## 2. COMPENSATORY TREE PLANTING

- With reference to the Landscape Proposal as required under Condition 2.4 of the Environmental Permit, the total area of compensation and reinstated area for temporary woodland loss for Pak Shek Area and Toll Plaza under Entrusted Portion were 4.14 ha.
- All the modified and newly formed slopes except rockfill slope have been planted with seedling mix at 1000mm c/c on a triangle grid or hydromulching.

## 3. FINDINGS

- During construction stage, two of the planting areas recommended in the Landscape Proposal were found densely vegetated on site and as such no planting was carried out in these two areas.
- Extensive loose fills were found at numbers of existing slope features (ref. 7SW-D/FR1, FR5, FR518, FR522, F437 and F534) in both Toll Plaza and Pak Shek areas during the construction stage. Extensive upgrading works were carried out at these slopes to preserve their long term stabilities. Woodland species were planted at these slopes after the stabilization works.
- The planting plan and schedule for Che Kung Miu Road have been revised to suit the alternative design of the road layout at ground level of Che Kung Miu Road. The environmental impact due to this change of road alignment was assessed and VEP124/2003 was issued accordingly. As this section of Che Kung Miu Road was highly congested with underground utilities, the number of planted trees has been reduced by 38 numbers as compared with the conforming design. In order to achieve the satisfactory greening effect upon completion, these planting areas have been compensated by planting shrubs. Consequently, the quantity of the planted shrubs along this section of Che Kung Miu Road has been increased by 65%.
- At Pak Shek area, woodland planting of about 0.6 ha was provided at the top of a reinforced concrete deck.
- According to the as-built planting plans and schedules, the total area of trees and shrubs planted under this Contract is approximately 5.3 ha within Pak Shek Area and Toll Plaza. Details are provided in the table below.

### Breakdown of Area of Woodland Compensation

Location	Woodland Compensation Area (ha)		Area of Compensation (ha)		Reinstated Area for temporary woodland loss (ha)	
	Woodland on Newly Formed Slope	Infill Planting on Undisturbed Ground				
Toll Plaza	2.92	-	-	(0.2)	2.92	(2.07)
Pak Shek Area	2.22	0.16	2.38	(1.87)	-	-
Sub-total			2.38	(2.07)	2.92	(2.07)
Total			5.30		(4.14)	

Note: 1. Figures in bracket are proposed compensation areas as given in the Landscape Proposal  
 2. Planting on top of reinforced concrete deck in Pak Shek Area is not included.

- The various types of plant species used are indicated in the planting schedule and enclosed in Appendix B.
- Temporary woodland loss during construction was reinstated in the newly formed slope formation.
- Disturbance to existing stream courses was minimized during the construction work.
- Architectural treatment of retaining structures, elevated road structures, noise barriers, noise enclosure and RC full enclosure as approved by ACABAS has been provided.

#### 4. CONCLUSION

- According to the Landscape Proposal for the Construction and Operation Route 8 between Cheung Sha Wan and Sha Tin – Entrusted Portion, the permit holder was required to plant and maintain not less than 4.14 ha of planting areas.
- Based on the table above, the overall planted areas within our Contract are approximately 5.3 ha which has met the minimum requirement that stated in the Landscape Proposal.
- The record photographs together with the plans demonstrating the satisfactory completion of the landscape works are enclosed in **Appendix C**.

**5. APPENDICES**

- Appendix A Environmental Permit No. EP-104/2001/D
- Appendix B As-Built Drawings of Soft Landscape Works  
60398/7201C, 7202B, 7203C, 7204B, 7206B & 7207B &  
A359/S/30291, 3029.1 & 3030
- Appendix C Photos of Landscape Works

## **APPENDIX A**



**ENVIRONMENTAL IMPACT ASSESSMENT ORDINANCE**  
**(CHAPTER 499)**  
**Section 10&13**

**環境影響評估條例**  
**(第 499 章)**  
**第 10 條及 13 條**

**ENVIRONMENTAL PERMIT TO CONSTRUCT AND OPERATE A DESIGNATED PROJECT**

**建造及營辦指定工程項目的環境許可證**

**PART A (MAIN PERMIT)**  
**A 部 (許可證主要部分)**

Pursuant to Section 10 of the Environmental Impact Assessment Ordinance (the Ordinance), the Director of Environmental Protection (the Director) granted the Environmental Permit to NEW TERRITORIES EAST DEVELOPMENT OFFICE, CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT (hereinafter referred to as the "Permit Holder") on 4 October 2001. Pursuant to Section 13 of the Ordinance, the Director amends the Environmental Permit (EP-104/2001/C) based on the Application No. VEP-249/2008. The amendments, described below, are incorporated into this Environmental Permit (EP-104/2001/D). This Environmental Permit as amended is for the construction and operation of the designated project(s) described in Part B of this Permit subject to the conditions described in or attached to Part C of this Permit.

根據環境影響評估(條例)第10條的規定，環境保護署署長(署長)於2001年10月4日將環境許可證(EP-104/2001)批予土木工程拓展署新界東拓展處(下稱"許可證持有人")。根據條例第13條的規定，署長因應更改環境許可證的申請編號VEP-249/2008修訂環境許可證編號EP-104/2001/C。以下修訂已包含在本環境許可證內(EP-104/2001/D)。本經修訂的環境許可證作為建造及營辦本許可證B部所說明的指定工程項目，但須遵守本許可證C部所說明或附載的條件。

The issue of this amended environmental permit is based on the documents, approvals or permissions described below:

本經修訂的環境許可證乃依據下列文件、批准或許可條件而簽發 -

Application No. 申請書編號:	VEP-249/2008
Document in the Register: 登記冊上的文件:	(1) (1) Route 16 Investigation Assignment - - Environmental Impact Assessment Final Assessment Report (January 1998) (Register No. EIA-135/BC) [Hereinafter referred to as the "1998 EIA Report"] - - Environmental Monitoring & Audit Manual (January 1998) [Hereinafter referred to as the "1998 EM&A Manual"]  (1) (1) 十六號幹線勘探工作 - - 《環境影響評估最終評估報告》(1998年1月)(登記冊編號: EIA-135/BC) [下稱「1998年環評報告」] - - 《環境監察及審核手冊》(1998年1月) [下稱「1998年環監手冊」]

<p>Document in the Register : 登記冊上的文件 :</p>	<p>(2) (2) Route 16 Investigation Assignment</p> <ul style="list-style-type: none"> <li>- - Alternative Alignment Environmental Impact Assessment Final Assessment Report (August 1999) (Register No. AEIAR-022/1999) [Hereinafter referred to as the "1999 EIA Report"]</li> <li>- - Environmental Monitoring &amp; Audit Manual (August 1999) [Hereinafter referred to as the "1999 EM&amp;A Manual"]</li> </ul> <p>The Director's letter of approval of the 1999 EIA Report dated 5 November 1999 ref (25) in Ax(1) to EP2/N1/A/24 Pt.3</p> <p>(2) 十六號幹線勘探工作</p> <ul style="list-style-type: none"> <li>- - 《替代路線 — 環境影響評估最終評估報告》(1999 年 8 月) (登記冊編號 AEIAR-022/1999) [下稱「1999 年環評報告」]</li> <li>- - 《環境監察及審核手冊》(1999 年 8 月) [下稱「1999 年環監手冊」]</li> </ul> <p>署長於 1999 年 11 月 5 日發出批准 1999 年環評報告的信件(檔號(25) in Ax(1) to EP2/N1/A/24 Pt.3)</p> <p>(3) Environmental permit application documents for the Main Portion, including all attachments, submitted by Highways Department on 20 August 2001 (Application No. AEP-103/2001)</p> <p>(3) (3) 路政署於 2001 年 8 月 20 日就主要路段提交的环境許可證申請文件，包括所有附件 (申請書編號 AEP-103/2001)</p> <p>(4) (4) Environmental Permit issued on 17 September 2001 for the Main Portion (Permit No. EP-103/2001)</p> <p>(4) 於 2001 年 9 月 17 日就主要路段發出的環境許可證 (環境許可證編號 EP-103/2001)</p> <p>(5) (5) Environmental permit application documents for the Entrusted Portion, including all attachments, submitted by the Permit Holder on 6 September 2001 (Application No. AEP-104/2001) [Hereinafter referred to as the "the Application AEP-104/2001"]</p> <p>(5) 許可證持有人於 2001 年 9 月 6 日就委託路段提交的申請文件，包括所有附件 (申請書編號 AEP-104/2001) [下稱 "申請書編號 AEP-104/2001"]</p> <p>(6) (6) Environmental Permit issued – Permit No.: EP-104/2001 issued on 4 October 2001.</p> <p>(6) 已簽發的環境許可證 — 許可證編號：EP-104/2001 於 2001 年 10 月 4 日簽發。</p> <p>(7) (7) Application for Variation of an Environmental Permit No. VEP-124/2003. [Hereafter referred to as "the Application VEP-124/2003"]</p> <p>(7) 申請更改環境許可證編號 VEP-124/2003。[下稱 "申請書編號 VEP-124/2003" ]</p> <p>(8) (8) Environmental Permit issued – Permit No.: EP-104/2001/A issued on 29 December 2003</p> <p>(8) 已簽發的環境許可證 — 許可證編號：EP-104/2001/A 於 2003 年 12 月 29 日簽發。</p> <p>(9) (9) Application for Variation of an Environmental Permit No. VEP-</p>
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	<p>163/2005 [Hereafter referred to as "the Application VEP-163/2005"]</p> <p>(9) 申請更改環境許可證編號 VEP-163/2005。[下稱“申請書編號 VEP-163/2005”]</p>
	<p>(10)(10) Environmental Permit issued – Permit No.: EP-104/2001/B issued on 16 February 2005</p> <p>(10) (10) 已簽發的環境許可證 — 許可證編號：EP-104/2001/B 於 2005 年 2 月 16 日簽發。</p> <p>(11)(11) Application for Variation of an Environmental Permit No. VEP-238/2007 [Hereafter referred to as "the Application VEP-238/2007"]</p> <p>(11) 申請更改環境許可證編號 VEP-238/2007。[下稱“申請書編號 VEP-238/2007”]</p> <p>(12)(12) Application for Variation of an Environmental Permit No. VEP-249/2008 [Hereafter referred to as "the Application VEP-249/2008"]</p> <p>(12) 申請更改環境許可證編號 VEP-249/2008。[下稱“申請書編號 VEP-249/2008”]</p>

Application No. 申請書編號	Date of Application 申請日期	List of Amendments Incorporated into this Environmental Permit 已包含在本環境許可證內的修訂項目	Date of Amendment 修訂日期
VEP-124/2003	6 December 2003 2003 年 12 月 6 日	<ul style="list-style-type: none"> <li>- - - Vary Condition 3.1 in Part C of the Environmental Permit EP-104/2001</li> <li>- - Vary Figure 2 and Annex A of the Environmental Permit EP-104/2001</li> <li>- - 更改環境許可證編號 EP-104/2001 C 部條件第 3.1 項條件</li> <li>- - 更改環境許可證編號 EP-104/2001 的圖 2 及附件 A</li> </ul>	29 December 2003 2003 年 12 月 29 日
VEP-163/2005	24 January 2005 2005 年 1 月 24 日	<ul style="list-style-type: none"> <li>- - - Vary Condition 3.1 in Part C of the Environmental Permit EP-104/2001/A</li> <li>- - Vary Figure 2 and Annex A of the Environmental Permit EP-104/2001/A</li> </ul>	16 February 2005 2005 年 2 月 16 日

		<ul style="list-style-type: none"> <li>- 更改環境許可證編號 EP-104/2001/A C 部條件第 3.1 項條件</li> <li>- 更改環境許可證編號 EP-104/2001/A 的圖 2 及 附件 A</li> </ul>	
VEP-238/2007	11 September 2007 2007 年 9 月 11 日	<ul style="list-style-type: none"> <li>- - Vary Condition 3.1 in Part C of the Environmental Permit EP-104/2001/B</li> <li>- Vary Figure 2 and Annex A of the Environmental Permit EP-104/2001/B</li> <li>- 更改環境許可證編號 EP-104/2001/B C 部條件第 3.1 項條件</li> <li>- 更改環境許可證編號 EP-104/2001/B 的圖 2 及 附件 A</li> </ul>	8 October 2007 2007 年 10 月 8 日
VEP-249/2008	21 January 2008 2008 年 1 月 21 日	<ul style="list-style-type: none"> <li>- - Vary Condition 3.1 in Part C of the Environmental Permit EP-104/2001/C</li> <li>- Vary Figure 2 and Annex A of the Environmental Permit EP-104/2001/C</li> <li>- 更改環境許可證編號 EP-104/2001/C C 部條件第 3.1 項條件</li> <li>- 更改環境許可證編號 EP-104/2001/C 的圖 2 及 附件 A</li> </ul>	13 February 2008 2008 年 2 月 13 日

13 February 2008

Date  
日期

(Maurice K.L. Yeung)  
Principal Environmental Protection Officer  
For Director of Environmental Protection  
環境保護署署長  
(首席環境保護主任)楊國良代行)

## PART B (DESCRIPTIONS OF DESIGNATED PROJECT)

### B 部 (指定工程項目的說明)

Hereunder is the description of the designated project mentioned in Part A of this environmental permit :

下列為本環境許可證 A 部所述指定工程項目的說明：

Title of Designated Project 指定工程項目的名稱	Route 9 between Cheung Sha Wan and Sha Tin – Entrusted Portion [This designated project is hereinafter referred to as “the Project”]. (Route 9 between Cheung Sha Wan and Sha Tin was previously known as Route 16 from West Kowloon to Sha Tin)  九號幹線長沙灣至沙田段 – 委託路段 [本指定工程項目下稱「工程項目」]。(九號幹線長沙灣至沙田段前稱 16 號幹線西九龍至沙田)
Nature of Designated Project 指定工程項目的性質	Construction and operation of a section of a dual 3-lane trunk road.  建造及營辦一條雙程三線分隔主幹路的部分路段。
Location of Designated Project 指定工程項目的地點	Sha Tin, New Territories. The location of the Project is shown in <u>Figure 1</u> of this Environmental Permit.  新界沙田。工程項目的地點載於本環境許可證圖 1。
Scale and Scope of Designated Project(s) 指定工程項目的規模和範圍	Construction & operation of 建造及營辦  (a) (a) the site formation, drainage, geotechnical and landscape works for the toll plaza;  (a) 繳費廣場的工地平整、渠務、土力及景觀美化工程；  (b) (b) the construction of the Sha Tin Heights Tunnel, the Sha Tin Approach Roads and the Slip Road connecting to Che Kung Miu Road including all formation, structure, road, geotechnical, drainage and landscape works;  (b) (b) 沙田嶺隧道、沙田引道及連接車公廟路支路的建造工程，包括各項平整、結構、道路、土力、渠務及景觀美化工程；  (c) (c) the construction of the structure of the portal buildings of the Sha Tin Heights Tunnel; and  (c) (c) 沙田嶺隧道入口大樓構築物的建造工程；及  (d) (d) the construction of noise mitigation measures.  (d) 噪音緩解措施的建造工程。

## **PART C (PERMIT CONDITIONS)**

### **1. General Conditions**

- 1.1 The Permit Holder shall ensure full compliance with all conditions of this environmental permit. Any non-compliance may constitute a contravention of the Environmental Impact Assessment Ordinance (Cap.499) and may become the subject of appropriate action being taken under the Ordinance.
- 1.2 The Permit Holder shall ensure full compliance with all legislation from time to time in force including without limitation the Noise Control Ordinance (Cap.400), Air Pollution Control Ordinance (Cap.311), Water Pollution control Ordinance (Cap.358), Dumping at Sea Ordinance (Cap.466), the Waste Disposal Ordinance (Cap.354). This Permit does not of itself constitute any ground of defense against any proceedings instituted under any legislation.
- 1.3 The Permit Holder shall make copies of this Permit together with all documents referred to in this Permit or the documents referred to in Part A of the Permit readily available at all times for inspection by the Director or his authorized officers at all sites/offices covered by this Permit. Any reference to the Permit shall include all documents referred to in the Permit and also the relevant documents in the Register.
- 1.4 The Permit Holder shall give a copy of this Permit to the person(s) in charge of the site(s) and ensure that such person(s) fully understands all conditions and all requirements incorporated by the Permit. The site(s) refers to the site(s) of the construction, operation and/or decommissioning of the Project and should mean the same hereinafter.
- 1.5 The Permit Holder shall display conspicuously a copy of this Permit on the construction site(s) at all vehicular site entrances/exits or at a convenient location for public information at all times. The Permit Holder shall ensure that the most updated information about the Permit, including any amended permit, is displayed at such locations. If the Permit Holder surrenders a part or the whole of the Permit, the notice he sends to the Director shall also be displayed at the same locations as the original Permit. The suspended, varied or cancelled Permit shall be removed from display at the construction site.
- 1.6 The Permit Holder shall construct and operate the Project in accordance with the project descriptions in Part B of this Permit.
- 1.7 The Permit Holder shall ensure that the Project is designed, constructed and operated in accordance with the information and all recommendations described in the 1998 EIA Report (Register No. EIA-135/BC), the 1999 EIA Report (Register No. AEIAR-022/1999), the 1998 EM&A Manual, the 1999 EM&A Manual, and other relevant documents in the Register; or mitigation measures described in this Permit, or mitigation measures to be recommended in submissions that shall be deposited with or approved by the Director as a result of permit conditions contained in this Permit, or mitigation measures to be recommended under on going surveillance and monitoring activities during all stages of the Project. Where recommendations referred to in the documents of the Register are not expressly referred to in this Permit, such recommendations are nevertheless to be implemented unless expressly excluded

or impliedly amended in this Permit.

- 1.8 All submissions, as required under this Permit, shall be rectified and resubmitted in accordance with the comments, if any, made by the Director within one month of the receipt of the Director's comments or otherwise as specified by the Director.
  - 1.9 All submissions approved by the Director, all submissions deposited without comments by the Director, or all submissions rectified in accordance with comments by the Director under this Permit shall be construed as part of the permit conditions described in Part C of this Permit. Any variation of the submissions shall be approved by the Director in writing or as prescribed in the relevant permit conditions. Any non-compliance with the submissions may constitute a contravention of the Environmental Impact Assessment Ordinance. All submissions or any variation of the submissions shall be verified by the Independent Environmental Checker (IEC) referred to in Condition 2.1 below, before submitting to the Director under this Permit.
  - 1.10 The Permit Holder shall release all finalized submissions, as required under this Permit, to the public by depositing copies in the Environmental Impact Assessment Ordinance Register Office, or in any other places, or any internet websites as specified by the Director, or by any other means as specified by the Director for public inspection. For this purpose, the Permit Holder shall provide sufficient copies of the submissions.
  - 1.11 The Permit Holder shall notify the Director in writing the commencement date of construction of the Project no later than 4 weeks prior to the date of commencement of construction of the Project. The Permit Holder shall notify the Director in writing immediately if there is any change of the commencement date of the construction.
  - 1.12 All submissions to the Director required under this Permit shall be delivered either in person or by registered mail to the Environmental Impact Assessment Ordinance Register Office (currently at 27/F, Southorn Centre, 130 Hennessy Road, Wanchai, Hong Kong). The Permit Holder shall make copies of this permit available at all times for inspection by the Director at all the sites covered by this permit.
2. **Submissions for the Construction of the Project**
- 2.1 2.1 An Independent Environmental Checker (IEC) shall be employed no later than two months before the commencement of construction of the Project. The IEC shall have at least 7 years' experience in environmental monitoring and audit (EM&A) or environmental management. The IEC shall be responsible for duties defined in the 1999 EM&A Manual, and shall audit the overall EM&A programme covered by the 1998 EM&A Manual and 1999 EM&A Manual (hereafter referred to as the two EM&A Manuals), including the implementation of all environmental mitigation measures, submissions relating to EM&A, and any other submissions required under this Permit. In addition, the IEC shall be responsible for verifying the environmental acceptability of permanent and temporary works, relevant design plans and submissions under this Permit.
  - 2.2 2.2 An Environmental Team (ET) shall be established no later than 2 months before the commencement of construction of the Project. The ET shall be headed by the ET Leader who shall have at least 7 years' experience in environmental

monitoring and auditing (EM&A) or environmental management. The ET team and the ET Leader shall be responsible for duties defined in the 1999 EM&A Manual. The ET Leader shall be responsible for the implementation of the EM&A programme in accordance with the EM&A requirements as contained in the two EM&A Manuals.

- 2.3 2.3 The Permit Holder shall, within 4 weeks after commencement of construction of the Project, inform the Director in writing of the management organization of the main construction companies and/or any form of joint ventures associated with the construction of the Project. The submitted information shall include at least an organization chart, names of responsible persons and their contact details.
- 2.4 2.4 The Permit Holder shall, at least 8 weeks before commencement of any construction work causing any loss of woodland, submit to the Director for approval 3 sets of landscape proposals as recommended in section 8.6.5 and the implementation schedule of the Environmental Review Report dated September 2001 attached to the Application. The landscape proposals shall include plans of scale 1 to 1000 or other appropriate scale as agreed by the Director. With a view to further minimizing ecological impacts, the proposals shall show the compensatory replanting areas for permanent woodland loss and reinstated areas for temporary woodland loss (with the size of compensation area clearly stated in hectares), and shall include a design document for the toll plaza illustrating efforts to further minimize ecological impacts. The proposals shall also include an implementation programme for these works, with clear identification of the responsibility for implementation, management and maintenance of landscape mitigation measures for these works. All measures recommended in the approved proposal(s) shall be fully implemented in accordance with the details and time schedule set out in the submission. No construction work causing any loss of woodland shall commence without the approval of the proposals.
- 2.5 2.5 The Permit Holder shall, no later than 4 weeks after the commencement of construction of the Project, submit to the Director for approval three sets of Waste Management Plan for the construction stage of the Project. The Plan shall be certified by the ET Leader and verified by the IEC as conforming to the information and recommendations contained in the 1998 EIA Report, 1999 EIA Report, and the Application. The Plan shall describe the arrangements for avoidance, reuse, recovery and recycling, storage, collection, treatment and disposal of different categories of waste to be generated from the construction activities and shall include the recommended mitigation measures on waste management in the 1998 EIA Report, 1999 EIA Report, and the Application. Such a Plan shall include the designated areas for segregation and temporary storage of reusable and recyclable materials. All measures in the approved Plan shall be fully implemented throughout the construction period.

### **3. Measures for Construction and Operation of the Project**

- 3.1 3.1 To mitigate the traffic noise impact arising from the Project, noise barriers/enclosures shall be constructed as shown in Figures 2, 2.1 to 2.5 and Annex A of this Permit, prior to the operation of the Project.
- 3.2 3.2 To mitigate water quality impact from tunneling works for Shatin Heights Tunnel, the following mitigation measures shall be fully implemented:
- a. a. Temporary open storage of excavated materials shall be covered with



tarpaulin or similar fabric during rainstorms. Any washout of construction or excavated materials from the drill-and-blast tunneling work shall be diverted to the drainage system via appropriate sediment traps, to achieve a controlled release of storm flow, construction runoff, or wash water.

- b. b. Ground water pumped out of tunnels shall be discharged into sediment traps to enhance deposition rates and to remove silt, before discharging into the drainage channels of the drainage system.

3.3 3.3 To mitigate environmental impacts due to site runoff and other potential water pollution caused by construction activities, mitigation measures described in Annex B shall be fully implemented throughout the construction period.

3.4 3.4 To mitigate ecological impact during construction, the following measures shall be fully implemented:

- a. a. At the location shown in Figure 3 of this Permit, a sediment barrier shall be erected to minimize stream sedimentation at downstream of the project boundary of the Toll Plaza.
- b. b. All measures recommended in the approved landscape proposals under Condition 2.4 above shall be fully implemented in accordance with the details and time schedule set out in the submission.
- c. c. As shown in Figure 3 of this Permit, fences shall be erected along the boundary of the construction sites at the Toll Plaza before commencement of works, to prevent tipping, vehicle movements, and encroachment of personnel onto adjacent wooded areas.

#### 4. Environmental Monitoring and Audit requirements during Construction of the Project

4.1 4.1 An EM&A programme shall be implemented as set out in the two EM&A Manuals. Any change to the programme shall be justified by the IEC as conforming to the requirements set out in the two EM&A Manuals and information contained in the 1998 EIA Report, 1999 EIA Report and the Application, before submission to the Director for approval.

4.2 4.2 Samples and measurements shall be taken in accordance with the requirements of the two EM&A Manuals by:

- a) a) conducting baseline environmental monitoring as set out in the two EM&A Manuals; and
- b) b) conducting impact monitoring as set out in the two EM&A Manuals.

4.3 4.3 The remedial actions described in the Event/Action Plans of the two EM&A Manuals shall be fully and properly carried out, in accordance with the time frames(s) set out in the Event/Action Plans, or as agreed by the Director.

4.4 4.4 Records of measurements and remedial actions taken under Conditions 4.2 and 4.3 respectively of this Permit shall be logged and kept, within 3 working days of the collection of data or completion of remedial action, for the purpose of preparing and submitting the EM&A Reports and making the information available for inspection on site.

- 4.5 4.5 Two hard copies and one soft copy of the Baseline Monitoring Report shall be submitted to the Director no later than 2 weeks before the construction of the Project. The submission shall be verified by the IEC. Additional copies of the submission shall be provided to the Director upon request by the Director.
- 4.6 4.6 One hard copy and one soft copy of monthly EM&A Report shall be submitted to the Director within 2 weeks after the end of the reporting month. The EM&A Reports shall include a summary of all noncompliance (exceedances) of the environmental quality performance limits (Action and Limit levels). The submissions shall be verified by the IEC. Additional copies of the submission shall be provided to the Director upon request by the Director.
- 4.7 4.7 All environmental monitoring and audit data submitted under this Permit shall be true, valid and correct.

**5. 5. Environmental Monitoring and Audit Requirements during Operation of the Project**

- 5.1 5.1 At least 6 months before the operation of the Project, the Permit Holder shall deposit with the Director a monitoring plan of traffic noise from operation of the Project, in accordance with section 3.5 of the Environmental Review Report dated September 2001 attached to the Application. Monitoring of traffic noise during the operational phase shall be conducted in accordance with this monitoring plan. Monitoring details and results, including the comparison between the measured noise levels and the predicted levels, shall be recorded in the Traffic Noise Monitoring Report. The Traffic Noise Monitoring Report shall be certified by the Permit Holder before three copies of the report are deposited with the Director, within one month after the completion of the monitoring.
- 5.2 5.2 The Permit Holder shall deposit with the Director 3 copies of an audit report, certified by the ET Leader and verified by the IEC, demonstrating the satisfactory completion of the measures recommended in the submission approved under Condition 2.4 of this Permit. The audit report shall be deposited within 3 weeks after completion of the mitigation measures.
- 5.3 5.3 The Permit Holder shall deposit with the Director 3 copies of an audit report, certified by the ET Leader and verified by the IEC, demonstrating the satisfactory completion of the measures described in Condition 3.1 of this Permit. The audit report shall be deposited within 3 weeks after completion of the mitigation measures.

**6. Electronic Reporting of EM&A Information**

- 6.1 6.1 To facilitate public inspection of the Baseline Monitoring Report, monthly EM&A Reports, and the Traffic Noise Monitoring Report via the EIAO Internet Website and at the EIAO Register Office, electronic copies of these Reports shall be prepared in Hyper Text Markup Language (HTML) (version 4.0 or later) and in Portable Document Format (PDF version 4.0 or later), unless otherwise agreed by the Director and shall be submitted at the same time as the hard copies as described in Conditions 4 and 5 of this Permit. For the HTML version, a content page capable of providing hyperlink to each section and sub-section of these Reports shall be included in the beginning of the document. Hyperlinks to all figures, drawings and tables in

these Reports shall be provided in the main text from where the respective references are made. All graphics in these Reports shall be in interlaced GIF format unless otherwise agreed by the Director. The content of the electronic copies of these Reports must be the same as the hard copies.

**Notes :**

1. This Permit consists of three parts, namely, PART A (Main Permit), PART B (Description of Designated Project) and PART C (Permit Conditions). Any person relying on this permit should obtain independent legal advice on the legal implications under the Ordinance, and the following notes are for general information only.
2. The Permit Holder may apply under Section 13 of the Ordinance to the Director for a variation of the conditions of this Permit. The Permit Holder shall replace the original permit displayed on the construction site by the amended permit.
3. A person who assumes the responsibility for the whole or a part of the designated project may, before he assumes responsibility of the designated project, apply under Section 12 of the Ordinance to the Director for a further environmental permit.
4. Under Section 14 of the Ordinance, the Director may with the consent of the Secretary for the Environment, suspend, vary or cancel this Permit. The suspended, varied or cancelled Permit shall be removed from display at the construction site.
5. If this Permit is cancelled or surrendered during construction or operation of the Project, another environmental permit must be obtained under the Ordinance before the Project could be continued. It is an offence under Section 26(1) of the Ordinance to construct or operate a designated project listed in Part I of Schedule 2 of the Ordinance without a valid environmental permit.
6. Any person who constructs or operates the Project contrary to the conditions in the Permit, and is convicted of an offence under the Ordinance, is liable: -
  - (i) (i) on a first conviction on indictment to a fine of \$ 2 million and to imprisonment for 6 months;
  - (ii) on a second or subsequent conviction on indictment to a fine of \$ 5 million and to imprisonment for 2 years;
  - (iii) on a first summary conviction to a fine at level 6 and to imprisonment for 6 months;
  - (iv) on a second or subsequent summary conviction to a fine of \$1 million and to imprisonment for 1 year; and
  - (v) in any case where the offence is of a continuing nature, the court or magistrate may impose a fine of \$ 10,000 for each day on which he is satisfied the offence continued.
7. The Permit Holder may appeal against any condition of this Permit under Section 17 of

the Ordinance within 30 days of receipt of this Permit.

8. The Notes are for general reference only and that the Permit Holder should refer to the EIA Ordinance for details and seek independent legal advice.

**Environmental Permit No. EP-104/2001/D**

## **Annex A (extracted from the Application VEP-249/2008, and as referred to in Condition 3.1)**

Sound absorptive panels are used at the lower portion of the noise barrier (i.e. up to 2m above carriageway level) and transparent panels are used at the upper portion of the barriers, except the 3m high noise barrier outside Tin Sam Village as shown in [Figure 2](#). For this 3m high noise barrier transparent panels are used for full height of the noise barrier. A summary of the mitigation measures are given below, where “left side” and “right side” are taken to mean the respective sides for a person driving along the designated direction of the carriageway:

### *For main road*

- A full enclosure of up to approx. 375m long, located along the main road of Route 9 facing the MOS depot development, to join at the north with the underpass for the Trunk Road T3 as one continuous enclosure;
- At the south portal of the full enclosure, a 5.5m minimum high with 4m cantilever barrier, i.e. NB2 (as shown in [Figure 2](#)) along the left side of the northbound carriageway and a 5.4m minimum high with 4m cantilever barrier, i.e. NB3 (as shown in [Figure 2](#)) along the right side of southbound carriageway. The height is increased near the full enclosure to keep the variable speed limit sign mounted on the external wall of the RC Full Enclosure visible by the northbound vehicles during both the normal and bi-directional traffic flow. To enable effective discharge of smoke in case of fire accidents within the RC Full Enclosure, the last bay of barriers NB2 and NB3 (the width of each is about 3m) abutting the enclosure is of vertical type with details as shown in [Figure 2.3](#);
- Low Noise Road Surfacing (LNRS) on the Route 9 main alignment.

### *For slip roads*

- A minor full enclosure of approx. 83 meters long, located near the middle of the north and south-bound slip roads leading from the Route 9 main alignment to Che Kung Miu Road.

#### *Northbound slip road*

##### *Left side*

- A 5.5m minimum high with 4m cantilever barrier of approx. 380m long, i.e. NB1 (as shown in [Figure 2](#)) running from the left side of the northbound carriageway of the main road, to join the west end of the minor enclosure on the slip road; a 5m high vertical barrier originated from the east end of the minor enclosure, running for approx. 120m to join a 5.5m minimum high with 4m cantilever barrier of approx. 240m long, i.e. NB5A (as shown in [Figure 2](#)). The height of the noise barrier near the North Portal Building is increased to 7.5m high with 4m cantilever barrier follow by 92m transition to keep the lane control signal mounted on the facade of the North Portal Building visible by the southbound vehicles during bi-directional traffic flow and to prevent the obstruction by the cantilever portion of the noise barrier during the operation of the CCTV mounted on a nearby sign gantry.

#### *Northbound slip road*

##### *Right side*

- An approx. 100m long 3m high vertical barrier, i.e. NB11 (as shown in [Figure 2](#)) joining the west end of the minor enclosure, followed by a 3m high vertical barrier of approx. 200m long, i.e. NB7 (as shown in [Figure 2](#)) running from the east end of the minor enclosure towards Che Kung Miu Road; a separated 3m high vertical barrier of approx. 160m long, i.e. NB8 (as shown in [Figure 2](#)) is also to be provided on the split section of the slip road at this end of the Che Kung Miu Road; it is then followed by an approx. 160m long 1.5m high crash barrier.

#### *Southbound slip road*

##### *Left side*

- From Che Kung Miu Road, a 3m high vertical barrier of approx. 160m, i.e. NB6 (as shown in [Figure 2](#)) followed by a 5m high vertical barrier of approx. 265m long running, i.e. NB10 (as shown in [Figure 2](#)) along the left side until the minor enclosure is reached; followed by a 5.5m

minimum high with 4m cantilever barrier of approx. 350m, i.e. NB4 (as shown in Figure 2) from the west end of the minor enclosure towards the Route 9 main alignment. The heights of the noise barriers are increased (about 400mm) locally due to the change of the road profile and the contractor's proposed fixing arrangement for panels' installation at the cantilever portion of the noise barrier posts.

*Southbound slip road*

*Right side*

- From the west end of the minor enclosure, a 5m high vertical barrier of approx. 170m long, i.e. NB5 (as shown in Figure 2) running towards the Route 9 main alignment. From the Che Kung Miu Road end of the slip road, an approx. 135m long 5.5m minimum high with 2m cantilever barrier, i.e. NB9 (as shown in Figure 2) is to be provided for the left lane of the split section of the slip road.

## **Annex B (as referred to in Condition 3.3)**

### **Measures to Mitigate Environmental Impacts due to Site Run-off and Other Potential Water Pollution During Construction**

#### **(a) *Surface Runoff***

- (i) Surface run-off from the construction site shall be directed into adequately designed sand/silt removal facilities such as sand traps, silt traps and sediment basins before discharge into storm drains. Channels, earth bunds or sand bag barriers shall be provided on site to properly direct stormwater to such silt removal facilities.
- (ii) Catchpits and perimeter channels shall be constructed in advance of site formation works and earthworks.
- (iii) Silt removal facilities, channels and manholes shall be suitably maintained with the deposited silt and grit being removed at least once a week, and at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times.
- (iv) Earthworks final surfaces shall be well compacted and the subsequent permanent work or surface protection shall be carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms. Appropriate intercepting channels shall be provided along the site boundary or at the locations agreed with the ET Leader. Rainwater pumped out from trenches or foundation excavations shall be discharged into silt removal facilities before discharge into storm drains.
- (v) All generators, fuel and oil storage shall be within bunded areas. Drainage from the areas shall be connected to storm drains via a petrol interceptor.
- (vi) (vi) Sand and silt in the wash water from the wheel washing facilities, which ensure no earth, mud and debris are deposited on roads, shall be settled out and removed before discharging into storm drains. A section of the road between the wheel washing bay and the public road shall be paved with backfill to prevent wash water or other site runoff from entering public road drains.
- (vii) (vii) Oil interceptors shall be provided in the drainage system and regularly emptied to prevent the release of oils and grease into the storm water drainage system after accidental spillage. The interceptor shall have a bypass to prevent flushing during periods of heavy rain.

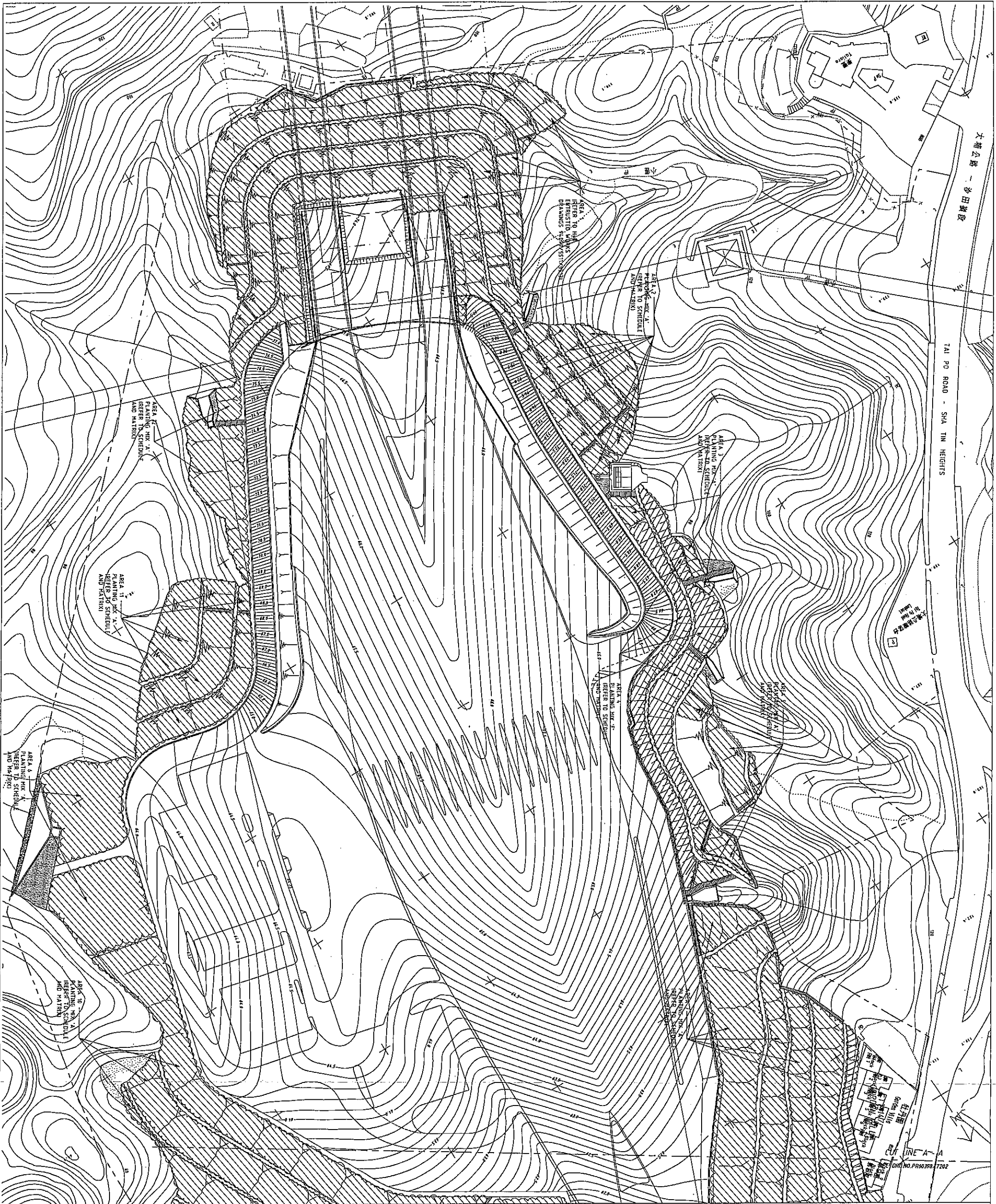
#### **(b) *General Construction Activities***

At all parts of all works areas and construction sites, and throughout the full duration of the construction contract(s), debris and rubbish on site shall be handled and disposed of to avoid entering the water column and causing water quality impacts. Temporary on-site storage of excavated materials from construction works shall be covered with tarpaulin or similar fabric during rainstorms. Any washout of construction or excavated materials should be diverted to the drainage system via sediment traps. Stockpiling of the excavated material shall be minimized by scheduling the construction programme in a way that one section of the alignment can be constructed and completed before the excavation works of the next section commence.

| [Figure 1](#) | [Figure 2](#) | [Figure 2.1](#) | [Figure 2.2](#) | [Figure 2.3](#) | [Figure 2.4](#) | [Figure 2.5](#) | [Figure 3](#) |

## **APPENDIX B**





NOTE  
1. REFER TO PLANTING SCHEDULE FOR QUANTITY & SPECIFICATION OF STOCK IN AREAS 1-42

LEGEND

- HEAVY STANDARD TREE AT INTERSECTIONS (REFER TO SCHEDULE)
- PLANTING MIX 'A' - WOODLAND ON DISTURBED GROUND (REFER TO SCHEDULE & MATERIAL)
- PLANTING MIX 'B' - WOODLAND ON UNDISTURBED GROUND (REFER TO SCHEDULE & MATERIAL)
- PLANTING MIX 'C' - SMALL TREES/SHRUBS (REFER TO SCHEDULE & MATERIAL)
- PLANTING MIX 'D' - PLANTING MIX 'E' (REFER TO SCHEDULE & MATERIAL)
- HYDROSEEDING IN KSCC LAND (REFER TO SCHEDULE & MATERIAL)
- AGRICULTURE / GRAZING (REFER TO SCHEDULE & MATERIAL)
- SOIL CUT SLOPE
- ROCK CUT SLOPE
- FLY SLOPE

LOCATION OF RETAINING WALL / ADDITION TO BE SCHEDULED WITH LINDING PLANS (REFER TO SCHEDULE)

SITE BOUNDARY

C	MINOR REVISION	SEE W/RE AREA 100, 01
B	AS-BUILT DRAWING	SEE W/RE AREA 100, 01
A	WORKING DRAWING	SEE W/RE AREA 100, 01
F	FIRST ISSUE TENDER DRAWING	SEE W/RE AREA 100, 01
D	DESIGN	SEE W/RE AREA 100, 01
E	ENGINEERING	SEE W/RE AREA 100, 01
G	GEOTECHNICAL	SEE W/RE AREA 100, 01
H	HYDROLOGICAL	SEE W/RE AREA 100, 01
I	IMMEDIATE	SEE W/RE AREA 100, 01
J	JOB	SEE W/RE AREA 100, 01
K	KIND	SEE W/RE AREA 100, 01
L	LAND	SEE W/RE AREA 100, 01
M	MATERIAL	SEE W/RE AREA 100, 01
N	NEW	SEE W/RE AREA 100, 01
O	OLD	SEE W/RE AREA 100, 01
P	PLANTING	SEE W/RE AREA 100, 01
Q	QUANTITY	SEE W/RE AREA 100, 01
R	REVISION	SEE W/RE AREA 100, 01
S	SCALE	SEE W/RE AREA 100, 01
T	TITLE	SEE W/RE AREA 100, 01
U	UNIT	SEE W/RE AREA 100, 01
V	VALUE	SEE W/RE AREA 100, 01
W	W/RE	SEE W/RE AREA 100, 01
X	X-AXIS	SEE W/RE AREA 100, 01
Y	Y-AXIS	SEE W/RE AREA 100, 01
Z	Z-AXIS	SEE W/RE AREA 100, 01

SHA TIN NEW TOWN, STAGE II  
ROUTE 8 - SHA TIN HEIGHTS TUNNEL AND APPROACHES  
PLANTING PLAN  
SHEET 1 OF 5

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NOTE  
1. REFER TO PLANTING SCHEDULE FOR QUANTITY & SPECIFICATION OF STOCK IN AREAS 1&2

LEGEND

- HEAVY STANDARD TREE AT 5m INTERVALS REFER TO SCHEDULE
- PLANTING MIX 'A' - WOODLAND ON DISTURBED GRASS REFER TO SCHEDULE & HATCH
- PLANTING MIX 'B' - PLANTING MIX 'C' - SMALL TREES/SHRUBS REFER TO SCHEDULE & HATCH
- PLANTING MIX 'D' - HYDRONATURAL OR SIMILAR SUBJECT TO CLIENT CONFIRMATION
- HYDRONATURAL IN KEE LAND
- AREWY - SHRUBS / GROUNDCOVERS
- SOIL CUT SLOPE
- ROCK CUT SLOPE
- FILL SLOPE
- SITE BOUNDARY
- LOCATION OF RETAINING WALL / ADJACENT TO RL SCHEDULE REFER TO SCHEDULE

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Territory Development Department 拓展處  
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新界東北發展處

SHA TIN NEW TOWN, STAGE II  
ROUTE 8 - SHA TIN HEIGHTS TUNNEL AND APPROACHES  
PLANTING PLAN  
SHEET 2 OF 5

**URBIS LIMITED**  
PLANNING, DESIGN, LANDSCAPE AND ENVIRONMENTAL CONSULTING

**MAUNSELL CONSULTANTS ASIA LTD.**  
茂盛亞洲工程顧問有限公司

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1. SITE PLAN

2. GENERAL NOTES

3. MATERIALS

4. CONSTRUCTION

5. FINISHES

6. PLANTING

7. UTILITIES

8. ROADS

9. LANDSCAPE

10. STRUCTURE

11. FURNITURE

12. LIGHTING

13. SIGNAGE

14. SECURITY

15. MAINTENANCE

16. ENVIRONMENT

17. HISTORY

18. CULTURE

19. ECONOMY

20. SOCIETY

21. POLITICS

22. RELIGION

23. ARTS

24. SCIENCE

25. TECHNOLOGY

26. MEDICINE

27. LAW

28. ETHICS

29. PHILOSOPHY

30. PSYCHOLOGY

31. SOCIOLOGY

32. ANTHROPOLOGY

33. LINGUISTICS

34. HISTORY

35. GEOGRAPHY

36. CLIMATE

37. ENVIRONMENT

38. AGRICULTURE

39. FISHERIES

40. FORESTRY

41. MINING

42. ENERGY

43. TRANSPORT

44. COMMUNICATIONS

45. DEFENSE

46. SPACE

47. AEROSPACE

48. MARITIME

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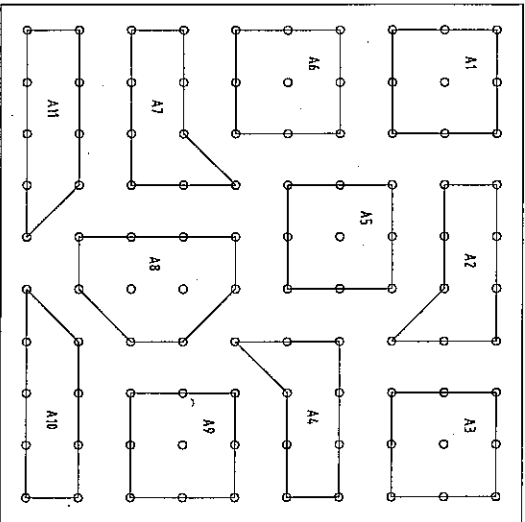
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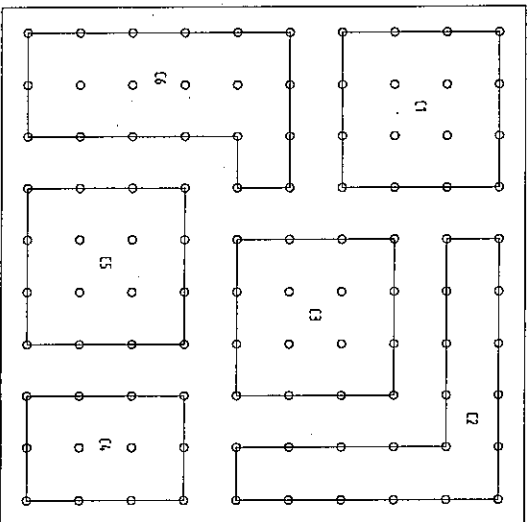
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10 METRES SQUARE - 100 TREES

WOODLAND MIX A / A1  
(WOODLAND ON DISTURBED GROUND)



6 METRES SQUARE - 100 TREES

WOODLAND MIX C  
(SHRUBS/SMALL TREES ON FULL  
ENCLOSURE LANDSCAPE DECK)

Woodland Planting Schedule (MIX A/A1)

Key	Scientific Name	Spacing (mm)	Size (mm)	Percentage	% City
A1	Acacia acutifolia	As Shown	600 - 800	9	9
A2	Acacia mangium	As Shown	600 - 800	9	9
A3	Albizia lebbek	As Shown	600 - 800	9	9
A4	Cassia siamea	As Shown	600 - 800	9	9
A5	Eucalyptus robusta	As Shown	600 - 800	9	9
A6	Litsea glutinosa	As Shown	600 - 800	9	9
A7	Machilus chinensis	As Shown	600 - 800	9	9
A8	Moranga tomentosa	As Shown	600 - 800	9	9
A9	Mallotus paniculatus	As Shown	600 - 800	10	10
A10	Scaevola discolor	As Shown	600 - 800	9	9
A11	Schefflera octaphylla	As Shown	600 - 800	9	9

- Notes:
- Hydroseeding will be applied to all woodland planting areas prior to planting of woodland whips
  - For details of hydroseeding mix and application refer to particular specification
  - The intention for the woodland planting is to create a two to three storey high mixed woodland which will help to integrate the proposed landscape into the existing landscape
  - This drawing is to be read in conjunction with Landscape Planting Plans and Schedule Drawings PR/00398/7201 to 7207

Woodland Planting Schedule (MIX C)

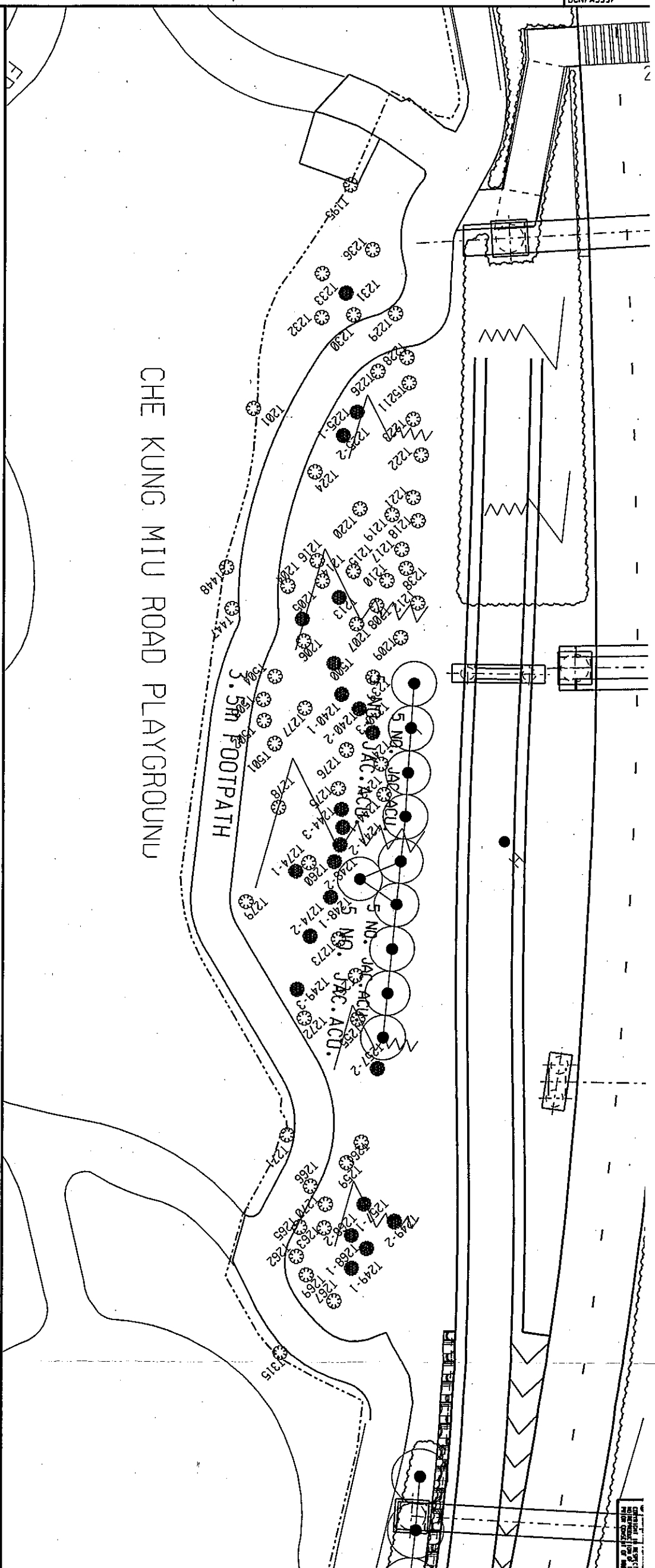
Key	Botanical Name	Spacing (mm)	Size (mm)	Percentage	% City
C1	Cassia surattensis	600	1000	16	16
C2	Nerium indicum	600	1000	20	20
C3	Thevetia peruviana	600	1000	16	16
C4	Ligustrum sinensis	600	1000	12	12
C5	Duranta repens	600	1000	16	16
C6	Bauhinia purpurea	600	1000	20	20

B AS-BUILT DRAWING		SRL	WHL	AKWL	APR 08
A WORKING DRAWING					NOV 02
FIRST ISSUE TENDER DRAWING		BS	ST	RAS	JUN 02
REVISION		NO	NO	NO	NO
Territory Development Department : 拓展署					
NT EAST DEVELOPMENT OFFICE					
SHA TIN NEW TOWN, STAGE II					
WOODLAND PLANTING MATRIX					
ROUTE 8 - SHA TIN HEIGHTS TUNNEL AND APPROPRIATES					
URBIS LIMITED					
PLANNING, DESIGN, LIAISON, COST & ENVIRONMENTAL CONSULTING					
MAUNSELL CONSULTANTS ASIA LTD.					
茂源亞洲工程顧問有限公司					
DRG. NO. PR00398/7207B					
DESIGNED BY: NIS		CHECKED BY: ST 03/02		DATE OF SCALE: 1:1	
SCALE: N.T.S.		AS-BUILT DRAWING		COPYRIGHT RESERVED	
DRAWING NO. 10		AS-BUILT DRAWING		COPYRIGHT RESERVED	
METRES		AS-BUILT DRAWING		COPYRIGHT RESERVED	

Maunsell



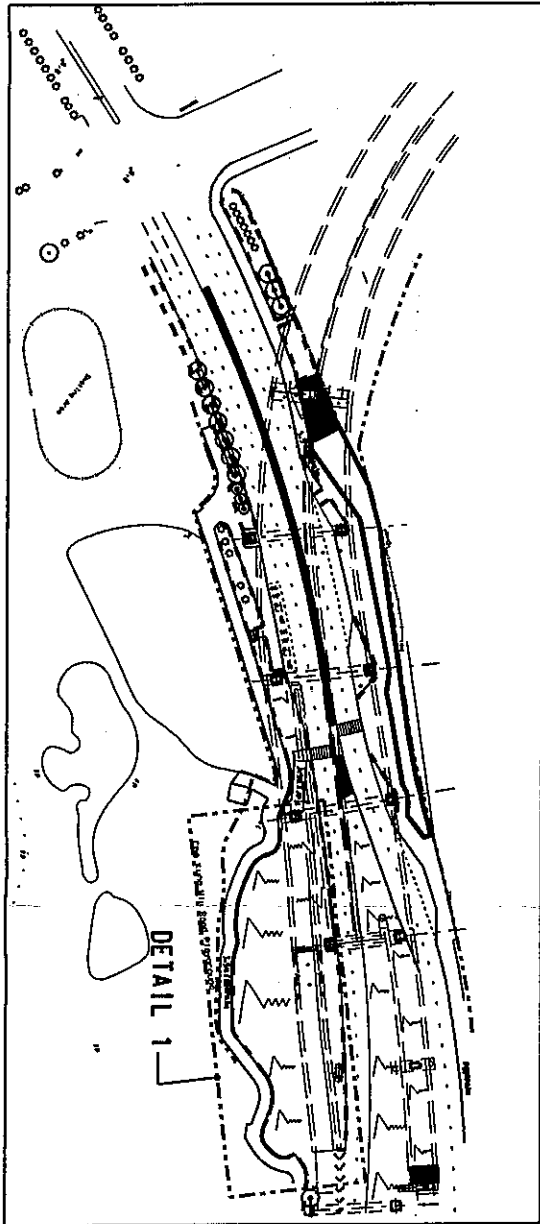




CHE KUNG MIU ROAD PLAYGROUND

DETAIL 1

TREE NO.	ORIGINAL TREE NO.	BOTANICAL NAME	TREE SURVEY SIZE		PROPOSED COMPENSATION		HEIGHT (m)	DBH (mm)	DIT
			HEIGHT (m)	DBH (mm)	BOTANICAL NAME	HEIGHT (m)			
1202		Litchi chinensis	5	200	Melaleuca quinquenervia	3.5	75	3	3
1203		Litchi chinensis	5	200	Melaleuca quinquenervia	3.5	75	3	3
1205		Bischofia trifoliata	5	90	Jacaranda acutifolia	3.5	75	1	1
1213		Bischofia trifoliata	5	80	Jacaranda acutifolia	3.5	75	1	1
1225		Litchi chinensis	3	150	Melaleuca quinquenervia	3.5	75	2	2
1231		Bischofia trifoliata	4	60	Jacaranda acutifolia	3.5	75	1	1
1240	01/15199	Litchi chinensis	7	220	Melaleuca quinquenervia	3.5	75	3	3
1244	01/15197	Acacia confusa	3	200	Melaleuca quinquenervia	3.5	75	3	3
1247		Sterea monogoni	6	200	Melaleuca quinquenervia	3.5	75	3	3
1248		Litchi chinensis	3	130	Pterocarpus pterocarpum	3.5	75	2	2
1249		Litchi chinensis	9	180	Pterocarpus pterocarpum	3.5	75	3	3
1257		Sterea monogoni	4	100	Melaleuca quinquenervia	3.5	75	2	2
1264		Litchi chinensis	4	150	Melaleuca quinquenervia	3.5	75	2	2
1268	01/15184	Averrhoa caribaea	5	150	Pterocarpus pterocarpum	3.5	75	2	2
1274		Litchi chinensis	4	150	Melaleuca quinquenervia	3.5	75	2	2
1500		Bischofia trifoliata	5	80	Jacaranda acutifolia	3.5	75	1	1



LOCATION PLAN FOR COMPENSATION TREES

DETAIL 1

LEGEND:

- EXISTING TREES TO BE RETAINED
- PROPOSED COMPENSATION TREES
- TRANSPLANTED TREE (1435 - Eucalyptus Robusta)
- 10 No Proposed Jacaranda acutifolia (JAC ACU) From Areas 80 & 81, Ref. Dwp. A359/S/2023 & 3030

1	AS BUILT	DATE	21.09.07
REV	DESCRIPTION	BY	DATE

SHATIN NEW TOWN STAGE II

CONTRACT No. STB9 /02

benaim 中國建築一平國際建築師事務所  
35th Floor, SHIP Tower  
75-83 King's Road  
Hong Kong  
www.benaimgroup.com

SHATIN HEIGHTS TUNNEL AND APPROACHES TREE COMPENSATION PLAN

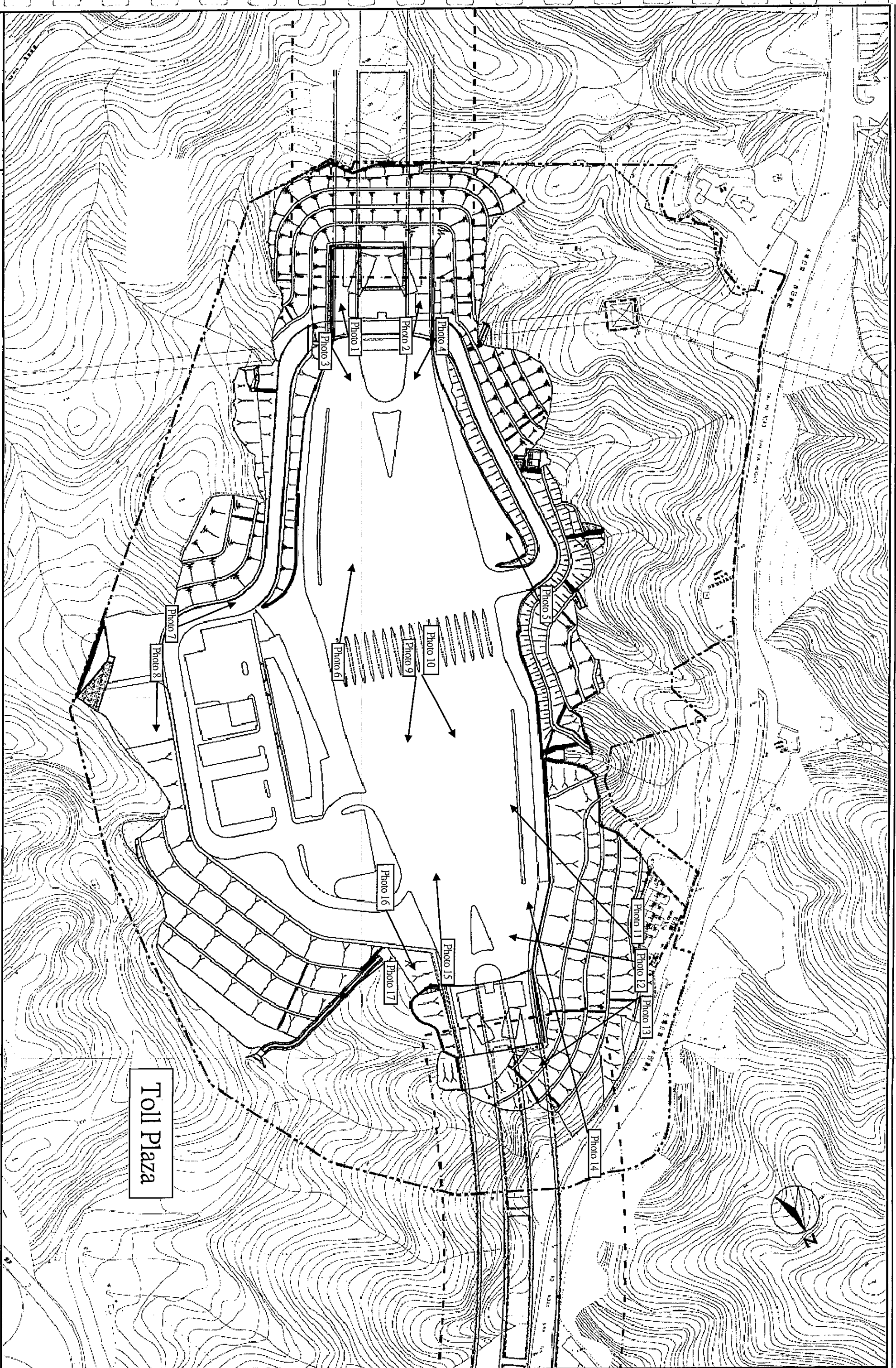
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Date: 15/09/2023  
Mounsell Consultants Asia Ltd





## **APPENDIX C**

SHA TUNNEL



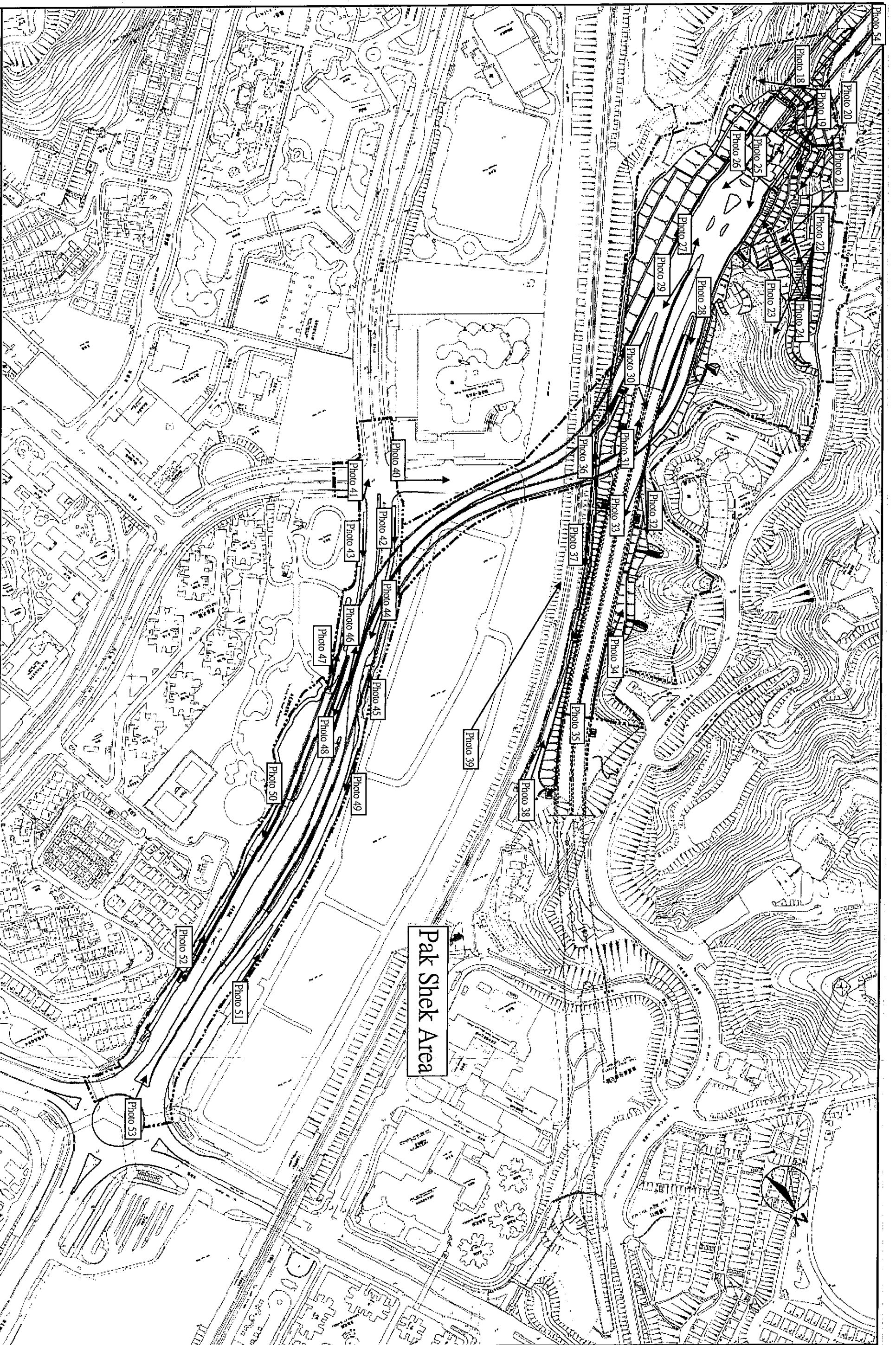
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SHA TIN NEW TOWN STAGE II  
SHA TIN HEIGHTS TUNNEL AND APPROACHES  
GENERAL LAYOUT PLAN

(SHEET 1 OF 2)

SCALE	1	2000 A3	DATE	13/07/2009
DRAWN BY			CHECK BY	SY
CONTRACT NO.	ST 89/02		DRAWING NO.	60398/DF/0790





Pak Shok Area

AECON

SHA T11 NEW TOWN STAGE II  
SHA T11 HEIGHTS TUNNEL AND APPROACHES  
GENERAL LAYOUT PLAN

(SHEET 2 OF 2)

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CHECK BY			DRAWN BY	SY
CONTRACT NO.	ST 89/02		DRAWING NO.	60398/DF/0791
			REV	-

# ST 89/02

## Landscape Audit Report

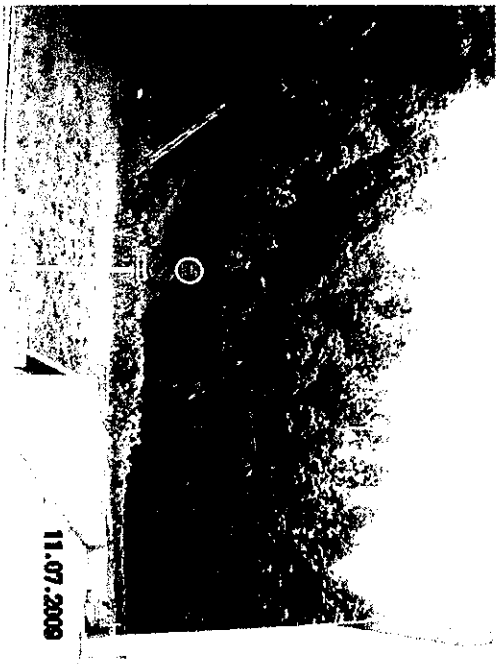


Photo 1



Photo 2

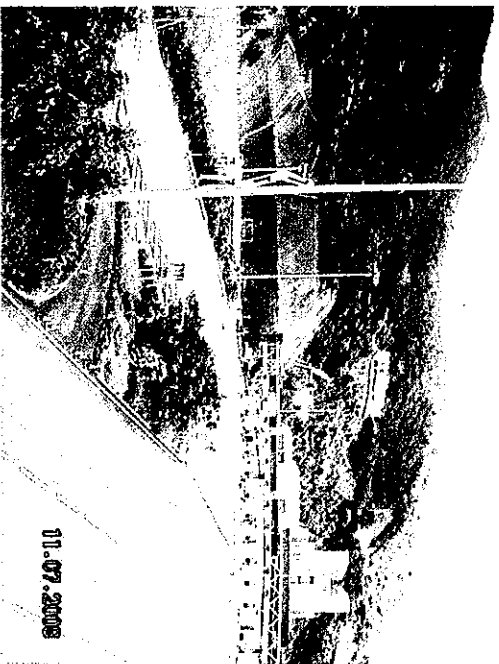


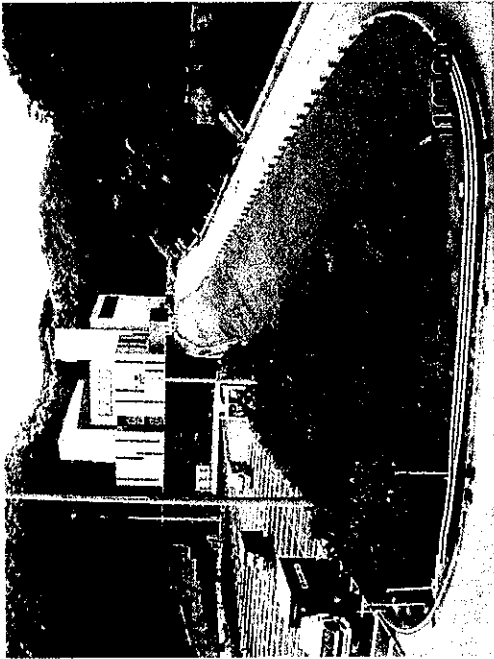
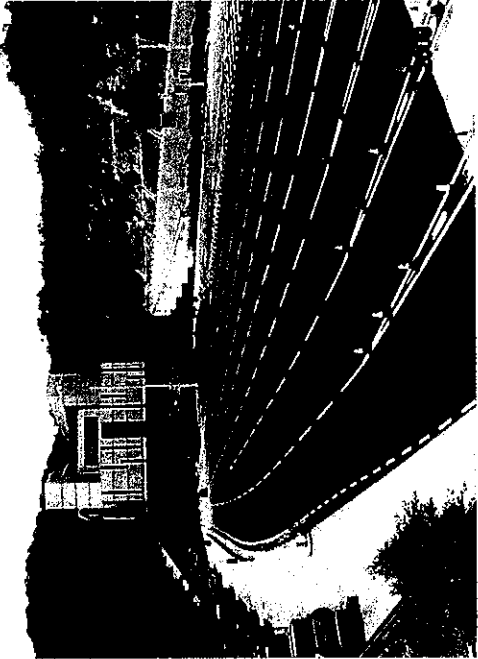
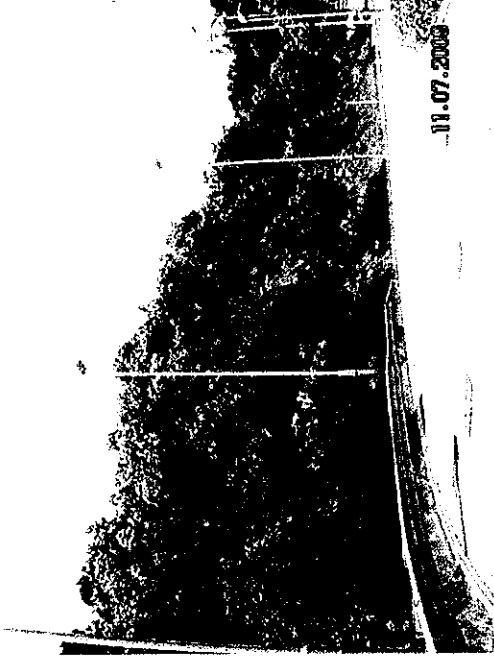

Photo 3



Photo 4

# ST 89/02

## Landscape Audit Report

	
Photo 5	Photo 6
	
Photo 7	Photo 8

# ST 89/02

## Landscape Audit Report

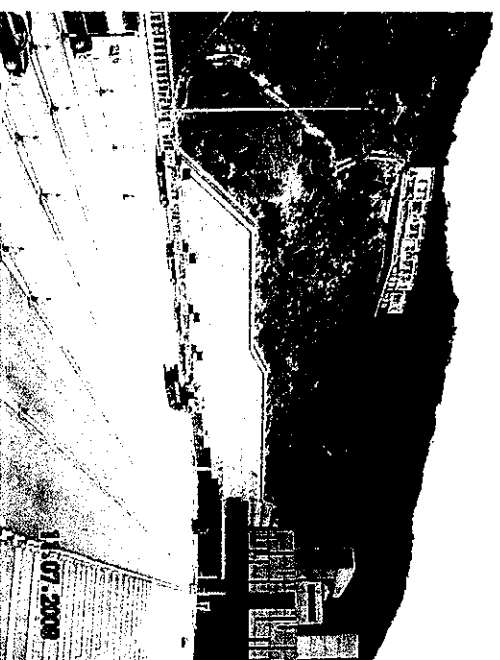


Photo 9

Photo 10

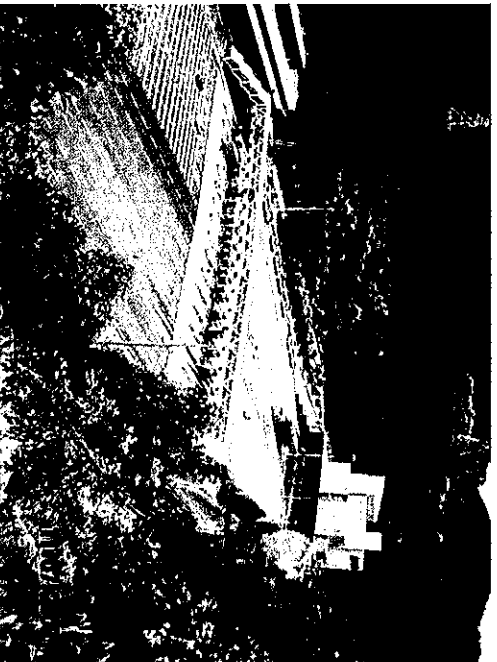

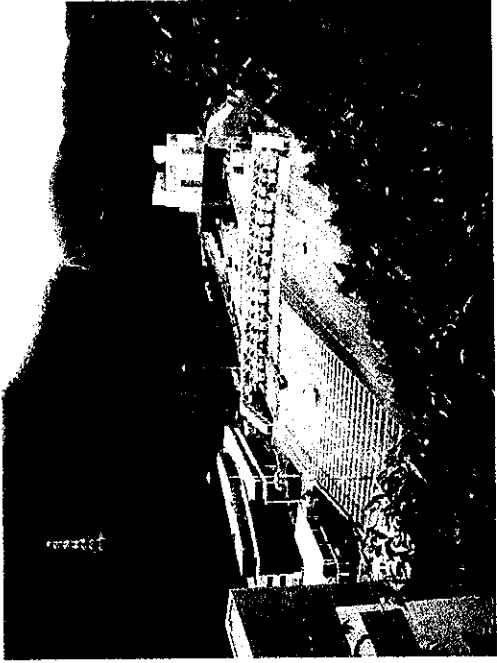
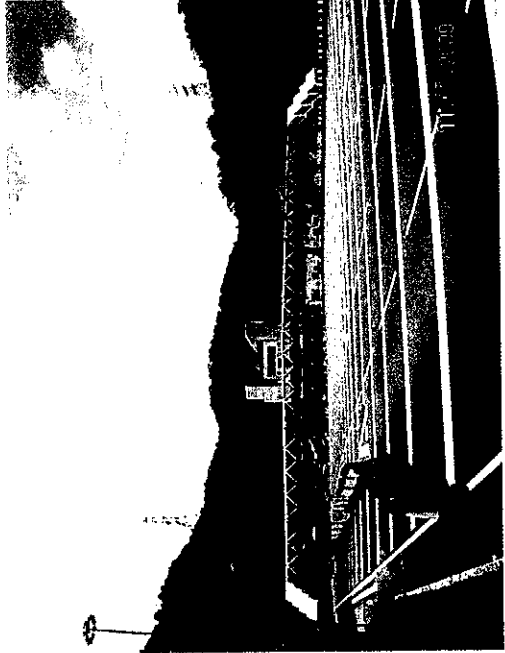
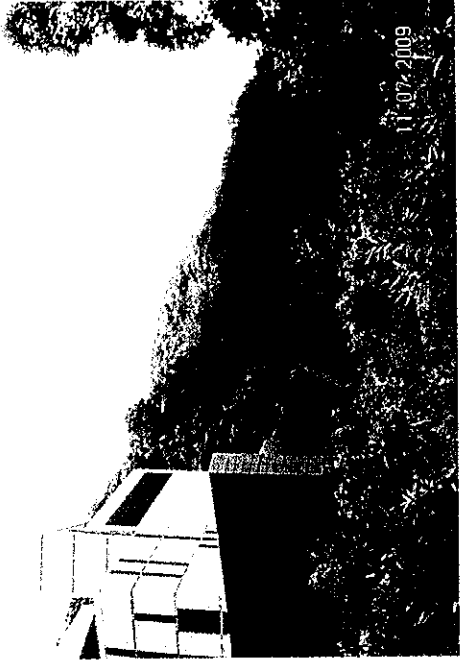


Photo 11

Photo 12

# ST 89/02

## Landscape Audit Report

	
Photo 13	Photo 14
	
Photo 15	Photo 16



ST 89/02  
Landscape Audit Report

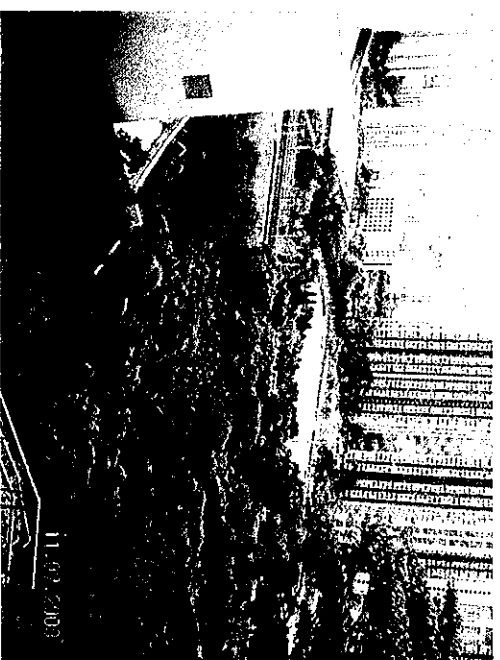


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Photo 18

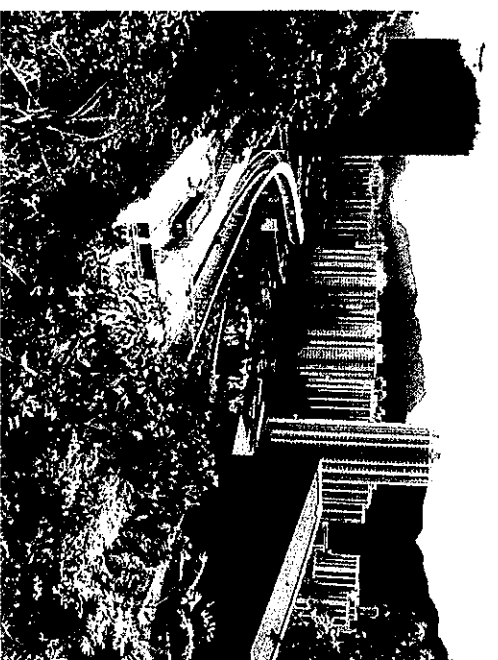

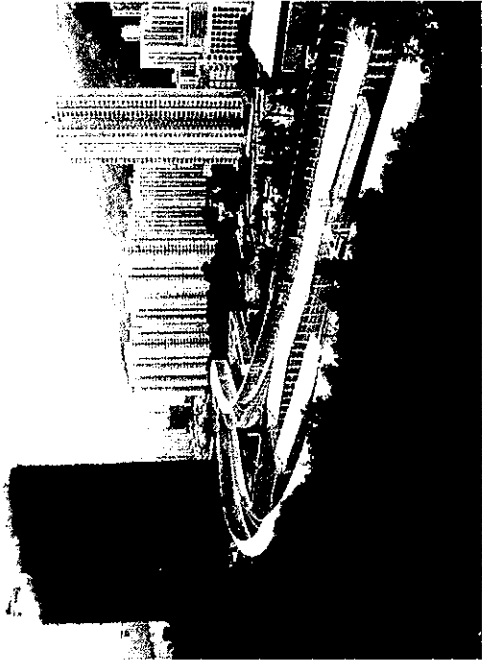

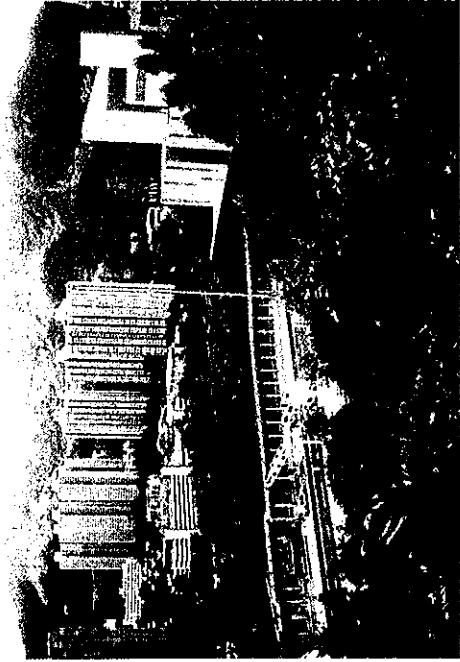


Photo 19

Photo 20

# ST 89/02

## Landscape Audit Report

	
<p>Photo 21</p>	<p>Photo 22</p>
	
<p>Photo 23</p>	<p>Photo 24</p>

ST 89/02  
Landscape Audit Report



Photo 25



Photo 26



Photo 27

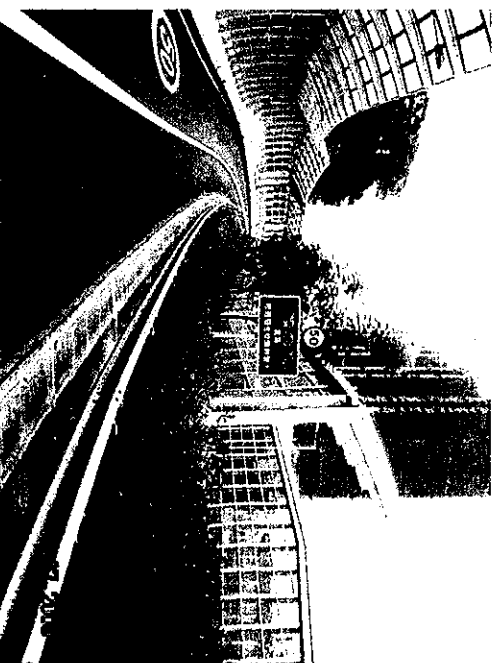
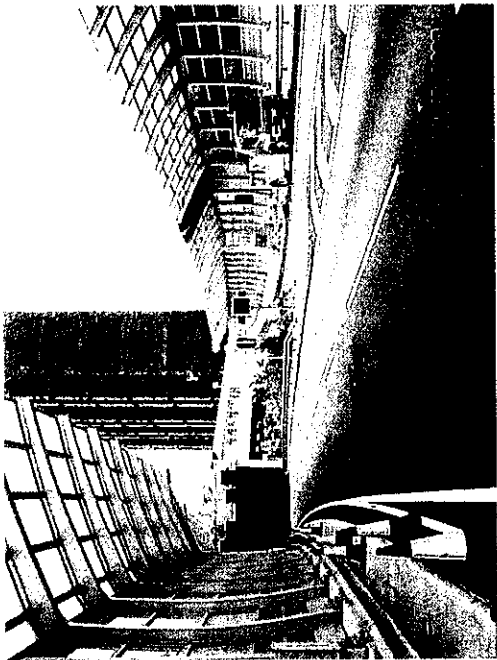
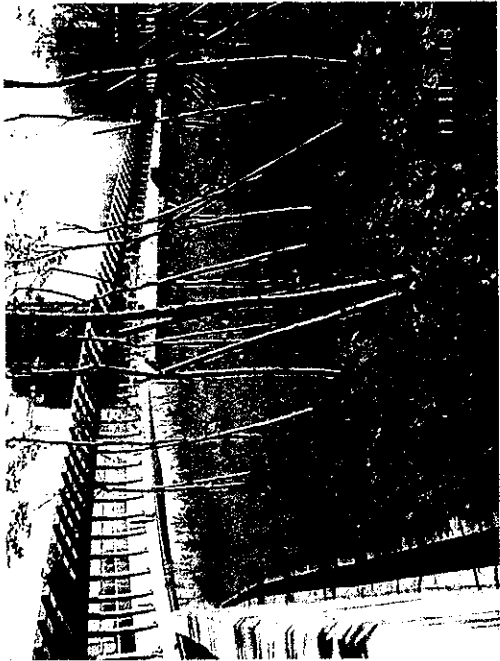

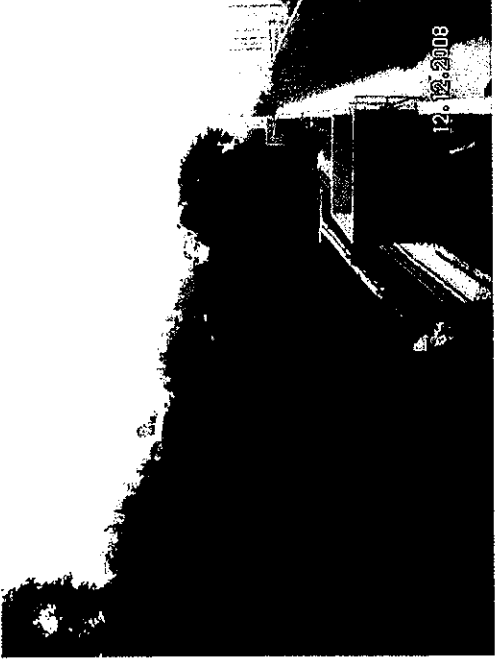


Photo 28

# ST 89/02

## Landscape Audit Report

	
Photo 29	Photo 30
	
Photo 31	Photo 32

ST 89/02  
Landscape Audit Report

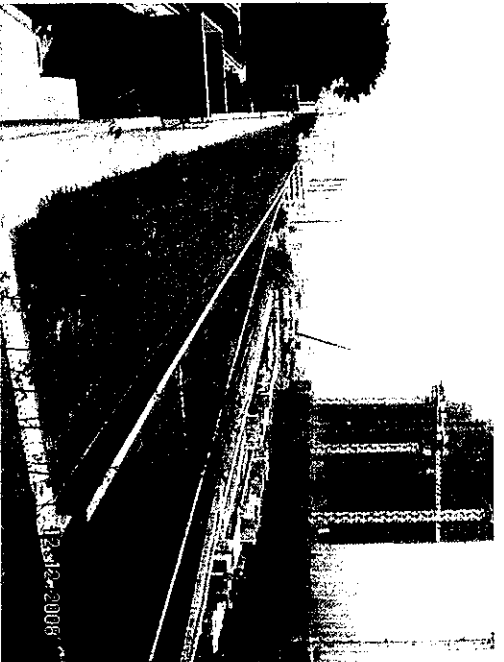


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Photo 34

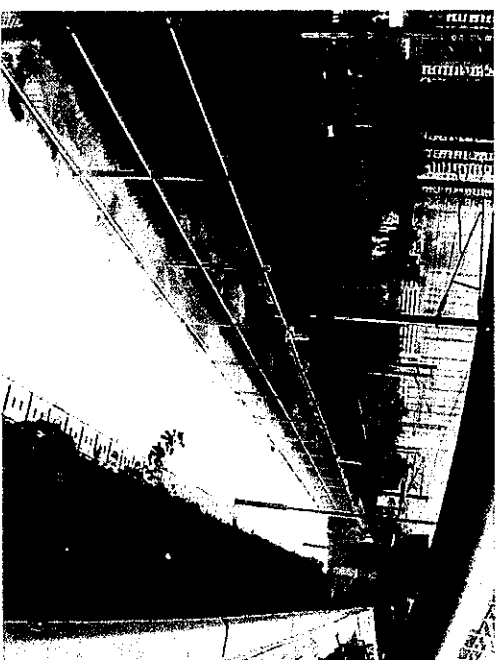
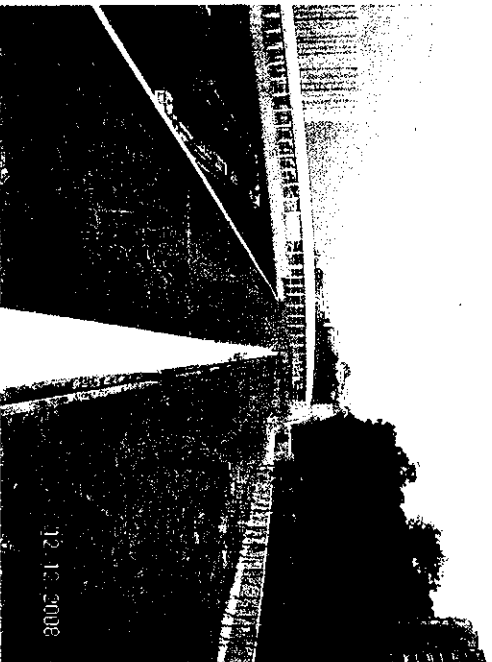


Photo 35

Photo 36

ST 89/02  
Landscape Audit Report

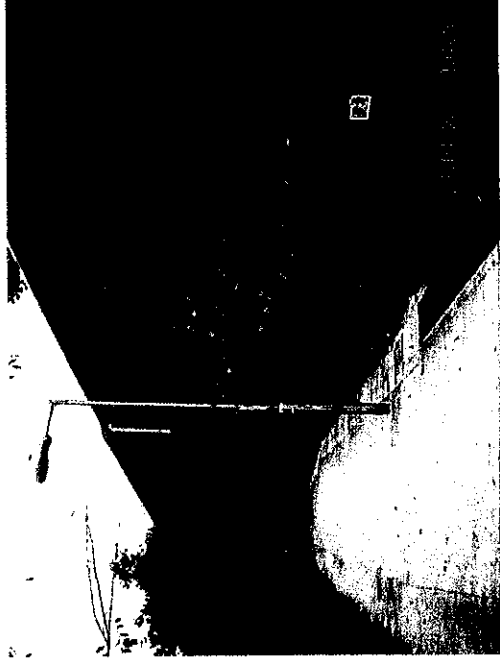
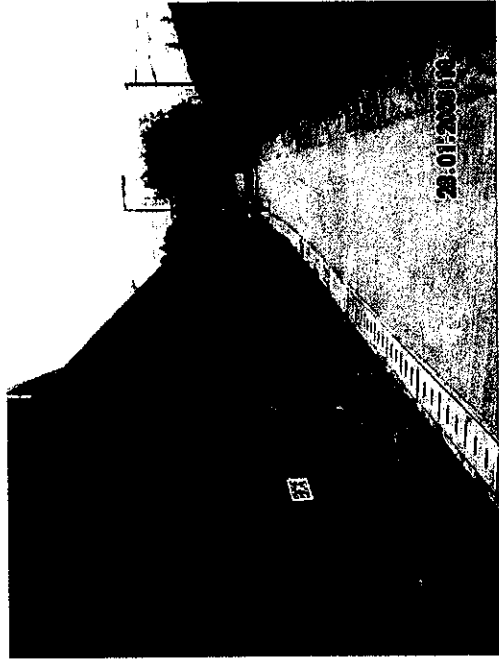


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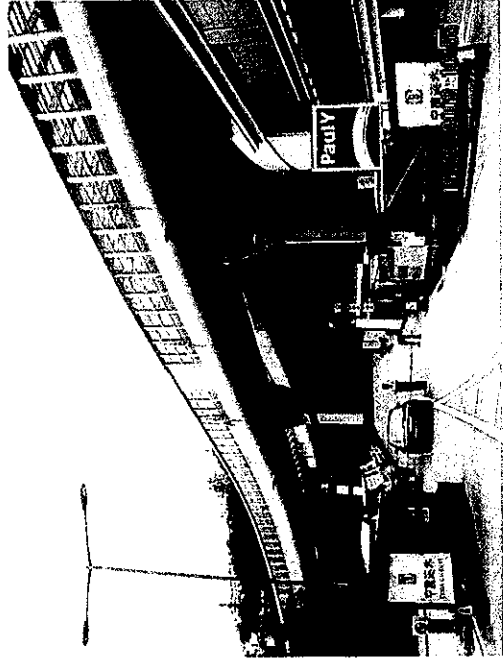
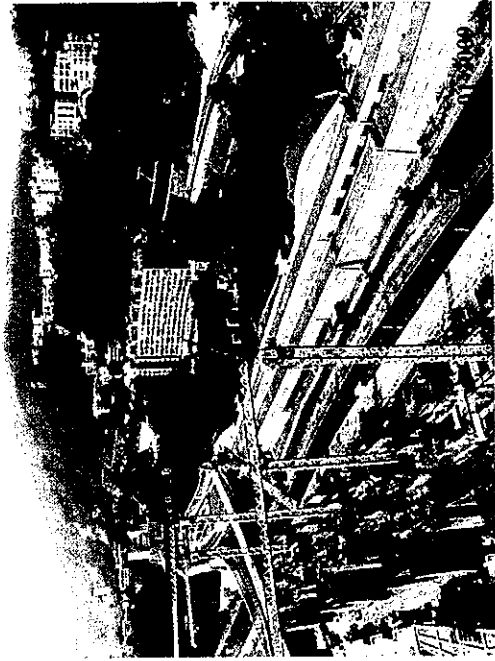


Photo 39

Photo 40

ST 89/02  
Landscape Audit Report

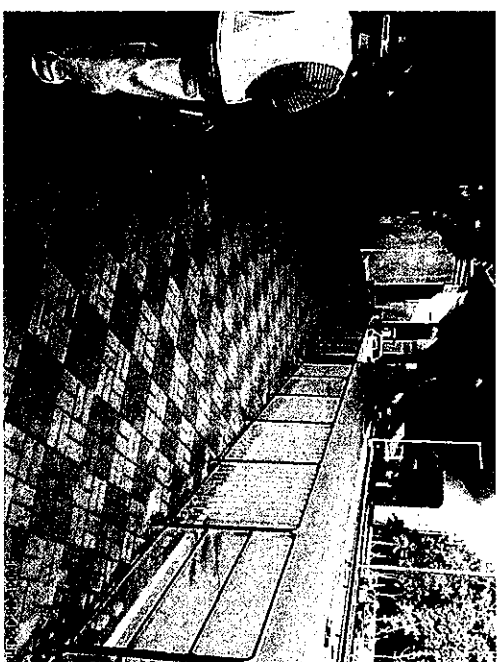


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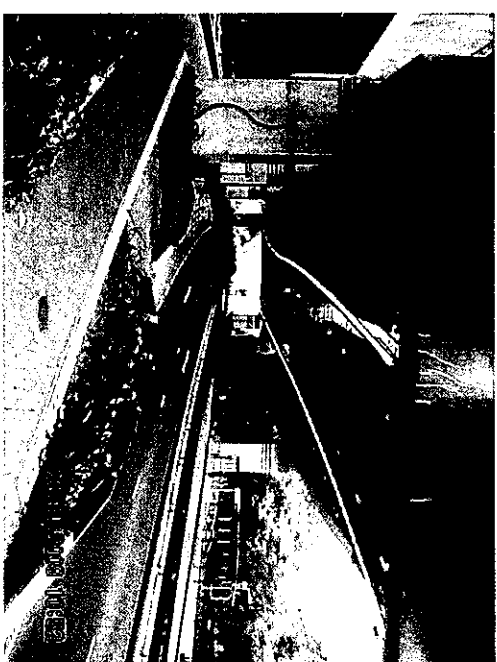
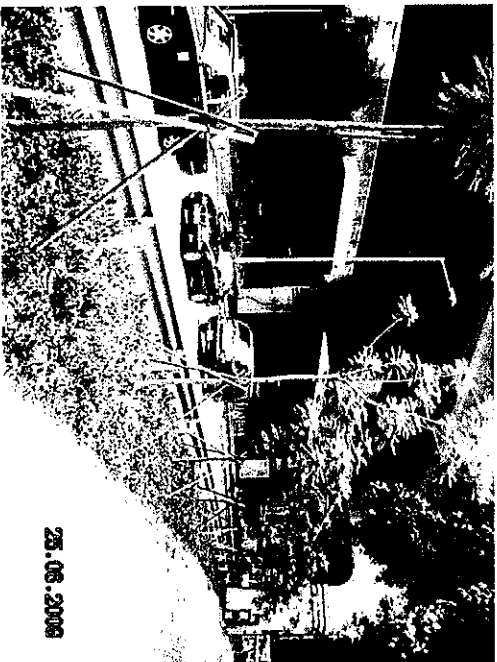
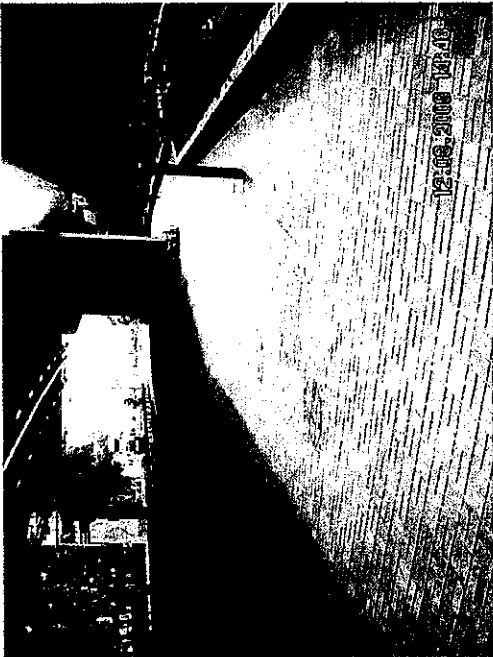
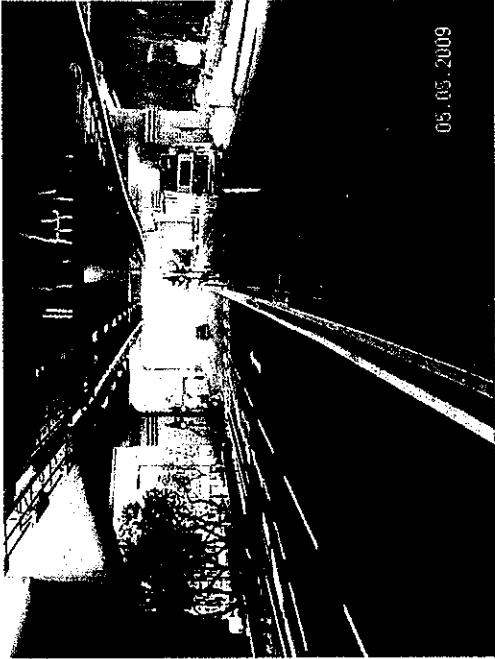




Photo 43

Photo 44

# ST 89/02

## Landscape Audit Report

	
Photo 45	Photo 46
	
Photo 47	Photo 48



ST 89/02  
Landscape Audit Report

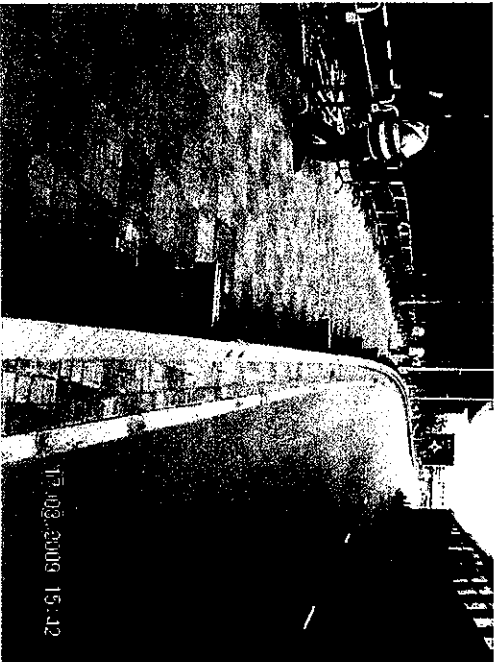


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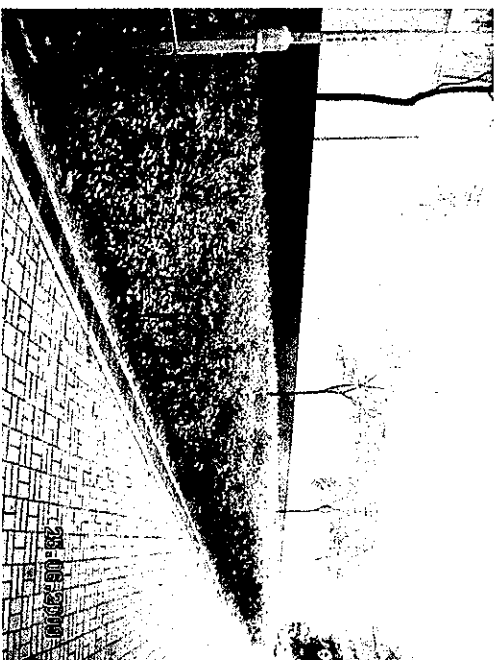


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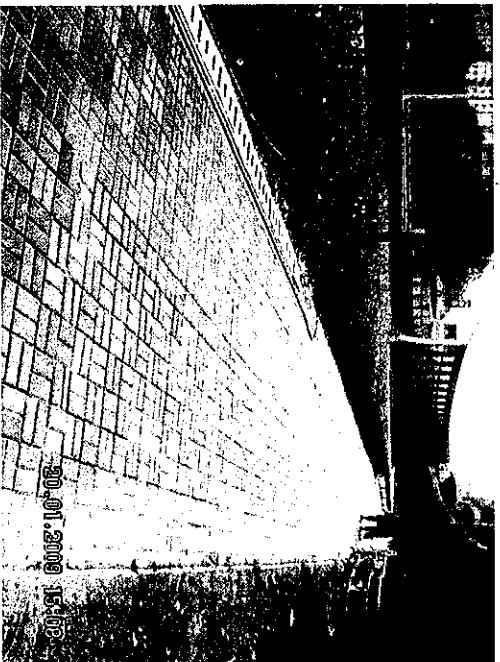


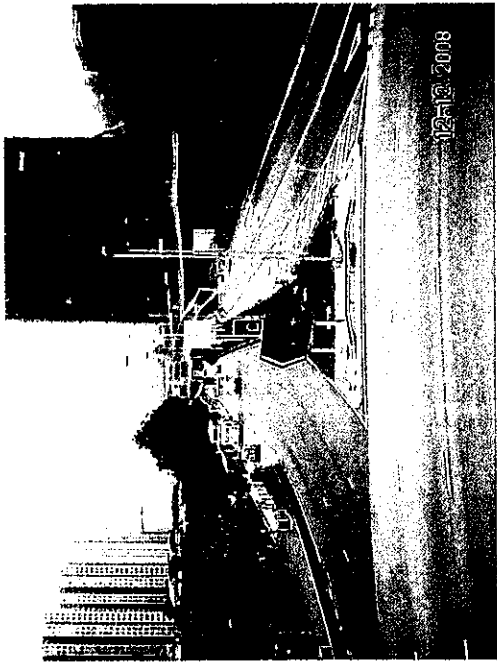

Photo 51



Photo 52

# ST 89/02

## Landscape Audit Report

	
Photo 53	Photo 54