

Project Profile

for

Proposed Headquarter and Bus Maintenance Depot in Chai Wan

Reference : R1612-1.00

Client : Citybus Limited

Date : January 2001

For and on behalf of EHS Consultants Limited:

Prepared by :

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A. BASIC INFORMATION

A.1. Project Title

Proposed Headquarters and Bus Maintenance Depot.

A.2. Purpose and Nature of the Project

The primary objective of this project is to construct and operate a facility at Chai Wan, which shall serve as the Headquarters of Citybus Limited with office and depot areas. The facility will provide services for coin collection, refuelling, maintenance, repairing, washing and parking areas for buses, etc.

A.3. Name of the Project Proponent

Citybus Limited.

A.4. Location and Scale of the Project

The proposed Headquarters and Bus Maintenance Depot is located at a reclaimed area in Chai Wan to the north of the Chai Wan cargo handling area as shown in Figure A-1. The site is bounded by a future local road (Road 20/4) to the East and Shing Tai Road to the West.

The proposed Headquarters and Bus Maintenance Depot is a multi-storey building situated on a site with an approximate area of about 1.1ha. An integrated design is formulated to provide bus maintenance area and offices within the same building.

The preliminary schedule of facilities at the depot is as follows:

1. 2 bus washing machines on ground floor;
2. 2 fuelling stations on ground floor;
3. Approximately 30 sunken pits for bus repair/maintenance on ground floor;
4. Approximately 45 bus parking/maintenance bays on first floor;
5. 10 workshops located on ground and first floor;
6. Overnight parking space for about 100 buses on the second floor;
7. 2 spare parts storage area located on ground and first floor;
8. Underground fuel tanks;
9. Spray painting area, scrap yard/waste material store;
10. Water recycling facilities for bus washing; and
11. Offices for executive, meeting, conference, traffic, revenue collection and engineering staff.

The approximate no. of occupants is estimated to be as follows :

- | | | |
|-----------------------------------|---|----|
| • Library/Learning Sources Centre | - | 10 |
| • Video/Recording Room | - | 5 |
| • Trainee Sitting-out Area | - | 50 |
| • Function Room/Executive Mess | - | 30 |

The majority area of the building will be occupied by the depot. Layout plans that show the preliminary design of the proposed Headquarters and Bus Maintenance Depot is set out in Appendix I.

A.5. Number and Types of Designated Projects to be Covered

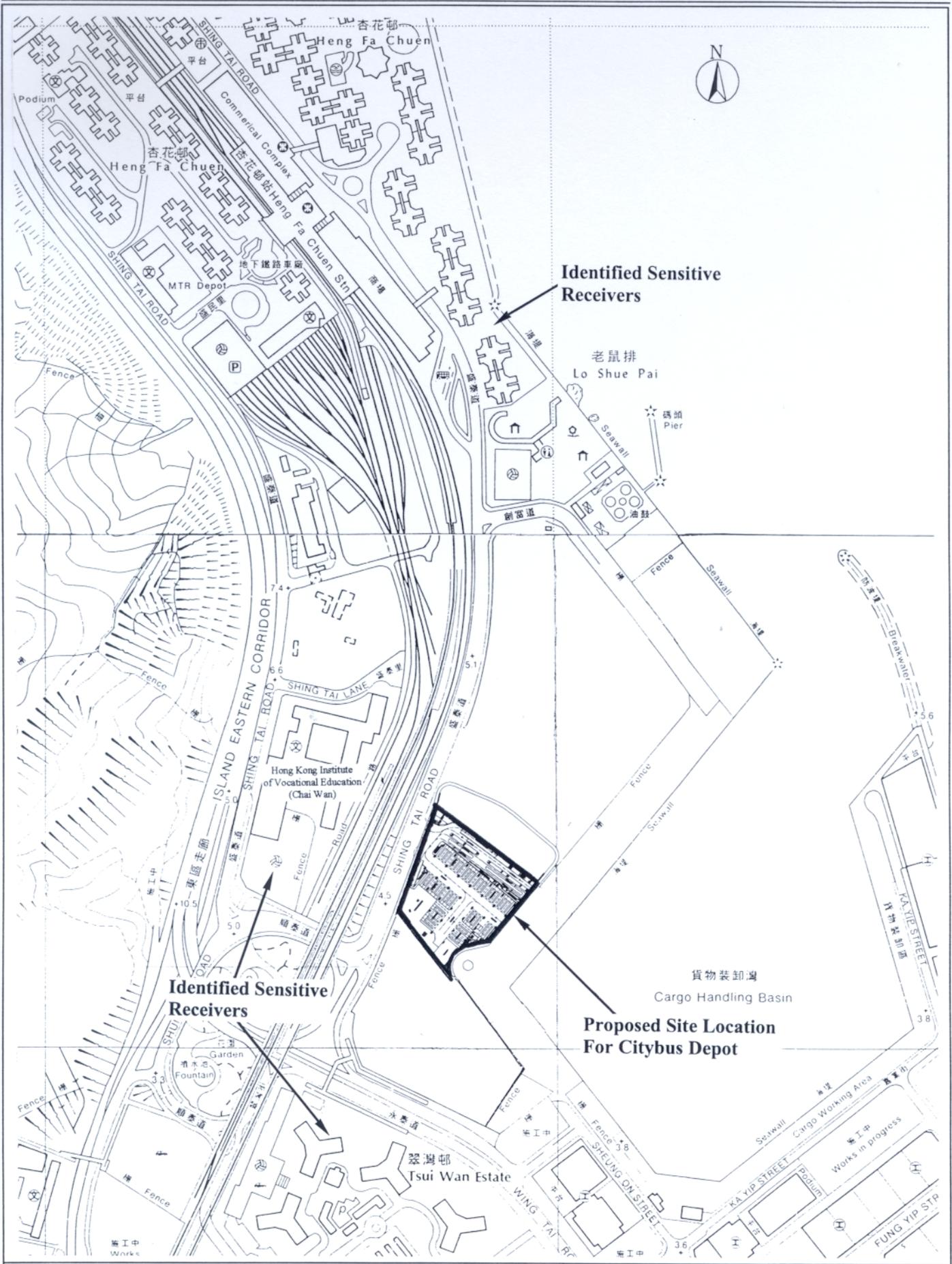
According to Part 1 Schedule 2 Section A.6(Roads, railways and depot) of the Environmental Impact Assessment Ordinance (EIAO), a transport depot located less than 200m from the nearest boundary of an existing or planned (a) residential area; (b) place of worship; (c) educational institution; or (d) health care institution shall be classified as a Designated Project.

As the proposed bus depot is situated at about 100m from Hong Kong Institute of Vocational Education (Chai Wan) and at 180m from the nearest block at Tsui Wan Estate, it is thus classified as a Designated Project. An environmental permit issued by the Director of Environmental Protection is required prior to the construction or operation of the subject Headquarters and Bus Maintenance depot.

A.6. Name and Telephone Number of Contact Person

Key personnel of the project at this preliminary design and assessment stage is listed in Table A-1 for information.

Table A-1 Contact for the Key Personal of the Project



<p>Title: Location of the Proposed Headquarters and Bus Maintenance Depot at Chai Wan</p>	<p>Figure: A-1</p>	<p>Scale: NTS</p>
<p>Project: Project Profile Proposed Headquarter and Bus Maintenance Depot in Chai Wan</p>	 <p>EHS CONSULTANTS LIMITED</p>	

Figure A-1 Location of the Proposed Headquarters and Bus Maintenance Depot at Chai Wan

B. OUTLINE OF PLANNING IMPLEMENTATION PROGRAMME

The Project Architect will plan and design the proposed Headquarters and Bus Maintenance Depot. The Project Architect is supported by a team of consultants, including environmental consultant, traffic consultant, engineer and surveyor to ensure that various interrelated design factors are taken into account in developing the design. The EIA study will be carried out in parallel with the design of the new development. It is targeted to complete the EIA near mid-2001 to allow the construction works to begin on time near end of 2001.

The envisaged construction period of the project will be from around the end of 2001 to June 2003. The depot is expected to be commissioned by around August 2003. A tentative construction programme of the development is shown in Appendix II.

Major future developments in the vicinity of the proposed Headquarter and Bus Maintenance Depot according to the latest planning information include industrial, commercial and Government landuses such as Joint Development Departmental Depot, Food and Environmental Hygiene Department (FEHD) Vehicle/Tree Depot, New World First Bus (NWFB) Permanent Depot, HK Post Super Centre and Chai Wan Public Cargo Handling Area etc.

C. POSSIBLE IMPACT ON THE ENVIRONMENT

C.1. Construction Phase

The programme for the construction of the proposed Headquarters and Bus Maintenance Depot is divided into two main stages: foundation works and superstructure development. Given the nature of the site (reclaimed), construction of the development will involve piling activity. A variety of powered mechanical equipment will also be in use as in other construction projects.

C.1.1. Fugitive Dust Impact

Fugitive dust emission is likely to be the key air quality pollutant of interest, which may pose an air quality impact on the nearby Air Sensitive Receivers if unmitigated.

C.1.2. Construction Noise Impact

Construction noise would arise from the use of powered mechanical equipment (PME) and from piling activity onsite.

C.1.3. Water Quality Impact

Site construction activities will inevitably have the potential to generate wastewater. Given the proximity of the site to the cargo handling basin, implementation of sufficient wastewater control/mitigation measures would be important. The key pollutants of interest are identified to suspended solid from soil erosion and surface runoff. Other pollutants would include fuel, oils and lubricants from construction vehicles and other onsite equipment, etc.

C.2. Operational Phase

During operation phase of the project, buses will generally leave the proposed Headquarters and Bus Maintenance Depot early in the morning. After servicing hours, buses will return to the proposed Headquarters and Bus Maintenance Depot. Upon entering the proposed depot, buses will line up for coil collection, refueling and bus washing to get ready for service on the following day. Upon completion of the maintenance/ repair works, buses will then move to their designated parking space.

To maintain a high quality service, buses entering the depot will be washed with formless shampoo and the vehicle surfaces will be brushed. Water used in the vehicle washing system will be recycled to minimize water consumption.

The proposed Headquarters and Bus Maintenance depot will primarily be in operation on a 24-hour basis.

C.2.1. Air Quality Impact

Vehicular emissions from engine testing, painting, buses leaving/ entering the depot, and moving inside the bus depot will be the major air pollution sources from the project.

C.2.2. Traffic Noise Impact

Buses leaving the depot in the morning and returning in the evening may generate some traffic noise. However, given the significant distance separation between the bus depot and the Noise Sensitive Receivers, significant noise impact is not anticipated.

C.2.3. Industrial Noise Impact

Industrial noise sources from the proposed depot include buses travelling and parking, engine testing, maintenance operations and other workshop operations.

C.2.4. Water Quality Impact

Effluent and wastewater will be generated from the washrooms and activities carried out in the washing area within the depot.

C.2.5. Waste Generation

Used petroleum products, including engine oilbreak oil, etc, will be generated as chemical wastes from the operation of the proposed depot. Solid waste such as used tires and parts will also be produced from the development requiring proper disposal.

C.2.6. Hazardous Installation

Fuel tanks for storage of diesel fuel will be installed in accordance with the requirements as stipulated by the Fire Services Department (FSD). In compliance with the Dangerous Goods Ordinance, a license for the storage of the fuel at the site will be applied from FSD prior to operation of the proposed Headquarters and Bus Maintenance Depot.

CRC Chai Wan Oil Terminal is located at more than 370m to the north of the development site. Typical size of consultation zone of liquefied petroleum gas (LPG) and/or diesel oil installation with high capacity and classified as Potentially Hazardous Installation (PHI) is typically in the range of 150m to 200m in radius taking into account the dominant sources of hazard. Therefore, significant risk arising from the operation of the oil terminal on the development is not anticipated.

C.2.7. Visual Impact

The bus depot will be situated within a low-rise building. Significant visual impact on the surrounding sensitive receivers is not anticipated.

C.2.8. Ecological Impact

The development is sitting on a reclaimed area. Implementation of the project will not cause any significant ecological impact.

D. MAJOR ELEMENTS OF THE SURROUNDING ENVIRONMENT

The surrounding areas are currently zoned as “Industrial, Government, Institutions or Community” and “Open Space” according to Outline Zoning Plan No. S/H20/9. Existing land use of the areas is mainly for temporary car/ coach parks. Chai Wan cargo handling area is located to the south. The CRC Chai Wan Oil Terminal is located at more than 370m to the north of the proposed development.

Two major residential areas lie to the south and north of the development. The nearest residential blocks of Tsui Wa Estate located to the south of the proposed development lie at more than 180m from the subject site. Hang Fa Chuen is located at more than 350m away to the north of the site.

Other sensitive receivers located in the vicinity of the site include Hong Kong Institute of Vocational Education (Chai Wan) and the staff quarters, which are located at approximately 100m to the west of the site, being buffered by Shing Tai Road and the MTR tracks. Traffic noise from Shing Tai Road and rail noise from MTR tracks and Chai Wan Cargo Handling Area are identified to be the dominant noise sources on these NSRs.

Location of the environmental sensitive receivers identified above relative to the proposed Headquarters and Bus Maintenance Depot are illustrated in Figure A-1.

The northern and southern sides of the site are reserved for other developments including a possible Liquefied Petroleum Gas (LPG) filling station to the northeast, and HK Post’s Super Centre to the south.

Appendix III presents the major planned land uses in the vicinity of the proposed Headquarters and Bus Depot.

E. ENVIRONMENTAL PROTECTION MEASURES

E.1. Construction Phase

E.1.1. Fugitive Dust Impact

The contractor of the project shall follow the requirement as stipulated in the Air Pollution Control (Construction Dust) Regulation and implement the necessary dust suppression measures to reduce the fugitive dust impact to within the Air Quality Objectives at the sensitive receivers.

E.1.2. Water Quality Impact

Sufficient water pollution control measures will be implemented following the requirements given in EPD’s ProPECC Note PN1/94 Construction Site Drainage. A series of silt removal facilities shall be installed to settle siltation prior to discharge. Such facilities shall be properly designed in accordance with guidelines issued by Civil Engineering Department to achieve the desired mitigating effect on water quality. Typically, a detention time of not less than 5 minutes for maximum design flow of inlet shall achieve adequate sediment removal. Channels, earth bunds or sand bag barriers shall be provided onsite to properly direct surface runoff to such silt removal facilities. Sediment traps, channels and manholes shall be maintained and the deposited silt and grit shall be removed on a regular basis.

E.1.3. Noise Impacts

With the implementation of appropriate noise mitigation measures where required, such as use of silenced equipment, noise barrier, and/or avoid concurrent noisy operations, it is envisaged that the potential construction noise impact can be substantially minimised.

E.1.4. General Management

As a general guidance, the contractor shall maintain a high standard of housekeeping to minimise noise and dust emission. Loading, unloading, handling and storage of building materials and debris shall be carried out in a manner so as to minimise the release of visible dust.

Any piles of debris accumulated on or around the work areas shall be cleaned up regularly. Cleaning, repair and maintenance of all plant facilities within the work areas shall be carried out in a manner without generating fugitive dust emissions. The material shall be handled properly to prevent fugitive dust emission before cleaning.

An Environmental Monitoring and Audit (EM&A) Programme would be set up as appropriate for checking the implementation of the environmental mitigation measures.

E.2. Operational Phase**E.2.1. Traffic Noise Impact**

The proposed development is bounded by a future local road (Road 20/4) to the East and Shing Tai Road to the West as shown in Figure E-1. Vehicular access to the depot is planned to be located at Road 20/4. Buses from Island Eastern Corridor (IEC) will arrive via Shing Tai Road northbound, Road 20/6 and Road 20/4 mini-roundabout. The initial plan of bus routing entering or leaving the bus depot is as shown in Figure E-1.

E.2.2. Aerial Industrial Emission and Noise Impact

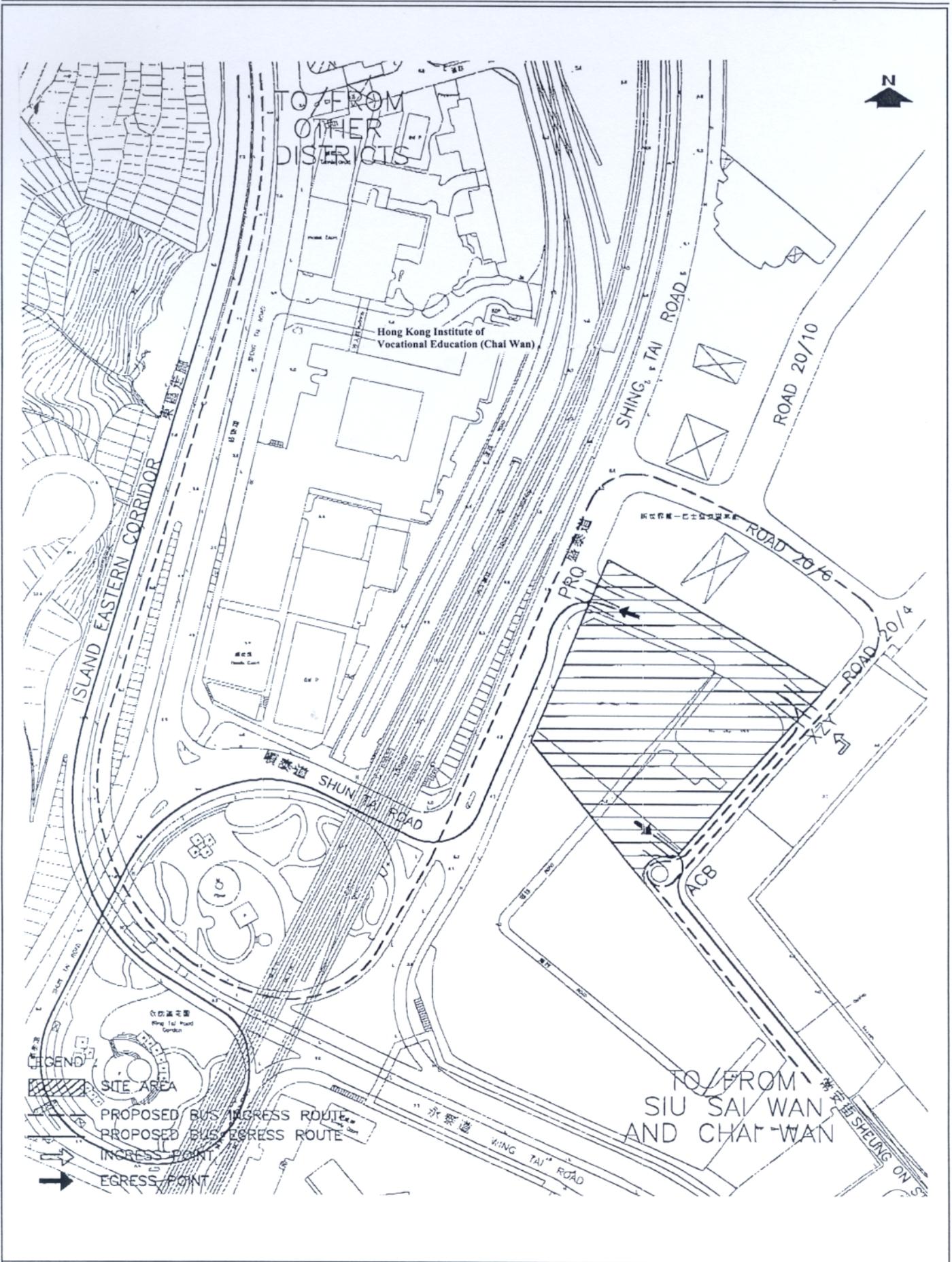
Given the large separation distance, significant air quality arising from the operation at the bus depot on the nearby air sensitive receivers is not anticipated. Similarly, industrial noise impact from operation of fixed plant at the depot on the nearby Noise Sensitive Receivers is not expected to be significant.

Relevant design guidelines such as Practice Notes issued by EPD and guidelines recommended in HKPSG will be followed in the design of the new facility. No adverse air quality or noise impact is expected to arise from the daily operation of the bus maintenance depot.

E.2.3. Water Quality

The design of the bus maintenance depot will take into account measures that can be implemented to minimise wastewater production through recycling, treatment and reuse. Wastewater for disposal to public drainage and sewer shall be appropriately treated to reduce the levels of suspended solids, oil and grease such that the treated effluent is in compliance with the limits stipulated in the Technical memorandum on Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Wastes under the Water Pollution Control Ordinance. No discharge of effluent shall be made to the cargo handling basin.

Sewage arising from the workforce at the proposed Headquarters and Bus Maintenance Depot will also be discharged to public sewer.



Title: Proposed Bus Ingress/ egress Routeing

Figure: E-1

Scale: NTS

Project: Project Profile Proposed Headquarter and Bus Maintenance Depot in Chai Wan



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Figure E-1 Proposed Bus Ingress/egress Routeing.

E.2.4. Waste Management

Used petroleum products will be collected and stored in an underground storage for collection by licensed waste collector for treatment and disposal. Sludge generated from the water treatment system of the bus washing machine will also be collected regularly and disposed of at landfill by a registered contractor with a valid sludge disposal licence.

E.2.5. Environmental Monitoring and Audit

To ensure that the proposed controls and mitigation measures recommended in the EIA are carried out effectively, an Environmental Monitoring and Audit Manual shall be drawn up. The EM&A Manual shall include the recommended monitoring and audit requirements during construction and operational phase of the depot as well as an Implementation Schedule containing the recommended environmental mitigation measures.

F. USE OF PREVIOUSLY APPROVED EIA REPORTS

An EIA report undertaken for a development of similar nature was conducted in December 1999 and approved by EPD in January 2000. Reference will be made to the results and proposed mitigation measures presented in this EIA report as appropriate in the current study. The title, date of approval and environmental issues covered in this EIA study are as follows: .

F.1.1. Title of the EIA Report

New World First Bus Permanent Depot at Chai Wan

F.1.2. Date of Approval

The EIA Report was approved on 25th January 2000.

F.1.3. Environmental Aspects Covered

The following are the Environmental Aspects covered by the EIA report:

- Air Quality;
- Noise;
- Waste Management;
- Land Contamination; and
- Hazard Assessment.

F.1.4.

Appendix I

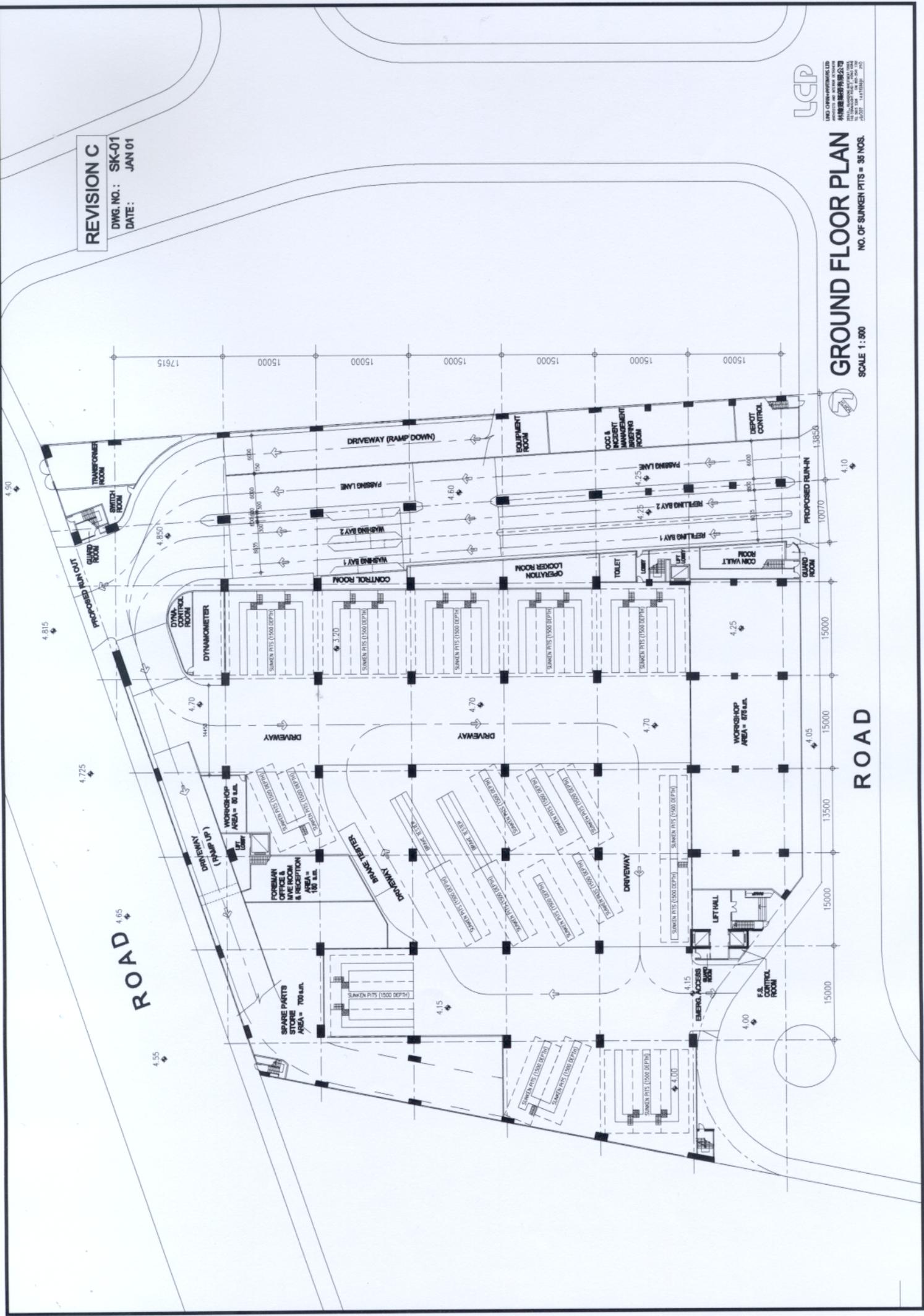
Preliminary Layout Plan
of the
Proposed Headquarters and Bus Maintenance Depot
in Chai Wan

REVISION C

DWG. NO.: SK-01
DATE: JAN 01



GROUND FLOOR PLAN
SCALE 1:500
NO. OF SUNKEN PITS = 35 NOS.



ROAD

ROAD

REVISION C

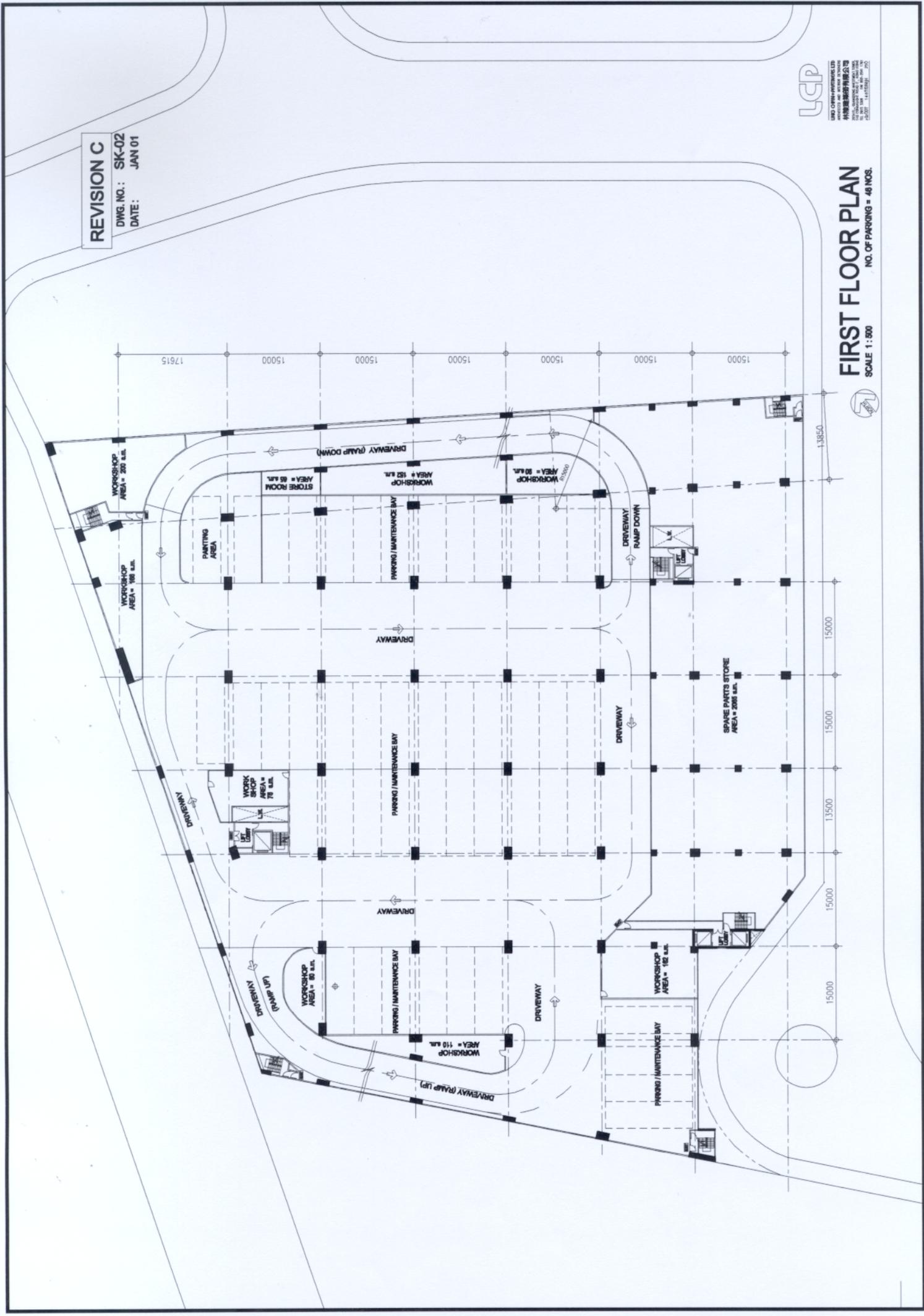
DWG. NO.: SK-02
DATE: JAN 01



FIRST FLOOR PLAN

NO. OF PARKING = 48 NOS.

SCALE 1 : 500



REVISION C

DWG. NO.: SK-03
DATE: JAN 01



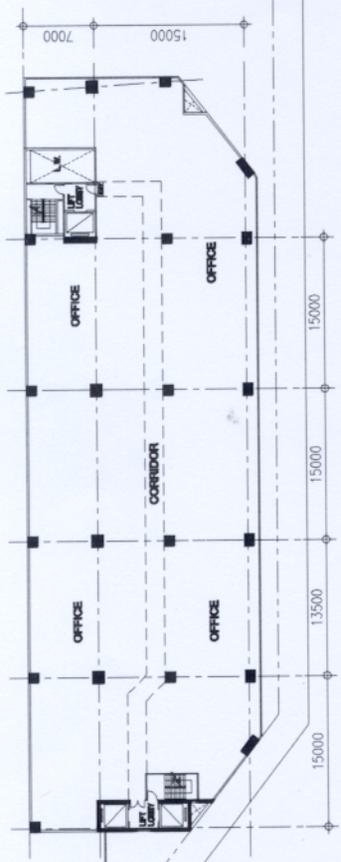
SECOND FLOOR PLAN
NO. OF CARPARK = 98 NOS.

SCALE 1:500

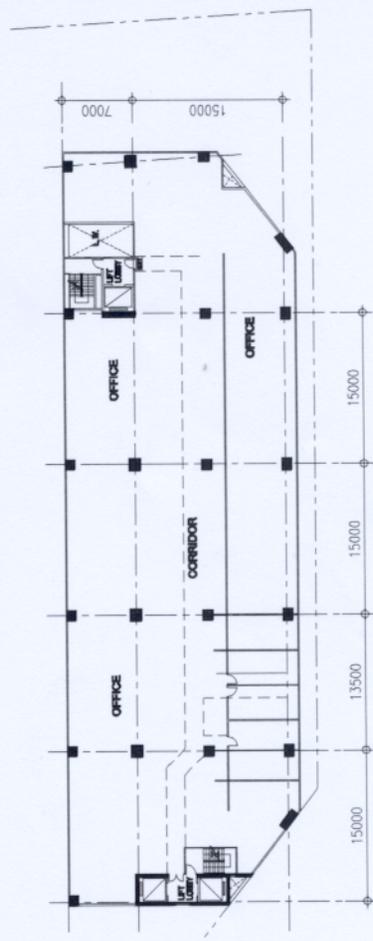


REVISION C

DWG. NO.: SK-04
DATE: JAN 01



THIRD FLOOR PLAN
G.F.A. = 1940 s.m.
SCALE 1:500



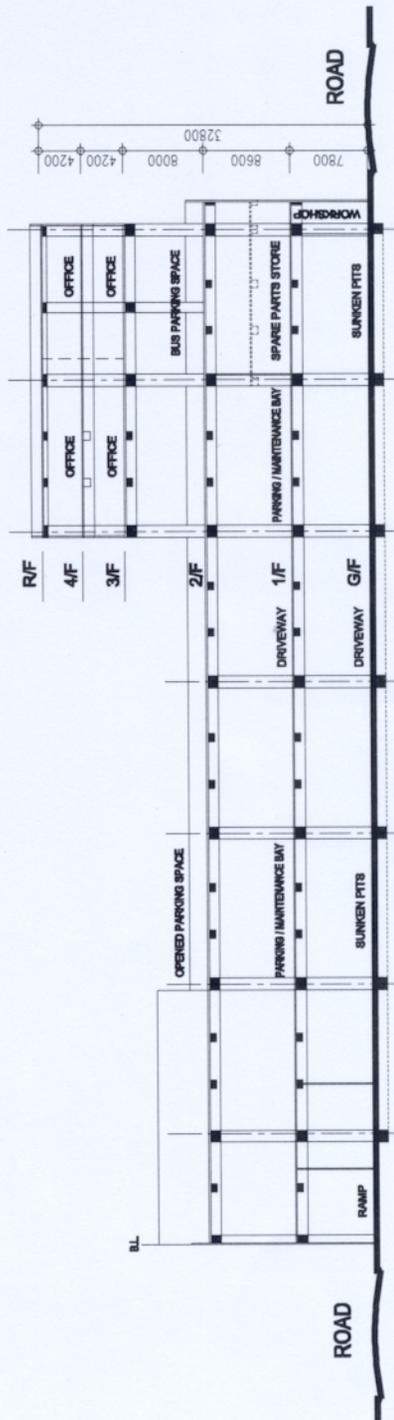
FOURTH FLOOR PLAN
G.F.A. = 1940 s.m.
SCALE 1:500



LCP
LHO CHHAIWONGE LTD
林鴻海有限公司
27/F, HONGKONG & SOUTH CHINA
SEAFARERS BUILDING, 110, QUEEN
STREET, HONG KONG

REVISION B

DWG. NO.: SK-05
DATE: JAN 01



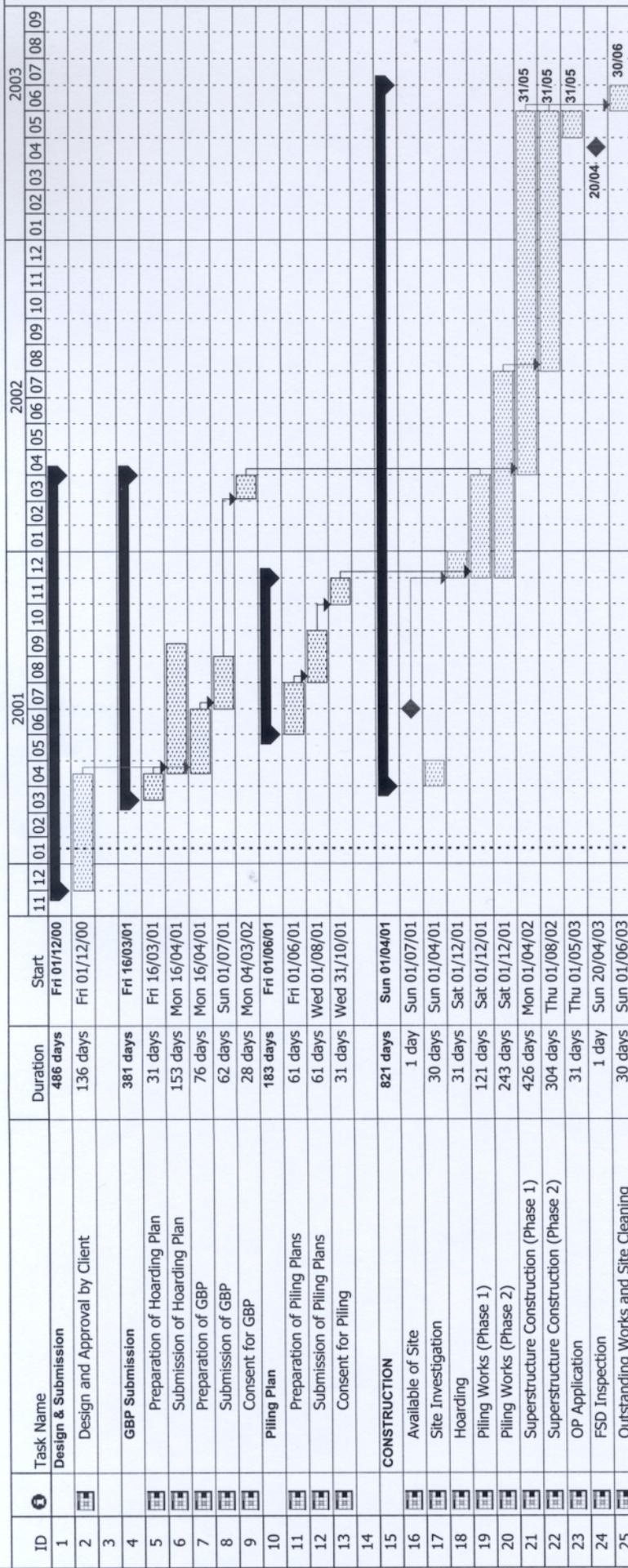
SECTION
SCALE 1 : 500

Appendix II

Tentative Development Programme

Ling Chan & Partners Ltd.

Construction of the Citybus Headquarters and Bus Maintenance Depot
At Sheung On Street, Chai Wan.



Project: Project New
Date: Thu 18/01/01

Date : 24th October, 2000

- Task
- Progress
- Milestone
- Summary
- Rolled Up Task
- Rolled Up Milestone
- Rolled Up Progress
- Split
- External Tasks
- Project Summary
- External Milestone
- Deadline

Appendix III

Major Future Development in Chai Wan

