

DECOMMISSIONING OF THE FORMER KAI TAK AIRPORT OTHER THAN THE NORTH APRON

Project Profile

November 2006

Civil Engineering and Development Department

TABLE OF CONTENTS

	Pages
1. BASIC INFORMATION.....	1
1.1 Project Title	1
1.2 Purpose and Nature of the Project	1
1.3 Name of Project Proponent.....	1
1.4 Location and Scale of Project and History of Site.....	1
1.5 Number and Types of Designated Projects to be Covered by the Project Profile	1
1.6 Name and Telephone Number of Contact Person.....	2
2. OUTLINE OF PLANNING AND IMPLEMENTATION PROGRAMME.....	3
2.1 Project Implementation Time Table	3
2.2 Interactions with Other Projects.....	3
3. POSSIBLE IMPACT ON THE ENVIRONMENT.....	4
3.1 General.....	4
3.2 Air Quality	4
3.3 Noise Impacts.....	4
3.4 Traffic Generation.....	5
3.5 Water Quality and Contaminated Runoff.....	5
3.6 Wastes and Hazardous Materials	5
3.7 Risk of Accidents which would result in Pollution or Hazard.....	5
3.8 Disruption of Water Movement or Bottom Sediment	6
3.9 Unsightly Visual Appearance.....	6
3.10 Ecological Impacts.....	6
3.11 Cultural Heritage.....	6
4. MAJOR ELEMENTS OF THE SURROUNDING ENVIRONMENT.....	7
5. ENVIRONMENTAL PROTECTION MEASURES TO BE INCORPORATED IN THE DESIGN AND ANY FURTHER ENVIRONMENTAL IMPLICATIONS	8
5.1 Measures to Minimize Environmental Impacts	8
5.2 Possible Severity, Distribution and Duration of Environmental Effects	10
5.3 History of Similar Project	10
6. USE OF PREVIOUSLY APPROVED EIA REPORTS.....	12

APPENDIX

LIST OF DRAWING

Drawing No. KZ450	Project Boundary of the Decommissioning of the former Kai Tak Airport other than the North Apron
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1. BASIC INFORMATION

1.1 Project Title

Decommissioning of the former Kai Tak Airport other than the north apron.

1.2 Purpose and Nature of the Project

- 1.2.1 The purpose of the Project is to decommission all remaining facilities, structures and buildings within the former Kai Tak Airport other than the north apron including the disused fuel dolphin. Any land contamination, if identified, will be decontaminated as appropriate to facilitate the re-development of the site.

1.3 Name of Project Proponent

Kowloon Development Office, Civil Engineering and Development Department, the Government of Hong Kong Special Administrative Region

1.4 Location and Scale of Project and History of Site

- 1.4.1 The former Kai Tak Airport is located in the south-eastern part of Kowloon Peninsula, comprising the north and south aprons and runway areas extending into the Kowloon Bay. The entire airport site covers a total land area of about 260 hectares, of which the land area other than the north apron is about 96 hectares. The boundary of the Project is shown in **Drawing No. KZ 450** at Appendix.
- 1.4.2 Kai Tak Airport was the international airport of Hong Kong, which had come into operations since 1920s. The operation of the former Kai Tak Airport was ceased and replaced by the new airport at Chek Lap Kok in July 1998. After closure, the disused airport site has been occupied by various temporary uses such as public fill banks, bus depots, car sales exhibitions and recreational grounds. Nonetheless, most of the original buildings and structures within the airport site have been cleared and the ground contamination identified at the north apron has been decontaminated except the site of the former passenger terminal building and multi-storey carpark building, which remedial works for the ground contamination are near completion.
- 1.4.3 In 2002, the Chief Executive in Council approved the Kai Tak Outline Zoning Plans for the development at the former Kai Tak Airport. However, in light of the judgement of the Court of Final Appeal in January 2004 regarding the harbour reclamation, the proposed development is currently under review.

1.5 Number and Types of Designated Projects to be Covered by the Project Profile

- 1.5.1 The Project falls within item 1 of Part II, Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO), i.e. decommissioning project for airports, including fuelling and fuel storage, the aircraft maintenance and repair facilities. It is a Designated Project requiring an EIA report subject to approval of the Director of Environmental Protection under EIAO.

1.6 Name and Telephone Number of Contact Person

1.6.1 All queries regarding the Project can be addressed to:

Mr Talis Wong (Chief Engineer/Kowloon)
Kowloon Development Office
Civil Engineering and Development Department
Government of Hong Kong Special Administrative Region
Tel: 2301 1455, Fax: 2369 4980

2. OUTLINE OF PLANNING AND IMPLEMENTATION PROGRAMME

2.1 Project Implementation Time Table

- 2.1.1 The objectives of the Project are to decommission remaining existing structures /buildings and abandoned facilities of the former Kai Tak Airport; identify and clean up contaminated areas within the Project boundary and implement appropriate mitigation measures so as to ensure the site safe and hazard-free for the planned future uses.
- 2.1.2 Assessments of potential land contamination at the south apron and runway areas have been undertaken with a view to formulating appropriate contamination assessment plans and remediation action plans if necessary. Consultants will be engaged to undertake the decommissioning EIA concurrently with the detailed feasibility study of Kai Tak development in early 2007 for timely commencement of the required decommissioning works prior to the permanent infrastructure construction, tentatively to commence in 2009/2010.

2.2 Interactions with Other Projects

- 2.2.1 There are likely interactions with the following proposed projects outside the Project Area:
- (i) Proposed infrastructure and other development components, e.g., Stadium, Metro Park and residential development, as recommended in Kai Tak development; and
 - (ii) Central Kowloon Route

3. POSSIBLE IMPACT ON THE ENVIRONMENT

3.1 General

3.1.1 An outline of environmental impacts or issues is given in the following paragraphs. In general, environmental impacts arising from the decommissioning of the former Kai Tak Airport other than the north apron should be minor, as the majority of the works had already been completed under the decommissioning of the former Kai Tak Airport north apron and only localized contamination hotspots are expected. Drawing on the successful experience of decommissioning works at the north apron, environmental impacts, if any, can be mitigated to the acceptable levels.

3.2 Air Quality

Gaseous Emission

3.2.1 Localized land contamination has been spotted within the project site. A low level of soil gas emission during decontamination stage of the Project will be expected from soil excavation.

Dust

3.2.2 During the demolition stage of the Project, dust impacts will arise from the demolition of existing buildings / structures, breaking up of pavement, haul road emissions, open site erosion, as well as from operations of the temporary stockpiling area, but is expected to be minor as the scale of the demolition works would be comparatively small.

Odour

3.2.3 Significant odour is not anticipated as the amount of contaminants, though may be volatile in nature, is expected to be small.

3.3 Noise Impacts

3.3.1 Construction noise will be generated by activities related to decontamination and demolition works and removal of pavement throughout the project period. Given the project site is a large open area and the nearest sensitive receivers are at a distance, noise impacts arising from the decommissioning works are not anticipated to be significant.

3.3.2 There is no plan of night-time operations. However, if night-time operation of the decommissioning works is required, appropriate noise mitigation measures (e.g., noise barriers, silencers, etc.) will be adopted. Furthermore, any construction works to be carried out in restriction periods (including evening, night-time and holidays) shall be subject to approval under the Noise Control Ordinance.

3.4 Traffic Generation

- 3.4.1 The uncontaminated construction and demolition materials arising from the demolition works would be re-used in the Project as far as possible or disposed of to public filling areas. The contaminated materials, depending on the quantities and level of contamination, will be disposed to landfills or other sites for treatment subject to EPD's agreement. In anticipating the small quantity of materials to be generated from the decommissioning works, the traffic generation (both land and marine) is envisaged to be insignificant.

3.5 Water Quality and Contaminated Runoff

- 3.5.1 The major sensitive receiving water bodies include Kai Tak Nullah, Kai Tak Approach Channel, Kwun Tong Typhoon Shelter and the open waters of Kowloon Bay including To Kwa Wan Typhoon Shelter.
- 3.5.2 Construction wastewater containing elevated levels of suspended solids and /or silt are likely to be generated as a result of rainwater runoff, processing water such as that used for dust suppression. Potential impacts would be associated with discharge of these waters into surface water, which could cause elevation of suspended solids. Domestic sewage from the workforce will also be generated.
- 3.5.3 The release of contaminated groundwater during decontamination is of concern. The nature of contamination in groundwater mainly relates to total petroleum hydrocarbons. Because of the relatively low moisture content in the soil at the required excavated levels and with the incorporation of various measures in the proposed decontamination technologies, the quantity of groundwater to be extracted from the site would be minimal.

3.6 Wastes and Hazardous Materials

- 3.6.1 Wastes generated by construction works are likely to include site wastes, workforce wastes, chemical wastes, and construction and demolition materials. Chemical wastes, including residual fuel, solvent, lube oil and free oil may be generated from the decontamination works. These wastes should be collected by licensed collected and disposed of off-site at designated treatment centre.
- 3.6.2 Surveys will be carried out to ascertain the presence of asbestos containing materials (ACM), such that appropriate handling and removal procedures for ACM can be established.
- 3.6.3 Contaminated soil may be generated from site decontamination, which requires treatment or disposal.

3.7 Risk of Accidents which would result in Pollution or Hazard

- 3.7.1 Contaminated materials will be handled, transported and disposed of by the Contractor for the decontamination activities. Risk of accidents, which would result

in pollution or soil / ground re-contamination, will be addressed in the decommissioning EIA.

3.8 Disruption of Water Movement or Bottom Sediment

- 3.8.1 Apart from the decommissioning of the disused dolphin structure and associated connecting abandoned fuel pipelines, there will be neither dredging nor reclamation involved in this decommissioning project. Therefore, no significant impacts are expected.

3.9 Unsightly Visual Appearance

- 3.9.1 The presence of demolition equipment and stockpiled materials in works sites will be potential sources of unsightly visual appearance. However, the visual impact arising from the decommissioning works will be temporary. Fences will be erected along boundary of construction sites to minimize the impact. Furthermore, site cleanliness will be maintained and stockpiling of materials will be properly controlled to alleviate the impact. Therefore no significant visual impact is expected.

3.10 Ecological Impacts

- 3.10.1 The existing surrounding area is highly urbanised, supporting a dense population and industrial activities. For the Project site, it is a disused airport and is currently a deserted flat / open area with a lot of temporary uses including construction/stockpiling sites and open car parks. There is little vegetation present, comprising amenity planting or grassed areas. The quality of both fresh and marine water bodies are poor as a result of sewage and industrial pollution at present. The habitats in general are of little ecological value.

3.11 Cultural Heritage

- 3.11.1 Cultural heritage relates to pre-aviation and aviation history of the area. There are also historical items within former Kai Tak Airport including two wind poles, airport pier, runway, seawall, fire stations (B & C) and the adjacent pole within the Project area, which should be preserved as far as possible. Impact should be minimized by avoiding physical encroachment or interface with the cultural heritage areas. Appropriate mitigation measures should be proposed and implemented to safeguard these items against the works of the Project.

4. MAJOR ELEMENTS OF THE SURROUNDING ENVIRONMENT

- 4.1 The Project area mainly covers the former Kai Tak Airport south apron and runway areas (including the disused fuel dolphin) and is open to Kowloon Bay (part of the inner harbour of Hong Kong containing To Kwa Wan Typhoon Shelter and mooring buoys for vessels), Kai Tak Approach Channel and Kwun Tong Typhoon Shelter. On land side, the development to the east at Kowloon Bay area is mainly industrial / commercial uses. The nearest residential development is at the north-western end of the site at To Kwa Wan and Ma Tau Kok areas.
- 4.2 There are major transport corridors surrounding the site, including the tunnel portal of Kai Tak Tunnel eastern end and Kai Fuk Road / Kwun Tong Bypass on the east.
- 4.3 There are no natural habitats in the area. In the past, environmental conditions in the Project area were generally poor because of noise from the airport, industrial sources and the existing transport links. Air quality is generally adversely affected by traffic and major industries. In particular, the odour and water quality of Kai Tak Approach Channel have long been concerns of the local community.

5. ENVIRONMENTAL PROTECTION MEASURES TO BE INCORPORATED IN THE DESIGN AND ANY FURTHER ENVIRONMENTAL IMPLICATIONS

5.1 Measures to Minimize Environmental Impacts

- 5.1.1 The decommissioning EIA will identify, assess and specify methods, measures and standards to be included in the detailed design and construction of the decommissioning works, which are necessary to mitigate the environmental impacts and cumulative effects and reduce them to the acceptable levels. Any residual impacts would be confined within the allowable limits.
- 5.1.2 An initial list of mitigation measures is as follows:

Key Environmental Impacts	Mitigation Measures to be Considered
Air Quality	<p><i>Emission</i></p> <ul style="list-style-type: none">Excavation will be carefully controlled to minimize soil gas emission. Moreover, site workers will be provided with adequate personal protective gears (e.g., vapour mask) during excavation of contaminated soil. <p><i>Dust</i></p> <ul style="list-style-type: none">Regular watering of exposed site surfaces, unpaved roads, and particularly dusty areas;Provision of side enclosure and covering of any aggregate or dusty material storage piles;All dusty vehicle and / or from and between site locations should be covered with tarpaulin;Speed controls for on-site vehicles; andProvisions of vehicle wheel washing bays.
Noise	<ul style="list-style-type: none">The demolition works and removal of pavement are expected to be carried out by conventional method using mechanical breakers and jackhammers. In view of the remote location of the Project site, it is unlikely that noise from the construction works would be a concern.
Water Quality	<ul style="list-style-type: none">The contaminated runoff and surface runoff could be controlled satisfactorily without adverse impact during the decommissioning works, by implementing the remediation action plan with adequate site drainage according to good practices outlined in ProPECC PN 1/94 “Construction Site Drainage”.

Key Environmental Impacts	Mitigation Measures to be Considered
Solid Waste Management	<ul style="list-style-type: none"> • Waste management in the way of avoiding, minimizing, reusing, and recycling should be adopted to reduce waste generation. In addition, on site sorting of demolition debris will be carried out. Scrap metals or abandoned equipment will be recycled, if possible. • The removal and disposal of contaminated wastes will be covered by remediation action plans. No significant impact is expected in this regard.
Land Contamination	<ul style="list-style-type: none"> • Assessment of potential land contamination will be conducted according to guidelines in Sections 3.1 and 3.2 in Annex 19 of the Technical Memorandum. • Site inspection and review of background information will be carried out to provide a clear and detailed account of the present land use and relevant land use history in relation to possible land contamination. Contamination assessment plans will be submitted for EPD's agreement prior to conducting the contamination impact assessment of the relevant land suspected to contain land contamination that shall be required remediation. Proposals with details on representative sampling and analysis required determining the nature and extent of the contamination of the relevant land. • Remediation action plans will be formulated and agreed with EPD, to develop options for site decontamination, if required, to mitigate impacts of soil and groundwater contamination.
Risk of Accidents which would result in Pollution or Hazard	<ul style="list-style-type: none"> • Safety measures for the transportation, handling and disposal of contaminated materials will be identified in the decommissioning EIA to minimize the risk of accidents. • The Contractor will be required to prepare emergency response plan specifically to address risk of accident during transportation, handling, and disposal and disposal of contaminated materials.
Unsightly Visual Appearance	<ul style="list-style-type: none"> • Visual impacts of decommissioning activities will be of short duration. Fences will be erected along boundary of construction sites to minimize the impact.

Key Environmental Impacts	Mitigation Measures to be Considered
	Additionally, site cleanliness will be maintained and stockpiling of materials will be properly controlled to alleviate the visual impact.
Ecology	<ul style="list-style-type: none">The Project site is expected to be little ecological value. Nevertheless, mitigation measures such as erecting fences along the boundary of construction sites, adjustment of haul routes, storage and works areas, etc. will be adopted to avoid indirect impact arising from the decommissioning works.
Cultural Heritage	<ul style="list-style-type: none">Cartographic and photographic recordings for the existing buildings / structures within the Project area such as the disused fire stations, had been completed and records were submitted to Antiquities and Monuments Office. If possible, it is suggested to preserve, salvage and reuse the cultural relics of the old airport like the remaining windsock post at the western end of the runway as landscape features in the future promenade open space to remark the original location of Kai Tak airport.

5.2 Possible Severity, Distribution and Duration of Environmental Effects

Short Term Effect

5.2.1 Potential environmental impacts described in Section 3 are expected to last for the decommissioning period only. As such, the ensuing effects are considered to be temporary and short term. With the incorporation of appropriate mitigation measures, no insurmountable effects are anticipated.

Beneficial Effects

5.2.2 The Project will make available the remaining former Kai Tak Airport site for future residential, commercial, tourism and leisure developments to meet the long term development, economic and social needs of Hong Kong.

5.3 History of Similar Project

5.3.1 The EIA Report for Decommissioning of Kai Tak Airport North Apron (NAKTA) was completed in April 1998 and approved under the EIAO in September 1998. The reference of the approved report in the EIAO Register is EIA-003/1998.

- 5.3.2 The land contamination impact assessment of the NAKTA Decommissioning EIA covered the vicinity of the north apron area. The assessment started with a review of the former Kai Tak Airport site history including records of historical leakage from the hydrant fuel system within the airport apron. A range of land uses with land contamination potential was also identified.
- 5.3.3 A detailed site investigation within the Kai Tak Airport had been undertaken to ascertain the nature, scale and extent of possible ground contamination resulted from known leaks of aviation fuels. The investigation was carried in two phases.
- 5.3.4 Results from the investigation indicated that remediation was required at some areas within the Kai Tak Airport north apron. Further site investigation was conducted during the decontamination works to verify the extent of ground contamination requiring remedial works. The identified contaminated areas at NAKTA had been cleaned up between 1998 and 2002, except the site for the former Passenger Terminal Building and multi-storey carpark building which are currently under demolition and decontamination.

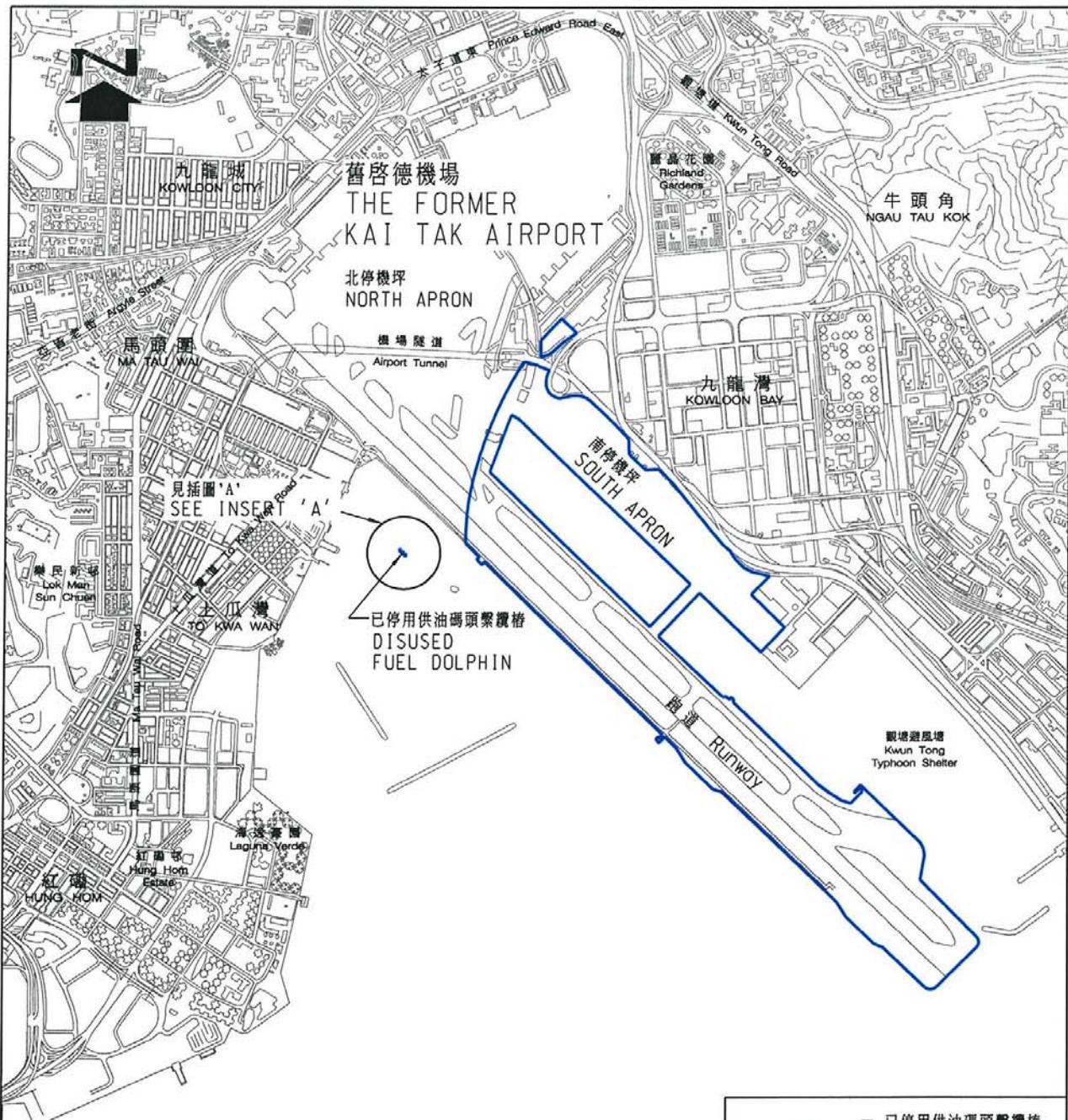
6. USE OF PREVIOUSLY APPROVED EIA REPORTS

6.1 The following approved EIA Reports will be referred in the Study:

- Comprehensive Feasibility Study for The Revised Scheme of South East Kowloon Development (EIA Register No. AEIAR-044/2001 approved with conditions on 25 Sep 2001).
- Kai Tak Airport North Apron Decommissioning (EIA Register No. EIA-003/1998, approved with conditions on 4 Sep 1998)

APPENDIX

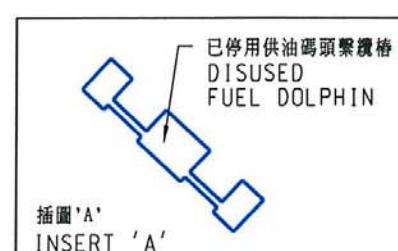
LIST OF DRAWING



LEGEND :



項目範圍
PROJECT BOUNDARY



圖則名稱 Drawing title	繪圖 Drawn W.L. Leung	簽署 Initial signed	日期 Date 23.10.2006	項目編號 Item no. -	辦事處 Office
遷拆舊啟德機場北停機坪以外範圍 - 項目範圍 DECOMMISSIONING OF THE FORMER KAI TAK AIRPORT OTHER THAN THE NORTH APRON - PROJECT BOUNDARY	核對 Checked Walter Leung	簽署 Initial signed	日期 Date 23.10.2006	比例尺 Scale 1 : 20 000	九龍拓展處 KOWLOON DEVELOPMENT OFFICE
	核准 Approved -	簽署 Initial -	日期 Date -	圖則編號 Drawing no. KZ 450	CEDD 土木工程拓展署 CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT