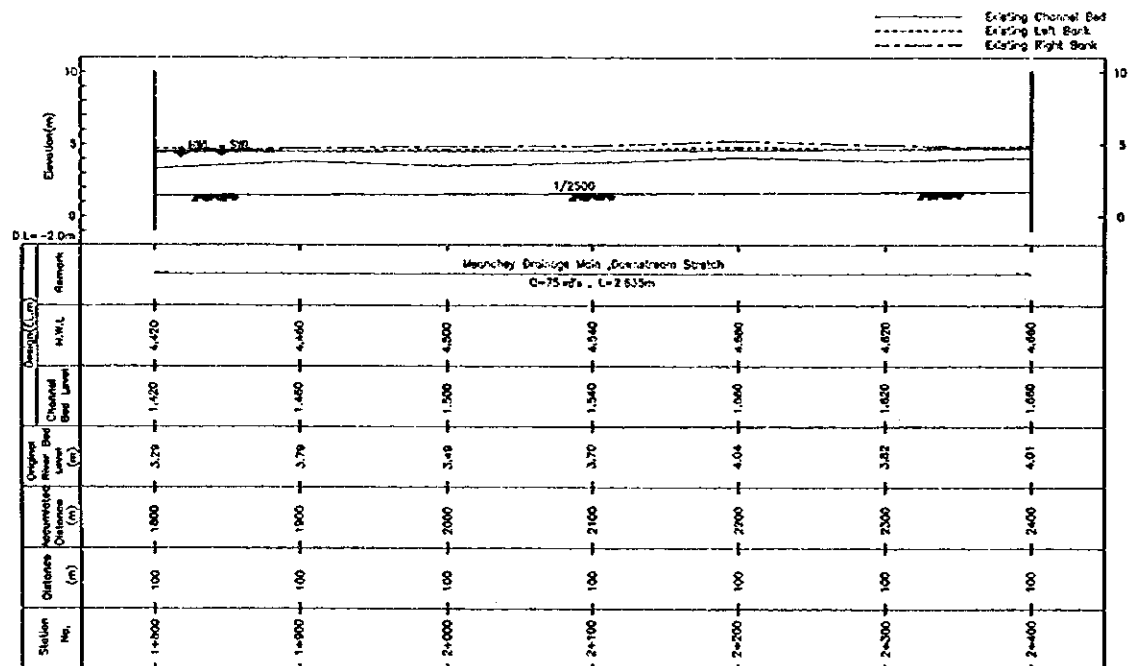
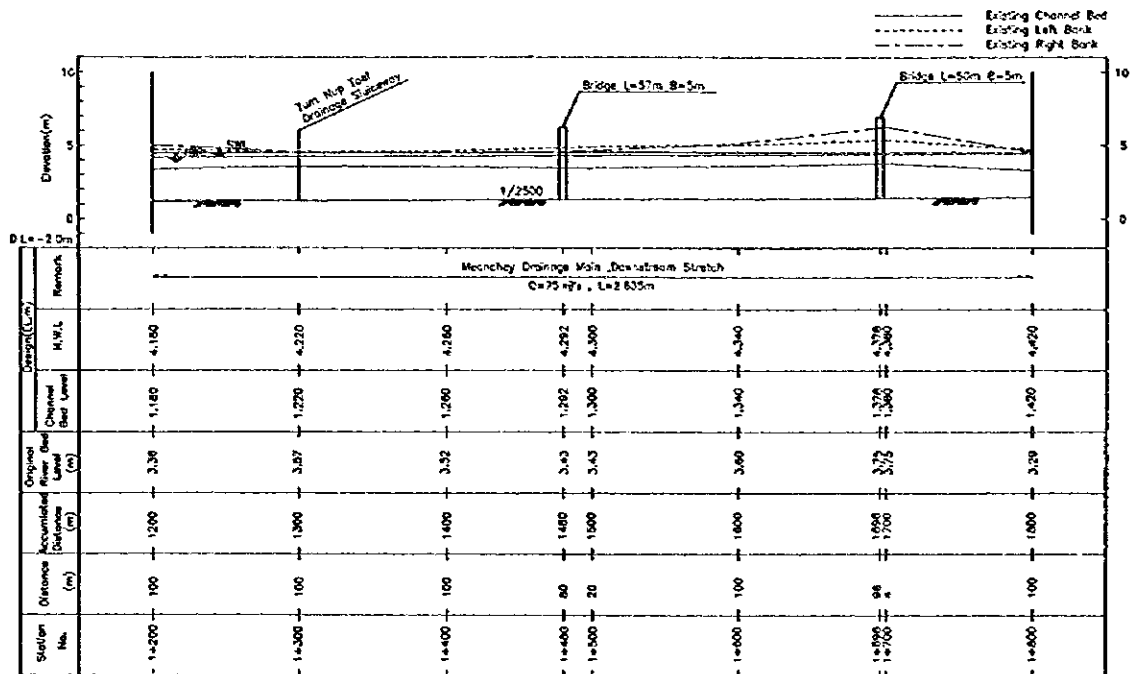
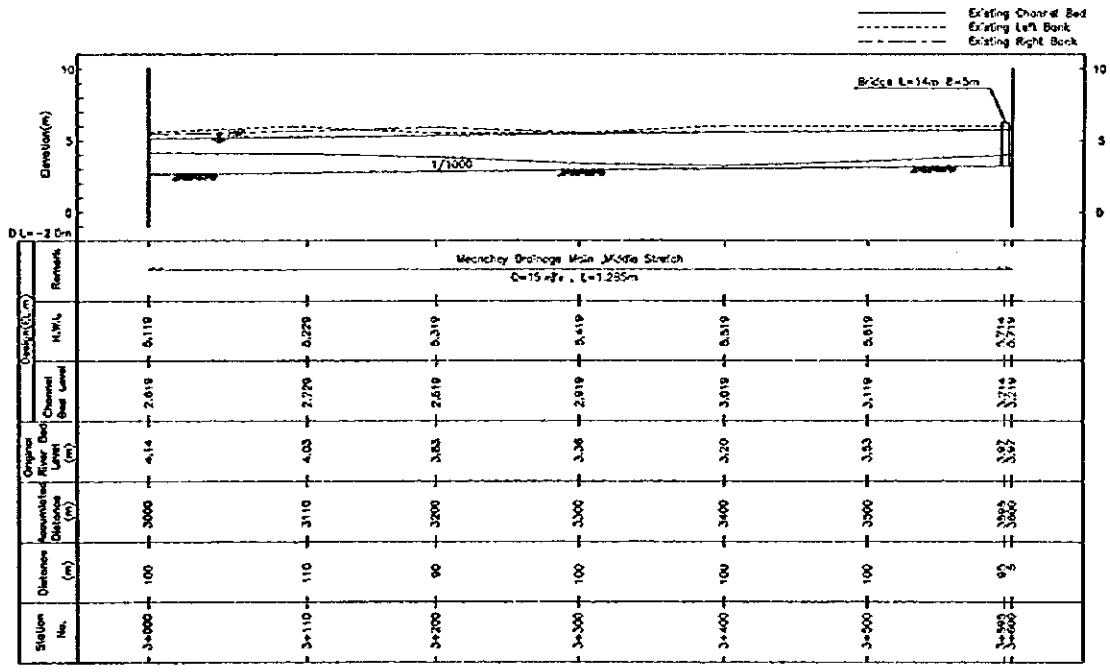
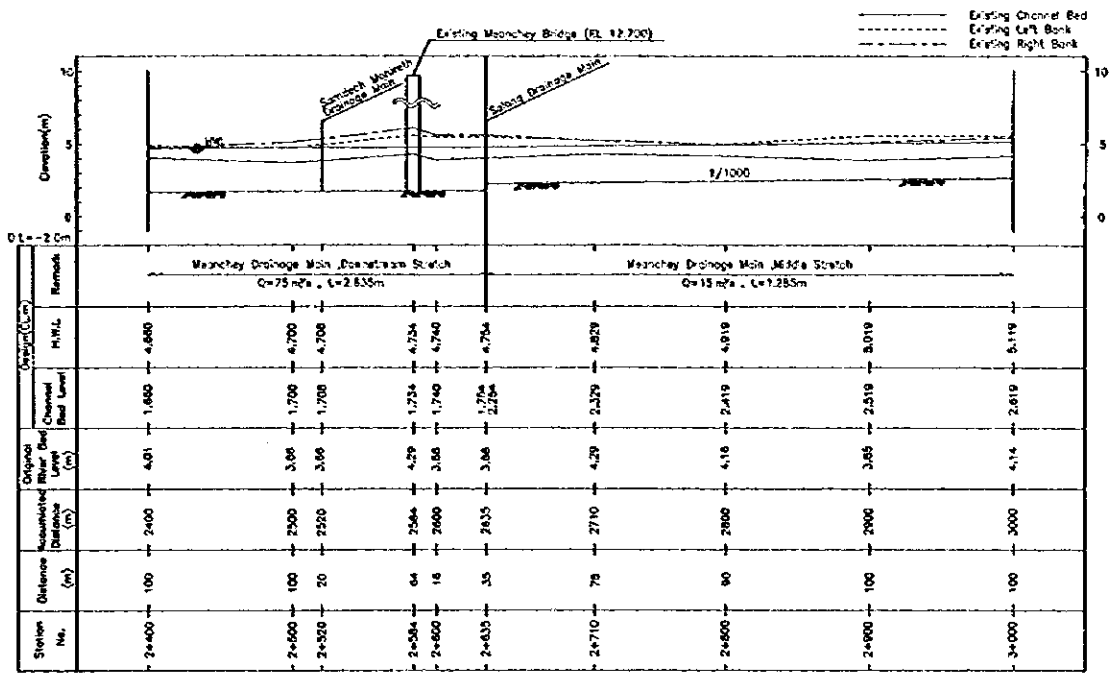


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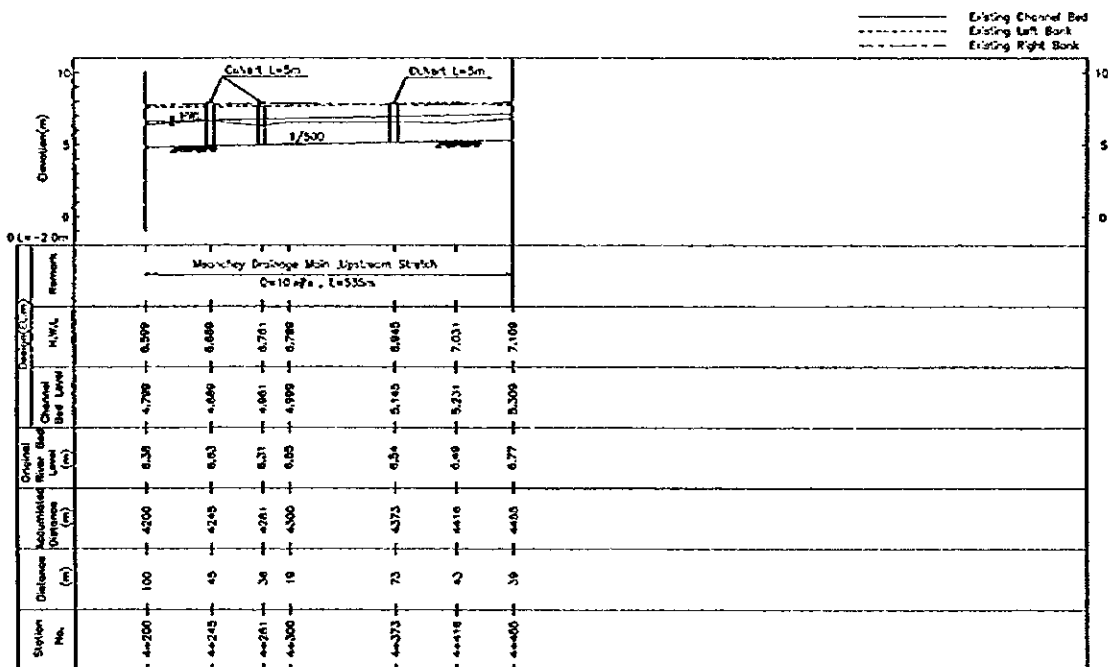
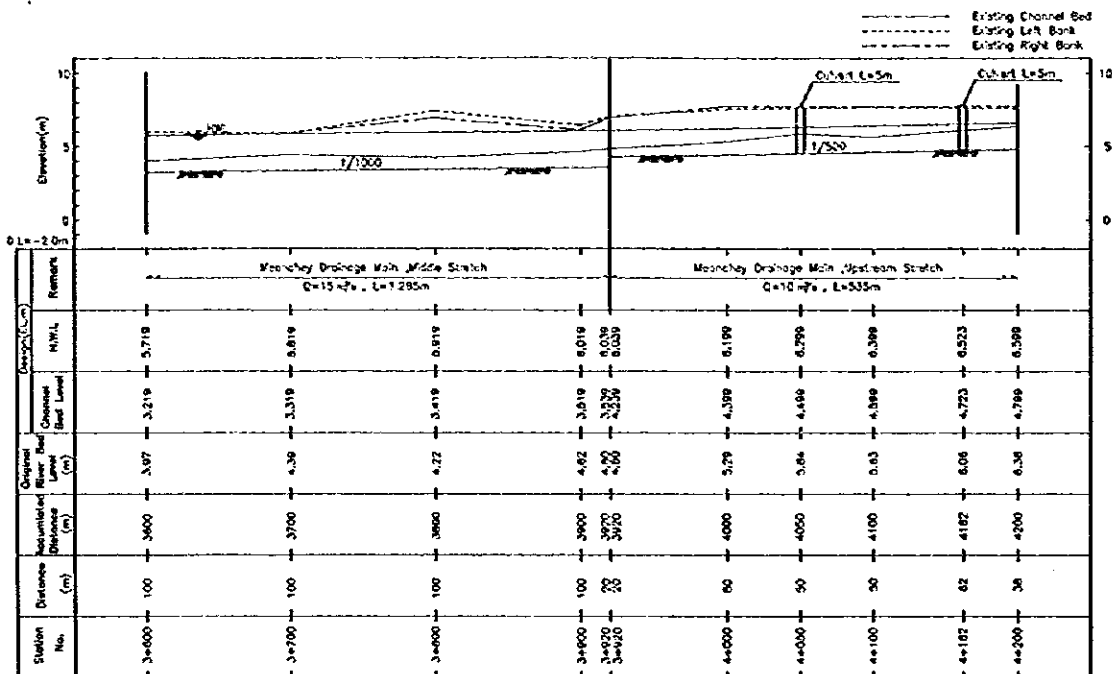
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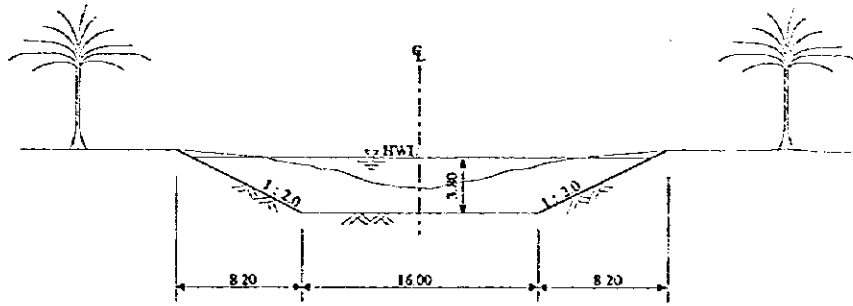
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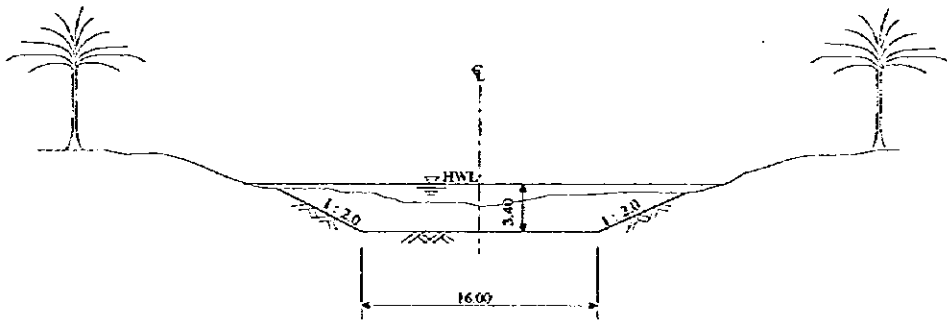
Figure D5-11
 Profile of Meanchey Drainage Main (3/4)



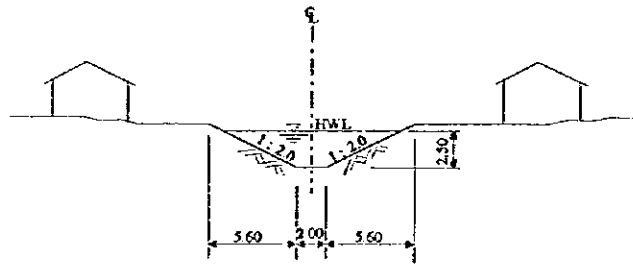
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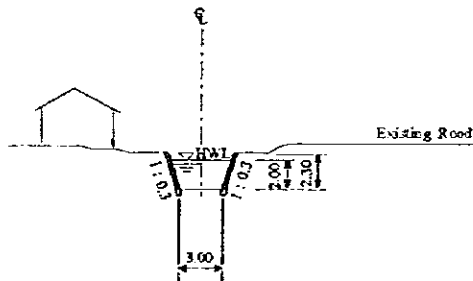
Downstream Stretch, Sta. 0+000 to Sta. 1+100



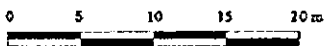
Downstream Stretch, Sta. 1+100 to Sta. 2+635



Middle Stretch, Sta. 2+635 to Sta. 3+920

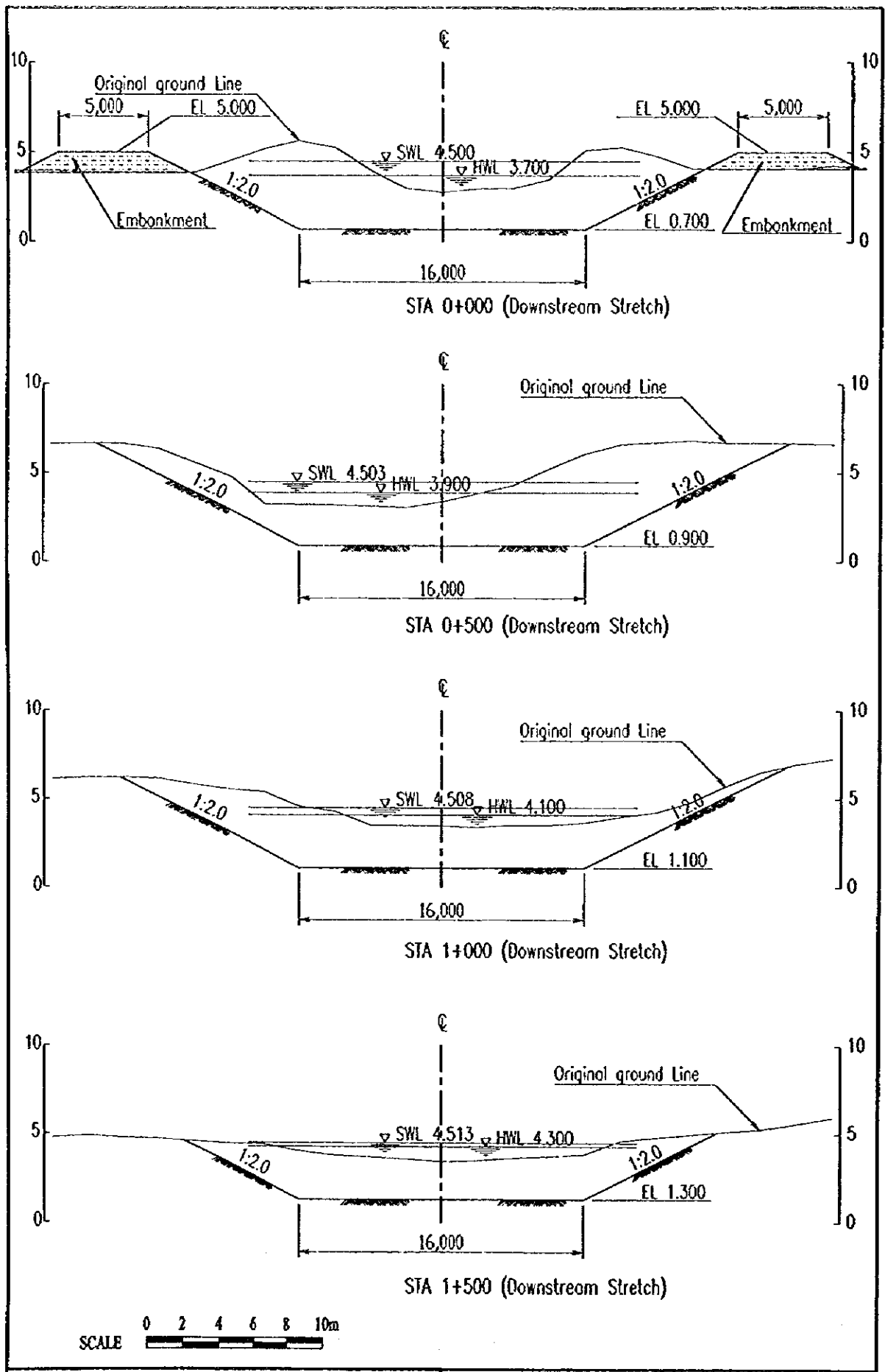


Upstream Stretch, Sta. 3+920 to Sta. 4+455



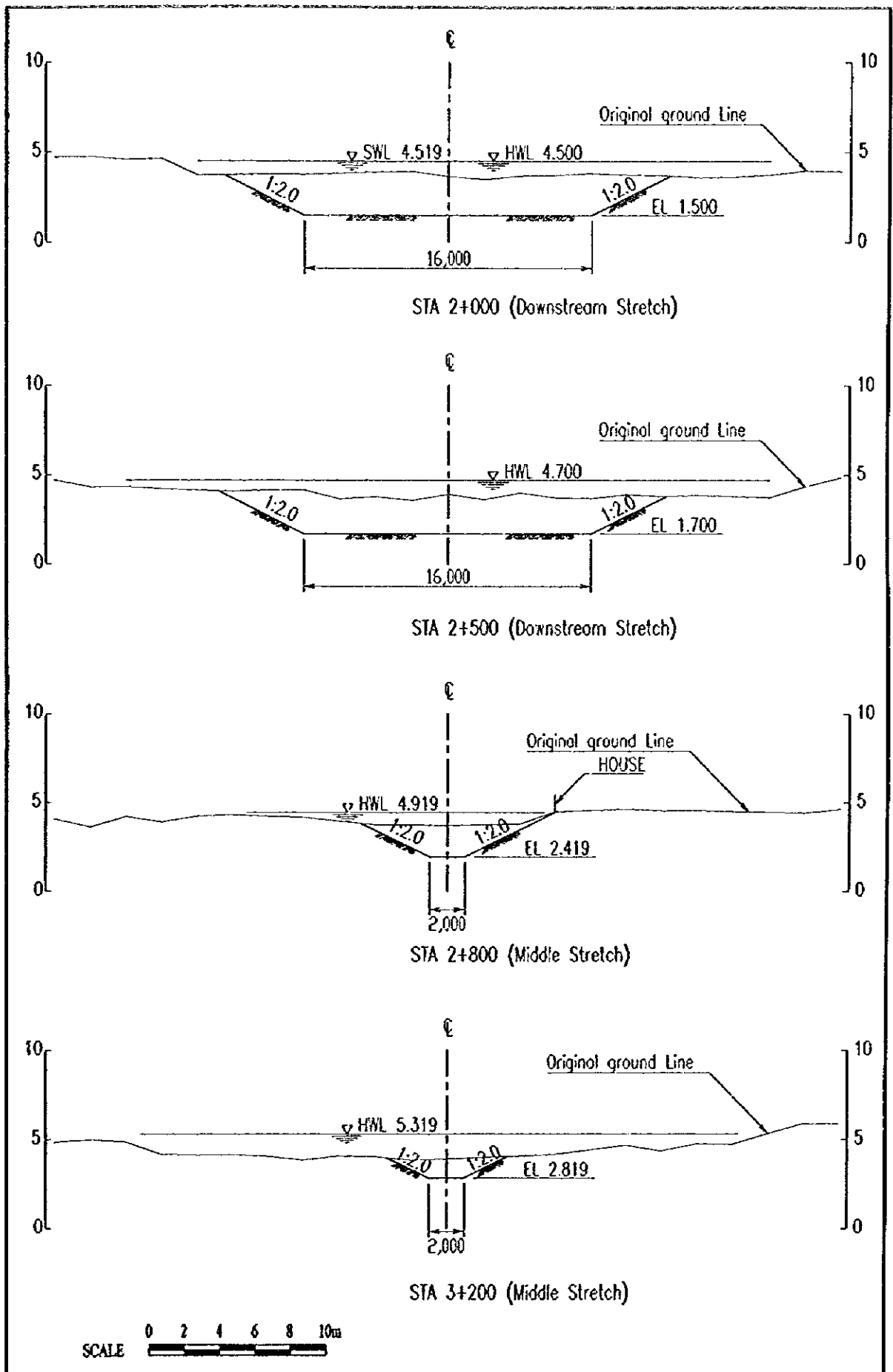
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Figure DS-12
Standard Cross-sections of Meanchey Drainage Main



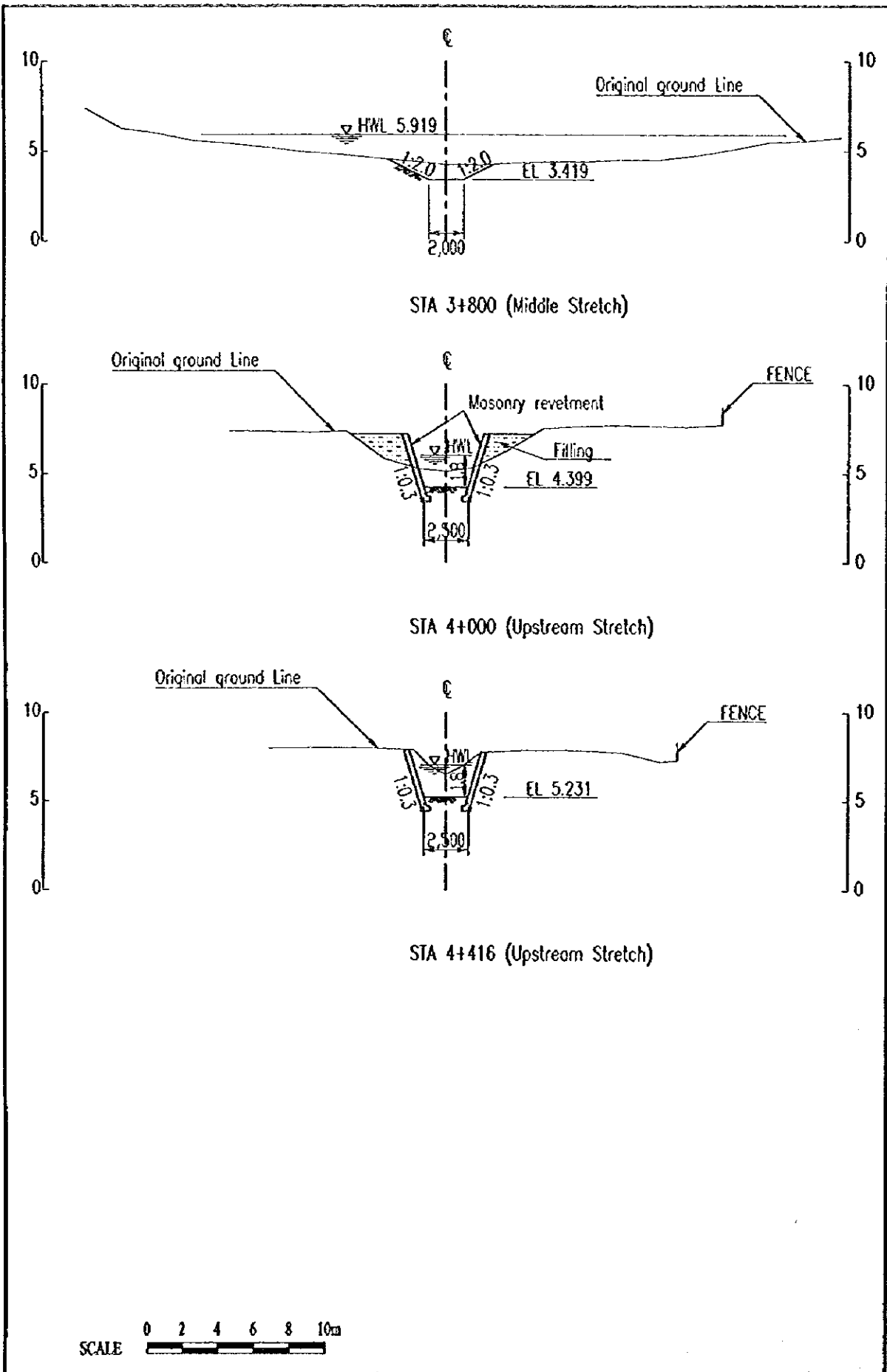
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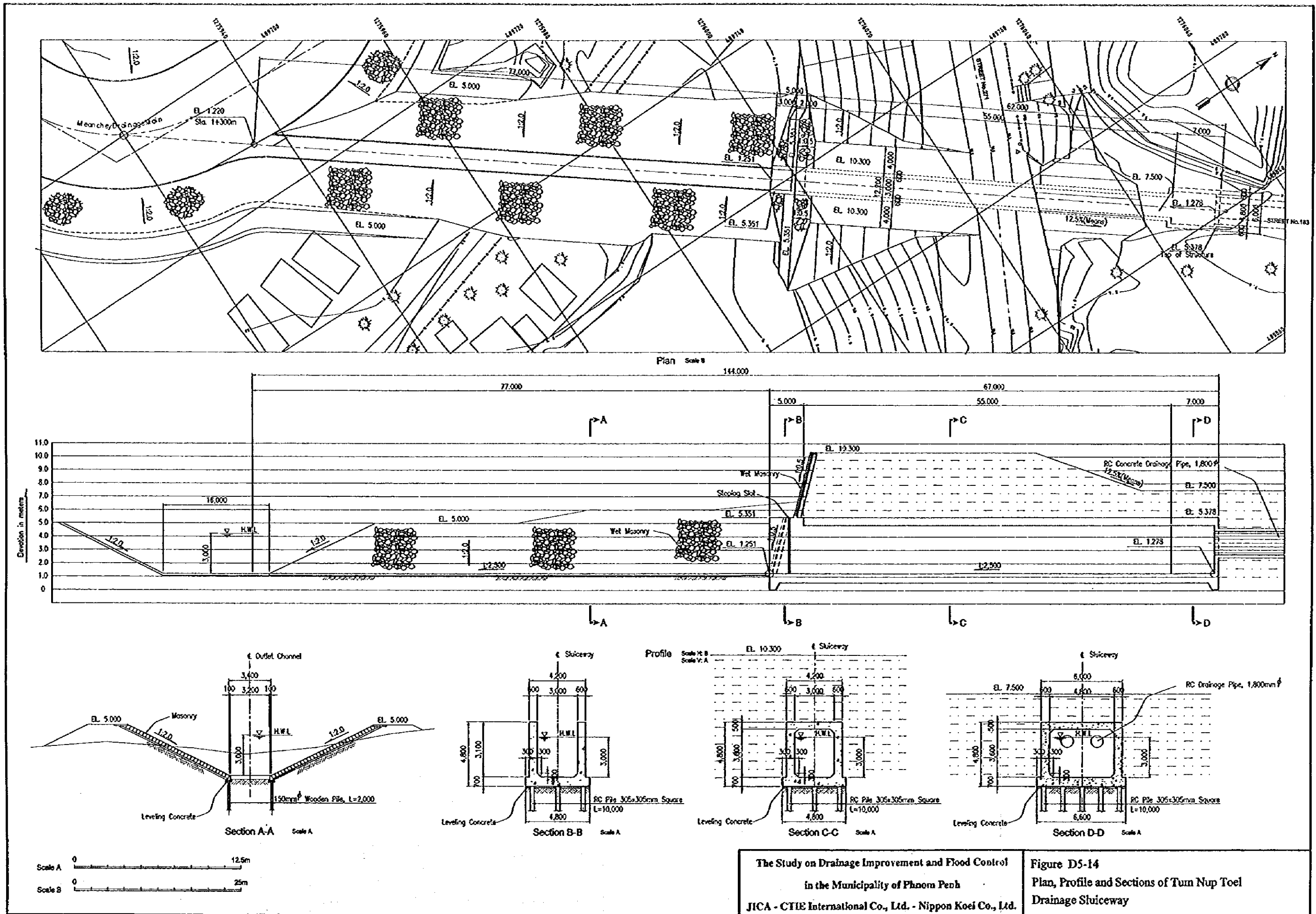
Figure D5-13
 Cross-sections of Meanchey Drainage Main (1/3)



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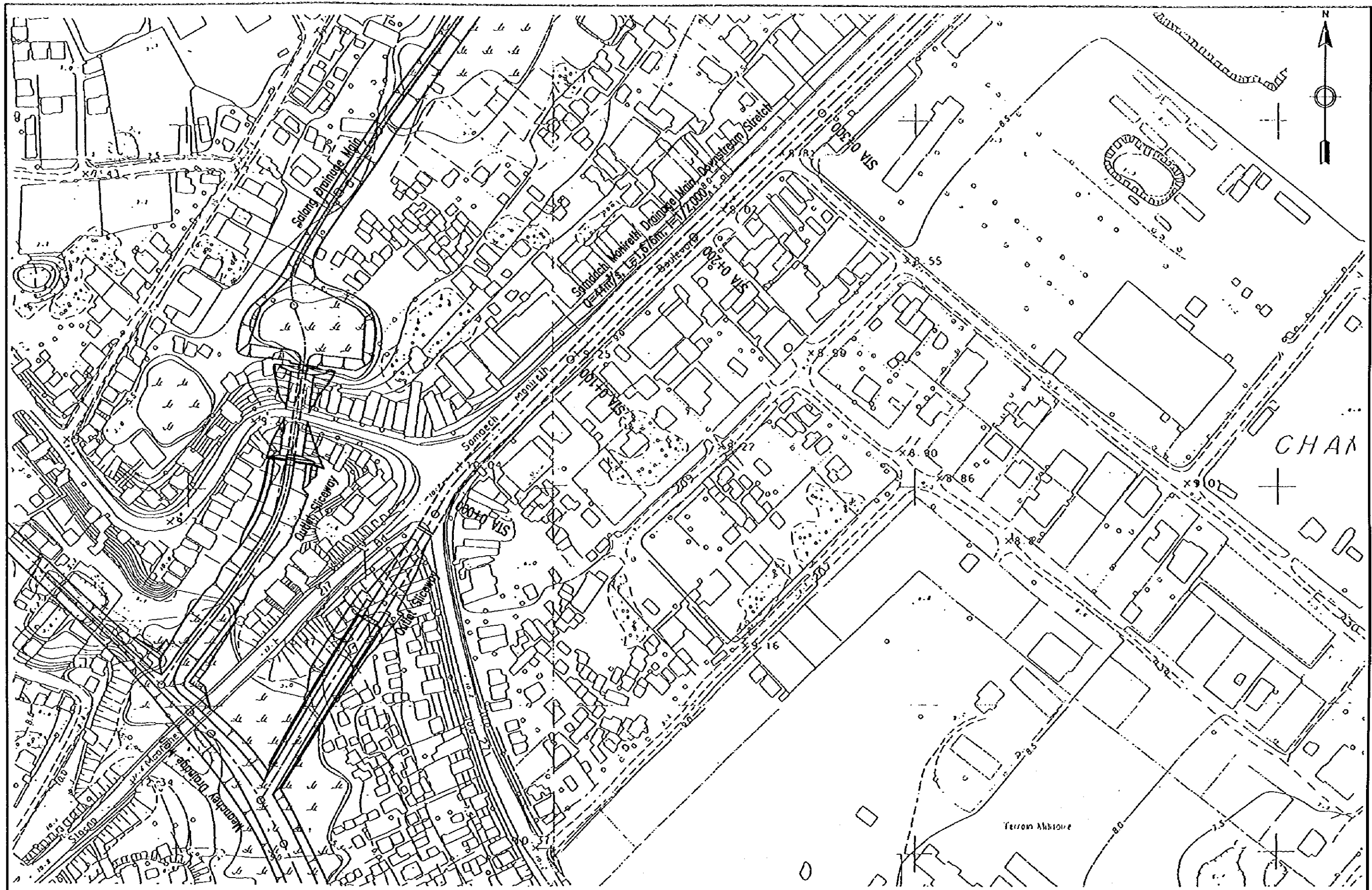
Figure D5-13
 Cross-sections of Meanchey Drainage Main (2/3)





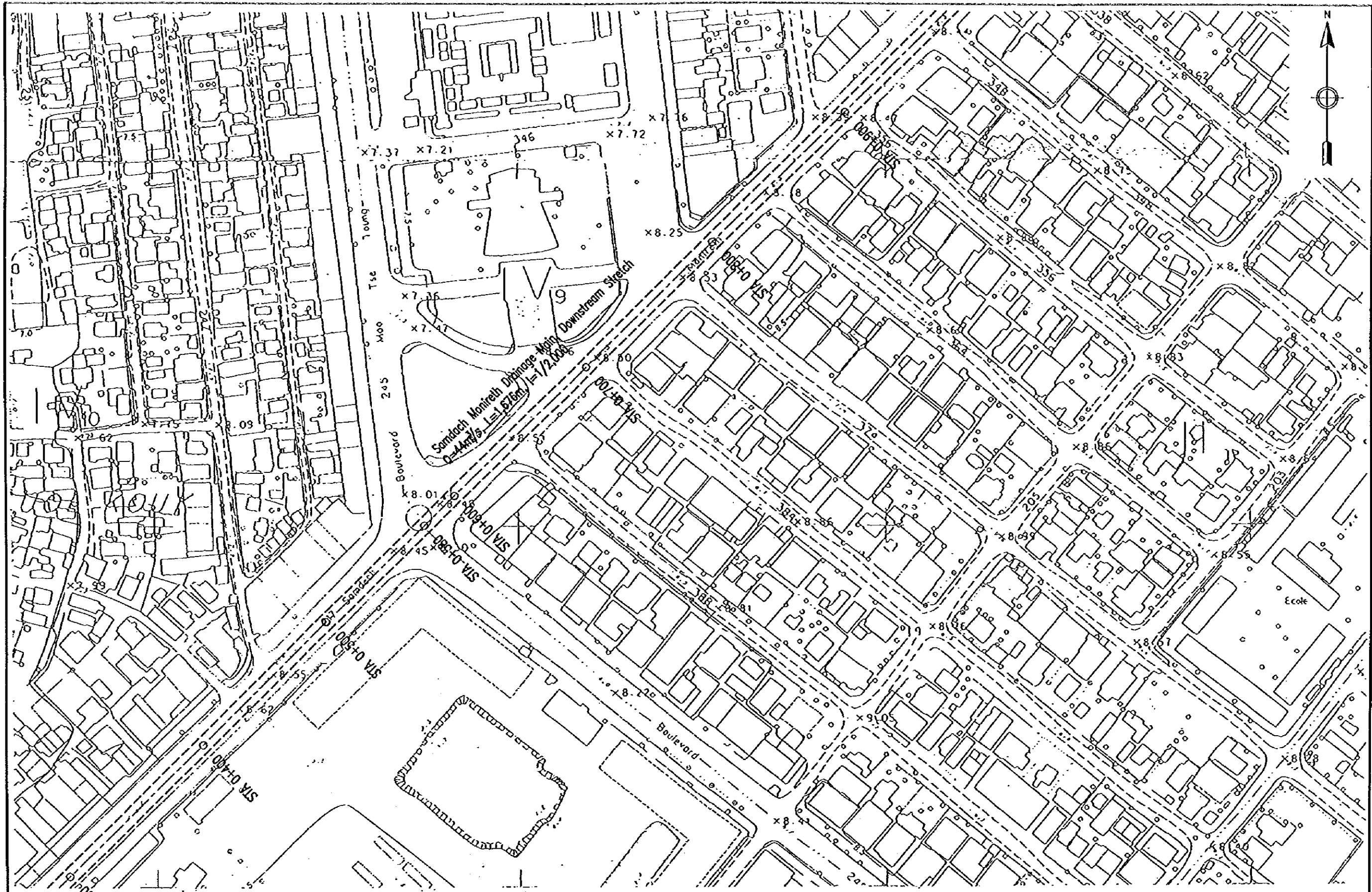
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Figure D5-14
 Plan, Profile and Sections of Tum Nup Toel
 Drainage Sluiceway



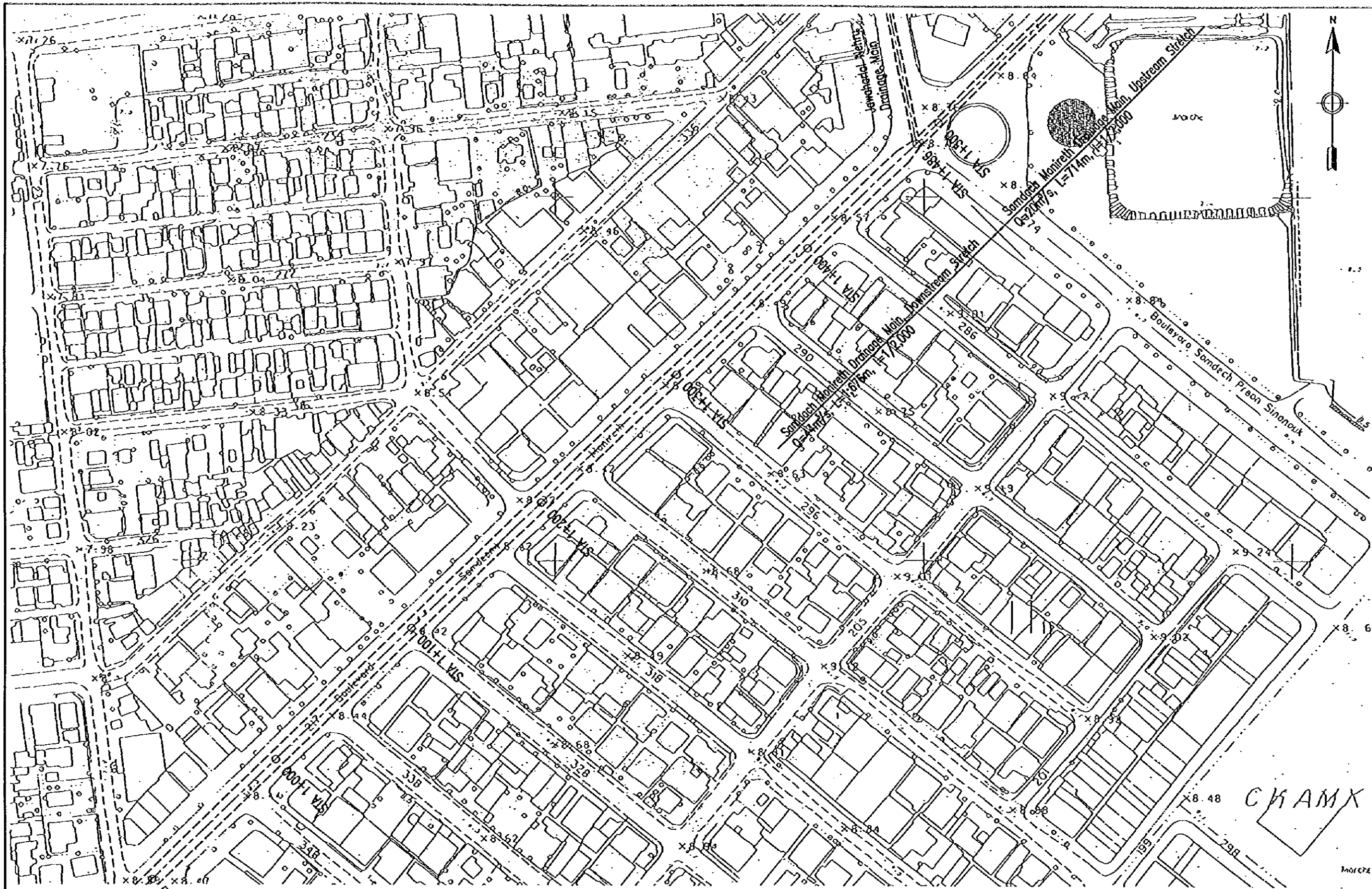
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Figure D5-15
 Plan of Samdach Monireth Drainage Main (1/5)



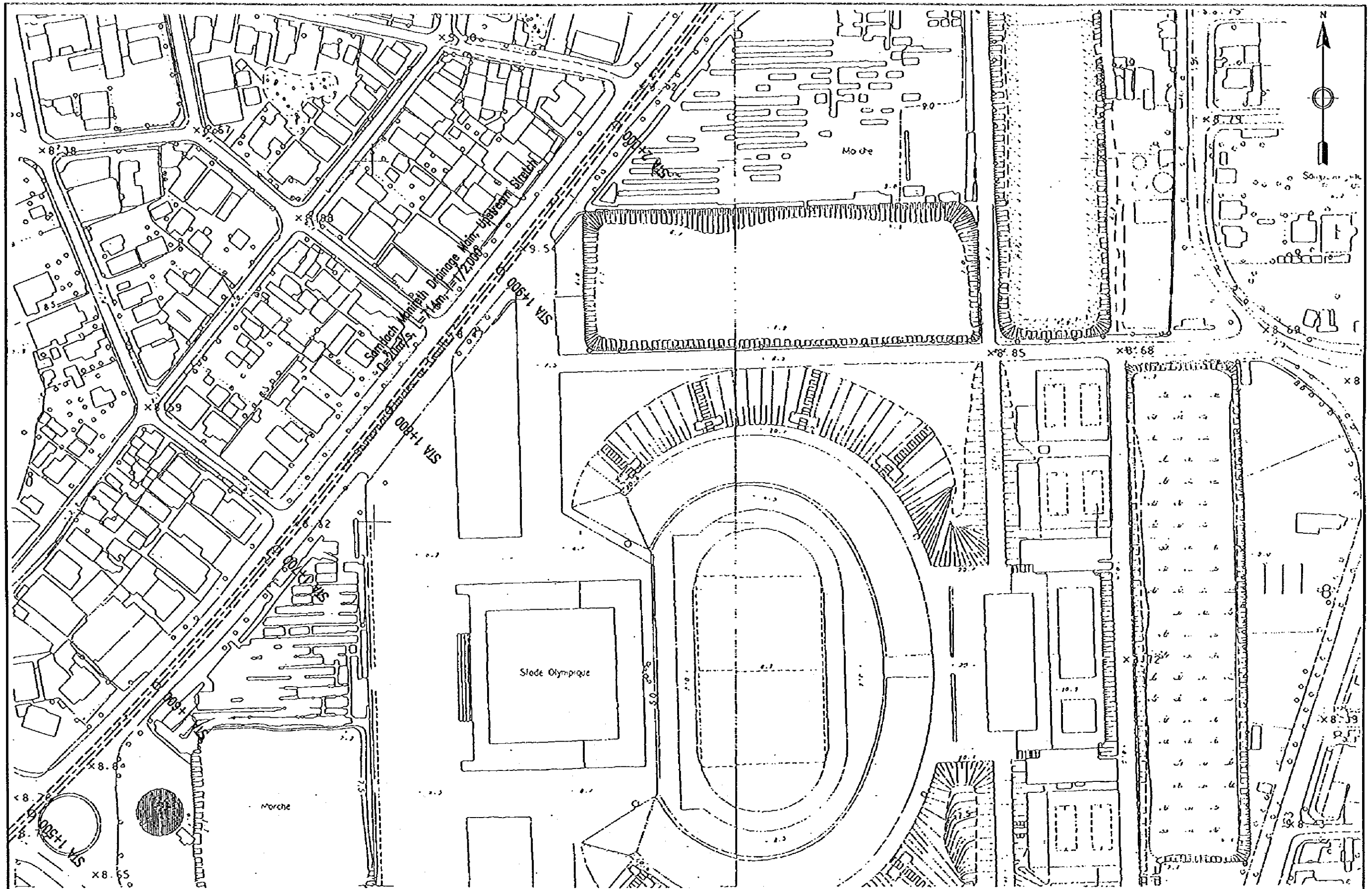
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Figure D5-15
 Plan of Samdach Monireth Drainage Main (2/5)



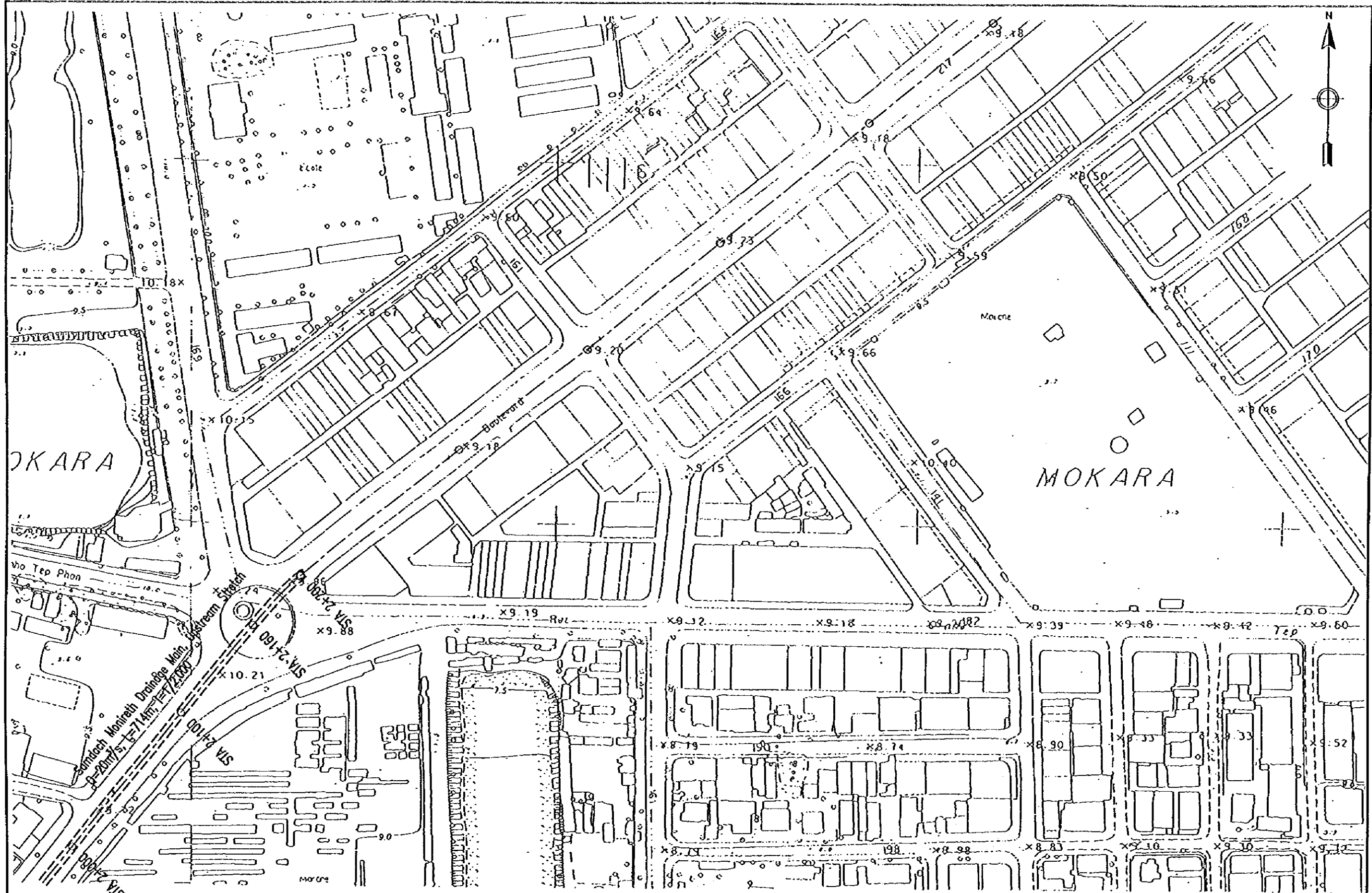
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Figure D5-15
 Plan of Samdach Monireth Drainage Main (3/5)



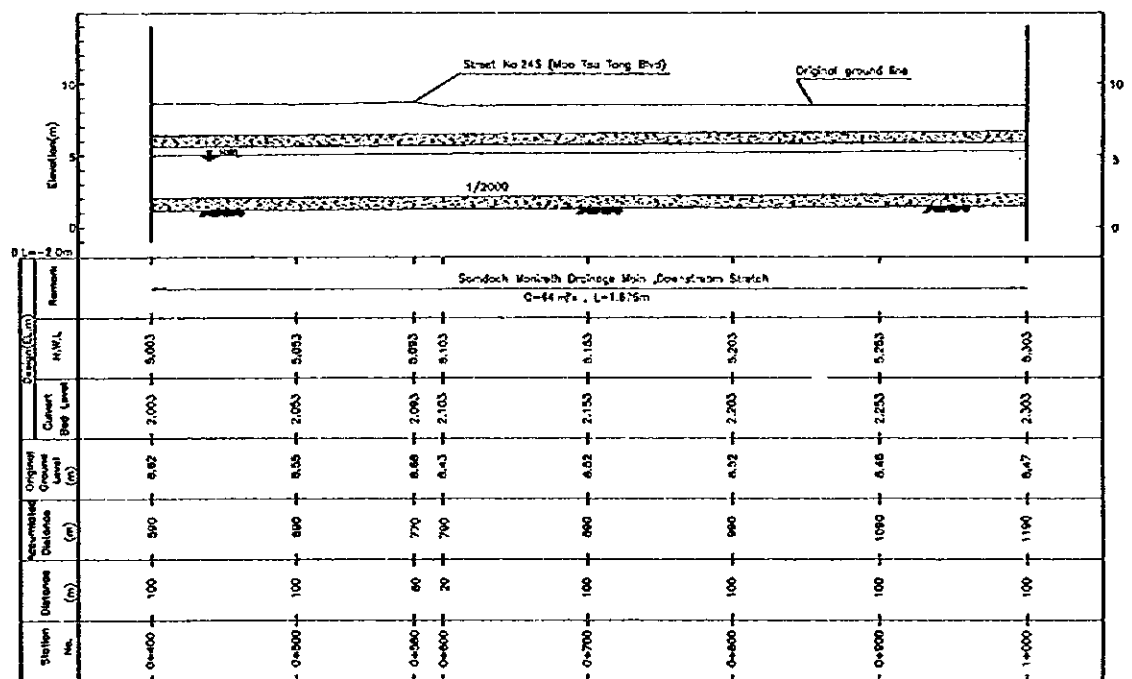
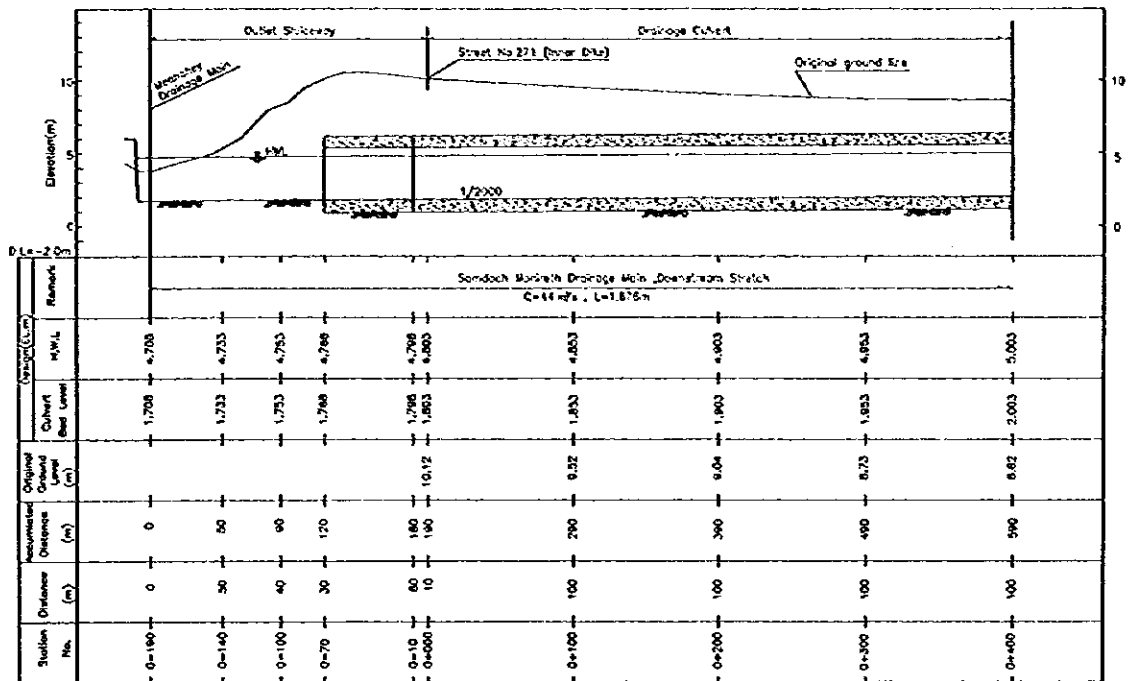
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 in the Municipality of Phnom Penh
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Figure D5-15
 Plan of Samdach Monireth Drainage Main (4/5)



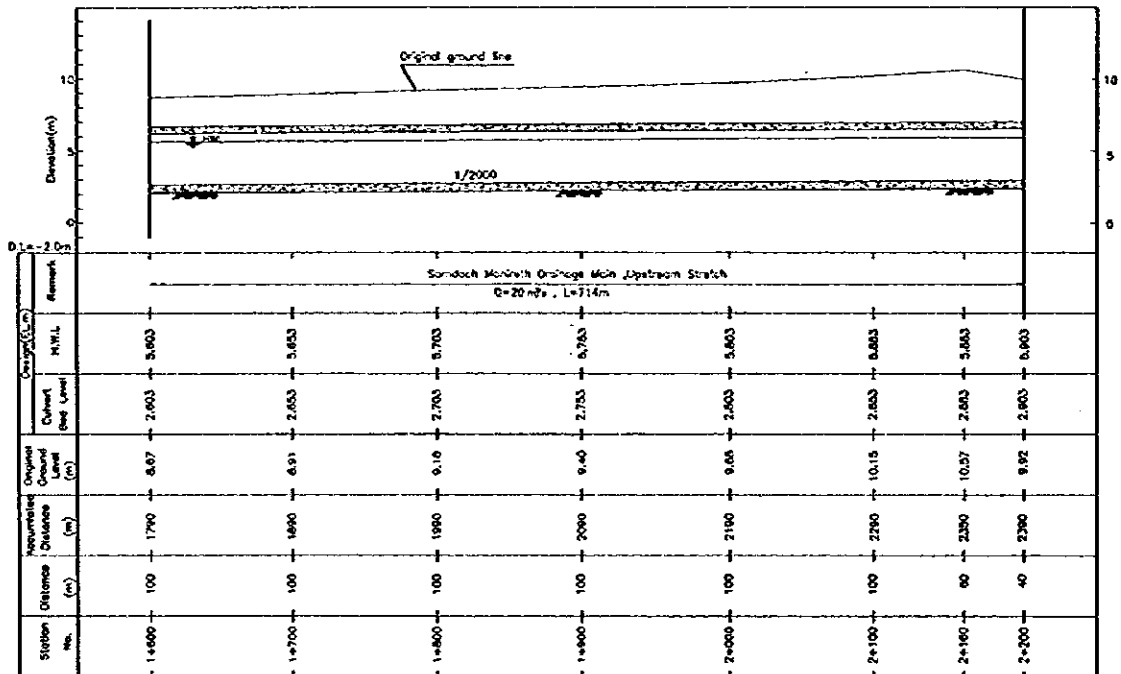
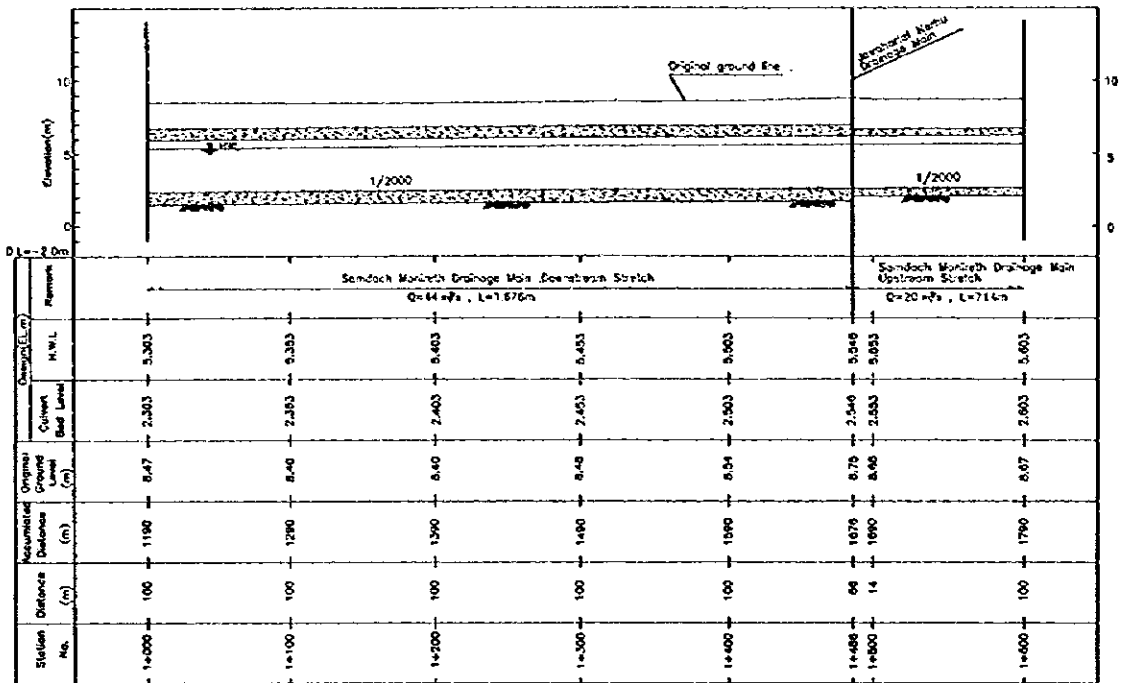
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in the Municipality of Phnom Penh
JICA - CTIE International Co., Ltd. - Nippon Koei Co., Ltd.

Figure D5-15
Plan of Samdach Monireth Drainage Main (5/5)

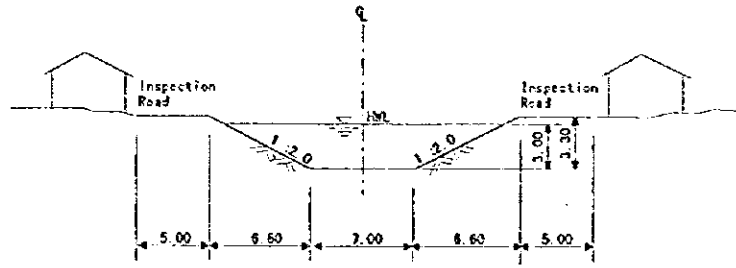


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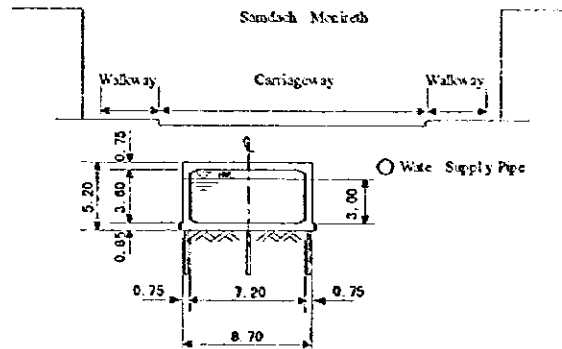
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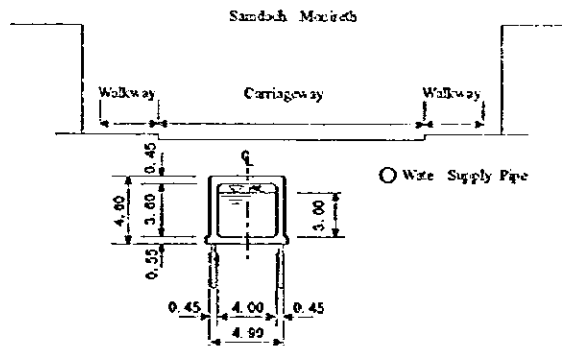
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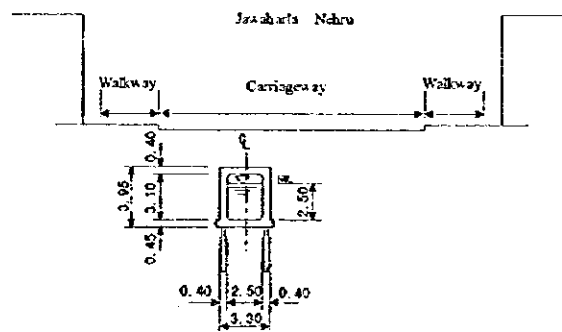
Samdach Monireth Outlet, Meanchey confluence to Sta. 0+050



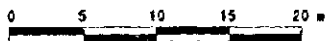
Samdach Monireth Downstream Stretch, Sta. 0+050 to Sta. 1+675



Samdach Monireth Upstream Stretch, Sta. 1+675 to Sta. 2+390

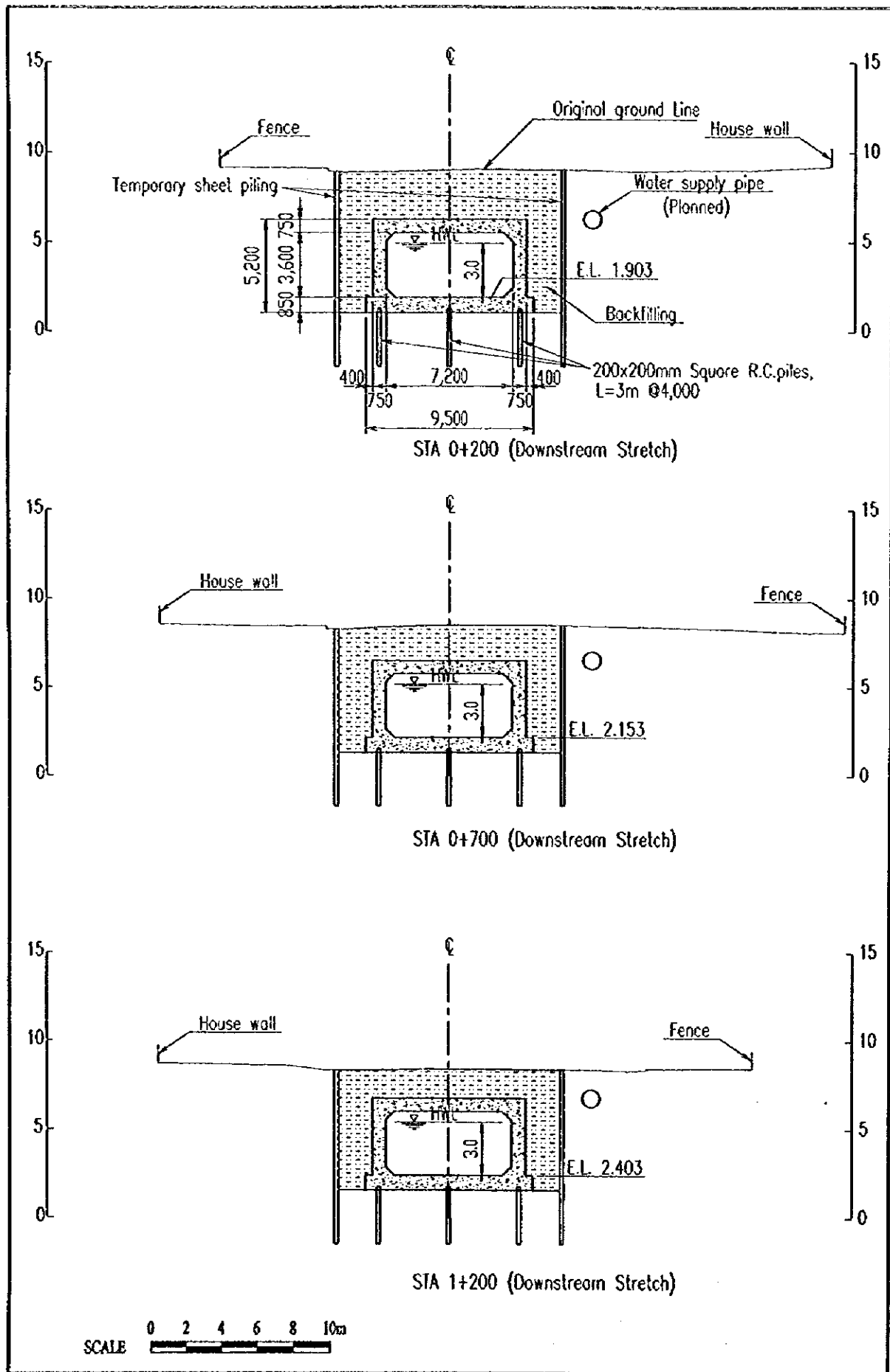


Jawaharlal Nehru, Samdach Monireth Confluence to Sta. 1+160



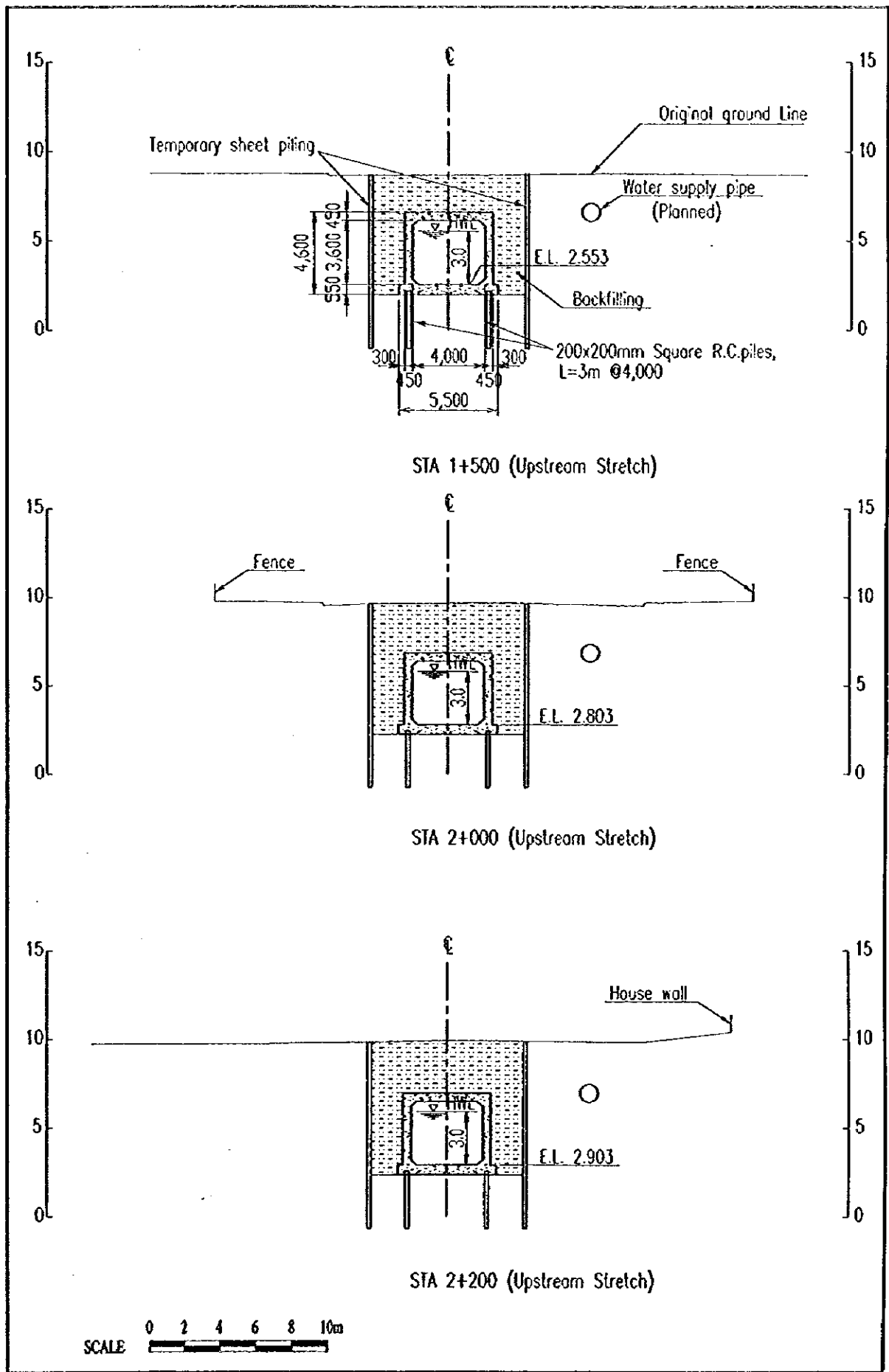
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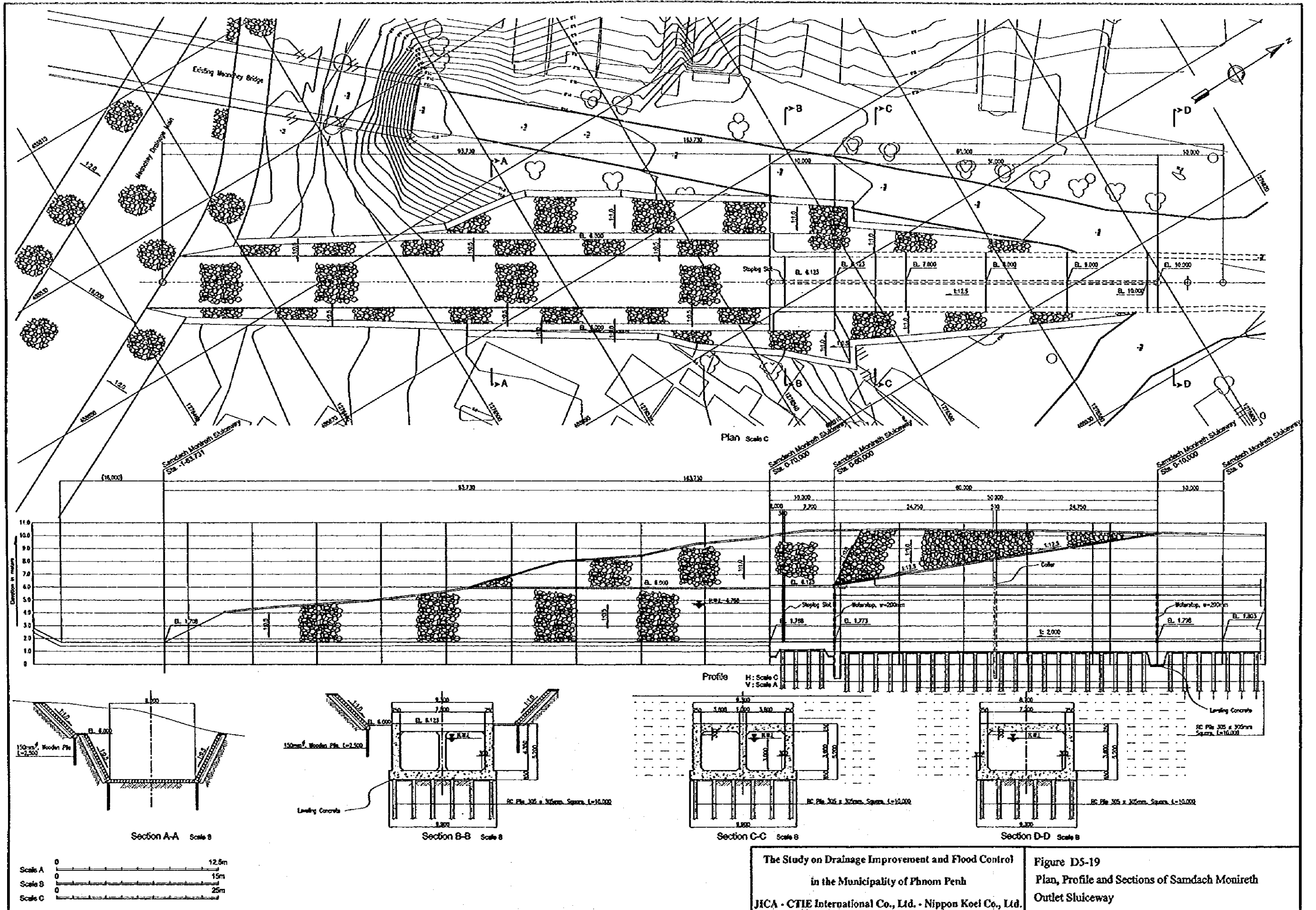
Figure D5-17
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Figure D5-18
 Cross-sections of Samdach Moeireth Drainage Main (1/2)





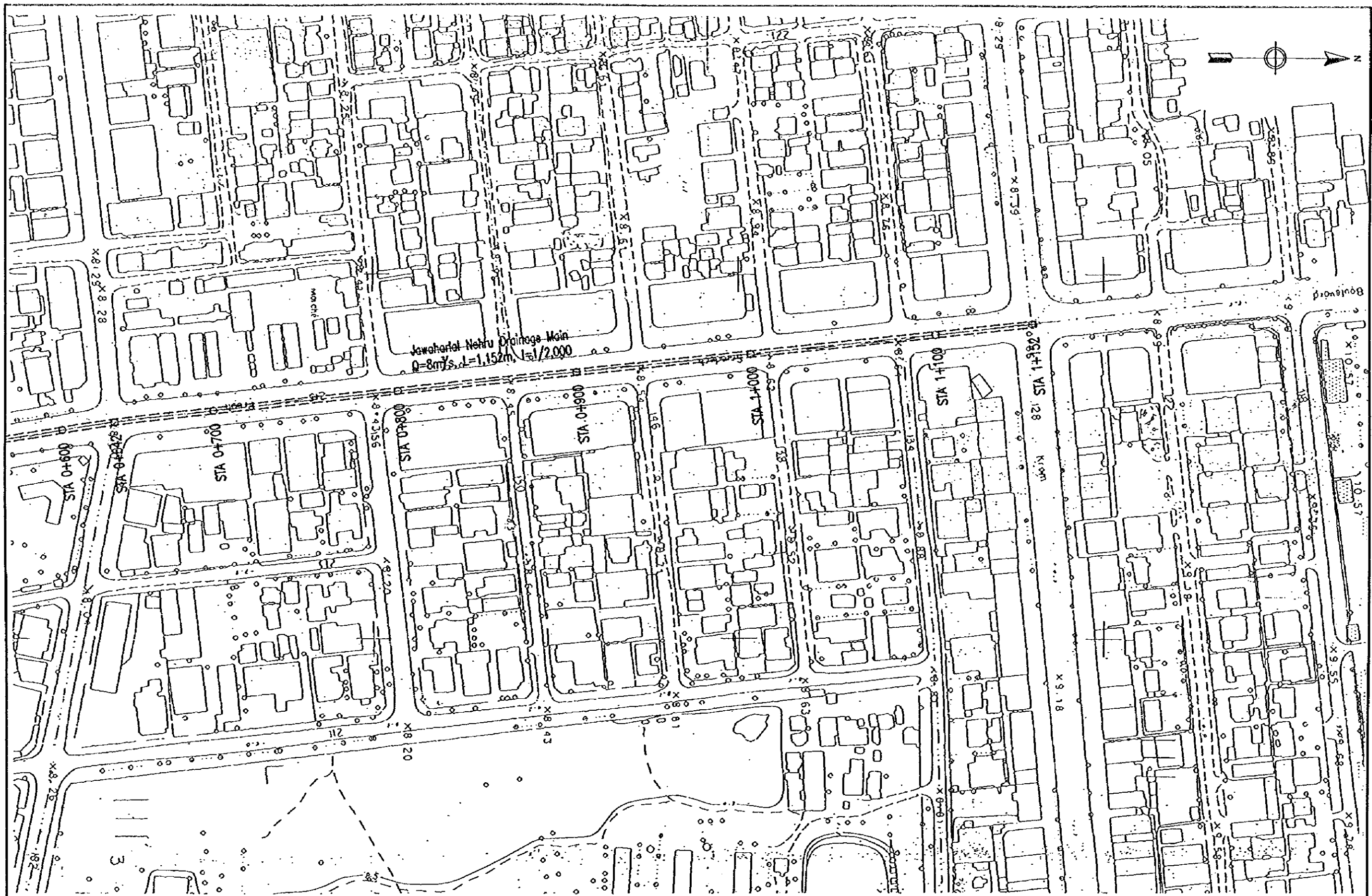
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Figure D5-19
 Plan, Profile and Sections of Samdach Monireth
 Outlet Sluiceway



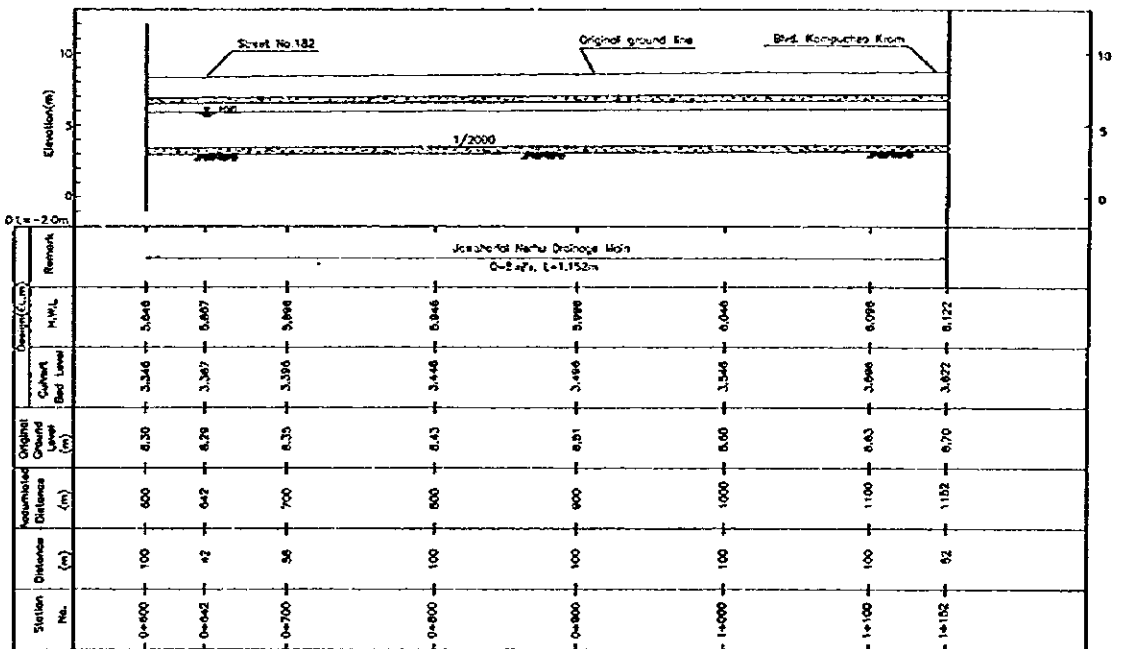
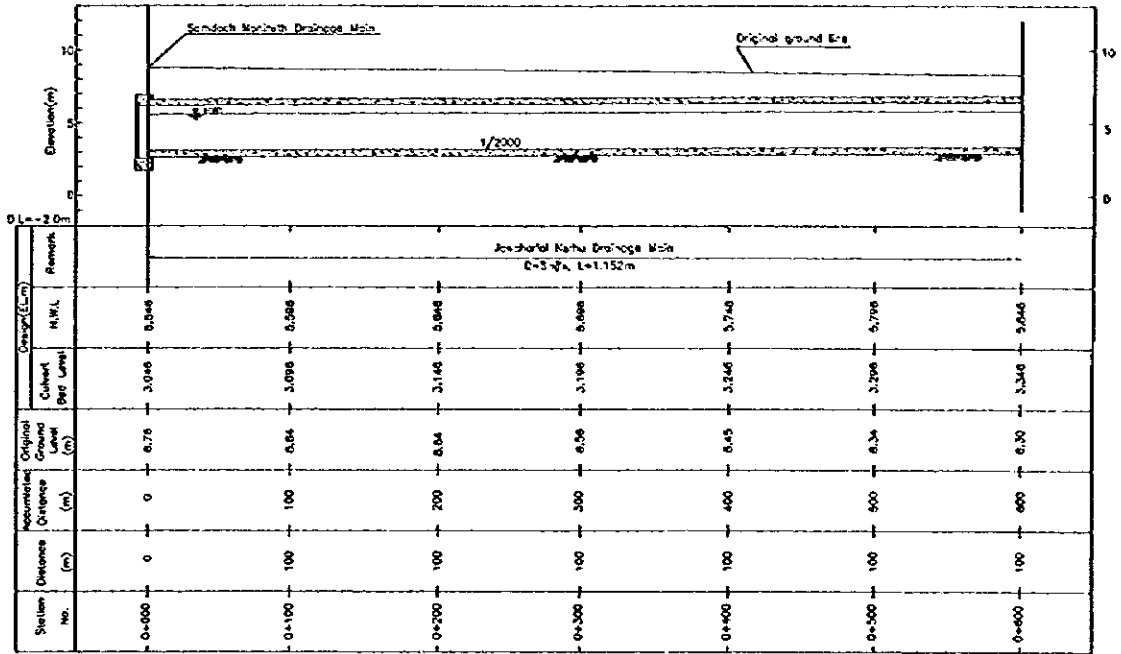
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Figure D5-20
 Plan of Jawaharlal Nehru Drainage Main (1/2)

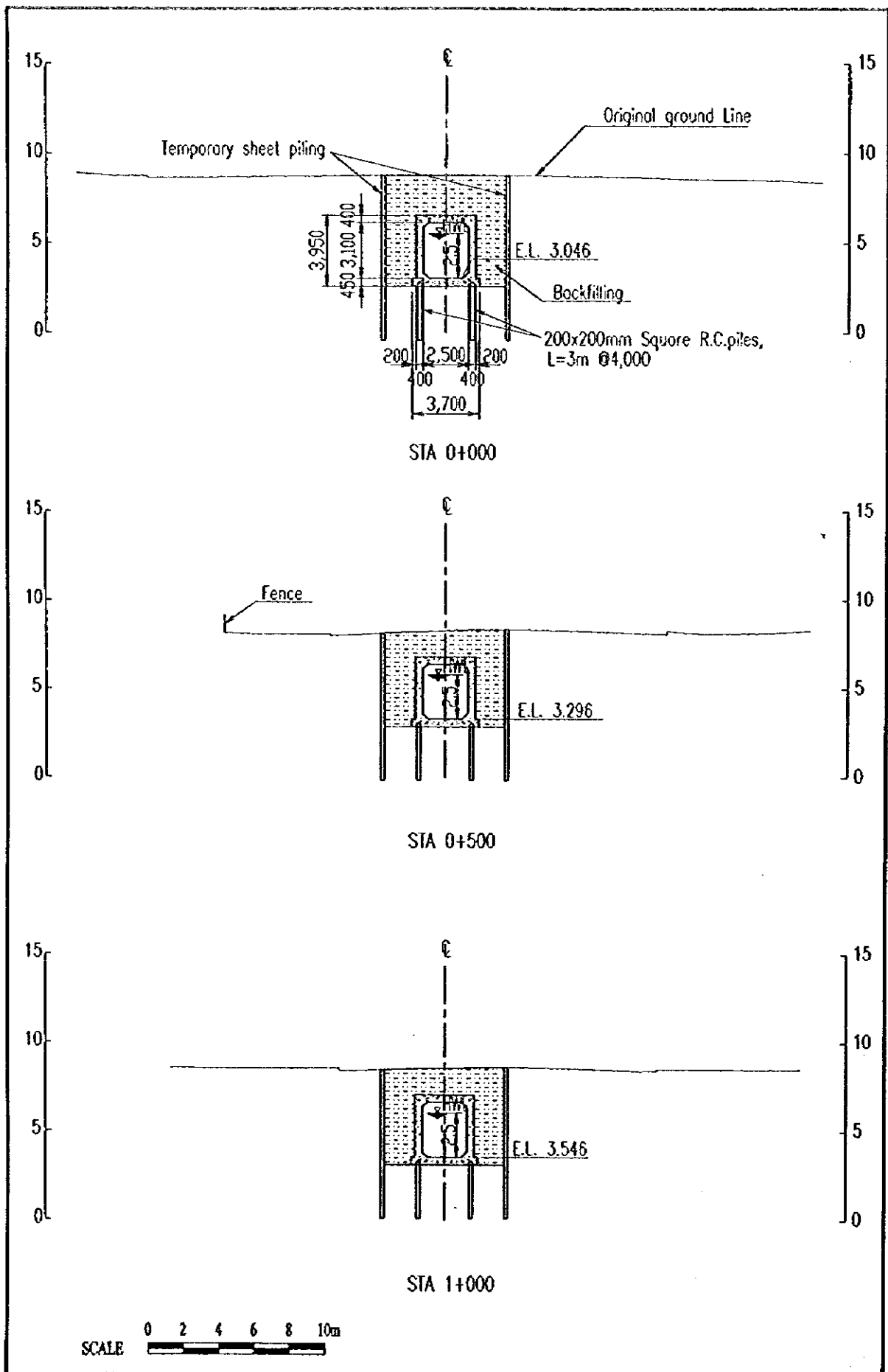


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Figure D5-20
 Plan of Jawaharlal Nehru Drainage Main (2/2)

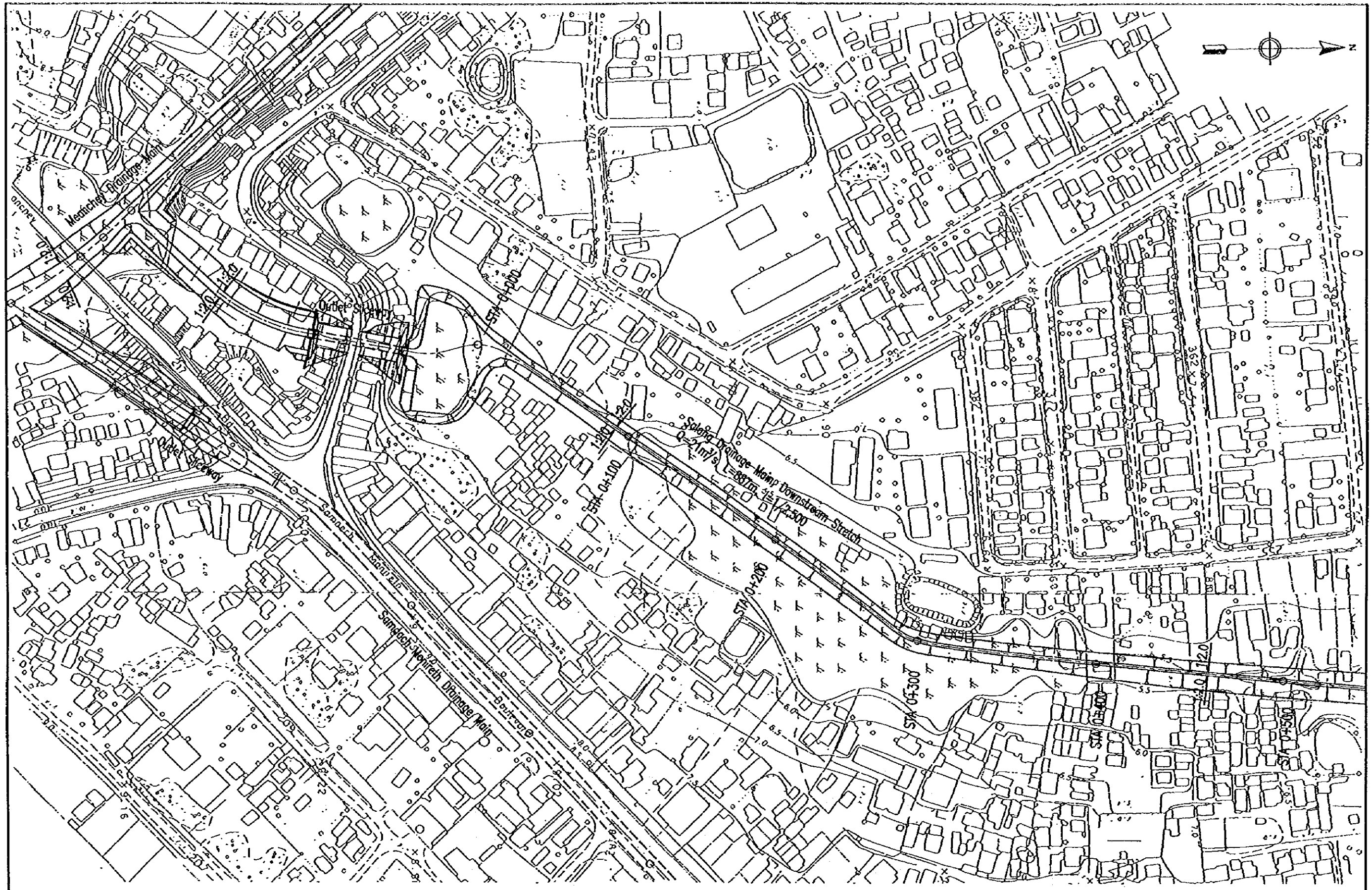


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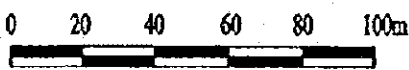
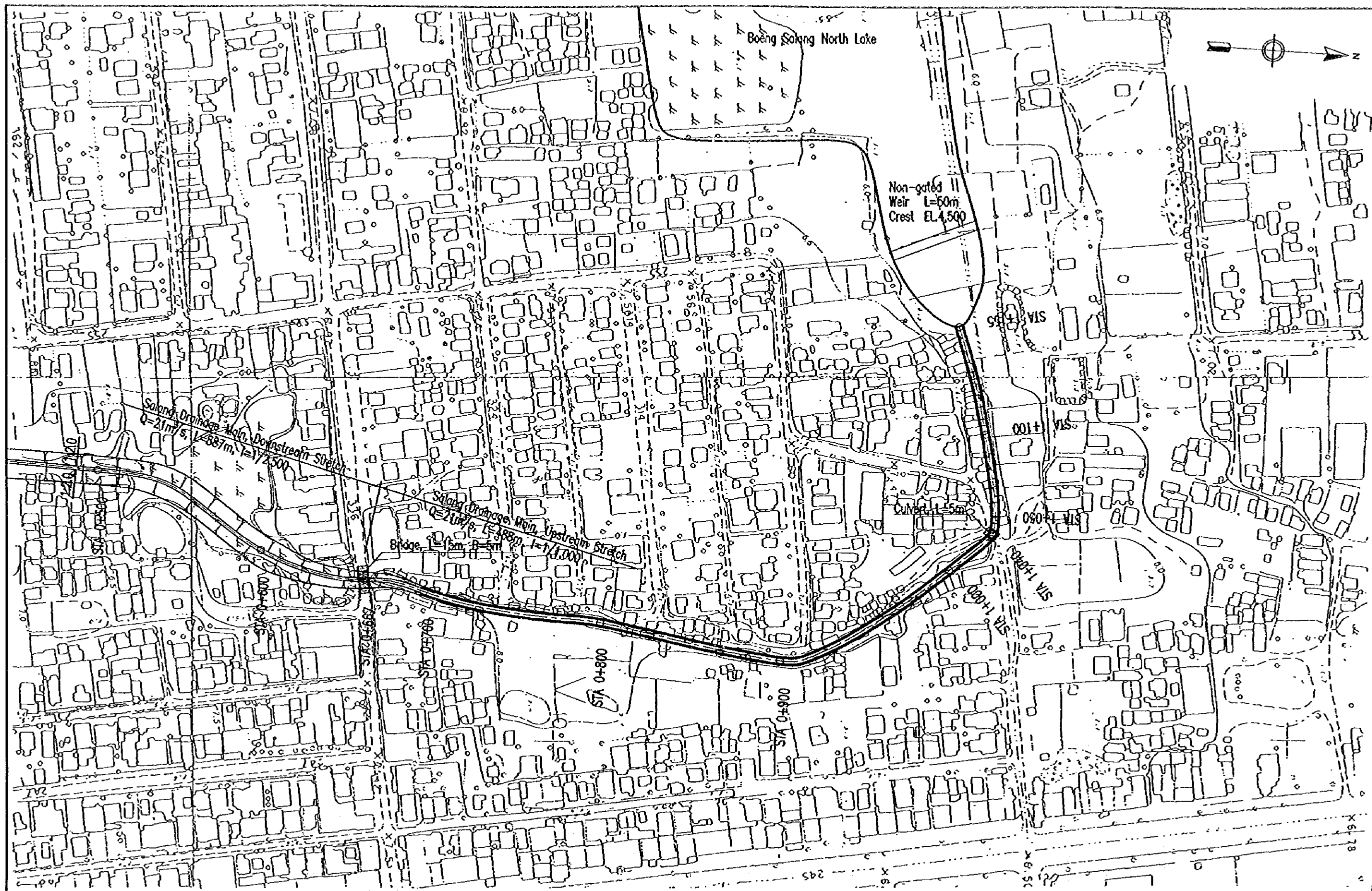
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Figure D5-22
 Cross-sections of Jawaharlal Nehru Drainage Main



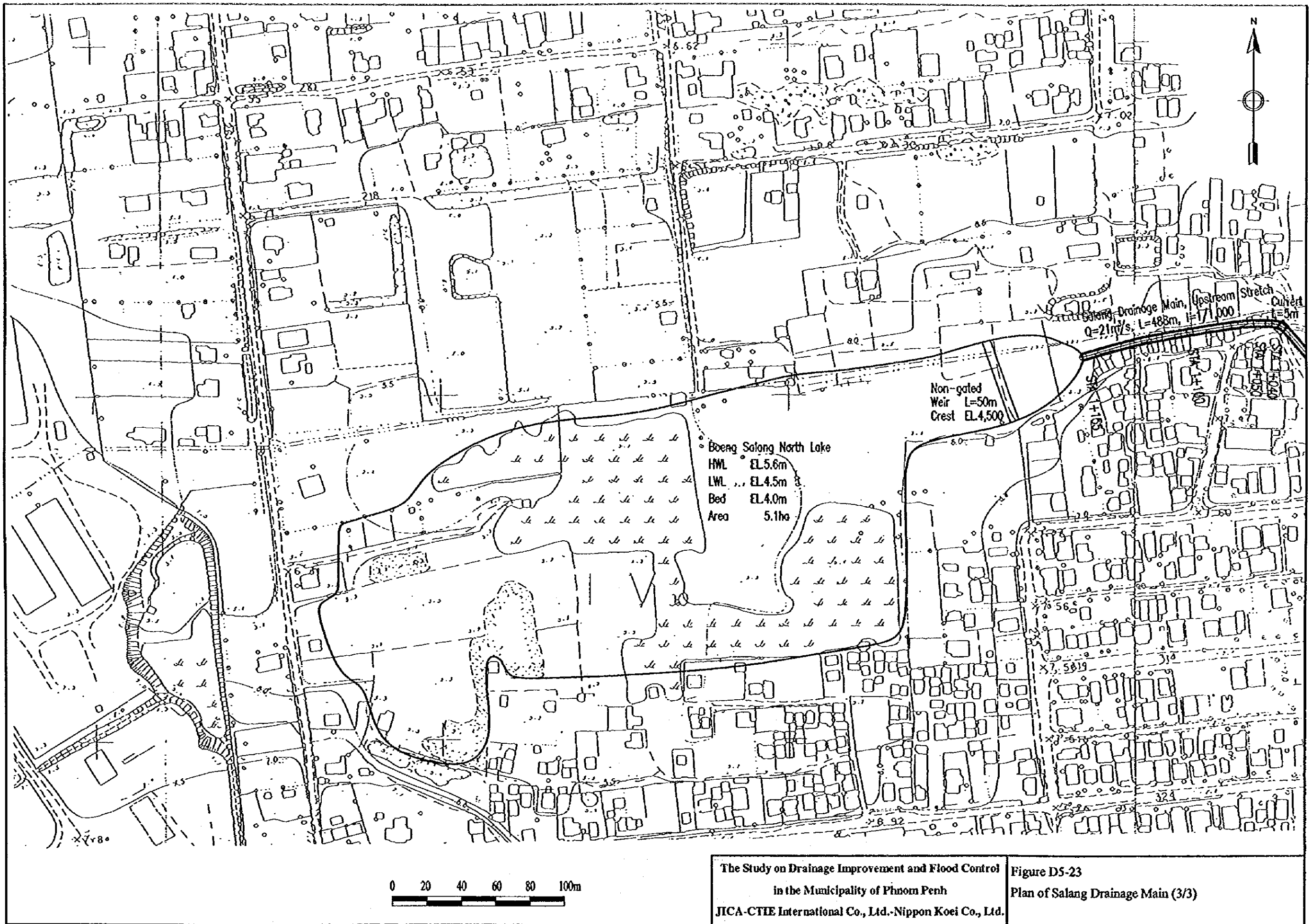
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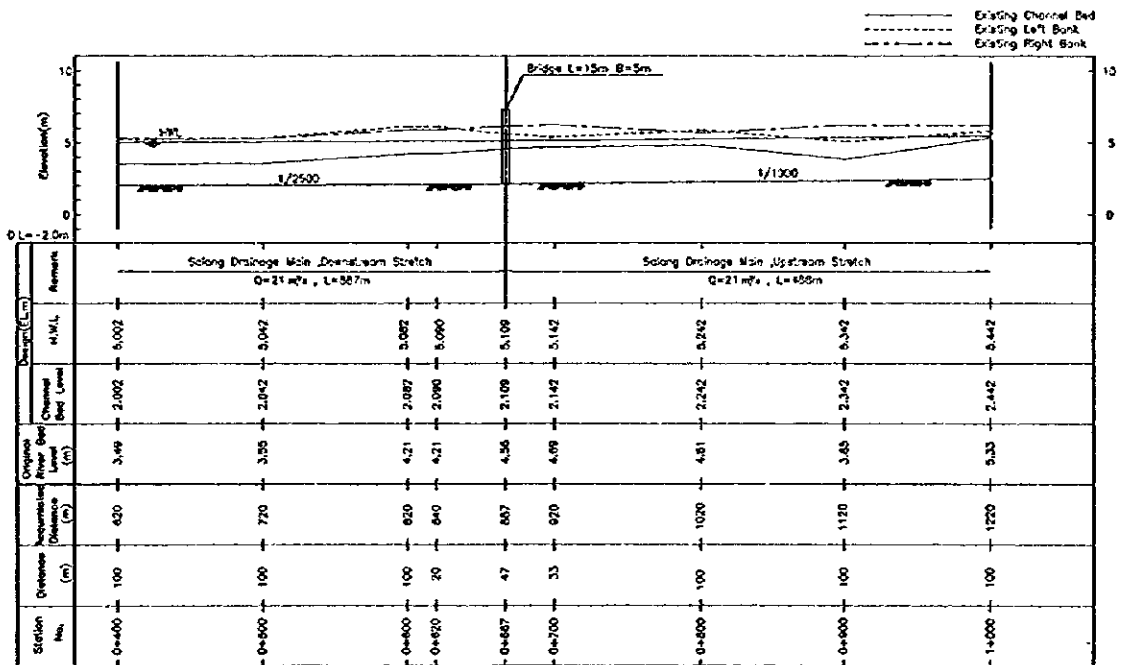
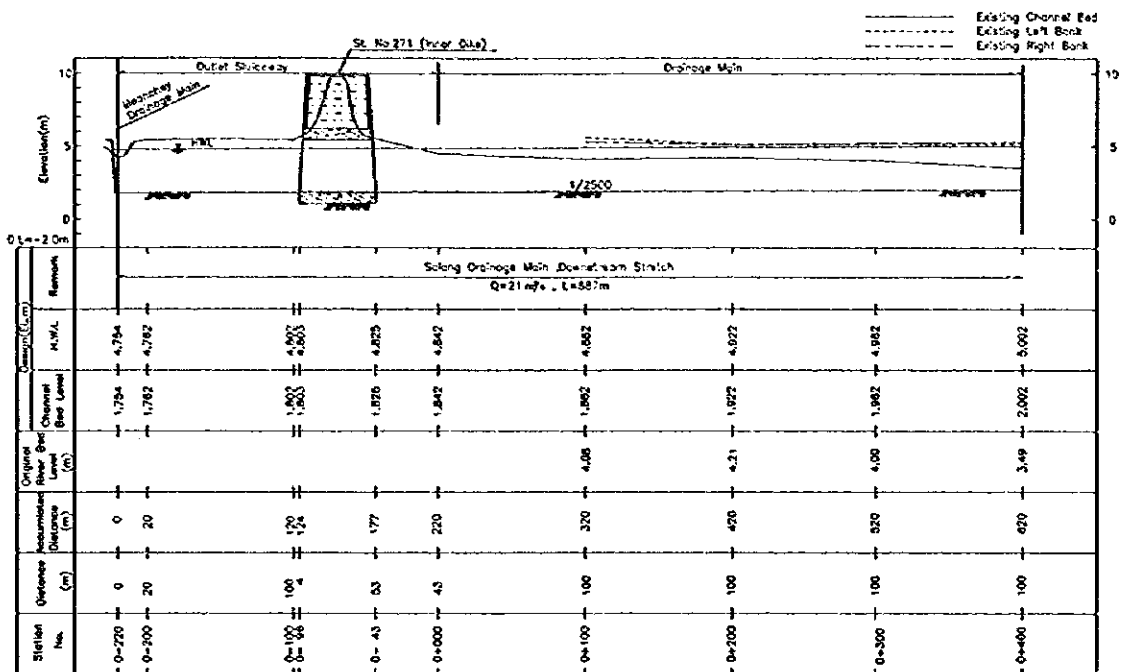
Figure D5-23
 Plan of Salang Drainage Main (1/3)



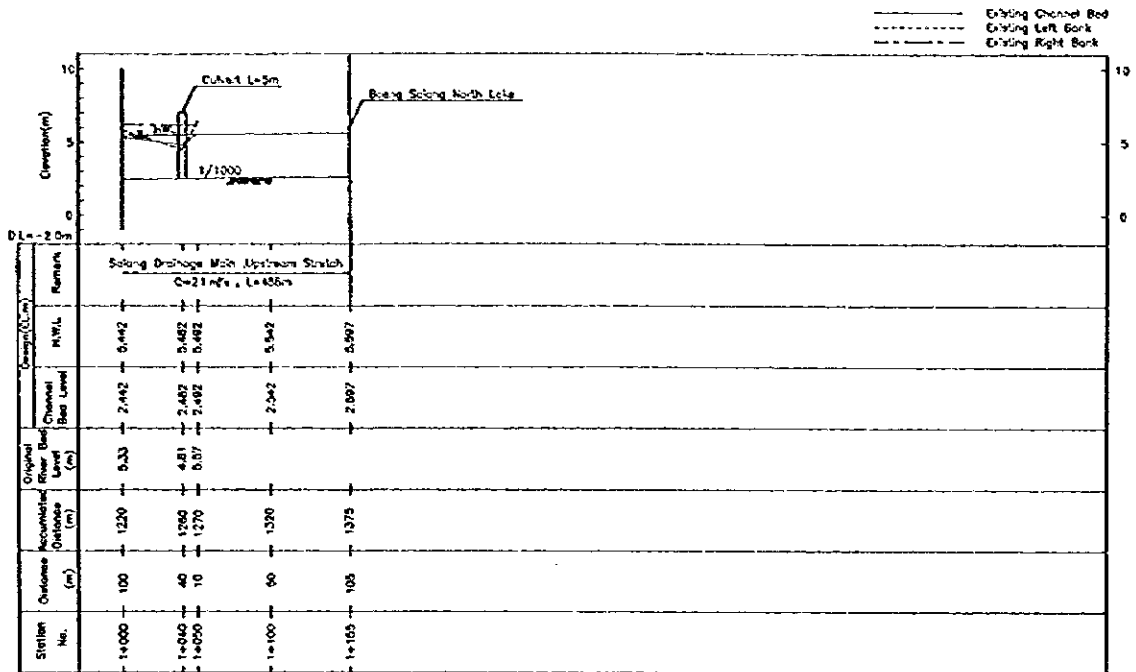
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Figure D5-23
 Plan of Salang Drainage Main (2/3)

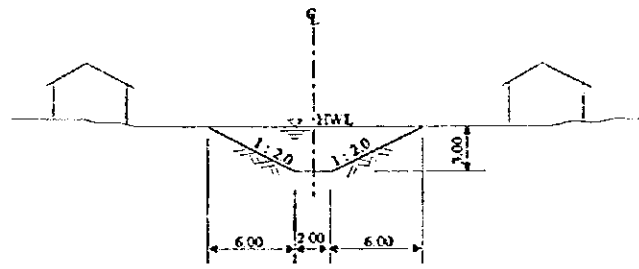




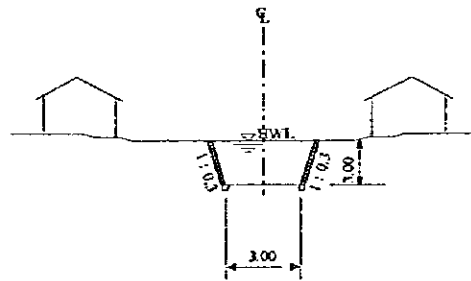
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 (Vertical)
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 (Horizontal)



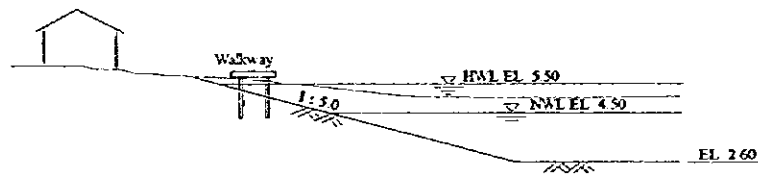
SCALE (Vertical) 0 2 4 6 8 10m
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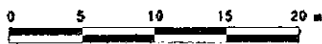
Downstream Stretch, Meanchey Confluence to Sta. 8+070



Upstream Stretch, Sta. 8+070 to Sta. 13+075

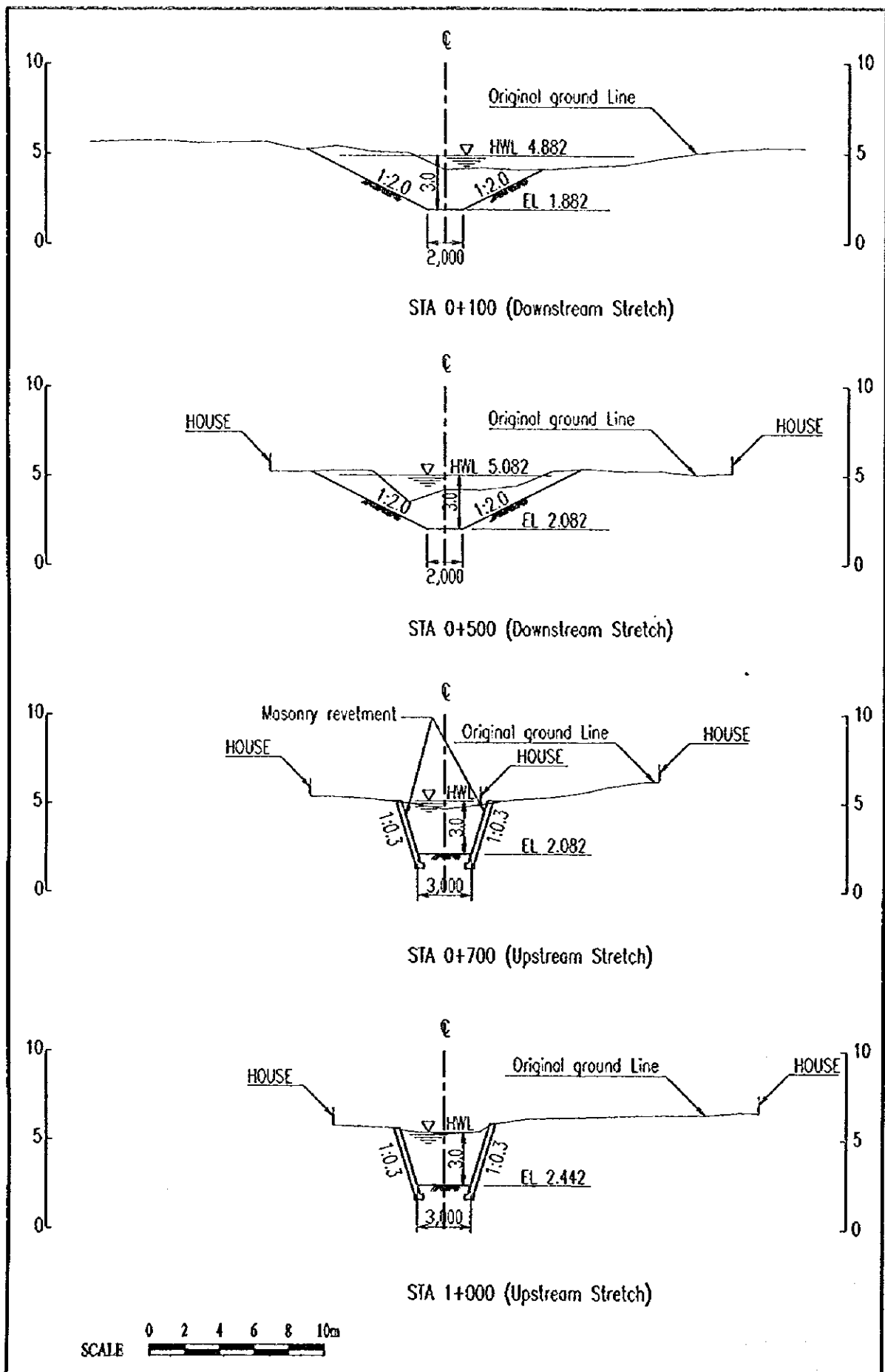


North Lake of Boeng Salang



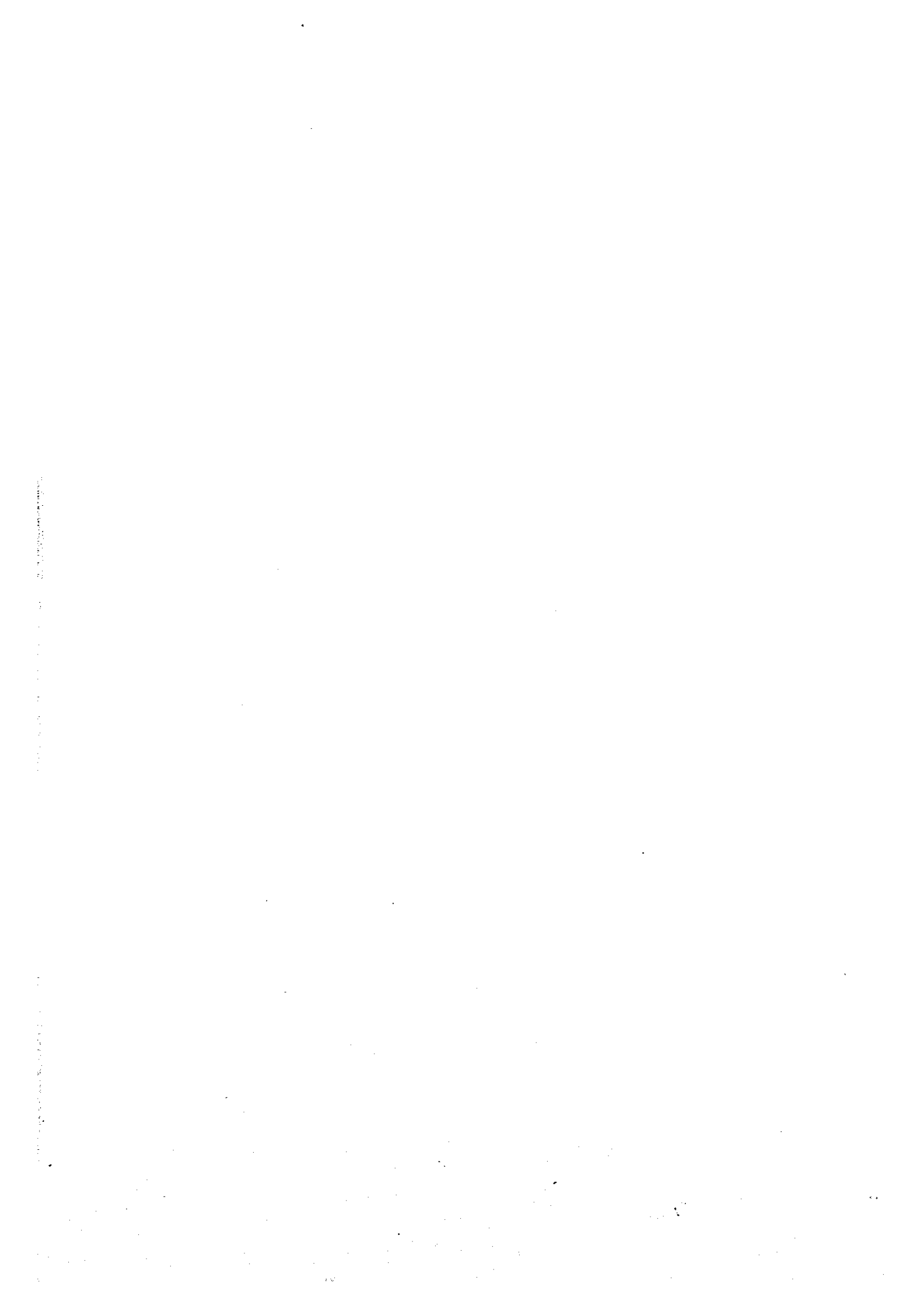
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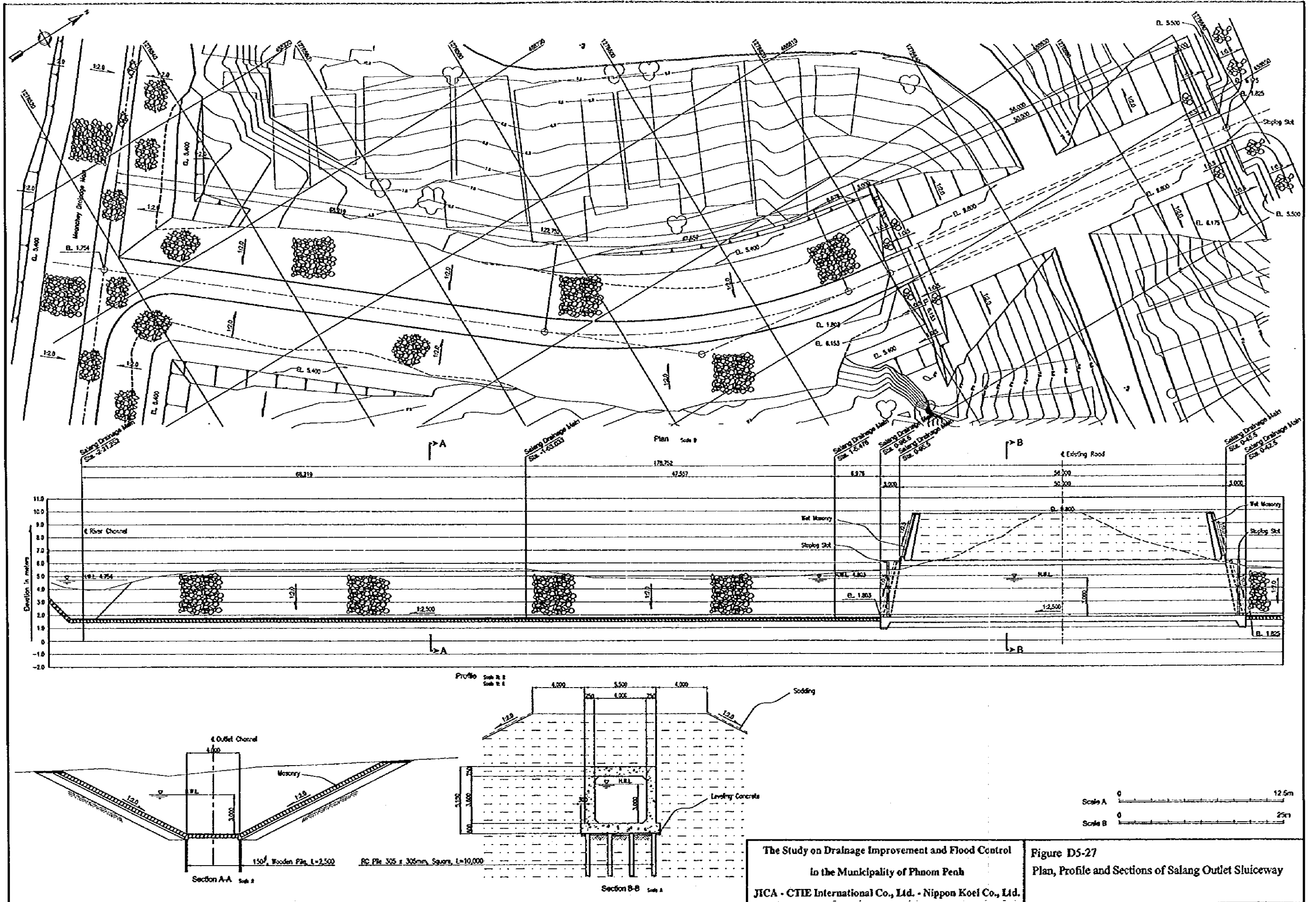
Figure D5-25
Standard Cross-sections of Salang Drainage Main



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Figure D5-26
 Cross-sections of Salang Drainage Main





Sector E

Organization and Institution

**THE STUDY ON
DRAINAGE IMPROVEMENT AND FLOOD CONTROL
IN THE MUNICIPALITY OF PHNOM PENH**

SECTOR E: ORGANIZATION AND INSTITUTION

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E1. Introduction

A variety of organizations is involved in the present study. Some are involved during the planning and designing stage, and some are involved in when the present project comes to the implementation stage. Degree of involvement is also different; some are closely related and others have a supportive relation. Present conditions of assigned duties, organizational structure and budgetary condition, etc. of these organizations are presented in the chapter E2.

Discussion on laws and regulations related to this study and also to the implementation and operation of the proposed project is presented in chapter E3. Recommendation for institutional improvement in the Master Plan is discussed in chapter E4.

E2. Present Situation of Related Organizations

Organizational structure, staffing, financial aspects, etc. of the organizations related to the present study have been reviewed as follows:

2.1 National Level

2.1.1 Nation and Government

Cambodia is a Kingdom with a King who shall rule according to the Constitution and to the principles of liberal democracy and pluralism. The Kingdom of Cambodia shall be independent, sovereign, peaceful, permanently neutral and non-aligned country.

The King of Cambodia shall reign but shall not govern. The King shall be the Head of State for life. The King shall be inviolable. The King of Cambodia shall be the head of State for life and shall be a symbol of unity and eternity of the nation.

The National Assembly consists of at least 120 members. The legislative term of the National Assembly is 5 years. The National Assembly approves the national budget, State Plannings, loans, lendings and the creation, changes or annulment of tax.

The Council of Ministers is the Royal Government of the Kingdom of Cambodia. The Council of Ministers is led by one Prime Minister assisted by Deputy Prime Ministers and by Senior Ministers, Ministers, and Secretaries of State as members. There is a total of 26 ministries as shown in Figure E2-1. Of these, three ministries have been newly created with the start of new government after the general election in July 1998. These are: Ministry of Parliamentary Relations and Inspection, Ministry of Urbanization and Construction, and Ministry of Water Resources and Meteorology.

Annual budget for the fiscal year 1998 (January to December, 1998) is presented below:

National Budget for the Fiscal Year 1998

Unit: US\$ million

Organization	Budget	Organization	Budget
1 Unclassified expenditure	173.29	14 Ministry of Public Works	2.12
2 Ministry of National Defence	82.64	15 Ministry of Information	1.54
3 Ministry of Interior	39.36	16 Ministry of Industry	1.41
4 Ministry of education	27.61	17 Ministry of Commerce	1.35
5 Ministry of Health	18.34	18 Ministry of Culture	1.10
6 Ministry of Social Welfare	14.77	19 Ministry of Tourism	0.95
7 Council of Ministers	10.69	20 Ministry of Rural Development	0.85
8 Ministry of Foreign Affairs	9.58	21 Ministry of Justice	0.78
9 Ministry of Telecom.	9.06	22 Ministry of Planning	0.52
10 Ministry of Finance	7.66	23 Ministry of Environment	0.45
11 Ministry of Agriculture	6.20	24 Ministry of Religion	0.37
12 Ministry of Royal Palace	4.80	25 Ministry of Women's Affairs	0.27
13 National Assembly	3.26		

2.1.2 CDC

In June 1995, a sub-decree was passed governing Council for the Development of Cambodia (CDC) organization and functioning. The organizational structure is presented

in Figure E2-2. As shown in the organizational structure, CDC is managed by two Co-chairmans, the First Prime Minister and the Second Prime Minister, and Vice-chairman, Senior minister in charge of Rehabilitation and Development, and eight members.

Cambodian Rehabilitation and Development Board (CRDB) and the Cambodian Investment Board (CIB) are under the direct supervision of a Secretary-General. The General-Secretariat of CDC is also under the direct supervision of the Secretary-General of CDC. The General-Secretariat shall be supported by four divisions, namely Legal and Dispute Resolution, Finances and Administration, Personal Management, and Strategic Planning.

The CDC is the executive agency of the Royal Government and has the following responsibilities:

- to be the “Etat Major” and the “One-stop Service” of the Royal Government responsible for rehabilitation, development and investment activities,
- to guide the preparation and the conception of development frameworks and strategies for Cambodia in cooperation with the relevant institutions
- to coordinate contributing countries, bilateral/multilateral organizations and NGOs in the National Programme to Rehabilitate and Develop Cambodia to ensure an efficient acceptance and reallocation of external aid according to the needs and priorities of the nation
- to facilitate and coordinate inter-ministerial activities, as well as the activities of the ministries and institutions involved with donor countries, organizations and investors
- to provide guidance in the utilization of public and private resources in the development process of Cambodia
- to facilitate and streamline administrative procedures for donor countries and investors
- to review and decide all the matters pertaining to the rehabilitation and development and other public sector investments through the “one-stop service” mechanism of CDC.

The CDC’s role and responsibilities in the “rehabilitation and development process” include the following:

- to cooperate with the relevant ministries and institutions in preparing the conceptual frameworks of the National Rehabilitation and Development and in setting the priority needs of the country for the immediate term, the short-term, the medium-term and the long-term in order to prepare rolling plans of action. These plans of action are to be coherent, inter-related and mutually reinforcing.
- to cooperate with the relevant ministries and institutions in preparing socioeconomic, and sectoral planning to develop Cambodia.
- to manage public sector investments in cooperation with the relevant ministries and institutions. This process shall mainly be related to the coordination and direction of the allocation and utilization of the national resources and external aid with the aim of rehabilitating and developing Cambodia.
- To sign pursuant to the delegation of authority of the Co-Prime Ministers and on behalf of the Royal Government, any legal agreements with bilateral and/or

multilateral donors and international organizations pertaining the acceptance and the allocation aids.

In the management of the public sector investment, the roles and responsibilities of CDC are the following:

- CDC shall be the coordinator for setting the strategic conceptual frameworks and the public investment policies as well as setting up the priorities for public investment projects for the medium-term and for one year.
- The Ministry of Foreign Affairs and International Cooperation shall be the diplomatic window.
- The Ministry of Planning shall prepare the 5 Year Plan and the public investment program, in cooperation with the relevant ministries and institutions.
- The Ministry of Economy and Finance shall prepare the macroeconomics framework for the medium-term and the budget for implementing the annual public investment programs and control the allocation of financing.
- The line ministries shall prepare the sectoral public investment projects and programs in cooperation with the Ministry of Planning and CDC, and is responsible respectively for the implementation of their relevant projects and programs.

2.1.3 MEF and MOP

Ministry of Economy and Finance (MEF) is responsible for preparation of the national budget. This includes estimating the total expected government revenues for the coming year, establish budgetary priorities and activities within the constraints imposed by available revenues and borrowing limit including grants.

MEF will also play a key role in programming the Public Investment Program with the Ministry of Planning (MOP) who is responsible for economic and social development and statistic practice of the country. In the process of selecting appropriate projects for capital investment, MEF works with line ministries and the MOP to prepare the annual investment budget.

2.1.4 MFAIC

The agency responsible for foreign assistance is Ministry of Foreign Affairs and International Cooperation (MFAIC). Any request for foreign assistance is first sent from a respective ministry to the Council for the Development of Cambodia (CDC).

The CDC accordingly check upon discussions with relevant agencies the conformity of the subject request to the national plan, and decide adoption/dismissal, and give priority for the adopted ones. When the request for the foreign assistance is approved, it is sent to the MFAIC.

2.1.5 CNATUC and CATUC

CNATUC (Comité National de l'Aménagement du Territoire, d'Urbanisme et de Construction = National Committee for Country Planning, Urbanization and Construction) was created by "Law on the Country Planning, Urbanization and Construction (CNATUC Law)" that was adopted by the National Assembly on May 24, 1994 (refer to the description under E3. Laws and Regulations).

The objective of the law is: to promote the organization and embellishment of the urban and rural areas throughout the country with the purpose of assuring the development of the country respecting both common and individual interests and private rights, assuring an equilibrium between the cities/towns and rural areas, and assuring the value of natural and cultural wealth ensuring the development of economic and tourist sectors and maintaining the quality of the environment.

According to the sub-decree passed in June 1997, the president of CNATUC is the Minister in charge of State, Urbanization and Construction, and the vice president is the Minister of Interior or his/her representative. Permanent members are representatives of the MPWT, MOE, MAFF, MEF, co-ministers of Defense or their representatives, a delegate of the Municipality of Phnom Penh, the co-ministers representing the Council of Ministers, and other concerned Ministers as the President decides.

For the capital city of Phnom Penh, a Committee for Planning, Urbanization and Construction (CATUC) was particularly established. This Committee is headed by the Chairman of the CNATUC and includes its members a Governor, Vice Governor and a relevant competent technical body.

CATUC of the Municipality of Phnom Penh, though not yet organized in reality, is designated to draw up own development master plans for the reorganization and development of the municipality. CATUC is also responsible to establish land use master plans that clearly indicate the areas to be allocated for national defense, agriculture, commerce, industry, handicraft, culture, tourism, religion and administrative and public facilities. The land use master plan shall be firstly approved by CATUC for the municipality and subsequently by the CNATUC.

2.1.6 MWRM and National Mekong Committee

Agencies related to river and/or water in Cambodia are: Ministry of Public Works and Transport (MPWT), Ministry of Water Resources and Meteorology (MWRM) and Cambodia National Mekong Committee. MPWT is discussed in detail in the next article, Article "2.2" below.

The Ministry of Water Resources and Meteorology has been newly created with the establishment of the new government in 1998. The former body of the MWRM is the General Directorate of Irrigation, Meteorology and Hydrology (GDIMH) of the Ministry of Agriculture, Forestry and Fisheries (MAFF). The tasks and duties of the MWRM is still not clear, the former GDIMH included the following tasks:

- Arrange policies, principles and norms relating to water resources (surface water and groundwater) to be exploited for use;
- Study, research, evaluate and work out programs for rehabilitation and development of irrigation systems, meteorology and hydrology;
- Organize short and long term hydrological and meteorological forecast for serving to all sectors and to inform in advance of disaster in order to take measures to conduct timely intervention; and,
- Collect and compile documents and do business on hydrological and meteorological data for serving various sectors with both national and international manner.

Another organization related to the river is Cambodia National Mekong Committee. It is the Cambodian organization under the Mekong River Commission. The National Mekong Committee does coordination of relevant agencies and investigation on the Mekong River including its tributaries.

2.1.7 Ministry of Environment

Ministry of the Environment (MOE) has been established in July 1993. The MOE has a broad mandate to protect Cambodia's natural resources and to prevent environmental degradation. It covers the following duties:

- Establishment of policy and plan related to environment, including National Environment Program and Regional Environment Program
- In charge of Environmental Impact Assessment
- Management of national parks and national reserves
- Measures against public pollution
- Environmental education
- Environmental Monitoring, etc.

Department of Environment is the organization in the Municipality of Phnom Penh responsible for environmental matter.

2.2 Ministry of Public Works and Transport (MPWT)

Duties

Sub-Decree No.14 dated on March 3, 1998 has newly declared the duty and organization of the Ministry of Public Works and Transport (MPWT). According to the sub-decree, the MPWT has the following duties, though a part of the duty has been transferred to the Ministry of Urbanization and Construction that has been created under the new government in December 1998:

- Organize the practice of national policies on general public construction by law and cooperate with other institutions for the development of the nation;
- Maintain and organize the infrastructure such as roads, bridges, ports, railways, waterways and public buildings;
- Make regulations on activities of infrastructure such as ports, railways, waterways;
- Make regulations and control transportation by roads, railways, waterways;
- Participate and cooperate in making laws and regulations which is related to construction;
- Other constructions that are to be achieved by the Royal Government of Cambodia; and,
- Cooperate with the Secretariat of Civil Aviation and all construction on airways.

Organizational Structure

The organizational structure declared in the sub-decree is presented in Figure E2-3. This new organizational structure is quite different from the former one. The MPWT is headed by a Senior Minister, assisted by a Secretary of State and an Under Secretary of State. There is a total of three General Departments (Administration, Transport, and Public

Works and Construction). Though the new organization has been announced, designation of personnel has not yet been in progress.

Department of Inland Waterway

In the new organization, Department of Inland Waterway under the General Department of Public Works and Construction is in charge of waterways including rivers. Management of rivers and conduct of flood protection are not clearly declared in the duty, but the following duties among others could be related to them:

- Study and doing any activities related to waterway;
- Make the plan and maps of rivers and dams;
- Checking the permission for construction on the river, under the river, in the air crossing over the river;
- Study, research and do protection works on the broken banks;
- Manage the land created by waterway;
- Checking the permission of taking water from rivers and discharge water into rivers that may be harmful to the depth of water; and,
- Record the depth of water along the river.

Urban drainage improvement is not clearly declared in the Sub-Decree. This seems to be given to provincial and municipal Departments of Public Works and Transport.

Number of Staffs

The number of staffs totals at approximately 13,500. Around 2,000 staffs work in head office, over 4,000 are based in the Municipality and provincial Public Works and Transport Departments, and over 7,000 are based on elsewhere.

Budget

A summary of annual budget allocation in the past four years is presented in the following table.

	Unit: Riel million			
	1994	1995	1996	1997
Salaries & Indemnities	2,286	1,315	1,175	1,140
Operational Expenditure and Small Repairs	1,562	605	585	710
Public Administration and Subsidies	2,973	2,245	2,950	2,000
Social & Cultural Expenditure	64	65	50	40
Capital Expenditure	159,120	107,500	12,987	12,340
Total	166,005	111,730	17,747	16,230

Constraints

Previous studies have identified constraints facing the Ministry including budgetary considerations, the shortage of management and technically skilled personnel despite at the same time serious over-staffing, unclear and duplicated organizational functions and responsibilities, lack of management information systems, old or broken down equipment, low morale levels and so on. Efforts to improve this situation have been made by the

technical assistance, capacity building and institutional strengthening activities of foreign organizations and specialists.

2.3 Municipality of Phnom Penh (MPP)

Duties and Organization

Organizational structure of Municipality of Phnom Penh is presented in Figure E2-4. Municipality of Phnom Penh is presently managed by a royally appointed First Vice Governor. There are four vice-governors each responsible for specific tasks. Chief of Cabinet is under First Vice Governor, and there are five Deputy Chief of Cabinet under the Chief of Cabinet.

Municipal Court, Special Regional Military and Municipal Police are under the direct control of the First Vice Governor. All the other functions of the Municipality are under the Deputy Chief of Cabinet or directly under the Chief of Cabinet. There are a total of 18 line ministry institutions, namely 16 departments and Tax Office and Bank. Direct Municipal institutions are an autonomy body of PPWSA (Phnom Penh Water Supply Authority), Cadastral Office, Department of Urbanization and Construction, administrative offices, and seven Districts (Khans).

All the line ministry departments are under the control of both Vice Governors of the Municipality and the Ministers. However due to its strong independence of the Phnom Penh Municipality, each department is strongly influenced by the Municipality.

Of the line ministry departments, Department of Public Works and Transport (DPWT) is the agency responsible for flood control and urban drainage of the Municipality. Details of the DPWT is discussed in next article, Article "2.4" below.

The organization related to urban planning is BAU (Bureau des Affaires Urbaines). BAUs are the implementing arm of the CATUC and the BAU for Phnom Penh is only the active one at present. The BAU is in charge of inter-sectorial coordination and urban planning in Phnom Penh. The BAU is designated to prepare urban planning documents and carry out technical coordination with provincial BAUs.

The BAU is managed independently of the other municipal government units, under the authority of the President of CNATUC. However, this office is located at the Municipality and does interact with and seek approval from the Municipality of Phnom Penh for its initiatives. Since 1995, the Phnom Penh BAU has received technical assistance from the APUR (Atelier Parisien d'Urbanisme = Town Planning Agency for Paris), financed by the European Union.

Department of Urbanization and Construction is a department under the Municipality of Phnom Penh. It is directly under the Chief of Cabinet and controlled by no line ministries. This department is participated in city planning and land use in the Municipality of Phnom Penh.

There are seven Khans in the Municipality of Phnom Penh, four (Don Penh, Tuol Kork, 7 Makara, Chamkarmon) inside the inner dike and three (Dang Kor, Mean Chey, Russey Keo) outside. Khan is divided into Sangkat. Sangkat is usually 1,000 to 2,000 families.

In total, there are 76 sangkats. Sangkat officials are involved in land observations. A land observation is the process by which property boundaries are documented. This is a necessary step before property can be sold or resolution of disputes regarding legal property ownership can be solved.

Number of Staffs

There is a total of 11,241 staffs in the Municipality of Phnom Penh as of May 1998. The Municipality of Phnom Penh is as dependent on the national budgeting process as the provincial government. The Municipality does not have the legal authority to raise revenue or make expenditures at its own discretion.

Budget

Budget for the Line Ministry Institution as presented in the organizational structure is decided and allocated by each ministry.

Budget of Municipality of Phnom Penh

Unit: Million Riel

Item	1994	1995	1996	1997
Salaries & Indemnities	8,425	8,852	8,423	8,452
Operational Expenditure and Small Repairs	3,724	1,720	2,338	2,081
Public Administration and Subsidies	342	1,381	2,159	2,615
Social & Cultural Expenditure	4,194	4,679	7,280	6,022
Capital Expenditure	907	455	1,985	481
Total	17,593	17,099	22,185	19,651

The total amount of 17,593 in 1994 decreased to 17,099 in 1995. It has increased to over 20 billion in 1996.

Of the total budget, salaries and indemnities share approximately 50%. This is a large burden for the Municipality that lacks the resources to address even the most basic infrastructure. On the contrary, the budget allocated to the capital expenditure is very small at 5% in 1994 and it reduced to 2.7% in 1995.

Execution of Project

The execution of a project is explained with the case of the "Phnom Penh Water Supply and Drainage Project, Part B: Drainage, ADB Loan 1468". In this case, the MPP is the Executing Agency. The Executing Agency is responsible for project implementation and coordination. Under the MPP as the Executing Agency, DPWT is the implementing body. Drainage and Sewerage Division is specifically responsible for the implementation of the drainage component. A project Steering Committee has been established by the Government, with the Governor of MPP appointed as the Chairman. The Steering Committee comprises Senior Governmental officials from MPP, Ministry of Economy and Finance (MEF), Ministry of Planning (MOP), Council for the Development of Cambodia (CDC), MPWT, PPWSA, and DPWT. They will meet at least bimonthly to review all aspects of project implementation and provide policy guidance.

2.4 Department of Public Works and Transport (DPWT), MPP

Organization

Department of Public Works and Transport (DPWT) is responsible for development, operation and management of infrastructures in the Municipality. The DPWT of MPP is the largest of the provincial level Public Works Departments. The DPWT is under the dual supervision of Ministry of Public Works and Transport (MPWT) and of the Vice Governor of the MPP in charge of infrastructure.

The organizational structure of the DPWT is presented in Figure E2-5. There are three Deputy Directors each responsible for Public Works, Transport and Administration/Finance.

Decisions related to the DPWT sometimes made outside of the Municipality. Officials of the DPWT are appointed by the MPWT. All funds for salaries, materials and equipment come from the MPWT. The Ministry, based on annual plans prepares all investment budgets, the recurrent budget, and the operation budget. Technical advice and guidance are also given by the MPWT.

There is, however, considerable influence from the MPP due to primarily to the independent role played by the Municipality prior to 1993.

Urban drainage and flood control in the Municipality of Phnom Penh is under the jurisdiction of Drainage and Sewerage Division of the DPWT.

Number of Staffs

Number of staffs is as follows. There is a total of 1,308 staffs as of May 1998. Of these, 626 are full-time staffs and 682 are part-time staffs.

Number of Staffs of DPWT as of May 1998

Division	Director	Vice Director	Engr.	Tech.	Acct.	Labor	Total	Full-time staff	Part-time staff
Road and Bridge	1	2	4	28	8	158	201	98	103
Drainage and Sewerage	1	5	0	8	2	237	253	113	140
Street Lighting	1	1	2	1	0	28	33	33	0
Park and Garden	1	1	0	3	0	562	567	124	443
District	1	2	0	0	0	22	25	22	3
Public Transport	1	2	0	1	0	42	46	25	21
River Transport	1	1	1	1	0	7	11	9	2
Traffic Office	1	3	0	5	0	72	81	41	40
Finance and Accounting	1	3	2	0	0	12	18	18	0
Administration and Personnel	2	2	8	10	0	29	51	46	5
Discipline	1	1	1	2	0	16	21	20	1
Total	12	23	18	59	10	1,185	1,307	549	758

Budget

The budget for the past five years are as follows:

Budget of DPWT

Unit: Million Riel

Item	1994	1995	1996	1997
Salaries & Indemnities	673.00	535.70	673.00	750.00
Operational Expenditure and Small Repairs	115.00	120.00	115.00	85.00
Public Administration and Subsidies	0.00	0.00	0.00	0.00
Social & Cultural Expenditure	7.50	8.40	7.50	20.00
Capital Expenditure	1,384.70	1,335.94	249.31	668.80
Total	2,180.20	2,000.04	1,044.81	1,523.80

Procedure to determine budget is the following. The MPWT authorizes funds for the operating and capital budgets used by the DPWT. This includes salaries, equipment and materials. The DPWT prepares annual budgets, review them with the Governor and after receiving support at the municipal level make a submission to the Directorate General of Public Works and Construction of the MPWT. Standard unit costs of material and labor are used in preparing and reviewing budget estimates. Once proposed budget from all provincial agencies are reviewed and accepted by the technical level, they are reviewed by the Department of Accounting and Financing of the MPWT and ultimately submitted to the Ministry of Economy and Finance. The process is time consuming and has caused substantial delays in the past.

2.5 Drainage and Sewerage Division (DSD), DPWT, MPP

The organizational chart of the Drainage and Sewerage Division (DSD) is presented in Figure E2-5. The Drainage and Sewerage Division (DSD) manages the maintenance and operations of the combined drainage and sewerage system (sewers, open channels, retarding ponds and pumping stations). Activities of the DSD include the following:

- Planning and programming of maintenance work on the system
- Operation and maintenance of pumping stations
- Production and laying of drain and sewer pipes
- Supervising work performed by contractors

There are five subdivisions each headed by a Deputy Director. Number of staffs is as follows: There is a total of 257 staffs as of May 1998. Of these, 118 are full-time and 137 are part-time.

Number of Staffs of DSD, DPWT as of May 1998

Division	Director	Vice Director	Engr.	Tech.	Other	Total	Full-time staff	Part-time staff
Planning & Technical	1	1	3	6	0	11	10	1
Pumping Stations & Canal	0	1	0	1	28	30	15	15
Personnel & Administration	1	1	0	0	11	13	11	2
Accounting	0	1	0	0	5	6	5	1
Workshop	0	0	0	0	19	19	8	11
Sewer Cleaning	0	0	0	0	37	37	17	20
Pipe Production Unit	0	1	0	0	35	36	6	30
Sewer Maintenance	0	0	0	0	11	11	2	9
Sewer Construction Unit	0	1	1	1	23	26	5	21
Manhole Cleaning	0	0	0	0	57	57	33	24
Dredging Works	0	0	1	0	10	11	6	5
Total	2	6	5	8	236	257	118	139

In the case of the implementation of projects related to drainage and sewerage, e.g. Phnom Penh Water Supply and Drainage Project, Part B: Drainage financed by ADB Loan 1468 and co-financed by NORAD, it is managed by PMU. Discussion on PMU is made in the next article, Article "2.6".

The budgets for the past five years are as follows:

Budget of DPWT

Unit: Thousand Riel

Item	1993	1994	1995	1996	1997
Salaries & Indemnities	70,335	80,415	78,891	70,002	61,126
Public Administration and Subsidies	62,100	62,100	62,100	62,100	62,100
Social & Cultural Expenditure			1,053	2,450	755
Capital Expenditure	114,957	132,368	115,981	38,091	263,168
Total of the above	247,392	274,883	258,025	172,644	387,149
Operation and Maintenance Work	No data	928,600	1,545,300	1,057,000	1,012,700

Breakdown of the budget allocated for operation and maintenance works in the recent five years are presented in Table E2-1. Annual budget for operation and maintenance is around US\$330,000 in 1997.

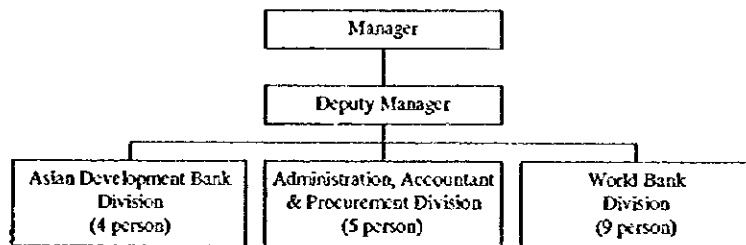
2.6 Project Management Unit (PMU), DPWT, MPP

Project Management Unit has been established to assist DPWT of MPP in the drainage component of the ADB Project (Loan 1468) in 1996 as an organization responsible for the implementation of foreign assisted projects. The PMU is under DPWT of Municipality of Phnom Penh. It has the following organizational structure. PMU coordinates and manages all activities related to the project implementation. Specific tasks assigned for the implementation include the following:

- Initiating project activities, including setting up of work systems and procedures, and engagement of consultants;
- Programming and budgeting the overall implementation program, and the annual plans and budgets;
- Maintaining accurate project accounts;
- Supervising and managing all aspects of the implementation and management of the project sub-components;
- Monitoring and reporting on overall project developments including physical, institutional and financial progress.
- Coordinating with other organizations and governments agencies, community groups, and foreign aid organizations;
- Approving all designs;
- Pre-qualifying all contracts and suppliers, evaluating tenders, and awarding contracts;
- Approving and processing all claims for payment;

The organizational structure is the following:

Organization of Project Management Unit



E3. Present Situation of Related Laws and Regulations

3.1 Legal System of Cambodia

The hierarchy of laws and regulations applied in Cambodia is as follows:

- **Constitution**
Adopted by the Constituent Assembly and promulgated on September 24, 1993. It is the Supreme Law of the Kingdom of Cambodia.
- **Treaties and Conventions**
It must be ratified by the National Assembly when an international treaty is enforced as if it were a national law.
- **Chhbab**
Chhbab is a law voted by the National Assembly. This is called an organic law if it refers to the creation or the organization of a state institution and its structures. The article 127 of the Constitution declares that provinces, municipalities, districts, khan, khum and sangkat shall be governed in accordance with organic law.
- **Reach Kret (Royal Decree)**
Used by the King in the exercise of his constitutional powers, i.e. power of appointments upon proposal by the Council of Ministers and by the Supreme Council of the Magistracy.
- **Anu-Kret (Sub-Decree)**
Signed by the Prime Ministers and countersigned by the minister(s) in charge of its execution after adoption of the Council of Ministers. The anu-kret can be also used by the Prime Ministers in the framework of their own regulatory executive powers.
- **Ministerial Prakas ("arrêt")**
Used by members of government in the framework of their own regulatory powers. Declaration is the same meaning with Prakas.
- **Sechdei Samrech (decision)**
Individual decision of the Prime Minister(s), a minister or a governor in the framework of their own regulatory powers
- **Sarachor (circular)**
In general, used by the Prime ministers as head of government, and by minister(s) as official of the ministry either to explain or clarify certain legal or regulatory measures or to provide instructions.
- **Provincial Deka ("arrêt")**
Used by provincial governors within the geographical limit of their provinces.

3.2 Laws and Regulations related to the Study and their Status

Laws and regulations related to the Study and their status are described as follows:

3.2.1 Water Law and River Law

There is no law on water, its use and its management in Cambodia. Since there is a plenty of water in and around the area of living and production activities, the necessity of law to control the use of water has been recognized not so indispensable. However, in accordance with the progress of development, a law on water, its use and its management seems to be needed. Ministry of Water Resources and Meteorology has started establishment of a law on river and water.

The table below shows the status of law on water in the neighboring countries.

Country	Status of water law and related laws
Japan	River Law is the base law on water.
Thailand	A draft for water law has been prepared.
Philippines	Water Code (1976) is the base law on water.
Indonesia	Governmental Decree on Rivers No.35 (1991) is the base law on water.
Vietnam	A water law has not been established. River management is conducted based on a decree on flood and typhoon damage protection and a decree on river embankment.
Laos	A draft of "Law on Water and Water Resources" has been prepared.

3.2.2 Drainage and Sewerage

At present, no law regulates domestic or industrial wastewater disposal to rivers or to sewerage systems.

In the Municipality of Phnom Penh, sewerage fee of 10% of water bill is collected from water users from 1997. The collected sewerage fee is paid from PPWSA to the account of MPP. This system has been started as one of conditionarities imposed by the ADB for the Loan No.1468. The MPP has requested the Government an approval for the collection of sewerage fee but the approval has not yet been released. The Government has authorized the MPP to collect sewerage fee and the MPP issued announce to the public.

There is no law that control the quality of domestic or industrial wastewater discharged to rivers or to sewerage systems.

Declaration states the connection to sewer. Drainage and Sewerage Division visits the site upon request from households and issue authorization to the connection to sewers. Connection without the license is strictly prohibited.

3.2.3 Law on Water Supply

Supply and consumption of potable water is declared by a decree, (Council of Ministers, No.32, December 31, 1987). Phnom Penh Water Supply Authority (PPWSA) is defined in this decree.

"Declaration on the Charge of Water Connection" (Municipality of Phnom Penh, No.178) is approved on October 22, 1997. According to the declaration, the house connection from the public main pipes to the water meters is the duty of PPWSA when the consumer

pays the subscription charges. In case of existing connection without meters, the connectors must pay additional subscription charges. PPWSA uses the subscription charges for buying materials and labor charges for house connections. The consumers have to get approvals of DPWT to break the road for their house connections.

All consumers of PPWSA must pay deposits for water consumption stipulated in sub-decree No.32 dated December 31, 1987 and in the notice of Phnom Penh Municipality No.633 dated November 3, 1993. Water tariff in the Municipality of Phnom Penh is shown in the following table.

Water Tariff in MPP

Category	Consumption volume (m ³ /month)	Charge (Riels/m ³)
Domestic	0-15	300
	15-30	620
	31-100	940
	101<	1,260
Public Office		940
Commercial/Industrial	0-100	940
	101-200	1,260
	201-500	1,580
	501<	1,900

Source: Phnom Penh Water Supply Authority

3.2.4 Urban Planning and Development

The National Assembly adopted "Law on the Country Planning, Urbanization and Construction" on May 24, 1994. The law is called as CNATUC Law.

The objective of the law is to promote the organization and embellishment of the urban and rural areas throughout the country with the purpose of assuring the development of this country in the spirit of:

- Respecting both common and individual interests, private rights, observing laws and regulations, and overseeing on the construction matters;
- Assuring through the development process an equilibrium between the cities/ towns and rural areas based on their geographical conditions and special characteristics; and,
- Assuring the value of natural and cultural wealth, ensuring the development of the economic and tourist sectors and maintaining the quality of the environment.

The Law is based on the ownership titles as provided in the present Land Law.

The Land Law is established in 1992 under UNTAC. The Government of Cambodia does not recognize any form of land ownership or land rights predating 1979. Both private and communal property rights exist in Cambodia. The 1992 Land Law recognizes the following rights; proprietorship, temporary possession, authorization to cultivate land, franchise, usufruct, right of use and stay, succession, easement, and secured loan on real estate and mortgage. Land proprietorship (freehold tenure) is only applicable to residential land.

Land Acquisition Law is presently under process.

“Sub-decree on Construction Permit” essentially serves as a site-specific control on new construction to ensure all future development meets appropriate standards. It establishes basic guidelines to control and limit development in urban areas as per the CNATUC legislation.

Land observation is conducted by sub-district (sangkat) and commune (phums) under the Municipality of Phnom Penh

3.2.5 Environment

Law on Environmental Protection and Natural Resources Management

Law on Environmental Protection and Natural Resources Management (EPNRM) was established in 1996 with the following purposes:

- To protect and promote environmental quality and public health through the prevention, reduction, and control of pollution;
- To assess the environmental impacts of all proposed projects prior to the issuance of the decision by the Royal Government;
- To ensure the rational and sustainable conservation, development, management and, use of the natural resources of the Kingdom of Cambodia;
- To encourage and enable the public to participate in environmental protection and natural resource management; and,
- To suppress any acts that cause harm to the environment.

Royal Decree on the Protection of Natural Areas

Royal Decree on the Protection of Natural Areas, November 1, 1993 declares the responsibility for the protection of natural areas. The Secretariat of Environment is responsible for managing and supervising the development and protection of natural areas. The decree declares Natural Parks, Wildlife Preserves, Protected scenic view areas, and Multi purposed areas.

The Creation and Designation of Natural Areas Sub-Decree, 1996

This designated a system of national parks, wildlife sanctuaries, protected landscapes and multi-use management areas (MMAs). No MMAs are as yet designated in or around Phnom Penh City.

The Environmental Impact Assessment Sub-decree

This is still in draft form, awaiting approval by the Council of Ministers. It supports the EPNRM law by providing implementing regulations associated with environmental impact assessment.

3.2.6 Technical Regulations and Guidelines

Technical regulations and guidelines, and design criteria have poorly been prepared. In the case of technical assistance from foreign countries, it is common to apply technical regulations and guidelines of the donor countries.