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MINISTRY OF ECONOMIC PLANNING  
GOVERNMENT OF THE REPUBLIC OF GHANA

FEASIBILITY REPORT  
ON THE AVEYIME SUGAR PRODUCTION  
PROJECT IN ACCRA PLAINS

DRAWINGS

JUNE 1976

JAPAN INTERNATIONAL COOPERATION AGENCY

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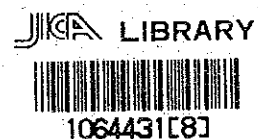
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JUNE 1976

国際協力事業団	
受入 月日 84. 9. 13	L512
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JAPAN INTERNATIONAL COOPERATION AGENCY

AVEYIME SUGAR PRODUCTION PROJECT

LIST OF DRAWINGS

PLATE NO.	DRAWING NO.	TITLE	PLATE NO.	DRAWING NO.	TITLE
1	000-01	LOCATION MAP & GENERAL LAYOUT			ROADS & DRAINAGE CANALS
2	000-02	SOIL MAP	24	300-01	TYPICAL SECTIONS OF ROADS & DRAINAGE CANALS
3	000-03	LAND CAPABILITY MAP			RELATED STRUCTURES
4	000-04	LAND USE MAP	25	400-01	TYPICAL TURNOUTS
5	000-05	GENERAL PLAN, BLOCK 1	26	400-02	TYPICAL SYPHONS
6	000-06	" 2	27	400-03	TYPICAL CULVERTS, SIDE SPILLWAYS & WASTEWAYS
7	000-07	" 3	28	400-04	TYPICAL CROSS REGULATORS & DROPS
8	000-08	" 4	29	400-05	TYPICAL CROSS DRAINS & DRAIN CULVERT
9	000-09	" 5	30	400-06	TYPICAL BRIDGES
10	000-10	" 6	31	400-07	TYPICAL FARM POND
11	000-11	" 7	32	400-08	FIELD LAYOUT FOR STANDARD FARM
12	000-12	POWER SUPPLY SYSTEM MAP			GATE STRUCTURES
		IRRIGATION CANALS	33	500-01	NO. 1 GATE
13	100-01	PLAN, PROFILE & TYPICAL SECTION OF HEAD RACE	34	500-02	NO. 2 GATE
14	100-02	PROFILE OF MAIN & SECONDARY IRRIGATION CANALS (1)			PILOT FARM
15	100-03	" (2)			
16	100-04	" (3)	35	600-01	GENERAL PLAN OF PILOT FARM
17	100-05	" (4)			SUGAR PLANT
18	100-06	" (5)	36	700-01	GENERAL PLAN OF SUGAR PLANT
19	100-07	" (6)	37	700-02	GENERAL LAYOUT OF SUGAR PLANT (1)
20	100-08	TYPICAL SECTIONS OF IRRIGATION CANALS	38	700-03	" (2)
		PUMPING STATIONS	39	700-04	OUTLINE OF PROCESS
21	200-01	NO. 1 PUMPING STATION	40	700-05	NO. 9 PUMPING STATION
22	200-02	NO. 2 "			
23	200-03	NO. 3, 4, 5, 6, 7 & 8 PUMPING STATIONS			

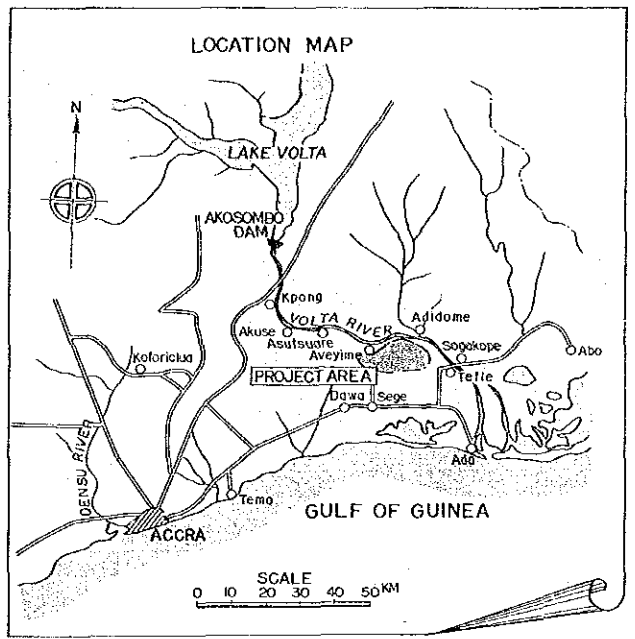
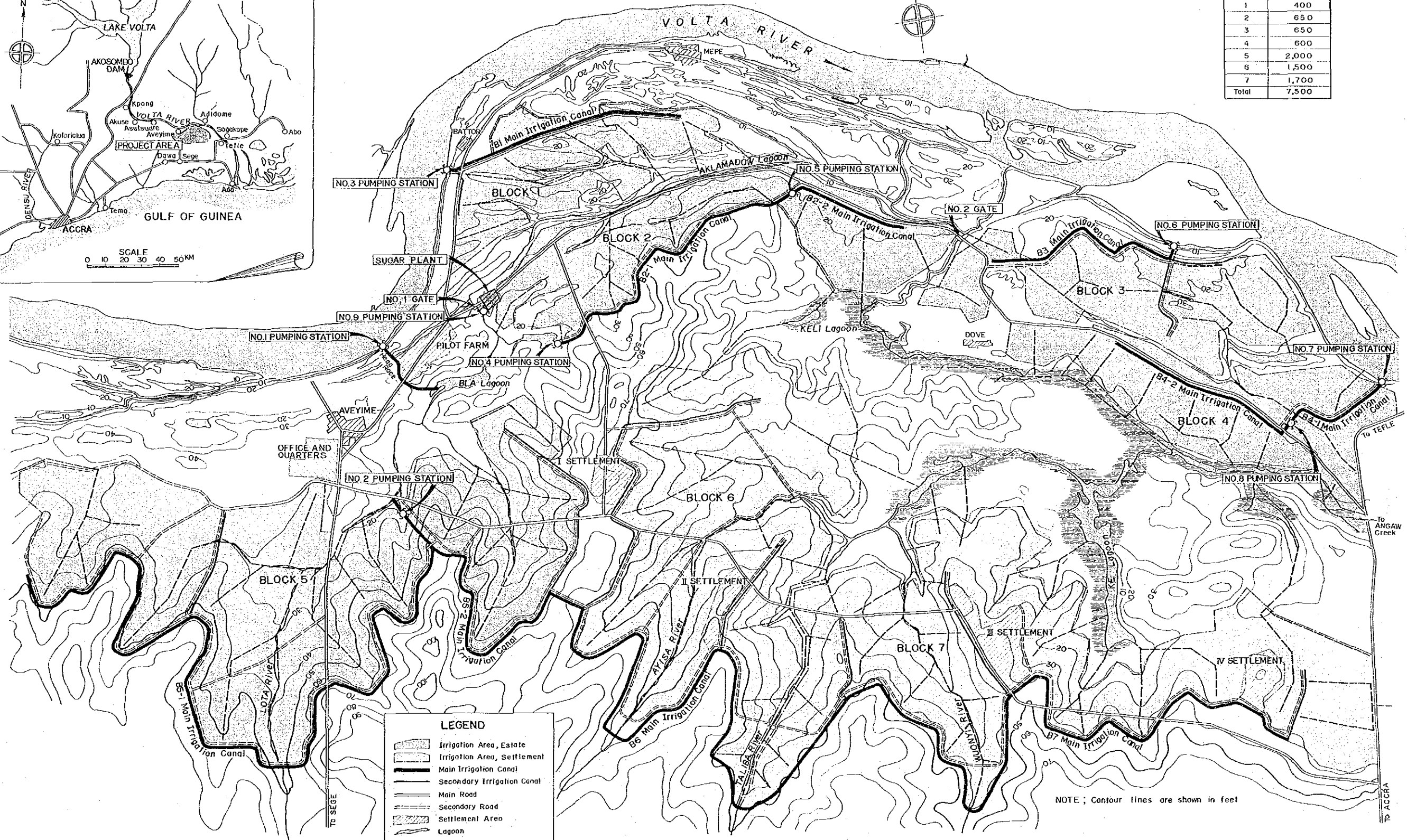


TABLE OF NET IRRIGABLE AREA

BLOCK	AREA (Hectare)
1	400
2	650
3	650
4	600
5	2,000
6	1,500
7	1,700
Total	7,500



**LEGEND**

- Irrigation Area, Estate
- Irrigation Area, Settlement
- Main Irrigation Canal
- Secondary Irrigation Canal
- Main Road
- Secondary Road
- Settlement Area
- Lagoon
- River
- Pumping Station
- Drainage Canal
- Swamp

NOTE: Contour lines are shown in feet

PREPARED <i>D. Yama</i>	MINISTRY OF ECONOMIC PLANNING	TITLE OF DRAWING	APPROVED
CHECKED <i>S. Saha</i>	GOVERNMENT OF THE REPUBLIC OF GHANA	LOCATION MAP & GENERAL LAYOUT	DATE
SUBMITTED <i>J. Kumar</i>	AVEYIME SUGAR PRODUCTION PROJECT	DWG. NO. 000-01	NIPPON KOEI CO., LTD. CONSULTING ENGINEERS, TOKYO
DATE DEL 1 1975			

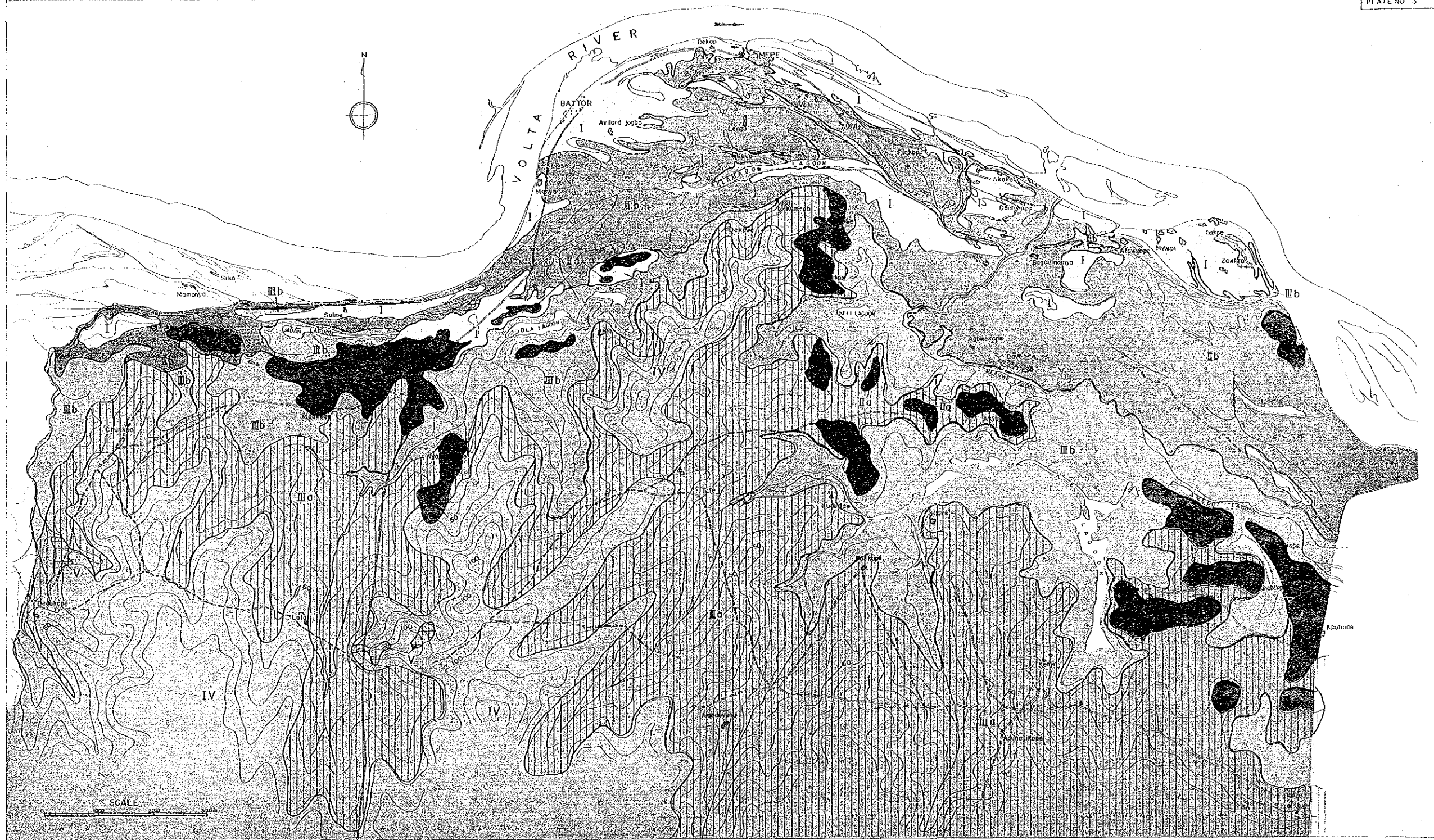


LEGEND

GREAT SOIL GROUP	SOIL SERIES	MAP UNIT	SOIL TYPE	SOIL PHASE	GREAT SOIL GROUP	SOIL SERIES	MAP UNIT	SOIL TYPE	SOIL PHASE	GREAT SOIL GROUP	SOIL SERIES	MAP UNIT	SOIL TYPE	SOIL PHASE
Acid gleisols	HAKA		1 Sandy surface - light clayey subsoil type	A. Deep, well drained, nearly flat lowland phase.	Acid gleisols	CHACHI-WERE	7 Sandy surface - sandy subsoil type	I. Deep, well drained, easily tillable, very gently sloping natural levee phase	J. Deep, well drained, easily tillable, gently sloping natural levee phase	Tropical grey earth	AGAVIWA	13 Sandy surface loamy subsoil type.	P Moderately deep, moderately well drained, very gently sloping upland phase	O Moderately deep, moderately well drained, gently sloping upland phase
			2 Clayey surface - sandy subsoil type	B. Deep, moderately well drained, nearly flat lowland phase.	Savannah ochrosols	AVEYIME	8 Sandy surface - loamy subsoil type	K. Deep, well drained, nearly flat slightly elevated lowland phase	L. Deep, moderately well drained, nearly flat slightly elevated lowland phase	Regosolic ground water laterites	DOYUMU	14 Sandy surface gravelly loam subsoil type.	R Deep, moderately well drained, easily tillable, very gently sloping upland phase.	S Deep, moderately well drained, easily tillable, gently sloping upland phase.
			3 Sandy surface - sandy subsoil type	C. Deep, moderately to well drained, nearly flat lowland phase.		ZIPA	9 Loamy surface - loamy subsoil type	M. Deep, well drained, mottled, nearly flat elevated lowland phase	N. Deep, moderately well drained, mottled, nearly flat elevated lowland phase.				T Deep, moderately well drained, usually rocky very gently sloping upland phase	
	AMO		4 Loamy surface - clayey subsoil type	D. Deep, imperfectly drained, flat lowland phase.			10 Sandy surface - loamy subsoil type							
			5 Silty clay surface - clayey subsoil type	E. Deep, poorly drained, flat lowland phase.	Tropical grey earth	AGAVIWA	11 Loamy surface - loamy subsoil type							
	TEFLE		6 Clayey surface - clayey subsoil type.	F. Deep, very poorly drained, severely floodable, flat lowest land phase			12 Sandy surface - clay pan type.							
				G. Deep, very poorly drained, slightly floodable, gently sloping lowland phase										
				H. Deep, very poorly drained, moderately floodable, flat lowland phase										

Remarks  
T rock outcrops

PREPARED <i>K. Osei</i>	MINISTRY OF ECONOMIC PLANNING GOVERNMENT OF THE REPUBLIC OF GHANA	TITLE OF DRAWING <b>SOIL MAP</b>	APPROVED
CHECKED <i>N. Ariga</i>		DWG NO 000-02	DATE
SUBMITTED <i>J. Kuma</i>	AVEYIME SUGAR PRODUCTION PROJECT	NIPPON KOEI CO., LTD CONSULTING ENGINEERS, TOKYO	
DATE JUL 1 1973			



**LEGEND**

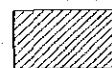







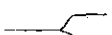
MAP UNIT	CLASS	DESCRIPTION
	CLASS I	Very suitable for irrigation farming. Deep, moderately to well drained, light to medium textured, slight problems of flooding, easily tillable, relatively rich fertility, fairly good irrigability, no erodibility. High productivities are got by proper management.
	CLASS IIa	Moderately suitable for irrigation farming. Deep, well drained light to medium textured, no problems of flooding, easily tillable, rather low fertility, fairly good irrigability, no erodibility.
	CLASS IIb	Moderately suitable for irrigation farming. Deep imperfectly to poorly drained, medium to fine textured, frequently flooded, uneasily tillable, fertile, good irrigability, no erodibility.
	CLASS IIIa	Fairly suitable for irrigation farming. Compact, shallow impermeable layer, unfavourable tillability, no problems of flooding, slight problems of erodibility, moderate irrigability, poor fertility.

MAP UNIT	CLASS	DESCRIPTION
	CLASS IIIb	Fairly suitable for irrigation farming. Deep, very poorly drained, fine textured, rich fertility, severe problems of annual flooding, unfavourable tillability, good irrigability, no erodibility.
	CLASS IV	Usable for irrigation farming. Deep, moderately well drained, light to medium textured, no problems of flooding, severe erodibility, easily tillable, low fertility, unfavourable irrigability.
	CLASS V	Unavailable for irrigation farming, usable for recreation, source of construction materials etc.

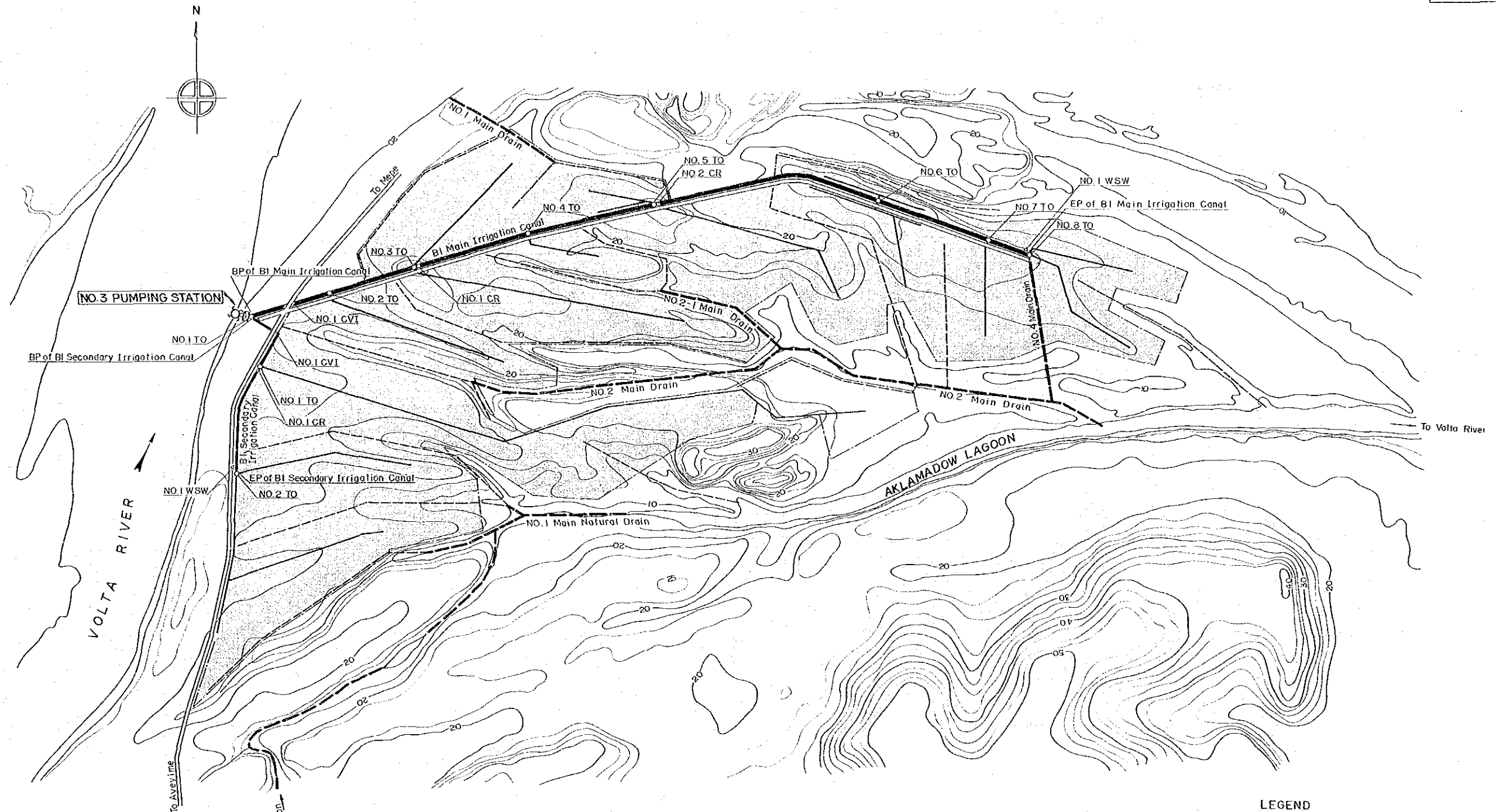
PREPARED <i>K. Osei</i>	MINISTRY OF ECONOMIC PLANNING	TITLE OF DRAWING	APPROVED
CHECKED <i>N. Agye</i>	GOVERNMENT OF THE REPUBLIC OF GHANA	LAND CAPABILITY MAP	
SUBMITTED <i>J. Kuma</i>			DATE
DATE DEC 1 1975	AVEYIME SUGAR PRODUCTION PROJECT	DWG. NO. 000-03	NIPPON KOEI CO., LTD. CONSULTING ENGINEERS, TOKYO



**LEGEND**

- |   |   |   |                   |   |            |
|---|---|---|-------------------|---|------------|
|  | Settlement & Associated Non-agricultural Land |  | Scrub & Grassland |  | Footpath   |
|  | Densely Cultivated Land                       |  | Forest            |  | Paved Road |
|  | Variable Mixture of Cultivation & Fallow      |  | Marshy Land       |  | River      |

PREPARED <i>R. Onye</i>	MINISTRY OF ECONOMIC PLANNING	TITLE OF DRAWING	APPROVED
CHECKED <i>M. Ariga</i>	GOVERNMENT OF THE REPUBLIC OF GHANA	LAND USE MAP	DATE
SUBMITTED <i>J. Kuma</i>	AVEYIME SUGAR PRODUCTION PROJECT	DWG. NO.	
DATE DEC 1 1975		000-04	NIPPON KOGI CO., LTD CONSULTING ENGINEERS, TOKYO



CANAL	TURNOUT	IRRIGABLE AREA (HA)	REMARKS
BI M.C.	NO. 1	154	turnout for BI S.C
	* 2	24	
	* 3	7.1	
	* 4	12	
	* 5	58	
	* 6	30	
	* 7	20	
	* 8	31	
BI S.C.	* 1	89	
	* 2	65	
Total		400	
Total Main canal length			4.0 KM
Total Secondary canal length			0.6 *
Total Distribution canal length			13.6 *

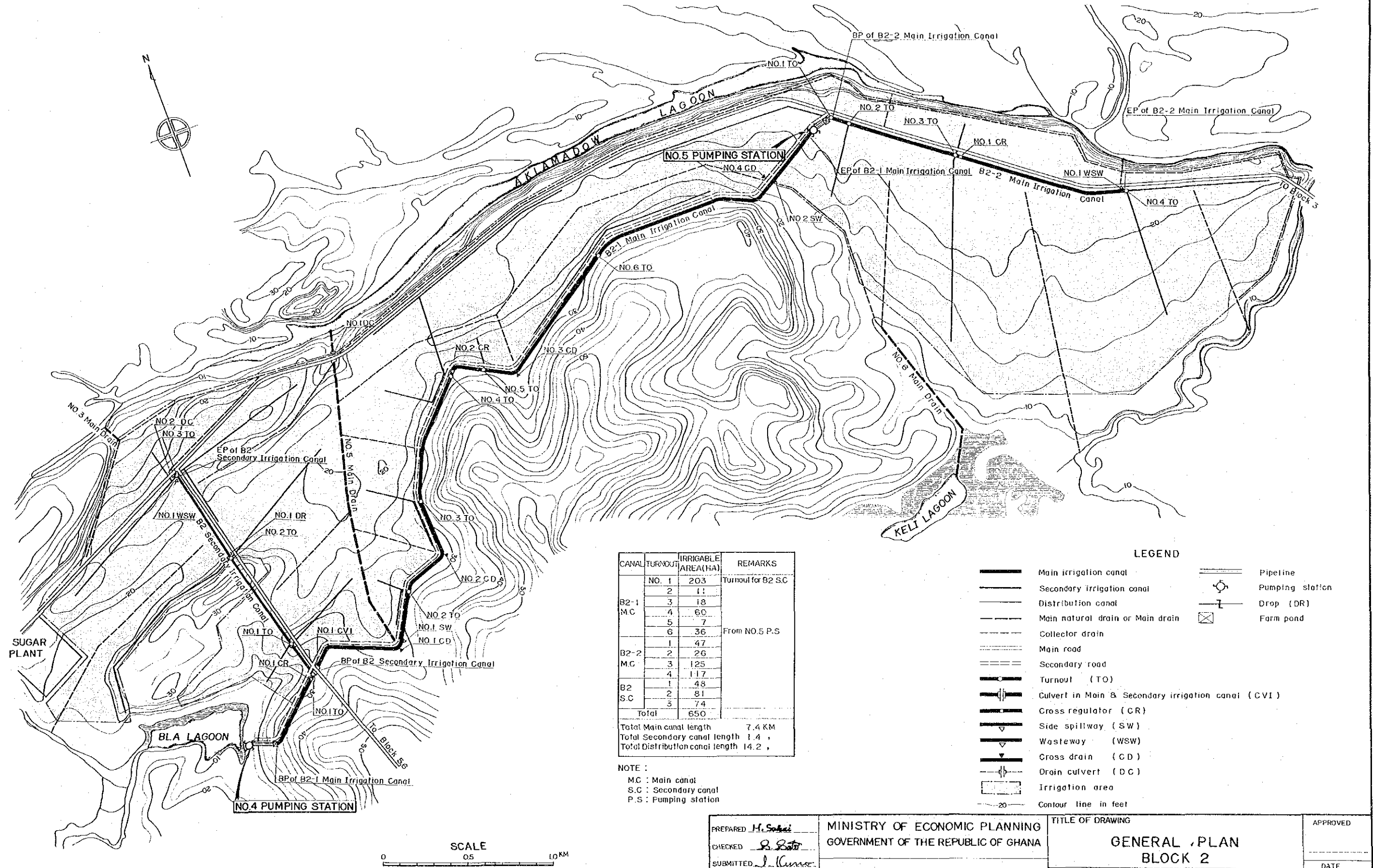
NOTE :  
 M.C : Main canal  
 S.C : Secondary canal

**LEGEND**

- Main irrigation canal
- Secondary irrigation canal
- Distribution canal
- Main natural drain or Main drain
- Collector drain
- Main road
- Turnout (TO)
- Culvert in Main & Secondary irrigation canal (CVI)
- Cross regulator (CR)
- Wasteway (WSW)
- Contour line in feet
- Irrigation area
- Pipeline
- Pumping station
- Farm pond

PREPARED <u>H. Sanni</u>	MINISTRY OF ECONOMIC PLANNING GOVERNMENT OF THE REPUBLIC OF GHANA	TITLE OF DRAWING		APPROVED
CHECKED <u>S. Sato</u>		GENERAL PLAN BLOCK 1		DATE
SUBMITTED <u>J. Kuma</u>	AVEYIME SUGAR PRODUCTION PROJECT			DWG. NO. 000-05
DATE <u>DEC 1 1965</u>				





CANAL	TURNOUT	IRRIGABLE AREA (HA)	REMARKS
B2-1 M.C.	NO. 1	203	Turnout for B2 S.C.  From NO. 5 P.S.
	2	11	
	3	18	
	4	60	
	5	7	
	6	36	
B2-2 M.C.	1	47	
	2	26	
	3	125	
B2 S.C.	1	48	
	2	81	
	3	74	
Total		650	
Total Main canal length			7.4 KM
Total Secondary canal length			1.4
Total Distribution canal length			14.2

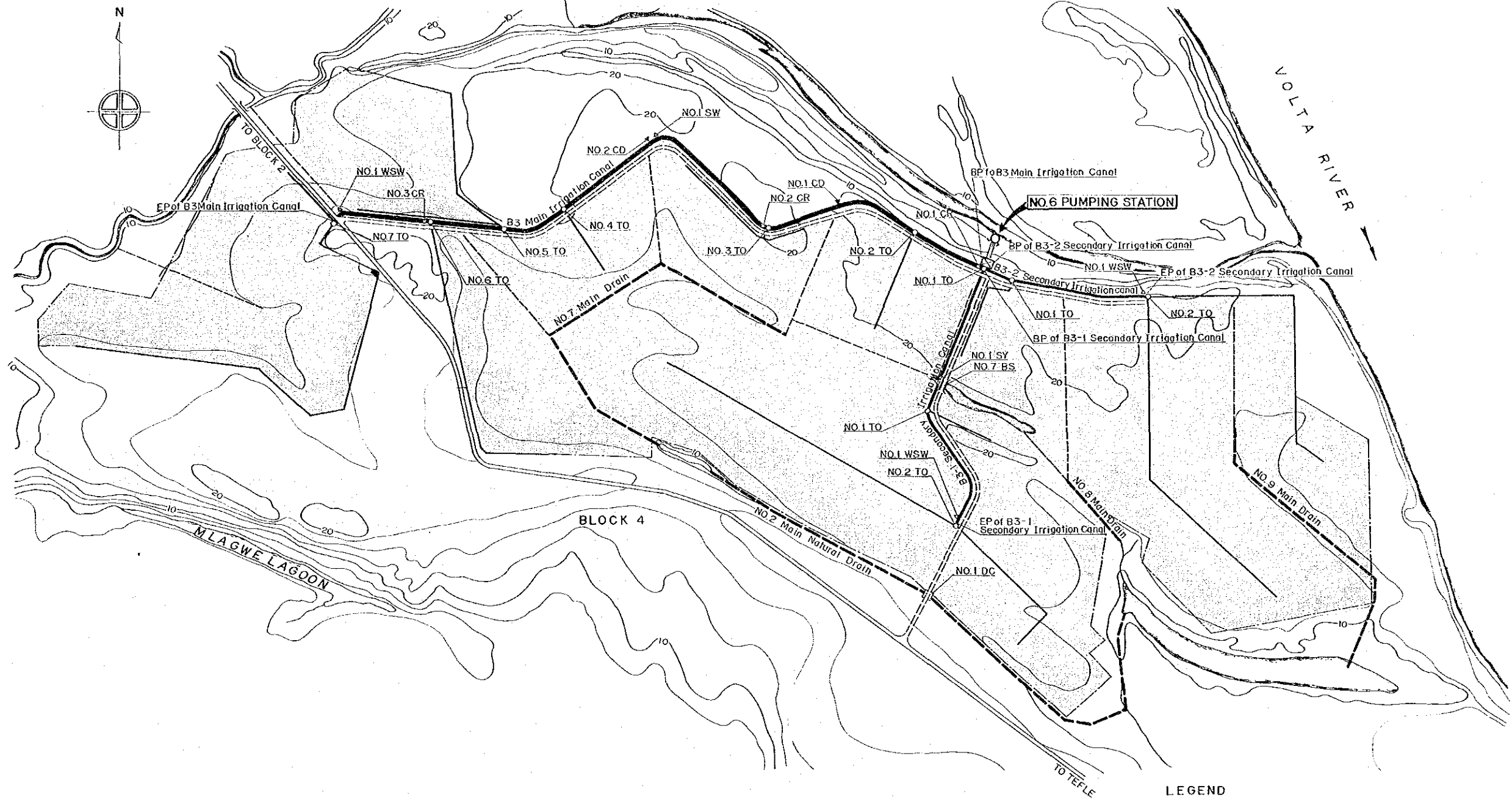
NOTE :  
 M.C : Main canal  
 S.C : Secondary canal  
 P.S : Pumping station

LEGEND

- Main irrigation canal
- Secondary irrigation canal
- Distribution canal
- Main natural drain or Main drain
- Collector drain
- Main road
- Secondary road
- Turnout (TO)
- Culvert in Main & Secondary irrigation canal (CVI)
- Cross regulator (CR)
- Side spillway (SW)
- Wasteway (WSW)
- Cross drain (CD)
- Drain culvert (DC)
- Irrigation area
- Contour line in feet
- Pipeline
- Pumping station
- Drop (DR)
- Farm pond

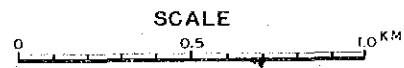


PREPARED <i>H. Saka</i>	MINISTRY OF ECONOMIC PLANNING GOVERNMENT OF THE REPUBLIC OF GHANA	TITLE OF DRAWING		APPROVED
CHECKED <i>P. B. B.</i>		GENERAL PLAN BLOCK 2		
SUBMITTED <i>J. K.</i>	AVEYIME SUGAR PRODUCTION PROJECT	DWG. NO.	NIPPON KOEI CO., LTD. CONSULTING ENGINEERS, TOKYO	DATE
DATE <i>DEC 1 1975</i>		000-06		



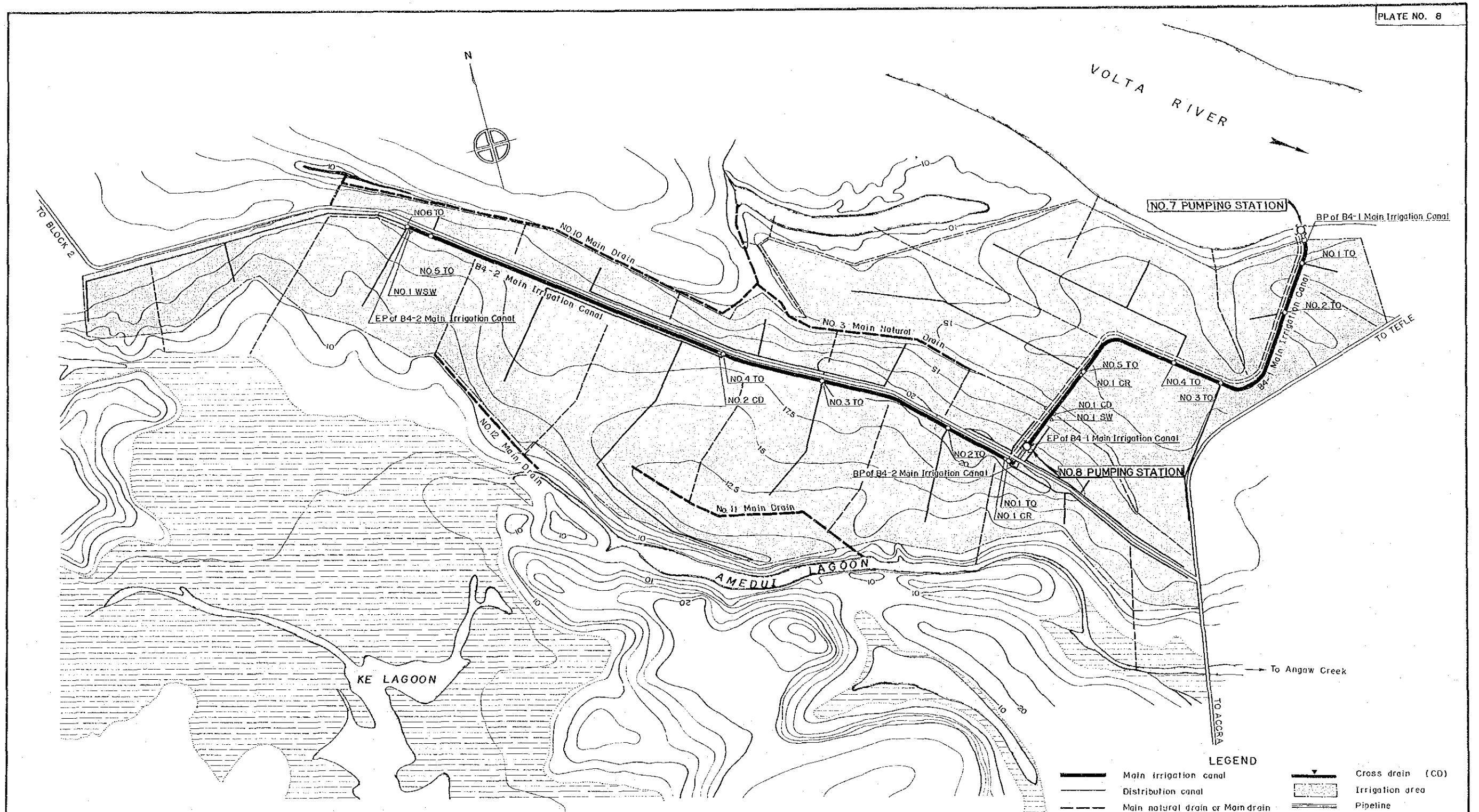
CANAL	TURNOUT	IRRIGABLE AREA (HA)	REMARKS
B3 MC	NO. 1	395	Turnout for B3-1 & B32 S.C
	2	39	
	3	30	
	4	30	
	5	35	
	6	40	
	7	81	
B3-1	1	25	
S.C	2	166	
B3-2	1	21	
S.C	2	183	
Total		650	
Total Main canal length			3.6 KM
Total Secondary canal length			2.2 "
Total Distribution canal length			19.3 "

NOTE:  
M.C : Main canal  
S.C : Secondary canal



- LEGEND**
- Main irrigation canal
  - Secondary irrigation canal
  - Distribution canal
  - Main natural drain or Main drain
  - Main road
  - Secondary road
  - Turnout (TO)
  - Syphon (SY)
  - Cross regulator (CR)
  - Side spillway (SW)
  - Wasteway (WSW)
  - Bridge (BM or BS)
  - Cross drain (CD)
  - Drain culvert (DC)
  - Irrigation area
  - Pipeline
  - Pumping station
  - Farm pond
  - Contour line in feet

PREPARED <i>H. Sanni</i>	MINISTRY OF ECONOMIC PLANNING	TITLE OF DRAWING		APPROVED
CHECKED <i>B. Sanni</i>	GOVERNMENT OF THE REPUBLIC OF GHANA	GENERAL PLAN		
SUBMITTED <i>J. Kuma</i>		BLOCK 3		DATE
DATE 1975	AVEYIME SUGAR PRODUCTION PROJECT	DWG. NO. 000-07	NIPPON KOEI CO., LTD. CONSULTING ENGINEERS, TOKYO	

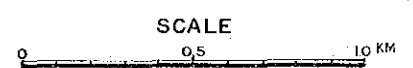


**LEGEND**

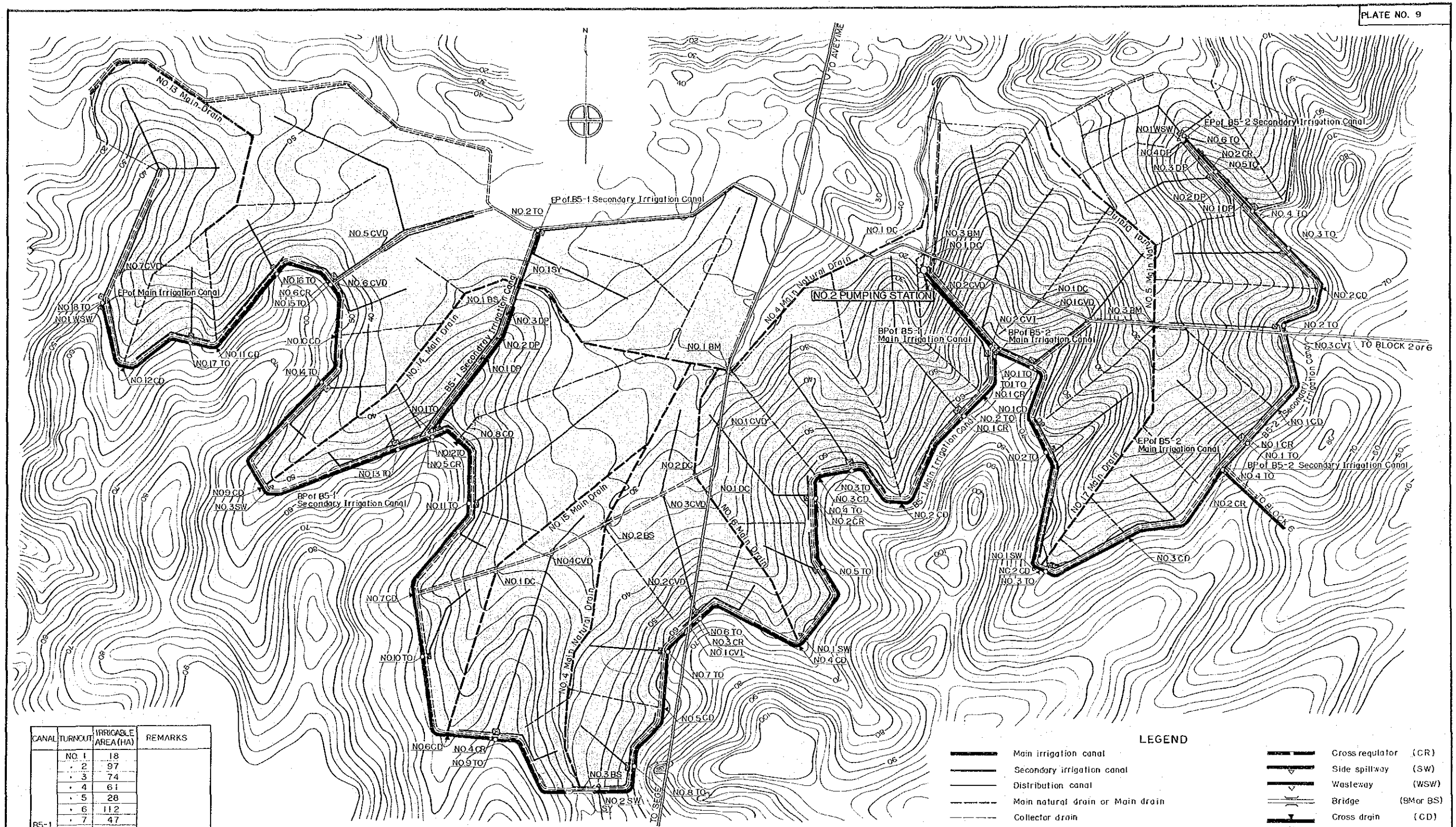
	Main irrigation canal		Cross drain (CD)
	Distribution canal		Irrigation area
	Main natural drain or Main drain		Pipeline
	Collector drain		Pumping station
	Main road		Farm pond
	Secondary road		Contour line in feet
	Turnout (TO)		
	Culvert in Main & Secondary irrigation canal		
	Cross regulator (CR)		
	Side splitway (SW)		
	Wasteway (WSW)		

CANAL	TURNOUT	IRRIGABLE AREA (HA)	REMARKS
B4-1 M.C	NO. 1	12	To NO. 8 P.S.
	2	19	
	3	34	
	4	20	
B4-2 M.C	5	57	
	1	57	
	2	37	
	3	97	
Total	4	123	
	5	17	
	6	77	
Total		600	
Total Main canal length		60 KM	
Total Secondary canal length			
Total Distribution canal length		21.3	

NOTE:  
M.C Main canal  
S.C Secondary canal  
P.S Pumping station



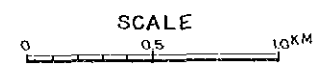
PREPARED <i>H. Sahai</i>	MINISTRY OF ECONOMIC PLANNING GOVERNMENT OF THE REPUBLIC OF GHANA	TITLE OF DRAWING		APPROVED
CHECKED <i>S. Saha</i>		GENERAL PLAN BLOCK 4		DATE
SUBMITTED <i>J. Kumar</i>	AVEYIME SUGAR PRODUCTION PROJECT			DWG. NO. 000-08
DATE DEC. 1 1975				



CANAL	TURNOUT	IRRIGABLE AREA (HA)	REMARKS
B5-1 M.C.	NO. 1	18	
	2	97	
	3	74	
	4	61	
	5	28	
	6	112	
	7	47	
	8	32	
	9	119	
	10	34	
	11	133	
	12	228	turnout for B5-1SC
	13	26	
	14	40	
	15	239	
	16	40	
	17	30	
	18	111	
B5-2 M.C.	1	203	
	2	56	
	3	37	
B5-1 S.C.	4	235	turnout for B5-2SC
	1	52	
S.C.	2	176	
	1	68	

CANAL	TURNOUT	IRRIGABLE AREA (HA)	REMARKS
B5-2 S.C.	NO. 2	28	
	3	29	
	4	17	
	5	53	
	6	40	
	Total		2000
Total Main canal length		20.4 KM	
Total Secondary canal length		5.2	
Total Distribution canal length		46.2	

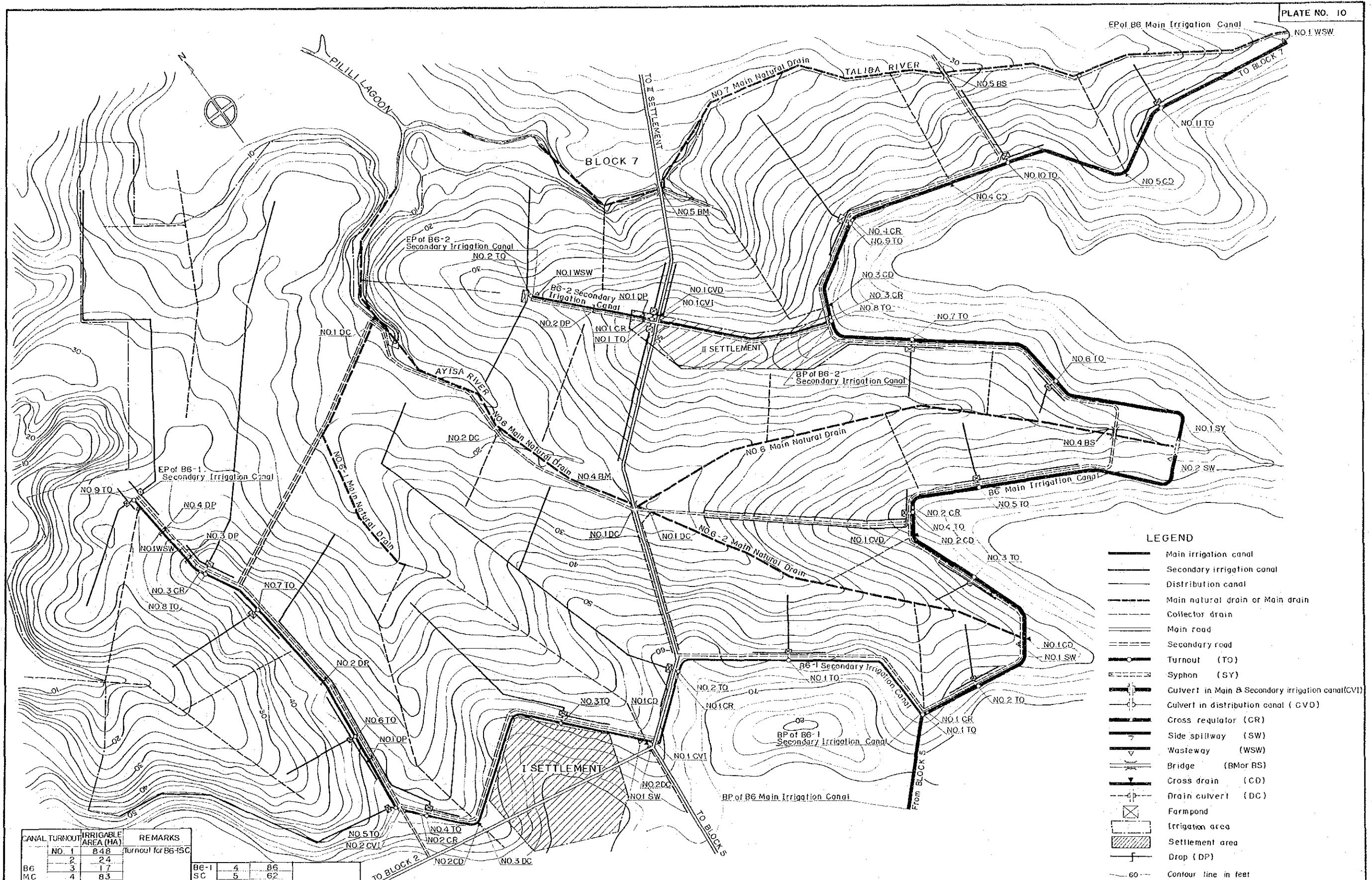
NOTE :  
M.C : Main canal  
S.C : Secondary canal  
P.S : Pumping station



**LEGEND**

- Main irrigation canal
- Secondary irrigation canal
- Distribution canal
- Main natural drain or Main drain
- Collector drain
- Main road
- Secondary road
- Turnout (TO)
- Syphon (SY)
- Culvert in Main & Secondary irrigation canal (CIV)
- Culvert in distribution canal (CVD)
- Contour line in feet
- Cross regulator (CR)
- Side spillway (SW)
- Wasteway (WSW)
- Bridge (BM or BS)
- Cross drain (CD)
- Drain culvert (DC)
- Farm pond
- Irrigation area
- Pumping station
- Drop (DR)
- Farm pond

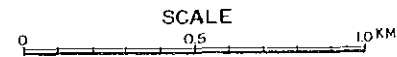
PREPARED <u>H. Sahai</u>	MINISTRY OF ECONOMIC PLANNING GOVERNMENT OF THE REPUBLIC OF GHANA	TITLE OF DRAWING		APPROVED
CHECKED <u>S. Saha</u>		GENERAL PLAN BLOCK 5		
SUBMITTED <u>J. Kumar</u>	AVEYIME SUGAR PRODUCTION PROJECT	DWG. NO.	NIPPON KOEI CO., LTD.	DATE
DATE		000-09	CONSULTING ENGINEERS, TOKYO	



CANAL	TURNOUT	IRRIGABLE AREA (HA)	REMARKS
B6 M.C.	NO. 1	8.48	Turnout for B6-1SC
	2	2.4	
	3	1.7	
	4	8.3	
	5	4.2	
	6	1.4	
	7	9.1	
	8	2.17	turnout for B6-2SC
	9	.99	
	10	.43	
	11	.22	To B7 M.C.
B6-1 S.C.	1	67	
	2	16.7	
	3	8.3	

B6-1 S.C.	4	86
	5	62
	6	39
	7	50
	8	166
	9	128
	1	125
	2	92
Total		1700
Total Main canal length		10.5 KM
Total Secondary canal length		8.4
Total Distribution canal length		27.2

NOTE:  
M.C.: Main canal  
S.C.: Secondary canal



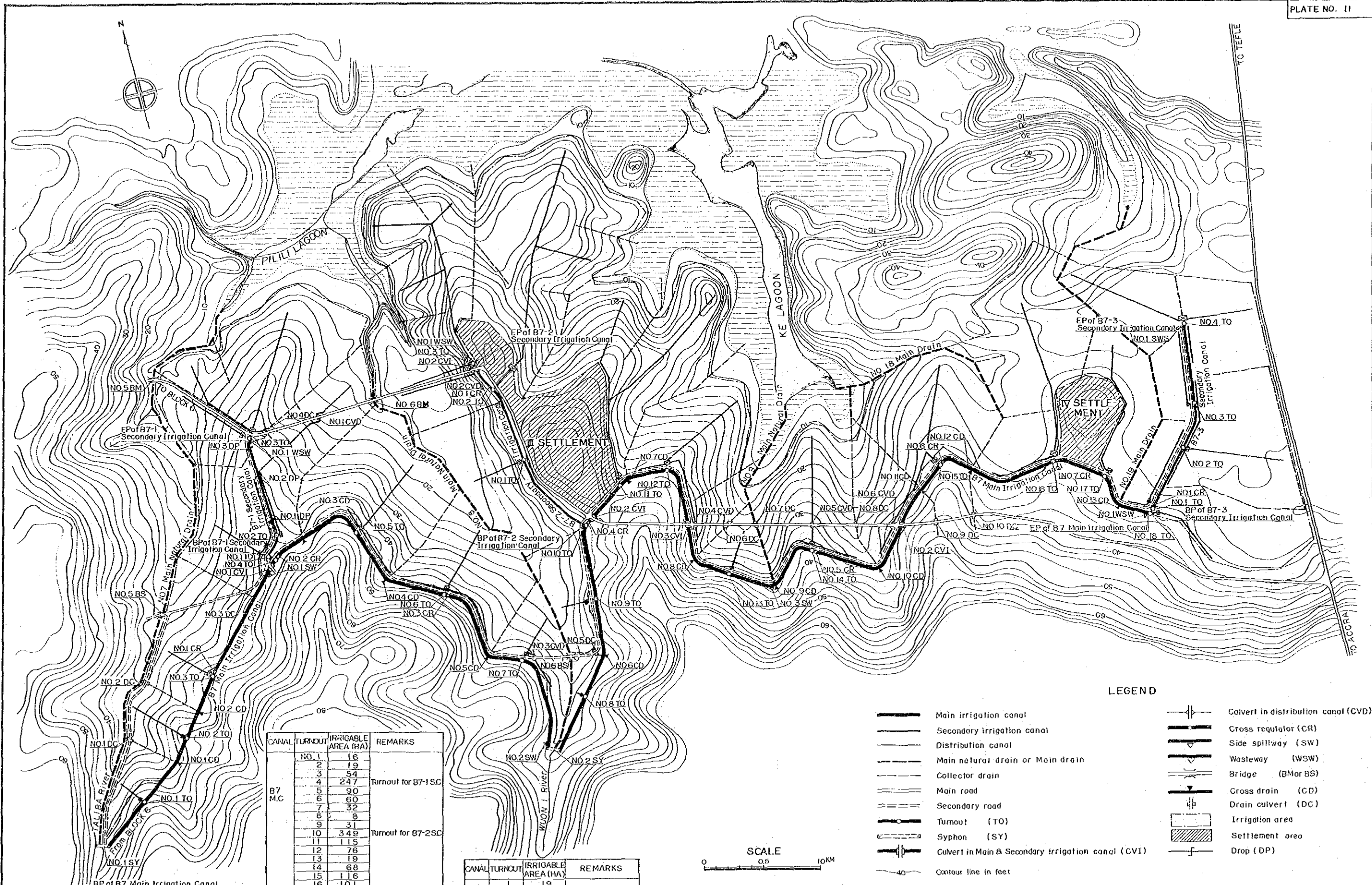
- LEGEND**
- Main irrigation canal
  - Secondary irrigation canal
  - Distribution canal
  - Main natural drain or Main drain
  - Collector drain
  - Main road
  - Secondary road
  - Turnout (TO)
  - ⊕ Syphon (SY)
  - |— Culvert in Main & Secondary irrigation canal (CVI)
  - |— Culvert in distribution canal (CVD)
  - |— Cross regulator (CR)
  - |— Side spillway (SW)
  - |— Wasteway (WSW)
  - |— Bridge (BM or BS)
  - |— Cross drain (CD)
  - |— Drain culvert (DC)
  - ⊗ Farmpond
  - ▭ Irrigation area
  - ▨ Settlement area
  - |— Drop (DP)
  - 60 — Contour line in feet

PREPARED H. Sobai  
CHECKED S. Pate  
SUBMITTED J. Kuro  
DATE DEC 1 1975

MINISTRY OF ECONOMIC PLANNING  
GOVERNMENT OF THE REPUBLIC OF GHANA  
AVEYIME SUGAR PRODUCTION PROJECT

TITLE OF DRAWING  
**GENERAL PLAN  
BLOCK 6**  
DWG. NO. 000-10  
NIPPON KOEI CO., LTD.  
CONSULTING ENGINEERS, TOKYO

APPROVED  
DATE



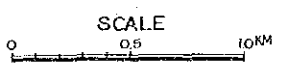
CANAL	TURNOUT	IRRIGABLE AREA (HA)	REMARKS
B7 M.C.	NO. 1	16	Turnout for B7-1SC
	2	19	
	3	54	
	4	247	
	5	90	
	6	60	
	7	32	
	8	8	
	9	31	
	10	349	Turnout for B7-2SC
	11	115	
	12	76	
	13	19	Turnout for B7-3SC
	14	68	
	15	116	
	16	101	
	17	43	
	18	256	
B7-1 S.C.	1	51	
	2	73	
	3	123	
B7-2 S.C.	1	65	
	2	147	
	3	137	

CANAL	TURNOUT	IRRIGABLE AREA (HA)	REMARKS
B7-3 S.C.	1	19	
	2	66	
	3	23	
	4	93	
Total		1500	
Total Main canal length			16.0 KM
Total Secondary canal length			4.6
Total Distribution canal length			31.6

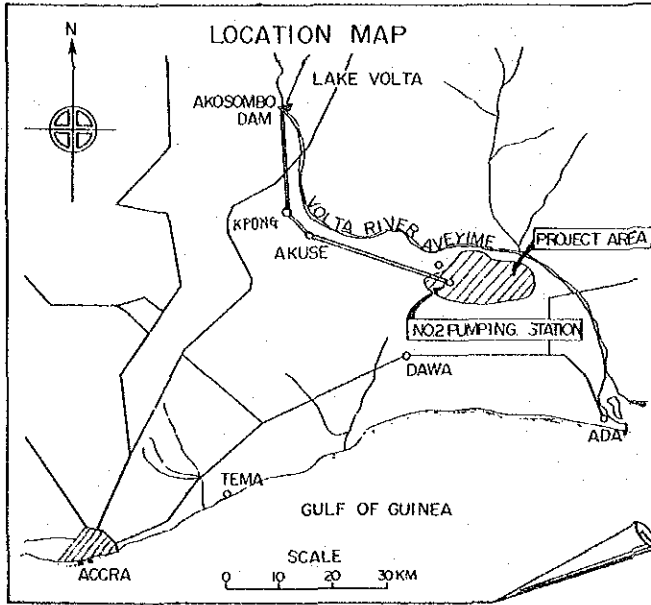
NOTE : M.C : Main canal  
S.C : Secondary canal

**LEGEND**

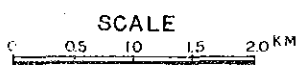
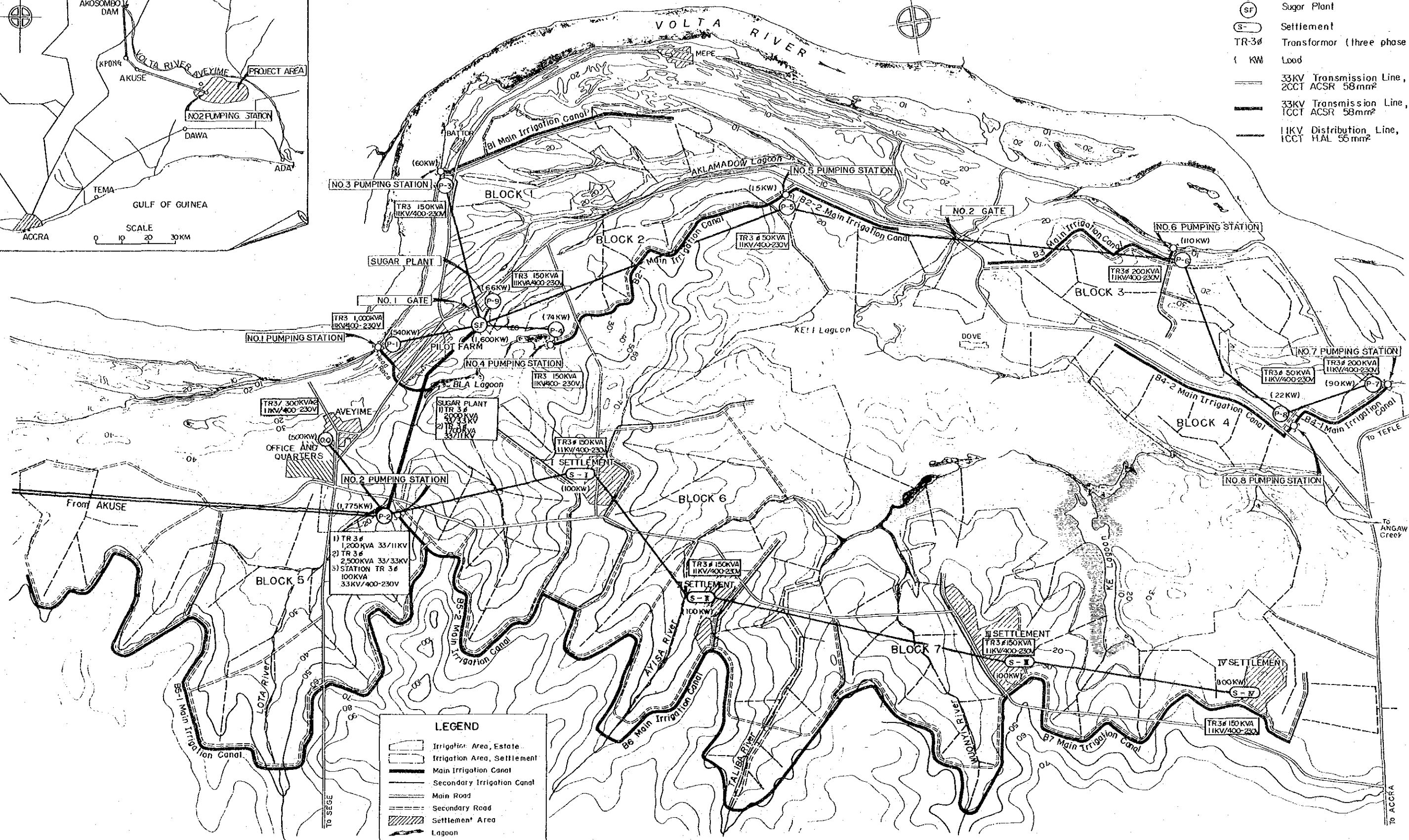
- Main irrigation canal
- Secondary irrigation canal
- Distribution canal
- Main natural drain or Main drain
- Collector drain
- Main road
- Secondary road
- Turnout (TO)
- Syphon (SY)
- Culvert in Main & Secondary irrigation canal (CVI)
- Culvert in distribution canal (CVD)
- Cross regulator (CR)
- Side spillway (SW)
- Wasteway (WSW)
- Bridge (BM or BS)
- Cross drain (CD)
- Drain culvert (DC)
- Irrigation area
- Settlement area
- Drop (DP)
- Contour line in feet



PREPARED: <i>H. S. Sani</i>	MINISTRY OF ECONOMIC PLANNING	TITLE OF DRAWING		APPROVED
CHECKED: <i>B. S. Sani</i>	GOVERNMENT OF THE REPUBLIC OF GHANA	GENERAL PLAN		
SUBMITTED: <i>J. K. Sani</i>		BLOCK 7		DATE
DATE: <i>10/1/60</i>	AVEYIME SUGAR PRODUCTION PROJECT	DWG. NO. 000-II	NIPPON KOEI CO., LTD. CONSULTING ENGINEERS, TOKYO	

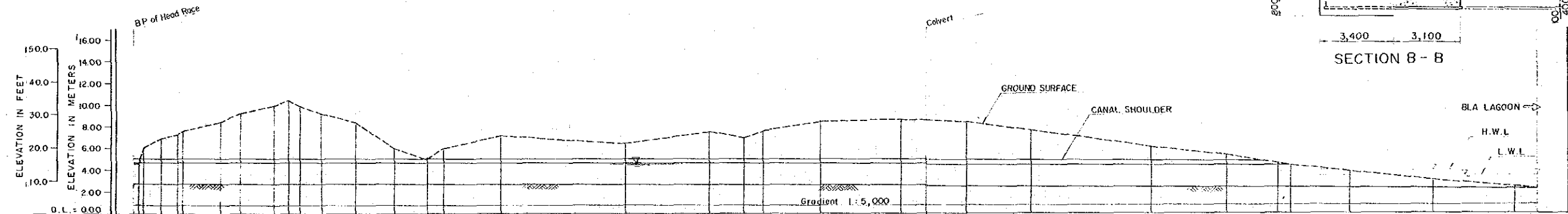
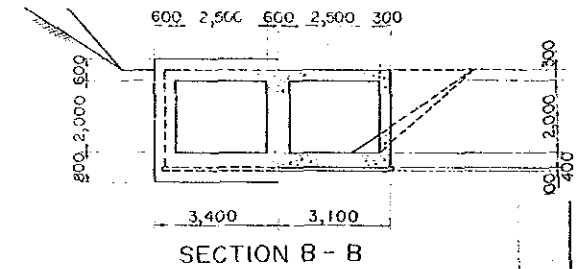
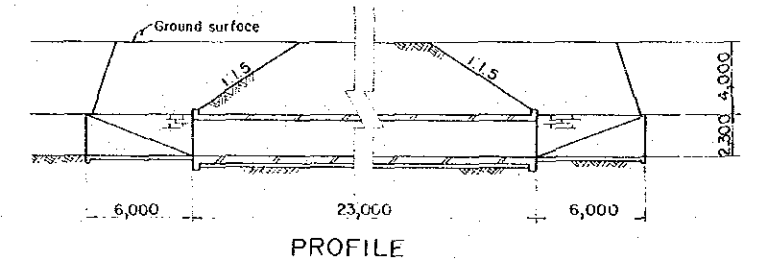
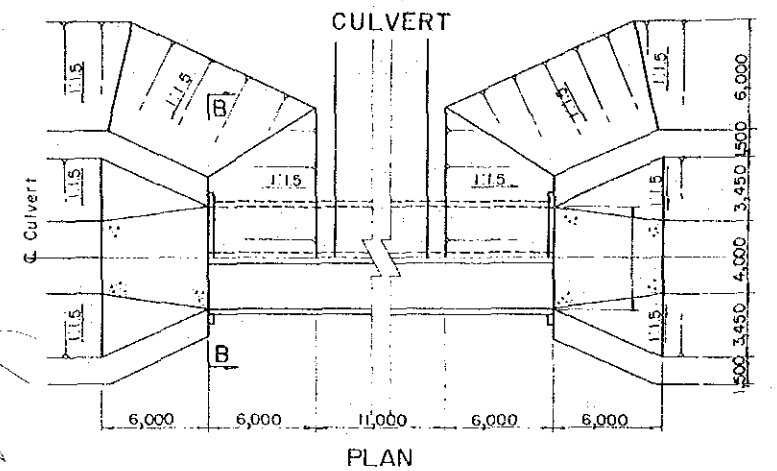
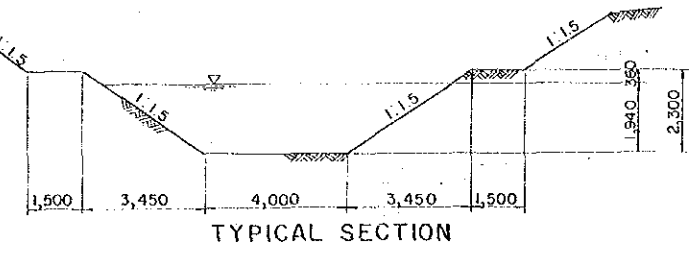
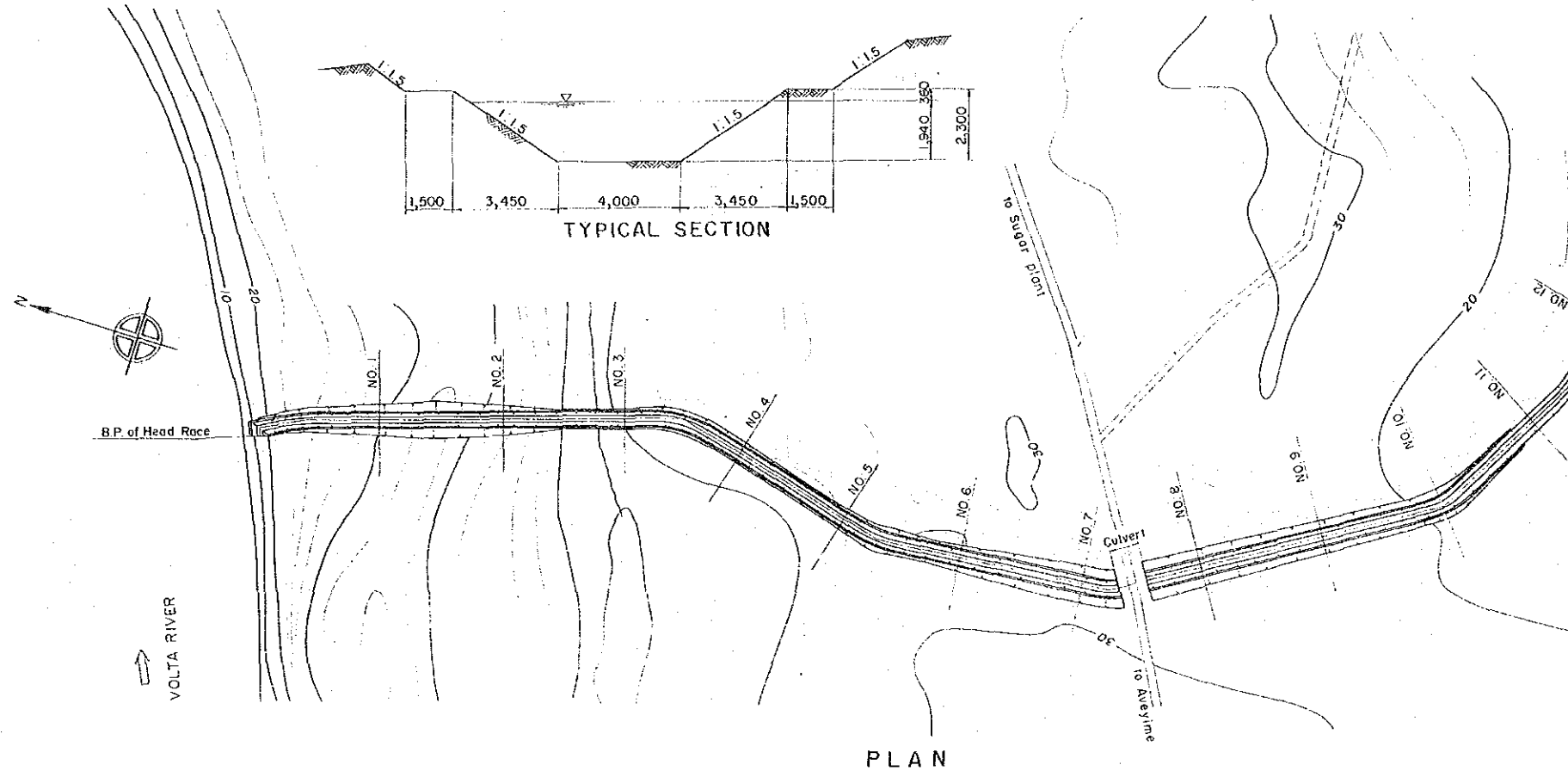


- LEGEND**
- (P) Pumping Station
  - (OO) Office & Quarters
  - (SF) Sugar Plant
  - (S-I) Settlement
  - TR-3φ Transformer (three phase)
  - ( KW Load
  - 33KV Transmission Line, 2CCT ACSR 58mm<sup>2</sup>
  - 33KV Transmission Line, 1CCT ACSR 58mm<sup>2</sup>
  - 11KV Distribution Line, 1CCT HAL 55mm<sup>2</sup>

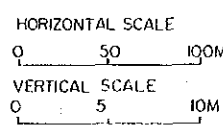


- LEGEND**
- Irrigation Area, Estate
  - Irrigation Area, Settlement
  - Main Irrigation Canal
  - Secondary Irrigation Canal
  - Main Road
  - Secondary Road
  - Settlement Area
  - Lagoon
  - River
  - Pumping Station
  - Drainage Canal
  - Swamp

PREPARED <i>H. Sabai</i>	MINISTRY OF ECONOMIC PLANNING GOVERNMENT OF THE REPUBLIC OF GHANA	TITLE OF DRAWING <b>POWER SUPPLY SYSTEM MAP</b>	APPROVED
CHECKED <i>S. Saha</i>		DWG. NO. 000-12	DATE
SUBMITTED <i>J. Kumar</i>	AVEYIME SUGAR PRODUCTION PROJECT	NIPPON KOEI CO., LTD. CONSULTING ENGINEERS, TOKYO	
DATE DEC 1 1975			



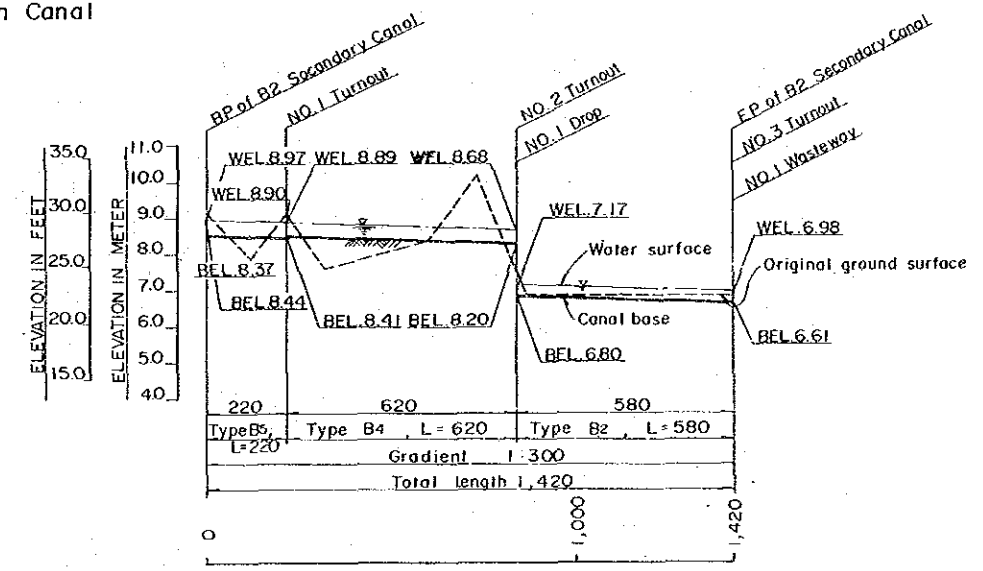
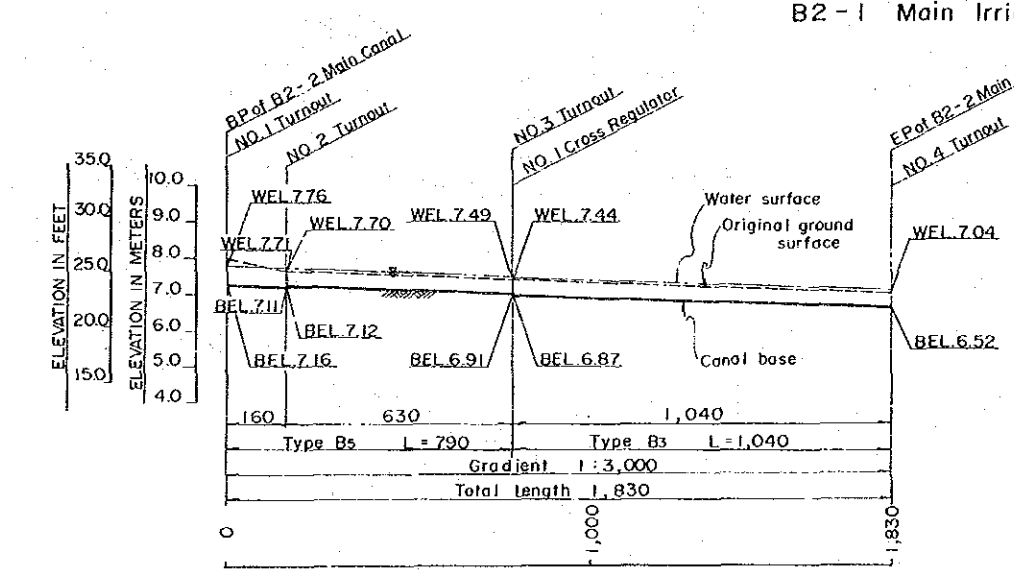
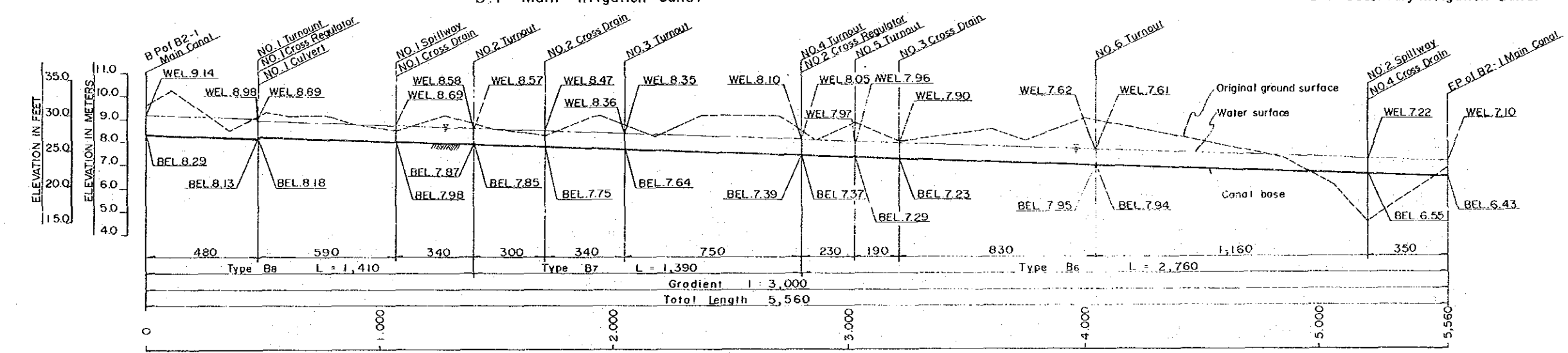
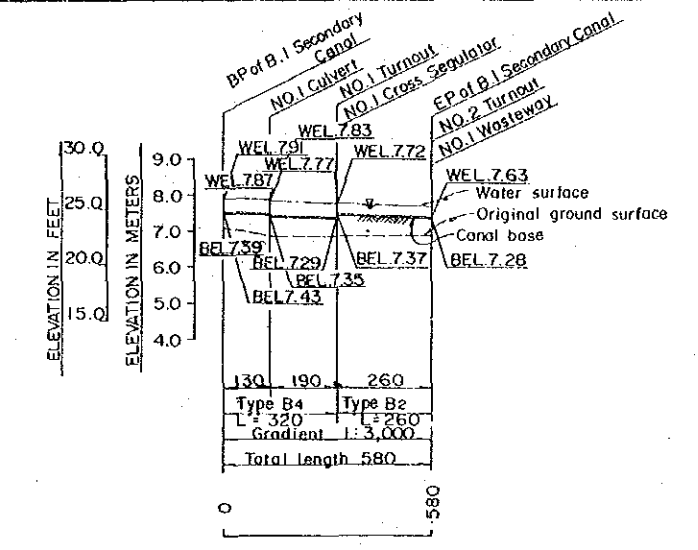
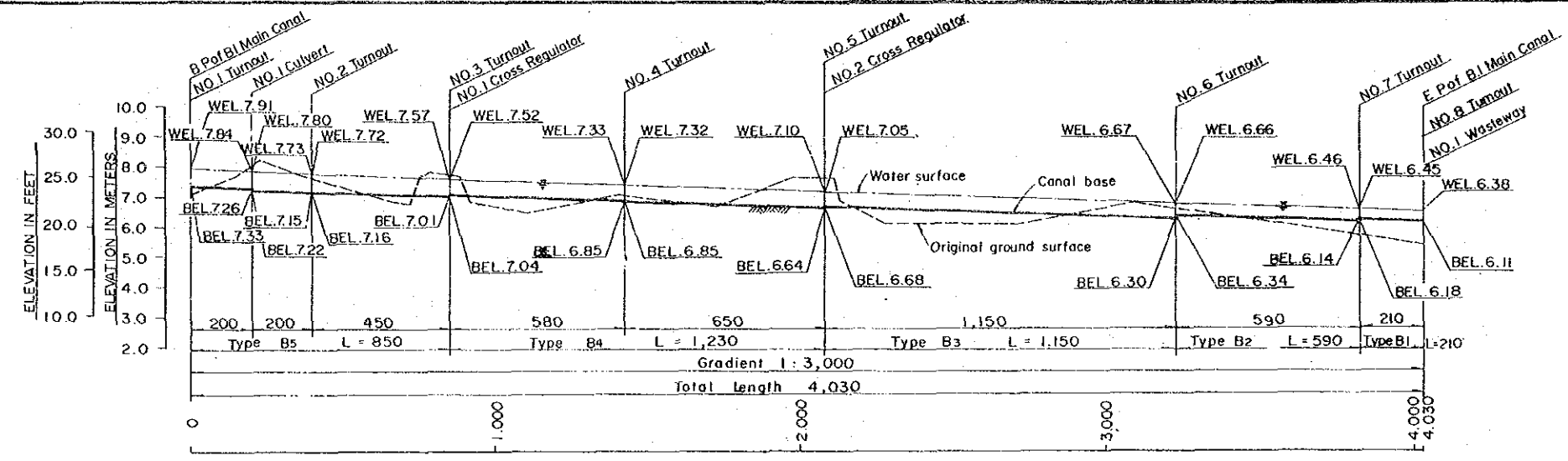
STATION NO.	0	1	2	3	4	5	6	7	8	9	10	11	12	13
CANAL BASE ELEVATION	2.76	2.76	2.74	2.73	2.73	2.70	2.69	2.67	2.65	2.65	2.62	2.55	2.48	2.44
WATER SURFACE ELEVATION	4.70	4.70	4.68	4.67	4.67	4.64	4.63	4.61	4.59	4.57	4.56	4.45	4.44	4.44
GROUND ELEVATION	4.58	4.58	4.39	4.31	4.27	4.00	3.90	3.80	3.63	3.39	3.50	3.34	3.18	2.88
REDUCED DISTANCE	0.00	5.00	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00	55.00	60.00	65.00
DISTANCE	0.00	16.00	26.00	36.00	46.00	56.00	66.00	76.00	86.00	96.00	106.00	116.00	126.00	136.00



NOTE: Contour lines are shown in feet

PREPARED <i>K. M. M.</i> CHECKED <i>S. B.</i> SUBMITTED <i>J. K.</i> DATE <b>DEC 1 1975</b>	MINISTRY OF ECONOMIC PLANNING GOVERNMENT OF THE REPUBLIC OF GHANA AVEYIME SUGAR PRODUCTION PROJECT	TITLE OF DRAWING IRRIGATION CANALS PLAN, PROFILE & TYPICAL SECTION OF HEAD RACE DWG. NO. 100-01 NIPPON KOEI CO., LTD CONSULTING ENGINEERS, TOKYO	APPROVED _____ DATE
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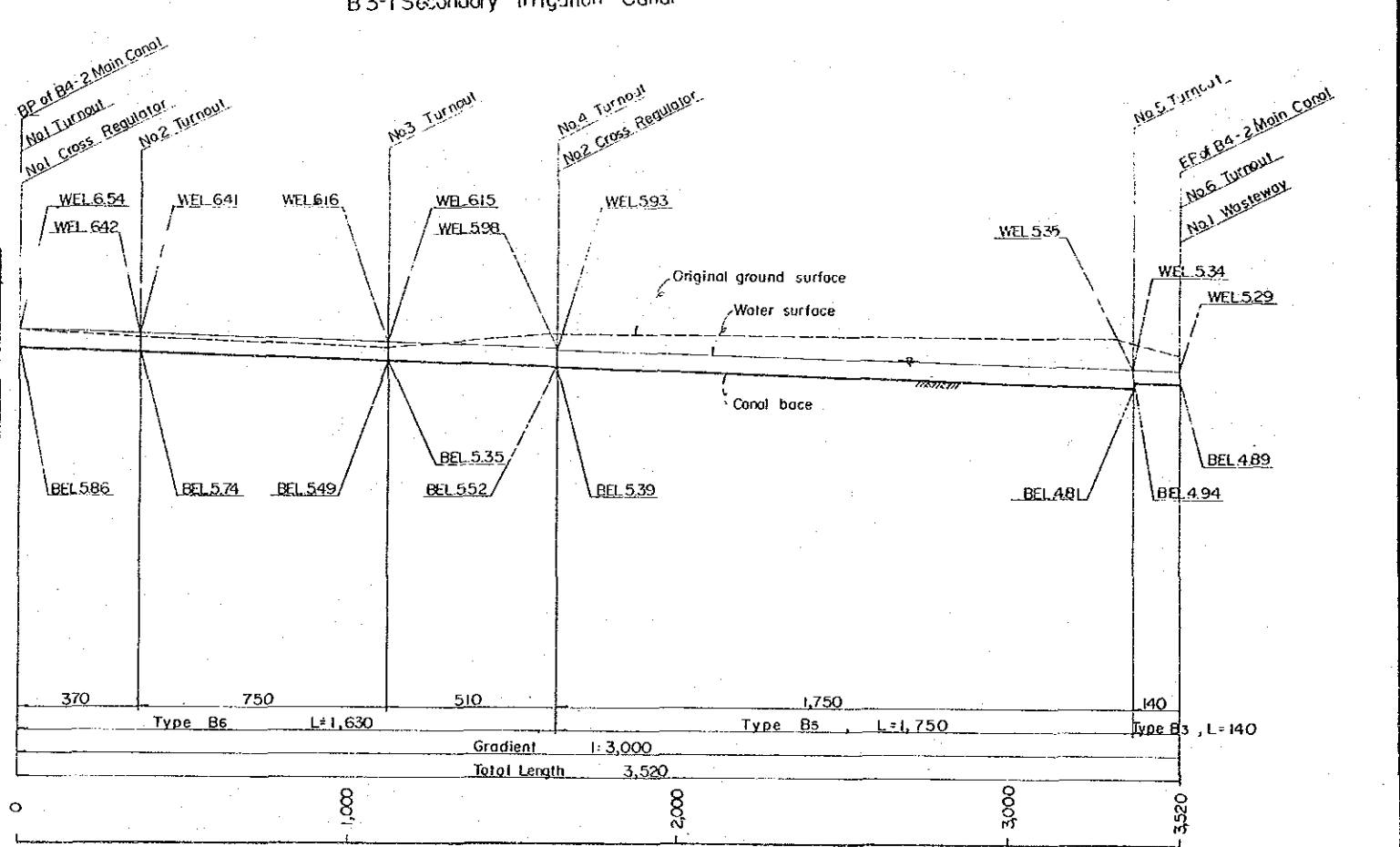
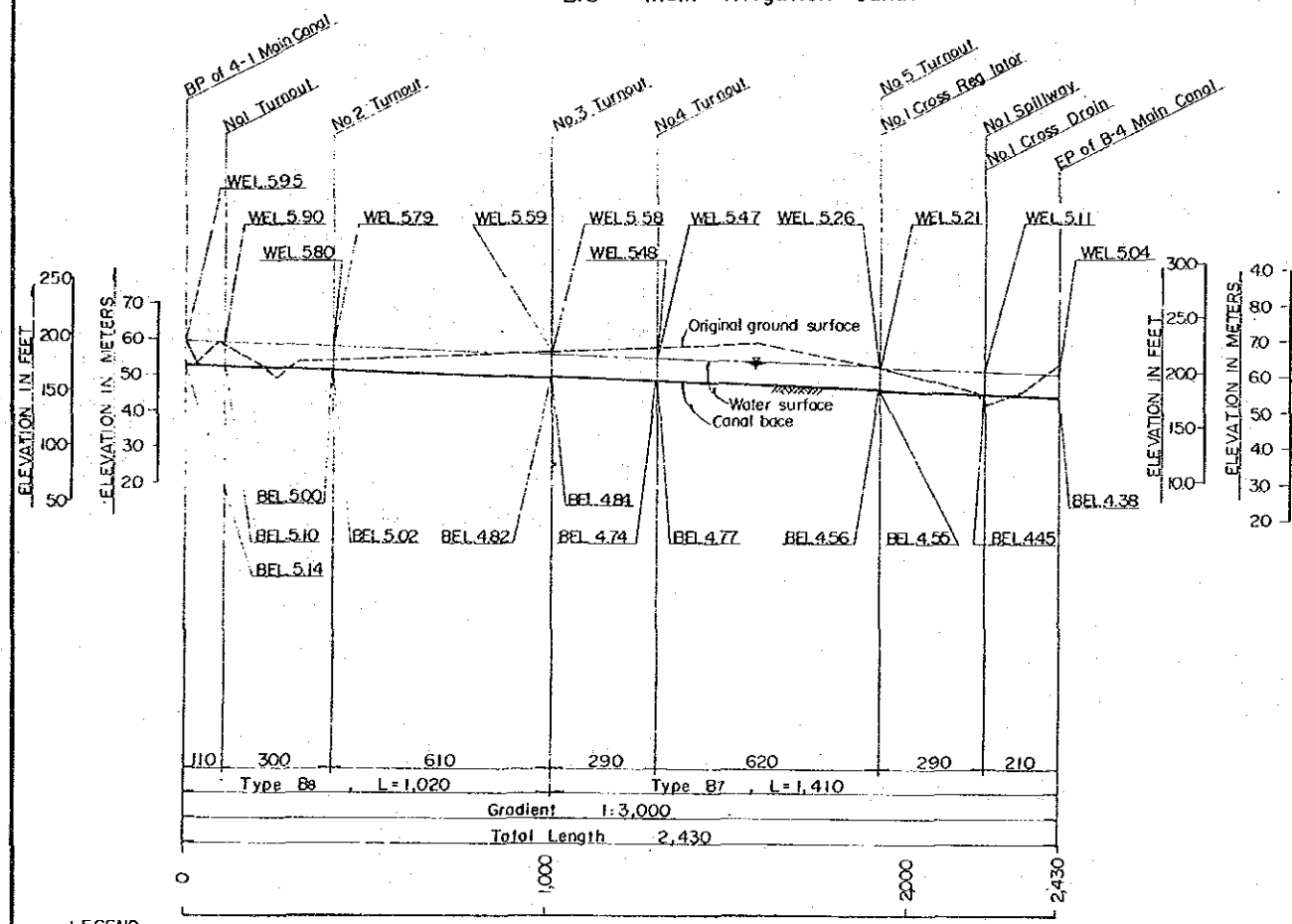
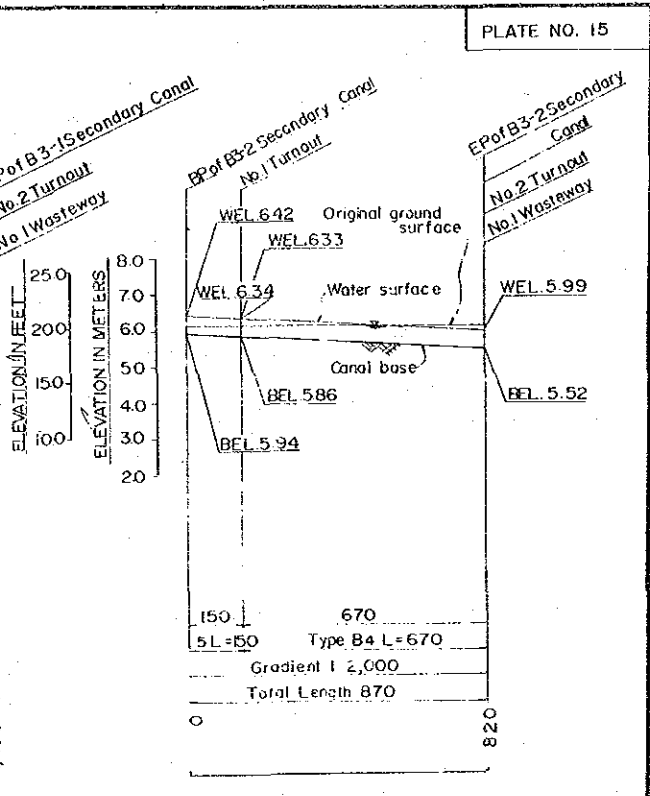
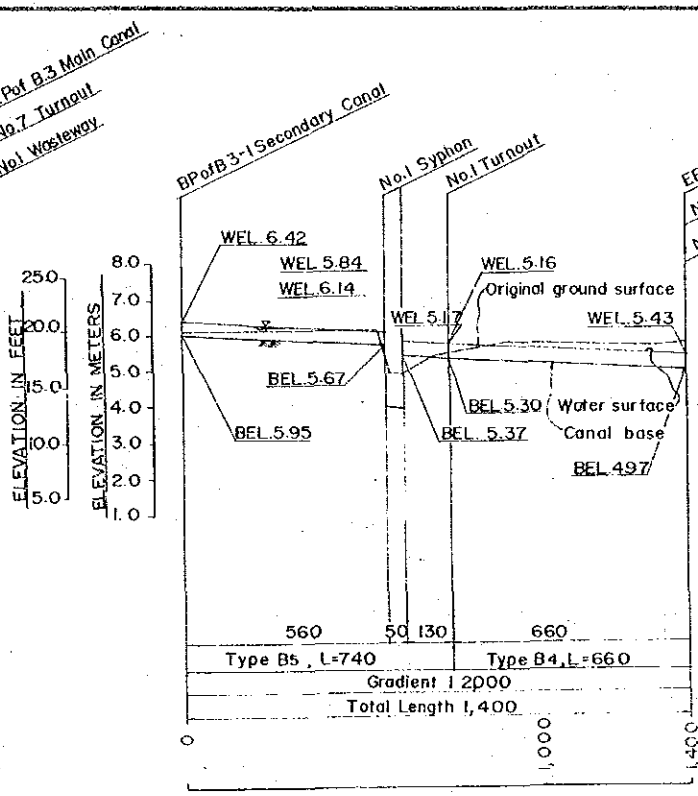
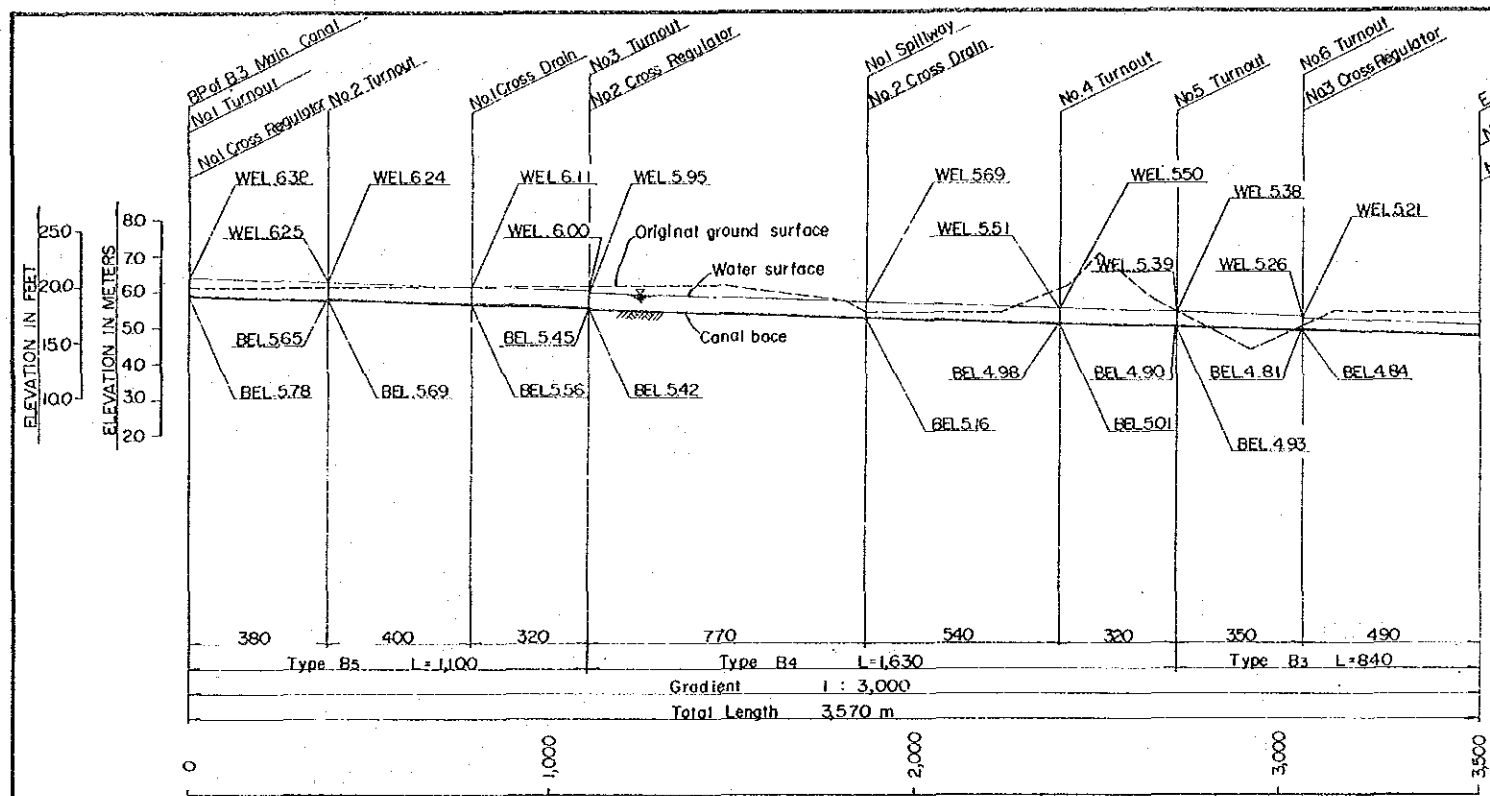


**LEGEND**

BP : Beginning point  
 EP : End point  
 WEL : Water surface elevation  
 BEL : Canal base elevation  
 Dimension in meters.

VERTICAL SCALE: 0 1 2 3 4 5M  
 HORIZONTAL SCALE: 0 250 500M

PREPARED: <i>M. Sahai</i>	MINISTRY OF ECONOMIC PLANNING GOVERNMENT OF THE REPUBLIC OF GHANA AVEYIME SUGAR PRODUCTION PROJECT	TITLE OF DRAWING IRRIGATION CANALS PROFILE OF MAIN & SECONDARY IRRIGATION CANALS ( I )		APPROVED
CHECKED: <i>B. Bato</i>		DWG NO. 100-C2	DATE	
SUBMITTED: <i>J. K...</i>		NIPPON KOEI CO., LTD. CONSULTING ENGINEERS, TOKYO		
DATE: <b>DEC 1975</b>				



**LEGEND**  
 BP : Beginning point  
 EP : End point  
 WEL: Water surface elevation  
 BEL: Canal base elevation  
 Dimension in meters

VERTICAL SCALE 0 1 2 3 4 5M  
 HORIZONTAL SCALE 0 250 500M

PREPARED <i>H. Sabal</i>	MINISTRY OF ECONOMIC PLANNING GOVERNMENT OF THE REPUBLIC OF GHANA	TITLE OF DRAWING	APPROVED
CHECKED <i>B. Sato</i>		IRRIGATION CANALS PROFILE OF MAIN & SECONDARY IRRIGATION CANALS ( 2 )	DATE
SUBMITTED <i>J. Kurusu</i>	AVEYIME SUGAR PRODUCTION PROJECT	DWG. NO.	NIPPON KOEI CO., LTD. CONSULTING ENGINEERS, TOKYO
DATE <i>1/19/75</i>		100-03	