

## ***VI      OTHERS***

Description	Quantity	2000				2001				2002				2003				2004			
		J	F	M	A	J	F	M	A	J	F	M	A	J	F	M	A	J	F	M	A
<b>KEY EVENT</b>																					
<b>PREPARATORY WORKS</b>																					
1. Temporary Buildings	L.S.																				
2. Temporary Facilities	L.S.																				
<b>KANAL DRAINAGE CHANNEL (MAIN)</b>																					
<b>I Section KM15+0m (Stage I)</b>																					
Channel excavation, BP-KM15+0m	1,392 lin.m																				
Levee Right, KM00+73m-KM14+23m	1,392 lin.m																				
Levee Left, KM00+18m-KM14+23m	1,289 lin.m																				
Bridge BKM-1 of KM05-1m, 3-span, Roadway	7,223 lin.m																				
	14.9m(S) x 0.4m(W)																				
<b>II Section KM16+0m-KM21+0m (Stage II)</b>																					
Channel excavation, KM16+0m-KM21+0m	313 lin.m																				
Levee Right, KM16+23m-KM21+0m	313 lin.m																				
Revelment Left, KM16+37m-KM18+13m	290 lin.m																				
Revelment Right, KM18+13m-KM21+0m	145 lin.m																				
Skidway SKM-1R at KM17+20m w/side gate, 1-lane	160 lin.m																				
Skidway SKM-1L at KM20+16m w/side gate, 1-lane	1.1m(W) x 4.562m(L)																				
Bridge BKM-3 at KM20-3m, 3-span, Roadway	12m(W) x 3.871m(L)																				
	13.35m(S) x 7.0m(W)																				
<b>III Section KM21+0m-KM26+0m (Stage III)</b>																					
Channel excavation, KM21+0m-KM26+0m	434 lin.m																				
Levee Right, KM21+0m-KM26+0m	434 lin.m																				
Revelment Left, KM21+0m-KM26+0m	434 lin.m																				
Skidway SKM-2R at KM21+6m w/side gate, 1-lane	434 lin.m																				
Skidway SKM-2L at KM24+35m w/side gate, 1-lane	12m(W) x 1.331m(L)																				
	3.1m(W) x 6.564m(L)																				
<b>IV Section KM26+0m-KM40+32m (Stage IV)</b>																					
Channel excavation, KM26+0m-KM40+32m	892 lin.m																				
Levee Right, KM26+0m-KM35+136m	892 lin.m																				
Levee Right, KM38+90m-KM40+32m	814 lin.m																				
Levee Left, KM26+0m-KM35+141m	67 lin.m																				
Parapet wall, Left, KM35+141m-KM40+32m	803 lin.m																				
Revelment Right, KM35+107m-KM40+32m	195 lin.m																				
Revelment Left, KM32+61m-KM40+32m	229 lin.m																				
Skidway SKM-3L at KM28+2m w/side gate, 1-lane	434 lin.m																				
Skidway SKM-3R at KM27+42m w/side gate, 1-lane	1.5m(W) x 0.300m(L)																				
Skidway SKM-4L at KM28+19m w/side gate, 1-lane	1.5m(W) x 1.284m(L)																				
Skidway SKM-5L at KM31+58m w/side gate, 1-lane	0.8m(W) x 6.309m(L)																				
Skidway SKM-6L at KM38+3m w/side gate, 1-lane	10m(W) x 6.324m(L)																				
Skidway SKM-6R at KM38+3m w/side gate, 1-lane	10m(W) x 7.700m(L)																				
Skidway SKM-4R at KM40+32m w/side gate, 1-lane	0.8m(W) x 3.492m(L)																				
Bridge BKM-4 at KM31-1m, 3-span, Pedestrian	13.1m(S) x 1.8m(W)																				
Bridge BKM-5 at KM38-31m, 4-span, Roadway	14.1m(S) x 7.8m(W)																				
Bridge BKM-6 at KM40+0m, 3-span, Pedestrian	12.15m(S) x 1.9m(W)																				
<b>V Section KM40+32m-KM48+0m (Stage V)</b>																					
Channel excavation, KM40+32m-KM48+0m	542 lin.m																				
Levee Right, KM40+32m-KM48+2m	542 lin.m																				
Relocation road, Right, KM45+2m-KM48+30m	268 lin.m																				
Parapet wall, Left, KM40+32m-KM48+54m	101 lin.m																				
Levee Left, KM45+2m-KM48+0m	285 lin.m																				
Revelment Left, KM40+32m-KM48+2m	229 lin.m																				
Revelment Right, KM40+32m-KM48+2m	268 lin.m																				
Revelment Left, KM40+32m-KM48+2m	268 lin.m																				
Revelment Right, KM45+2m-KM47+71m	234 lin.m																				
Skidway SKM-7L at KM42+7m w/side gate, 1-lane	0.7m(W) x 3.700m(L)																				
Skidway SKM-5R at KM45+6m w/side gate, 1-lane	0.8m(W) x 5.544m(L)																				
Skidway SKM-8L at 48+35m w/side gate, 1-lane	10m(W) x 8.426m(L)																				
Bridge BKM-7 at KM42+0m, 3-span, Pedestrian	12.15m(S) x 1.3m(W)																				
Bridge BKM-8 at KM45-1m, 3-span, Roadway	12.9m(S) x 1.0m(W)																				
<b>VI Section KM48+0m-KM57+0m (Stage VI)</b>																					
Channel excavation, KM48+0m-KM57+0m	783 lin.m																				
Levee Left, KM48+0m-KM48+122m	783 lin.m																				
Inspection road, Right, KM48+131m-KM57+0m	121 lin.m																				
Revelment Right, KM48+0m-KM57+0m	632 lin.m																				
Revelment Left, KM48+0m-KM54+0m	783 lin.m																				
Skidway SKM-6R at KM50+31m w/side gate, 1-lane	288 lin.m																				
Skidway SKM-7R at KM54-28m w/side gate, 1-lane	0.8m(W) x 5.542m(L)																				
Bridge BKM-10 at KM50-5m, 3-span, Roadway	10m(W) x 8.536m(L)																				
Bridge BKM-11 at KM54-4m, 3-span, Roadway	11.8m(S) x 7.8m(W)																				

[illegible]

Note: Rainy season ; November - April

REFERENCE	NO.	PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	TITLE OF DRAWING CONSTRUCTION TIME SCHEDULE, PACKAGE 1	APPROVED
		CHECKED.....			
		SUBMITTED.....	JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	DWG NO.  J-95-00-001	DATE
		DATE.....			

Description	Quantity	2003												2004												2005															
		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D				
KEY EVENT	Notice to Proceed	Contract Period : 27 months																																				Complete			
PREPARATORY WORKS	L.S.	Demolition																																							
1. Temporary Buildings	L.S.																																								
2. Temporary Facilities	L.S.																																								
TANJUNGAN DRAINAGE CHANNEL																																									
I Section TM00+0m-TM17+0m	1,430 lin.m																																								
Channel excavation, TM00+0m-TM17+0m	1,430 lin.m																																								
Levee, Right, TM00+0m-TM18+47m	1,442 lin.m																																								
Levee, Left, TM00+0m-TM18+58m	1,454 lin.m																																								
Bridge BTM-1 at TM10+18m, 3-span, Roadway	13.5m(S)×5.4m(W)																																								
II Section TM18+0m-TM25+5m	527 lin.m																																								
Channel excavation, TM18+0m-TM25+5m	527 lin.m																																								
Levee, Right, TM18+0m-TM22+10m	326 lin.m																																								
Levee, Left, TM18+28m-TM21+44m	309 lin.m																																								
L-shape wall, TM23+16m-TM25+5m	14 lin.m																																								
Revelment R, Right, TM21+79m-TM23+16m	143 lin.m																																								
Revelment L, Left, TM21+19m-TM23+16m	204 lin.m																																								
Sluiceway STM-1R at TM25+13m w/side gate, 1-lane	0.8m(W)×0.300m(L)																																								
Sluiceway STM-1L at TM25+13m w/side gate, 1-lane	0.8m(W)×0.300m(L)																																								
Bridge BTM-3 at TM25+4m, 2-span, Roadway	11.9m(S)×8.0m(L)																																								
III Section TM25+5m-EP	553 lin.m																																								
Channel excavation, TM25+5m-EP	553 lin.m																																								
Inspection road, Right, TM26+29m-EP	495 lin.m																																								
Concrete wall, TM25+5-EP	553 lin.m																																								
Sluiceway STM-2L at TM30+10m w/side gate, 2-lane	1.0m(W)×0.300m(L)																																								
Sluiceway STM-2R at TM30+3m w/side gate, 1-lane	0.4m(W)×0.050m(L)																																								
Sluiceway STM-3L at TM30+16m w/side gate, 1-lane	0.8m(W)×0.300m(L)																																								
Sluiceway STM-4L at TM33+13m w/side gate, 1-lane	1.0m(W)×0.3m(L)																																								
Sluiceway STM-3R at TM35+0m w/side gate, 1-lane	0.8m(W)×0.700m(L)																																								
Bridge BTM-4 at TM30+8m, 2-span, Roadway	9.6(S)×11m(W)																																								
Bridge BTM-5 at TM33+4m, 2-span, Roadway	9.6(S)×11m(W)																																								
Bridge BTM-6 at TM35+1m, 2-span, Pedestrian	8.4m(S)×1.9m(W)																																								
PJK JUNCTION DRAINAGE CHANNEL																																									
I Section BP-NM32+0m	455 lin.m																																								
Channel excavation, BP-NM32+0m	455 lin.m																																								
Concrete culvert, BP-NM32+0m	455 lin.m																																								
Bridge BNM-1 at NM32+13m, in-situ slab, Roadway	2.8m(S)×7.0m(W)																																								
II Section NM32+0m-EP	310 lin.m																																								
Channel excavation, NM32+0m-EP	310 lin.m																																								
Concrete culvert, NM32+0m-EP	310 lin.m																																								
Sluiceway SNM-1R at NM34+0m w/side gate, 1-lane	1.1m(W)×0.300m(L)																																								
Bridge BNM-2 at NM33+7m, in-situ slab, Roadway	2.8m(S)×4.0m(L)																																								
Bridge BNM-3 at NM34+2m, in-situ slab, Roadway	2.8m(S)×4.0m(L)																																								
Bridge BNM-4 at NM34+38m, in-situ slab, Roadway	2.8m(S)×4.0m(L)																																								

Note: Rainy season : November - April

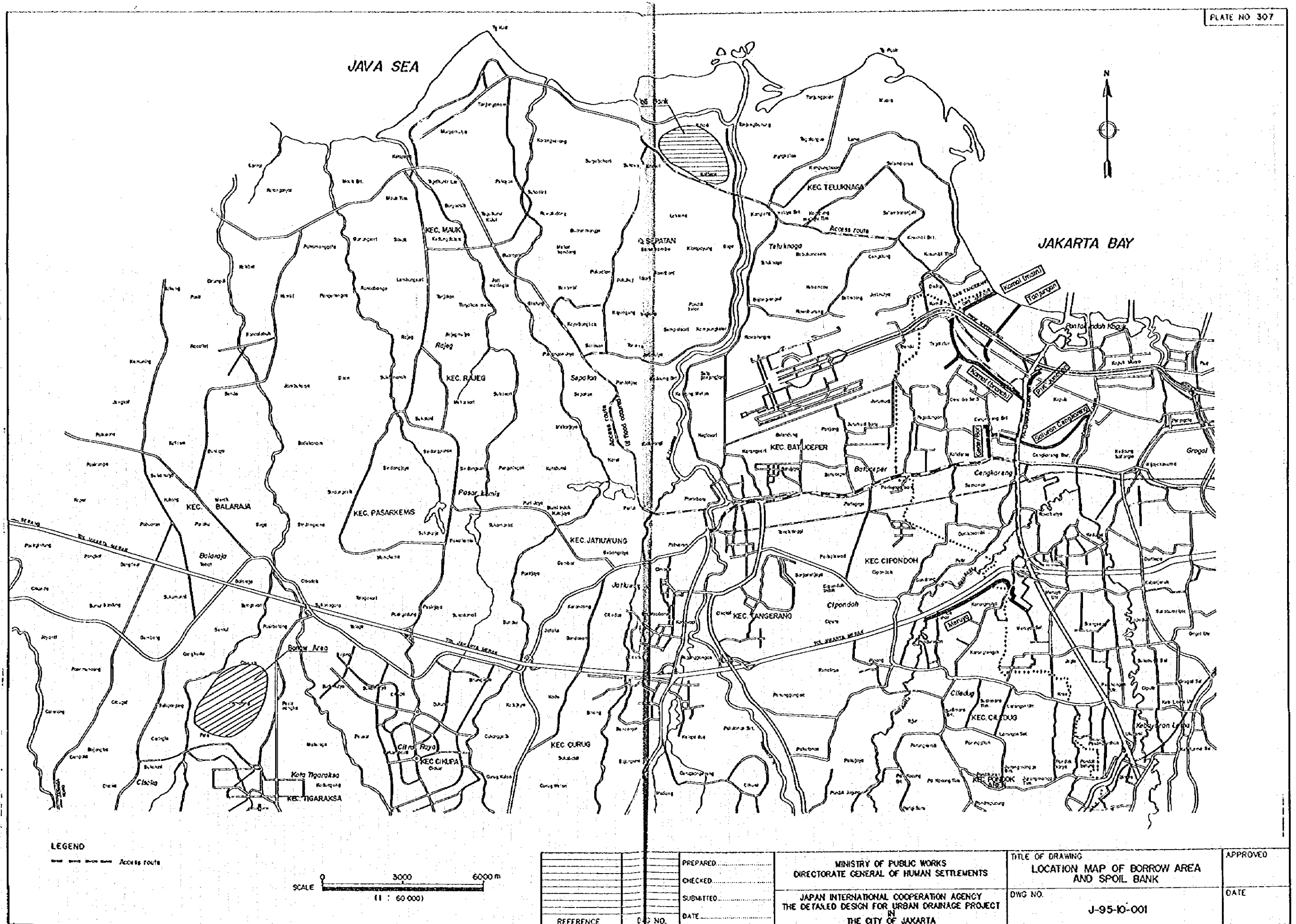
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Description	Quantity	2004												2005												2006												2007												
		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D													
KEY EVENT	Notice to Proceed	Contract Period : 36 months																																																Completion
PREPARATORY WORKS																																																		
1. Temporary Buildings	L.S.																																																	
2. Temporary Facilities	L.S.																																																	
SALURAN CENGKARENG DRAINAGE CHANNEL																																																		
I Section CM01+0m-CM07+4m	948 kn.m																																																	
Inspection road, Right, CM02+10m-CM07+4m	533 kn.m																																																	
Revetment #, Right, CM05+20m-CM07+4m	153 kn.m																																																	
Revetment #, Left, CM05+20m-CM07+4m	153 kn.m																																																	
Open culvert, 3-lanex3.33m	391 kn.m																																																	
Outlet sluiceway of CM01+0m, 5-lane, w/side gate	2.3m(W)																																																	
Sluiceway SCM-11 at CM05+3m w/side gate, 1-lane	3m(W)x300x(1)																																																	
Bridge BCM-2 at CM05+2m, 1-span, Roadway	15.8m(S)x7.0m(W)																																																	
II Section CM07+4m-CM15+0m	872 kn.m																																																	
Channel excavation, CM07+4m-CM15+0m	872 kn.m																																																	
Inspection road, Left, CM07+0m-CM15+1m	855 kn.m																																																	
Revetment #, Right, CM07+4m-CM15+8m	876 kn.m																																																	
Revetment #, Left, CM07+4m-CM15+28m	828 kn.m																																																	
Sluiceway SCM-1R at CM15+10m w/side gate, 1-lane	2m(W)x300x(1)																																																	
Bridge BCM-3 at CM07+2m, 1-span, Roadway	15.8m(S)x4.0m(W)																																																	
Bridge BCM-4 at CM08+1m, 1-span, Pedestrian	14.6m(S)x1.9m(W)																																																	
Bridge BCM-5 at CM12+3m, 1-span, Roadway	15.8m(S)x5.4m(W)																																																	
III Section CM15+0m-CM28+10m	1,362 kn.m																																																	
Channel excavation, CM15+0m-CM28+0m	1,362 kn.m																																																	
Parapet wall, Right, CM15+5m-CM17+75m	278 kn.m																																																	
Levee, Right, CM17+85m-CM23+75m	570 kn.m																																																	
Parapet wall, Right, CM23+85m-CM27+142m	535 kn.m																																																	
Levee, Left, CM15+5m-CM28+108m	1,168 kn.m																																																	
Levee, Right, CM17+85m-CM23+75m	530 kn.m																																																	
Parapet wall, Left, CM28+85m-CM27+146m	192 kn.m																																																	
Revetment #, Right, CM15+8m-CM29+19m	851 kn.m																																																	
Revetment #, Left, CM28+73m-CM29+24m	235 kn.m																																																	
Sluiceway SCM-2R at CM18+4m w/side gate, 1-lane	2m(W)x300m(L)																																																	
Sluiceway SCM-2L at CM18+12m w/side gate, 2-lane	2m(W)x5.83m(L)																																																	
Sluiceway SCM-3L at CM20+10m w/side gate, 1-lane	10m(W)x5.95m(L)																																																	
Sluiceway SCM-3R at CM26+1m w/side gate, 1-lane	10m(W)x300m(L)																																																	
Sluiceway SCM-4L at CM27+21m w/side gate, 1-lane	1m(W)x300m(L)																																																	
Bridge BCM-6 at CM15+3m, 1-span, Roadway	14.1m(S)x4.0m(W)																																																	
Bridge BCM-7 at CM19+5m, 1-span, Pedestrian	15.8m(S)x1.5m(W)																																																	
Bridge BCM-8 at CM24+2m, 1-span, Pedestrian	12.6m(S)x1.8m(W)																																																	
Bridge BCM-9 at CM27+4m, 1-span, Pedestrian	12.6m(S)x1.5m(W)																																																	
Bridge BCM-10 at CM29+4m, 1-span, Roadway	14.9m(S)x5.4m(W)																																																	
IV Section CM29+0m-CM32+101m	435 kn.m																																																	
Channel excavation, CM29+0m-CM32+101m	435 kn.m																																																	
Levee, Right, CM29+3m-CM32+101m	435 kn.m																																																	
Levee, Left, CM29+3m-CM30+83m	158 kn.m																																																	
Parapet wall, Left, CM30+53m-CM32+98m	280 kn.m																																																	
Revetment #, Left, CM30+42m-CM38+16m	324 kn.m																																																	
Sluiceway SCM-4R at CM30+10m w/side gate, 1-lane	10m(W)x108m(L)																																																	
Sluiceway SCM-5L at CM30+0m w/side gate, 1-lane	10m(W)x1018m(L)																																																	
V Section CM32+101m-CM36+4m	57 kn.m																																																	
Channel excavation, CM32+101m-CM36+4m	57 kn.m																																																	
Levee, Right, CM32+101m-CM36+4m	57 kn.m																																																	
Levee, Left, CM34+4m-CM36+4m	57 kn.m																																																	
Bridge BCM-11 at CM34+10m, 1-span, Roadway	13.5m(S)x11.0m(W)																																																	
Bridge BCM-12 at CM36+10m, 1-span, Roadway	13.5m(S)x11.0m(W)																																																	
VI Section CM36+4m-CM49+11m	1,140 kn.m																																																	
Channel excavation, CM36+4m-CM49+11m	1,140 kn.m																																																	
Levee, Right, CM36+4m-CM43+77m	742 kn.m																																																	
Levee, Right, CM45+0m-CM49+11m	315 kn.m																																																	
Levee, Left, CM36+4m-CM43+83m	772 kn.m																																																	
Levee, Left, CM45+0m-CM49+11m	315 kn.m																																																	
Revetment #, Right, CM36+35m-CM43+77m	804 kn.m																																																	
Revetment #, Right, CM45+0m-CM49+11m	315 kn.m																																																	
Revetment #, Left, CM42+58m-CM43+83m	120 kn.m																																																	
Revetment #, Left, CM45+0m-CM49+11m	315 kn.m																																																	
Revetment #, Left, CM43+83m-CM45+0m	58 kn.m																																																	
Revetment #, Right, CM43+77m-CM45+0m	62 kn.m																																																	
Sluiceway SCM-5R at CM37+0m w/side gate, 1-lane	10m(W)x1076m(L)																																																	
Sluiceway SCM-6L at CM37+50m w/side gate, 1-lane	11m(W)x1082m(L)																																																	
Sluiceway SCM-7L at CM41+0m w/side gate, 1-lane	11m(W)x1115m(L)																																																	
Sluiceway SCM-6R at CM43+30m w/side gate, 1-lane	11m(W)x1136m(L)																																																	
Sluiceway SCM-8L at CM47+34m w/side gate, 1-lane	8.5m(W)x1818m(L)																																																	
Sluiceway SCM-7R at CM47+53m w/side gate, 1-lane	8.5m(W)x1818m(L)																																																	
Bridge BCM-13 at CM40+2m, 1-span, Roadway	11.3m(S)x7.0m(W)																																																	
Bridge BCM-14 at CM45+5m, 1-span, Roadway	10.5m(S)x7.0m(W)																																																	

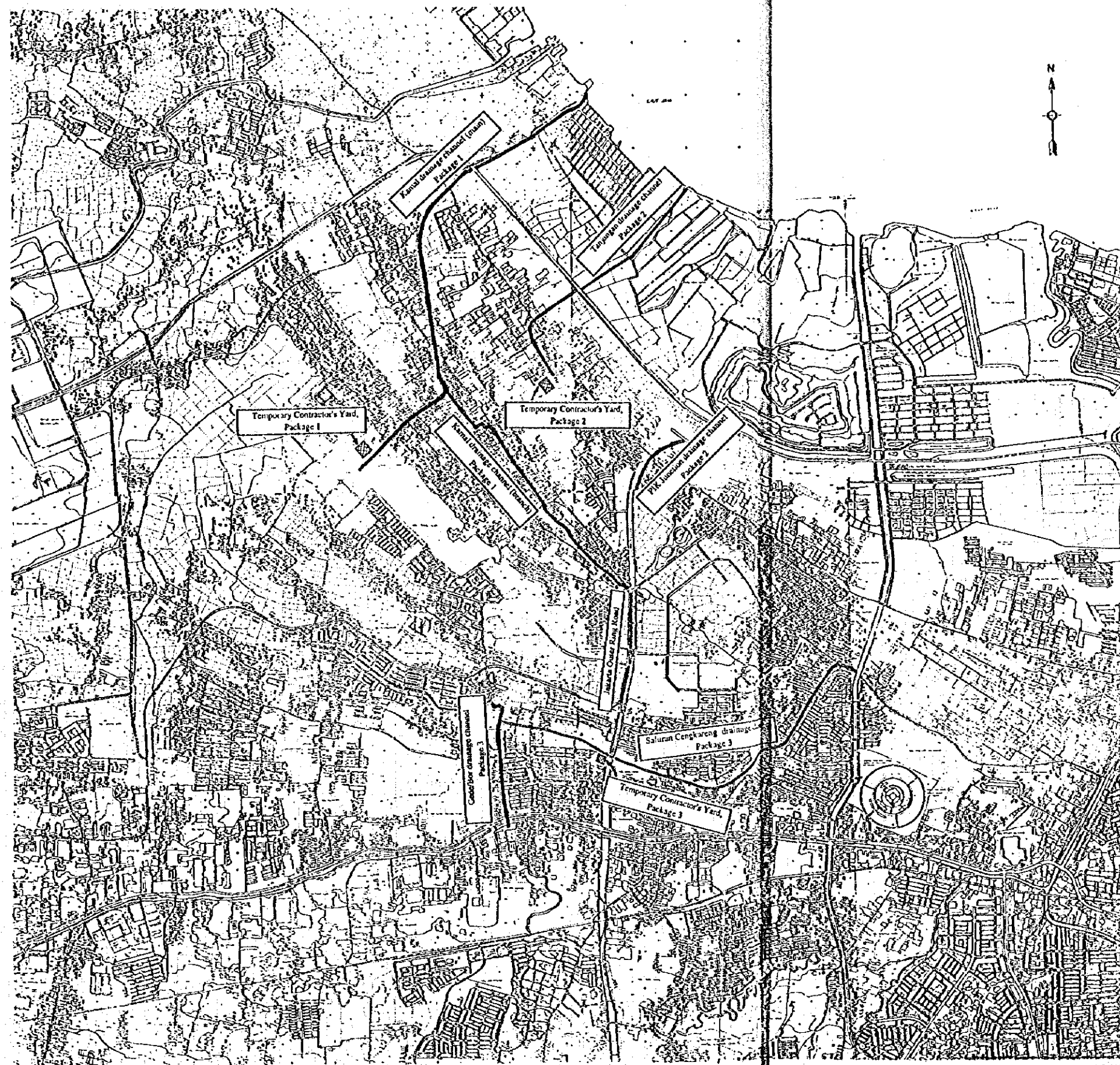
[illegible]

Note: Rainy season ; November - April

REFERENCE	C.D. NO.	PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	TITLE OF DRAWING CONSTRUCTION TIME SCHEDULE, PACKAGE 3	APPROVED
		CHECKED.....			
		SUBMITTED.....	JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	DWG NO.  J-95-00-003	DATE
		DATE.....			







Cengkareng West Area

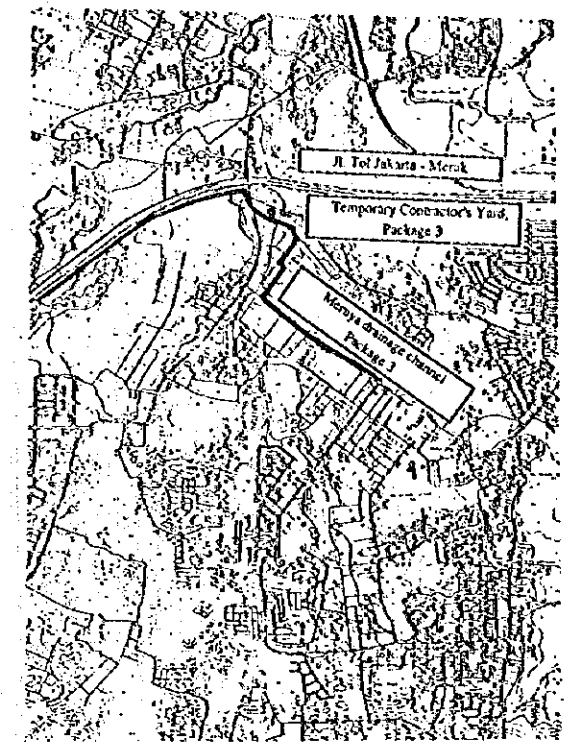
1000 2000  
SCALE 1:20,000

REFERENCE	DATE

MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS
JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA

TITLE OF DRAWING LOCATION MAP OF CONTRACTOR'S TEMPORARY YARD
DWG NO. J-95-20-001

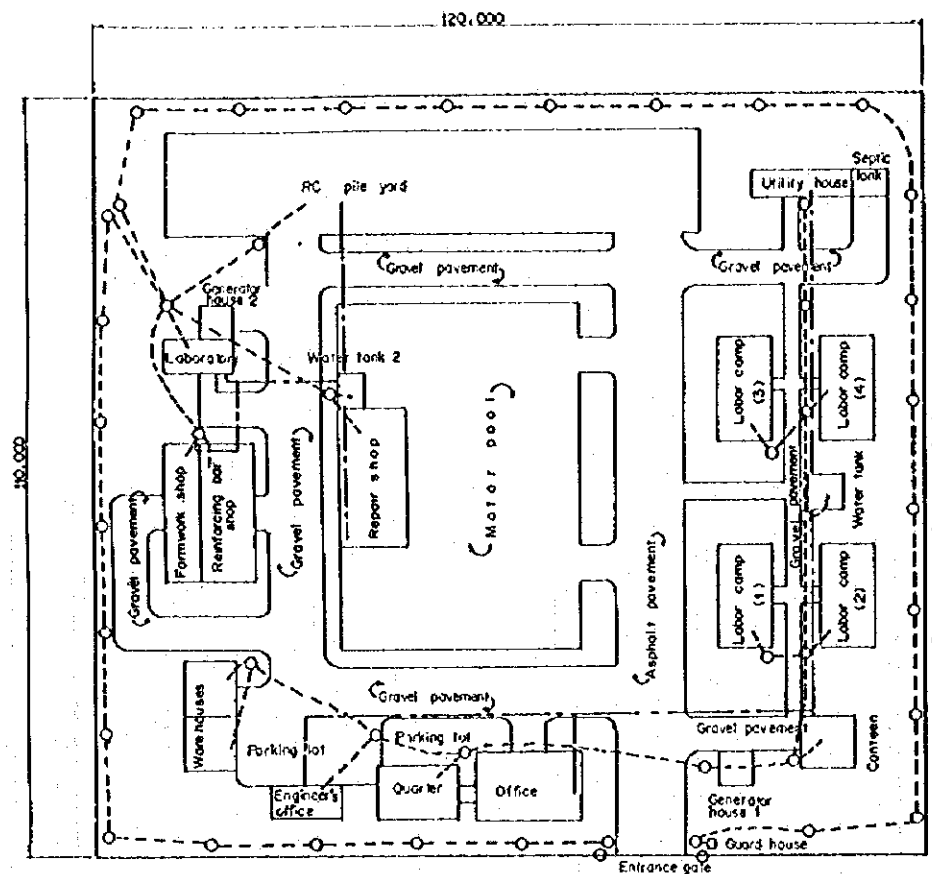
APPROVED
DATE



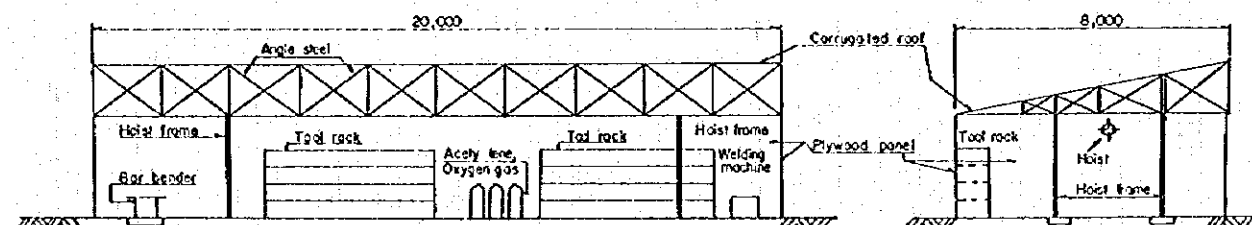
Meruya Area

Note:

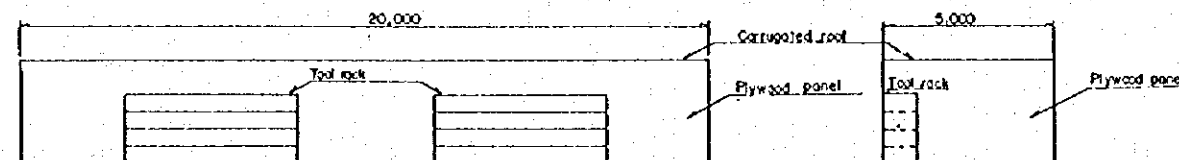
1. Temporary Contractor's Yard, Package 1 (13,200 m<sup>2</sup>)  
for - Kamal drainage channel (main), and  
- Kamal drainage channel (branch)
  2. Temporary Contractor's Yard, Package 2 (13,200 m<sup>2</sup>)  
for - Tanjung drainage channel, and  
- PIK Junction drainage channel
  3. Temporary Contractor's Yard, package 3 (13,200 m<sup>2</sup> & 1,000 m<sup>2</sup>)  
for - Gede/Bor drainage channel,  
- Saluran Cengkareng drainage channel, and  
- Meruya drainage channel
- \*Temporary Contractor's Yard contains office, quarter, labor camp, motor pad, repair shop, warehouse, work shop, guard house, laboratory and facilities such as telecommunication system, water supply and sewage system and power supply system.



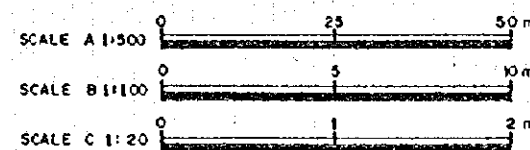
GENERAL LAYOUT OF TEMPORARY CONTRACTOR'S YARD  
Scale A



Reinforcing bar shop (20m x 8m)  
Scale B

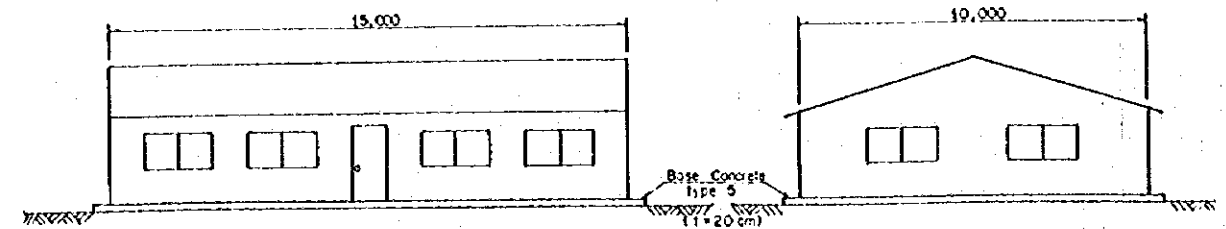
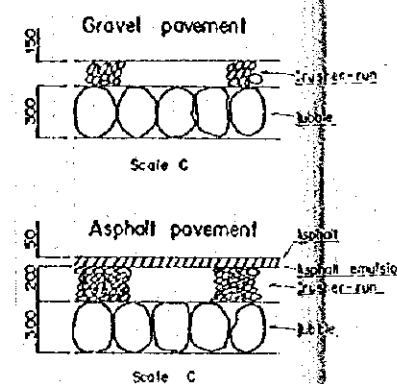


Formwork shop (20m x 5m)  
Scale B

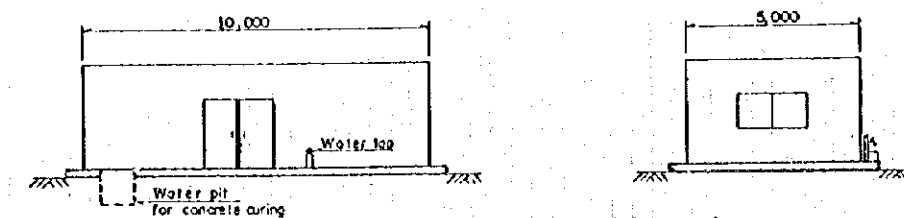


LEGEND

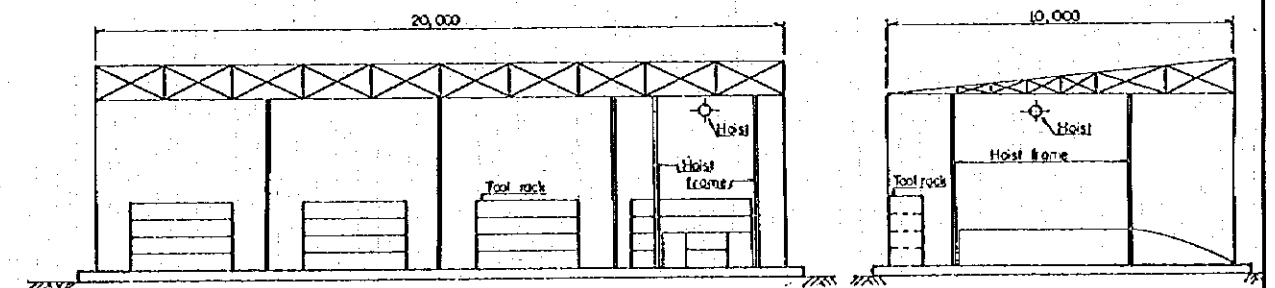
- Water distribution pipe (underground)
- Electric power distributor
- Electric pole



Contractor's office (15m x 10m)  
Scale B



Laboratory (10m x 5m)  
Scale B

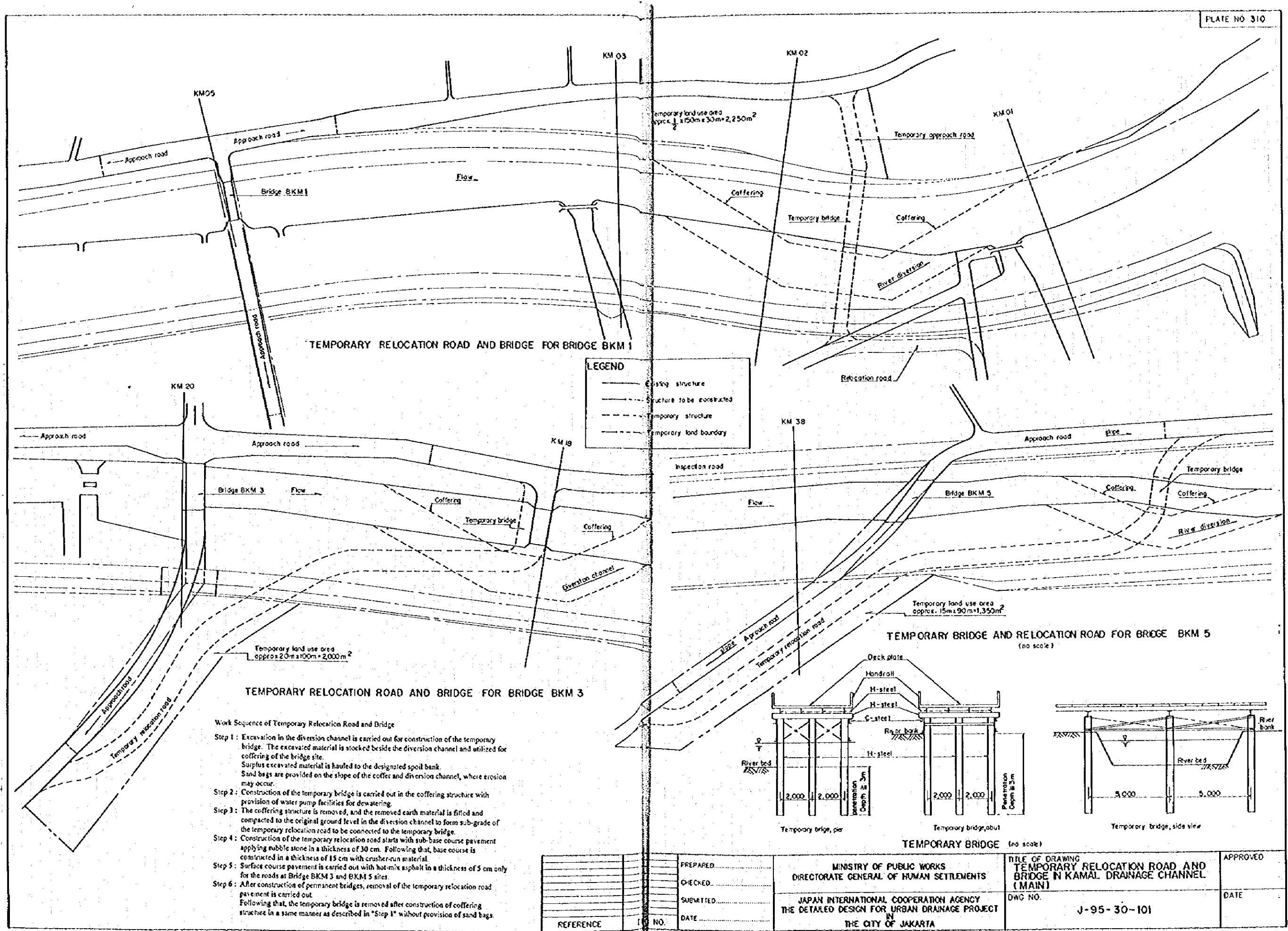


Repair shop (20m x 10m)  
Scale B

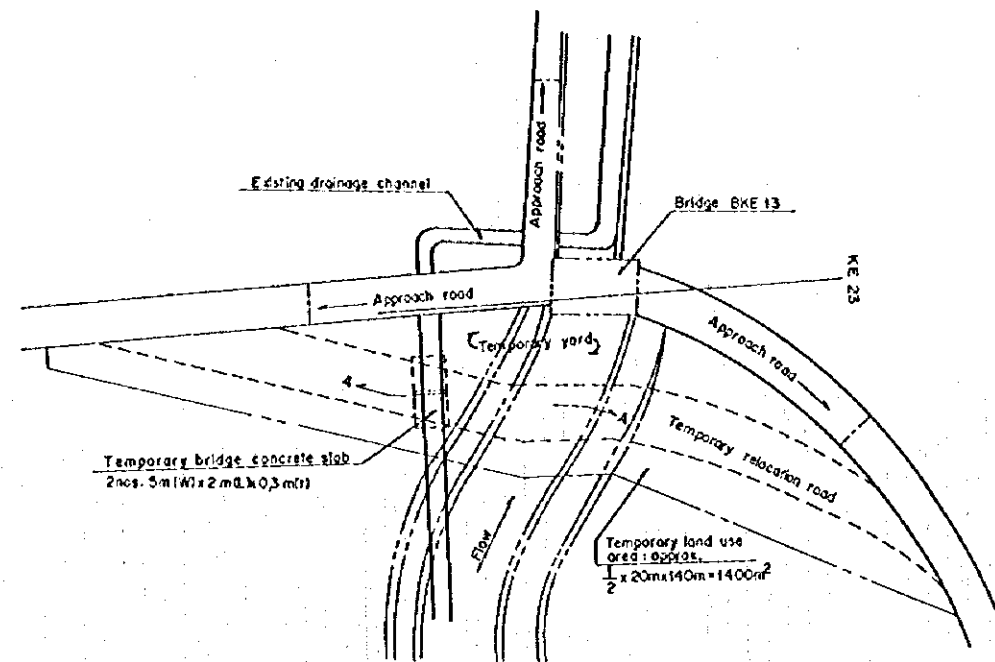
Feature of Buildings										Water Demand		Power Demand	
Building	Length	Width	Height	Nos	Area (sq m)	Roof	Material	Wall	Facility / Remarks	Facility	Water supply	Facility	Power supply
1. Office	15	10	4	1	150	Wood	Wood	Brick	Office equipment and furniture	System 1	600 lit/day	1. Office	12 kW
2. Engineer's office	12	8	4	1	96	Wood	Wood	Brick	Office equipment and furniture	2. Engineer's office	100 lit/day	2. Engineer's office	5 kW
3. Quarter	15	8	4	4	480	Wood	Wood	Brick	Furniture	3. Quarter	600 lit/day	3. Quarter	8 kW
4. Canteen	15	8	4	4	480	Wood	Wood	Brick	Furniture	4. Canteen	3,000 lit/day	4. Labor camp	12 kW
5. Utility house	15	4	3	1	60	Wood	Wood	Brick	Washroom with shower and septic tank	5. Utility house	9,600 lit/day	5. Canteen	5 kW
6. Laboratory	10	5	3	1	50	Corrugate plate	Plywood panel	Brick	Testing equipment	6. Laboratory	20 lit/min	6. Laboratory	12 kW
7. Repair shop	20	10	5	1	200	Corrugate plate	Plywood panel	Brick	Rack and base plate	7. Repair shop	30 lit/min	7. Repair shop	10 kW
8. Formwork shop	20	5	3	1	100	Corrugate plate	Plywood panel	Brick	Hoist, 0.5 ton: 3 m span x 13 m (L)	8. Formwork shop	10 lit/min	8. Formwork shop	5 kW
9. RC pile yard	20	5	3	1	100	Corrugate plate	Plywood panel	Brick	Tool rack	9. RC pile yard	10 lit/min	9. RC pile yard	3 kW
10. Warehouse	20	5	3	2	200	Wood	Wood	Brick	Cooler	10. Warehouse	75 lit/min	10. Warehouse	6 kW
Total					1,380					Total	113 lit/min	Total	47 kW

Note: Temporary Contractor's yard is stripped (1=50cm approx) and embanked by borrowed earth material in a thickness of 2m (approx)

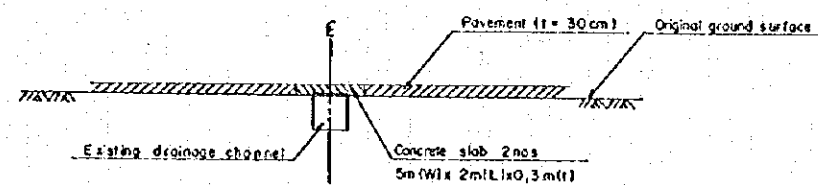
PREPARED	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	TITLE OF DRAWING GENERAL LAYOUT PLAN OF CONTRACTOR'S TEMPORARY YARD	APPROVED
CHECKED	JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	DWG NO. J-95-20-002	DATE
SUBMITTED			
DATE			
REFERENCE			



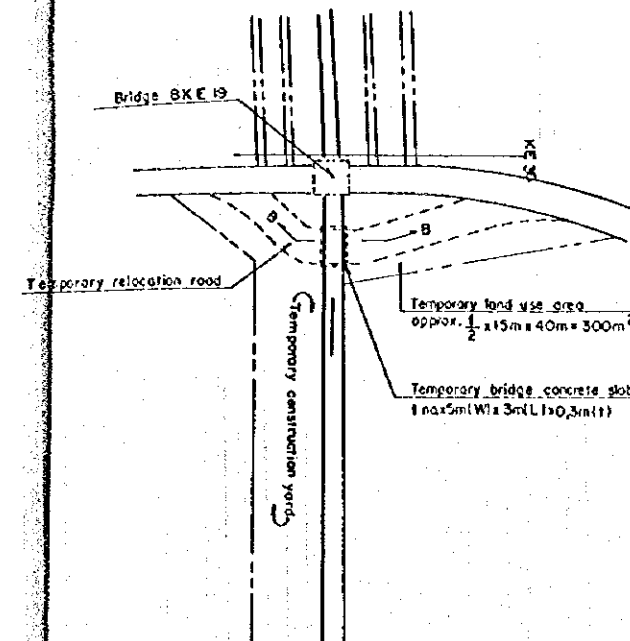




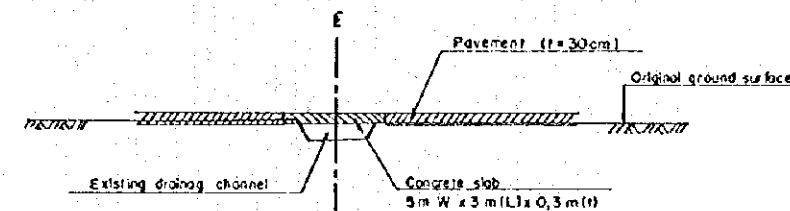
TEMPORARY RELOCATION ROAD AND BRIDGE FOR BRIDGE BKE 13



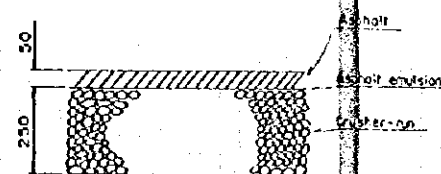
SECTION A-A



TEMPORARY RELOCATION ROAD AND BRIDGE FOR BRIDGE BKE 14



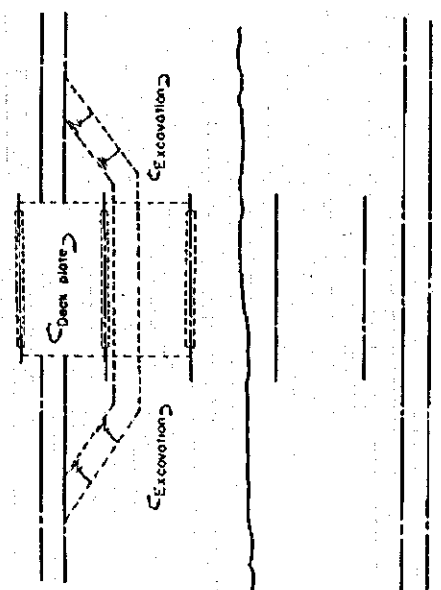
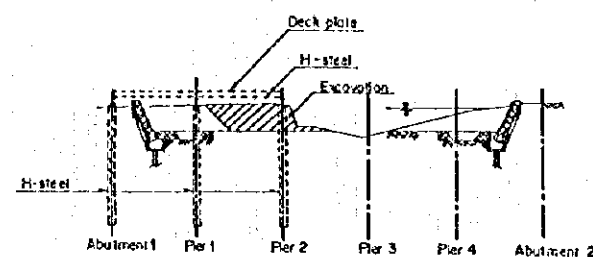
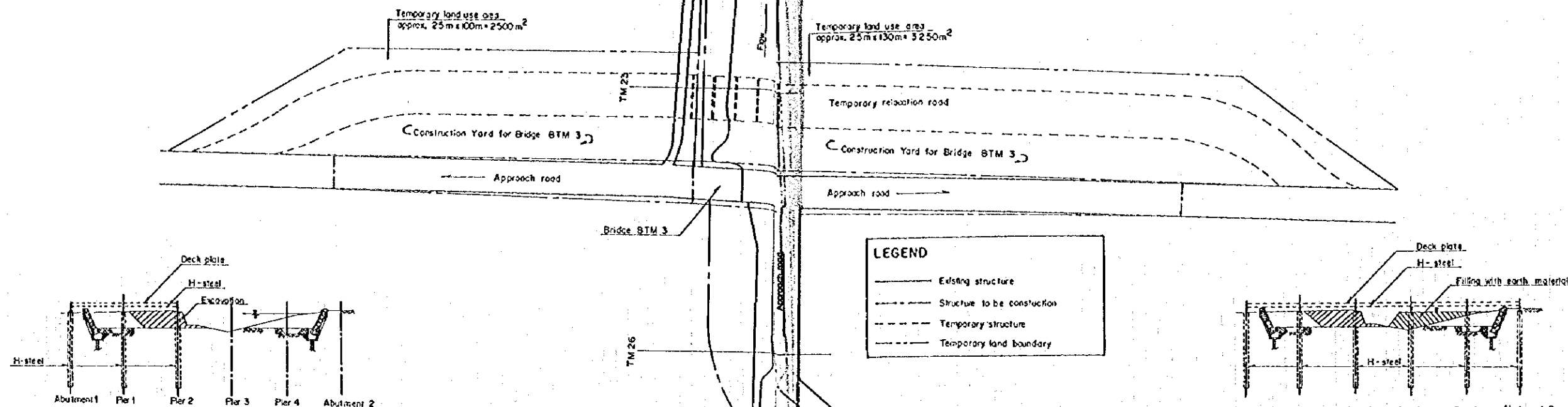
SECTION B-B



Pavement for Temporary Relocation Road

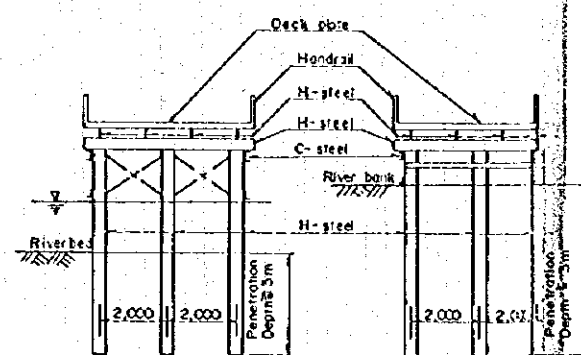
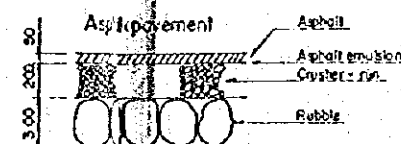
LEGEND	
	Existing structure
	Structure to be constructed
	Temporary structure
	Temporary land boundary

REFERENCE	PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	TITLE OF DRAWING TEMPORARY RELOCATION ROAD AND BRIDGE IN KAMAL DRAINAGE CHANNEL (BRANCH)	APPROVED
	CHECKED.....			
	SUBMITTED.....			
	DATE.....			
NO.	DATE	JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT BY THE CITY OF JAKARTA	DWG NO. J-95-30-102	DATE


 TEMPORARY BRIDGE CONSTRUCTION of 1ST STAGE  
No scale

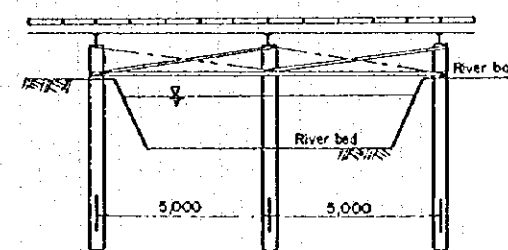
TEMPORARY RELOCATION ROAD AND BRIDGE FOR BRIDGE BTM 3

No scale



Temporary bridge, pier

Temporary bridge, pier



Temporary bridge, side view

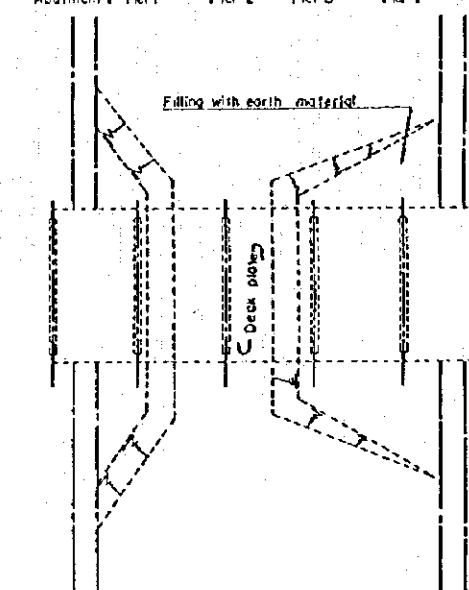
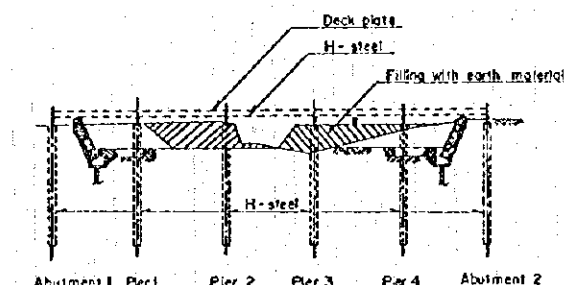
TEMPORARY BRIDGE (No scale)

#### Work Sequence of Temporary Bridge Construction, 1st Stage

- Step 1: H-shape steel supports are driven at the Piers 1 and 2 and Abutment 1.
- Step 2: Excavation in the existing drainage channel on the left half is carried out. Sand bags are provided on the excavated slope, where erosion may occur. On the same time, each H-shape steel support as a member of sub-structure is connected by L-shape steel and C-shape steel.
- Step 3: H-shape steel girders on a sub-structure and beams between sub-structures are erected as a part of superstructure between Abutment 1 and Pier 2. Following that, deck plates are placed on the beams, and steel pipes for handrail and the deck plates are bolted between Abutment 1 and Pier 2.

#### Removal of the temporary Bridge

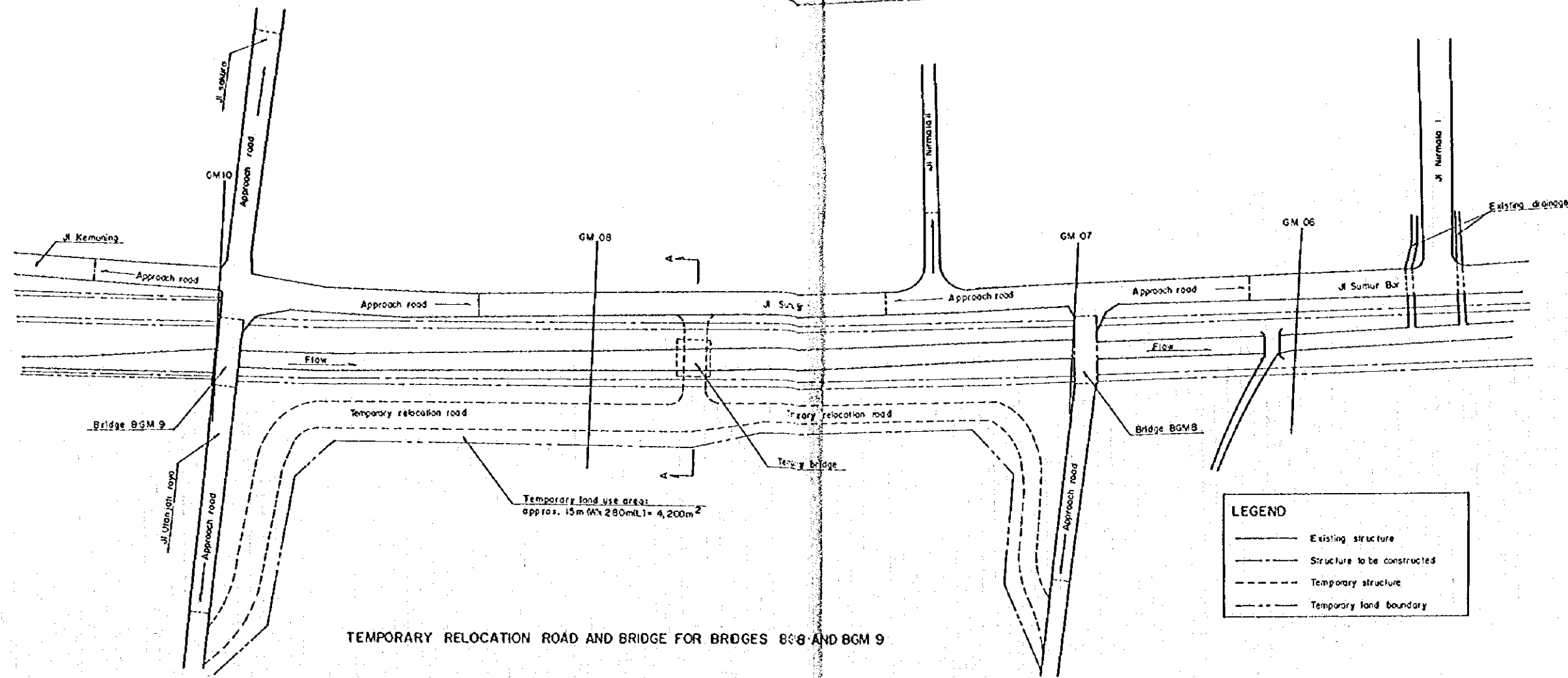
- Step 1: After construction of permanent bridge BTM 3, removal of the superstructures is carried out from Abutment 1 to Pier 2. On the same time, L-shape steel and C-shape steel are disconnected from H-shape steel supports.
- Step 2: Extract of H-shape steel support is carried out at Piers 3 and 4 and Abutment 2.
- Step 3: The filled earth material on the right half of the existing channel is removed to the left half of the channel to cover the left pier 2.
- Step 4: Extract of H-shape steel support is carried out at Abutment 1 and Piers 2 and 3.


 TEMPORARY BRIDGE CONSTRUCTION of 2ND STAGE  
No scale

#### Work Sequence of Temporary Bridge Construction, 2nd Stage

- Step 4: Filling with earth material is carried out on the right half of the existing drainage channel to cover the area of Piers 3 and 4.
- Step 5: H-shape steel supports are driven at the Piers 3 and 4 and Abutment 2.
- Step 6: Each H-shape steel support as a member of sub-structure is connected by L-shape steel and C-shape steel.
- Step 7: H-shape steel girders on a sub-structure and beams between sub-structures are erected as a part of superstructure between Pier 3 and Abutment 2. Following that, deck plates are placed on the beams, and steel pipes for handrail and the deck plates are bolted between Pier 3 and Abutment 2.
- Step 8: H-shape steel girders on a sub-structure and beams between sub-structures are erected as a part of superstructure between Piers 2 and 3. Following that, deck plates are placed on the beams, and steel pipes for handrail and the deck plates are bolted between Pier 2 and 3.

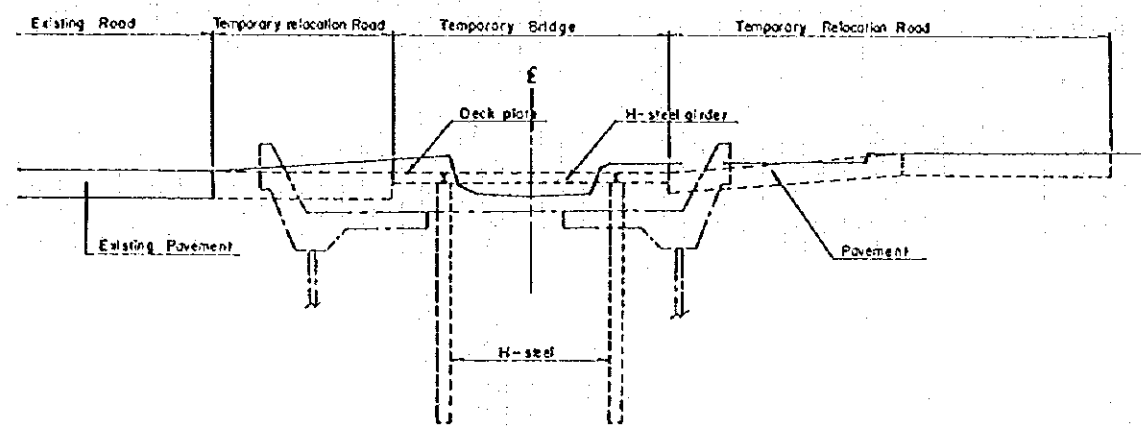
REFERENCE	NO. NO.	PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	TITLE OF DRAWING TEMPORARY RELOCATION ROAD AND BRIDGE IN TANJUNGAN DRAINAGE CHANNEL	APPROVED
		CHECKED.....			
		SUBMITTED.....	JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	DWG NO.  J-95-30-201	DATE
		DATE.....			



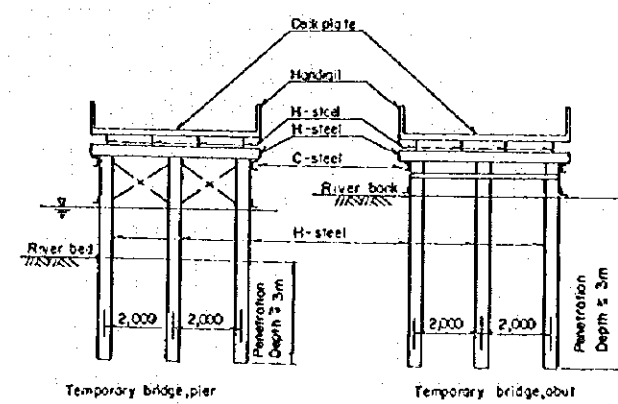
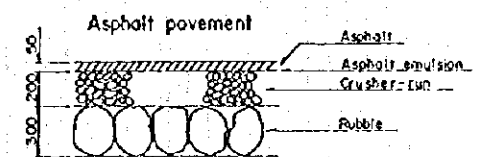
**LEGEND**

- Existing structure
- - - Structure to be constructed
- - - Temporary structure
- - - Temporary land boundary

TEMPORARY RELOCATION ROAD AND BRIDGE FOR BRIDGES BGM 8 AND BGM 9

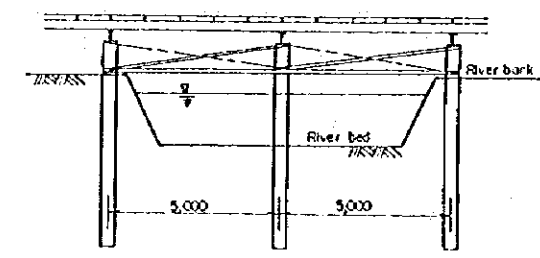


SECTION A-A



Temporary bridge, pier

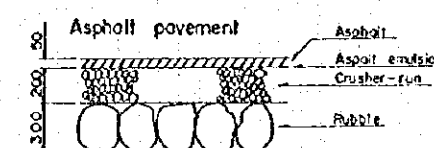
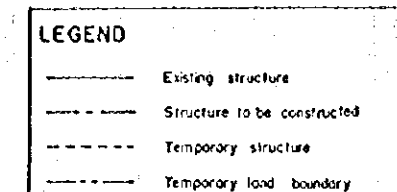
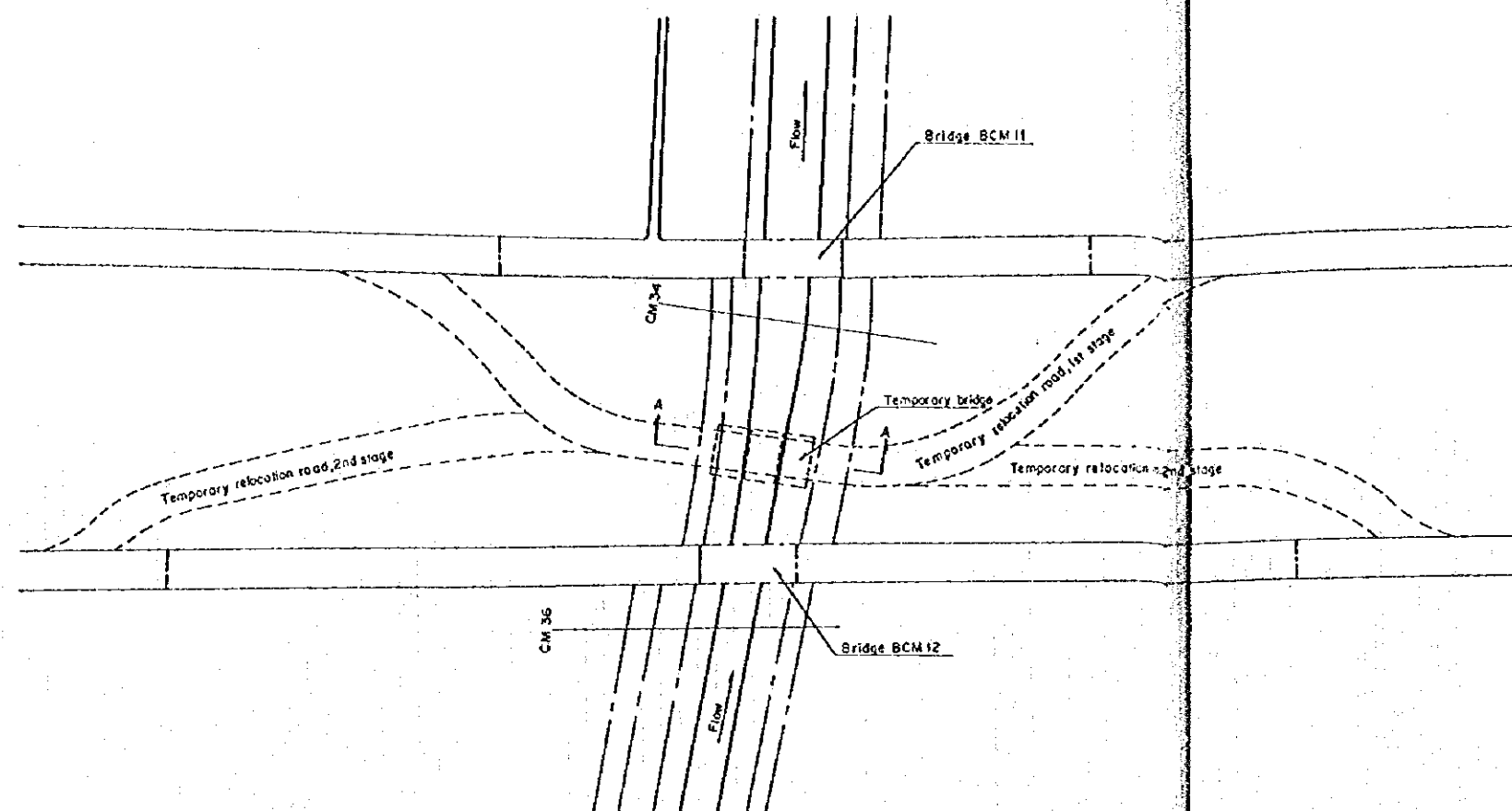
Temporary bridge, abut



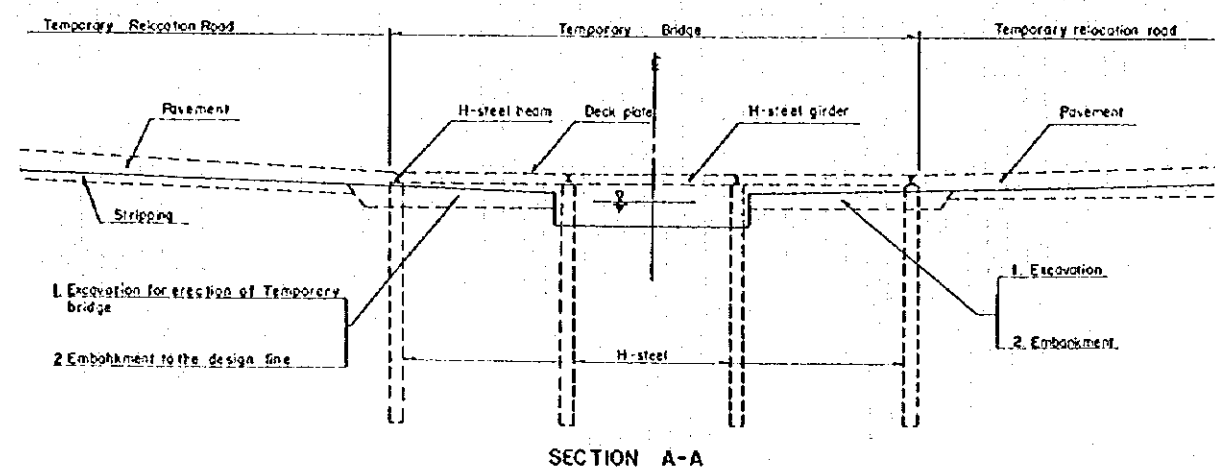
Temporary bridge, side view

TEMPORARY BRIDGE (no scale)

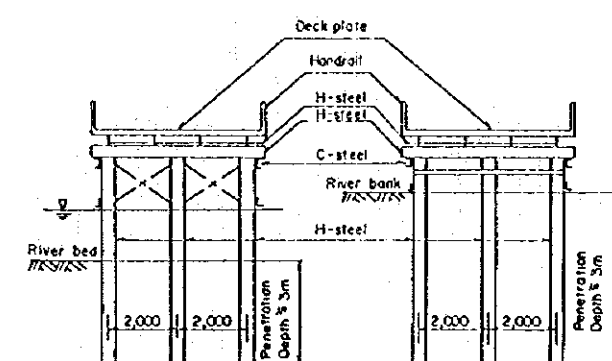
		PREPARED .....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	TITLE OF DRAWING TEMPORARY RELOCATION ROAD AND BRIDGE IN GEDE / BOR DRAINAGE CHANNEL	APPROVED	
		CHECKED .....				
		SUBMITTED .....				
REFERENCE	NO.	DATE .....	JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	DWG NO. J-95-30-401	DATE	



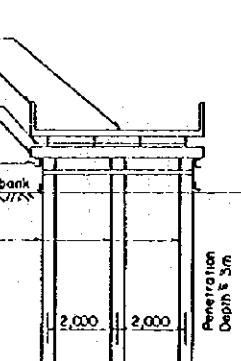
TEMPORARY RELOCATION ROAD AND BRIDGE FOR BRIDGES BCM 11 &amp; BCM 12



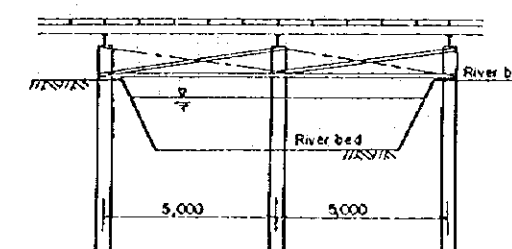
SECTION A-A



Temporary bridge, pier



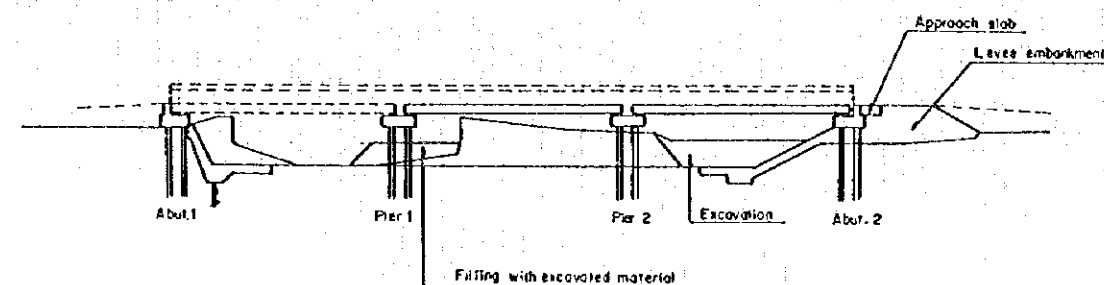
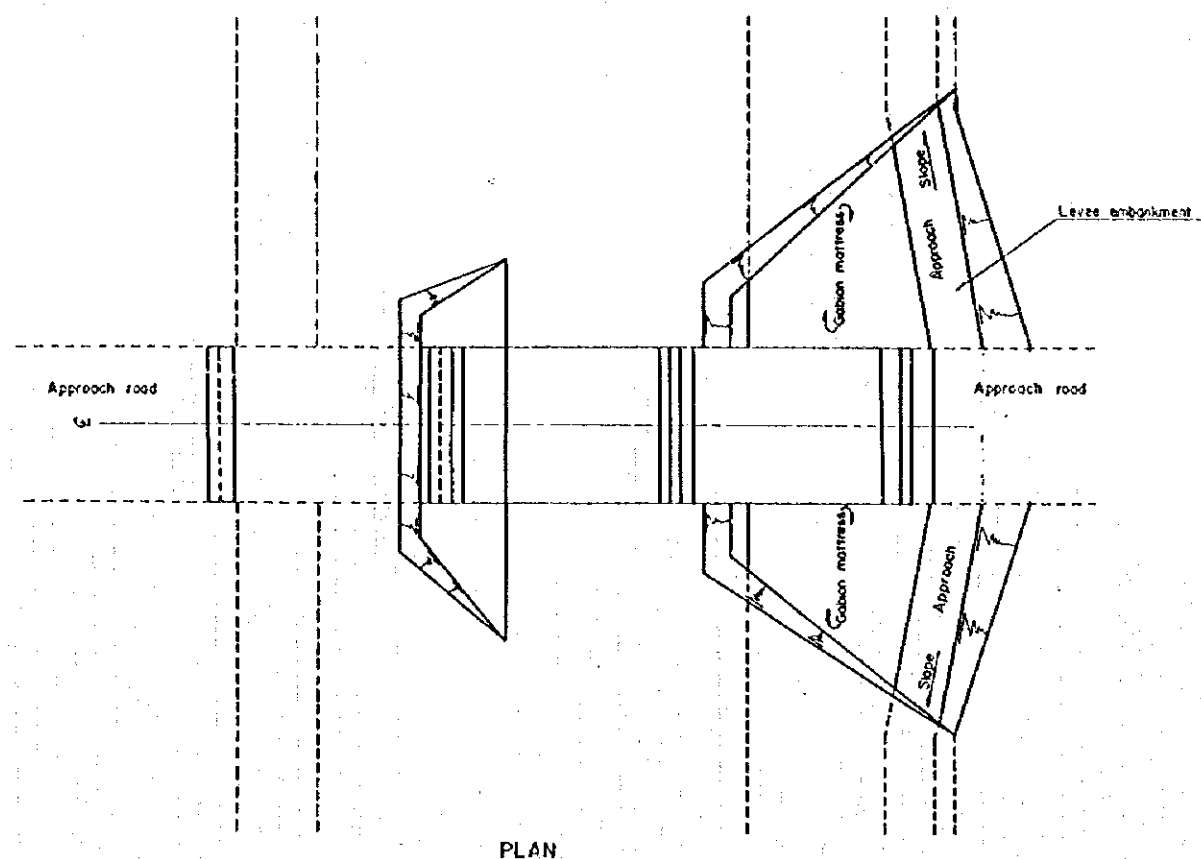
Temporary bridge, abut



Temporary bridge, side view

TEMPORARY BRIDGE (no scale)

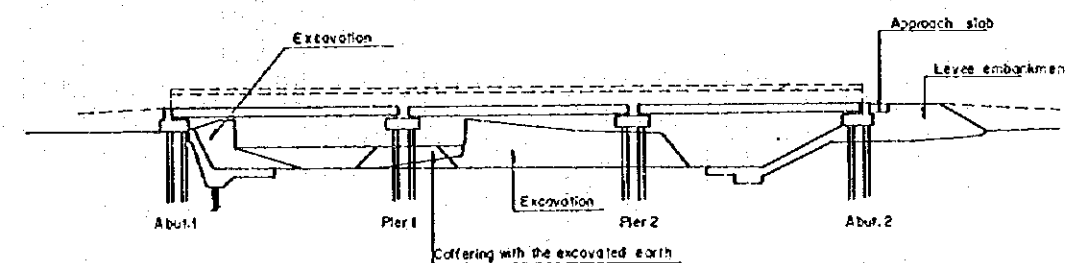
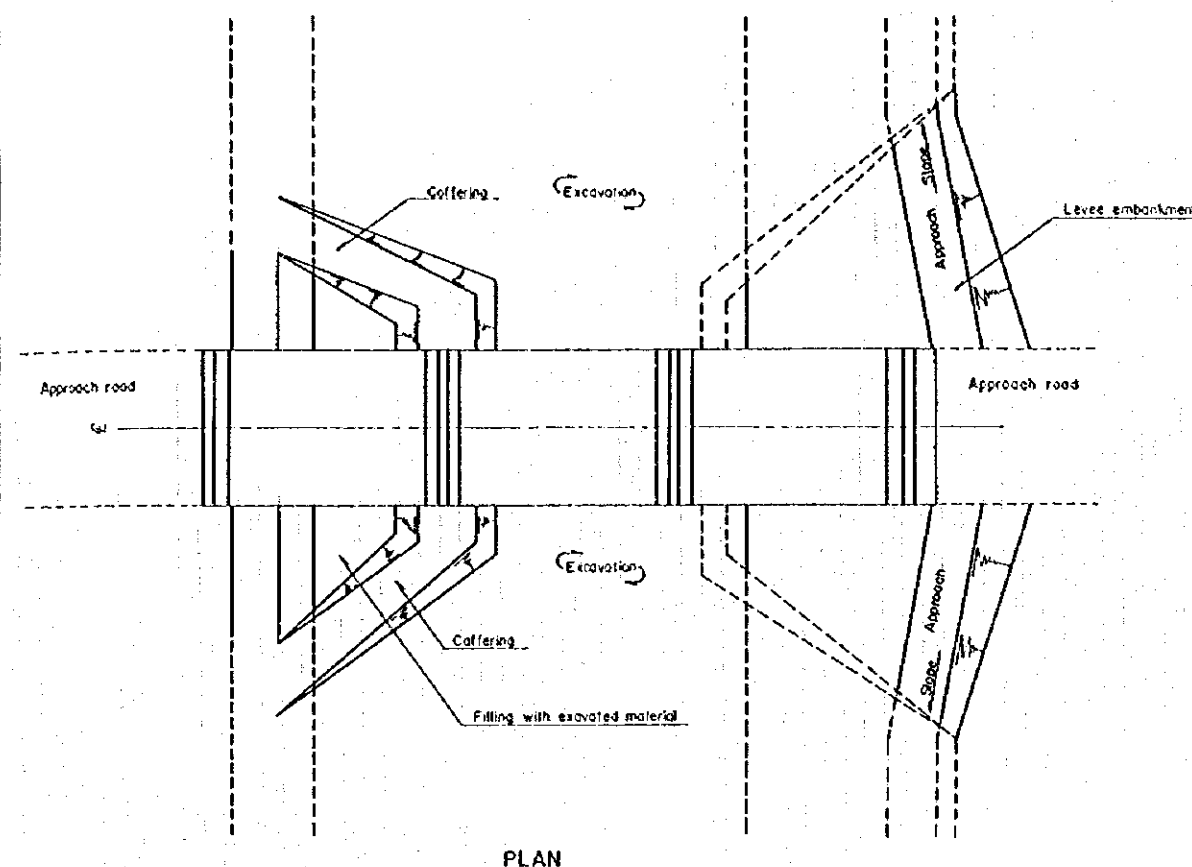
REFERENCE	PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	TITLE OF DRAWING TEMPORARY RELOCATION ROAD AND BRIDGE IN SALURAN CENGKARENG DRAINAGE CHANNEL	APPROVED
	CHECKED.....			
	SUBMITTED.....			
	DATE.....			
	NO.	JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	OWG NO. J-95-30-501	DATE



PROFILE  
CONSTRUCTION METHOD OF BRIDGE, 1ST STAGE

#### Work Sequence of Reconstruction of Bridge, 1st Stage

- Step 1: A PC pile is driven at Pier 2 as for test piling.
- Step 2: Excavation is carried out between Pier 2 and Abutment 2. On the same time, filling with the excavated earth material is carried out at Pier 1. Sand bags are provided on the filled slope, where erosion may occur.
- Step 3: Levee embankment and slope protection by gabion mattress are carried out under the bridge at the Abutment 2.
- Step 4: PC piles are driven at all the foundations of substructures.
- Step 5: Concrete, type 2, is placed in those substructures, after installation of scaffolding with support and treatment of pile heads.
- Step 6: Erection of main girders is carried out between Pier 1 and Abutment 2.



PROFILE  
CONSTRUCTION METHOD OF BRIDGE, 2ND STAGE

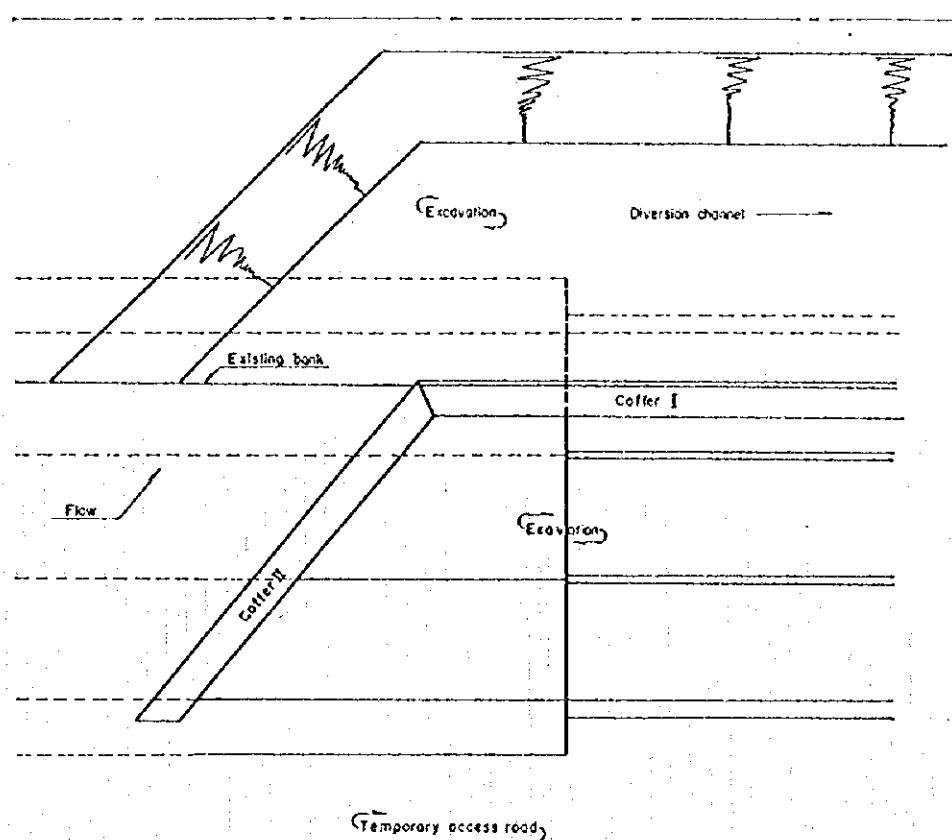
#### Work Sequence of Reconstruction of Bridge, 2nd Stage

- Step 7: Excavation is carried out between Pier 1 and Pier 2. On the same time, filling with the excavated earth is done between Abutment 1 and Pier 2.
- Step 8: Erection of main girders is carried out between Abutment 1 and Pier 1.
- Step 9: The filled earth material between Abutment 1 and Pier 1 is removed, and excavation is carried out in the river bank at Abutment 1. The filled earth material around Pier 1 is remained as a coffering structure.
- Step 10: Revetment on the river bank beside Abutment 1 is carried out.
- Step 11: The coffering structure is removed, and site clearance is done.

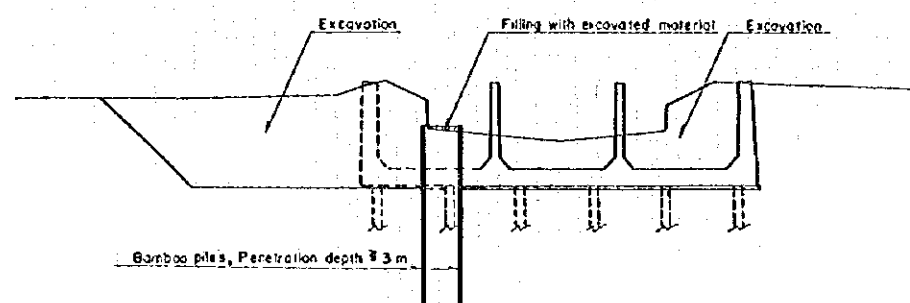
Note: Superstructures are constructed in parallel with the works described in the Step 7 to Step 11.

REFERENCE	PREPARED	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	TITLE OF DRAWING TEMPORARY WORKS FOR CONSTRUCTION OF BRIDGE WITH PIERS IN KAMAL DRAINAGE CHANNEL (MAW)	APPROVED
	CHECKED			
	SUBMITTED			
	DATE			
		JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	DWG NO. J-95-40-101	DATE





PLAN



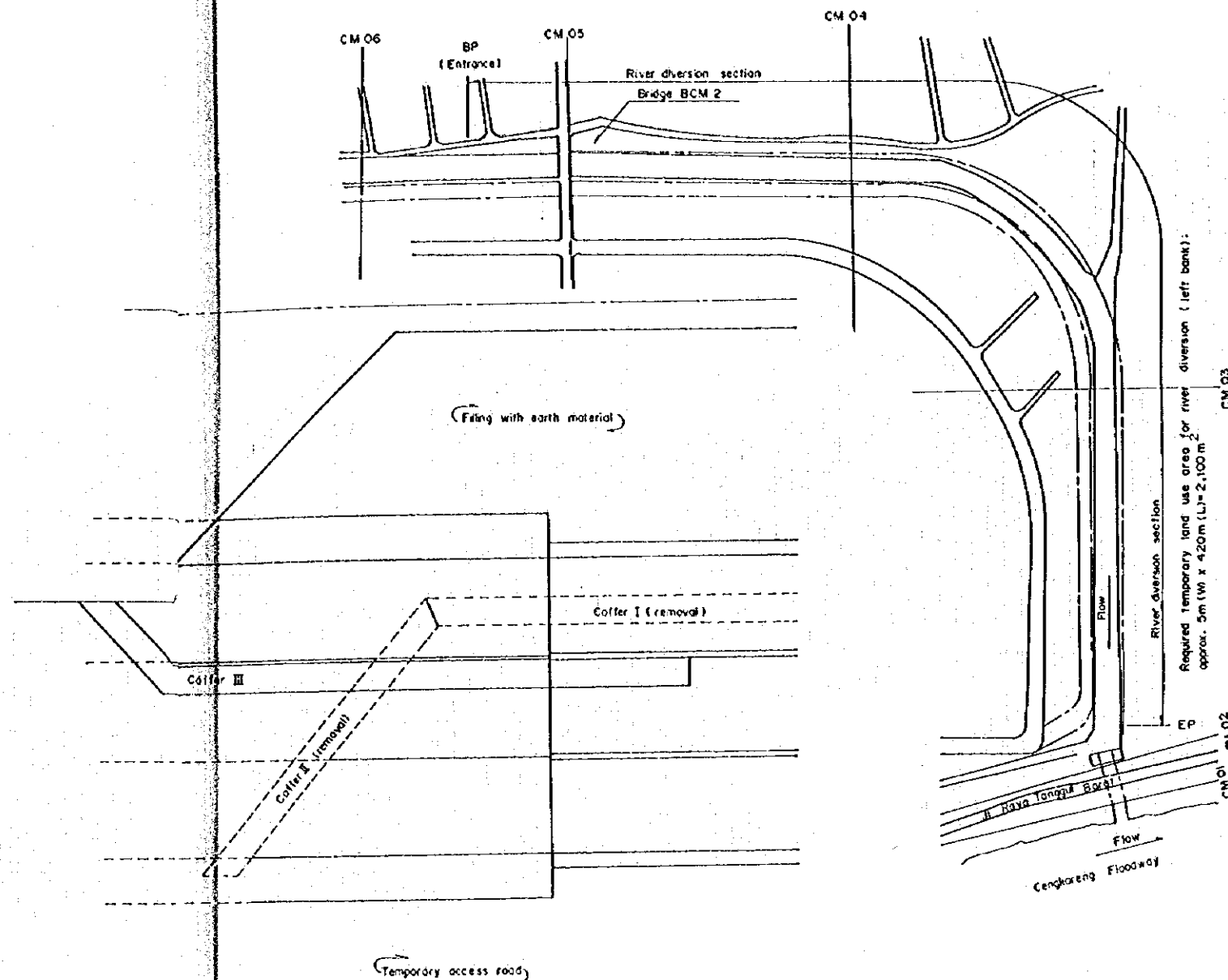
PROFILE

### TEMPORARY WORKS FOR CULVERT CONSTRUCTION, 1ST STAGE (AT ENTRANCE)

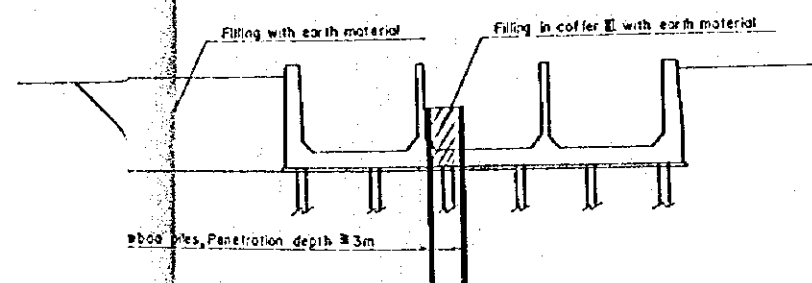
#### Work Sequence of Temporary Works and Culvert Construction, 1st Stage

- Step 1: Excavation on the left bank is carried out in parallel with construction of the Coffers I. The excavated earth material will be temporarily stocked on the planned inspection road on the right bank between CM 02 and CM 05.
- Step 2: After excavation on the left bank for the diversion and construction of the Coffers I beside the planned open culvert in the whole length, Coffers II is constructed to close the drainage channel on the right half portion.
- Step 3: Construction of the open culvert is carried out in the middle and right lanes. At the confluence with the tributary drainage on the left bank (at CM 03), the open culvert is constructed in full width.

Note: A temporary bridge shall be provided at the cross section of the diversion channel with the existing road at CM 05+2m. The construction method of the bridge can be referred to Drawing No. J-95-50-401.



PLAN



PROFILE

### TEMPORARY WORKS FOR CULVERT CONSTRUCTION, 2ND STAGE (AT ENTRANCE)

#### Work Sequence of Temporary Works and Culvert Construction, 2nd Stage

- Step 4: Coffers III is constructed to close the diversion channel, after removal of the Coffers I and Coffers II.
- Step 5: Construction of the open culvert is carried out in the remaining left lane. On the same time, filling in the diversion channel is carried out.
- The construction at the confluence (CM 03) is carried out after provision of a small earth dike at left lane to divert the tributary drainage water to the middle and right lanes through slits to be provided on both the side walls of the middle lane.
- Step 6: Removal of the Coffers III and site clearance are done.

Note: The construction of Bridge BCM 2 at CM 05+2m will start after finishing of earth filling work in the diversion channel.

REFERENCE	PREPARED	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	TITLE OF DRAWING TEMPORARY WORKS FOR CULVERT CONSTRUCTION IN SALURAN CENGKARENG DRAINAGE CHANNEL	APPROVED
	CHECKED			
	SUBMITTED			
	DATE			
	0 NO.	JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	DWG NO. J-95-50-501	DATE











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