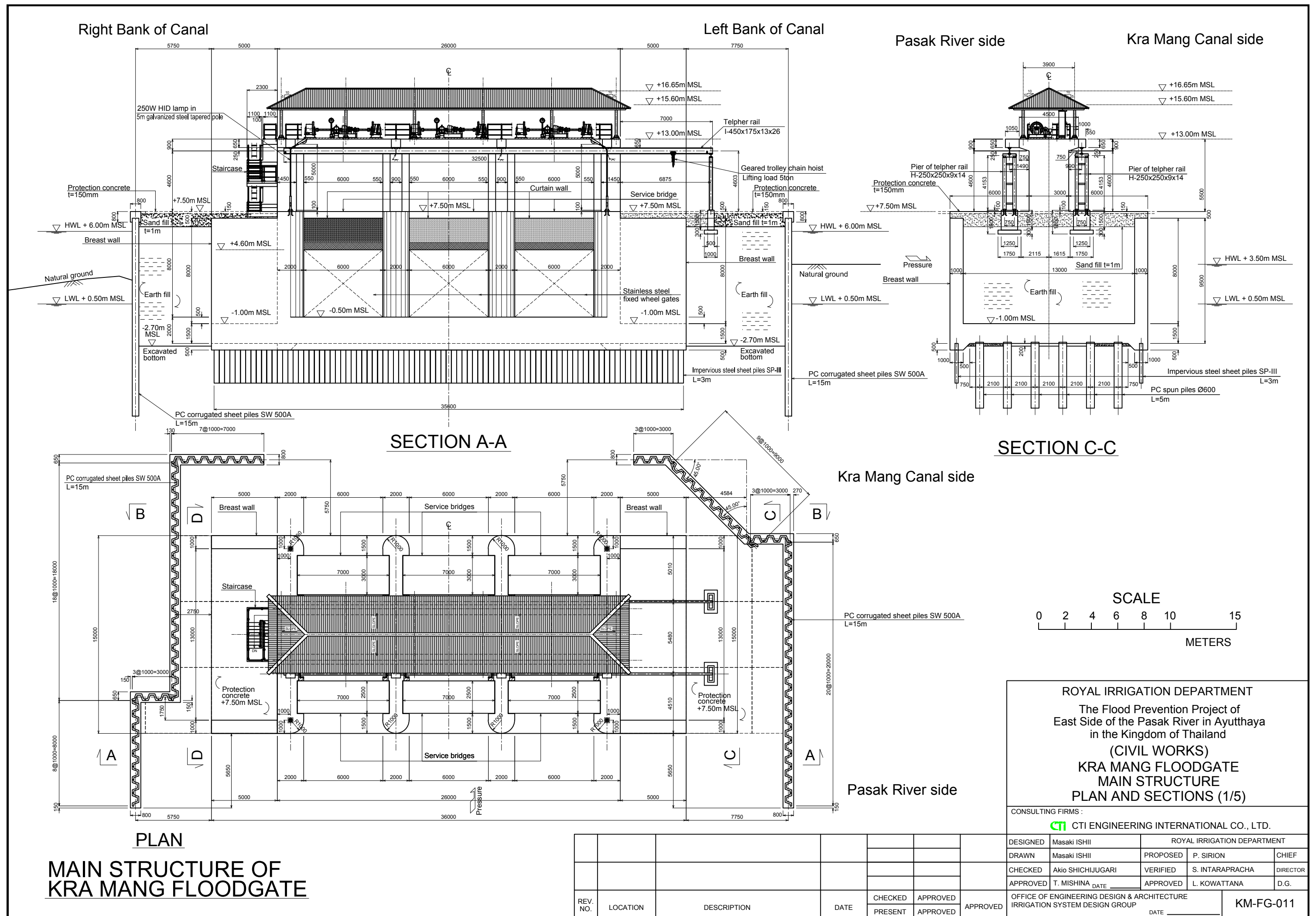




MAIN STRUCTURE OF
KRA MANG FLOODGATE

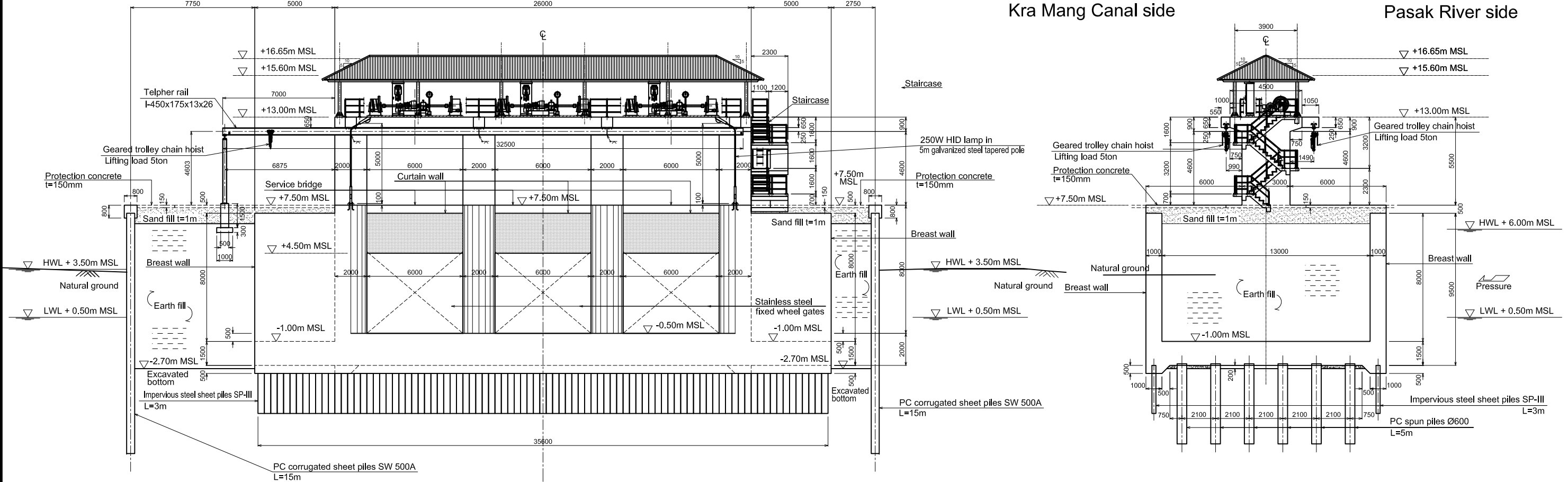
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				PRESENT	APPROVED											
							ROYAL IRRIGATION DEPARTMENT									
							DESIGNED	Masaki ISHII								
							DRAWN	Masaki ISHII	PROPOSED	P. SIRION	CHIEF					
							CHECKED	Akio SHICHIJUGARI	VERIFIED	S. INTARAPRACHA	DIRECTOR					
							APPROVED	T. MISHINA	DATE	APPROVED	L. KOWATTANA					
											D.G.					

Left Bank of Canal

Right Bank of Canal

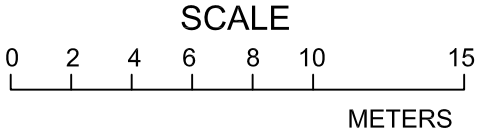
Kra Mang Canal side

Pasak River side



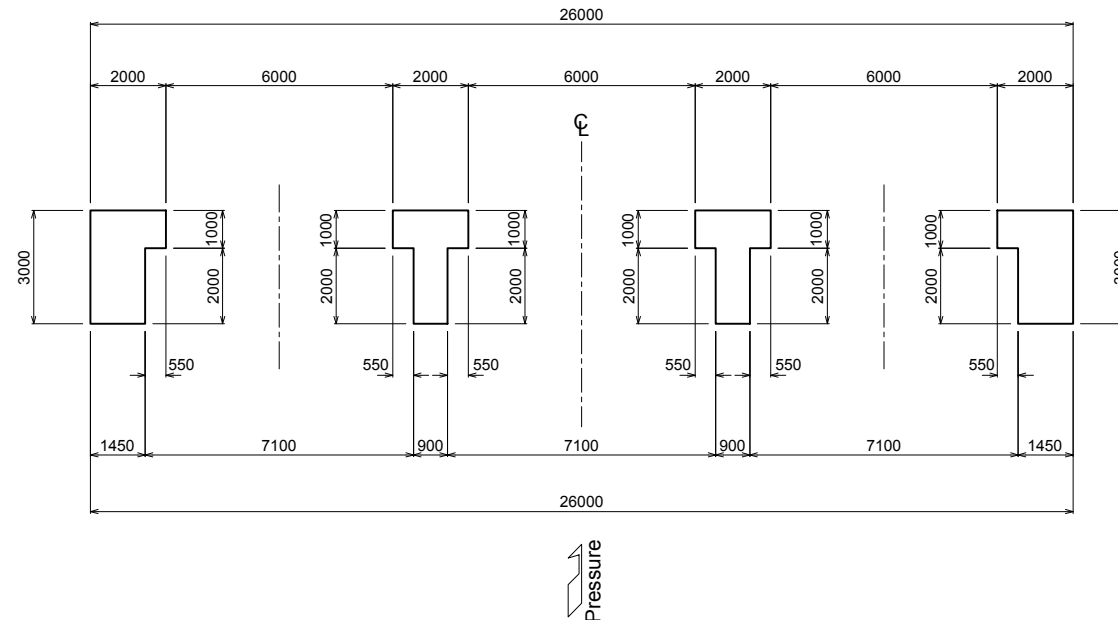
SECTION B-B

SECTION D-D



MAIN STRUCTURE OF
KRA MANG FLOODGATE

REV. NO.	LOCATION	DESCRIPTION	DATE	CHECKED	APPROVED	APPROVED	OFFICE OF ENGINEERING DESIGN & ARCHITECTURE IRRIGATION SYSTEM DESIGN GROUP			DATE	KM-FG-012					
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							ROYAL IRRIGATION DEPARTMENT									
							DESIGNED	Masaki ISHII	PROPOSED	P. SIRION						
							DRAWN	Masaki ISHII	VERIFIED	S. INTARAPRACHA						
							CHECKED	Akio SHICHIJUGARI	APPROVED	L. KOWATTANA						
							APPROVED	T. MISHINA	DATE							
							CONSULTING FIRMS : CTI ENGINEERING INTERNATIONAL CO., LTD.									



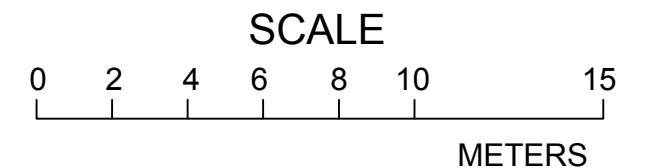
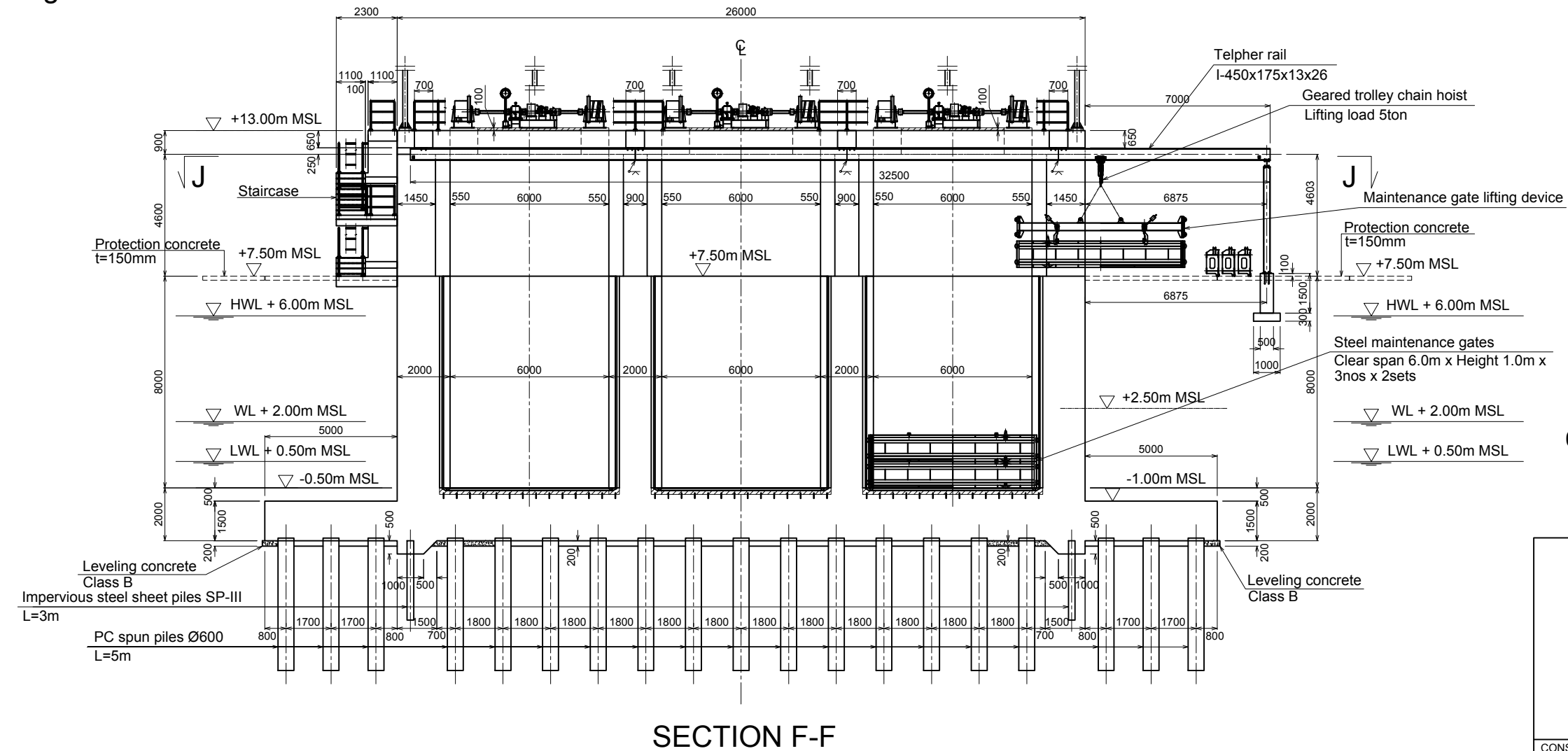
Kra Mang Canal side

Pasak River side

SECTION J-J

Left Bank of Canal

Right Bank of Canal



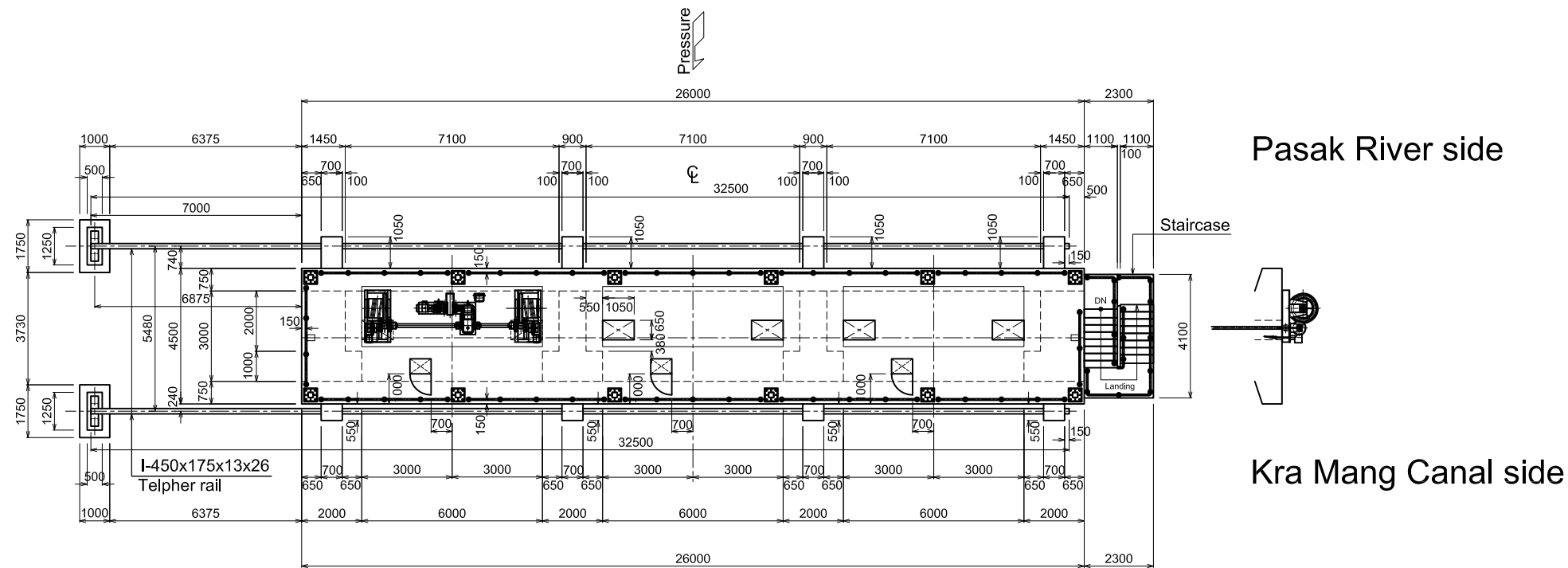
ROYAL IRRIGATION DEPARTMENT
The Flood Prevention Project of
East Side of the Pasak River in Ayutthaya
in the Kingdom of Thailand
(CIVIL WORKS)
KRA MANG FLOODGATE
MAIN STRUCTURE
PLAN AND SECTIONS (4/5)

CONSULTING FIRMS :
CTI ENGINEERING INTERNATIONAL CO., LTD.

DESIGNED	Masaki ISHII	ROYAL IRRIGATION DEPARTMENT		
DRAWN	Masaki ISHII	PROPOSED	P. SIRION	CHIEF
CHECKED	Akio SHICHIJUGARI	VERIFIED	S. INTARAPRACHA	DIRECTOR
APPROVED	T. MISHINA	DATE	APPROVED	L. KOWATTANA
OFFICE OF ENGINEERING DESIGN & ARCHITECTURE IRRIGATION SYSTEM DESIGN GROUP				D.G.
DATE				KM-FG-014

MAIN STRUCTURE OF KRA MANG FLOODGATE

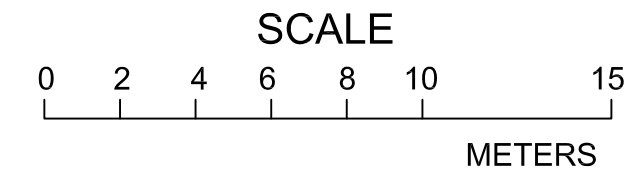
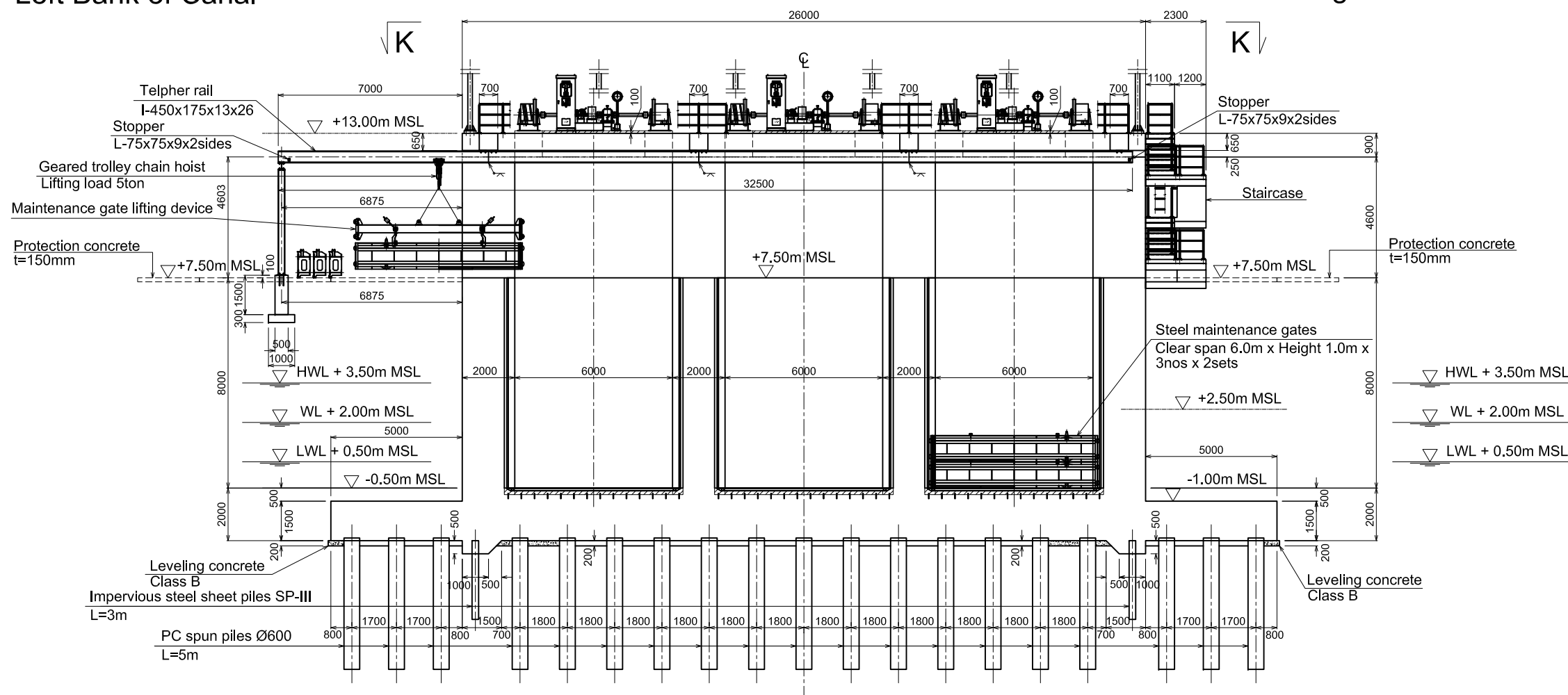
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				PRESENT	APPROVED	



SECTION K-K

Left Bank of Canal

Right Bank of Canal

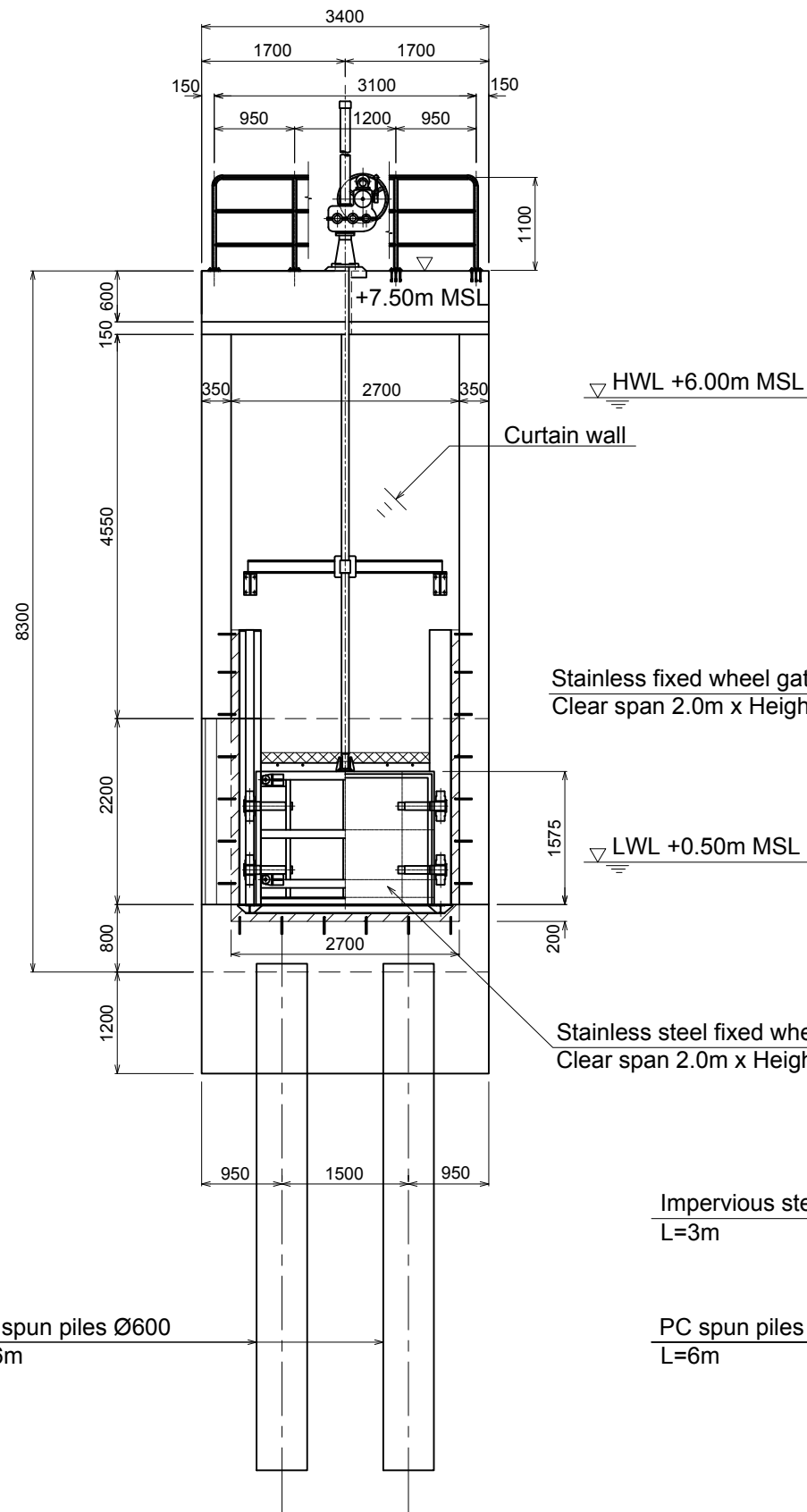


MAIN STRUCTURE OF KRA MANG FLOODGATE

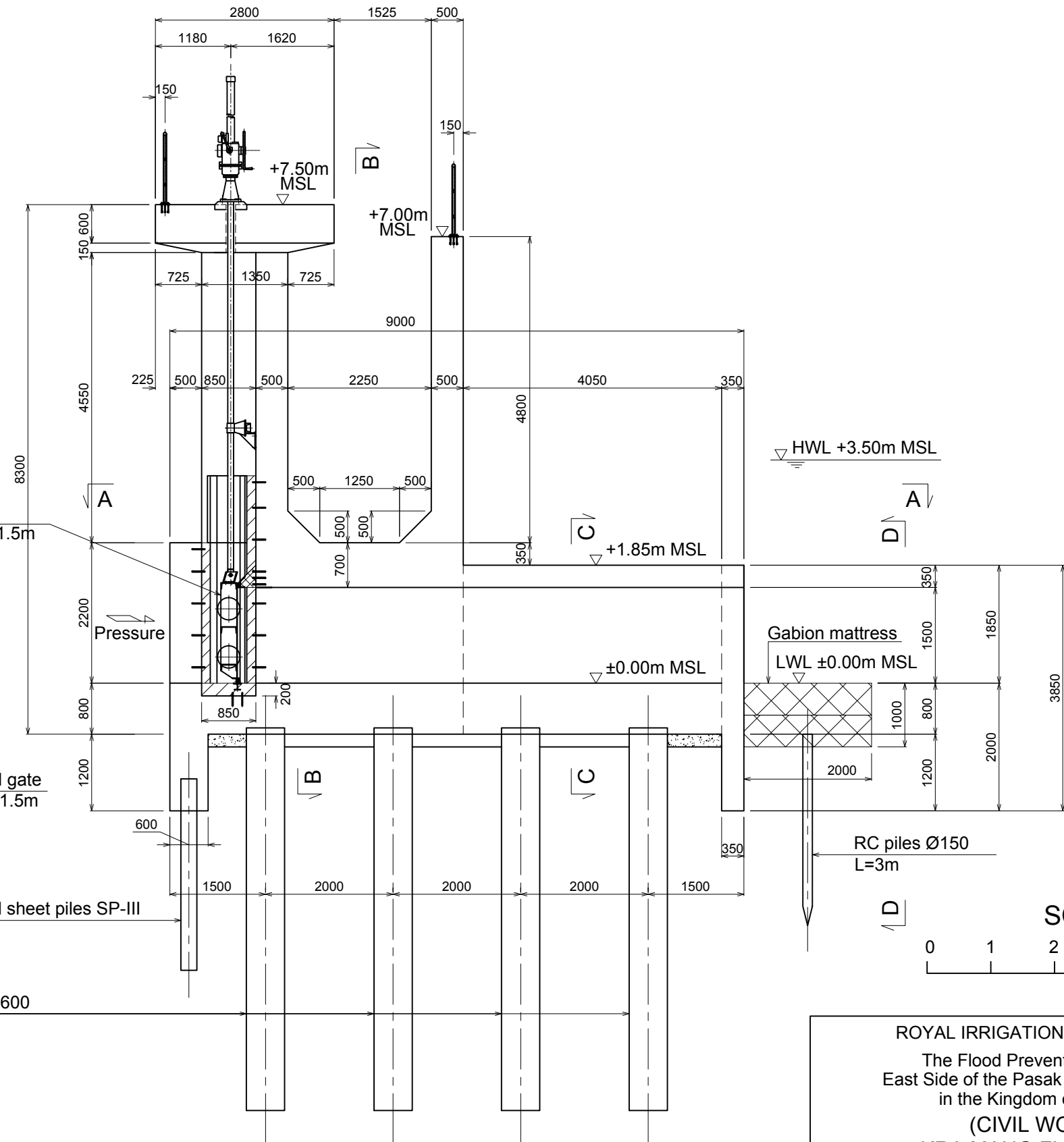
SECTION H-H

ROYAL IRRIGATION DEPARTMENT				The Flood Prevention Project of East Side of the Pasak River in Ayutthaya in the Kingdom of Thailand (CIVIL WORKS)					
KRA MANG FLOODGATE MAIN STRUCTURE PLAN AND SECTIONS (5/5)				CONSULTING FIRMS : CTI ENGINEERING INTERNATIONAL CO., LTD.					
DESIGNED		Masaki ISHII	ROYAL IRRIGATION DEPARTMENT						
DRAWN		Masaki ISHII	PROPOSED		P. SIRION	CHIEF			
CHECKED		Akio SHICHIJUGARI	VERIFIED		S. INTARAPRACHA	DIRECTOR			
APPROVED		T. MISHINA DATE	APPROVED		L. KOWATTANA	D.G.			
OFFICE OF ENGINEERING DESIGN & ARCHITECTURE IRRIGATION SYSTEM DESIGN GROUP				DATE					
KM-FG-015									

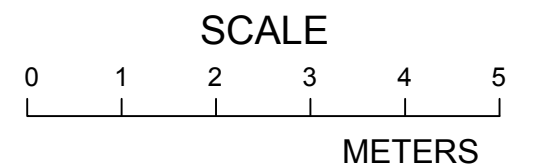
REV. NO.	LOCATION	DESCRIPTION	DATE	CHECKED PRESENT	APPROVED APPROVED	APPROVED
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FRONT VIEW



LONGITUDINAL SECTION



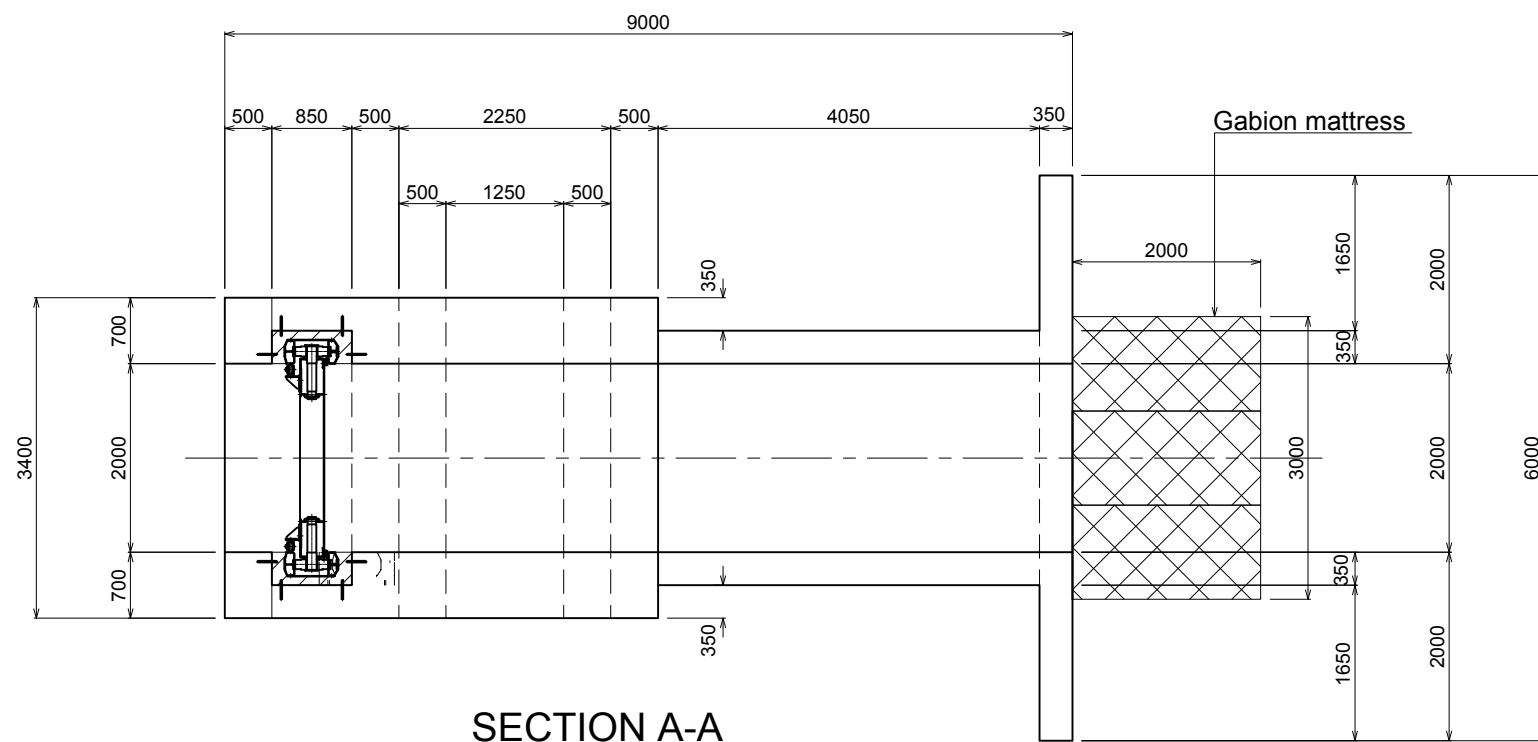
ROYAL IRRIGATION DEPARTMENT
The Flood Prevention Project of
East Side of the Pasak River in Ayutthaya
in the Kingdom of Thailand
(CIVIL WORKS)
KRA MANG FLOODGATE
DRAINAGE GATE (1/2)

CONSULTING FIRMS :
CTI ENGINEERING INTERNATIONAL CO., LTD.

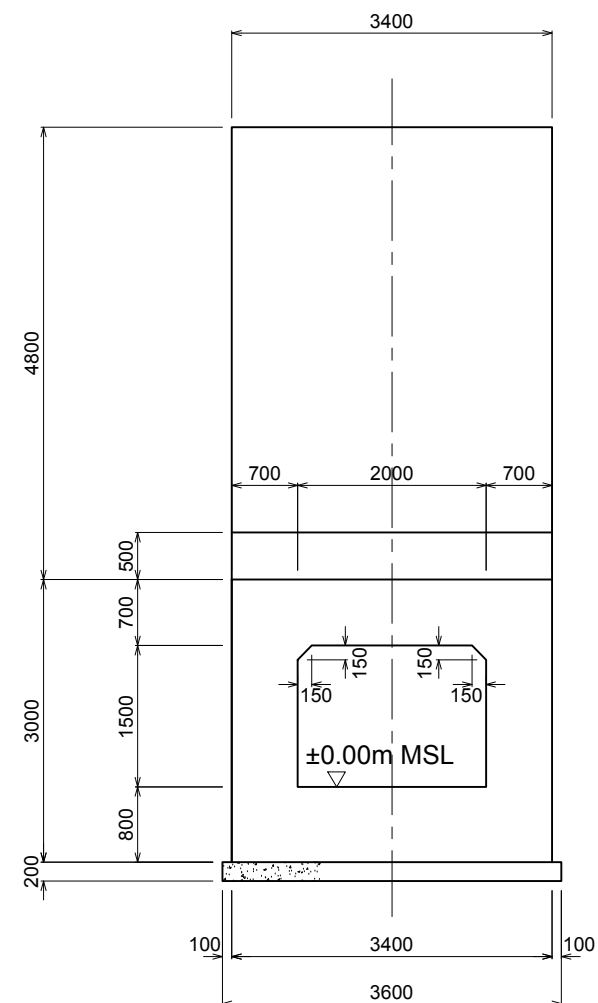
DESIGNED	Masaki ISHII	ROYAL IRRIGATION DEPARTMENT		
DRAWN	Masaki ISHII	PROPOSED	P. SIRION	CHIEF
CHECKED	Akio SHICHIJUGARI	VERIFIED	S. INTARAPRACHA	DIRECTOR
APPROVED	T. MISHINA	DATE	APPROVED	L. KOWATTANA
OFFICE OF ENGINEERING DESIGN & ARCHITECTURE IRRIGATION SYSTEM DESIGN GROUP				D.G.
DATE				KM-FG-016

REV. NO.	LOCATION	DESCRIPTION	DATE	CHECKED	APPROVED	APPROVED
				PRESENT	APPROVED	

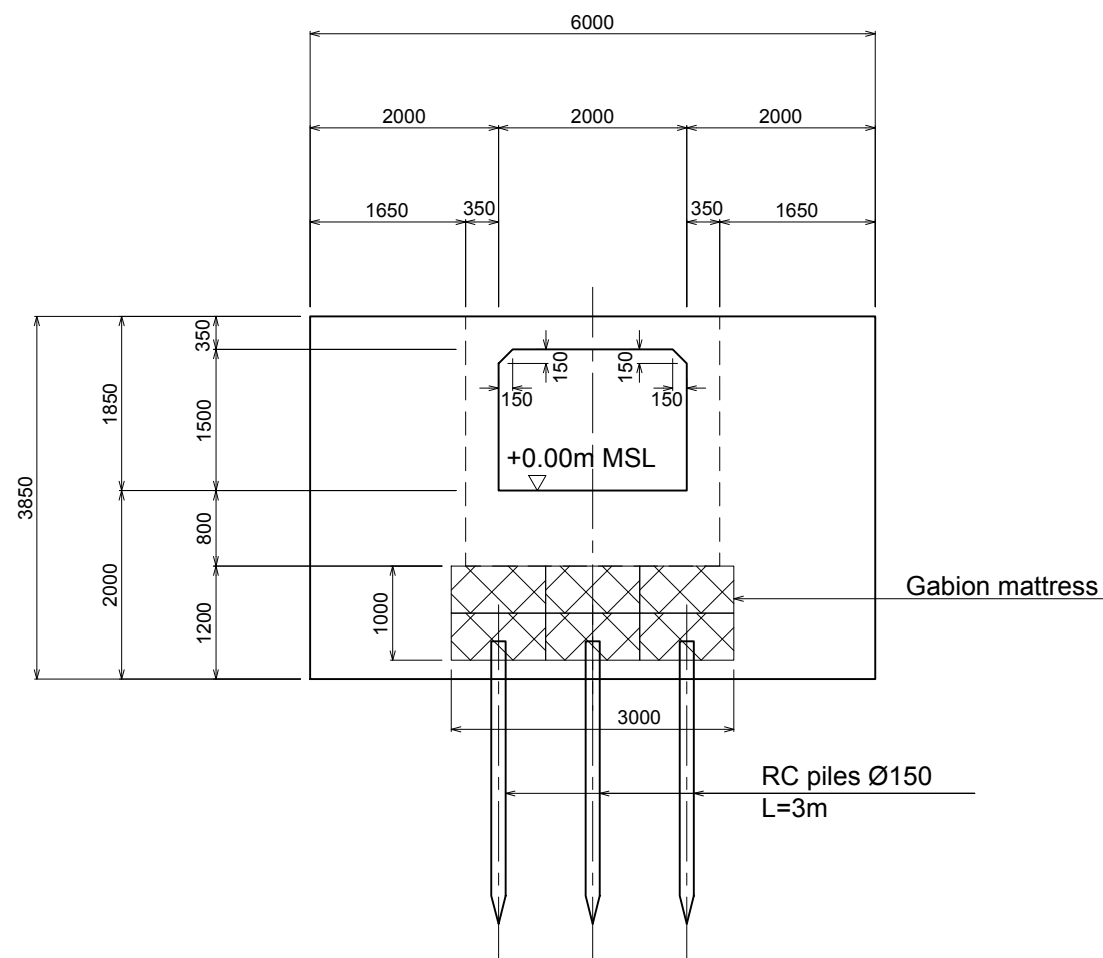
DRAINAGE GATE



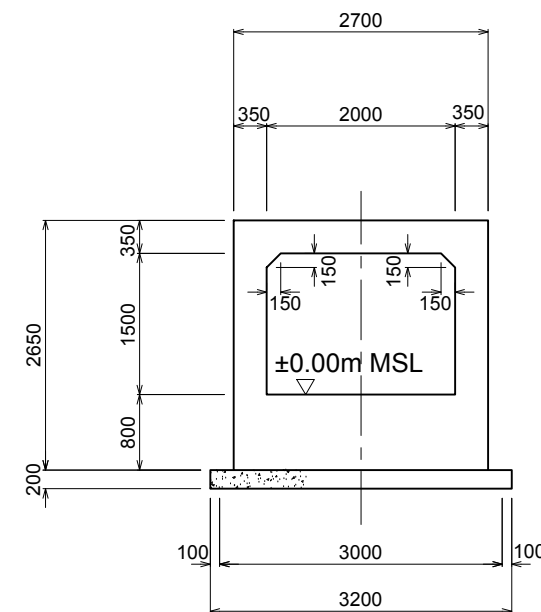
SECTION A-A



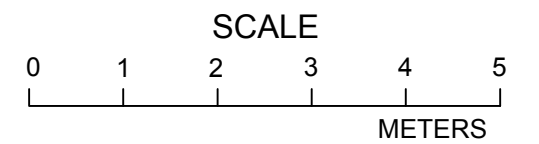
SECTION B-B



SECTION D-D



SECTION C-C



ROYAL IRRIGATION DEPARTMENT
The Flood Prevention Project of
East Side of the Pasak River in Ayutthaya
in the Kingdom of Thailand
(CIVIL WORKS)
**KRA MANG FLOODGATE
DRAINAGE G**

Left Bank of Canal

The foundation piles are to be PRESTRESSED CONCRETE SPUN PILE Ø600 which is in conformity with the accredited technical standards in Thai construction market.

Pasak River side

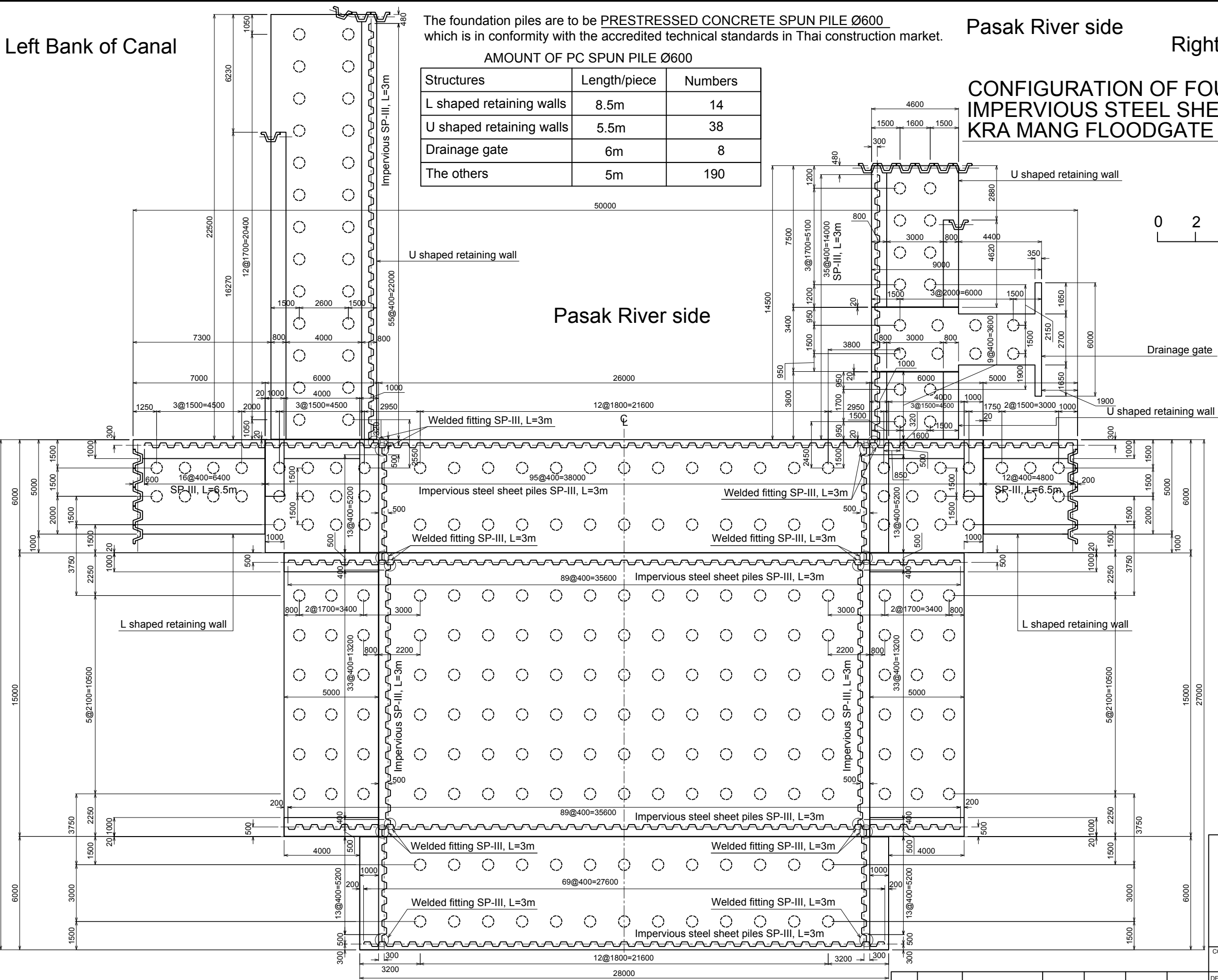
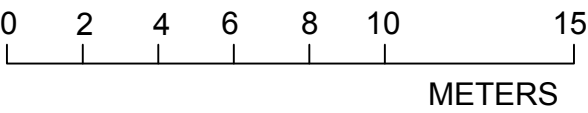
Right Bank of Canal

AMOUNT OF PC SPUN PILE Ø600

Structures	Length/piece	Numbers
L shaped retaining walls	8.5m	14
U shaped retaining walls	5.5m	38
Drainage gate	6m	8
The others	5m	190

CONFIGURATION OF FOUNDATION PILES AND IMPERVIOUS STEEL SHEET PILES FOR KRA MANG FLOODGATE

SCALE



Kra Mang Canal side

ROYAL IRRIGATION DEPARTMENT

The Flood Prevention Project of
East Side of the Pasak River in Ayutthaya
in the Kingdom of Thailand

(CIVIL WORKS)

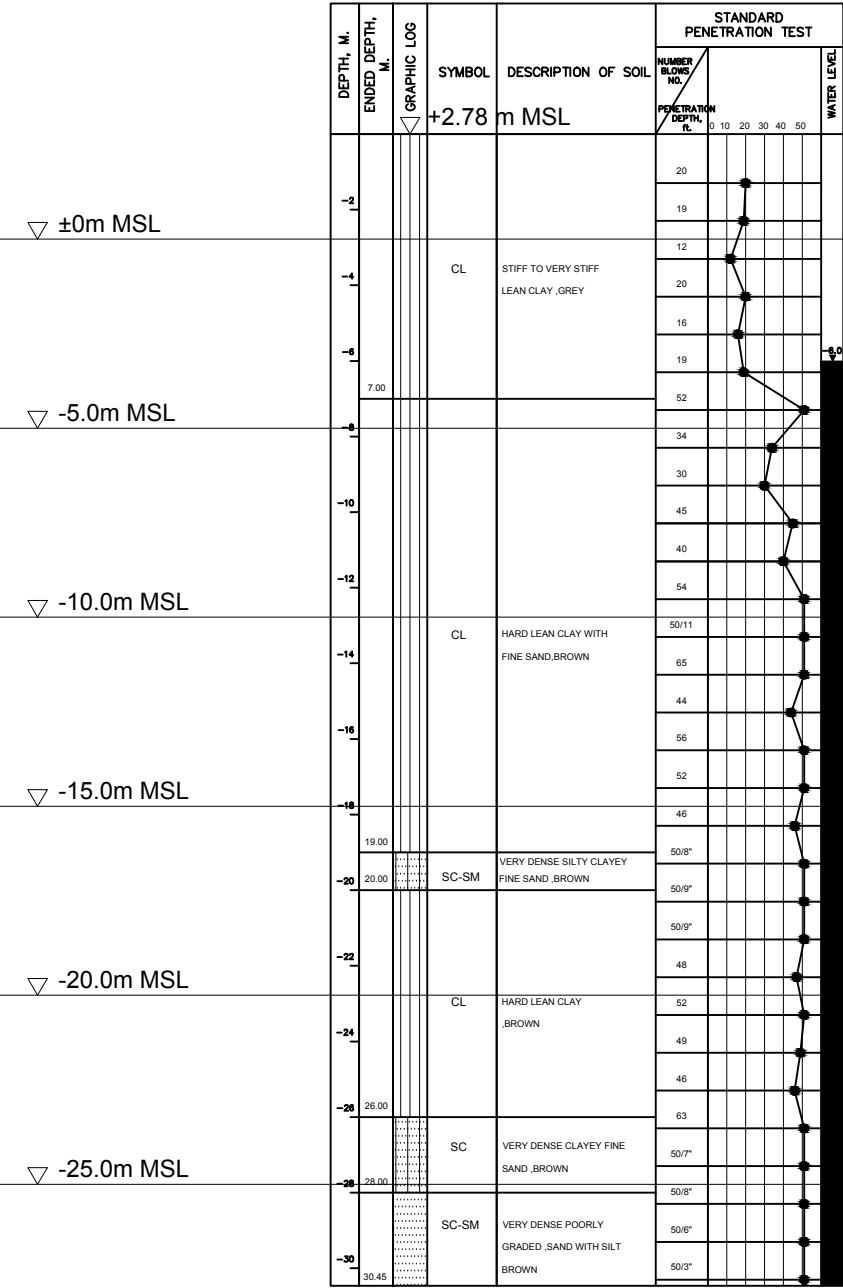
KRA MANG FLOODGATE
CONFIGURATION OF FOUNDATION PILES AND
IMPERVIOUS STEEL SHEET PILES

CONSULTING FIRMS :

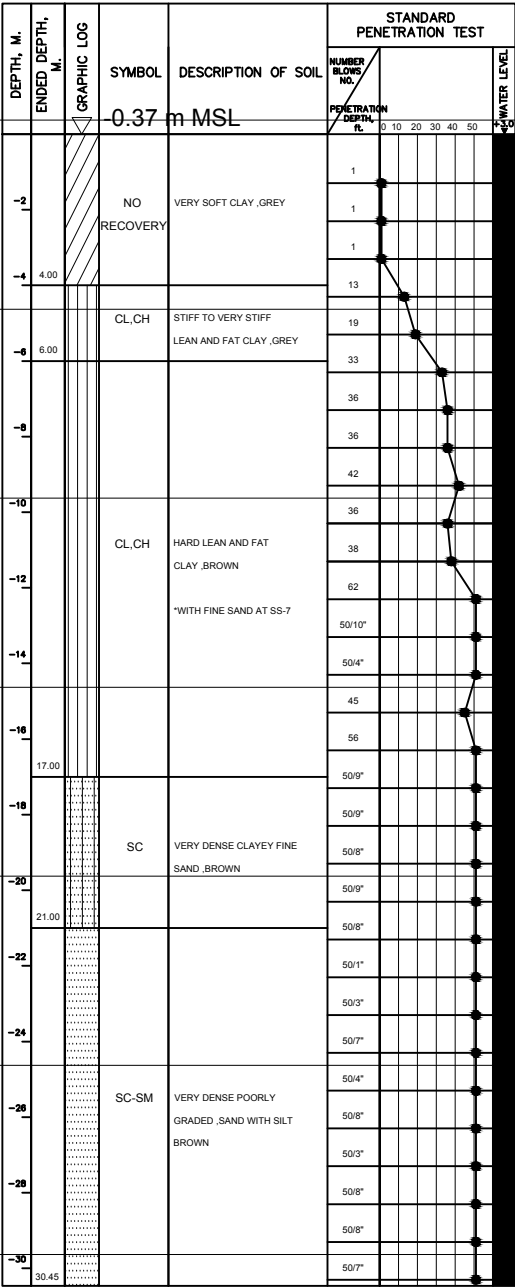
CTI CTI ENGINEERING INTERNATIONAL CO., LTD.

DESIGNED	Masaki ISHII	ROYAL IRRIGATION DEPARTMENT		
DRAWN	Masaki ISHII	PROPOSED	P. SIRION	CHIEF
CHECKED	Akio SHICHIJUGARI	VERIFIED	S. INTARAPRACHA	DIRECTOR
APPROVED	T. MISHINA	DATE	APPROVED	L. KOWATTANA
OFFICE OF ENGINEERING DESIGN & ARCHITECTURE		DATE		
IRRIGATION SYSTEM DESIGN GROUP		KM-FG-018		

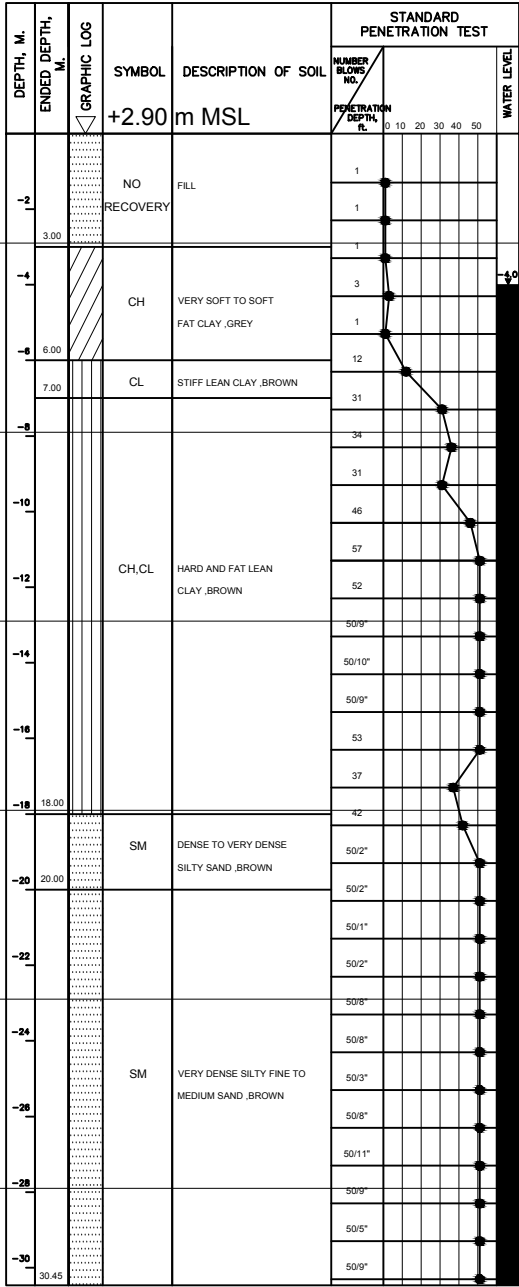
DH-KM-1



DH-KM-2



DH-KM-3



BOREHOLE LOGS FOR
KRA MANG FLOODGATE

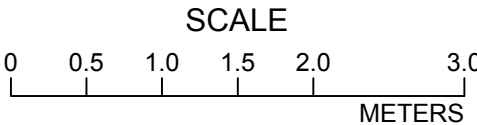
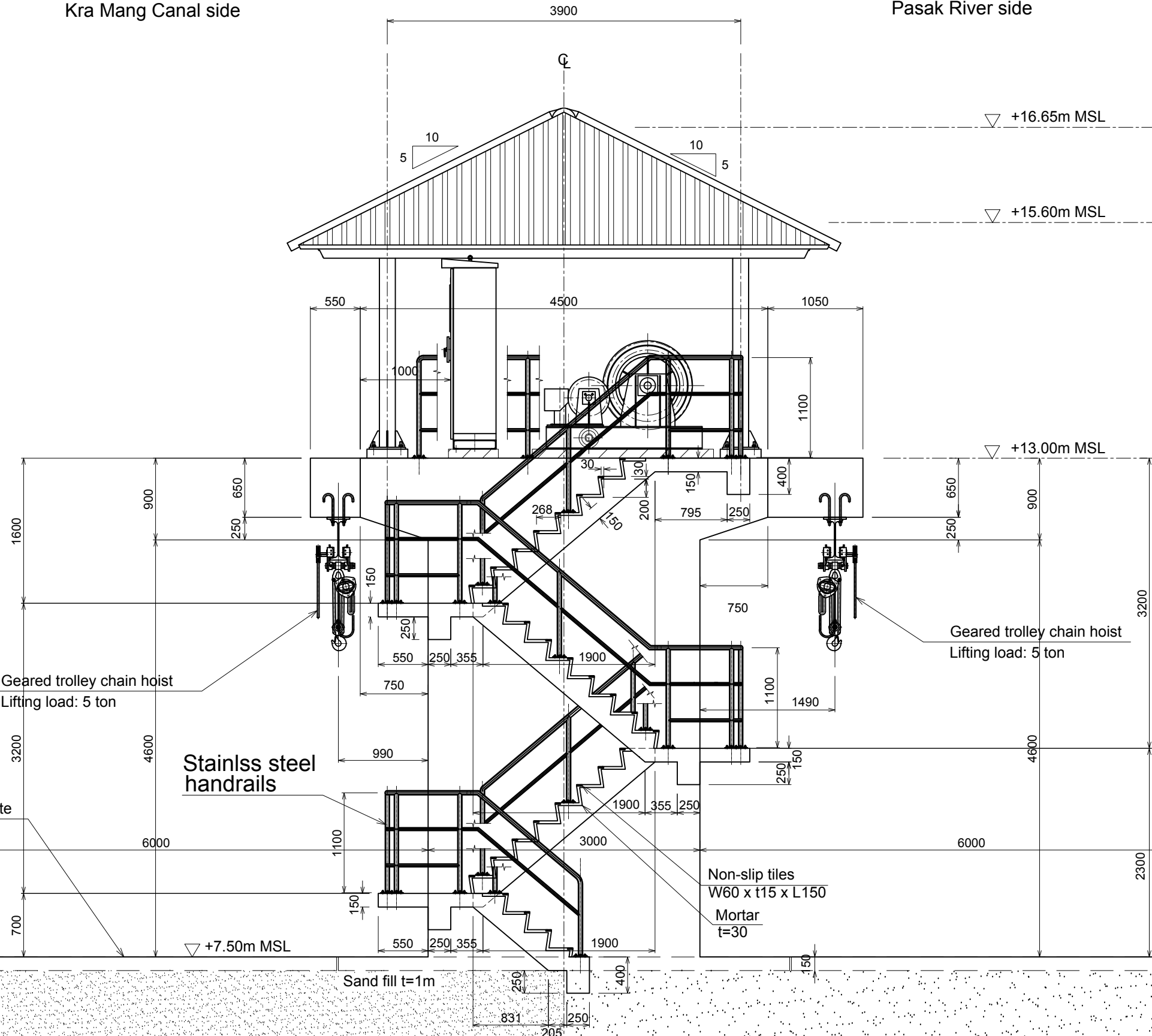
ROYAL IRRIGATION DEPARTMENT
The Flood Prevention Project of
East Side of the Pasak River in Ayutthaya
in the Kingdom of Thailand
(CIVIL WORKS)
KRA MANG FLOODGATE
BOREHOLE LOGS

CONSULTING FIRMS :
CTI ENGINEERING INTERNATIONAL CO., LTD.

REV. NO.	LOCATION	DESCRIPTION	DATE	CHECKED	APPROVED	APPROVED	DESIGNED	ROYAL IRRIGATION DEPARTMENT		
				PRESENT	APPROVED		DRAWN	Masaki ISHII	PROPOSED	P. SIRION
							CHECKED	Akio SHICHIJUGARI	VERIFIED	S. INTARAPRACHA

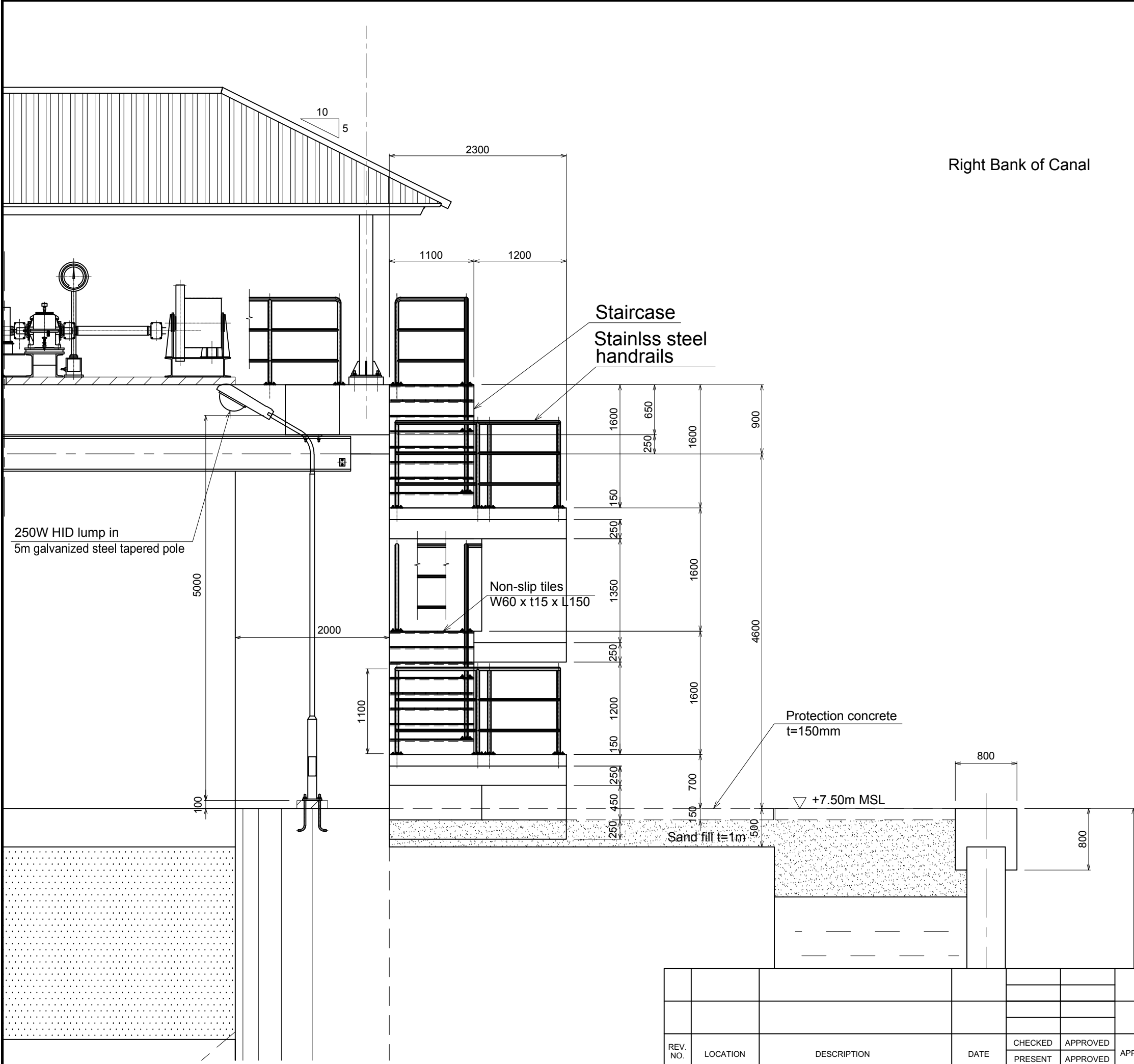
Kra Mang Canal side

Pasak River side

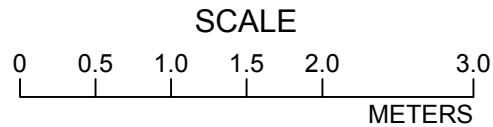


ROYAL IRRIGATION DEPARTMENT				
The Flood Prevention Project of East Side of the Pasak River in Ayutthaya in the Kingdom of Thailand (CIVIL WORKS) KRA MANG FLOODGATE STAIRCASE (1/4)				
CONSULTING FIRMS :				
CTI ENGINEERING INTERNATIONAL CO., LTD.				
DESIGNED	Masaki ISHII	ROYAL IRRIGATION DEPARTMENT		
DRAWN	Masaki ISHII	PROPOSED	P. SIRION	CHIEF
CHECKED	Akio SHICHIJUGARI	VERIFIED	S. INTARAPRACHA	DIRECTOR
APPROVED	T. MISHINA	DATE	APPROVED	L. KOWATTANA
OFFICE OF ENGINEERING DESIGN & ARCHITECTURE IRRIGATION SYSTEM DESIGN GROUP				D.G.
DATE				KM-FG-019

REV. NO.	LOCATION	DESCRIPTION	DATE	CHECKED PRESENT	APPROVED APPROVED	APPROVED

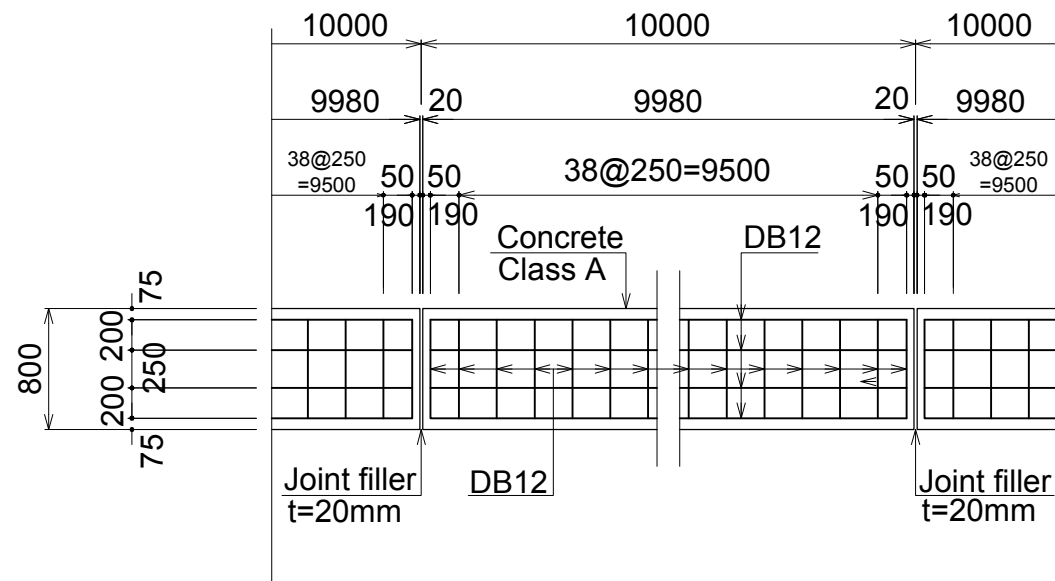


Right Bank of Canal

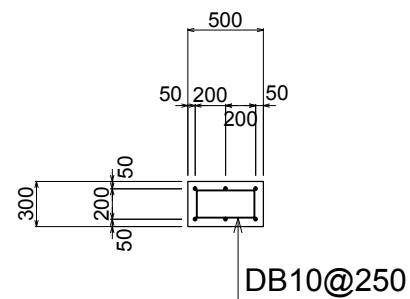


ROYAL IRRIGATION DEPARTMENT				
The Flood Prevention Project of East Side of the Pasak River in Ayutthaya in the Kingdom of Thailand (CIVIL WORKS) KRA MANG FLOODGATE STAIRCASE (2/4)				
CONSULTING FIRMS :				
CTI ENGINEERING INTERNATIONAL CO., LTD.				
DESIGNED	Masaki ISHII	ROYAL IRRIGATION DEPARTMENT		
DRAWN	Masaki ISHII	PROPOSED	P. SIRION	CHIEF
CHECKED	Akio SHICHIJUGARI	VERIFIED	S. INTARAPRACHA	DIRECTOR
APPROVED	T. MISHINA	DATE	APPROVED	L. KOWATTANA
OFFICE OF ENGINEERING DESIGN & ARCHITECTURE IRRIGATION SYSTEM DESIGN GROUP				D.G.
DATE				KM-FG-020

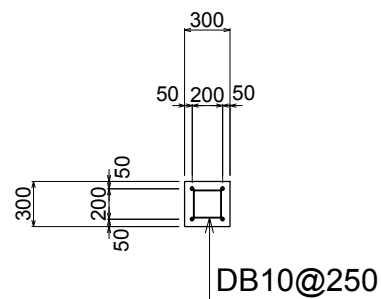
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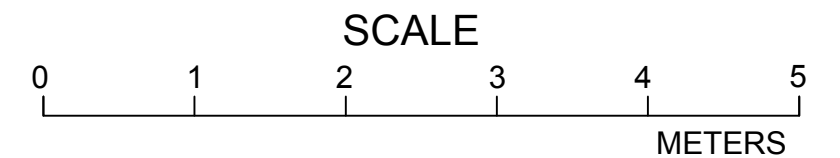
SECTION A-A, B-B



SECTION C1-C1



SECTION C2-C2



FLOODWALL OF KRA MANG FLOOD GATE (2/4)

ROYAL IRRIGATION DEPARTMENT
The Flood Prevention Project of
East Side of the Pasak River in Ayutthaya
in the Kingdom of Thailand
(CIVIL WORKS)
KRA MANG FLOODGATE
FLOODWALL (2/4)

CONSULTING FIRMS :
CTI ENGINEERING INTERNATIONAL CO., LTD.

							DESIGNED	Masaki ISHII	ROYAL IRRIGATION DEPARTMENT		
							DRAWN	Masaki ISHII	PROPOSED	P. SIRION	CHIEF
							CHECKED	Akio SHICHIJUGARI	VERIFIED	S. INTARAPRACHA	DIRECTOR
							APPROVED	T. MISHINA DATE _____	APPROVED	L. KOWATTANA	D.G.
REV. NO.	LOCATION	DESCRIPTION	DATE	CHECKED PRESENT	APPROVED APPROVED	APPROVED	OFFICE OF ENGINEERING DESIGN & ARCHITECTURE IRRIGATION SYSTEM DESIGN GROUP DATE _____				KM-FG-024

DH-KM-1

DEPTH, M.	ENDED DEPTH, M.	GRAPHIC LOG	SYMBOL	DESCRIPTION OF SOIL	STANDARD PENETRATION TEST		WATER LEVEL
					NUMBER BLOWS NO.	PENETRATION DEPTH, ft.	
						0 10 20 30 40 50	
					20		
					19		
					12		
-2			CL	STIFF TO VERY STIFF LEAN CLAY ,GREY	20		
-4					16		
-6					19		
	7.00				52		
-8					34		
-10					30		
					45		
					40		
-12			CL	HARD LEAN CLAY WITH FINE SAND,BROWN	54		
-14					50/11		
-16					65		
					44		
					56		
-18	19.00				52		
-20	20.00		SC-SM	VERY DENSE SILTY CLAYEY FINE SAND ,BROWN	46		
					50/8"		
					50/9"		
-22	22.30		CL	HARD LEAN CLAY ,BROWN	50/9"		
					48		

HWL + 6.00m MSL

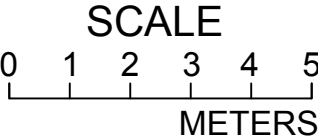
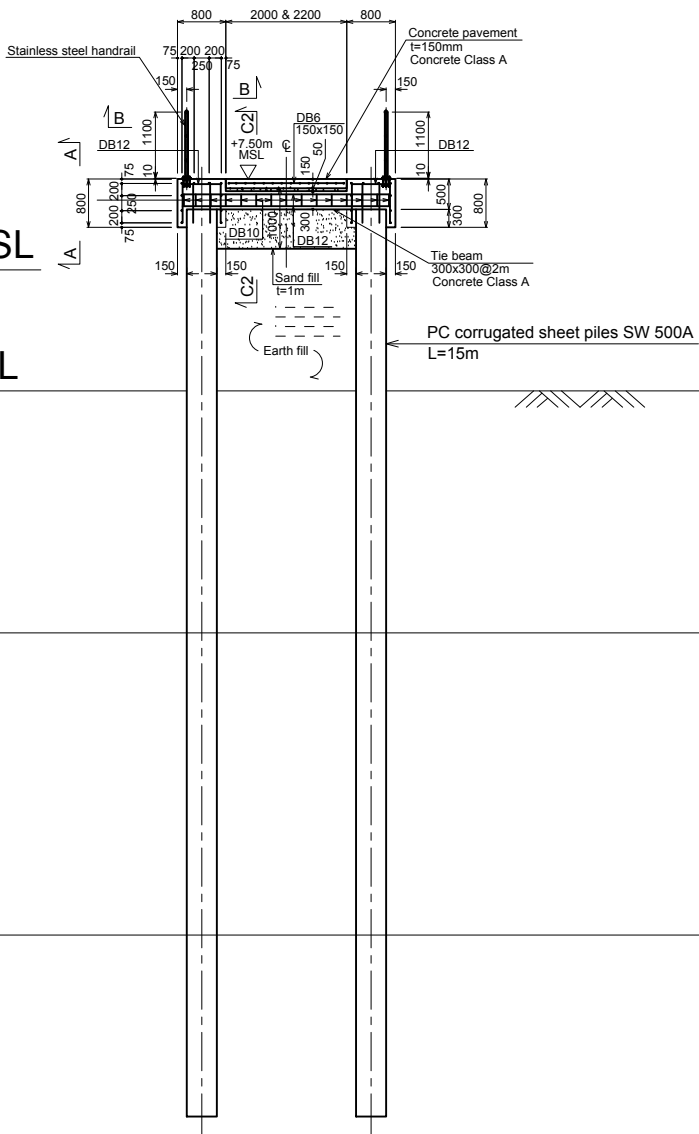
Ave.+4.0m MSL
Natural ground

±0m MSL

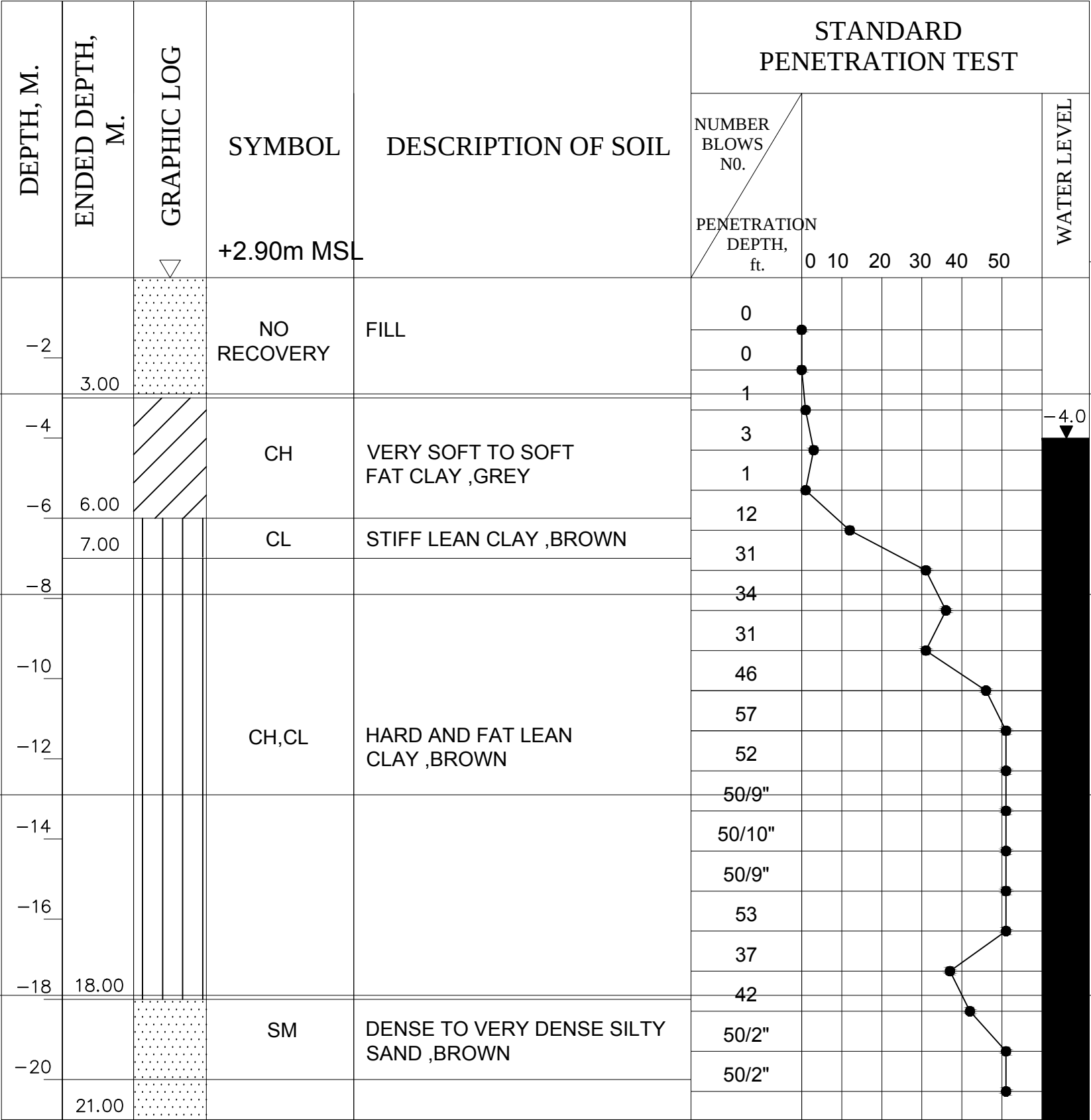
-5.0m MSL

-10.0m MSL

-15.0m MSL



DH-KM-3



▽ HWL + 6.00m MSL

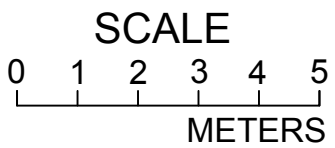
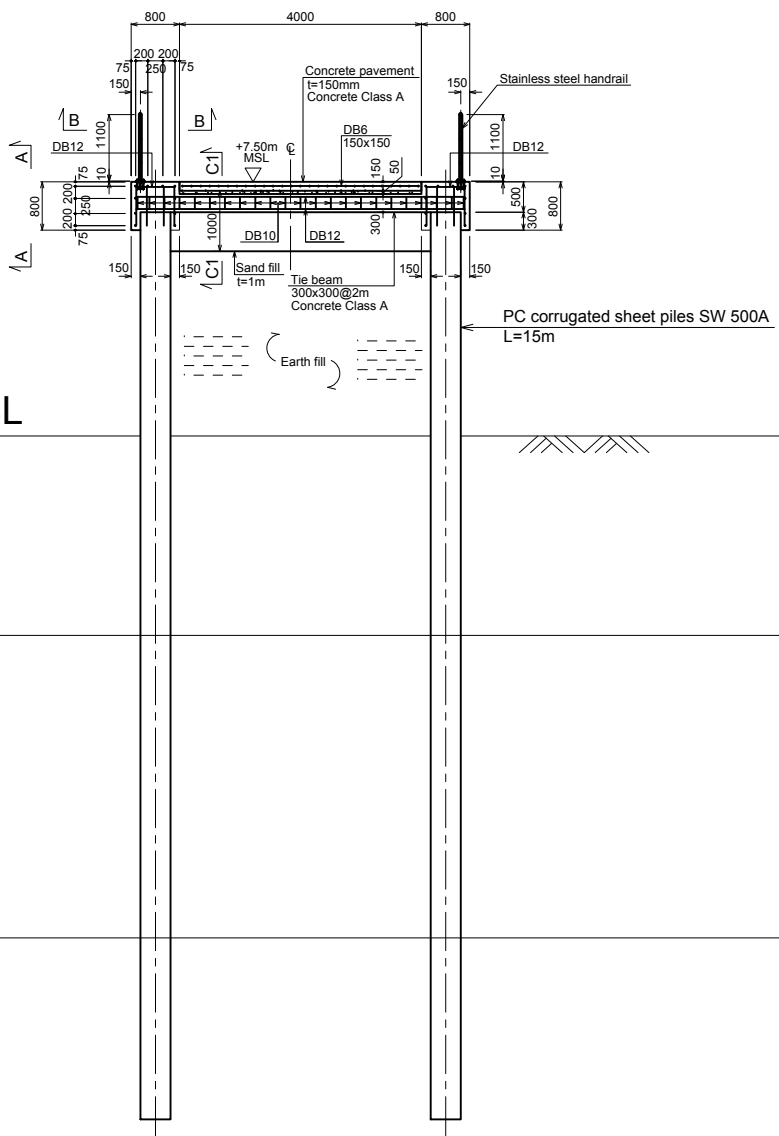
▽ Ave.+3.3m MSL
Natural ground

▽ ±0m MSL

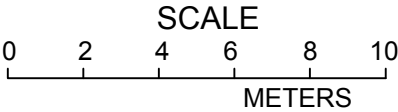
▽ -5.0m MSL

▽ -10.0m MSL

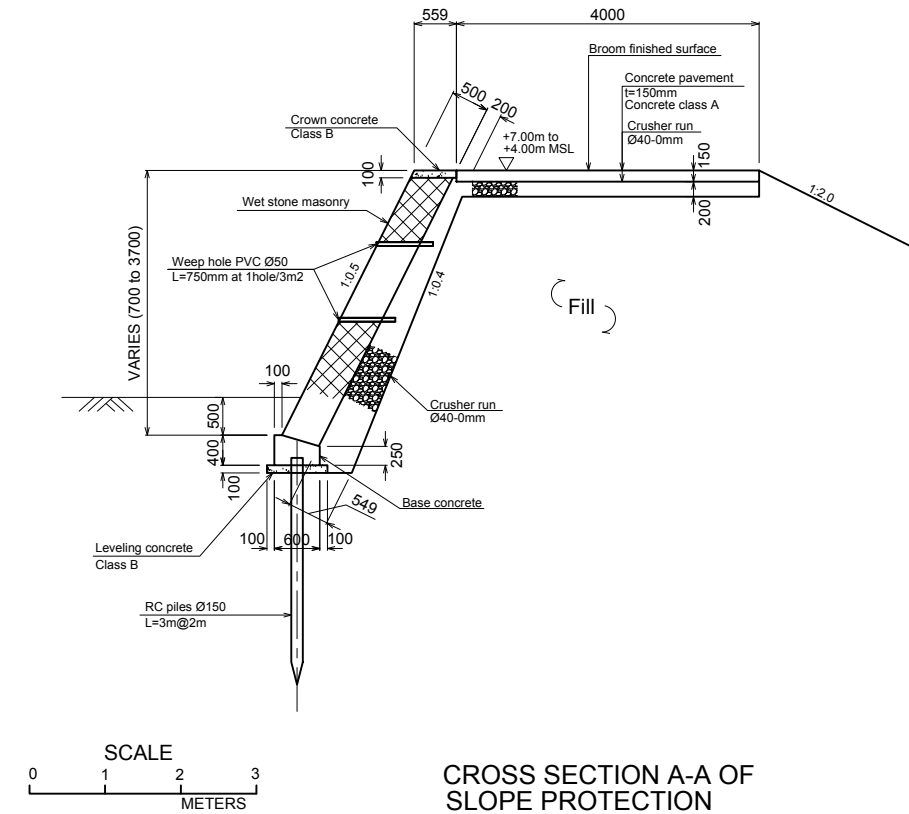
▽ -15.0m MSL



PLAN OF APPROACH WAY TO
KRA MANG FLOODGATE



Pasak River side

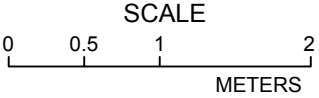


CROSS SECTION

RC piles Ø150
L=3m@2m

DETAIL OF BASE CONCRETE

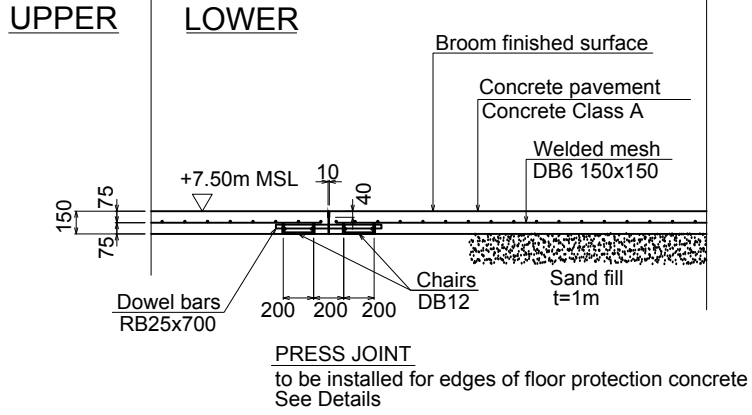
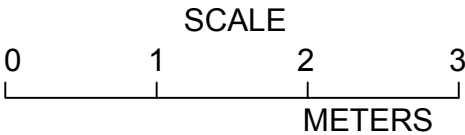
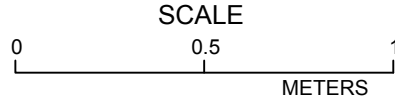
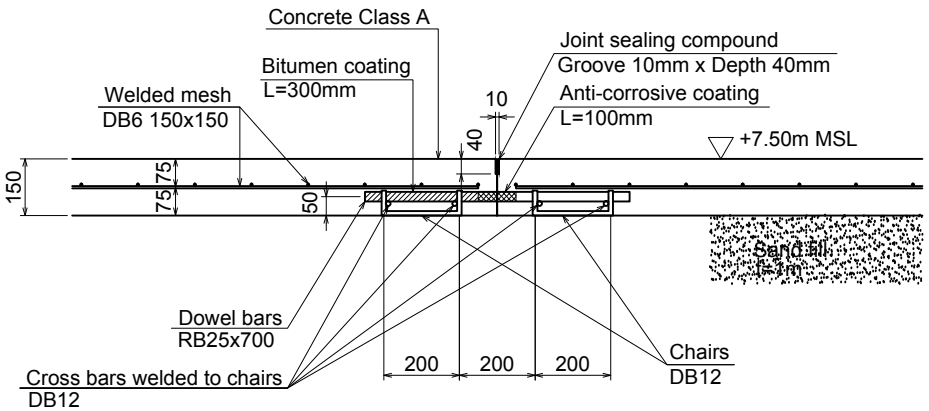
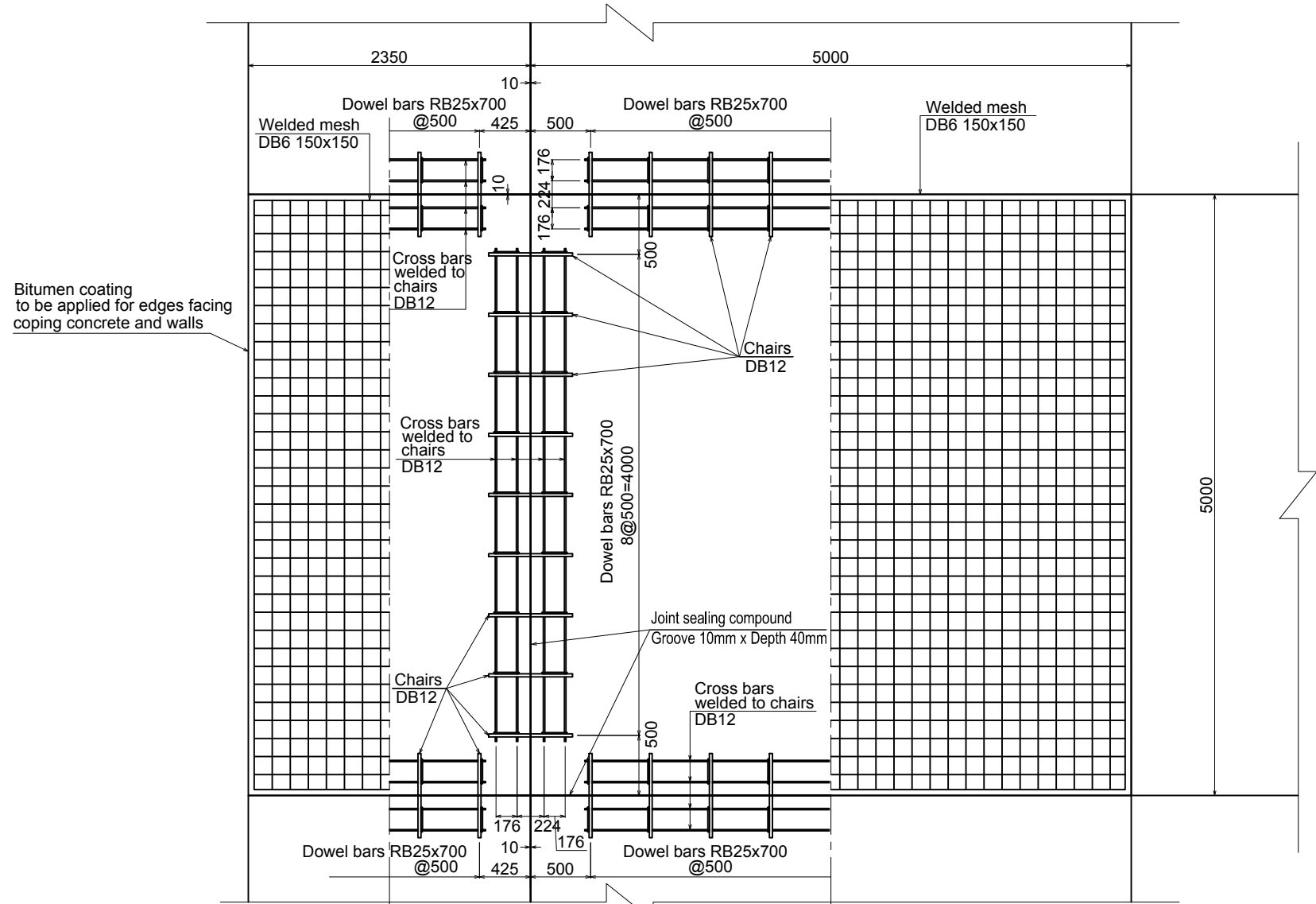
LONGITUDINAL SECTION B-B



ROYAL IRRIGATION DEPARTMENT
The Flood Prevention Project of
East Side of the Pasak River in Ayutthaya
in the Kingdom of Thailand
(CIVIL WORKS)
KRA MANG FLOODGATE
SLOPE PROTECTION OF APPROACH WAY

CONSULTING FIRMS :
CTI ENGINEERING INTERNATIONAL CO., LTD.

REV. NO.	LOCATION	DESCRIPTION	DATE	CHECKED	APPROVED	APPROVED	DESIGNED Masaki ISHII			ROYAL IRRIGATION DEPARTMENT		
				PRESENT	APPROVED		DRAWN Masaki ISHII			PROPOSED	P. SIRION	CHIEF
							CHECKED Akio SHICHIJUGARI			VERIFIED	S. INTARAPRACHA	DIRECTOR
							APPROVED T. MISHINA DATE			APPROVED	L. KOWATTANA	D.G.
OFFICE OF ENGINEERING DESIGN & ARCHITECTURE IRRIGATION SYSTEM DESIGN GROUP							DATE			KM-FG-027		

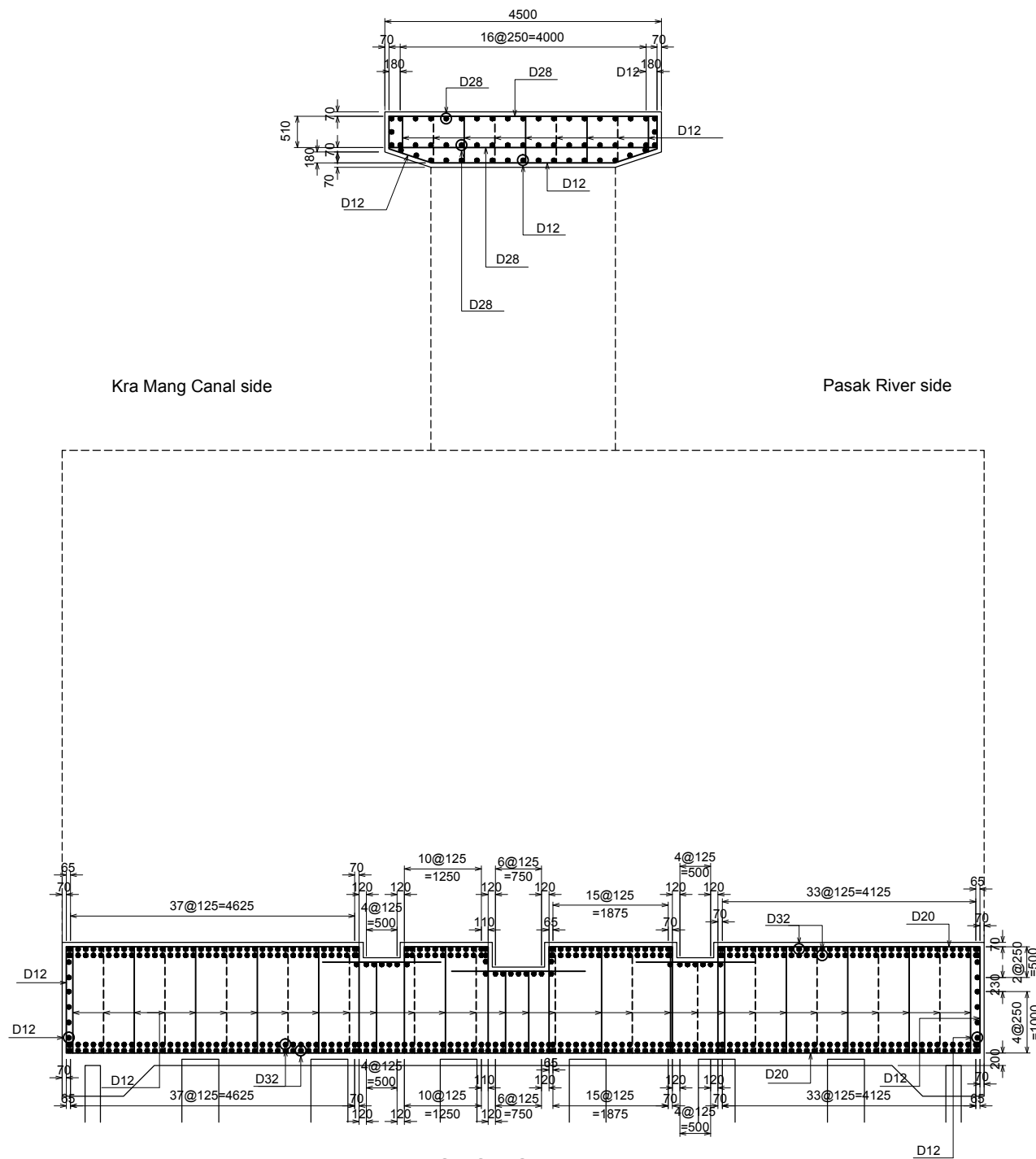


SECTION

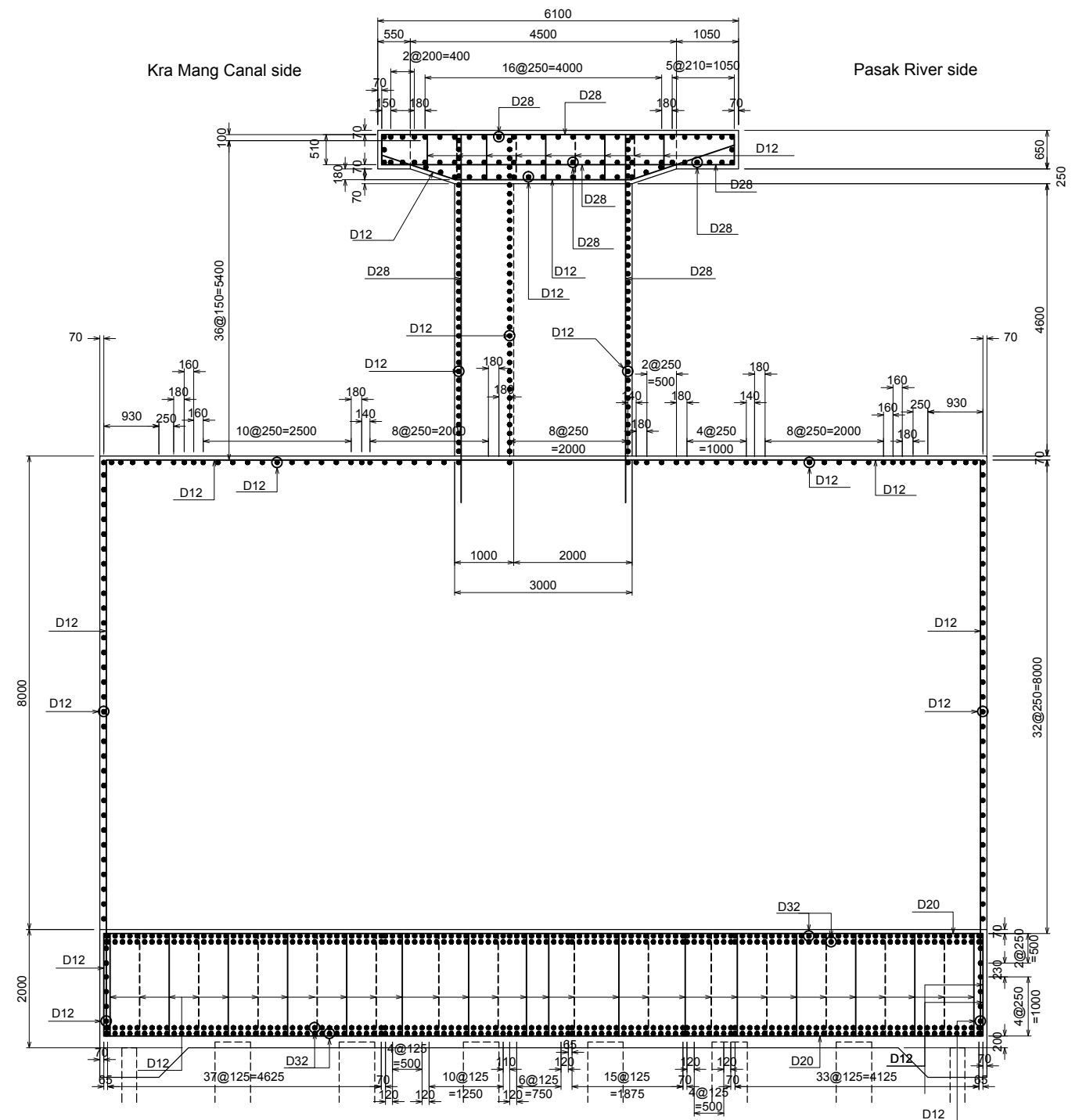
PLAN AND SECTIONS OF FLOOR PROTECTION CONCRETE

ROYAL IRRIGATION DEPARTMENT				
The Flood Prevention Project of East Side of the Pasak River in Ayutthaya in the Kingdom of Thailand (CIVIL WORKS) KRA MANG FLOODGATE FLOOR PROTECTION CONCRETE (2/2)				
CONSULTING FIRMS :				
CTI ENGINEERING INTERNATIONAL CO., LTD.				
DESIGNED	Masaki ISHII	ROYAL IRRIGATION DEPARTMENT		
DRAWN	Masaki ISHII	PROPOSED	P. SIRION	CHIEF
CHECKED	Akio SHICHIJUGARI	VERIFIED	S. INTARAPRACHA	DIRECTOR
APPROVED	T. MISHINA	DATE	APPROVED	L. KOWATTANA
OFFICE OF ENGINEERING DESIGN & ARCHITECTURE IRRIGATION SYSTEM DESIGN GROUP				D.G.
DATE				KM-FG-027B

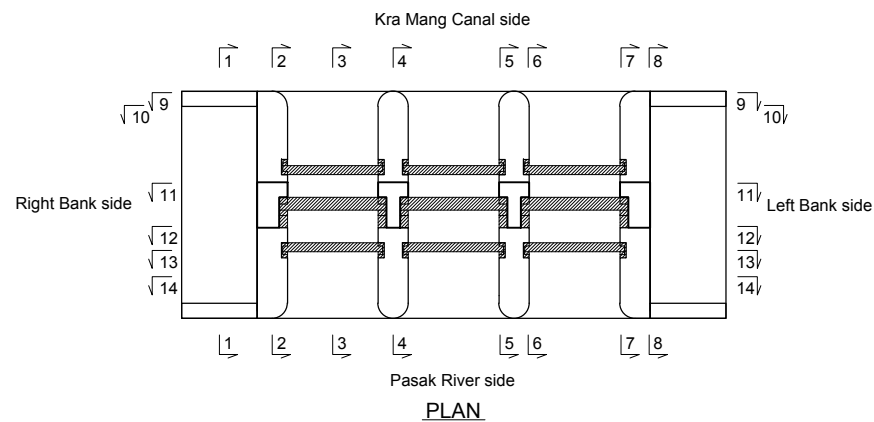
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				PRESENT	APPROVED	



SECTION 3 - 3

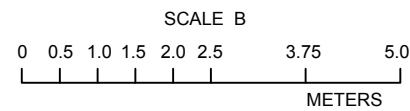


SECTION 4 - 4



BAR ARRANGEMENT (MAIN BODY OF FLOODGATE 2/18)

SCALE B

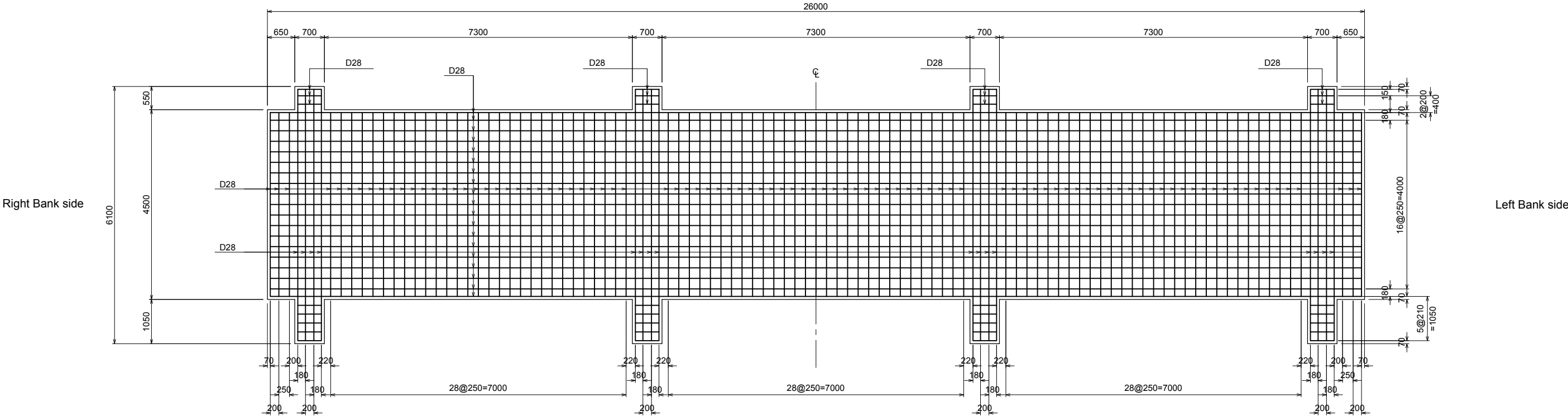


REV. NO.	LOCATION	DESCRIPTION	DATE	CHECKED	APPROVED	APPROVED	DESIGNED Masaki ISHII DRAWN Masaki ISHII CHECKED Akio SHICHIJUGARI APPROVED T. MISHINA DATE _____ OFFICE OF ENGINEERING DESIGN & ARCHITECTURE IRRIGATION SYSTEM DESIGN GROUP			ROYAL IRRIGATION DEPARTMENT PROPOSED P. SIRION VERIFIED S. INTARAPRACHA APPROVED L. KOWATTANA DATE _____		
				PRESENT	APPROVED							
							KM-FG-029					

ROYAL IRRIGATION DEPARTMENT
The Flood Prevention Project of
East Side of the Pasak River in Ayutthaya
in the Kingdom of Thailand
(CIVIL WORKS)
KRA MANG FLOODGATE
BAR ARRANGEMENT
(MAIN BODY OF FLOODGATE 2/18)

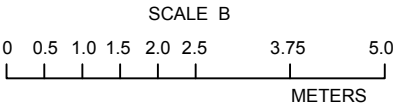
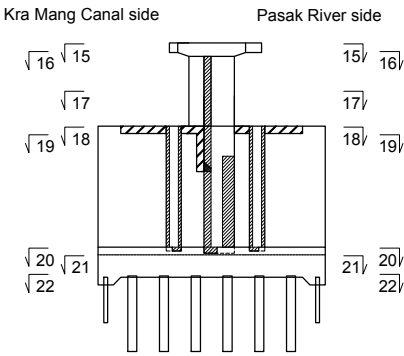
CONSULTING FIRMS :
CTI ENGINEERING INTERNATIONAL CO., LTD.

Kra Mang Canal side



Pasak River side

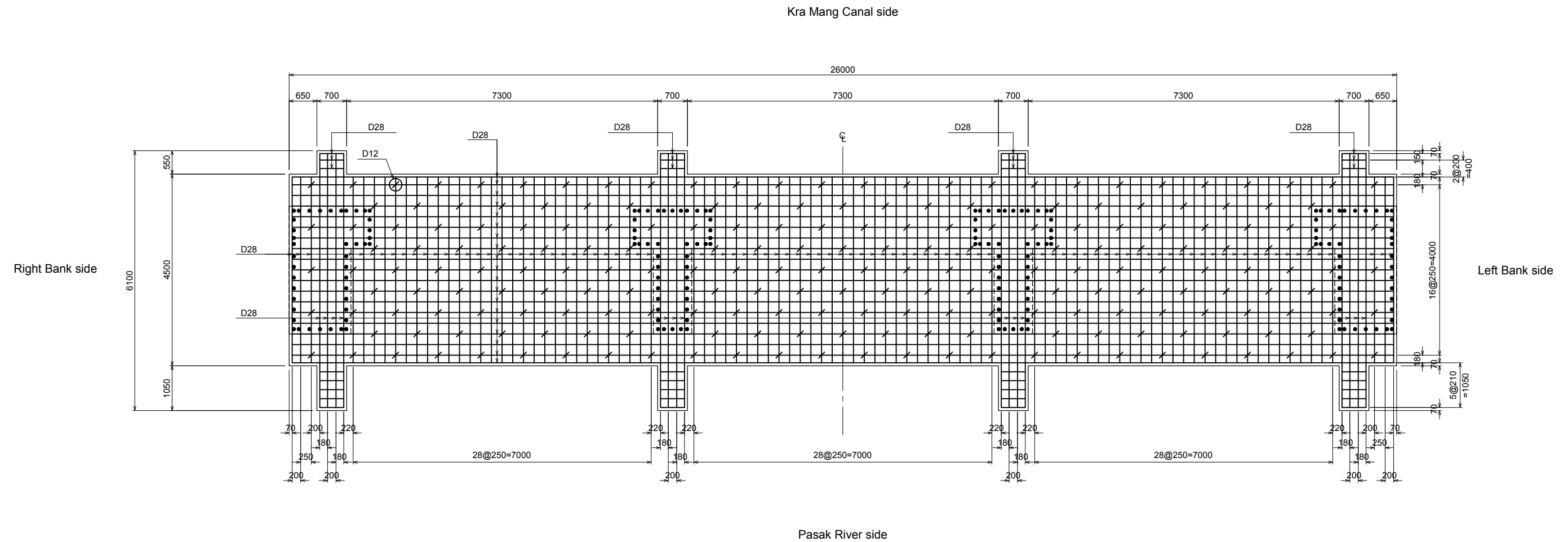
SECTION 15 - 15



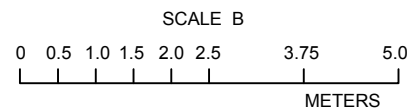
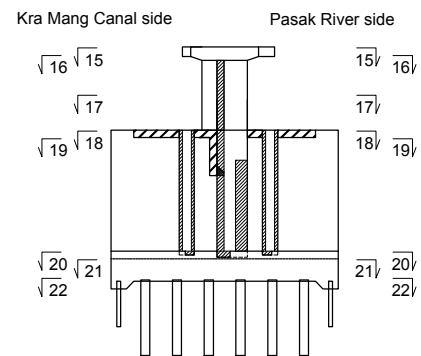
BAR ARRANGEMENT (MAIN BODY OF FLOODGATE 11/18)
SCALE B

ROYAL IRRIGATION DEPARTMENT				
The Flood Prevention Project of East Side of the Pasak River in Ayutthaya in the Kingdom of Thailand				
(CIVIL WORKS)				
KRA MANG FLOODGATE BAR ARRANGEMENT (MAIN BODY OF FLOODGATE 11/18)				
CONSULTING FIRMS :				
CTI ENGINEERING INTERNATIONAL CO., LTD.				
DESIGNED	Masaki ISHII	ROYAL IRRIGATION DEPARTMENT		
DRAWN	Masaki ISHII	PROPOSED	P. SIRION	CHIEF
CHECKED	Akio SHICHIJUGARI	VERIFIED	S. INTARAPRACHA	DIRECTOR
APPROVED	T. MISHINA DATE	APPROVED	L. KOWATTANA	D.G.
OFFICE OF ENGINEERING DESIGN & ARCHITECTURE IRRIGATION SYSTEM DESIGN GROUP				KM-FG-038
DATE				

REV. NO.	LOCATION	DESCRIPTION	DATE	CHECKED	APPROVED	APPROVED
				PRESENT	APPROVED	



SECTION 16 - 16



BAR ARRANGEMENT (MAIN BODY OF FLOODGATE 12/18)

SCALE B

ROYAL IRRIGATION DEPARTMENT

The Flood Prevention Project of
East Side of the Pasak River in Ayutthaya
in the Kingdom of Thailand

(CIVIL WORKS)

KRA MANG FLOODGATE
BAR ARRANGEMENT
(MAIN BODY OF FLOODGATE 12/18)

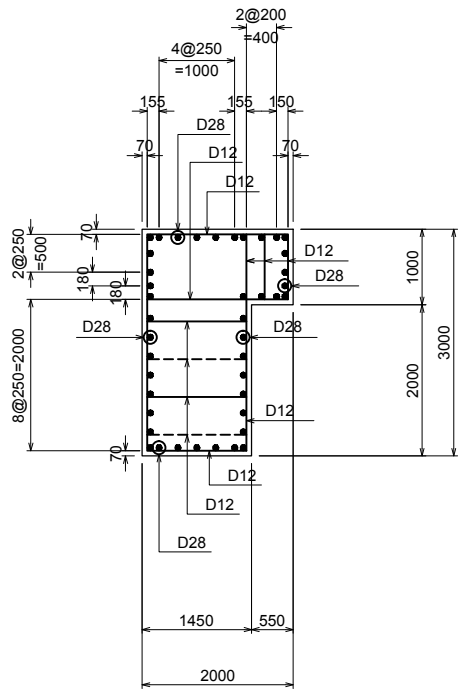
CONSULTING FIRMS :

 CTI ENGINEERING INTERNATIONAL CO., LTD.

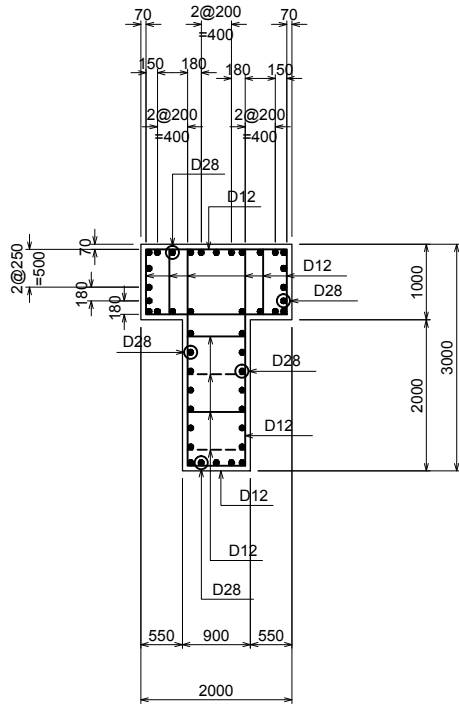
DESIGNED	Masaki ISHII	ROYAL IRRIGATION DEPARTMENT		
DRAWN	Masaki ISHII	PROPOSED	P. SIRION	CHIEF
CHECKED	Akio SHICHIJUGARI	VERIFIED	S. INTARAPRACHA	DIRECTOR
APPROVED	T. MISHINA DATE _____	APPROVED	L. KOWATTANA	D.G.
OFFICE OF ENGINEERING DESIGN & ARCHITECTURE IRRIGATION SYSTEM DESIGN GROUP		DATE _____		KM-FG-039

REV. NO.	LOCATION	DESCRIPTION	DATE	CHECKED PRESENT	APPROVED APPROVED	APPROVED

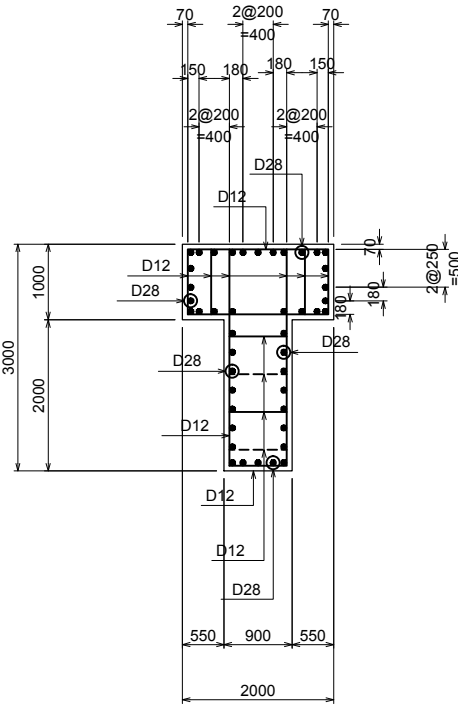
Right Bank side



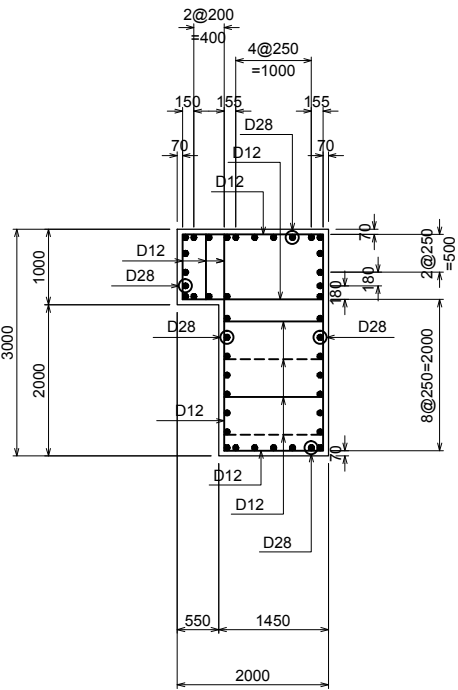
Kra Mang Canal side



☐

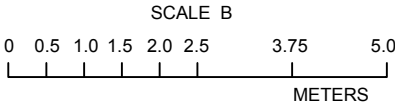
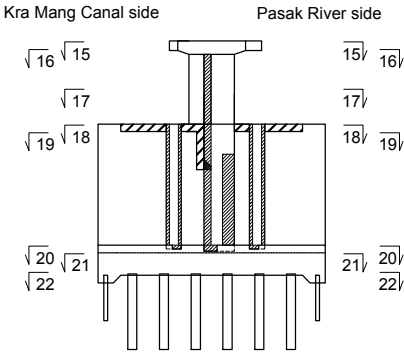


Pasak River side



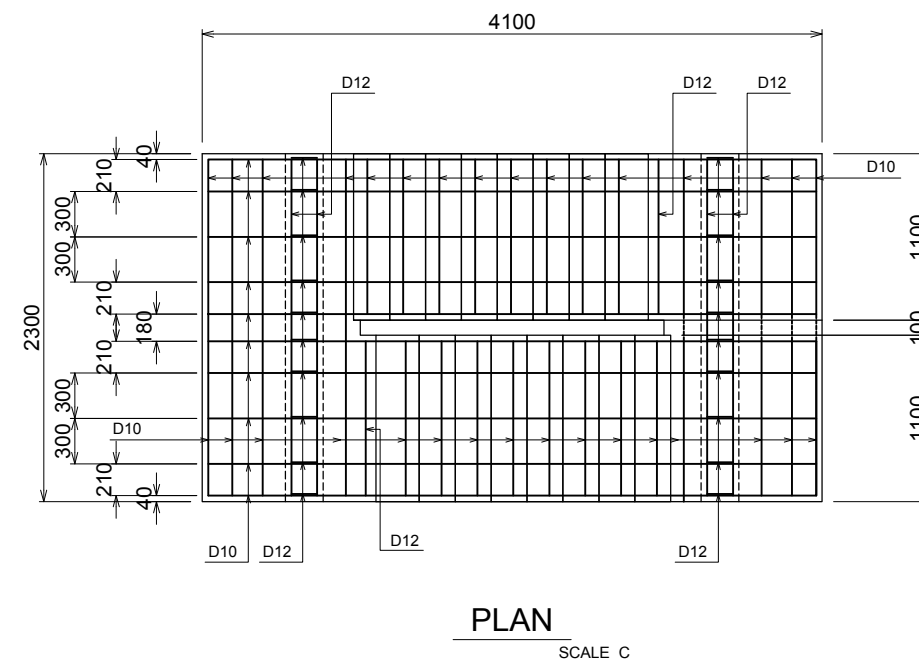
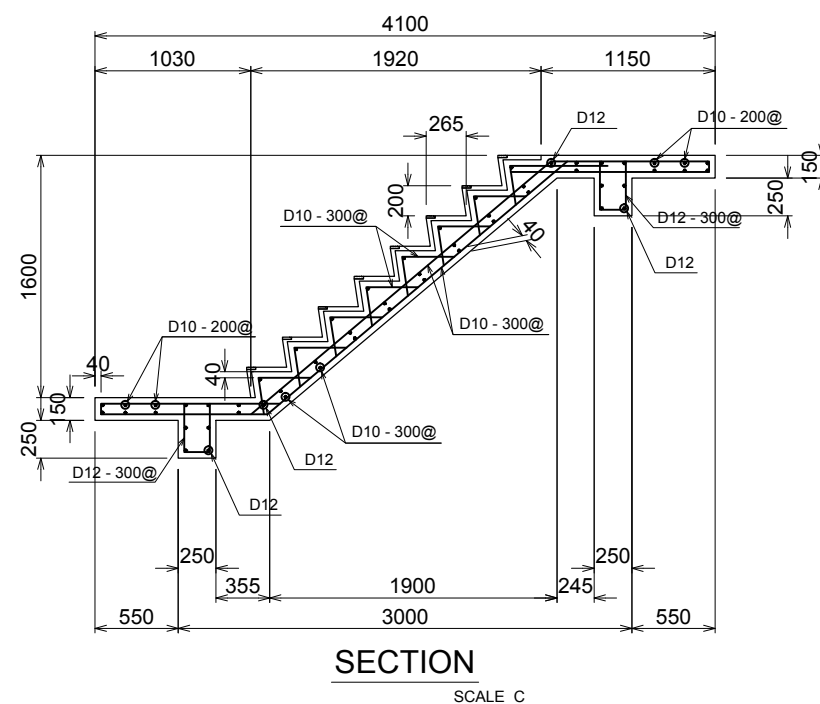
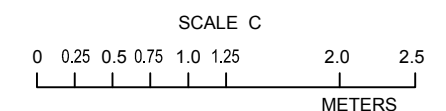
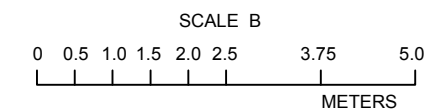
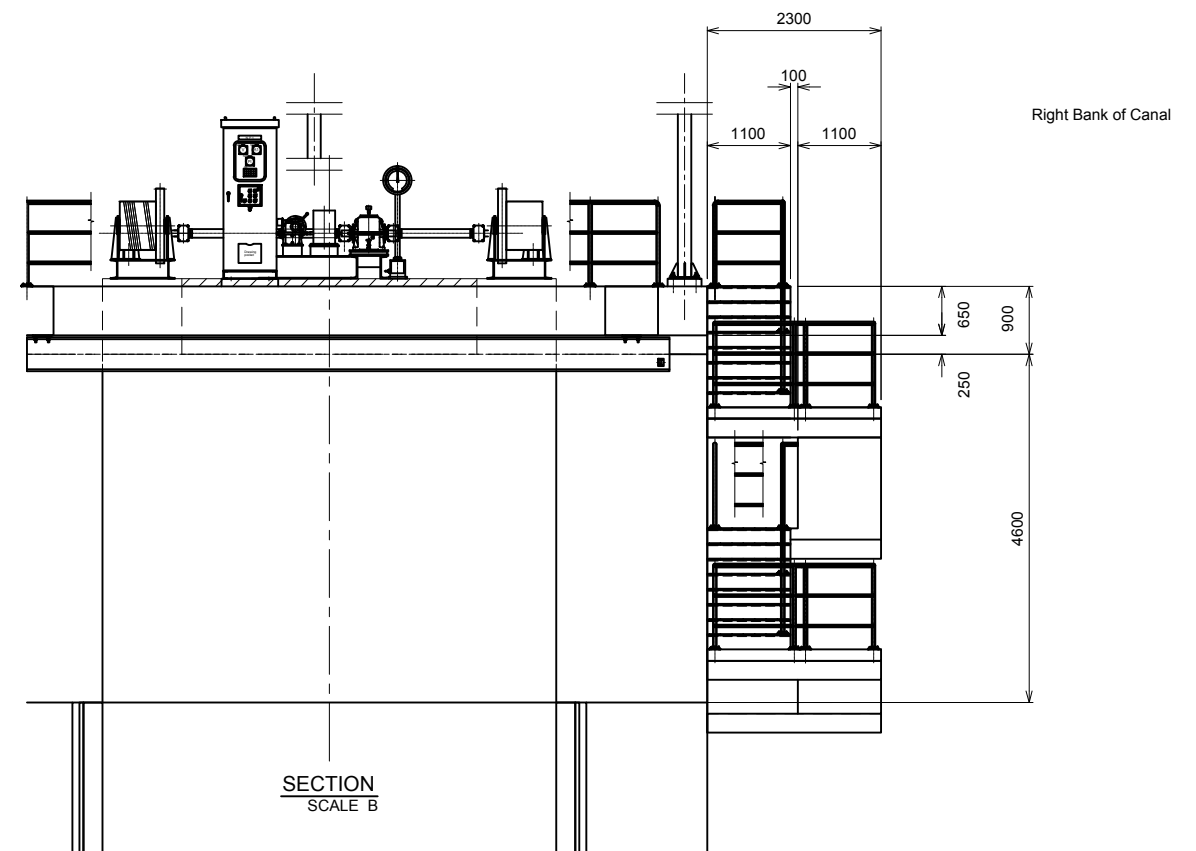
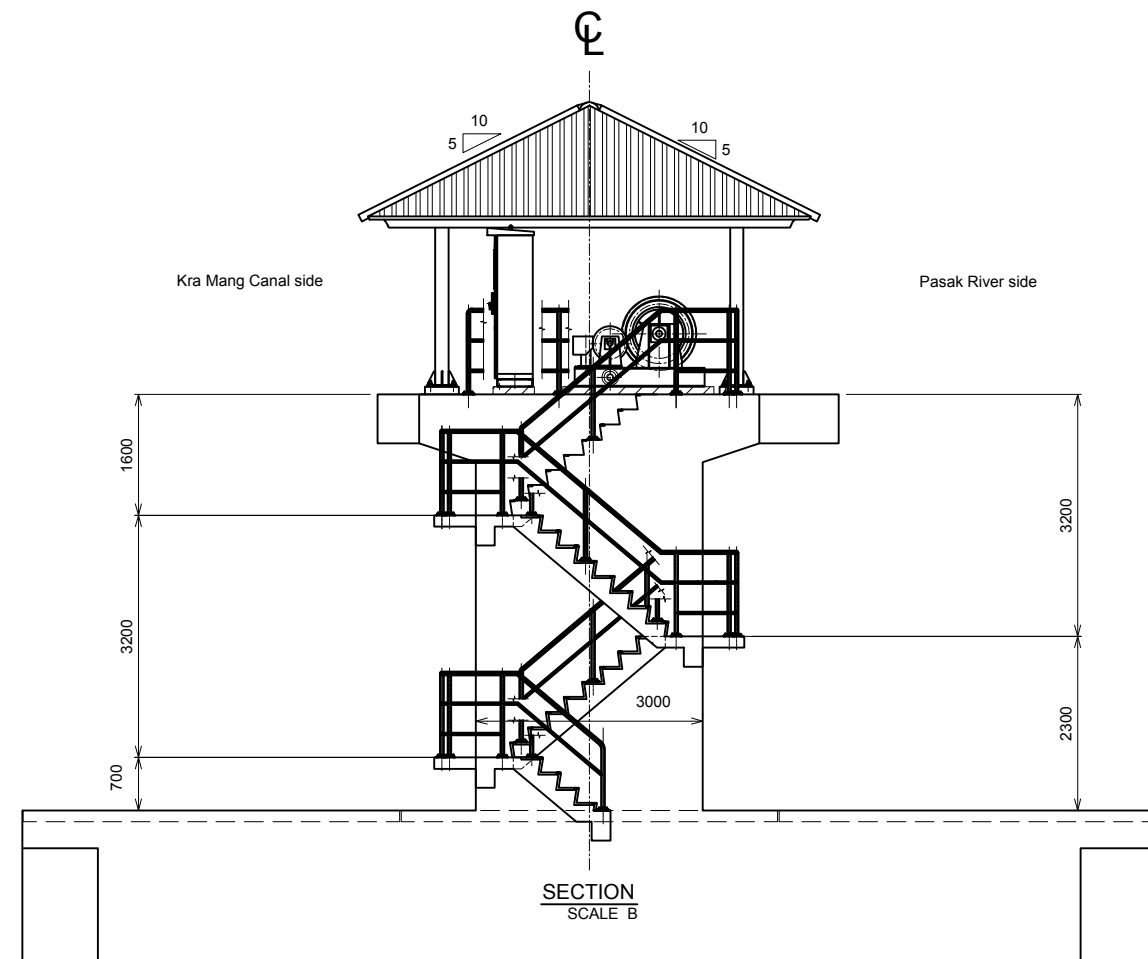
Left Bank side

SECTION 17 - 17



BAR ARRANGEMENT (MAIN BODY OF FLOODGATE 13/18)
SCALE B

ROYAL IRRIGATION DEPARTMENT				
The Flood Prevention Project of East Side of the Pasak River in Ayutthaya in the Kingdom of Thailand				
(CIVIL WORKS)				
KRA MANG FLOODGATE BAR ARRANGEMENT (MAIN BODY OF FLOODGATE 13/18)				

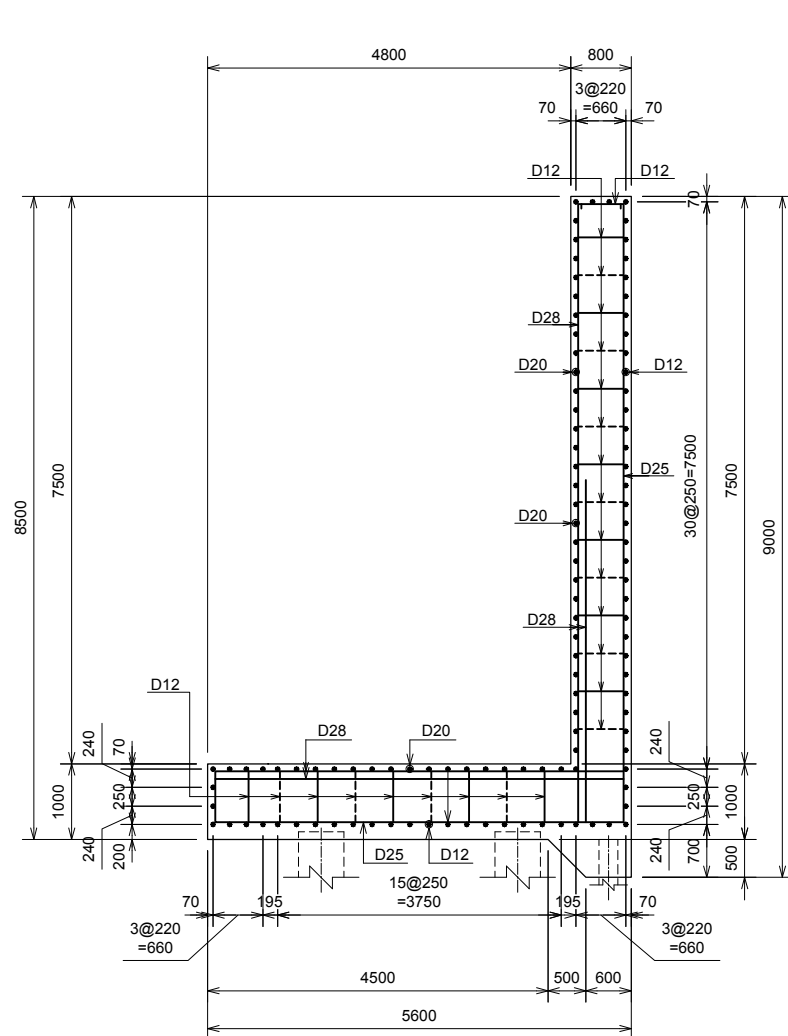


BAR ARRANGEMENT (STAIRCASE)

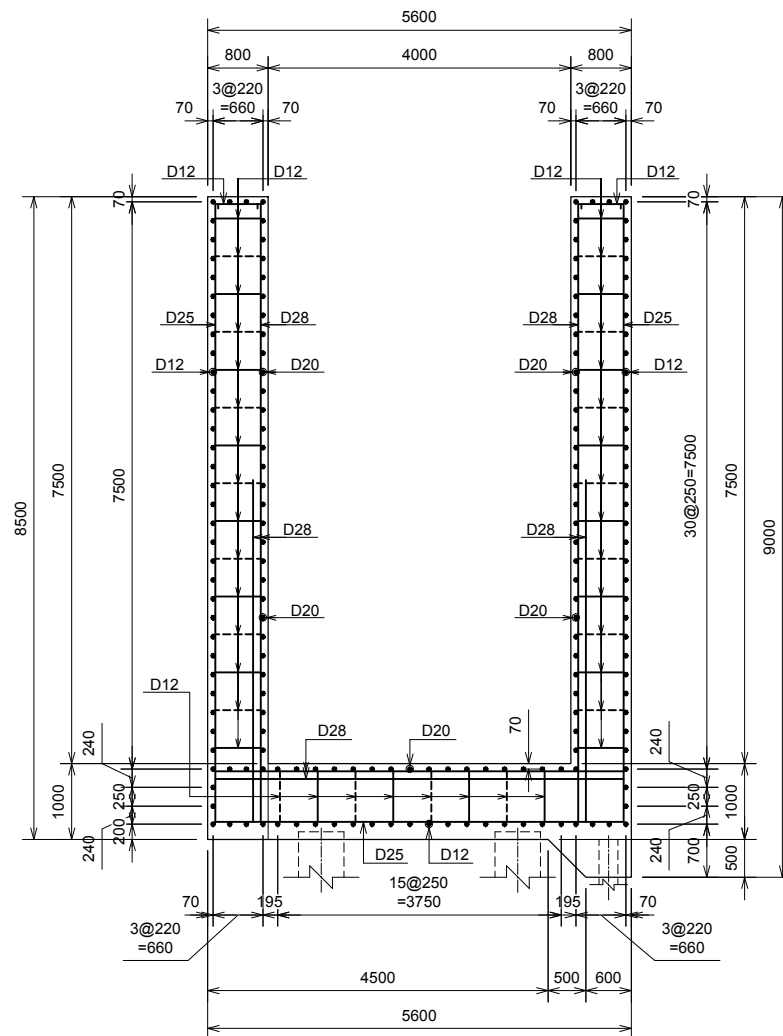
ROYAL IRRIGATION DEPARTMENT
The Flood Prevention Project of
East Side of the Pasak River in Ayutthaya
in the Kingdom of Thailand
(CIVIL WORKS)
KRA MANG FLOODGATE
BAR ARRANGEMENT (STAIRCASE)

CONSULTING FIRMS :
CTI ENGINEERING INTERNATIONAL CO., LTD.

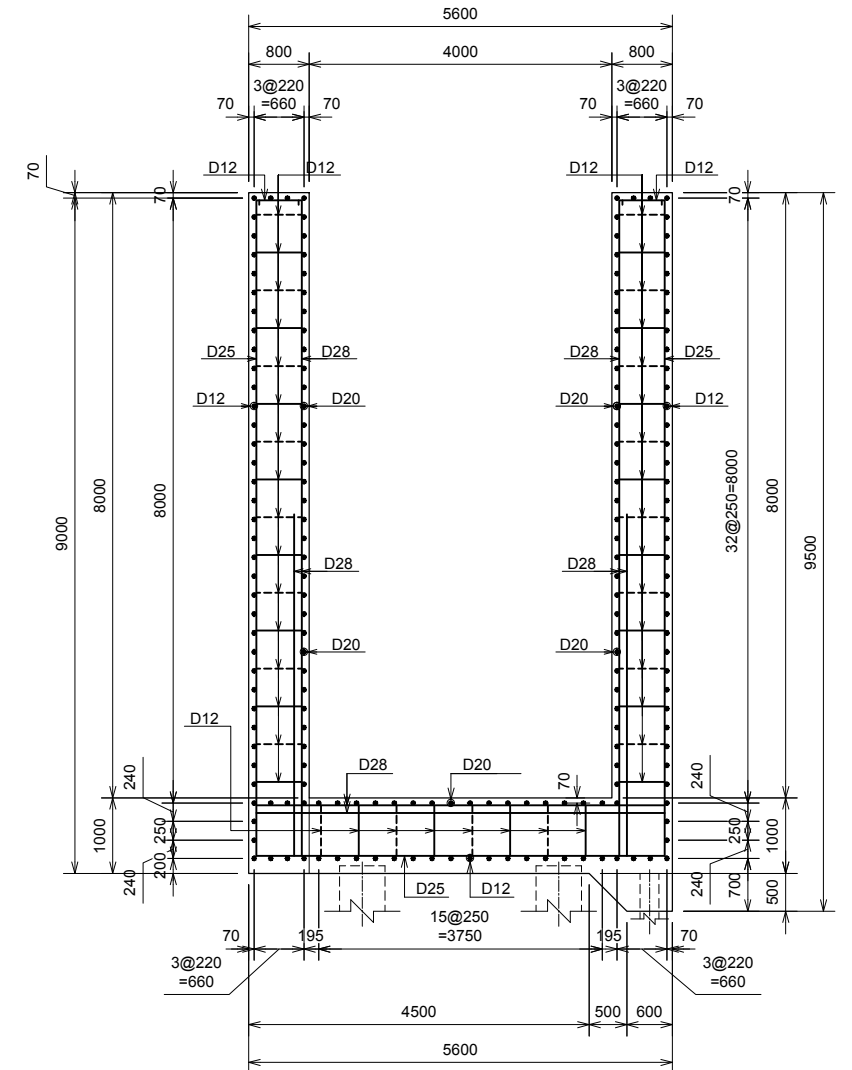
REV. NO.	LOCATION	DESCRIPTION	DATE	CHECKED	APPROVED	APPROVED	DESIGNED	ROYAL IRRIGATION DEPARTMENT		
				PRESENT	APPROVED		DRAWN	Masaki ISHII	PROPOSED	P. SIRION
							CHECKED	Akio SHICHIJUGARI	VERIFIED	S. INTARAPRACHA
							APPROVED	T. MISHINA	APPROVED	L. KOWATTANA
							OFFICE OF ENGINEERING DESIGN & ARCHITECTURE IRRIGATION SYSTEM DESIGN GROUP			KM-FG-048



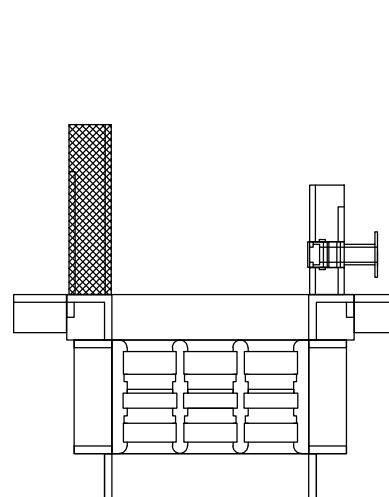
SECTION 1-1



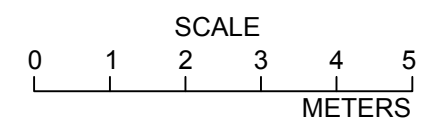
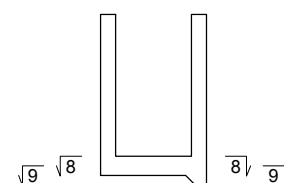
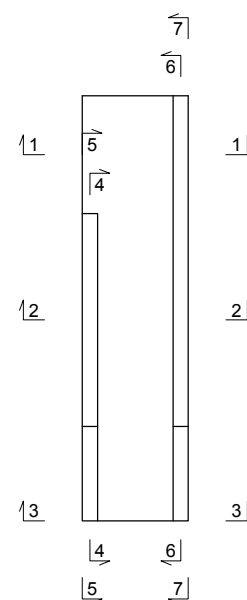
SECTION 2-2



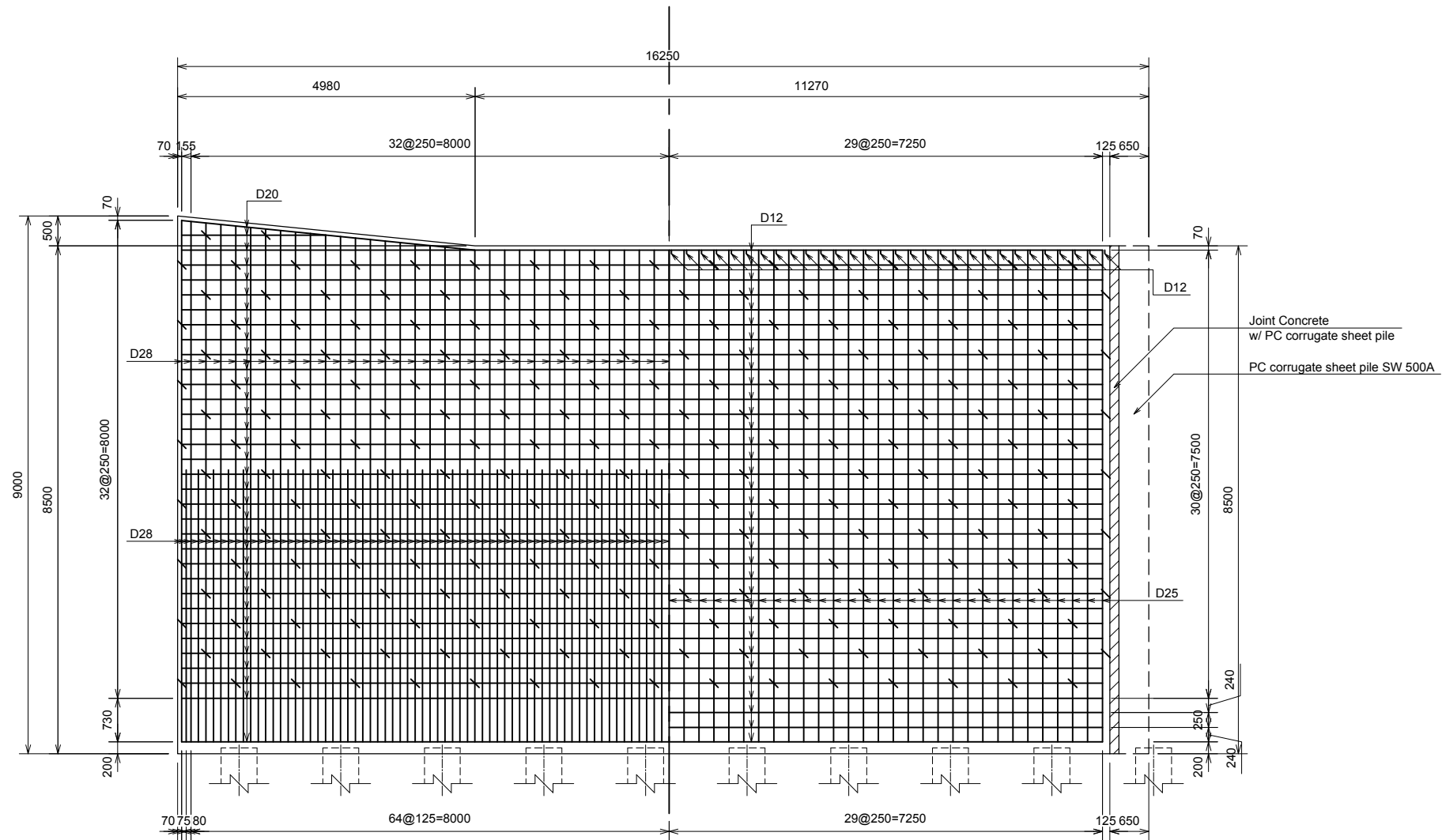
SECTION 3-3



KEY PLAN

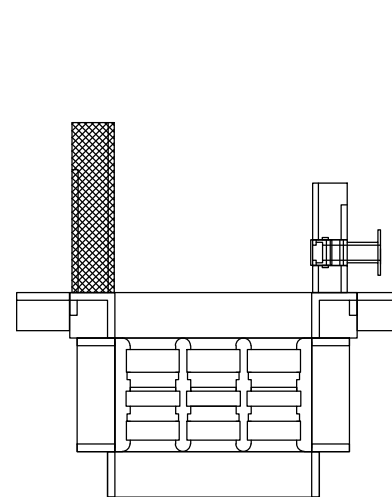


ROYAL IRRIGATION DEPARTMENT The Flood Prevention Project of East Side of the Pasak River in Ayutthaya in the Kingdom of Thailand (CIVIL WORKS) KRA MANG FLOODGATE BAR ARRANGEMENT (PART - U-SHAPED FLOODWALL LEFT 1/4) CONSULTING FIRMS : CTI ENGINEERING INTERNATIONAL CO., LTD.				
DESIGNED	Masaki ISHII	ROYAL IRRIGATION DEPARTMENT		
DRAWN	Masaki ISHII	PROPOSED	P. SIRION	CHIEF
CHECKED	Akio SHICHIJUGARI	VERIFIED	S. INTARAPRACHA	DIRECTOR
APPROVED	T. MISHINA DATE _____	APPROVED	L. KOWATTANA	D.G.
REV. NO.	LOCATION	DESCRIPTION	DATE	

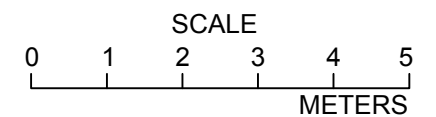
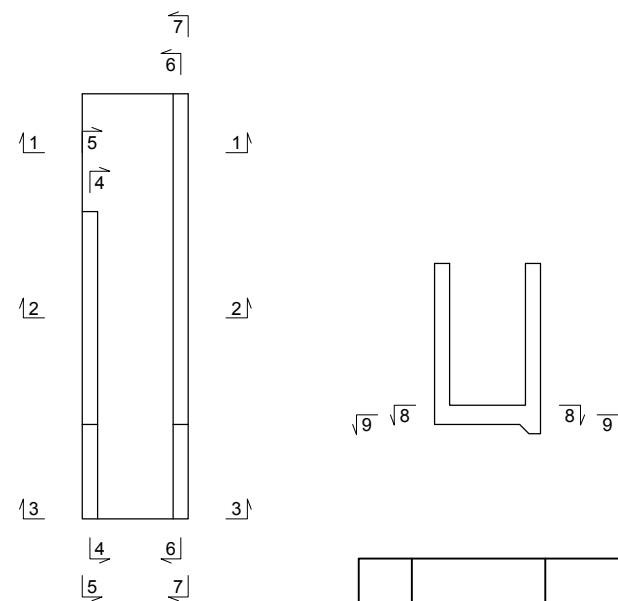


SECTION 4-4
(INTERIOR SIDE)

SECTION 5-5
(EXTERIOR SIDE)



KEY PLAN

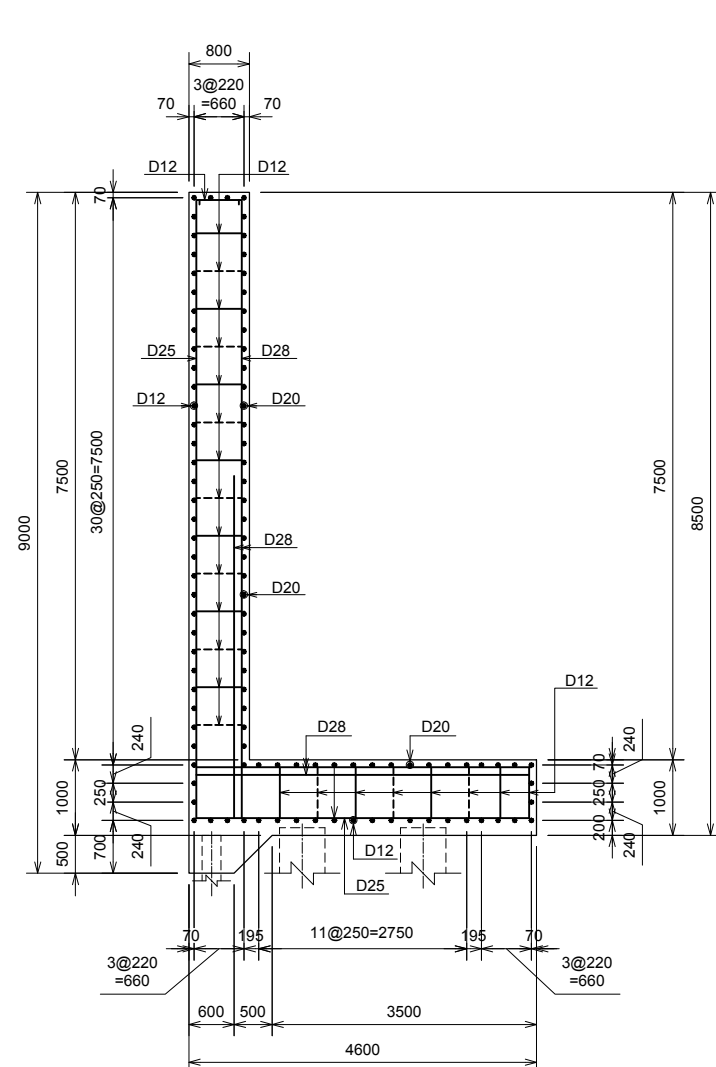


ROYAL IRRIGATION DEPARTMENT
The Flood Prevention Project of
East Side of the Pasak River in Ayutthaya
in the Kingdom of Thailand
(CIVIL WORKS)
KRA MANG FLOODGATE
BAR ARRANGEMENT
(PART - U-SHAPED FLOODWALL LEFT 2/4)

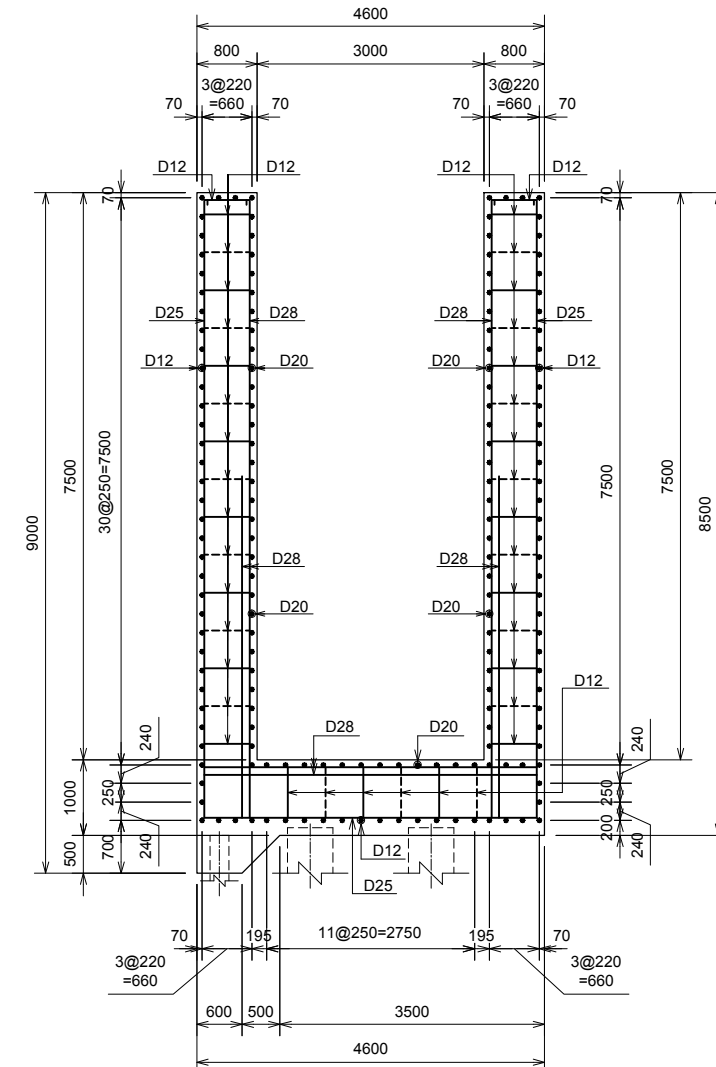
CONSULTING FIRMS :

 CTI ENGINEERING INTERNATIONAL CO., LTD.

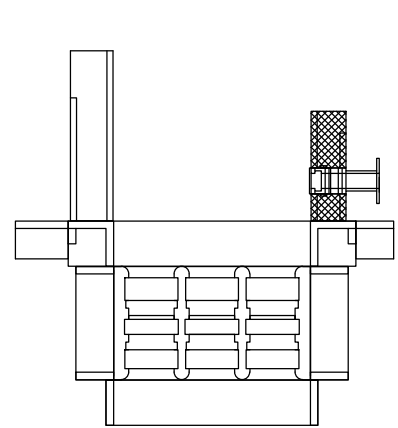
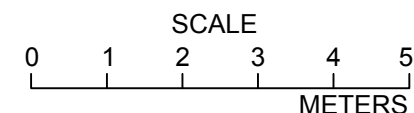
REV. NO.	LOCATION	DESCRIPTION	DATE	CHECKED	APPROVED	APPROVED	DESIGNED	Masaki ISHII	ROYAL IRRIGATION DEPARTMENT								
				PRESENT	APPROVED		DRAWN	Masaki ISHII	PROPOSED	P. SIRION	CHIEF						
							CHECKED	Akio SHICHIJUGARI	VERIFIED	S. INTARAPRACHA	DIRECTOR						
							APPROVED	T. MISHINA	DATE	APPROVED	L. KOWATTANA						
							OFFICE OF ENGINEERING DESIGN & ARCHITECTURE IRRIGATION SYSTEM DESIGN GROUP				D.G.						
							DATE				KM-FG-050						



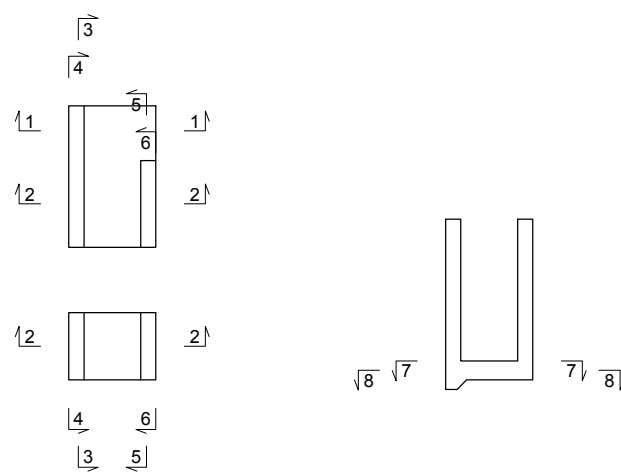
SECTION 1-1



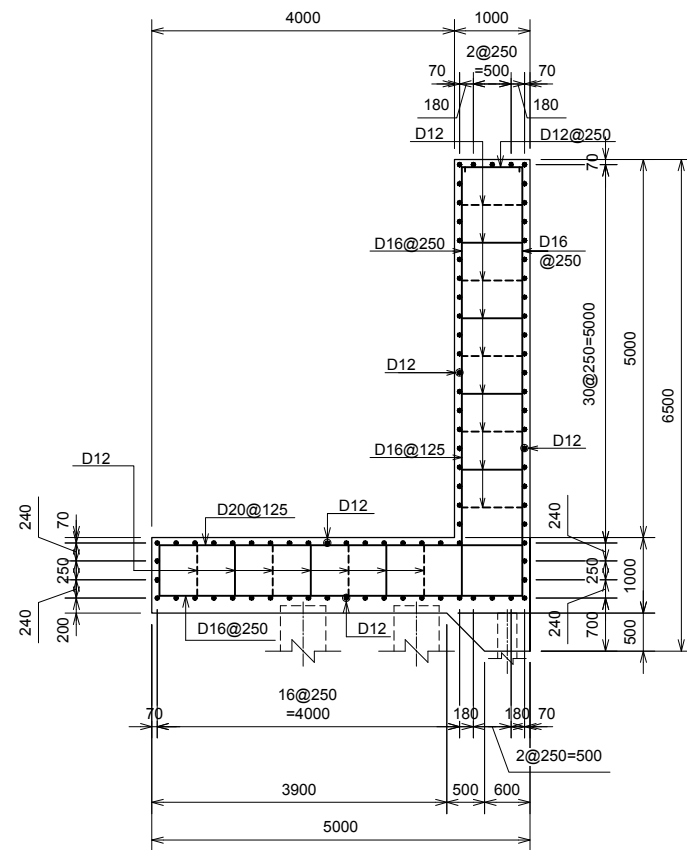
SECTION 2-2



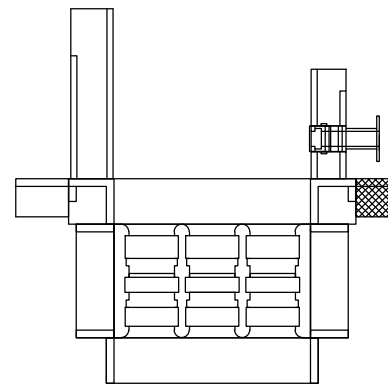
KEY PLAN



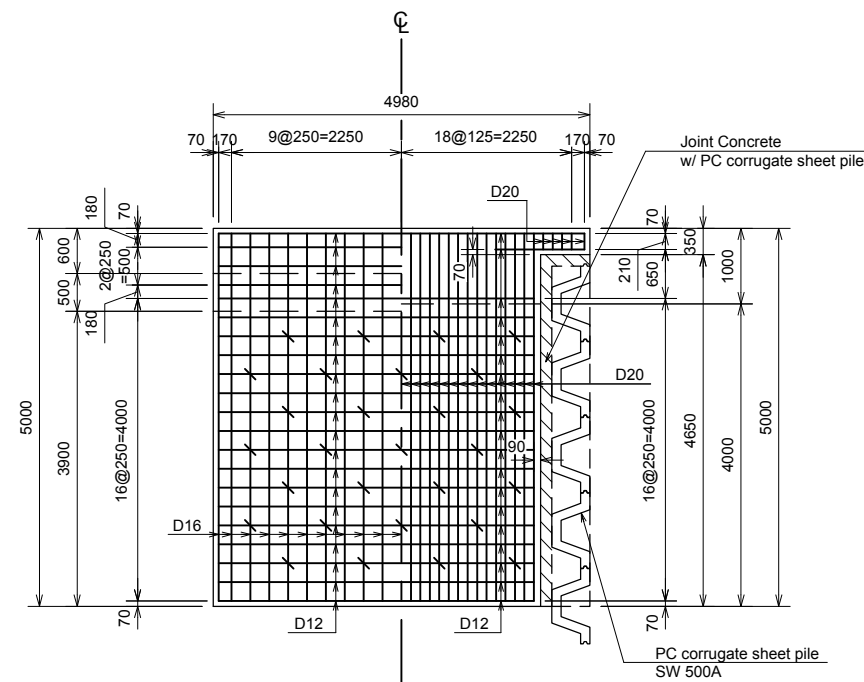
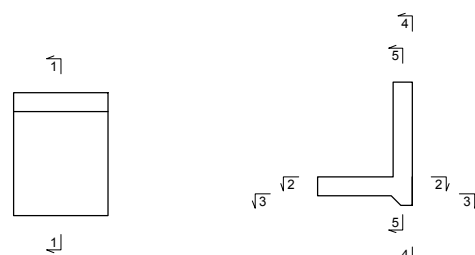
ROYAL IRRIGATION DEPARTMENT The Flood Prevention Project of East Side of the Pasak River in Ayutthaya in the Kingdom of Thailand (CIVIL WORKS) KRA MANG FLOODGATE BAR ARRANGEMENT (PART - U-SHAPED FLOODGATE RIGHT 1/4)				
CONSULTING FIRMS :				
 CTI ENGINEERING INTERNATIONAL CO., LTD.				
DESIGNED	Masaki ISHII	ROYAL IRRIGATION DEPARTMENT		
DRAWN	Masaki ISHII	PROPOSED	P. SIRION	CHIEF
CHECKED	Akio SHICHIJUGARI	VERIFIED	S. INTARAPRACHA	DIRECTOR
APPROVED	T. MISHINA	DATE	APPROVED	L. KOWATTANA
REV. NO.	LOCATION	DESCRIPTION	DATE	CHECKED
				PRESENT
				APPROVED
				APPROVED
OFFICE OF ENGINEERING DESIGN & ARCHITECTURE IRRIGATION SYSTEM DESIGN GROUP				DATE



SECTION 1-1

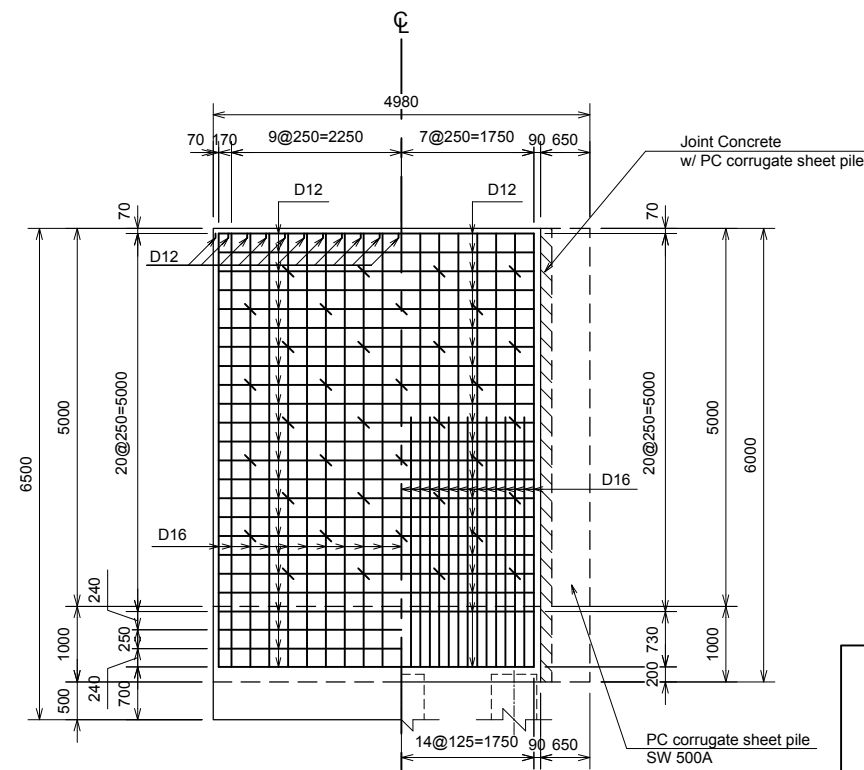


KEY PLAN



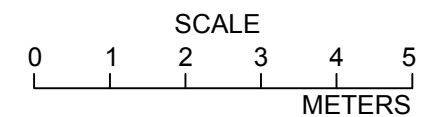
SECTION 3-3
(BOTTOM SIDE)

SECTION 2-2
(TOP SIDE)



SECTION 4-4
(FRONT SIDE)

SECTION 5-5
(BACK SIDE)

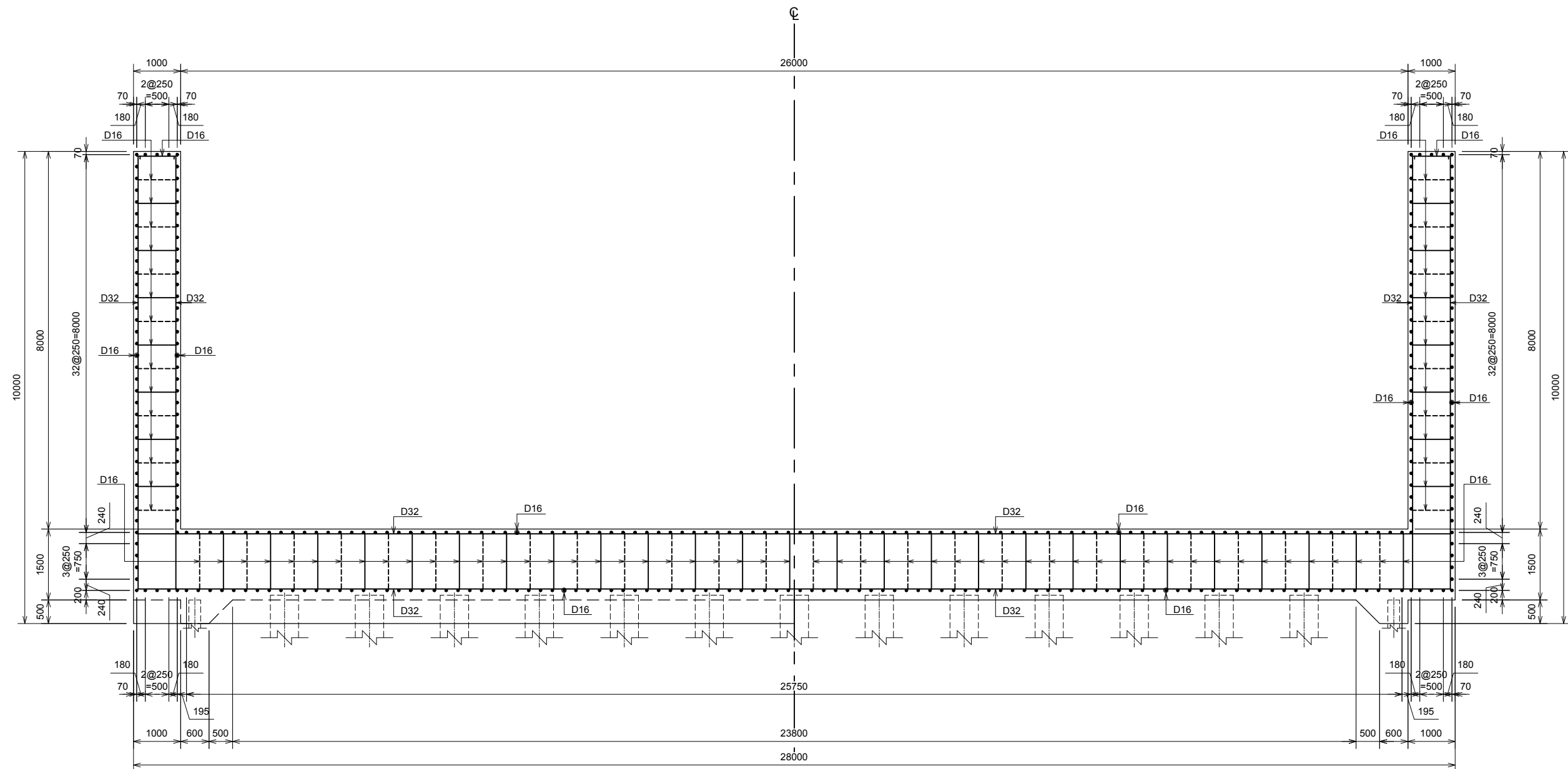


ROYAL IRRIGATION DEPARTMENT
The Flood Prevention Project of
East Side of the Pasak River in Ayutthaya
in the Kingdom of Thailand

(CIVIL WORKS)
KRA MANG FLOODGATE
BAR ARRANGEMENT
(PART - WING WALL RIGHT)

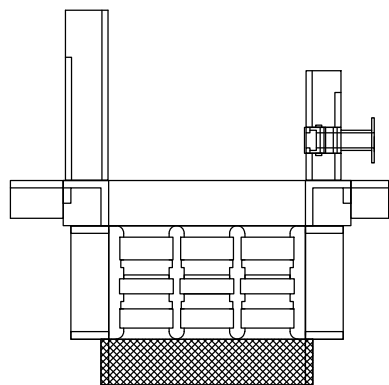
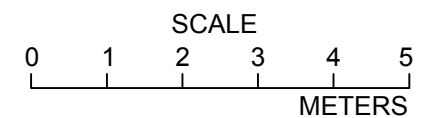
CONSULTING FIRMS :
CTI ENGINEERING INTERNATIONAL CO., LTD.

REV. NO.	LOCATION	DESCRIPTION	DATE	CHECKED	APPROVED	APPROVED	DESIGNED	Masaki ISHII	ROYAL IRRIGATION DEPARTMENT		
				PRESENT	APPROVED		DRAWN	Masaki ISHII	PROPOSED	P. SIRION	CHIEF
							CHECKED	Akio SHICHIJUGARI	VERIFIED	S. INTARAPRACHA	DIRECTOR

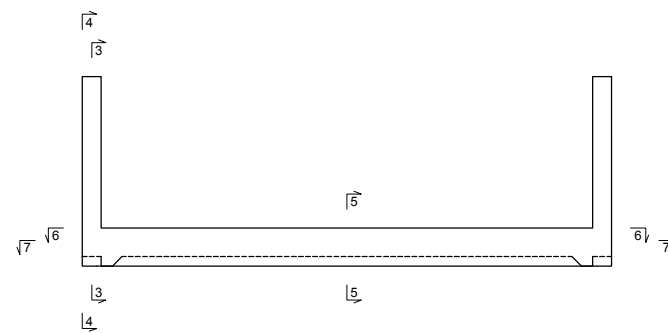
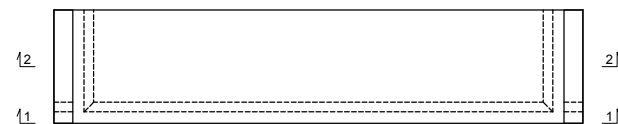


SECTION 1-1

SECTION 2-2



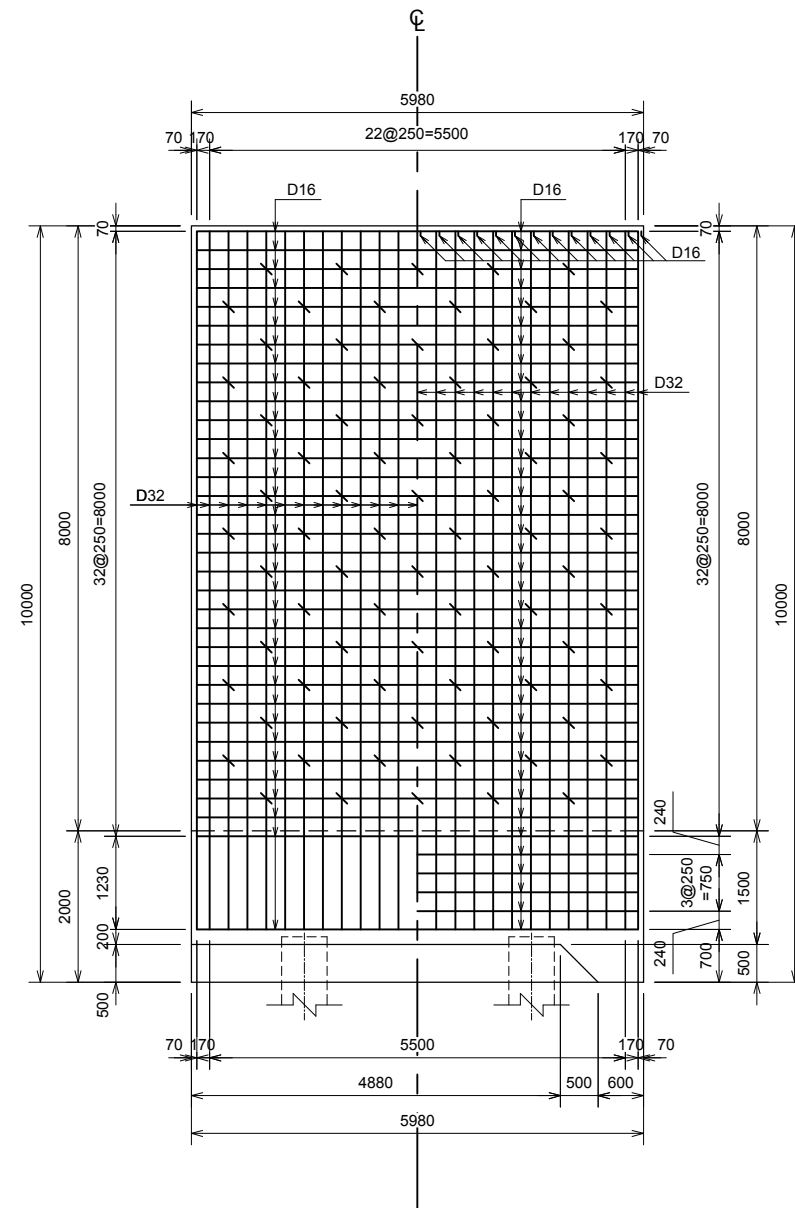
KEY PLAN



ROYAL IRRIGATION DEPARTMENT
The Flood Prevention Project of
East Side of the Pasak River in Ayutthaya
in the Kingdom of Thailand
(CIVIL WORKS)
KRA MANG FLOODGATE
BAR ARRANGEMENT
(PART - UPSTREAM APRON 1/3)

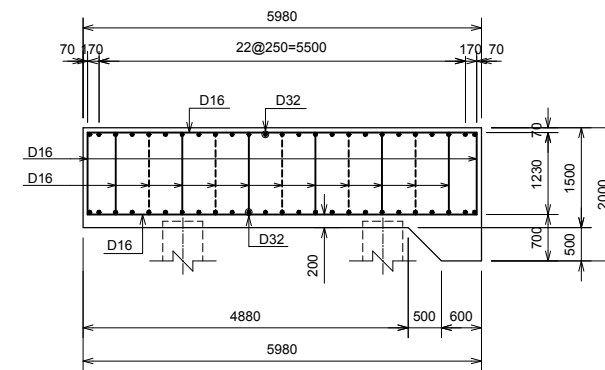
CONSULTING FIRMS :
CTI ENGINEERING INTERNATIONAL CO., LTD.

REV. NO.	LOCATION	DESCRIPTION	DATE	CHECKED	APPROVED	APPROVED	DESIGNED	Masaki ISHII	ROYAL IRRIGATION DEPARTMENT						
				PRESENT	APPROVED		DRAWN	Masaki ISHII	PROPOSED	P. SIRION	CHIEF				
							CHECKED	Akio SHICHIJUGARI	VERIFIED	S. INTARAPRACHA	DIRECTOR				
							APPROVED	T. MISHINA	APPROVED	L. KOWATTANA	D.G.				
							OFFICE OF ENGINEERING DESIGN & ARCHITECTURE IRRIGATION SYSTEM DESIGN GROUP				KM-FG-062				

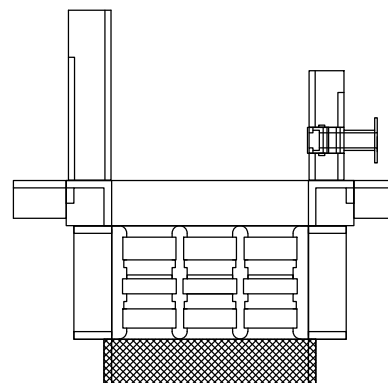
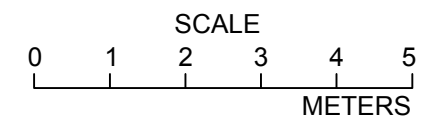


SECTION 3-3
(INTERIOR SIDE)

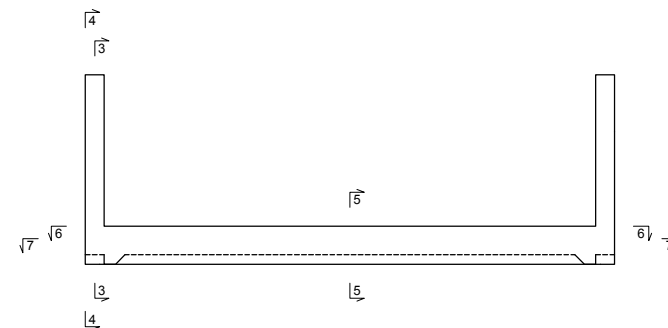
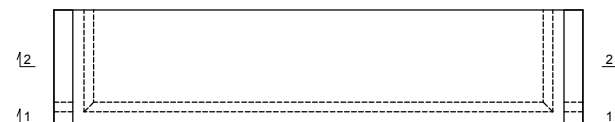
SECTION 4-4
(EXTERIOR SIDE)



SECTION 5-5



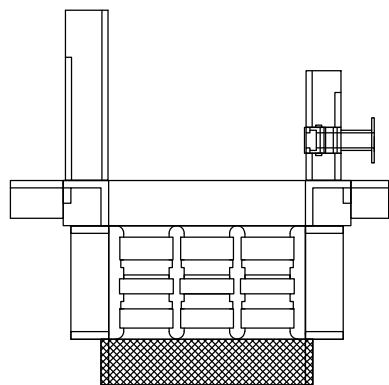
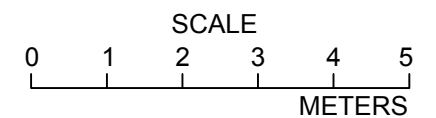
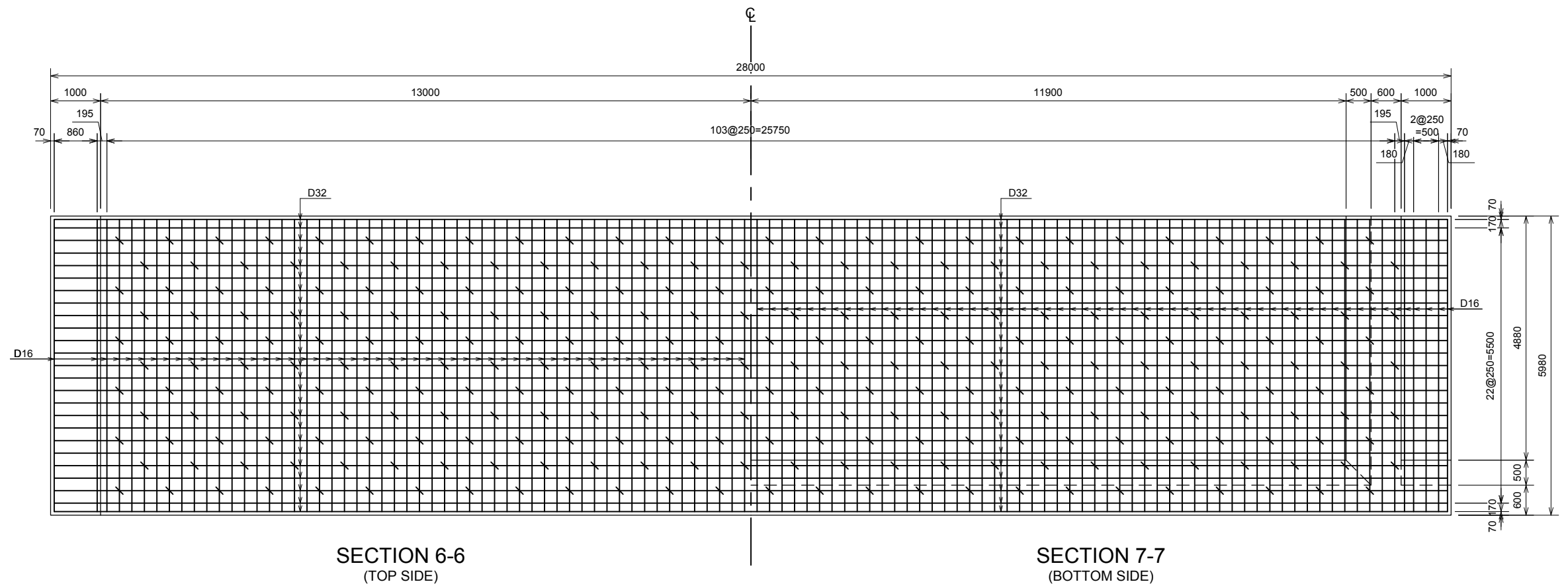
KEY PLAN



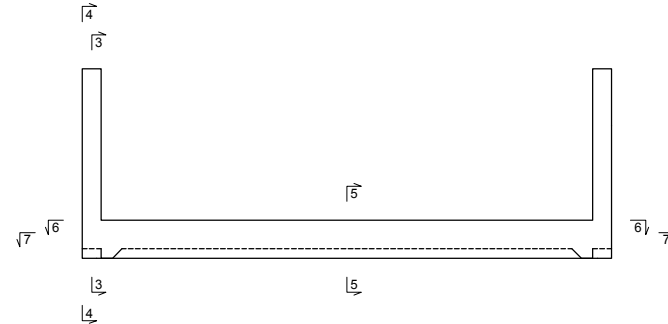
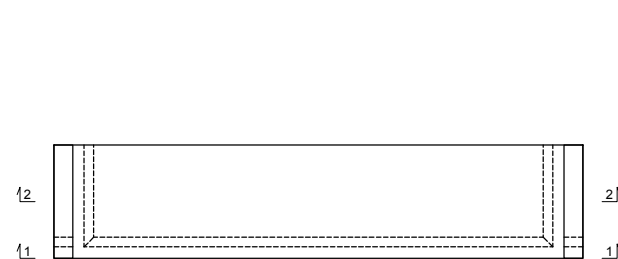
ROYAL IRRIGATION DEPARTMENT
The Flood Prevention Project of
East Side of the Pasak River in Ayutthaya
in the Kingdom of Thailand
(CIVIL WORKS)
KRA MANG FLOODGATE
BAR ARRANGEMENT
(PART - UPSTREAM APRON 2/3)

CONSULTING FIRMS :
CTI ENGINEERING INTERNATIONAL CO., LTD.

DESIGNED	Masaki ISHII	ROYAL IRRIGATION DEPARTMENT			
		DRAWN	Masaki ISHII	PROPOSED	
CHECKED	Akio SHICHIJUGARI	VERIFIED	S. INTARAPRACHA	DIRECTOR	
		APPROVED	T. MISHINA	D.G.	
OFFICE OF ENGINEERING DESIGN & ARCHITECTURE		KM-FG-063			
IRRIGATION SYSTEM DESIGN GROUP		DATE			



KEY PLAN



ROYAL IRRIGATION DEPARTMENT
The Flood Prevention Project of
East Side of the Pasak River in Ayutthaya
in the Kingdom of Thailand
(CIVIL WORKS)
KRA MANG FLOODGATE
BAR ARRANGEMENT
(PART - UPSTREAM APRON 3/3)

CONSULTING FIRMS :
CTI ENGINEERING INTERNATIONAL CO., LTD.

REV. NO.	LOCATION	DESCRIPTION	DATE	CHECKED	APPROVED	APPROVED	DESIGNED	Masaki ISHII	ROYAL IRRIGATION DEPARTMENT						
				PRESENT	APPROVED		DRAWN	Masaki ISHII	PROPOSED	P. SIRION	CHIEF				
							CHECKED	Akio SHICHIJUGARI	VERIFIED	S. INTARAPRACHA	DIRECTOR				
							APPROVED	T. MISHINA DATE	APPROVED	L. KOWATTANA	D.G.				
							OFFICE OF ENGINEERING DESIGN & ARCHITECTURE IRRIGATION SYSTEM DESIGN GROUP				KM-FG-064				
							DATE								

