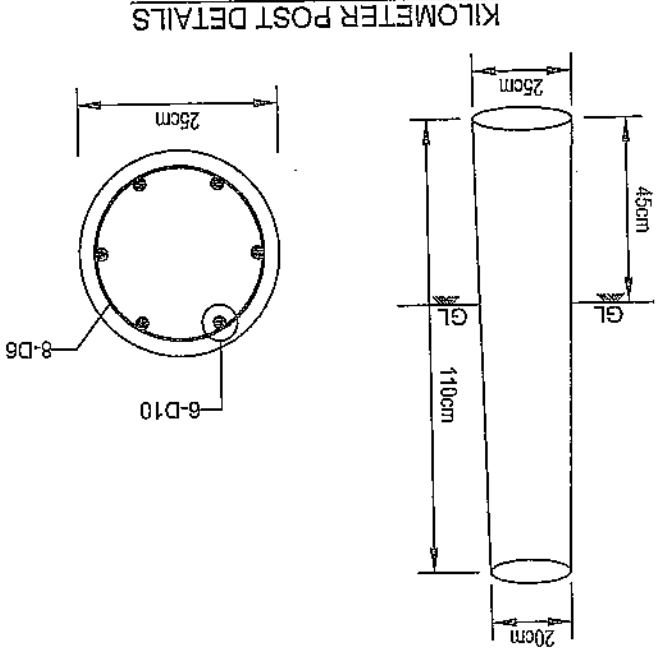


GENERAL NOTES:

1. SURVEY DATA FOR THIS DRAWING HAS BEEN CONDUCTED BY IWM.
2. 1 IN 10 YEAR PRE-MONSOON FLOOD UPTO 15TH MAY HAS BEEN CONSIDERED FOR DESIGN OF EMBANKMENT CREST LEVEL.
3. ALL DIMENSIONS ARE IN MILLIMETER & ALL ELEVATIONS ARE IN METER PWD UNLESS OTHERWISE MENTIONED IN THE DRAWING.
4. BASE OF THE EMBANKMENT SHALL BE STRIPPED OF NOT LESS THAN 150 mm TO REMOVE VEGETATION, SLUSHY EARTH AND OTHER SOFT MATERIALS TO DEVELOPE STRONG BONDAGE BETWEEN THE BASE MATERIALS AND BORROWED EARTH FOR EMBANKMENT.
5. BEFORE RE-SECTIONING OF THE EMBANKMENT, REMOVING ROOTS AND STUMPS OF TREES OF GIRTH UPTO 200 mm FROM THE GROUND, STRIPPING/PLOUGHING WHERE REQUIRED SHALL BE DONE PROPERLY BEFORE PLACING THE NEW FILLING SOIL ALL SORTS OF ORGANIC AND OTHER FOREIGN MATERIALS MUST BE REMOVED PROPERLY.
6. THE EARTH BORROWED FOR CONSTRUCTION OF EMBANKMENT MUST BE FREE FROM GRASS & VEGETATION ETC. PEAT SOIL SHALL NOT BE USED IN EMBANKMENT CONSTRUCTION.
7. EMBANKMENT MATERIALS SHALL BE CLAYEY SOIL (MINIMUM 30% CLAY, 0-40% SILT, 0-30% SAND).
8. NEW EARTH FILL SHALL BE PLACED LAYER BY LAYER IN 230 mm THICKNESS AND EARTH SHALL THOROUGHLY BE COMPACTED MECHANICALLY TO ATTAIN 85% OF MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT WITH REFERENCE TO LABORATORY DENSITY TEST AASTHO-180 MODIFIED HAMMER AS PROVIDED IN BWDB SCHEDULE IN ALL KINDS OF SOILS AS PER DIRECTION OF ENGINEER IN CHARGE.
9. 150 mm CAMBERING AT THE CENTER OF THE OF EMBANKMENT SHALL BE PROVIDED.
10. EARTH SHALL NOT BE REMOVED FROM THE CREST OF THE EMBANKMENT WHERE THE EXISTING CREST LEVEL IS HIGHER THAN THE DESIGN CREST LEVEL.
11. BOTH SIDE SLOPES AND CREST OF THE EMBANKMENT SHALL BE FINALLY DRESSED AND CLOSELY TURFED TO RETAIN EARTH FROM BEING WASHED UP BY RAIN AND WIND.
12.  $c = 10.00 \text{ kN/m}^2$  &  $\phi = 10^\circ$  SHALL BE ATTAIN FOR COMPLETED EMBANKMENT.
13. SHRINKAGE AS PER SCHEDULE SHALL BE CONSIDERED SO THAT FINAL CREST LEVEL REMAINS AT DESIGN LEVEL AFTER SHRINKAGE.
14. THE BORROW PIT SHALL NOT BE EXCAVATED CONTINUOUSLY ALONG THE EMBANKMENT LINE. CROSS BERM OF 5 m WIDTH AT TOP WITH REQUIRED SLOPES SHALL BE LEFT ALONG THE BORROW PIT AT MORE OR LESS 30 m APART.
15. NO EXCAVATION SHALL BE MADE WITHIN 50m FROM THE C/S TOE OF THE EMBANKMENT.
16. BM PILLAR ESTABLISHED BY IWM AND AS MENTIONED IN THIS DRAWING SHALL BE USED AS A REFERENCE FOR CONSTRUCTION OF EMBANKMENT (ITEM CODE NO. 4-150 & 4-160).
17. EARTHWORK SHALL BE COMPLETED BY FEBRUARY FOR EFFECTIVENESS OF WORK.
18. DHOLKALMI MAY BE PLANTED AS PER ITEM CODE NO. 48-130 ALONG THE TOE OF EMBANKMENT.
19. KILOMETER POST SHALL BE ESTABLISHED ALONG THE EMBANKMENT.
20. THE WORK SHALL BE EXECUTED AFTER ADMINISTRATIVE AND FINANCIAL APPROVAL FROM THE COMPETENT AUTHORITY.
21. ANY ERROR / OMISSION, IF DETECTED SHALL BE REFERRED TO THE DESIGN CIRCLE-1 FOR TAKING NECESSARY ACTION THROUGH CONSULTANT.
22. BM/TBM PILLAR ESTABLISHED BY IWM (AS SHOWN HERE) SHALL BE USED AS REFERENCE FOR SURVEY AND IMPLEMENTATION WORK.
23. CREST WIDTH OF EMBANKMENT IS KEPT AS 4.30 m AS THE EMBANKMENT ARE PLANNED TO BE USED AS ROAD BY THE PEOPLE WITH SIDE SLOPE OF 1:3 ON BOTH SIDES.
24. STRUCTURE SHALL BE PROVIDED ON FLOWING OR NON FLOWING CHANNEL UNLESS IT IS DESIGNED AS CLOSURE.
25. EXISTING BRIDGE / CULVERT ON THE ALIGNMENT OF EMBANKMENT SHALL BE CLOSED UPTO DESIGN CREST LEVEL DURING THE MONTH OF JANUARY/ FEBRUARY AND SHALL BE OPEN AFTER MAY 15TH IN EVERY YEAR.
26. SUBMERSIBLE BLOCK ROAD SECTION SHALL BE CONSTRUCTED AS PER FIELD REQUIREMENT, BUT WITHIN DPP PROVISION.
27. COMPACTION OF EARTH IN THE EMBANKMENT HAS BEEN CONSIDERED AS 85% OF MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT (IN NOTE NO-8) VIDE MEMO NO-BW-16-086 DATED 10-08-16 OF THE CONSULTANTS OF THIS PROJECT.



REVISION									
NO.	DATE	MADE	CHKD.	RECOM.	APPV.	AUTO CAD OPERATOR	DESIGN ENGINEER	CO-TEAM LEADER	CO-TEAM LEADER
1						Ms. Tahira Chowdhury	Anisur Kawsar Waseel	A.Q. Mohammad Ali	A.Q. Mohammad Ali
DRAWN BY:						DESIGNED BY:			
						CHECKED BY:			
						RECOMMENDED BY:			
CONSULTANTS:						Nippon Koei Co. Ltd (NK), Joint Venture with BETS-CNRS			
2									
GENERAL NOTES									
SUBMERSIBLE EMBANKMENT AROUND DAKSHINER HAOR									
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)									
BANGLADESH WATER DEVELOPMENT BOARD									
Checked By: Farzana Afrin									
Recommended By: Yasmin Begum									
Approved By: Saeeda Nazreen									
DWG. NO. KISHORE-DAKSHINER HAOR-EMB-0000									
SHEET: 13/62									

Scale: As shown

Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.	AUTO CAD OPERATOR	DESIGN ENGINEER	CO-TEAM LEADER	CO-TEAM LEADER	DWG. NO.: KISHORE-DAKSHINER HAOR-EMB-00000	SHEET: 14/62
							Ms. Tahira Chowdhury	Arifur Kawser Wasef	A.Q. Mohammad Ali	A.Q. Mohammad Ali	SE, DESIGN CIRCLE - 1
1							DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:	Farzana Afreen	Yasmin Begum
							Ms. Tahira Chowdhury	Arifur Kawser Wasef	A.Q. Mohammad Ali	Saeeda Nazreen	
2							CONSULTANTS:	Nippon Koei Co. Ltd (NK), Joint Venture with BETS-CNRS			
							DRAWN BY:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:	APPROVED BY:

TECHNICAL NOTES

SUBMERGIBLE EMBANKMENT AROUND DAKSHINER HAOR

Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)

BANGLADESH WATER DEVELOPMENT BOARD

Location, km	Type of	Size, m x m	Silt/bed level, mPWD	Remarks (incoming/drainage)
Kaysar (in meterage)	3-vent Regulator over Shandir Khal	Width 1.7 m, height partly silted	silted	Abandoned

Features Considered along the Proposed Project Boundary

The project boundary is fixed with zero reference at existing 3 vent regulator (Abandoned) over Shankir Khal following high ridge of river bank, homesteads (wherever available) and roads keeping appropriate set back distance from bank of river. The sub-project is encircled by Kalni River, Bantai River, Uara Khal and Cherapur Khal. Fifty meter set back distance is followed for small river/khals, and that of 150-200 meter has been considered from big rivers. The internal khals that are not connected with peripheral rivers have not been considered as incoming flood or drainage route. The bridges/culverts and khals over the boundary as drainage or flood incoming route have been considered in the planning process.

BM AND TBM INFORMATION: (CO-ORDINATES ARE IN RTM)

SL No.	TBM ID	UTM X	UTM Y	RTM PWB	Description
1	IWM TBM N-05	315954	2710293	5.829	IWM TBM N-05 on the top of RCC Pillar near house Mr. Belal Vill: Dhampur Union: Nichintapur, PS: Ajmiriganj, Dist: Habiganj
2	IWM TP - N-01	315068	2709188	6.999	IWM TP N-01 (TBM-E-03) engraved on the N/W corner at Nichintapur Bazar Mosque tubewell base Vill: Nichintapur Union: Nichintapur, PS: Ajmiriganj, Dist: Habiganj
3	IWM TBM N-04	314718	2708099	8.708	IWM TBM N-04 on the top of RCC Pillar at Kamelpur UP: Kakkhal, Upazila: Mithamain, Dist: Kishoreganj
4	IWM TP - N-02	314453	2707117	6.202	IWM TP N-02 (TBM-E-02) engraved on top of railing N/W corner at Kolsor 3 vent sluice gate Vill: Kolsor UP: Kakkhal, Upazila: Mithamain, Dist: Kishoreganj
5	IWM TBM N-01	315093	2706556	5.477	IWM TBM N-01 engraved on the 1st step of Kolsor Govt. Primary School Vill: Kolsor, P.S: Mithamain, Dist: Kishoreganj
6	IWM TBM Pillar-03	314450	2706122	4.648	IWM TBM Pillar-03, Vill: Kolsor, P.S: Mithamain, Dist: Kishoreganj
7	IWM TBM Pillar-02	312703	2706115	4.851	IWM TBM Pillar-02, Vill: Murshidpur, P.S: Mithamain, Dist: Kishoreganj
8	IWM TP	312585	2705599	5.469	IWM TP AL-02 on top of iron khunt at Murshidpur P.S, Mithamain, Dist: Kishoreganj
9	IWM TBM Pillar-01	311585	2704122	4.007	IWM TBM Pillar-01 Vill: Charigram Union: Dhakal, Upazila: Mithamain, Dist: Kishoreganj
10	TP TS Peg	310321	2703665	3.923	On the top of peg at Charigram
11	IWM TBM N-06	309631	2705006	5.768	IWM TBM N-06 (AL-01) Engraved on the railing base N/W corner at Charigram Bazar two vent Box Culvert Vill: Charigram Union: Dhakal, Upazila: Mithamain, Dist: Kishoreganj
12	IWM TBM N-07	309005	2706130	6.251	IWM TBM N-07 (TS peg E 10) Engraved on N/E corner top of boundary wall Graveyard at vill Kolehani Union: Dhakal P.S, Mithamain, Dist: Kishoreganj
13	IWM TBM N-08	308365	2706644	7.466	IWM TBM N-08 engraved on the S/W corner of Marefatul Uloomat Madrasa Kolehani Gobindpur Union: Dhakal P.S, Mithamain, Dist: Kishoreganj
14	IWM TBM N-09	308230	2706850	5.795	IWM TBM N-09 (TS peg E 14) Engraved on top of baundar wall at Gobindpur Bazar Union: Dhakal P.S, Mithamain, Dist: Kishoreganj
15	IWM TBM N-10	307416	2708340	4.163	TBM N-10 on the top of RCC pillar land woner Mr. Zahid Mahab Vill: Chokosor UP: Dhakal Upazila: Mithamain, Dist: Kishoreganj
16	IWM TBM N-11	306964	2708660	4.908	TBM N-11 (TS Sohe) Engraved on top of BADC paca drain at Atpasha UP: Dhakal PS: Mithamain Dist: Kishoreganj
17	IWM TBM N-12	307087	2709280	4.441	TBM N-12 (Azim) Engraved on top of BADC paca Water tank at Atpasha High School UP: Dhakal PS: Mithamain Dist: Kishoreganj
18	IWM TBM N-13	307296	2710147	6.096	TBM N-13 (AL-10) on the top of RCC pillar near Noyanogor Nurani Hafizi madrasa UP: Elongjuri PS, Itna, Dist: Kishoreganj
19	IWM TBM N-14	307663	2710513	5.303	TBM N-14 (AL-11) on the top of RCC pillar near Noyanogor Govt. Primary School UP: Elongjuri PS, Itna, Dist: Kishoreganj
20	IWM TBM N-15	308062	2710810	5.197	IWM TBM N-15 engraved on the 1st step of Noyanogor Voyra Brikul Janata Bazar UP: Elongjuri PS: Itna, Dist: Kishoreganj
21	IWM TBM N-16	308617	2711117	6.924	IWM TBM N-16 on the top of RCC pillar top of THE RETAINING WALL, Voyra Govt. Primary School, Itna, Kishoreganj
22	IWM TBM N-17	309832	2711392	4.933	IWM TBM N-17 on the top of RCC pillar at Vill: Vikrul, PS: Itna, Dist: Kishoreganj
23	IWM TBM N-18	310036	2711422	4.866	IWM TBM N-18 on the top of RCC pillar at Vill: Vikrul, PS: Itna, Dist: Kishoreganj
24	IWM TBM N-19	310603	2711725	5.412	IWM TBM N-19 Engraved on the Place at Koronshi Govt. Primary School Back Side PS: Itna Dist: Kishoreganj
25	IWM TBM N-20	311023	2711739	5.375	IWM TBM N-20 on the top of RCC pillar at Vill: Joytsiddi, PS: Itna, Dist: Kishoreganj
26	IWM TBM N-21	312128	2711981	6.788	IWM TBM N-21 engraved on the N/E corner of box culvert (4 Vent) at Joytsiddi (Aligara), UP: Joytsiddi PS: Itna Dist: Kishoreganj
27	IWM TBM N-22	313171	2711946	5.219	IWM TBM N-22 engraved on the top of RCC pillar at Vill: Sabaspur UP: Joytsiddi PS: Itna Dist: Kishoreganj
28	IWM TBM N-23	313990	2711694	6.63	IWM TBM N-23 engraved on the Mudirgaon Eidgah Tgate Vill: Mudirgaon PS: Itna, Dist: Kishoreganj
29	IWM TBM N-24	314409	2711690	4.602	IWM TBM N-24 on the top of RCC pillar at Vill: Mudirgaon, PS: Itna, Dist: Kishoreganj

Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.	REVISION			
1									
2									
CONSULTANTS:						DRAWN BY:			
Nippon Koel Co. Ltd (NK), Joint Venture with BETS-CNRS						DESIGNED BY:			
						CHECKED BY:			
						RECOMMENDED BY:			
						CO-TEAM LEADER			
						DESIGN ENGINEER			
						AUTO CAD OPERATOR			
						CO-TEAM LEADER			
						CO-TEAM LEADER			
						DWG. NO: KISHORE DAKSHINER HAOR-EMB-0000			
						SHEET: 15/62			
						CE, DESIGN			
						SE, DESIGN CIRCLE - 1			
						EE, DESIGN CIRCLE - 1			
						Farzana Ameen			
						Yasmin Begum			
						Saeeda Nazreen			

APPROVED BY:	
RECOMMENDED BY:	
CHECKED BY:	
BM / TBM	
SUBSERSIBLE EMBANKMENT AROUND DAKSHINER HAOR	
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BMDP Part)	
BAKSHINER WATER DEVELOPMENT BOARD	

SL No	Haor Name	BM ID	UTM X	UTM Y	RL (mPWB)	Location	Ref. BM
1	Dakshiner_Haor	Dakshiner-1	311324	2711774	8.094	Joytsiddhi High School	GPS-5469
2	Dakshiner_Haor	Dakshiner-1	308358	2706656	7.77	Kolahani Marefatul Uloom Madrasa	GPS-5469
3	Dakshiner_Haor	Dakshiner-1	315090	2706577	7.355	Khoishar Govt. Primary School	GPS-5469



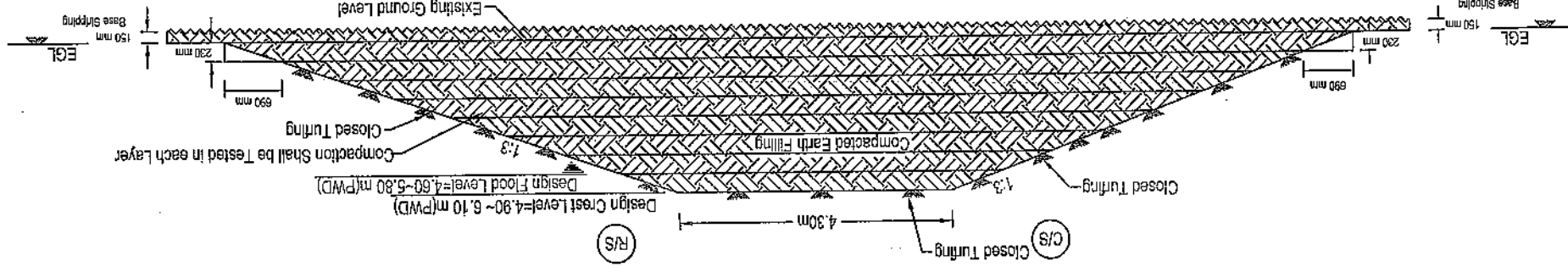
# DAKSHINER HAOR SUB-PROJECT

SUBMERSIBLE EMBANKMENT AROUND DAKSHINER HAOR  
LONG SECTION  
(FROM KM. 0.00 TO KM. 33.520)

Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.	REVISION			
1									
2									
CONSULTANTS:						Nippon Koei Co. Ltd (NK), Joint Venture with BETS-CNRS			
DRAWN BY:						DESIGNED BY:			
CHECKED BY:						RECOMMENDED BY:			
AUTO CAD OPERATOR:						DESIGN ENGINEER:			
CO-TEAM LEADER:						CO-TEAM LEADER:			
DWG. NO: KISHORE DAKSHINER HAOR EMB-0000						SHEET: 17/62			
CE, DESIGN						SE, DESIGN			
Saeeda Nazreen						Yasmin Begum			
APPROVED BY:						RECOMMENDED BY:			
CHECKED BY:						Farzana Aftab			
LONG SECTION (FROM KM-0.00 TO KM-4.662)						SUBMERGIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)			
CONSULTANCY SERVICES FOR Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)						BANGLADESH WATER DEVELOPMENT BOARD			

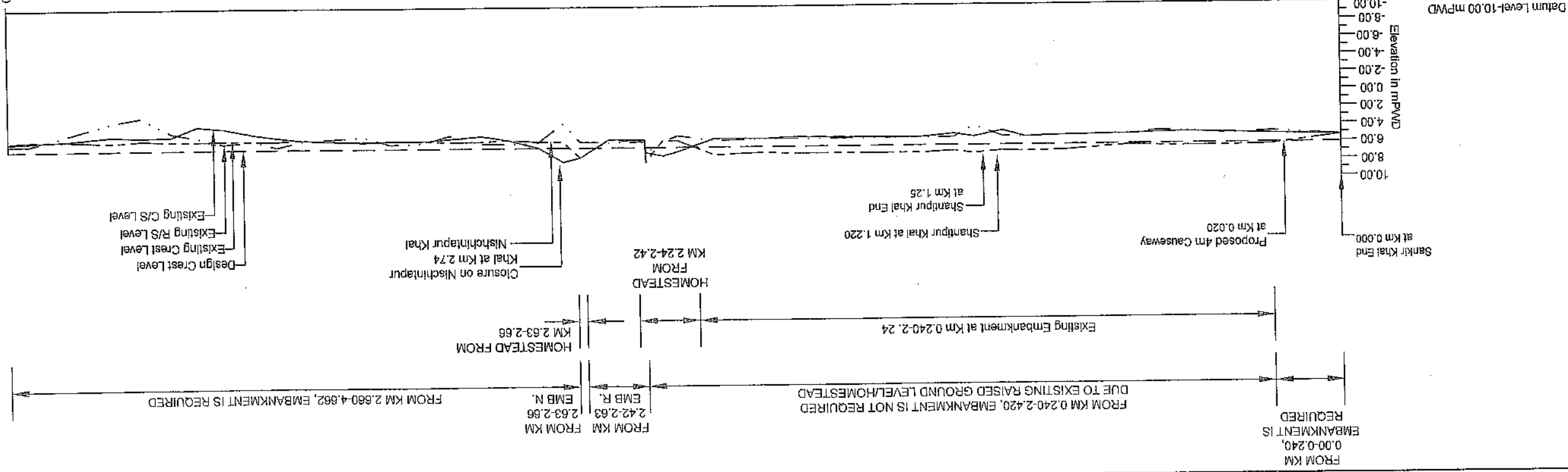
APPLICABLE FROM KM. 0.00 TO KM. 33.52, EXCEPT THE REACH FROM KM. 8.352 TO KM. 9.600  
(Not to Scale)



N = EMBANKMENT IS NOT REQUIRED DUE TO EXISTING RAISED GROUND LEVEL/HOMESTEAD  
R = EMBANKMENT IS REQUIRED

LONG PROFILE OF SUBMERGIBLE EMBANKMENT OF DAKSHINER HAOR  
(FROM KM-0.00 TO KM-4.662)

Distance (m)	Existing Crest Level (mPWD)	Existing RS Level (mPWD)	Existing CS Level (mPWD)	Design Crest Level (mPWD)
0.0	5.30	5.30	5.30	5.10
240.0	6.29	4.80	5.08	
390.0	6.39	5.06	4.93	
530.0	6.38	4.72	4.79	
640.0	6.34	4.64	4.83	
730.0	6.22	4.93	4.98	
960.0	6.74	5.02	5.03	
1100.0	6.85	5.17	5.20	
1180.0	6.73	5.13	4.47	
1280.0	7.05	3.90	5.15	
1350.0	6.74	5.19	4.81	
1470.0	6.95	5.22	5.16	
1920.0	6.87	5.21	5.02	
2000.0	6.78	5.21	5.19	
2180.0	7.00	5.38	5.12	
2310.0	5.35	4.79	6.63	
2360.0	5.31	5.53	7.07	
2420.0	5.42	5.74	8.93	
2640.0	5.19	5.50	5.15	
2648.0	7.22	5.44	7.22	
2707.0	5.41	3.31	7.71	
2793.0	5.38	5.45	6.07	
2901.0	5.18	5.64	5.17	
2990.0	5.35	5.54	4.71	
3101.0	5.37	4.62	4.89	
3183.0	5.22	5.43	5.22	
3307.0	5.19	5.60	5.22	
3389.0	5.36	4.69	5.30	
3615.0	5.05	5.20	5.05	
3702.0	5.17	5.84	4.76	
3781.0	5.16	5.11	4.37	
3894.0	5.11	5.46	3.71	
3987.0	5.14	4.70	3.41	
4081.0	5.10	4.15	4.55	
4186.0	4.99	2.37	4.64	
4294.0	5.22	2.92	4.48	
4438.0	4.99	4.22	4.89	
4585.0	4.99	5.45	5.11	
4662.0	5.14	5.49	5.24	6.10



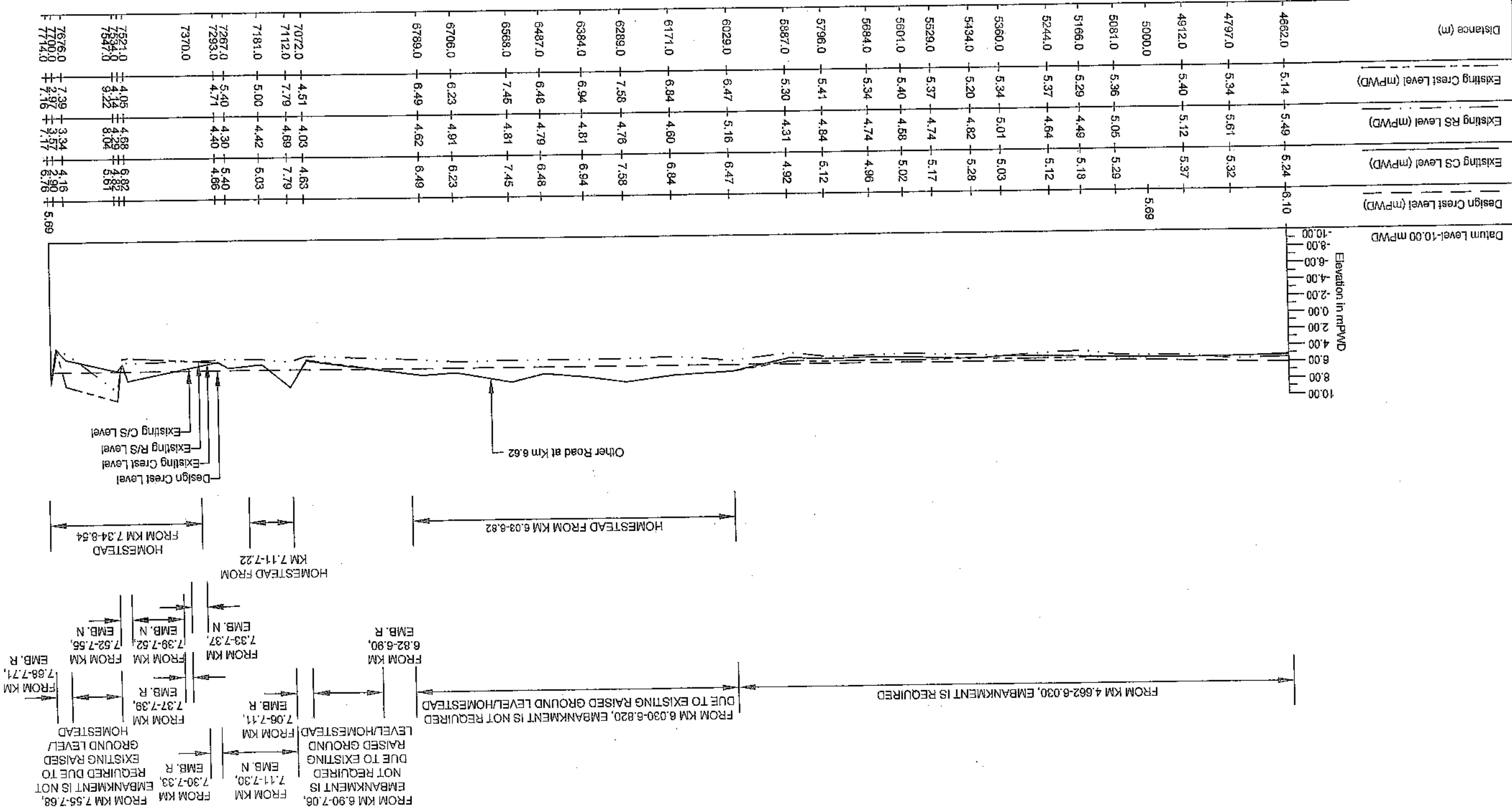
Scale: As shown

BANGLADESH WATER DEVELOPMENT BOARD																	
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)																	
SUBMERSIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)																	
LONG SECTION (FROM KM-4.652 TO KM-7.714)																	
APPROVED BY:																	
CHECKED BY:																	
RECOMMENDED BY:																	
Farzana Aftab																	
SE, DESIGN CIRCLE - 1																	
Yasmin Begum																	
SA, DESIGN CIRCLE - 1																	
Saeeda Nazreen																	
CE, DESIGN																	
DWG. NO: KISHORE-DAKSHINER HAOR-FMB-00000																	
SHEET: 18 /52																	

NO.	DATE	MADE	CHKD.	RECD.	APPV.	REVISION	
						AUTO CAD OPERATOR	DESIGN ENGINEER
1						Ms. Tahura Chowdhury	Amirul Karim Waseed
2							

CONSULTANTS:				Nippon Koel Co. Ltd (NG), Joint Venture with BETS-CNRS			
DRAWN BY:				DESIGNED BY:			
CHECKED BY:				RECOMMENDED BY:			
A.O. Mohammad Ali				A.O. Mohammad Ali			
CO-TEAM LEADER				CO-TEAM LEADER			

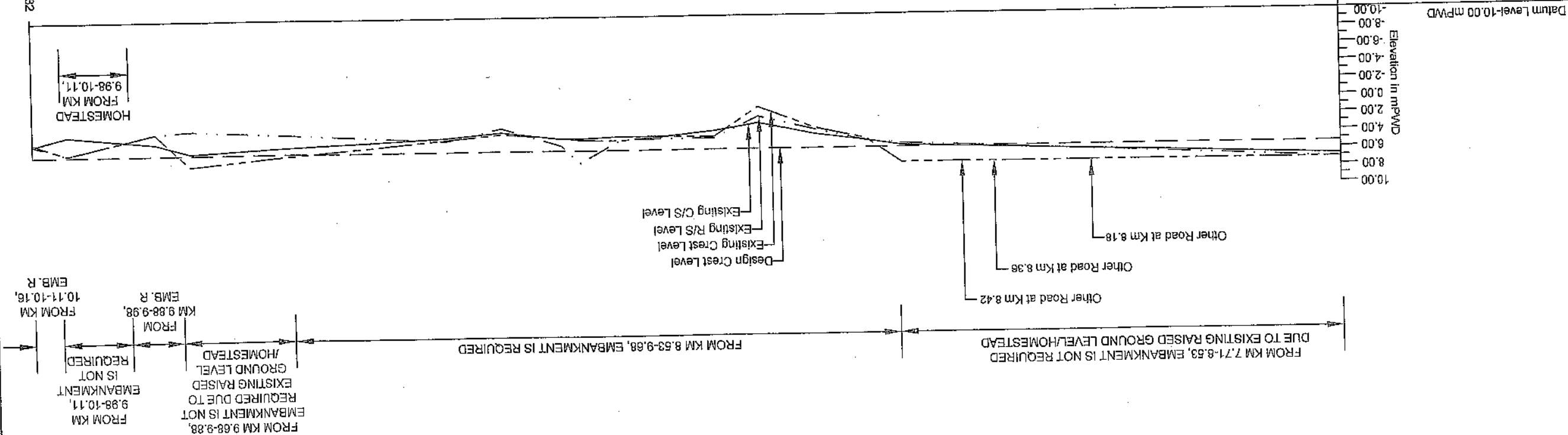
LONG PROFILE OF SUBMERSSIBLE EMBANKMENT OF DAKSHINER HAOR  
(FROM KM-4.662 TO KM-7.714)  
N = EMBANKMENT IS NOT REQUIRED DUE TO EXISTING RAISED  
GROUND LEVEL/HOMESTEAD  
R = EMBANKMENT IS REQUIRED



NO.	DATE	MADE	CHKD.	RECOM.	APPV.	REVISION	
1						Mrs. Tahura Chowdhury	AUTO CAD OPERATOR
2						CONSULTANTS:	DESIGNED BY: Nippon Koei Co. Ltd (NKK), Joint Venture with BETS-CNKS
						DRAWN BY: E. Chowdhury	
						Checked By: A.Q. Mohammad Ali	CO-TEAM LEADER
						Checked By: A.Q. Mohammad Ali	CO-TEAM LEADER
						Checked By: Farzana Afreen	EE DESIGN CIRCLE - 1
						Checked By: Yasmin Begum	SE DESIGN CIRCLE - 1
						Checked By: Saeeda Nazneen	CE DESIGN
		DWG. NO: KISHORE-DAKSHINER HAOR-EMB-00000		SHEET: 19 / 22			

LONG PROFILE OF SUBMERGIBLE EMBANKMENT OF DAKSHINER HAOR  
(FROM KM-7.714 TO KM-10.164)

Distance (m)	Existing Crest Level (mPWD)	Existing RS Level (mPWD)	Existing CS Level (mPWD)	Design Crest Level (mPWD)	Datum Level-10.00 mPWD
7714.0	-7.16	-7.17	-6.76	-5.32	-10.00
8532.0	-7.09	-4.90	-5.12	-	-
8599.0	-4.29	-4.54	-4.49	-	-
8665.0	-2.98	-3.18	-3.70	-	-
8799.0	-0.55	-1.65	-2.38	-	-
8881.0	-3.87	-4.04	-3.21	-	-
8972.0	-3.79	-4.01	-3.76	-	-
9054.0	-4.22	-4.19	-3.74	-	-
9130.0	-4.12	-6.72	-3.93	-	-
9165.0	-3.88	-4.72	-3.93	-	-
9276.0	-3.35	-2.67	-3.15	-	-
9378.0	-3.93	-4.04	-3.70	-	-
9862.0	-6.62	-2.55	-5.12	-	-
9930.0	-2.84	-2.84	-3.99	-	-
10097.0	-5.14	-5.14	-3.02	-	-
10164.0	-3.81	-3.98	-4.06	-5.32	-



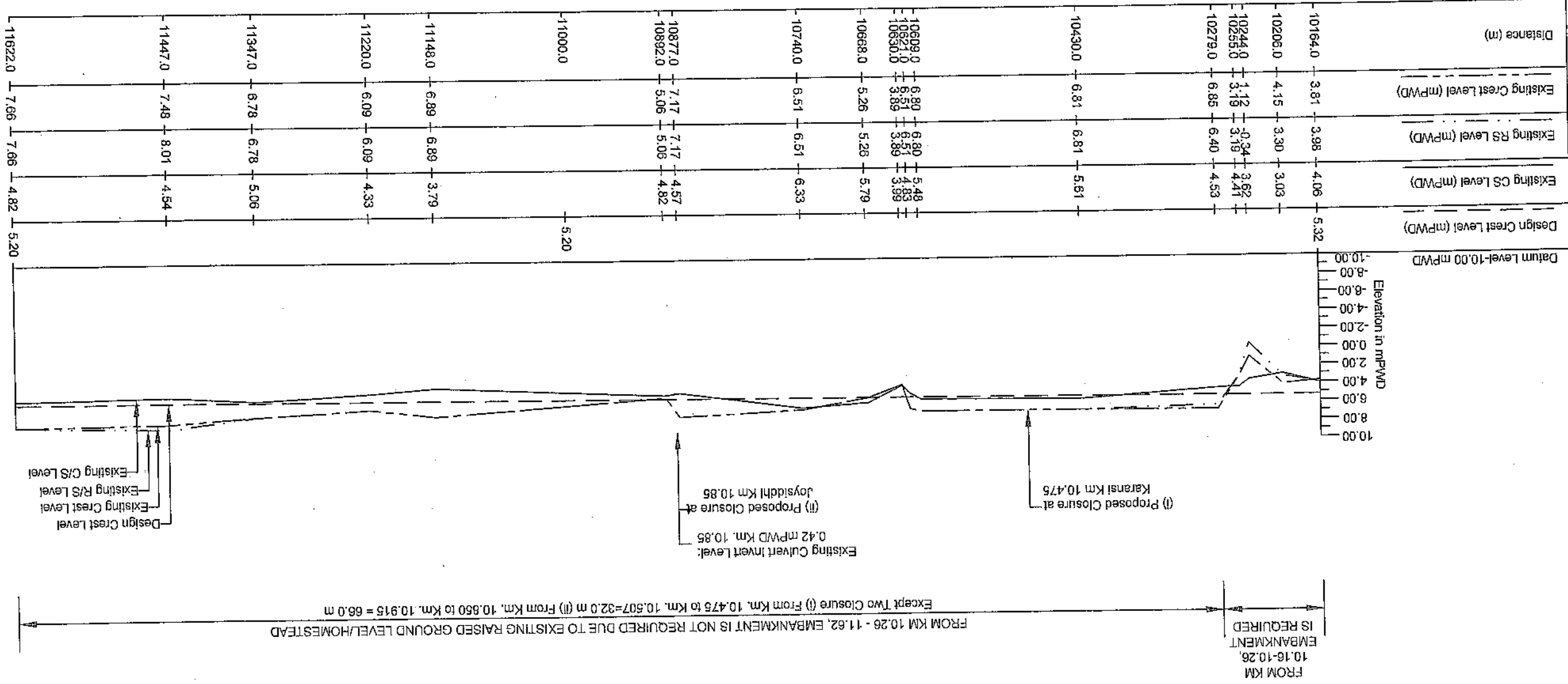


Scale: As shown

BANGLADESH WATER DEVELOPMENT BOARD									
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)									
SUBMERGIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)									
LONG SECTION (FROM KM- 10.164 TO KM- 11.622)									
CHECKED BY:					RECOMMENDED BY:				
Farzana Aftreen					Yasmin Begum				
EE, DESIGN CIRCLE - 1					SE, DESIGN CIRCLE - 1				
DWG. NO: KISHORE-DAKSHINER HAOR-EMB-00000					SHEET: 20 /62				

N = EMBANKMENT IS NOT REQUIRED DUE TO EXISTING RAISED  
GROUND LEVEL/HOMESTEAD  
R = EMBANKMENT IS REQUIRED

LONG PROFILE OF SUBMERGIBLE EMBANKMENT OF DAKSHINER HAOR  
(FROM KM-10.164 TO KM-11.622)



Scale: As shown

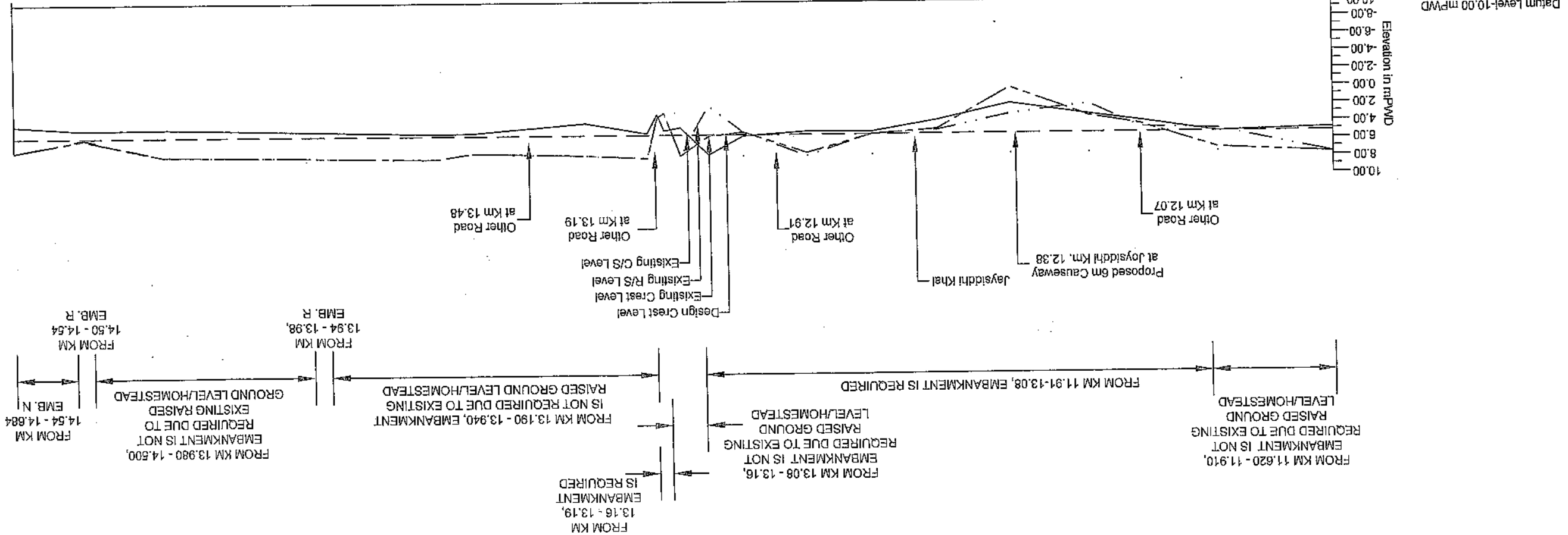
NO.	DATE	MADE	CHKD.	RECOM.	APPV.	REVISION			
1									
2									
CONSULTANTS:						Nippon Keel Co. Ltd (NKC), Joint Venture with BETS-CNRS			
DRAWN BY:						DESIGNED BY:			
CHECKED BY:						RECOMMENDED BY:			
AUTO CAD OPERATOR						DESIGN ENGINEER			
CO-TEAM LEADER						CO-TEAM LEADER			
DWG. NO: KISHORE-DAKSHINER HAOR-EMB-00000						SHEET: 21 / 62			

CE, DESIGN	Farzana Aftreen	SE, DESIGN CIRCLE - 1	Yasmin Begum	APPROVED BY:
Saeeda Nazreen		SE, DESIGN CIRCLE - 1		
BANGLADESH WATER DEVELOPMENT BOARD				
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)				
SUBMERISBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)				
LONG SECTION (FROM KM-11.622 TO KM-14.684)				

N = EMBANKMENT IS NOT REQUIRED DUE TO EXISTING RAISED GROUND LEVEL/HOMESTEAD  
R = EMBANKMENT IS REQUIRED

LONG PROFILE OF SUBMERISBLE EMBANKMENT OF DAKSHINER HAOR  
(FROM KM-11.622 TO KM-14.684)

Distance (m)	Existing Crest Level (mPWD)	Existing RS Level (mPWD)	Existing CS Level (mPWD)	Design Crest Level (mPWD)
-11622.0	7.66	7.66	4.82	5.20
-11890.0	6.73	4.89	7.04	5.20
-12070.0	4.26	4.61	3.89	5.20
-12190.0	3.27	1.89	3.09	5.20
-12370.0	2.27	3.00	1.79	5.20
-12540.0	4.67	4.81	3.66	5.20
-12690.0	5.20	5.13	4.88	5.20
-12840.0	7.27	7.63	4.82	5.20
-12990.0	4.89	4.91	5.34	5.20
-12990.0	5.37	1.86	7.47	5.20
-13131.0	7.57	7.57	4.35	
-13168.0	3.28	3.28	4.85	
-13207.0	7.80	7.80	4.99	
-13349.0	7.48	7.48	3.79	
-13612.0	7.16	7.16	4.87	
-13696.0	7.81	7.81	4.91	
-14336.0	7.34	7.34	4.22	
-14522.0	5.41	5.29	4.29	
-14684.0	6.78	6.78	3.76	5.20

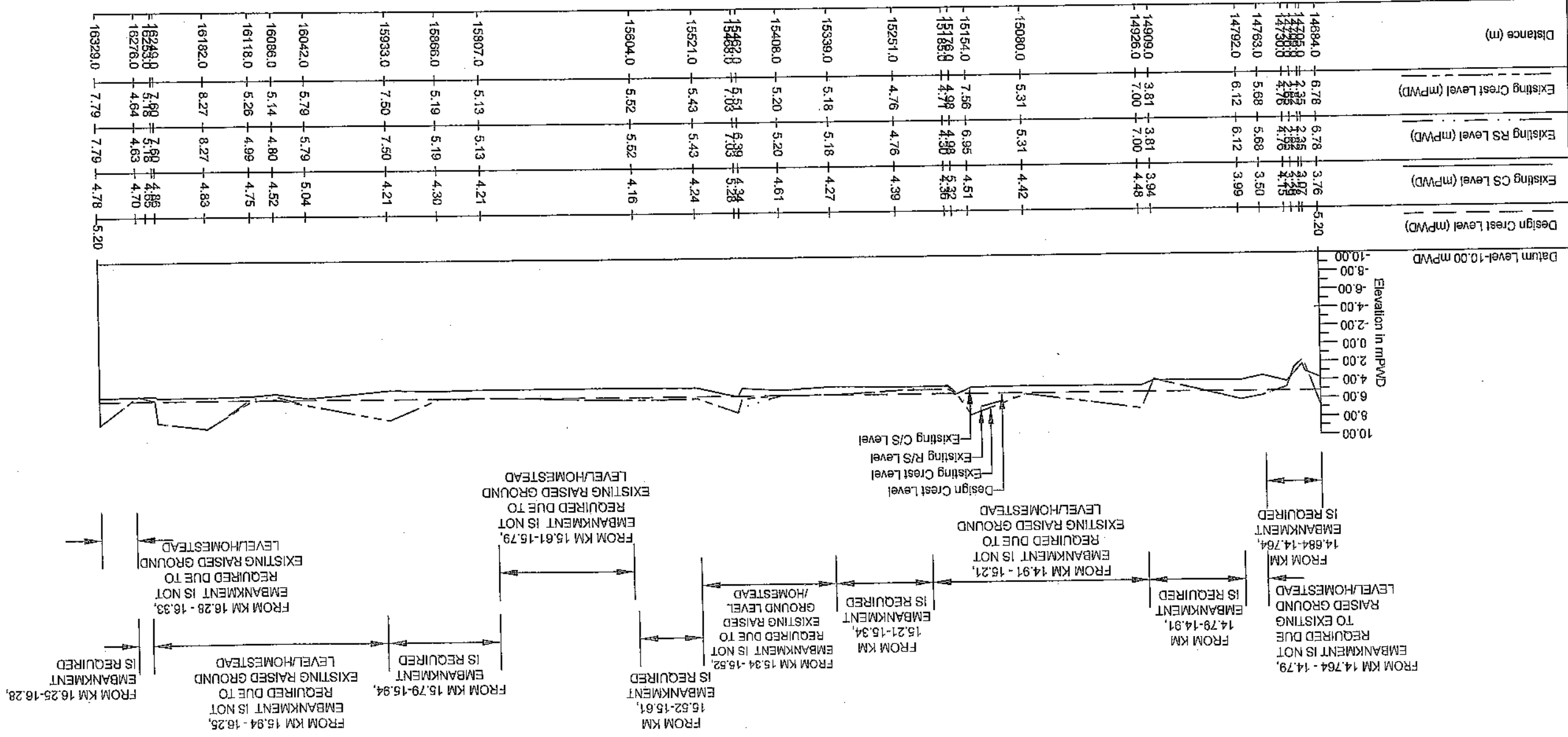


Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.	REVISION			
1									
2									
CONSULTANTS:						Nippon Koei Co. Ltd (NK), Joint Venture with BETS-CNRS			
DRAWN BY:						A. Q. Mohammed Ali			
DESIGNED BY:						A. Q. Mohammed Ali			
CHECKED BY:						A. Q. Mohammed Ali			
RECOMMENDED BY:						A. Q. Mohammed Ali			
APPROVED BY:						A. Q. Mohammed Ali			
DESIGN ENGINEER						A. Q. Mohammed Ali			
CO-TEAM LEADER						A. Q. Mohammed Ali			
AUTO CAD OPERATOR						A. Q. Mohammed Ali			
DWG. NO. KISHORE-DAKSHINER HAOR-EMB-0000						SHEET: 22/62			

N = EMBANKMENT IS NOT REQUIRED DUE TO EXISTING RAISED GROUND LEVEL/HOMESTEAD  
R = EMBANKMENT IS REQUIRED

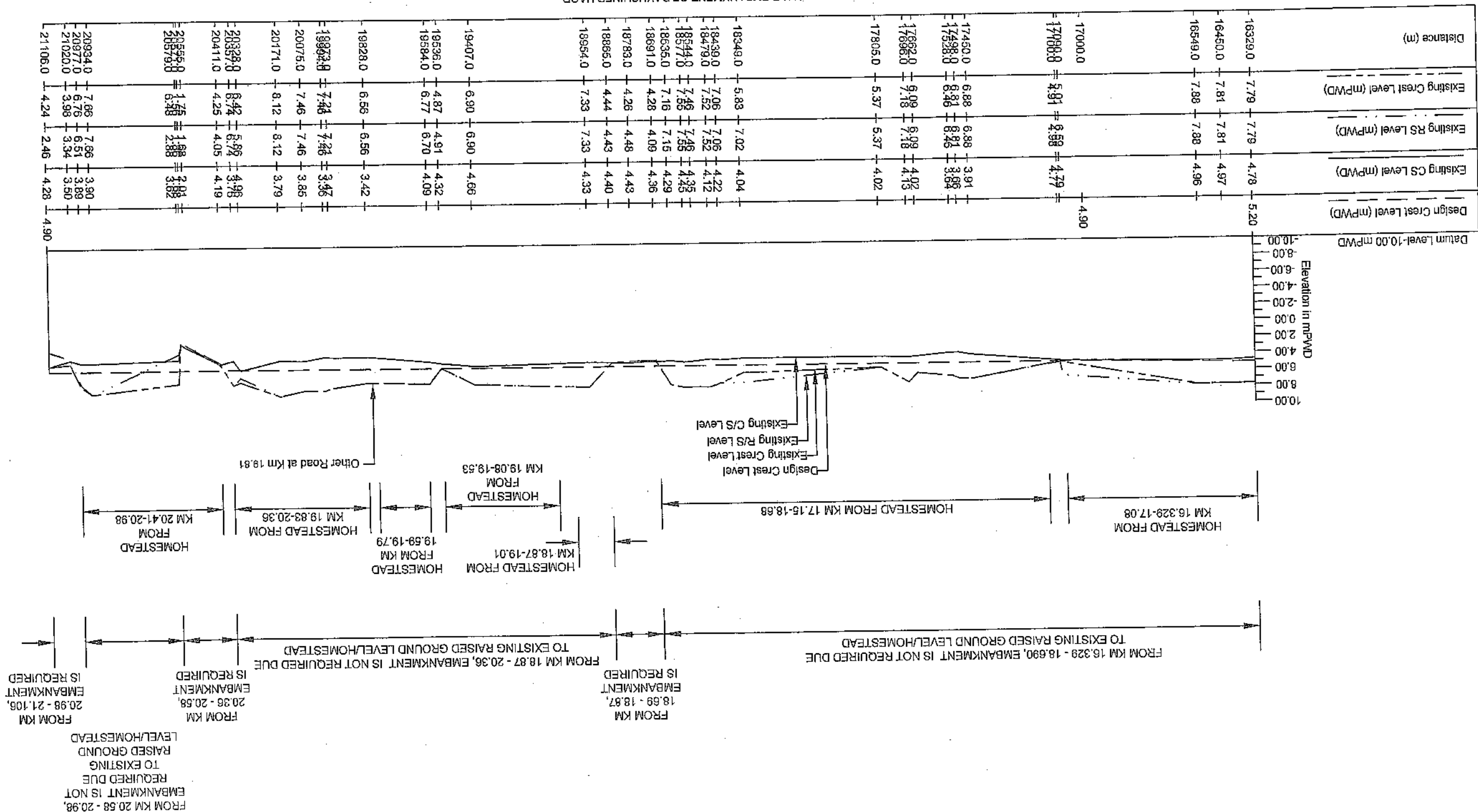
LONG PROFILE OF SUBMERSSIBLE EMBANKMENT OF DAKSHINER HAOR  
(FROM KM-14.684 TO KM-16.329)



Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.	CONSULTANTS:	DRAWN BY:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:	APPROVED BY:
1						Ms. Tahura Chowdhury	A. Chowdhury	Ahsanul Karwar Waseel	A.A. Mohammad Ali	Farzana Afsheen	Saeeda Nazreen
2											
REVISION											
AUTO CAD OPERATOR											
DESIGN ENGINEER											
CO-TEAM LEADER											
DWG. NO: KISHORE-DAKSHINER HAOR-EMB-0000											
SHEET: 23 / 62											
CE, DESIGN											

LONG PROFILE OF SUBMERGIBLE EMBANKMENT OF DAKSHINER HAOR  
(FROM KM-16.329 TO KM-21.106)  
N = EMBANKMENT IS NOT REQUIRED DUE TO EXISTING RAISED GROUND LEVEL/HOMESTEAD  
R = EMBANKMENT IS REQUIRED



CONSULTANTS:		Nippon Koei Co, Ltd (NK), Joint Venture with BETS-CNRS		CHECKED BY:		CHECKED BY:		RECOMMENDED BY:		RECOMMENDED BY:		APPROVED BY:	
		DRAWN BY:		DESIGNED BY:		CHECKED BY:		RECOMMENDED BY:		SE, DESIGN CIRCLE - 1		CE, DESIGN	
1													
2													
AUTO CAD OPERATOR		DESIGN ENGINEER		CO-TEAM LEADER		CO-TEAM LEADER		DWG. NO. KISHORE-DARKSHINER HAO-R-EMB-00000		SHEET: 24 / 62			
Ms. Tahura Chowdhury		Anisur Kawser Wasefi		A.Q. Mohammad Ali		A.Q. Mohammad Ali		Farzana Afreen		Yasmin Begum		Saeeda Nazreen	
REVISION		DATE		MADE		CHKD.		RECOM.		APPV.			

Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.	AUTO CAD OPERATOR	DESIGN ENGINEER	CO-TEAM LEADER	DWG. NO. KISHORE-DAKSHINER HAOR-EMB-00000	SHEET: 26/62
1						Ms. Tahura Chowdhury	Ansar Kawsar Waseh	A.Q. Mohammad Ali	Farzana Afreen	SE, DESIGN CIRCLE-1
2									Yasmin Begum	CE, DESIGN
CONSULTANTS:						Nippon Keel Co. Ltd (NK), Joint Venture with BETS-CNRS				
DRAWN BY:						CHECKED BY:				
DESIGNED BY:						RECOMMENDED BY:				
APPROVED BY:						APPROVED BY:				

LONG SECTION (FROM KM-26.643 TO KM-30.315)

SUBMERISBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)

of Haor Flood Management and Livelihood Improvement Project (BVDB Part)

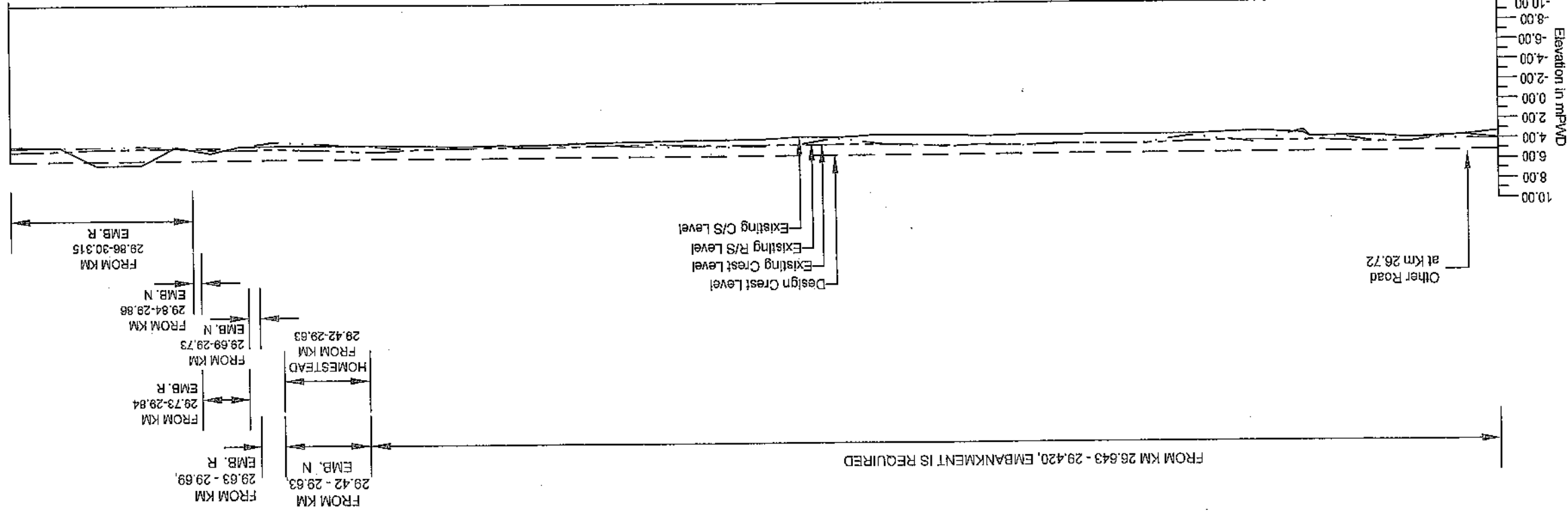
Consultancy Services for Management, Design, Supervision and other Related Services

BANGLADESH WATER DEVELOPMENT BOARD

N = EMBANKMENT IS NOT REQUIRED DUE TO EXISTING RAISED  
GROUND LEVEL/HOMESTEAD  
R = EMBANKMENT IS REQUIRED

LONG PROFILE OF SUBMERISBLE EMBANKMENT OF DAKSHINER HAOR  
(FROM KM-26.643 TO KM-30.315)

Distance (m)	Existing Crest Level (mPWD)	Existing RS Level (mPWD)	Existing CS Level (mPWD)	Design Crest Level (mPWD)
26643.0	4.00	4.01	3.26	5.15
26735.0	3.60	4.03	3.65	
26869.0	4.30	3.79	3.86	
26944.0	4.29	4.29	3.63	
27021.0	4.17	3.80	3.62	
27128.8	4.08	3.04	3.34	
27237.0	4.04	4.27	3.10	
27406.0	4.12	3.57	3.39	
27532.0	4.34	4.34	3.35	
27612.0	4.33	4.28	3.34	
27721.0	4.24	4.31	3.43	
27802.0	4.41	4.50	3.38	
27916.0	4.30	4.33	3.47	
27997.0	4.50	4.43	3.36	
28106.0	4.27	4.43	3.34	
28175.0	4.25	4.15	3.32	
28270.0	4.25	3.62	3.55	
28352.0	4.32	4.20	3.47	
28441.0	4.30	4.38	3.68	
28542.0	4.36	4.43	3.75	
28643.0	4.27	4.41	3.80	
28722.0	4.18	4.41	3.87	
28818.0	4.26	4.27	3.93	
28908.0	4.35	3.98	4.01	
28990.0	4.45	4.47	4.17	
29105.0	4.38	4.12	4.21	
29192.0	4.46	4.25	4.27	
29306.0	4.56	4.62	4.18	
29394.0	4.79	4.28	4.13	
29650.0	4.46	3.72	4.15	
29740.0	4.56	4.32	4.18	
29813.0	4.49	4.33	4.82	
29900.0	4.33	4.23	4.20	
29988.0	4.37	4.11	6.01	
30098.0	4.40	4.18	6.00	
30191.0	4.57	4.18	4.18	
30315.0	4.64	4.26	4.10	5.70

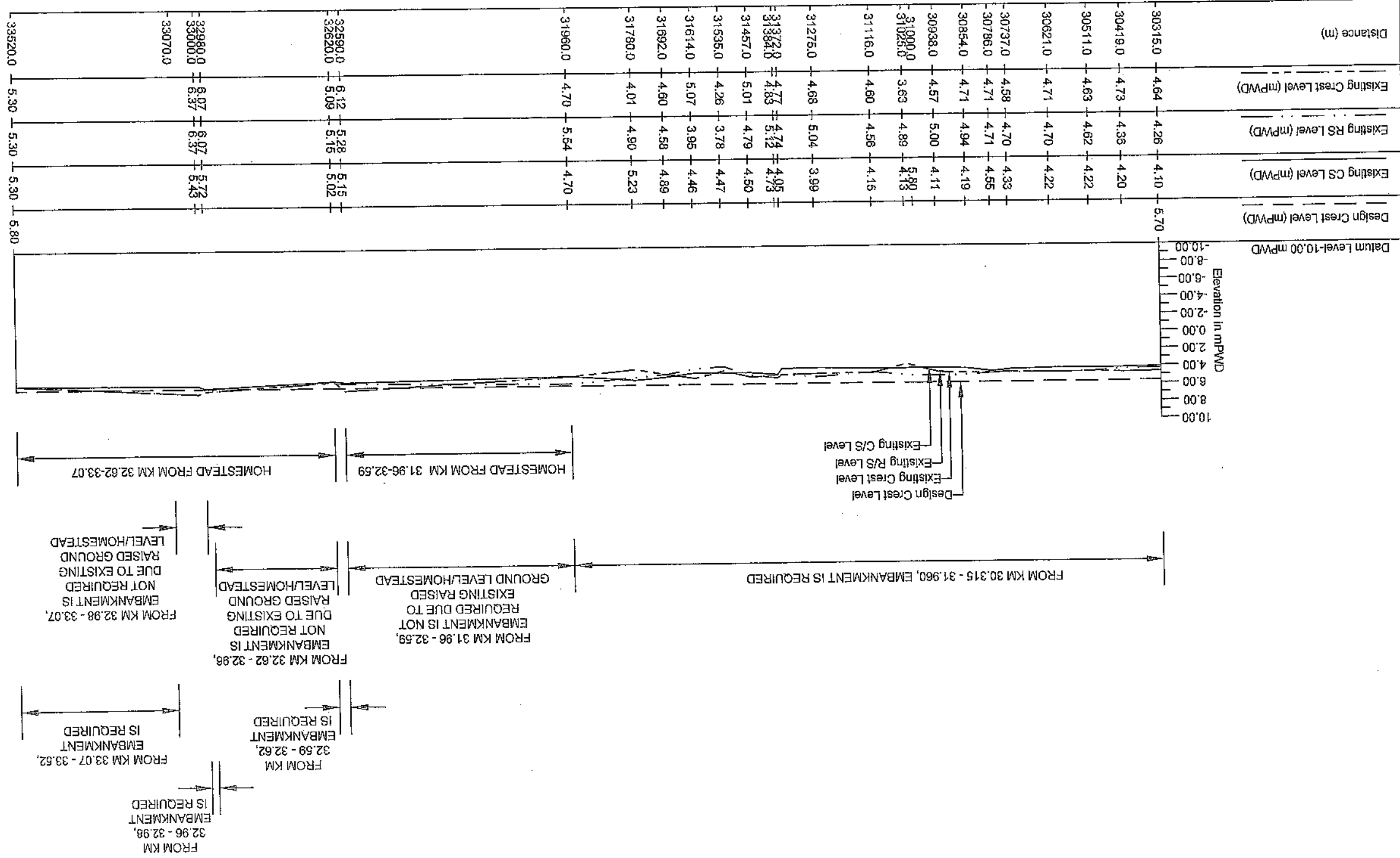


Scale: As shown

NO.	REVISION				AUTO CAD OPERATOR	DESIGN ENGINEER	CO-TEAM LEADER	CO-TEAM LEADER	DWG. NO. KISHORE-DAKSHINER HAOR-EMB-00000	SHEET: 26 / 52
	DATE	MADE	CHKD.	RECOM.	APPV.	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:	EE, DESIGN CIRCLE - 1	SE, DESIGN CIRCLE - 1
1						Ms. Tahura Chowdhury	A. Q. Mohammad Ali	A. Q. Mohammad Ali	Fazana Afsan	Yasmin Begum
2						CONSULTANTS:	Nippon Koei Co. Ltd (NK), Joint Venture with BETS-CNRS			
CE, DESIGN										
Saeeda Nazreen										
APPROVED BY:										
RECOMMENDED BY:										
CHECKED BY:										
LONG SECTION (FROM KM- 30.315 TO KM- 33.520)										
SUBMERISBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)										
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BIMDB Part)										
BANGLADESH WATER DEVELOPMENT BOARD										

N = EMBANKMENT IS NOT REQUIRED DUE TO EXISTING RAISED GROUND LEVEL/HOMESTEAD  
R = EMBANKMENT IS REQUIRED

LONG PROFILE OF SUBMERISBLE EMBANKMENT OF DAKSHINER HAOR  
(FROM KM- 30.315 TO KM- 33.520)

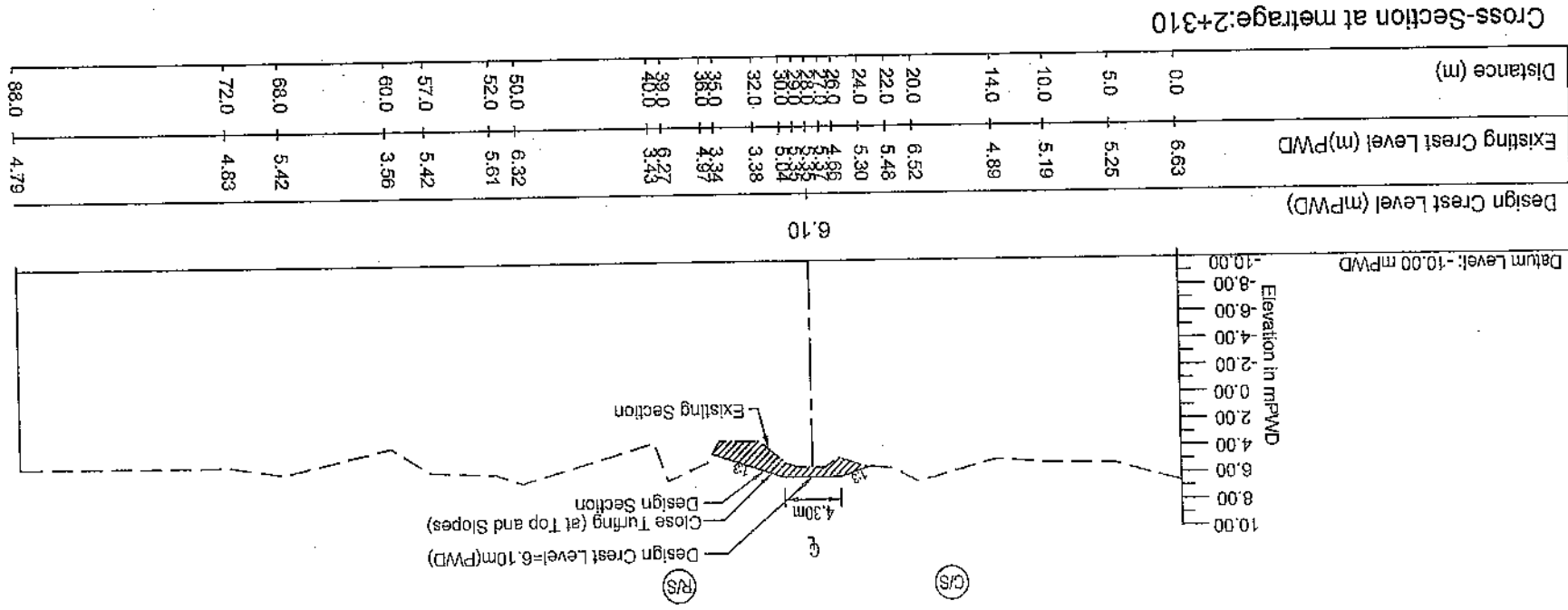
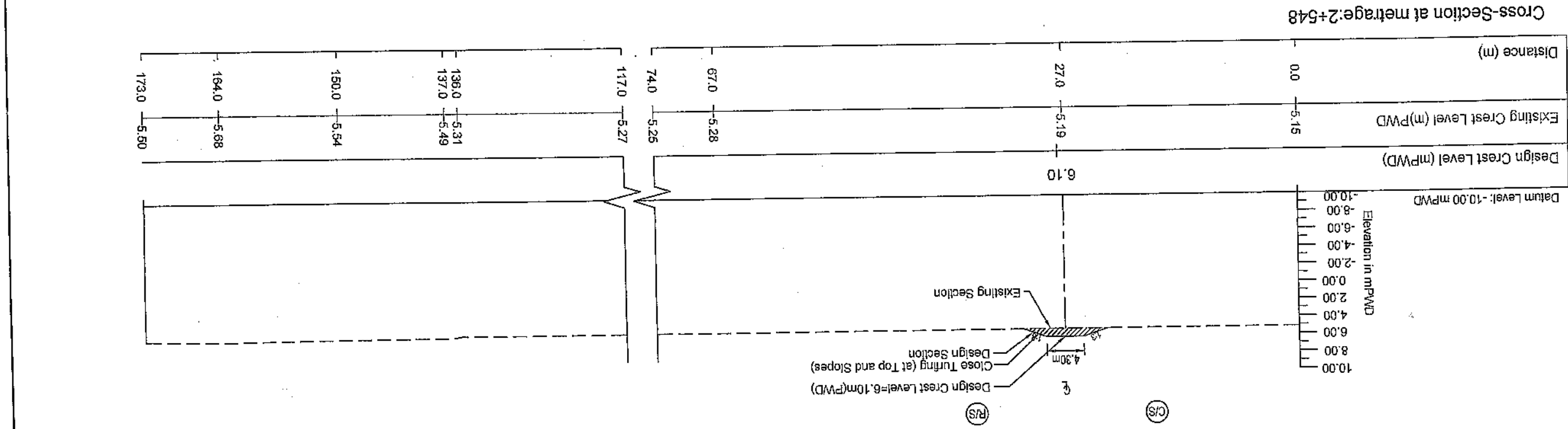


**DAKSHINER HAOR SUB-PROJECT**  
**SUBMERISIBLE EMBANKMENT AROUND DAKSHINER HAOR**  
**CROSS SECTIONS**  
**(FROM KM. 0.00 TO KM. 33.520)**



Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APV.	REVISION			
						DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:	APPROVED BY:
1						Ms. Tahura Chowdhury	Ms. Tahura Chowdhury	Ms. Tahura Chowdhury	Ms. Tahura Chowdhury
2						Ms. Tahura Chowdhury	Ms. Tahura Chowdhury	Ms. Tahura Chowdhury	Ms. Tahura Chowdhury
CONSULTANTS: Nippon Koei Co. Ltd (NK), Joint Venture with BETS-CNRS									
DESIGNED BY: A.Q. Mohammad Ali									
CHECKED BY: A.Q. Mohammad Ali									
RECOMMENDED BY: A.Q. Mohammad Ali									
APPROVED BY: A.Q. Mohammad Ali									
DWG. NO: KISHORE-DAKSHINER HAOR-EMB-00000									
SHEET: 27/62									
CE, DESIGN									
Saeeda Nazreen									
Farzana Areen									
Yasmin Begum									
Saeeda Nazreen									



Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.	REVISION	AUTO CAD OPERATOR	DESIGN ENGINEER	CO-TEAM LEADER	CO-TEAM LEADER	DWG. NO: KISHIGORE-DAKSHINER HAOR-EMB-00000	SHEET: 28/62
1							Ms. Tahura Chowdhury	Amirur Kewser Waseel	A.O. Mohammad Ali	A.O. Mohammad Ali	EE, DESIGN CIRCLE - 1	SE, DESIGN CIRCLE - 1
2							Ms. Tahura Chowdhury	Amirur Kewser Waseel	A.O. Mohammad Ali	A.O. Mohammad Ali	EE, DESIGN CIRCLE - 1	SE, DESIGN CIRCLE - 1
CONSULTANTS: Nippon Koei Co. Ltd (NKK), Joint Venture with BETS-CNRS							DRAWN BY: E. Chowdhury					
							DESIGNED BY: M. Kewser					
							CHECKED BY: A.O. Mohammad Ali					
							RECOMMENDED BY: A.O. Mohammad Ali					
							CHECKED BY: Farzana Akter					
							RECOMMENDED BY: Yasmin Begum					
							APPROVED BY: Saeeda Nazreen					
							CE, DESIGN					

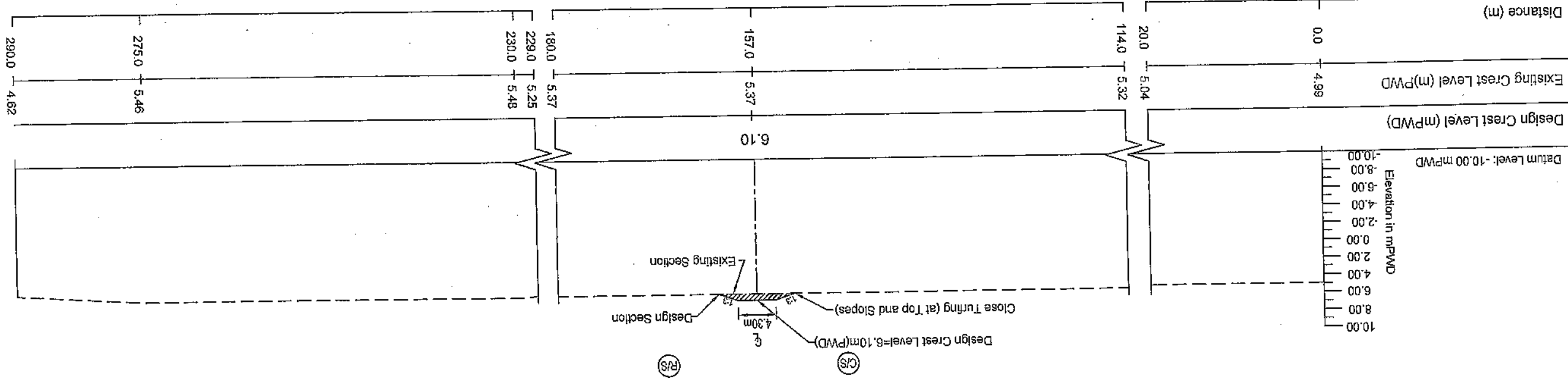
BANGLADESH WATER DEVELOPMENT BOARD

Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)

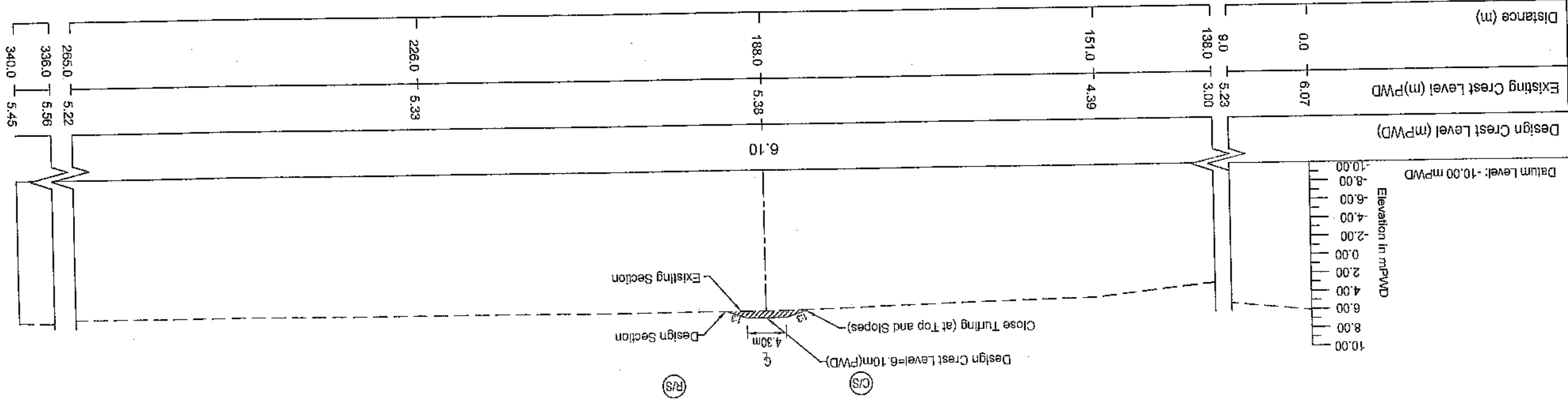
SUBMERGIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.620)

CROSS SECTIONS WITH DESIGN SECTIONS




Cross-Section at metrage:3+101



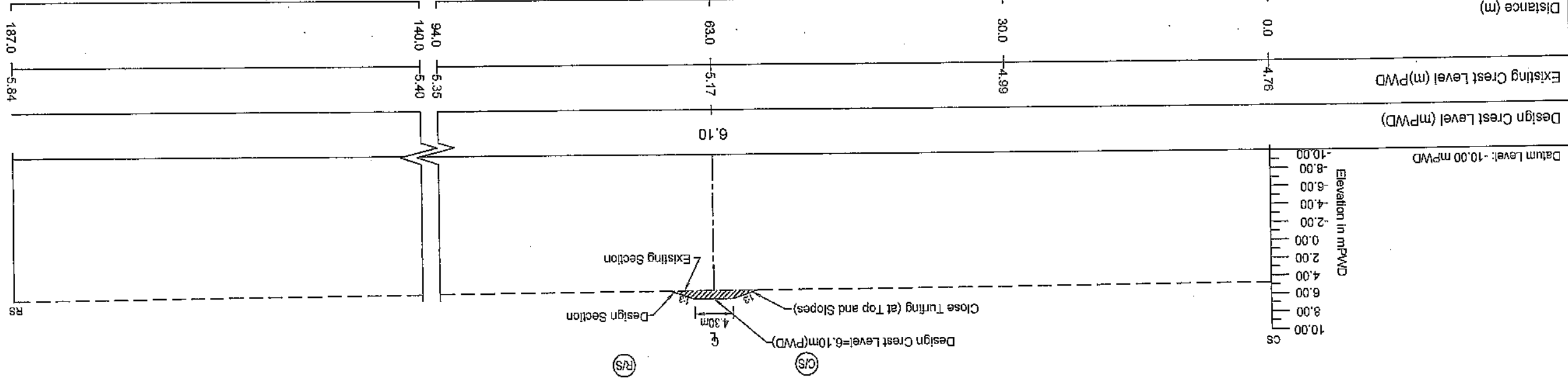
Cross-Section at metrage:2+793



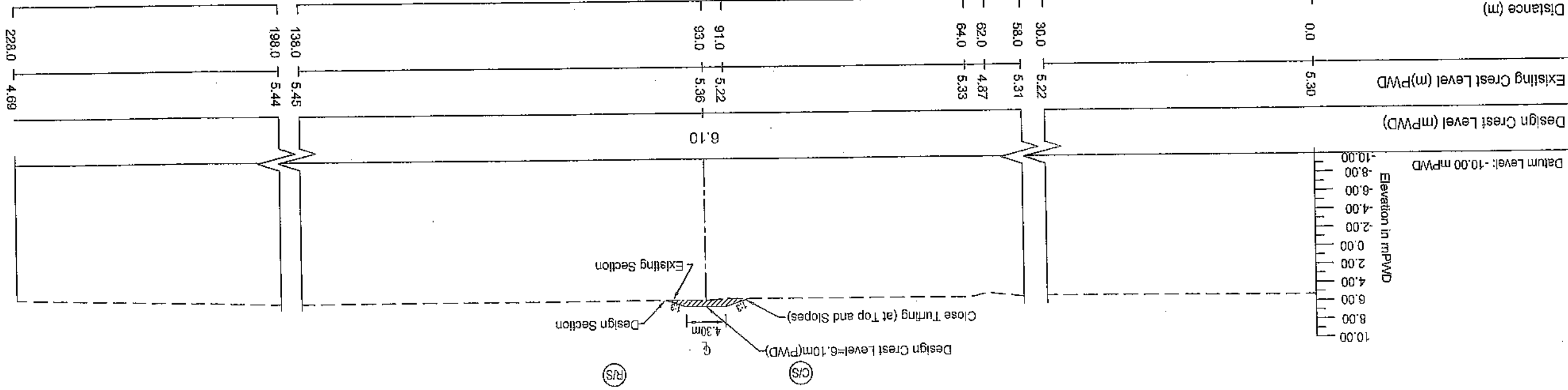
Scale: As shown

NO.		REVISION					AUTO CAD OPERATOR	DESIGN ENGINEER	CO-TEAM LEADER	CO-TEAM LEADER	DWG. NO: KISHORE-DAKSHINER HAOR-EMB-00000	SHEET: 29 /62
		DATE	MADE	CHKD.	RECOM.	APPV.	Ms. Tahura Chowdhury	Anisur Kawsar Waseel	A.Q. Mohammad Ali	A.Q. Mohammad Ali	EE, DESIGN CIRCLE- 1	SE, DESIGN CIRCLE- 1
1										Farzana Aftreen	Yasmin Begum	Saeeda Nazreen
2							DRAWN BY:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:	CHECKED BY:	APPROVED BY:
CONSULTANTS: Nippon Koel Co, Ltd (NKC), Joint Venture with BETS-CNRS												
CROSS SECTIONS WITH DESIGN SECTIONS												
SUBMERGIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)												
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)												
BANGLADESH WATER DEVELOPMENT BOARD												

Cross-Section at metrage:3+702

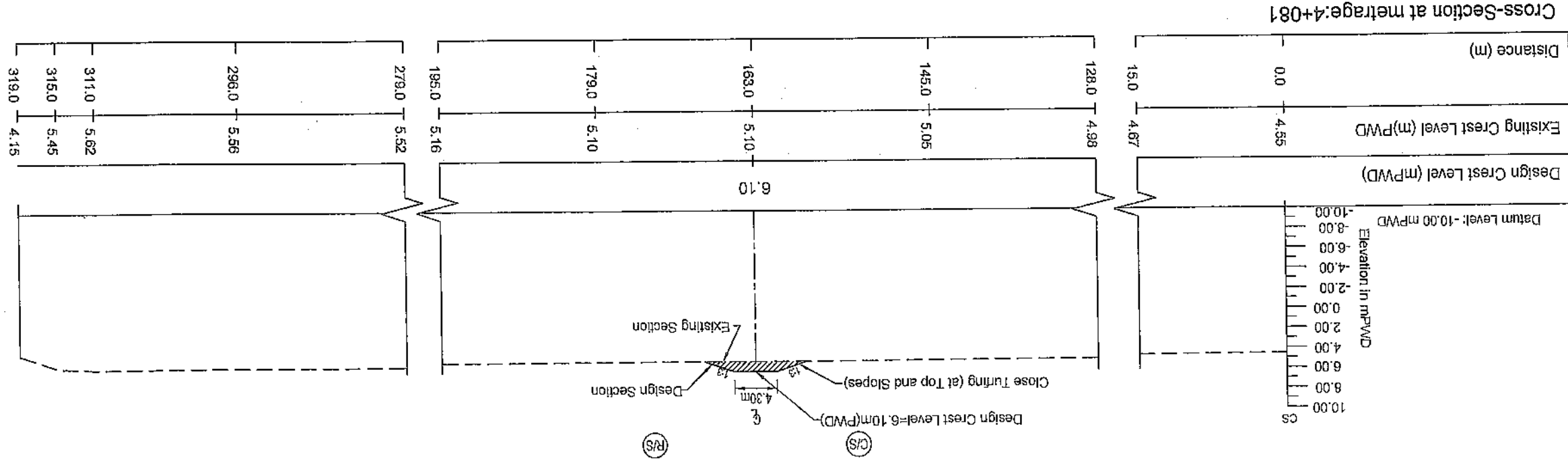
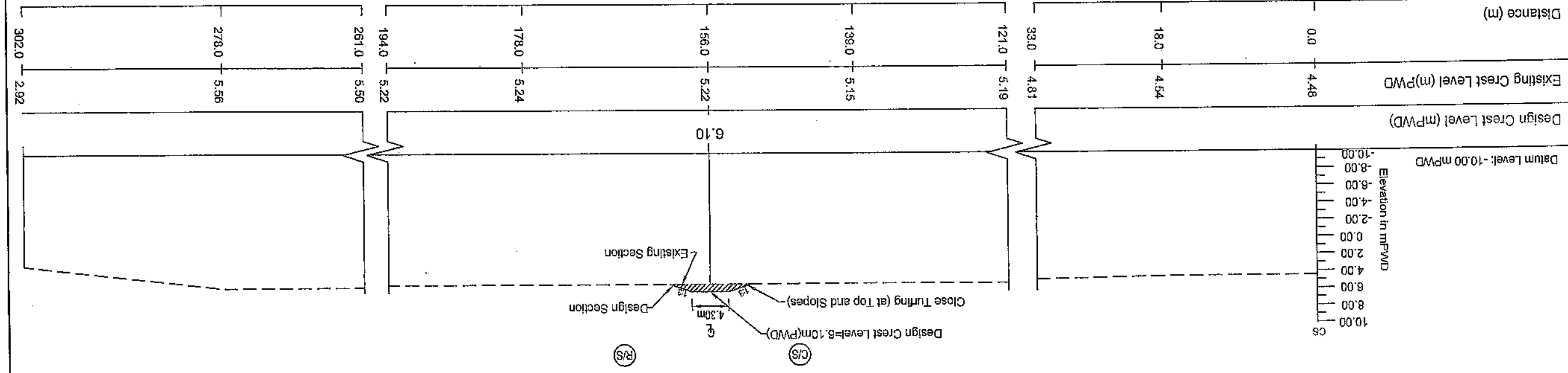


Cross-Section at metrage:3+399



Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:	APPROVED BY:
1						Ms. Tahira Chowdhury	A.Q. Mohammad Ali	Fazana Aftab	Saeeda Nazreen
2						Ms. Tahira Chowdhury	A.Q. Mohammad Ali	Fazana Aftab	Saeeda Nazreen
CONSULTANTS: Nippon Koei Co. Ltd (NK), Joint Venture with BETS-CNRS									
DESIGN ENGINEER: Anisur Kawser Waseel									
CO-TEAM LEADER: A.Q. Mohammad Ali									
CO-TEAM LEADER: A.Q. Mohammad Ali									
DWG. NO.: KISHORE-DAKSHINER HAOR-EMB-00000									
SHEET: 30 / 62									



Scale: As shown

BANGLADESH WATER DEVELOPMENT BOARD																		
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)																		
SUBMERISABLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)																		
CROSS SECTIONS WITH DESIGN SECTIONS																		
APPROVED BY:																		
CHECKED BY:																		
RECOMMENDED BY:																		
Saeeda Nazreen																		
CE, DESIGN																		
DWG. NO: KISHORE-DAKSHINER HAOR-EMB-00000																		
SHEET: 31 /62																		

NO.	DATE	MADE	CHKD.	RECOM.	APPV.	AUTO CAD OPERATOR	DESIGN ENGINEER	CO-TEAM LEADER	CO-TEAM LEADER
						Ms. Tahura Chowdhury	Antur Kawsar Waseel	A.Q. Mohammad Ali	A.Q. Mohammad Ali
1						E. Chowdhury	W. Kawsar	Approved	Approved
2						DRAWN BY:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:
						CONSULTANTS: Nippon Koel Coj Ltd (NK), Joint Venture with BETS-CNRS			

BAKSHINER WATER DEVELOPMENT BOARD

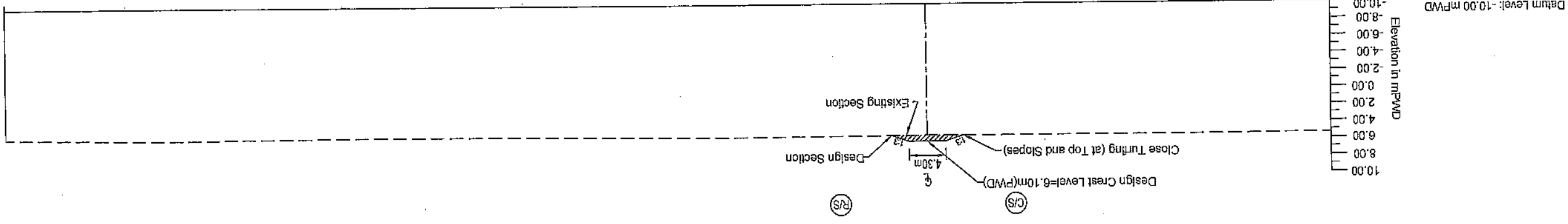
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BMDP Part)

SUBMERGIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)

CROSS SECTIONS WITH DESIGN SECTIONS

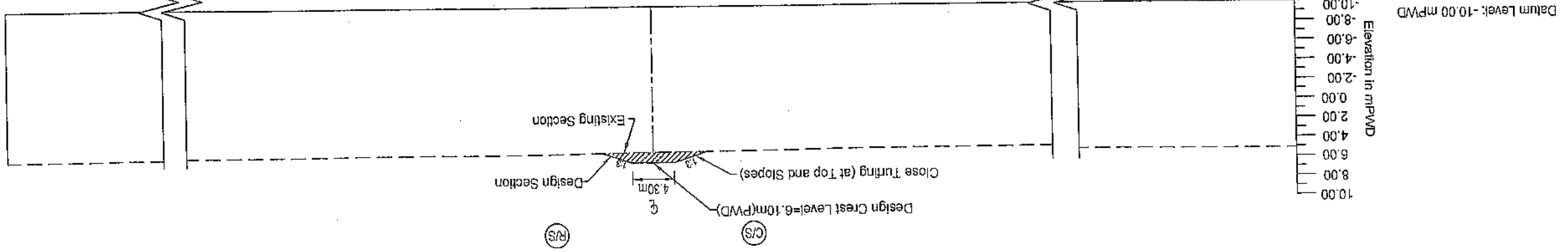
Cross-Section at metrage:4+912

Distance (m)	Existing Crest Level (m)PWD	Design Crest Level (m)PWD
0.0	5.37	6.10
24.0	5.42	
48.0	5.40	
71.0	5.51	
95.0	5.29	
116.0	5.24	
139.0	5.41	
158.0	5.12	

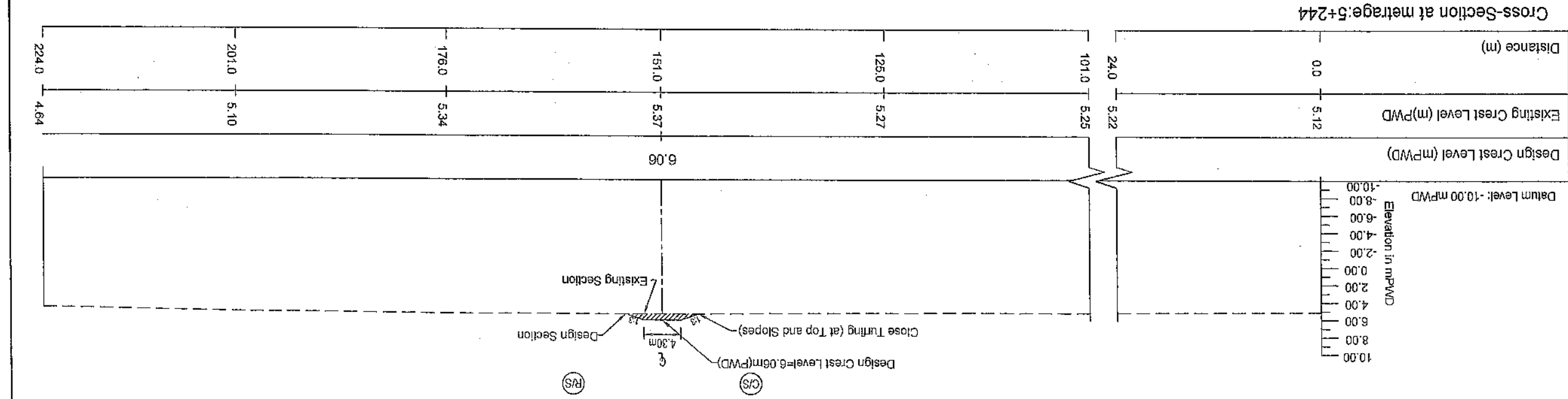
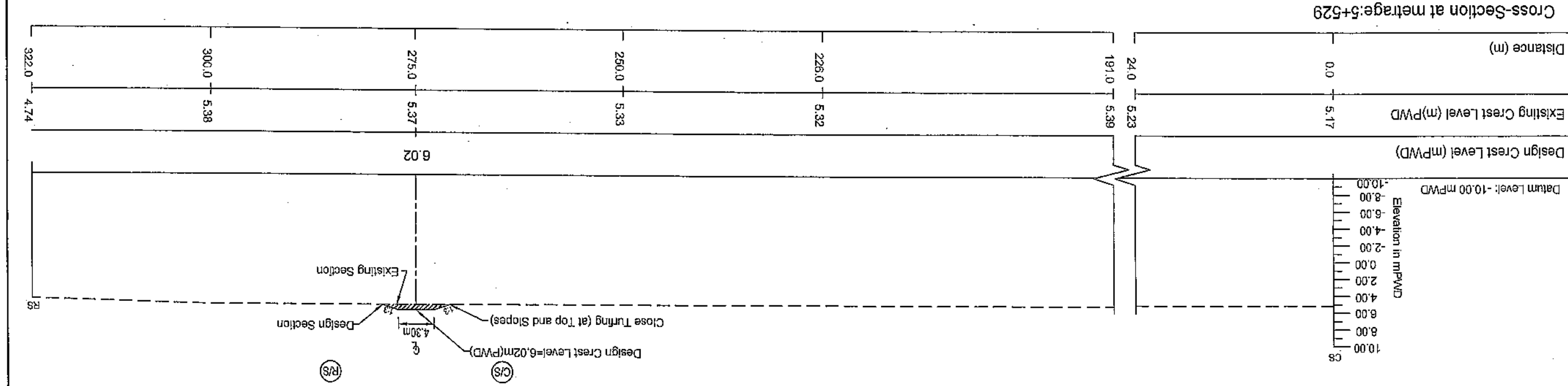


Cross-Section at metrage:4+585

Distance (m)	Existing Crest Level (m)PWD	Design Crest Level (m)PWD
0.0	5.11	6.10
23.0	5.05	
118.0	4.68	
140.0	4.79	
160.0	4.99	
175.0	5.13	
192.0	5.18	
209.0	5.26	
259.0	5.40	
276.0	5.45	



<b>BANGLADESH WATER DEVELOPMENT BOARD</b>																	
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)																	
SUBMERISBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.820)																	
CROSS SECTIONS WITH DESIGN SECTIONS																	
CHECKED BY:		RECOMMENDED BY:		APPROVED BY:		CONSULTANTS:		NIPPON KOEI CO., LTD (NK), Joint Venture with BETS-CNRS		DRAWN BY:		DESIGNED BY:		CHECKED BY:		RECOMMENDED BY:	
										E. Chowdhury		A.K. Karmakar		A.Q. Mohammad Ali		A.Q. Mohammad Ali	
NO.		DATE		MADE		CHKD.		RECOM.		APPV.		Ms. Tahura Chowdhury		Anisur Kamrat Vawesi		A.Q. Mohammad Ali	
1																	
2																	
						DWG. NO.: KISHORE-DAKSHINER HAOR-EMB-000000 SHEET: 32 / 52											



Scale: As shown

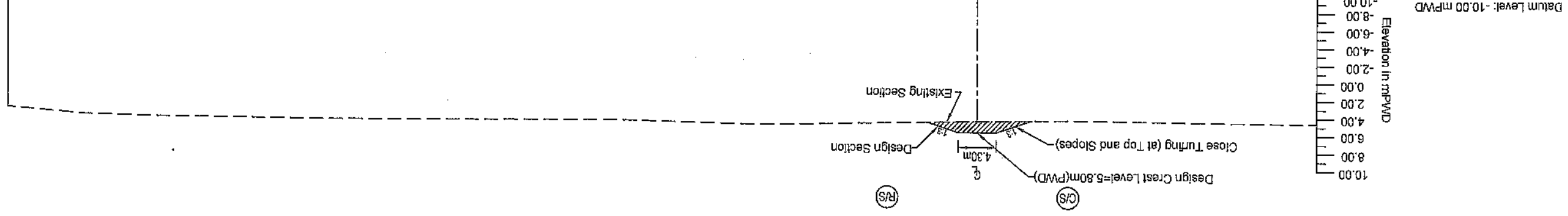
NO.	DATE	MADE	CHKD.	RECOM.	APPV.	REVISION			
1									
2									
CONSULTANTS:						Nippon Koei Co. Ltd (NK), Joint Venture with BETS-CNRS			
DRAWN BY:						DESIGNED BY:			
CHECKED BY:						CHECKED BY:			
RECOMMENDED BY:						RECOMMENDED BY:			
AUTO CAD OPERATOR						DESIGN ENGINEER			
CO-TEAM LEADER						CO-TEAM LEADER			
DWG. NO: KISHORE DAKSHINER HAOR-EMB-0000						SHEET: 33 /52			

CONSULTANCY SERVICES for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)	
SUBMERSIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)	
CROSS SECTIONS WITH DESIGN SECTIONS	
CHECKED BY:	Farzana Aftreen
RECOMMENDED BY:	Yasmin Begum
APPROVED BY:	Saeeda Nazreen
CE, DESIGN	

## BANGLADESH WATER DEVELOPMENT BOARD

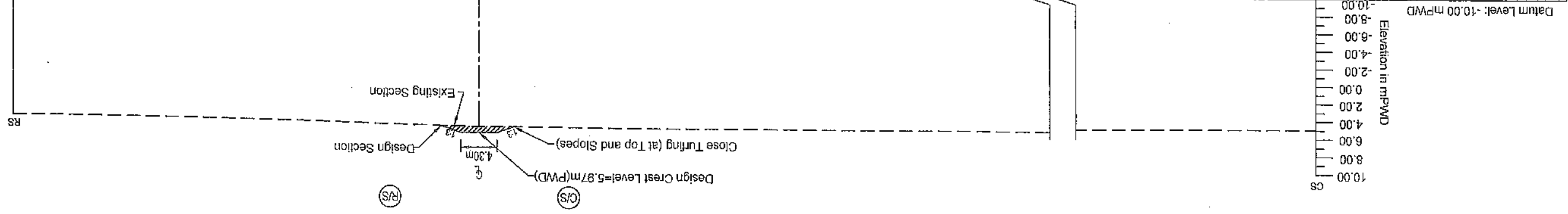
Cross-Section at metrage:7+072

Distance (m)	Existing Crest Level (m)PWD	Design Crest Level (m)PWD
0.0	4.63	5.80
20.0	4.49	
28.0	4.38	
39.0	4.51	
64.0	5.07	
81.0	4.71	
100.0	4.91	
116.0	5.02	
131.0	4.95	
142.0	4.76	
151.0	4.03	



Cross-Section at metrage:5+887

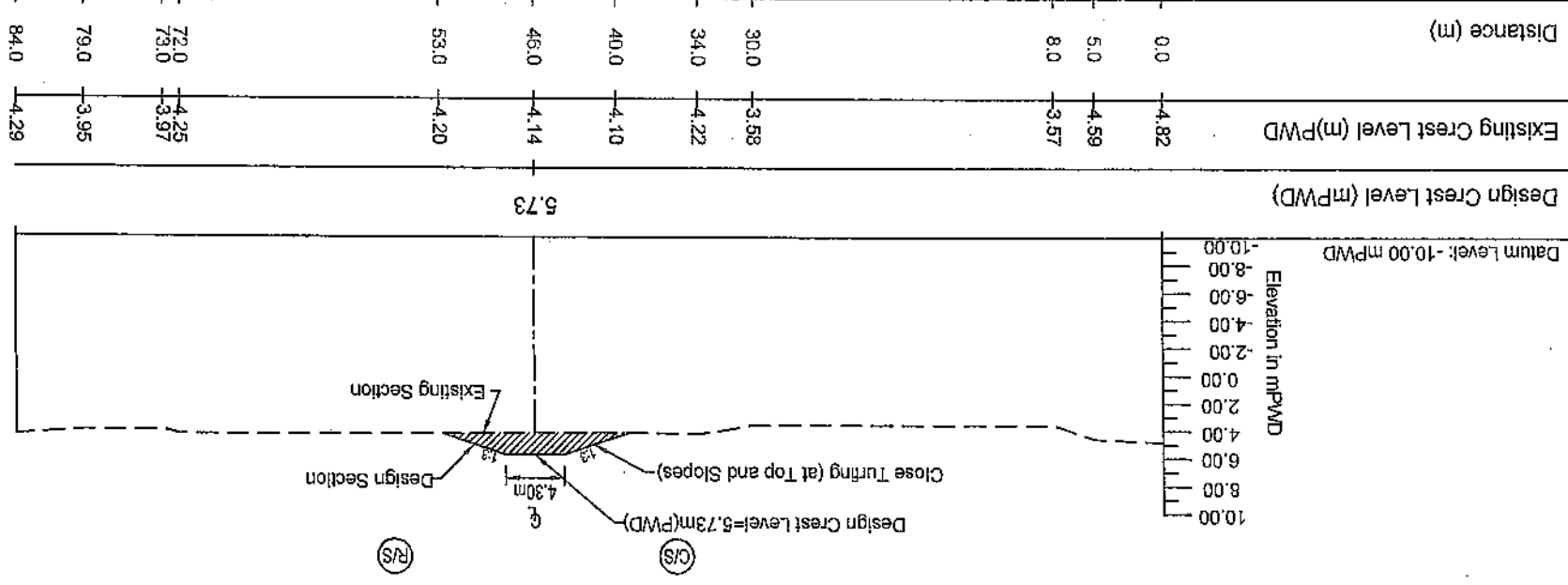
Distance (m)	Existing Crest Level (m)PWD	Design Crest Level (m)PWD
0.0	4.92	5.97
28.0	5.09	
133.0	5.38	
223.0	5.36	
269.0	5.30	
292.0	4.51	
314.0	4.31	



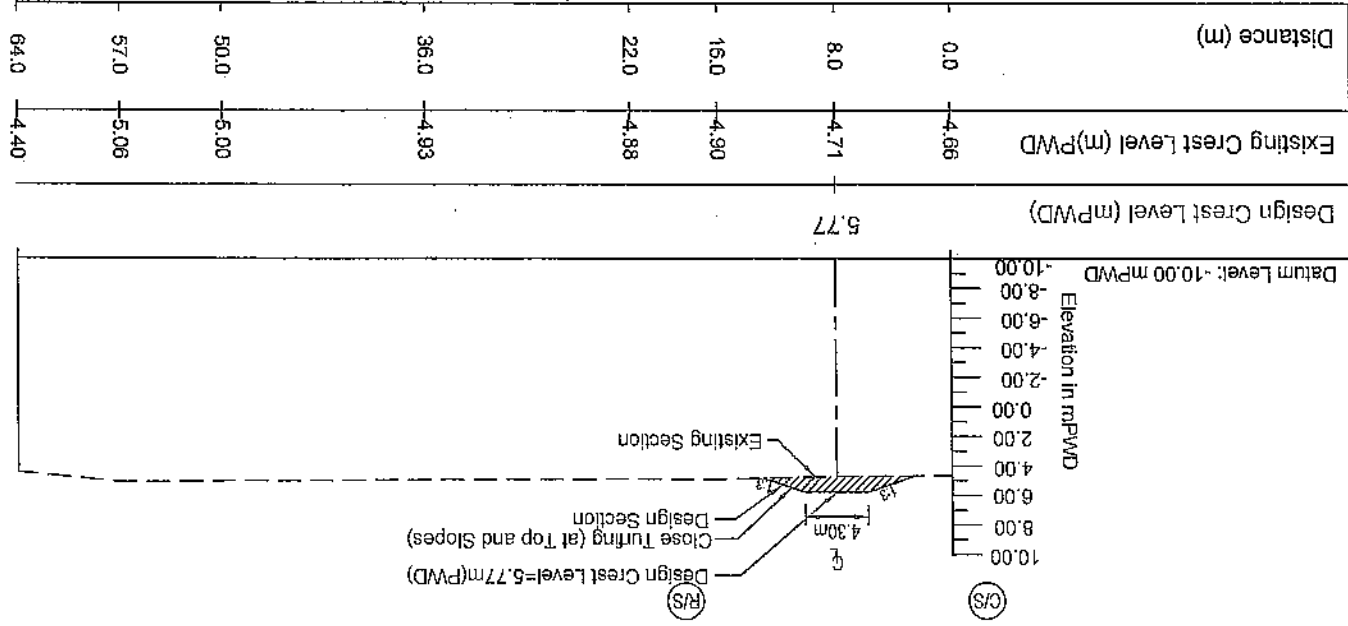
Scale: As shown

BANGLADESH WATER DEVELOPMENT BOARD										CONSULTANTS: Nippon Keel Co. Ltd (NKC), Joint Venture with BETS-CNRS.										DRAWN BY: E. Chowdhury										DESIGNED BY: A.Q. Mohammad Ali										CHECKED BY: A.Q. Mohammad Ali										RECOMMENDED BY: A.Q. Mohammad Ali										Fazana Aftreen										Yasmin Begum										Saadea Nazreen										CE, DESIGN									
CROSS SECTIONS WITH DESIGN SECTIONS										CONSULTANTS: Nippon Keel Co. Ltd (NKC), Joint Venture with BETS-CNRS.										DRAWN BY:										DESIGNED BY:										CHECKED BY:										RECOMMENDED BY:										APPROVED BY:																																							
SUBMERGIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)										CONSULTANTS: Nippon Keel Co. Ltd (NKC), Joint Venture with BETS-CNRS.										DRAWN BY:										DESIGNED BY:										CHECKED BY:										RECOMMENDED BY:										APPROVED BY:																																							
Consistency Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWBDB Part)										CONSULTANTS: Nippon Keel Co. Ltd (NKC), Joint Venture with BETS-CNRS.										DRAWN BY:										DESIGNED BY:										CHECKED BY:										RECOMMENDED BY:										APPROVED BY:																																							
DWG. NO.: KISHORE-DAKSHINER HAOR-EMB-00000										CONSULTANTS: Nippon Keel Co. Ltd (NKC), Joint Venture with BETS-CNRS.										DRAWN BY:										DESIGNED BY:										CHECKED BY:										RECOMMENDED BY:										APPROVED BY:																																							
SHEET: 34 /62										CONSULTANTS: Nippon Keel Co. Ltd (NKC), Joint Venture with BETS-CNRS.										DRAWN BY:										DESIGNED BY:										CHECKED BY:										RECOMMENDED BY:										APPROVED BY:																																							

Cross-Section at meirage:7+534



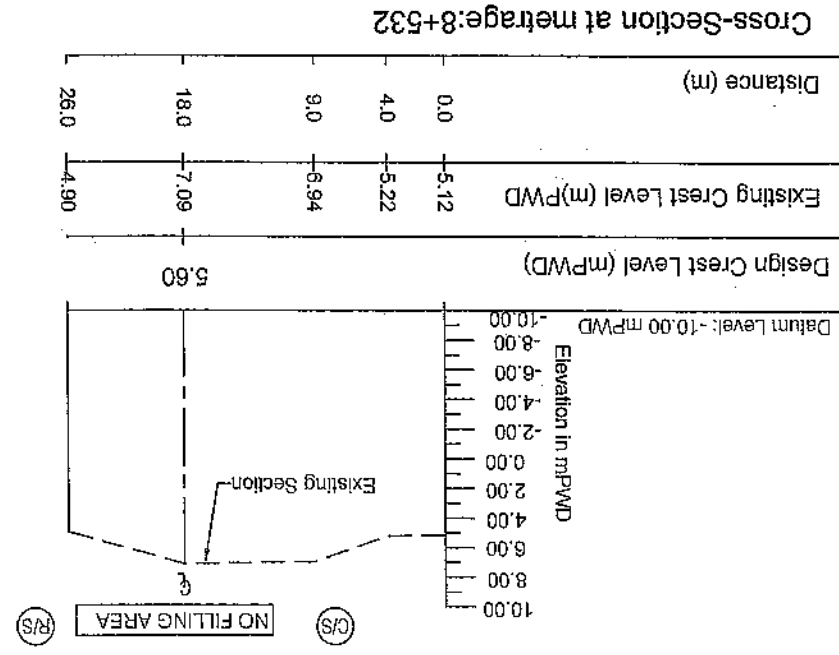
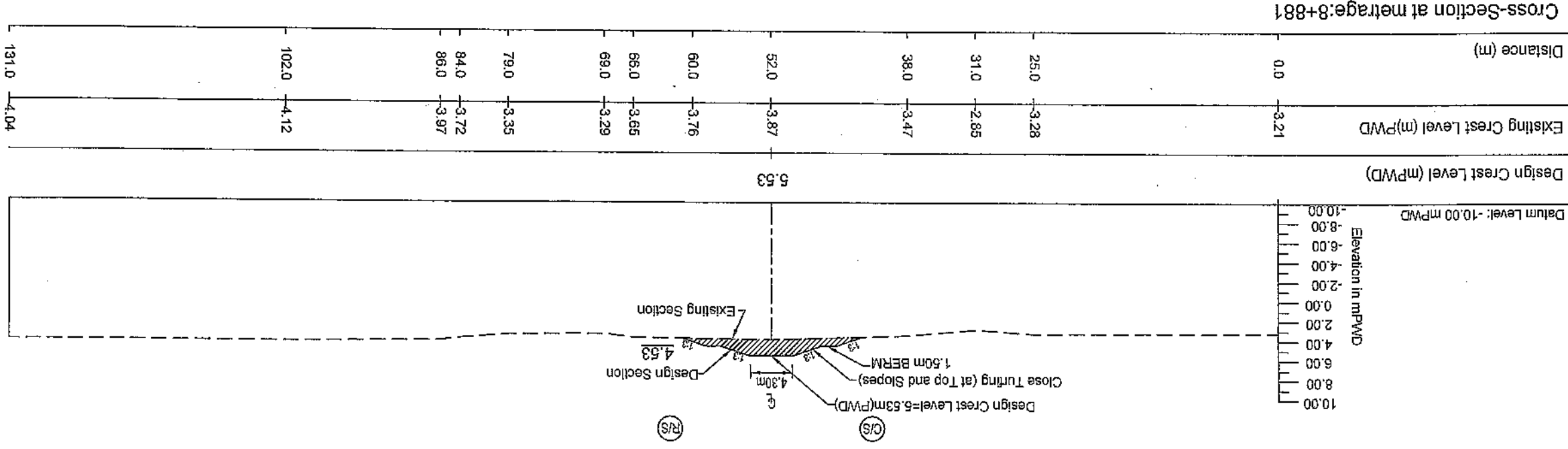
Cross-Section at metrage:7+293





Scale: As shown

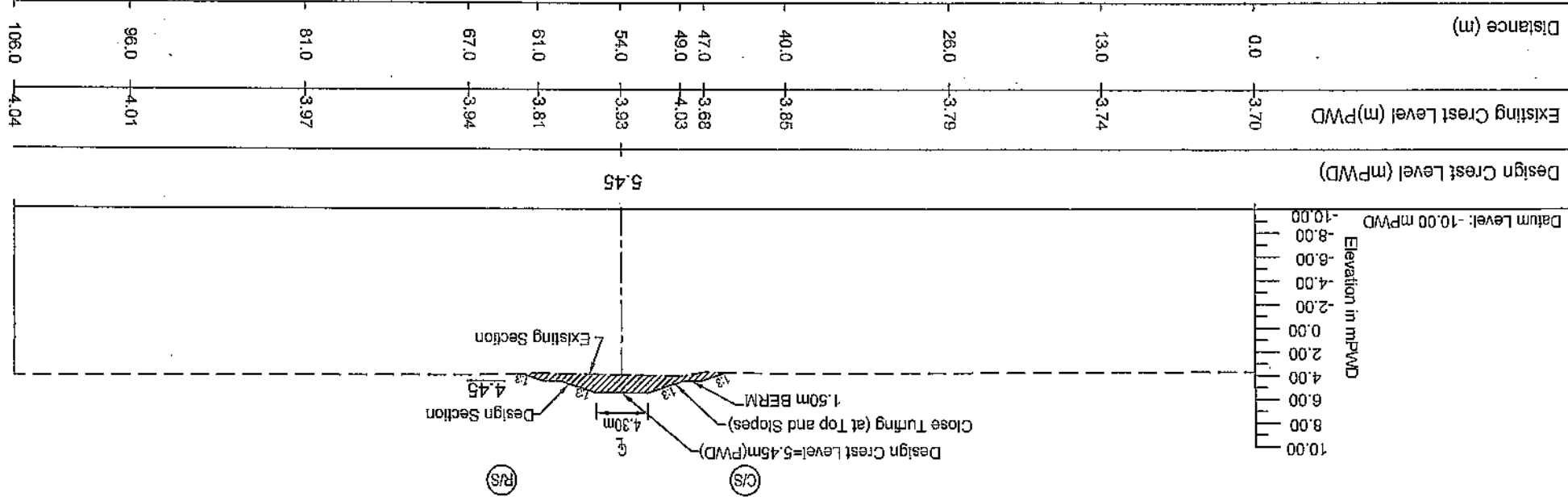
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1							Ms. Tahura Chowdhury	Anisur Kawser Waseel	A.Q. Mohammad Ali	A.Q. Mohammad Ali	Farzana Afran	SE, DESIGN CIRCLE-1
2							CONSULTANTS:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:	APPROVED BY:	CE, DESIGN
							Nippon Koel Co. Ltd (NK), Joint Venture with BETS-CNRS					Saeeda Nazreen
CROSS SECTIONS WITH DESIGN SECTIONS												
SUBMERSIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)												
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)												
BANGLADESH WATER DEVELOPMENT BOARD												



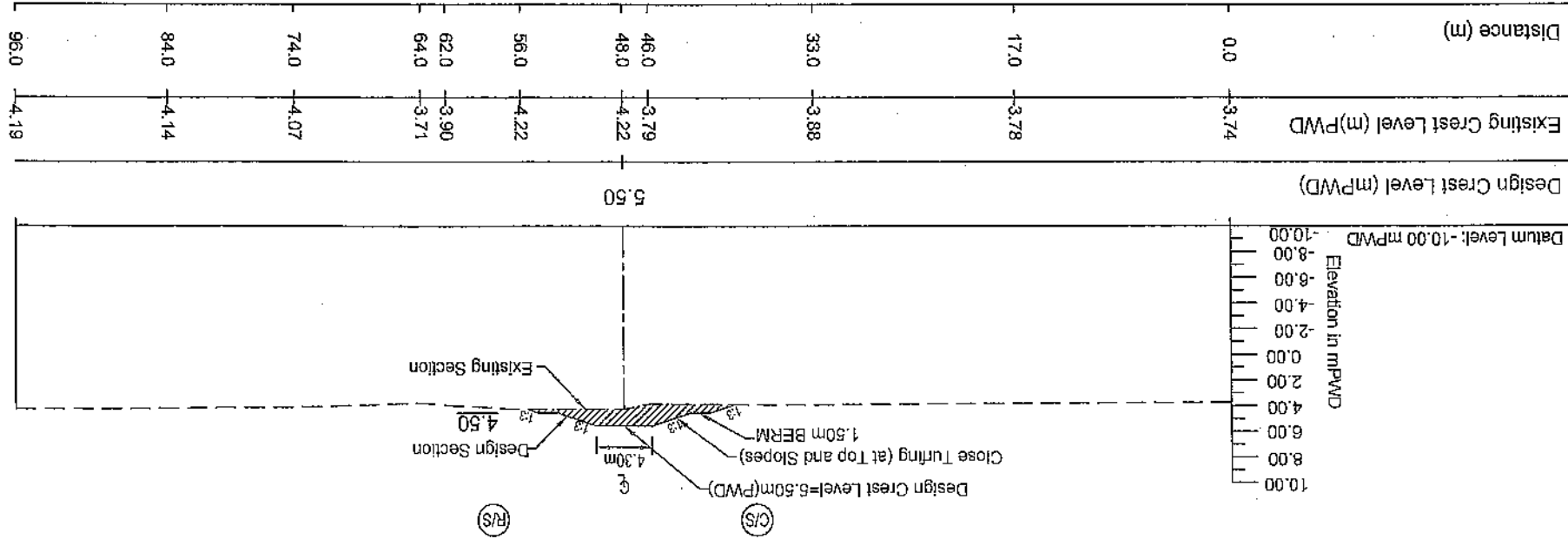
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Cross-Section at metrage:9+378



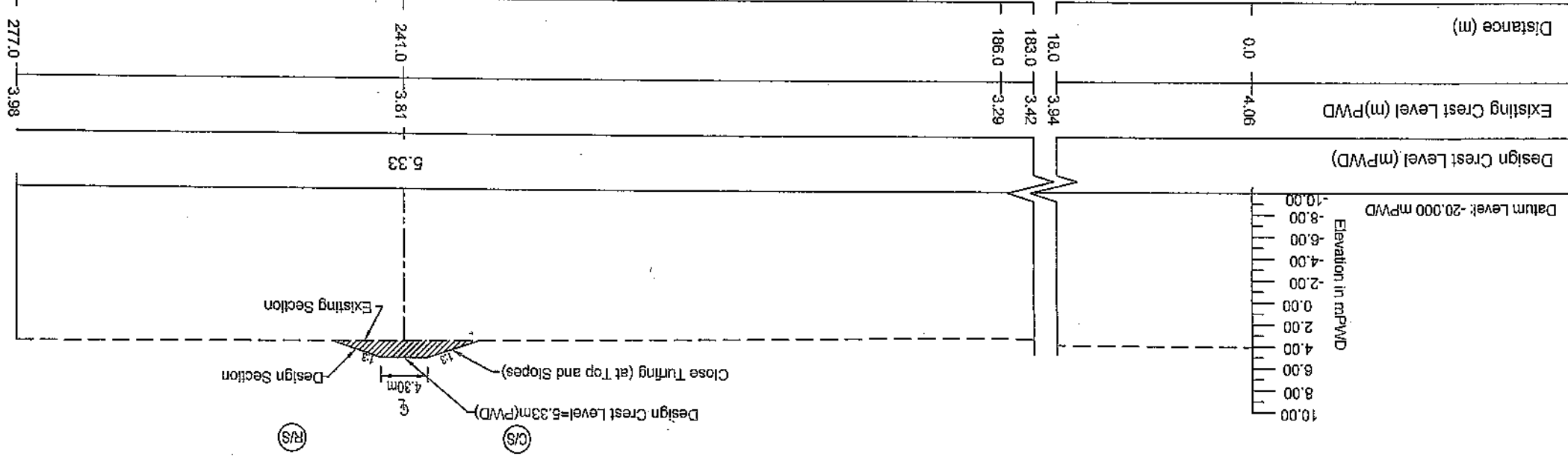
Cross-Section at metrage:9+054



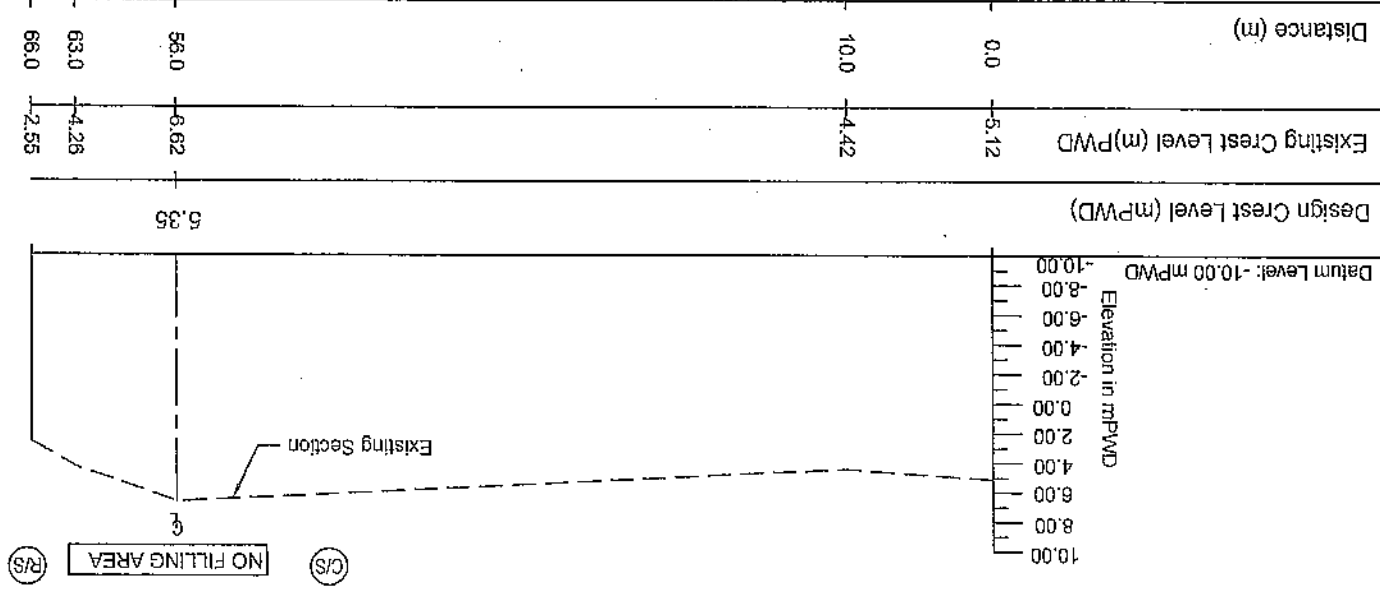
Scale: As shown

BANGLADESH WATER DEVELOPMENT BOARD										CONSULTANTS: Nippon Koei Co. Ltd (NK), Joint Venture with BETS-CNRS											
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part) SUBMERGIBLE EMPANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520) CROSS SECTIONS WITH DESIGN SECTIONS										CHECKED BY:		RECOMMENDED BY:		APPROVED BY:		CHECKED BY:		RECOMMENDED BY:		APPROVED BY:	
DWG. NO: KISHORE-DAKSHINER HAOR-EMB-00000 SHEET: 37 of 32										CO-TEAM LEADER		CO-TEAM LEADER		DESIGN ENGINEER		AUTO CAD OPERATOR		REVISION			
A.Q. Mohammad Ali A.Q. Mohammad Ali A.Q. Mohammad Ali A.Q. Mohammad Ali										A.Q. Mohammad Ali		A.Q. Mohammad Ali		A.Q. Mohammad Ali		A.Q. Mohammad Ali		CHKD. MADE RECOM. APPV. Ms. Tahura Chowdhury		NO. DATE MADE RECOM. APPV. Ms. Tahura Chowdhury	
A.Q. Mohammad Ali A.Q. Mohammad Ali A.Q. Mohammad Ali A.Q. Mohammad Ali										A.Q. Mohammad Ali		A.Q. Mohammad Ali		A.Q. Mohammad Ali		A.Q. Mohammad Ali		A.Q. Mohammad Ali		A.Q. Mohammad Ali	
A.Q. Mohammad Ali A.Q. Mohammad Ali A.Q. Mohammad Ali A.Q. Mohammad Ali										A.Q. Mohammad Ali		A.Q. Mohammad Ali		A.Q. Mohammad Ali		A.Q. Mohammad Ali		A.Q. Mohammad Ali		A.Q. Mohammad Ali	

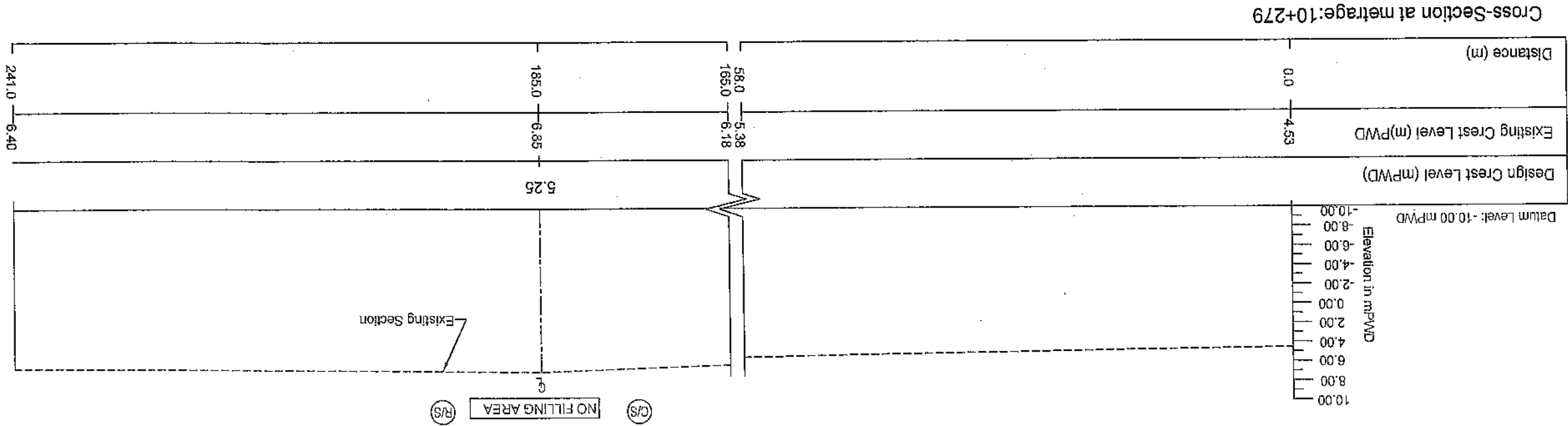
Cross-Section at meirage:10+164



Cross-Section at metreage:9+862



BANGLADESH WATER DEVELOPMENT BOARD		CONSULTANCY SERVICES for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BVMDB Part)		SUBMERSIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)		CROSS SECTIONS WITH DESIGN SECTIONS	
DWG. NO: KISHORE-DAKSHINER HAOR-ENG-00000		SHEET: 38 /62					
CO-TEAM LEADER		CO-TEAM LEADER		CO-TEAM LEADER		CO-TEAM LEADER	
A. O. Mohammad Ali		A. O. Mohammad Ali		A. O. Mohammad Ali		A. O. Mohammad Ali	
DESIGNED BY:		DESIGNED BY:		DESIGNED BY:		DESIGNED BY:	
CHECKED BY:		CHECKED BY:		CHECKED BY:		CHECKED BY:	
RECOMMENDED BY:		RECOMMENDED BY:		RECOMMENDED BY:		RECOMMENDED BY:	
CONSULTANTS:		Nippon Koei Co. Ltd (NK), Joint Venture with BETS-CNRS		CONSULTANTS:		CONSULTANTS:	
DRAWN BY:		DRAWN BY:		DRAWN BY:		DRAWN BY:	
MS. Tahura Chowdhury		MS. Tahura Chowdhury		MS. Tahura Chowdhury		MS. Tahura Chowdhury	
APPLY.		APPLY.		APPLY.		APPLY.	
REVISION		REVISION		REVISION		REVISION	
NO.		DATE		MADE		CHKD.	
1							
2							



Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.	REVISION			
1									
2									
CONSULTANTS:						Nippon Koei Co. Ltd (NK), Joint Venture with BETS-CNRS			
DRAWN BY:						A. O. Mohammad Ali			
DESIGNED BY:						A. O. Mohammad Ali			
CHECKED BY:						A. O. Mohammad Ali			
RECOMMENDED BY:						Farzana Afreen			
CHECKED BY:						Farzana Afreen			
RECOMMENDED BY:						Yasmin Begum			
APPROVED BY:						Saeeda Nazreen			
DWG. NO: KISHORE-DAKSHINER HAOR-EMB-00000						SHEET: 39 / 62			

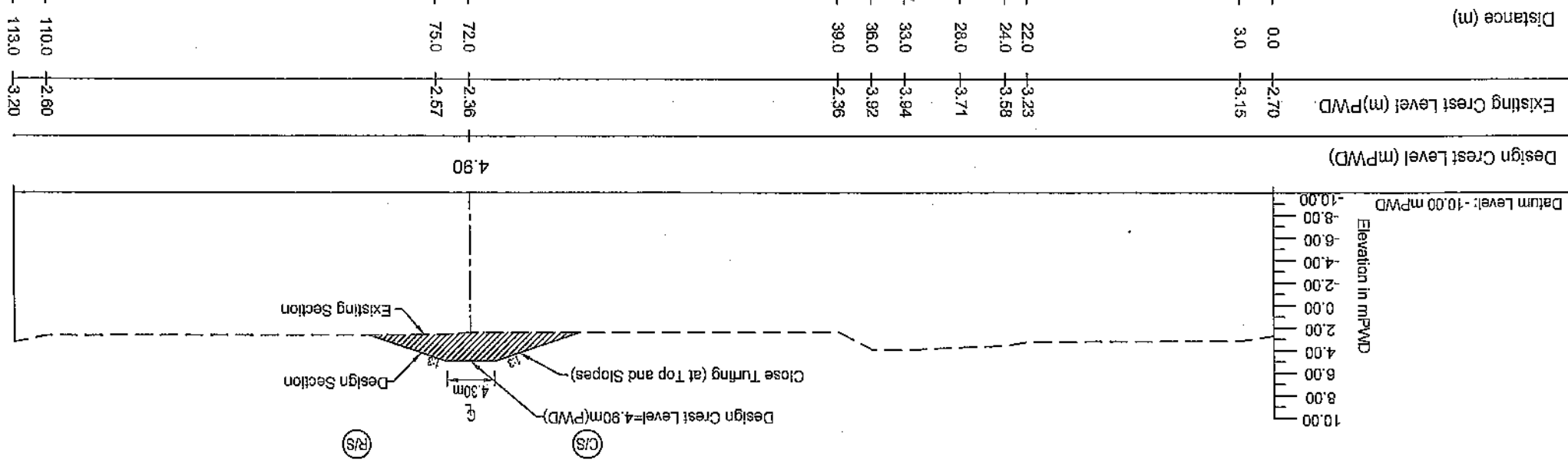
BANGLADESH WATER DEVELOPMENT BOARD

Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)

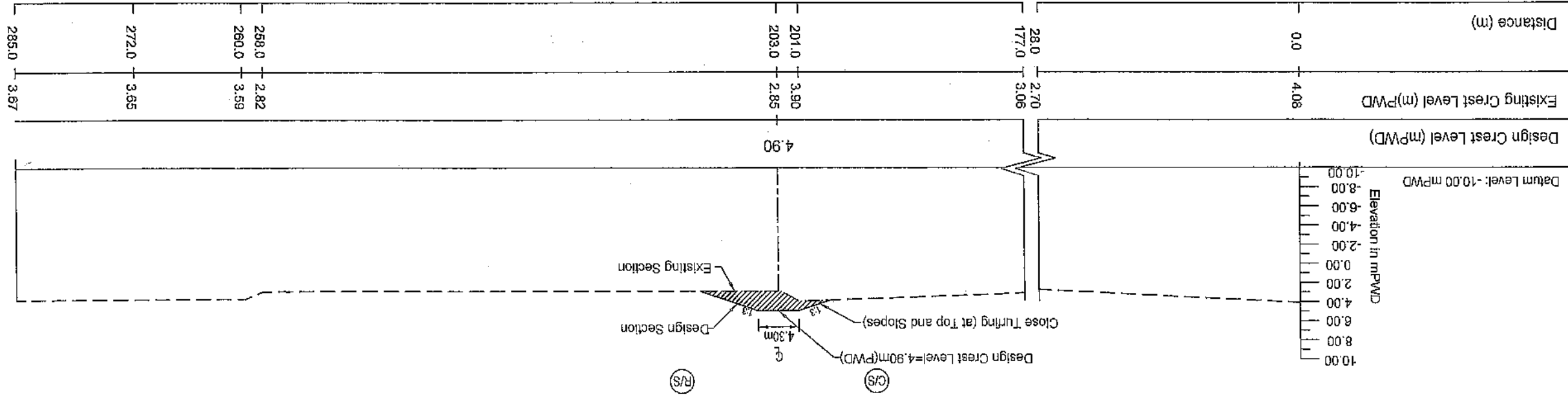
SUBMERGIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)

CROSS SECTIONS WITH DESIGN SECTIONS

Cross-Section at metrage:21+859



Cross-Section at metrage:21+620

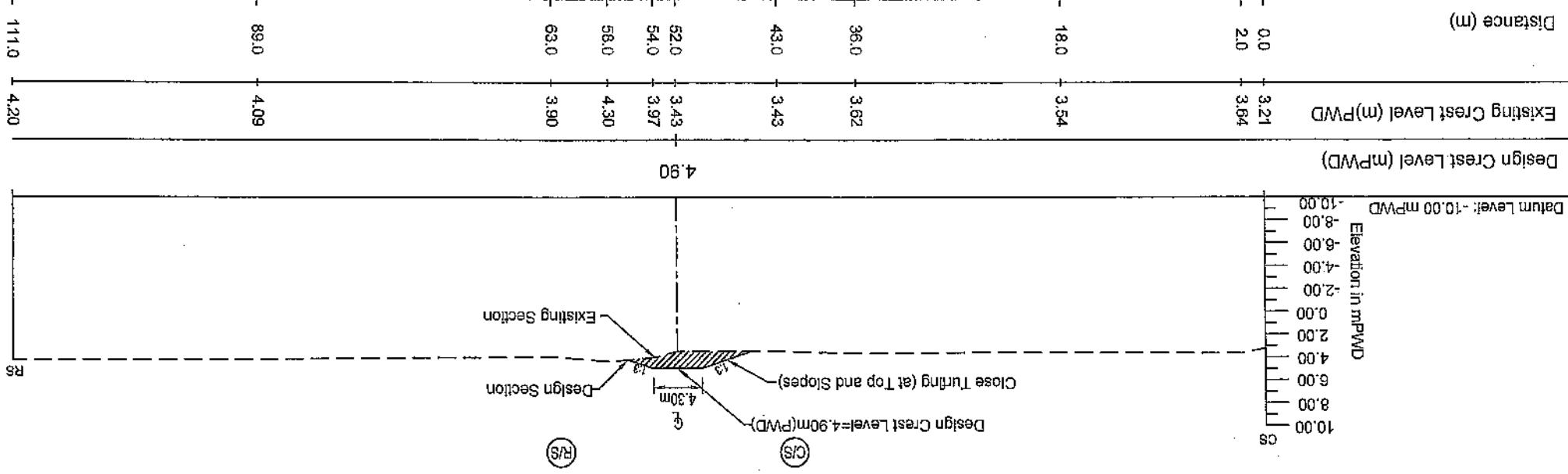


Scale: As shown

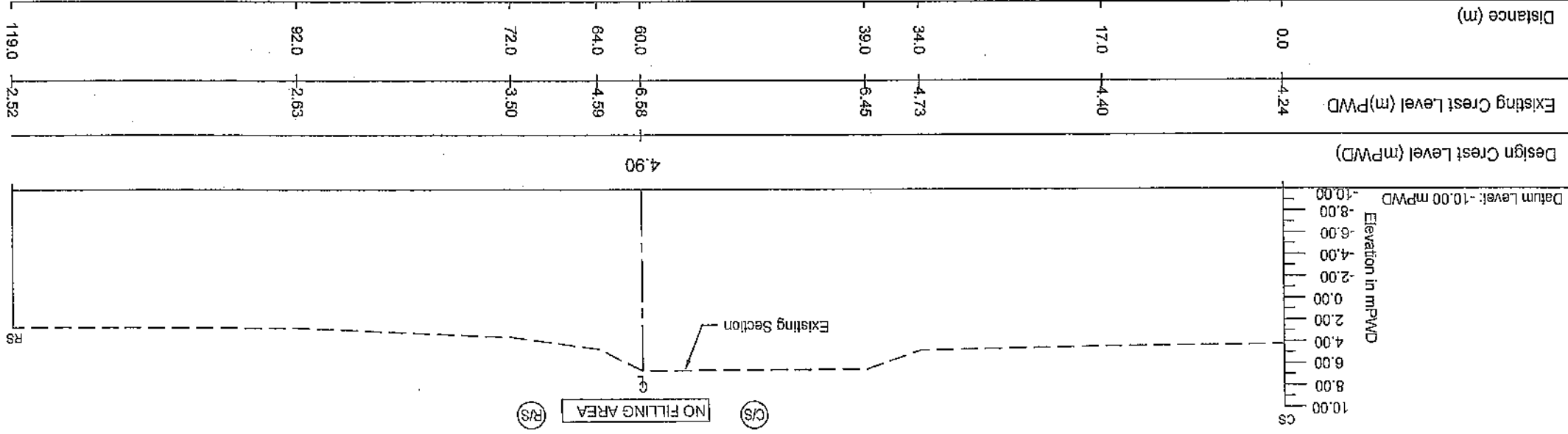
NO.	DATE	MADE	CHKD.	RECOM.	APPV.	DESIGN BY:	CHECKED BY:	RECOMMENDED BY:	APPROVED BY:	CONSULTANTS:	Nippon Koei Co. Ltd (NK), Joint Venture with BETS-CNRS
1						Ms. Tahura Chowdhury	A.Q. Mohammad Ali	Farzana Afreen	Saeeda Nazreen	CE, DESIGN	
2											
REVISION											
AUTO CAD OPERATOR											
DESIGN ENGINEER											
CO-TEAM LEADER											
CO-TEAM LEADER											
DWG. NO: KISHORE-DAKSHINER HAOR-EMB-00000											
SHEET: 40 /62											

**BANGLADESH WATER DEVELOPMENT BOARD**  
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BVIDB Part)  
SUBMERSIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)  
CROSS SECTIONS WITH DESIGN SECTIONS

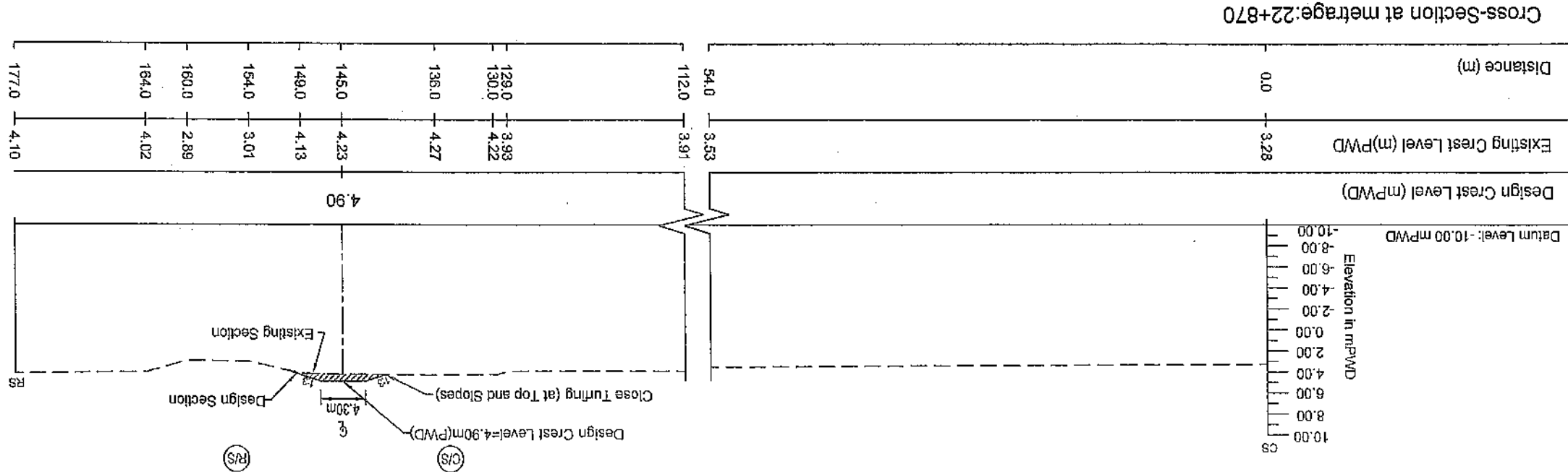
Cross-Section at metrage:22+534



Cross-Section at metrage:22+187

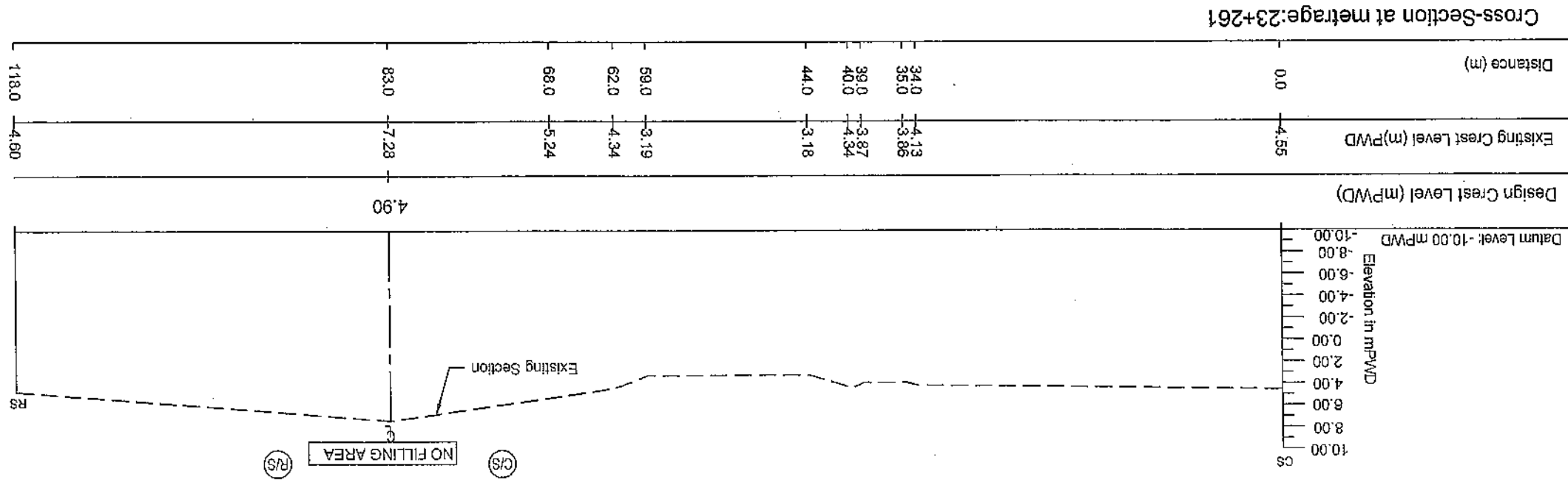
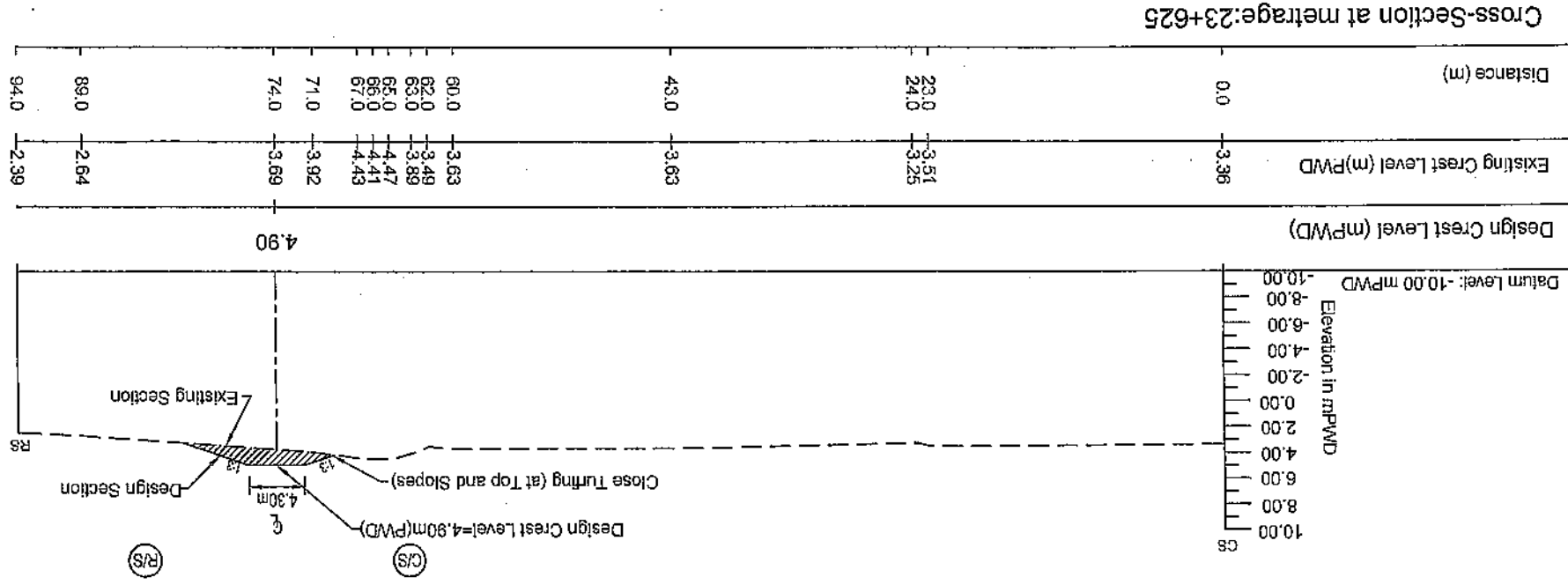


BANGLADESH WATER DEVELOPMENT BOARD										CONSULTANCY SERVICES for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BvWB Part)										SUBMERSIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)										CROSS SECTIONS WITH DESIGN SECTIONS																																																											
DWG. NO: KISHORE-DAKSHINER HAOR-EM-B-00000 SHEET: 41 /62										CO-TEAM LEADER										CO-TEAM LEADER										DESIGN ENGINEER										AUTO CAD OPERATOR										REVISION																																							
										A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.									
										A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.									
										A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.									
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
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A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV.										CHKD.										RECOM.										APPV.																			
A.Q. Mohammad Ali										A.Q. Mohammad Ali										Anisur Kawsar Waseel										Ms. Tahura Chowdhury										APPV																																																	



Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPR.	CONSULTANTS:	DRAWN BY:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:	APPROVED BY:	CONSULTANCY SERVICES for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)	SUBMERGIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)	CROSS SECTIONS WITH DESIGN SECTIONS	BANGLADESH WATER DEVELOPMENT BOARD
1						Ms. Tahura Chowdhury		Arifur Kawser Waseh	A.O. Mohammad Ali	Fazana Aftreen	Yasmin Begum	Saeeda Nazreen			
2															
DWG. NO: KISHORE-DAKSHINER HAOR-EMB-00000															
SHEET: 42/62															
CE, DESIGN															





Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.	REVISION	AUTO CAD OPERATOR	DESIGN ENGINEER	CO-TEAM LEADER	CO-TEAM LEADER	DWG. NO: KISHORE-DAKSHINER HAOR-EMB-00000	SHEET: 43 / 52
1							Ms. Tabura Chowdhury	Anisur Kawser Waseel	A.Q. Mohammad Ali	A.Q. Mohammad Ali	Farzana Areen	SE, DESIGN
2							Ms. Tabura Chowdhury	Anisur Kawser Waseel	A.Q. Mohammad Ali	A.Q. Mohammad Ali	Farzana Areen	SE, DESIGN
CONSULTANTS: Nippon Koei Co. Ltd (NKG), Joint Venture with BETS-CNRS							DRAWN BY: E. Chowdhury					
							DESIGNED BY: W. K. Waseel					
							CHECKED BY: A.Q. Mohammad Ali					
							RECOMMENDED BY: A.Q. Mohammad Ali					
							APPROVED BY: Saeeda Nazreen					
							APPROVED BY: Yasmim Begum					
							APPROVED BY: Saeeda Nazreen					

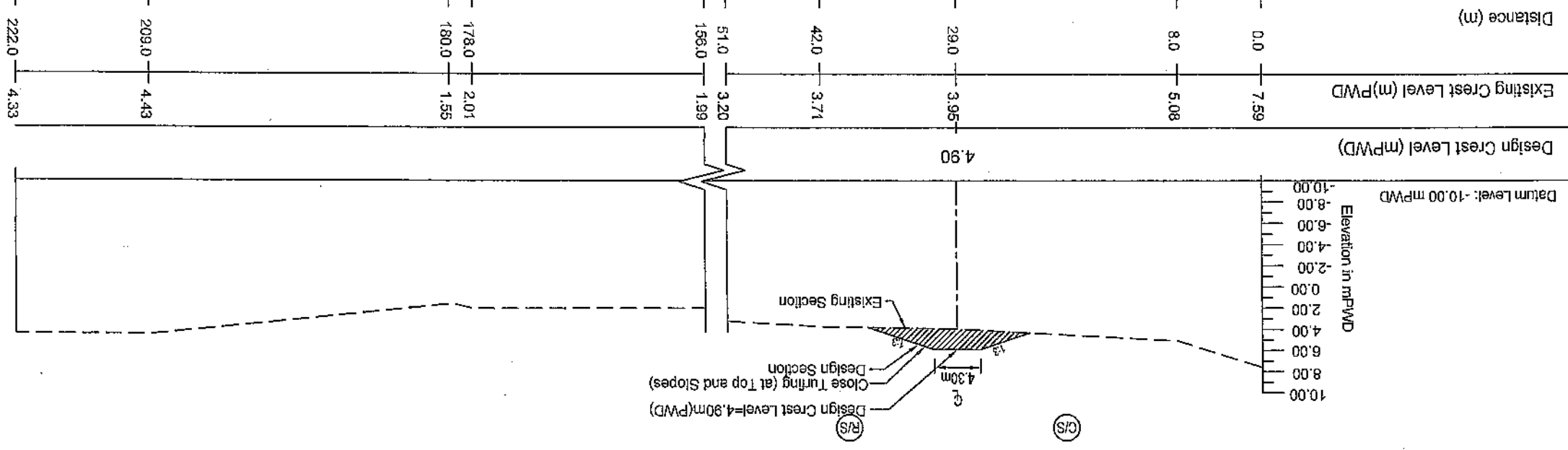
**BANGLADESH WATER DEVELOPMENT BOARD**

Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)

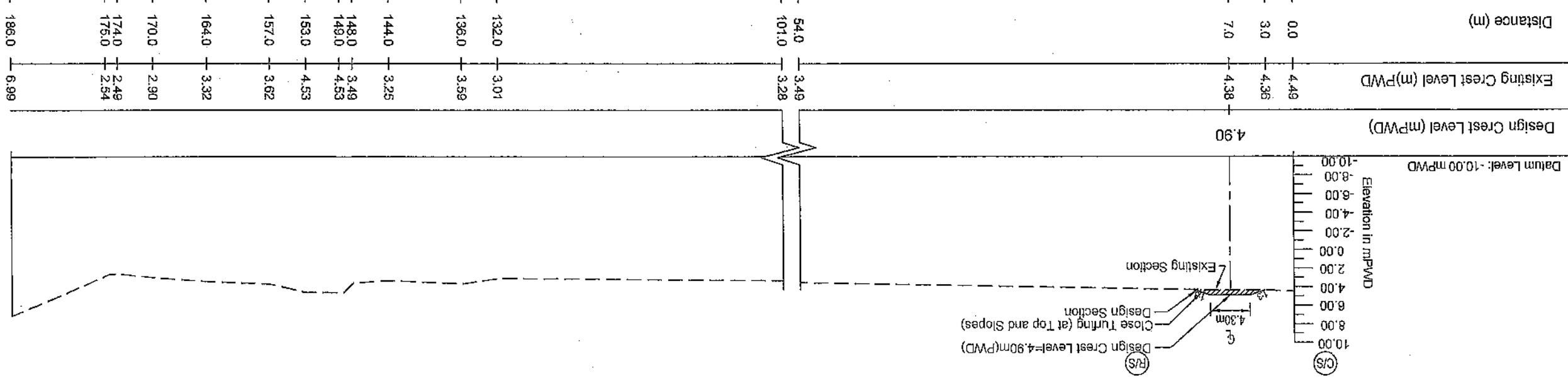
SUBMERGIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)

CROSS SECTIONS WITH DESIGN SECTIONS

Cross-Section at metrage:24+211



Cross-Section at metrage:23+868



Scale: As shown

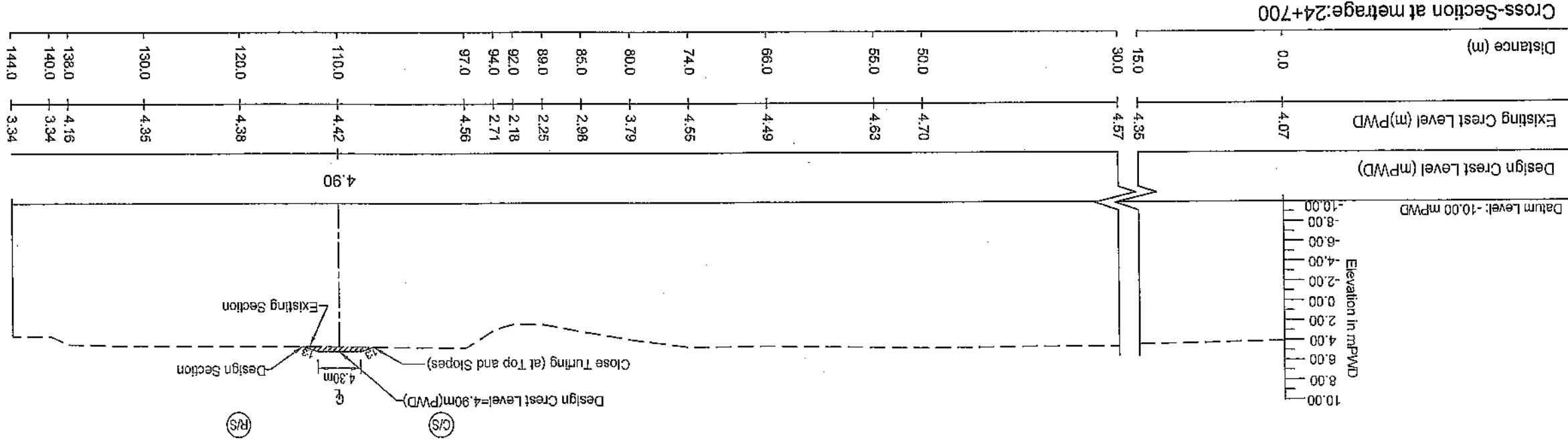
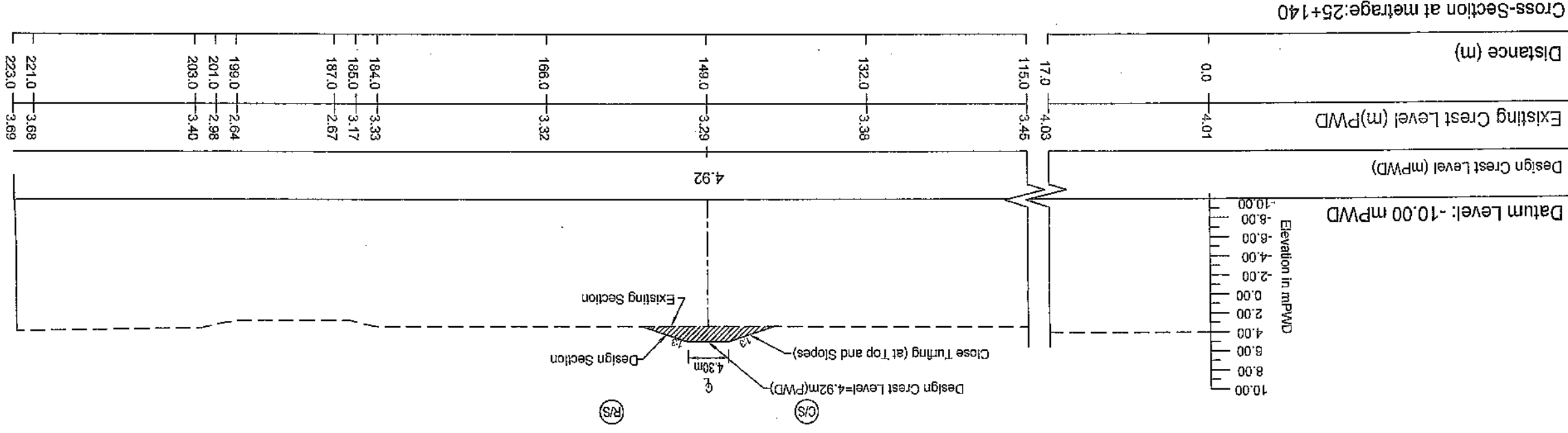
NO.		DATE	MADE	REVISION			AUTO CAD OPERATOR	DESIGN ENGINEER	CO-TEAM LEADER	CO-TEAM LEADER	DWG. NO: KISHORE-DAKSHINER HAOR-EMB-00000	SHEET: 44/62			
				CHKD.	RECOM.	APPV.									
1							Ms. Tahura Chowdhury	Ahsanur Kawser Wawesi	A.Q. Mohammad Ali	A.Q. Mohammad Ali	EE, DESIGN CIRCLE-1	SE, DESIGN CIRCLE-1	Yasmin Begum	Saeeda Nazreen	CE, DESIGN
							DRAWN BY:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:					
2							CONSULTANTS:	Nippon Koei Co. Ltd (N/K), Joint Venture with BETS-CNRS							
CROSS SECTIONS WITH DESIGN SECTIONS															
SUBMERISBLE EMBANKMENT AROUND DAKKSHINER HAOR (FROM KM 0.00 TO KM 33.520)															
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)															
BANGLADESH WATER DEVELOPMENT BOARD															

**BANGLADESH WATER DEVELOPMENT BOARD**

Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)

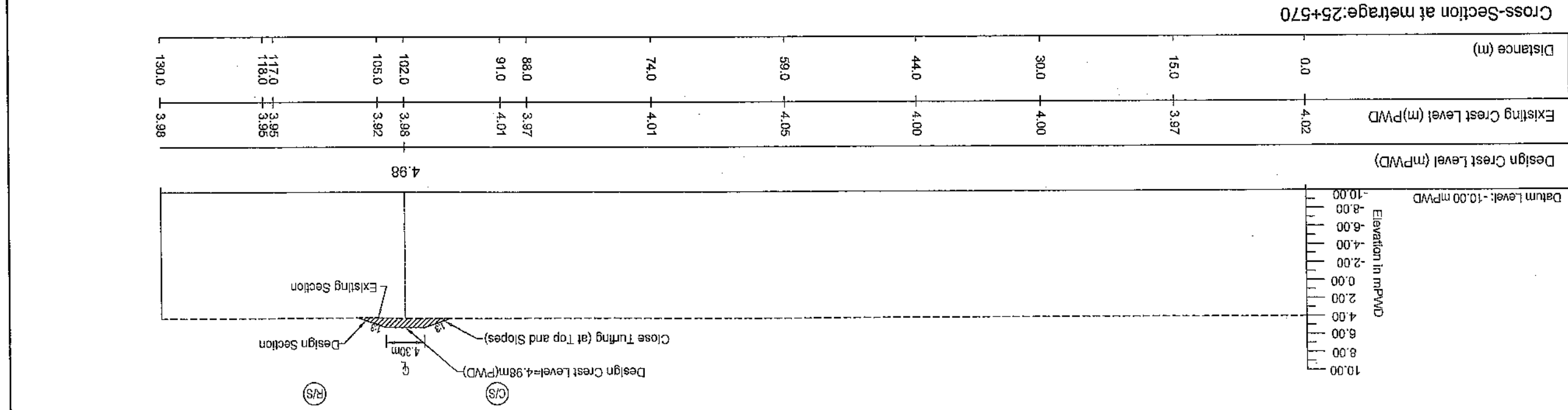
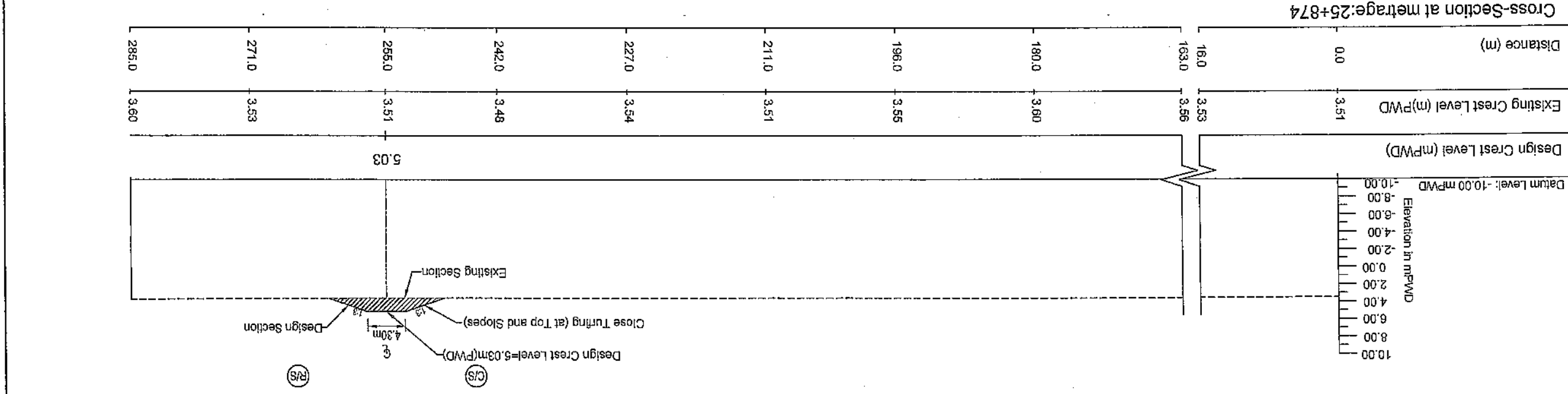
SUBMERGIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)

CROSS SECTIONS WITH DESIGN SECTIONS



Scale: As shown

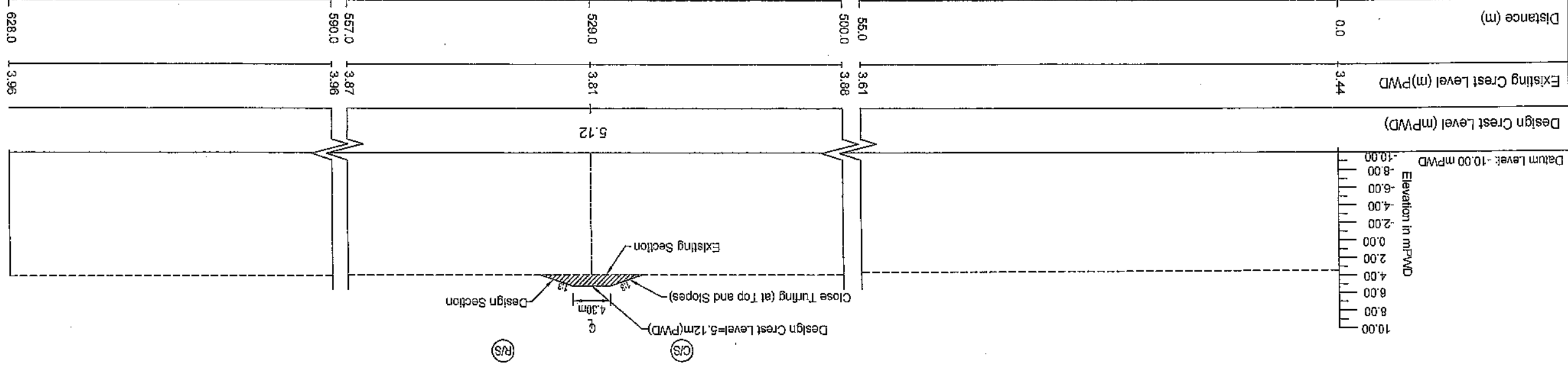
BANGLADESH WATER DEVELOPMENT BOARD																				
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)																				
SUBMERISBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)																				
CROSS SECTIONS WITH DESIGN SECTIONS																				
NO.		DATE		MADE	CHKD.	RECOM.	APV.	CONSULTANTS:		Nippon Koel Co. Ltd (NK), Joint Venture with BETS-CNRS										
1								DRAWN BY:		DESIGNED BY:		CHECKED BY:		RECOMMENDED BY:		A.Q. Mohammad Ali				
								E. Chowdhury		Ansar Kawsar Waseel		A.Q. Mohammad Ali		A.Q. Mohammad Ali		A.Q. Mohammad Ali				
								Ms. Tahura Chowdhury		Amitur Kawsar Waseel		A.Q. Mohammad Ali		A.Q. Mohammad Ali		A.Q. Mohammad Ali				
								AUTO CAD OPERATOR		DESIGN ENGINEER		CO-TEAM LEADER		CO-TEAM LEADER		DWG. NO: KISHORE-DAKSHINER HAOR-EMB-00000				
		REVISION		SHEET: 46 /62																



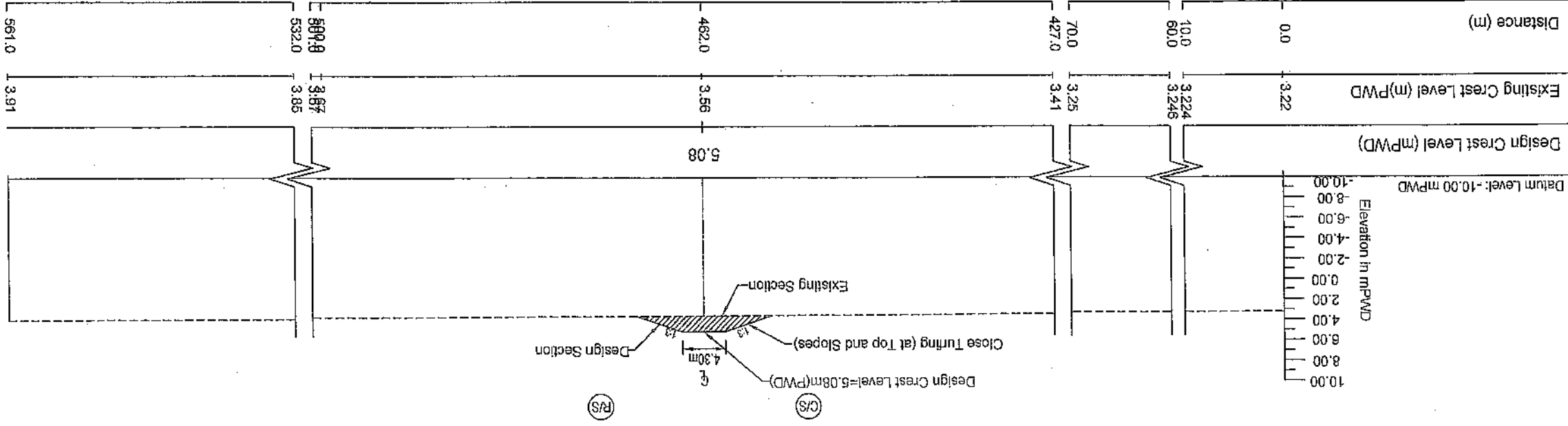
Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.	CONSULTANTS:	DRAWN BY:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:	APPROVED BY:	CROSS SECTIONS WITH DESIGN SECTIONS	SUBMERGIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)	of Haor Flood Management and Livelihood Improvement Project (BWDB Part)	Consultancy Services for Management, Design, Supervision and other Related Services	BANGLADESH WATER DEVELOPMENT BOARD
1						Ms. Tahura Chowdhury	Ms. Tahura Chowdhury	Anisur Kawser Wasefi	A.Q. Mohammad Ali	A.Q. Mohammad Ali	Paana Afreen	SE, DESIGN OFFICE - 1	Yasmin Begum	CE, DESIGN	Saeeda Nazreen	
2																
DWG. NO: KISHORE-DAKSHINER HAOR-EMB-00000																
SHEET: 46/472																

Cross-Section at metrage:26+478



Cross-Section at metrage:26+204

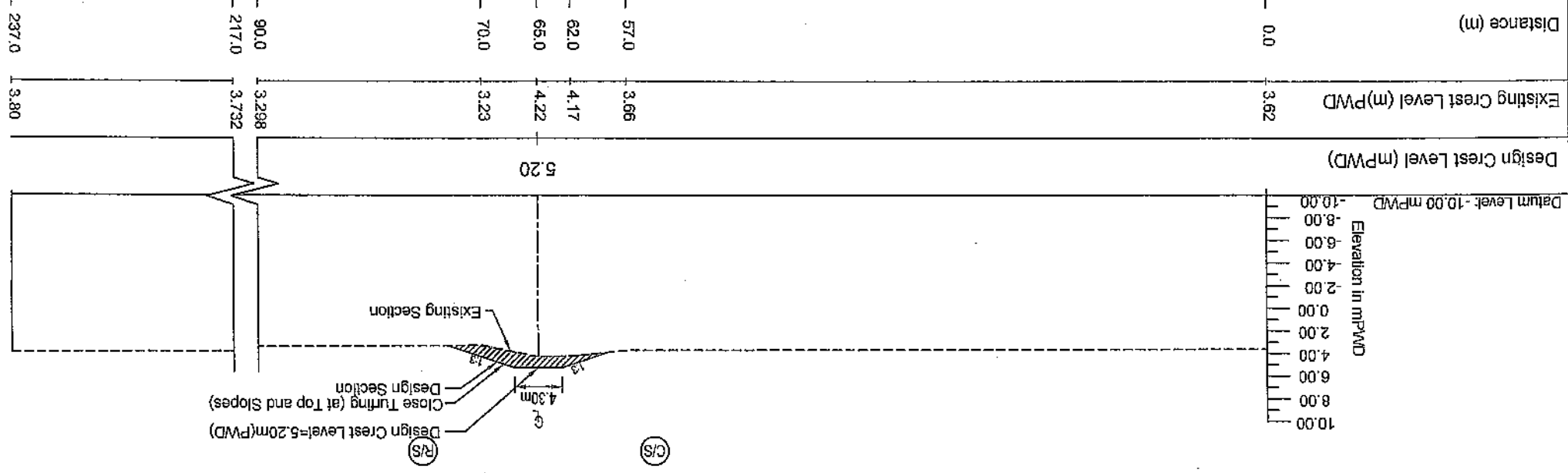


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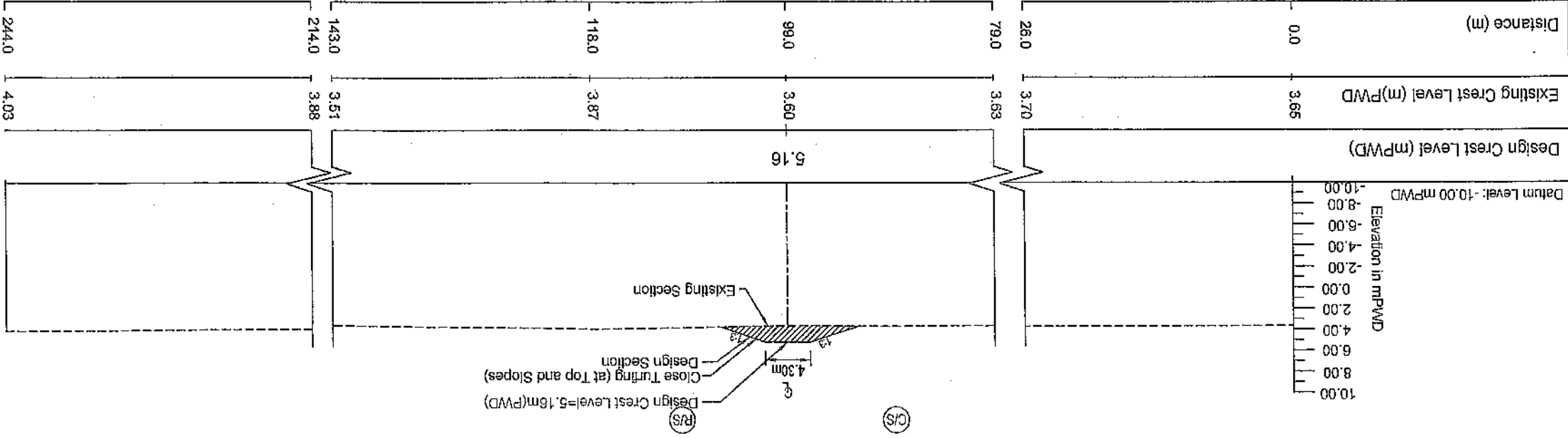
NO.	DATE	MADE	CHKD.	RECOM.	APPV.	CONSULTANTS:	DRAWN BY:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:	CO-TEAM LEADER	CO-TEAM LEADER	DESIGN ENGINEER	AUTO CAD OPERATOR	REVISION	DWG. NO. KISHORE-DAKSHINER HAOR-EMB-0000	SHEET: 47 / 62
1						Ms. Tahira Chowdhury	E. Chowdhury	Amir Kawsar Waseel	A.O. Mohammad Ali	A.O. Mohammad Ali	Farzana Afsan	SE, DESIGN CIRCLE - 1	Yasmin Begum	CE, DESIGN	Saeeda Nazreen		
2						Nippon Koei Co. Ltd (NKK), Joint Venture with BETS-CNRS											

**BANGLADESH WATER DEVELOPMENT BOARD**  
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BVVDB Part)  
SUBMERGIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 39.520)  
CROSS SECTIONS WITH DESIGN SECTIONS  
CHECKED BY: APPROVED BY:

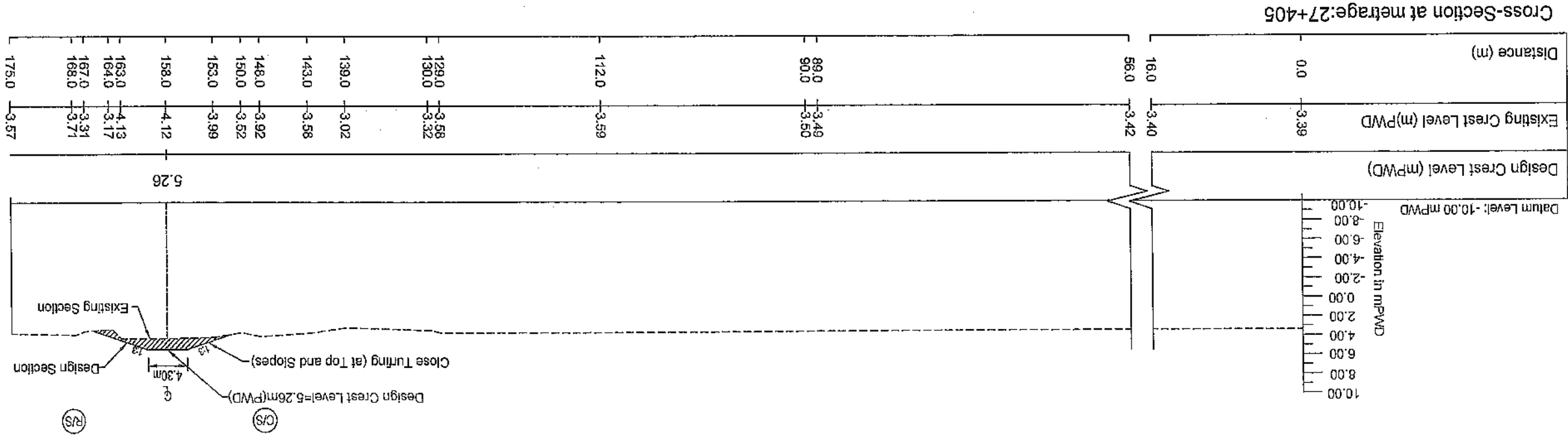
Cross-Section at metrage:27+021



Cross-Section at metrage:26+735



BANGLADESH WATER DEVELOPMENT BOARD										CONSULTANCY SERVICES FOR MANAGEMENT, DESIGN, SUPERVISION AND OTHER RELATED SERVICES OF HAOR FLOOD MANAGEMENT AND LIVELIHOOD IMPROVEMENT PROJECT (BVIDB PART)										SUBMERISABLE EMBANKMENT AROUND DAKSHINHAOR (FROM KM 0.00 TO KM 33.520)										CROSS SECTIONS WITH DESIGN SECTIONS (RESECTIONING OF EXISTING ROAD)																																							
CHECKED BY:										RECOMMENDED BY:										APPROVED BY:										DRAWN BY:										DESIGNED BY:										CHECKED BY:										RECOMMENDED BY:									
Farzana Atrien										Yasmin Begum										Saadea Nazneen										Ms. Tahura Chowdhury										Anisur Kawser Wajed										A.Q. Mohammad Ali										A.Q. Mohammad Ali									
EE. DESIGN OFFICE - 1										SE. DESIGN OFFICE - 1										CE. DESIGN										AUTO CAD OPERATOR										DESIGN ENGINEER										CO-TEAM LEADER										CO-TEAM LEADER									
DWG. NO. KISHORE-DAKSHINHAOR-ENR-00-000										SHEET: 48 OF 52																																																											



Scale: As shown

No.	DATE	MADE	CHKD.	RECOM.	APPV.	CONSULTANTS:	DRAWN BY:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:	CO-TEAM LEADER	CO-TEAM LEADER	DESIGN ENGINEER	AUTO CAD OPERATOR	REVISION	DWG. NO. KISHORE-DAKSHINER HAOR-EMB-00000	SHEET: 49/62	CE, DESIGN	Saeeda Nazreen
1																			
2																			

BANGLADESH WATER DEVELOPMENT BOARD

Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)

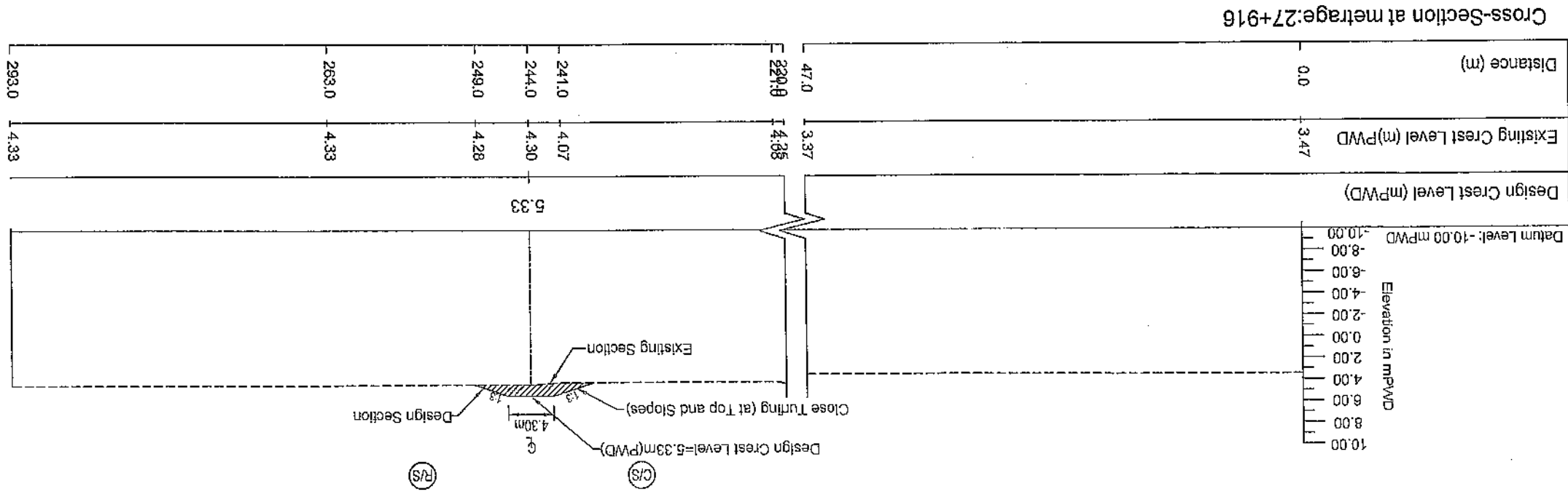
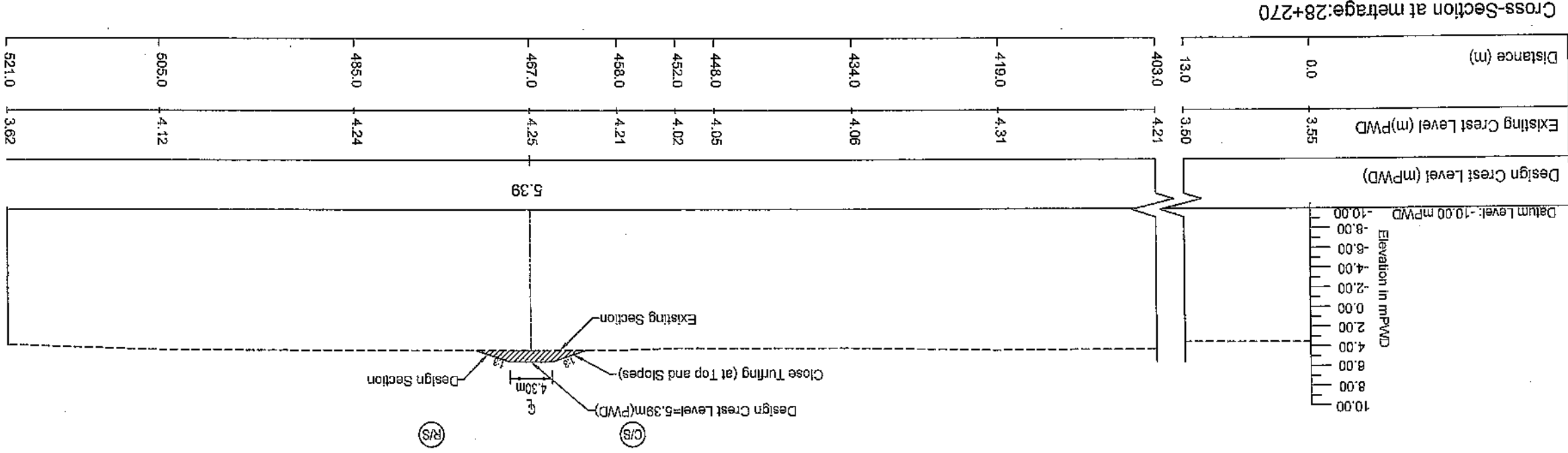
SUBMERGIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)

CROSS SECTIONS WITH DESIGN SECTIONS (RESECTIONING OF EXISTING ROAD)

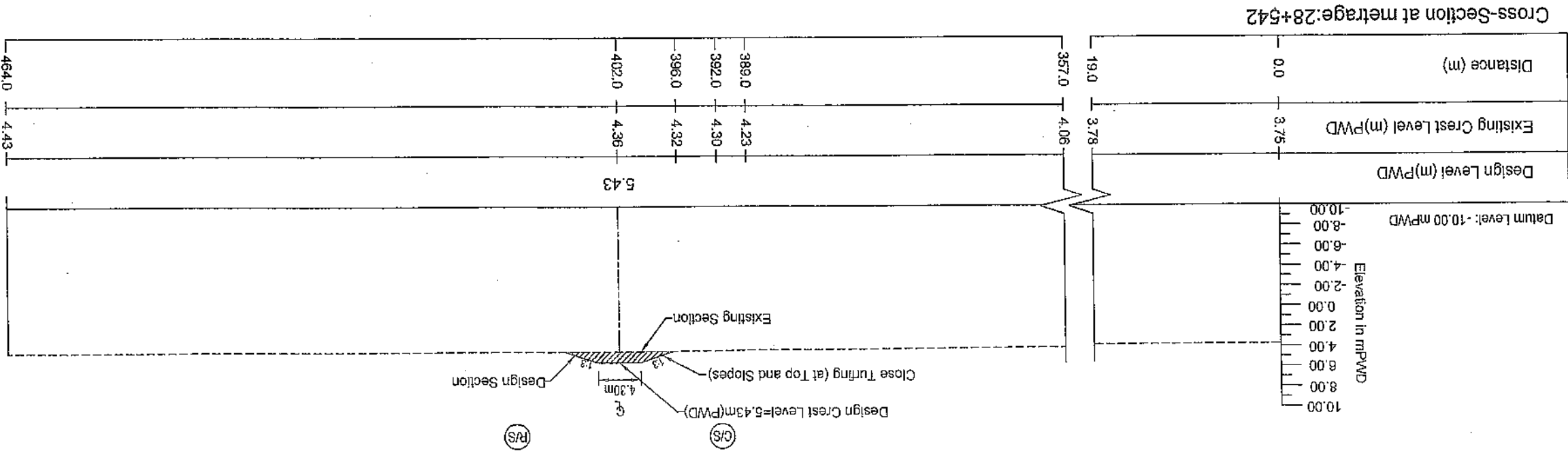
CHECKED BY: Yamin Begum

RECOMMENDED BY: Saeeda Nazreen

APPROVED BY:

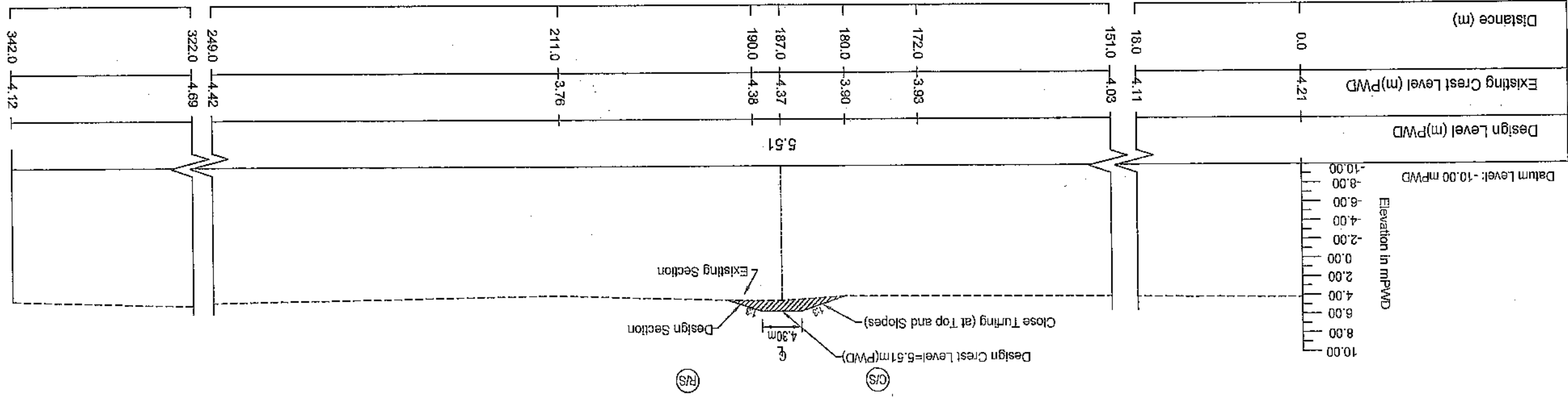
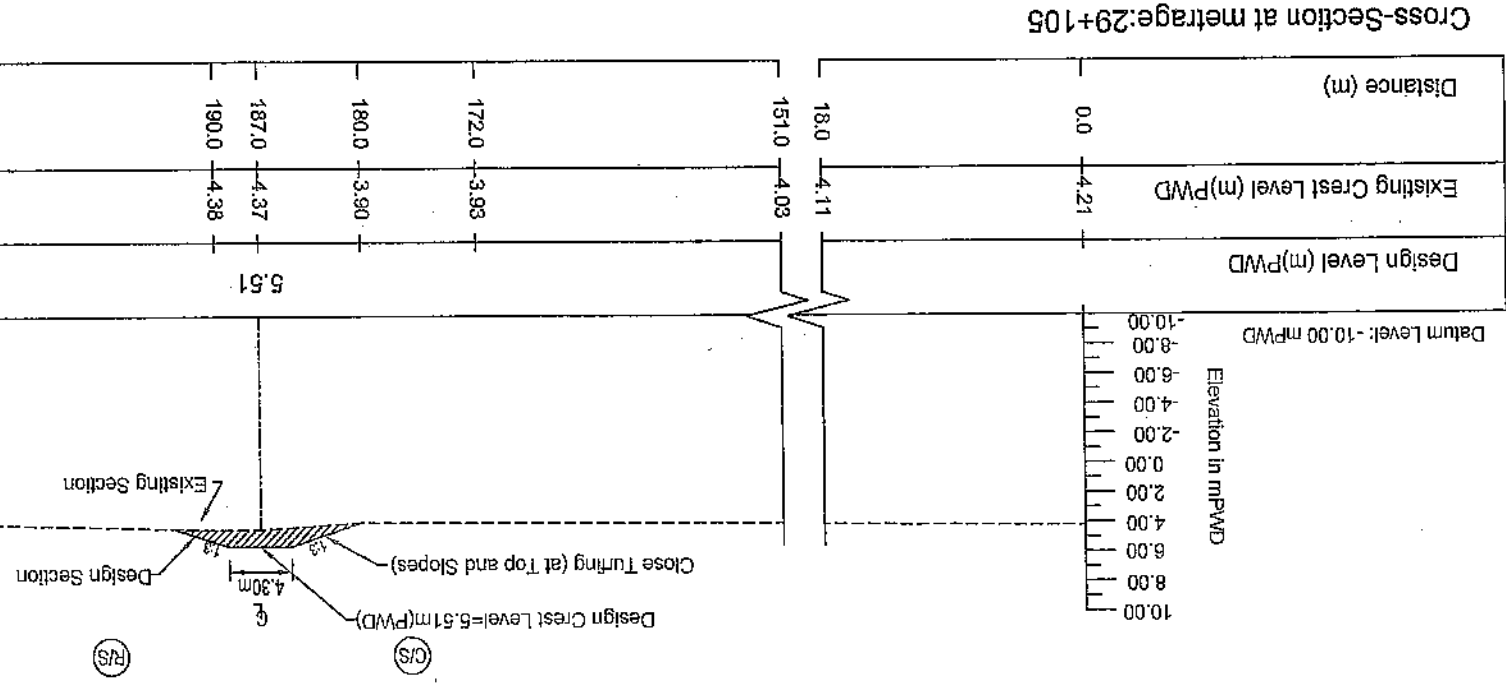


BANGLADESH WATER DEVELOPMENT BOARD										CONSULTANCY SERVICES FOR MANAGEMENT, DESIGN, SUPERVISION AND OTHER RELATED SERVICES OF HAOR FLOOD MANAGEMENT AND LIVELIHOOD IMPROVEMENT PROJECT (BVMDB PART)										SUBMERGIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)										CROSS SECTIONS WITH DESIGN SECTIONS (RESECTIONING OF EXISTING ROAD)																			
CHECKED BY: Farzana Aheen RECOMMENDED BY: Yasmih Begum APPROVED BY: Saeeda Nazreen CE, DESIGN										CO-TEAM LEADER: A.O. Mohammad Ali CHECKED BY: <i>[Signature]</i> RECOMMENDED BY: <i>[Signature]</i>										CO-TEAM LEADER: A.O. Mohammad Ali CHECKED BY: <i>[Signature]</i> RECOMMENDED BY: <i>[Signature]</i>										DESIGN ENGINEER: Ansur Kawsar Waseed DESIGNED BY: <i>[Signature]</i> DRAWN BY: <i>[Signature]</i>										AUTO CAD OPERATOR: Ms. Tahura Chowdhury APPV. APPV. RECD. RECD. CHRD. CHRD.									
										NO. 1 DATE MADE CHRD.										NO. 2 DATE MADE CHRD.										REVISION																			
										NO. 1 DATE MADE CHRD.										NO. 2 DATE MADE CHRD.										REVISION																			
										NO. 1 DATE MADE CHRD.										NO. 2 DATE MADE CHRD.										REVISION																			



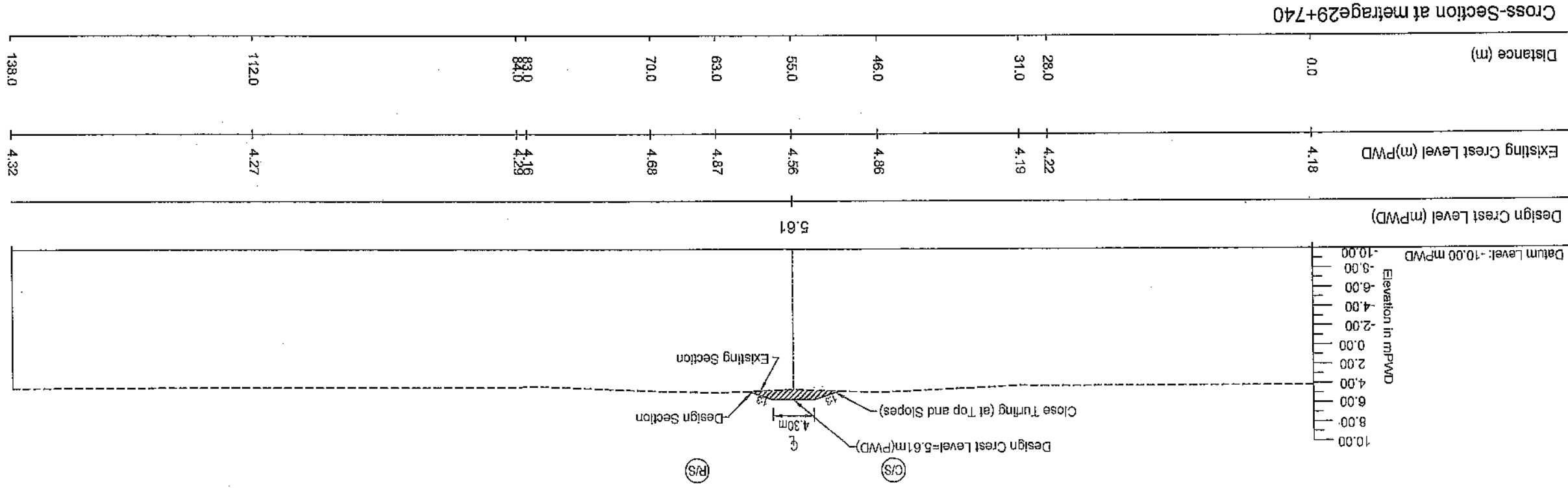
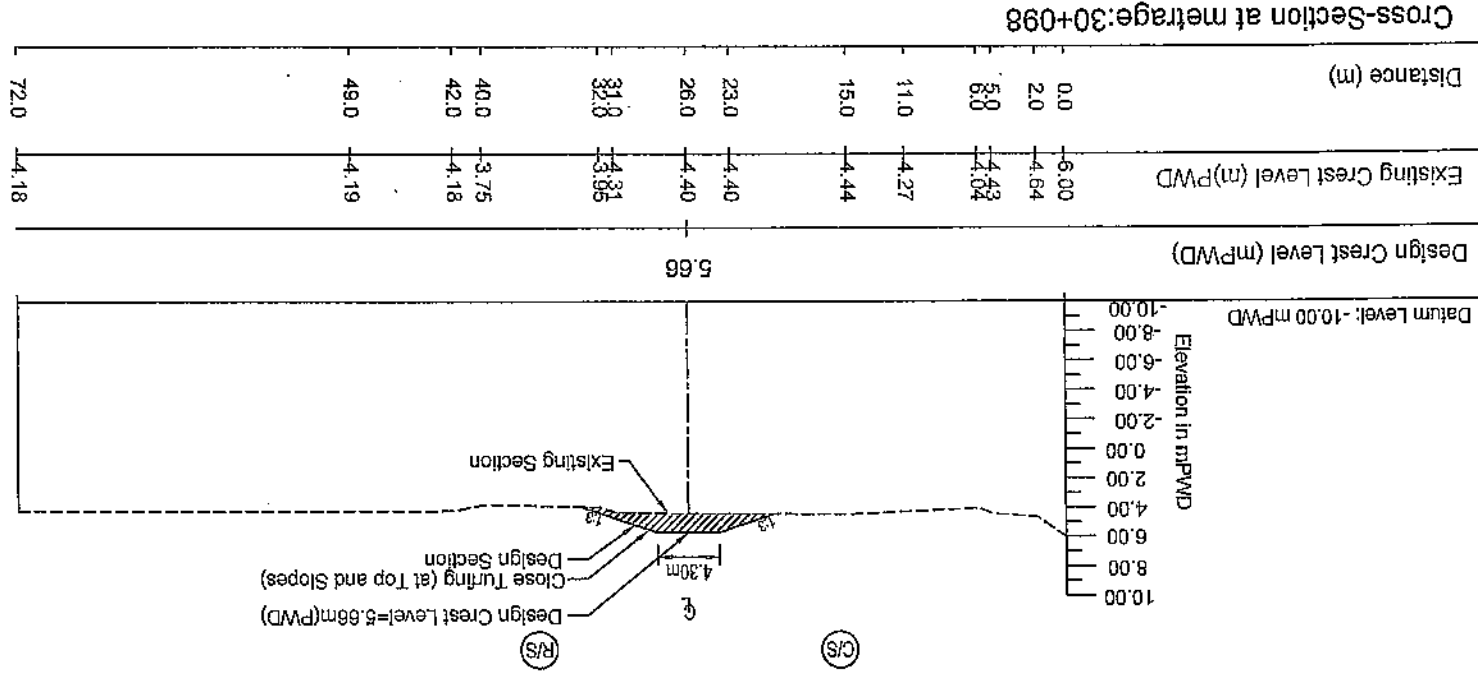


BANGLADESH WATER DEVELOPMENT BOARD		Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BVVDB Part)		SUBMERGIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)		CROSS SECTIONS WITH DESIGN SECTIONS (RESECTIONING OF EXISTING ROAD)		CHECKED BY:		RECOMMENDED BY:		APPROVED BY:	
1		DRAWN BY:		CHECKED BY:		DESIGNED BY:		A.O. Mohammad Ali		RECOMMENDED BY:		A.O. Mohammad Ali	
2		CONSULTANTS:		Nippon Koei Co. Ltd (N/K), Joint Venture with BETS-CNRS		DESIGNED BY:		CHECKED BY:		RECOMMENDED BY:		A.O. Mohammad Ali	
NO.		DATE		MADE		CHKD.		RECOM.		APPV.		Ms. Tahura Chowdhury	
REVISION		AUTO CAD OPERATOR											
DESIGN ENGINEER		CO-TEAM LEADER											
CO-TEAM LEADER		CO-TEAM LEADER											
DWG. NO.: KISHORE-DAKSHINER HAOR-EMB-00000		SHEET: 51 /62											

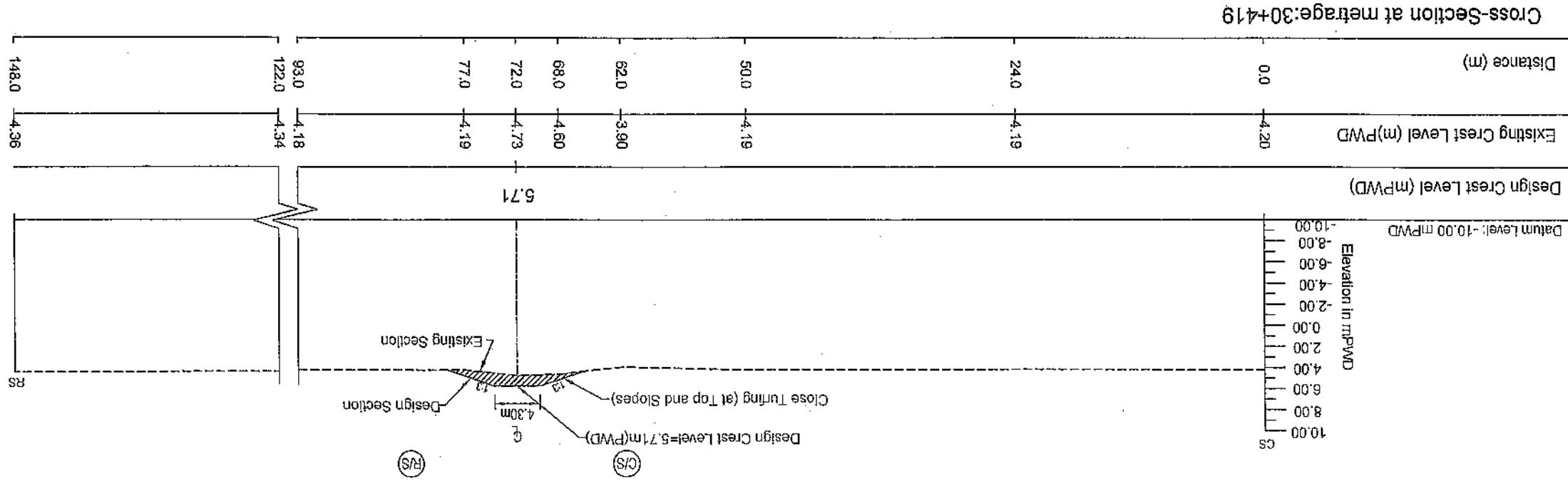


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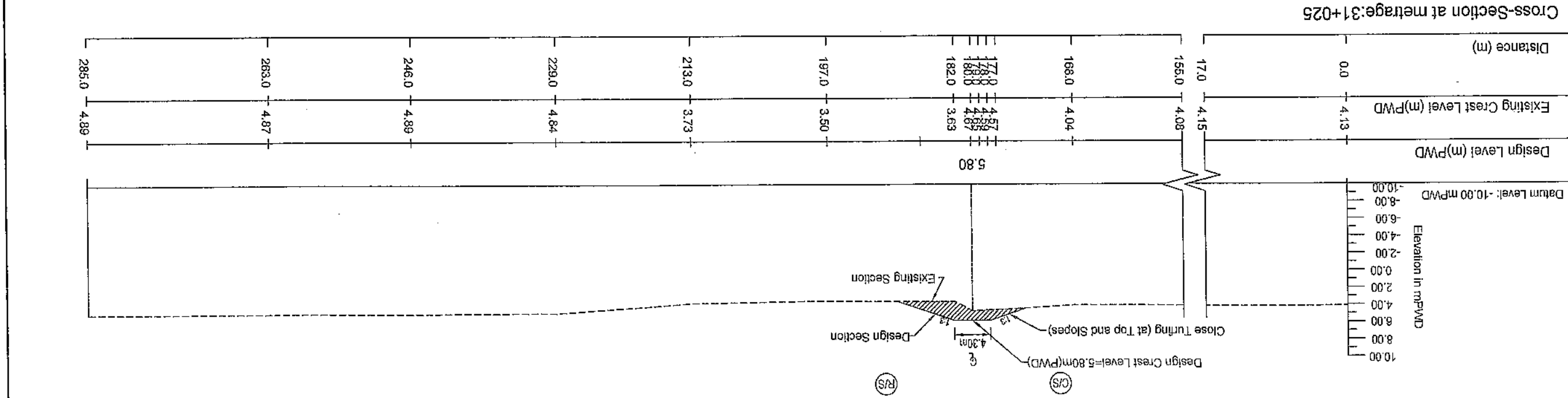
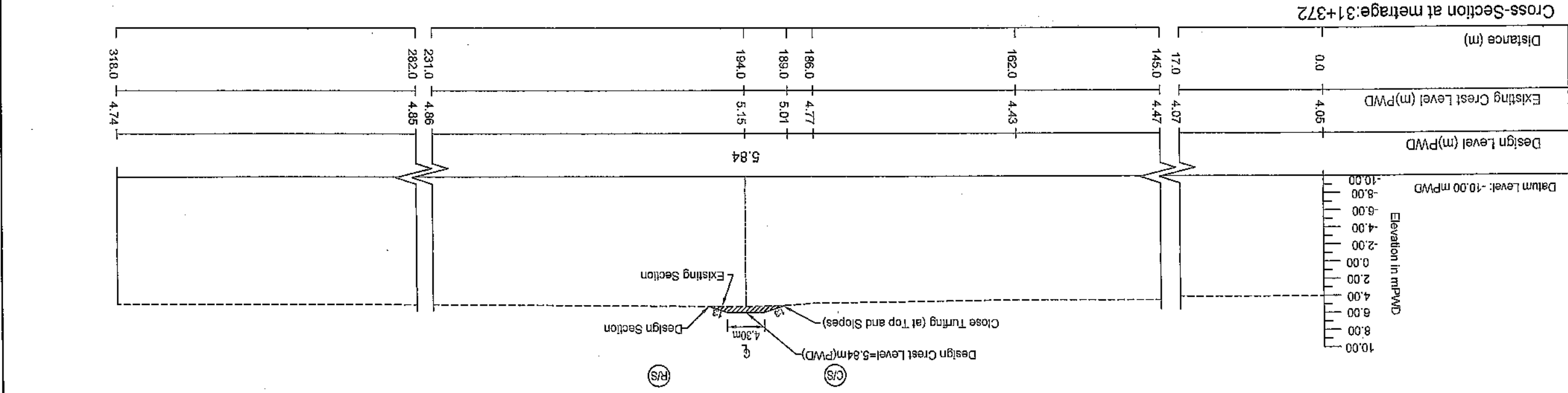
BANGLADESH WATER DEVELOPMENT BOARD													
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BVIDB Part)													
SUBMERGIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 39.520)													
CROSS SECTIONS WITH DESIGN SECTIONS (RESECTIONING OF EXISTING ROAD)													
CHECKED BY:													
RECOMMENDED BY:													
APPROVED BY:													
CONSULTANTS: Nippon Koel Co. Ltd (NIQ), Joint Venture with BETS-CNRS													
DRAWN BY:													
DESIGNED BY:													
CHECKED BY:													
RECOMMENDED BY:													
A.O. Mohammad Ali													
A.O. Mohammad Ali													
A.O. Mohammad Ali													
CO-TEAM LEADER													
CO-TEAM LEADER													
DWG. NO. KISHORE DAKSHINER HAOR-EMB-00000													
SHEET: 52 / 52													



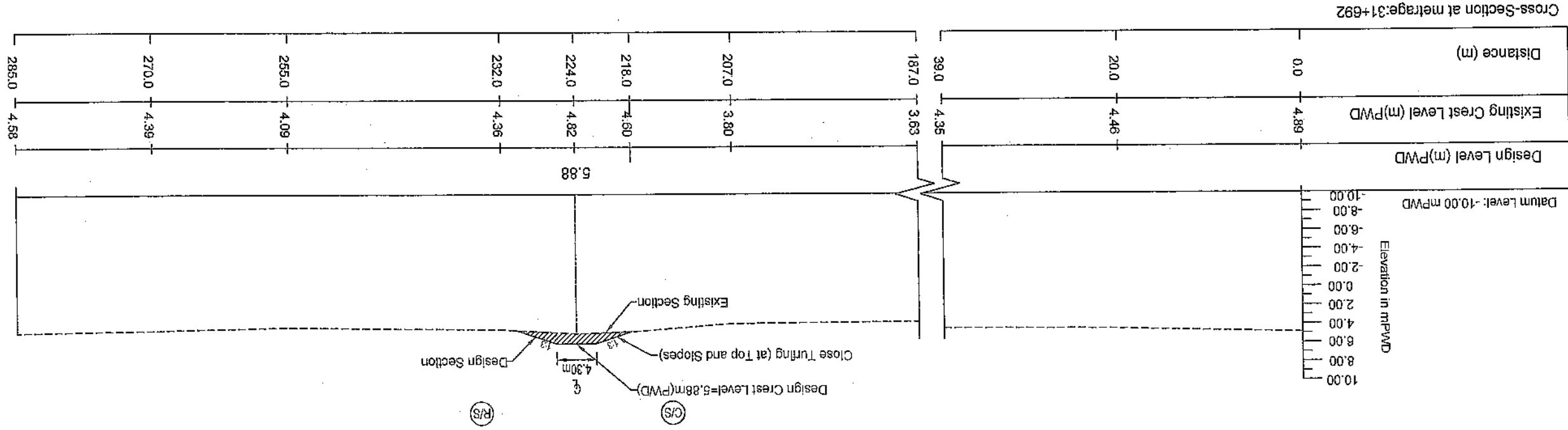
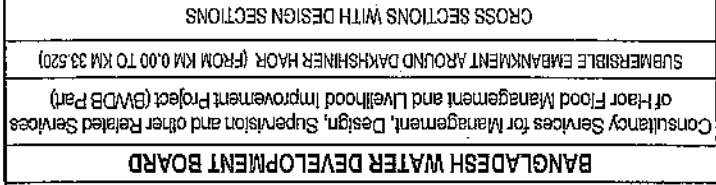
BANGLADESH WATER DEVELOPMENT BOARD										CONSULTANCY SERVICES FOR MANAGEMENT, DESIGN, SUPERVISION AND OTHER RELATED SERVICES OF HAOR FLOOD MANAGEMENT AND LIVELIHOOD IMPROVEMENT PROJECT (BWDB Part)										SUBMERGIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)										CROSS SECTIONS WITH DESIGN SECTIONS (RESECTIONING OF EXISTING ROAD)																																																											
CHECKED BY:										RECOMMENDED BY:										APPROVED BY:										DRAWN BY:										DESIGNED BY:										CHECKED BY:										RECOMMENDED BY:																													
Farzana Afrin										Yasmin Begum										Saeeda Nazneen										E. Chowdhury										W. Kawsar Waseed										A. O. Mohammad Ali										A. O. Mohammad Ali																													
EE, DESIGN CIRCLE - 1										SE DESIGN CIRCLE - 1										CE, DESIGN										APPLY.										RECOM.										CHKD.										MADE										DATE										NO.									
REVISION										AUTO CAD OPERATOR										DESIGN ENGINEER										CO-TEAM LEADER										CO-TEAM LEADER										DWG. NO.: KISHORE-DAKSHINER HAOR-EMB-00000										SHEET: 63 /62																													



<b>BANGLADESH WATER DEVELOPMENT BOARD</b>													
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Par)													
SUBMERISBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)													
CROSS SECTIONS WITH DESIGN SECTIONS													
						CHECKED BY:		RECOMMENDED BY:		APPROVED BY:			
						Farzana Afreen		SE Design Circle - 1		Yasmin Begum		SE Design Circle - 1	
						A.Q. Mohammad Ali		CO-TEAM LEADER		A.Q. Mohammad Ali		CO-TEAM LEADER	
						DESIGNED BY:		CHECKED BY:		DRAWN BY:		DESIGNED BY:	
CONSULTANTS:						Nippon Koei Co; Ltd (NK), Joint Venture with BETS-CNRS							
DATE						MADE		CHKD.		RECOM.			
APPLY.						Ms. Tanura Chowdhury		Anisur Kawser Waseel		A.Q. Mohammad Ali			
AUTO CAD OPERATOR						DESIGN ENGINEER		CO-TEAM LEADER		CO-TEAM LEADER			
DWG. NO.: KISHORE-DAKSHINER HAOR-FMB-00000						SHEET: 54 /52							



BANGLADESH WATER DEVELOPMENT BOARD		CONSULTANCY SERVICES for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWWDB Part)		SUBMERISBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)		CROSS SECTIONS WITH DESIGN SECTIONS	
		CHECKED BY:		RECOMMENDED BY:		APPROVED BY:	
		Farzana Aftreen		Yasmin Begum		Saeeda Nazneen	
		EE, DESIGN CIRCLE - 1		SE, DESIGN CIRCLE - 1		CE, DESIGN	
DWG. NO.: KISHORE-DAKSHINER HAOR-EMB-00000		SHEET: 55 /52					



# **BANGLADESH WATER DEVELOPMENT BOARD**

Consultancy Services for Management, Design, Supervision and other Related Services  
of Haor Flood Management and Livelihood Improvement Project (BWDB Part)

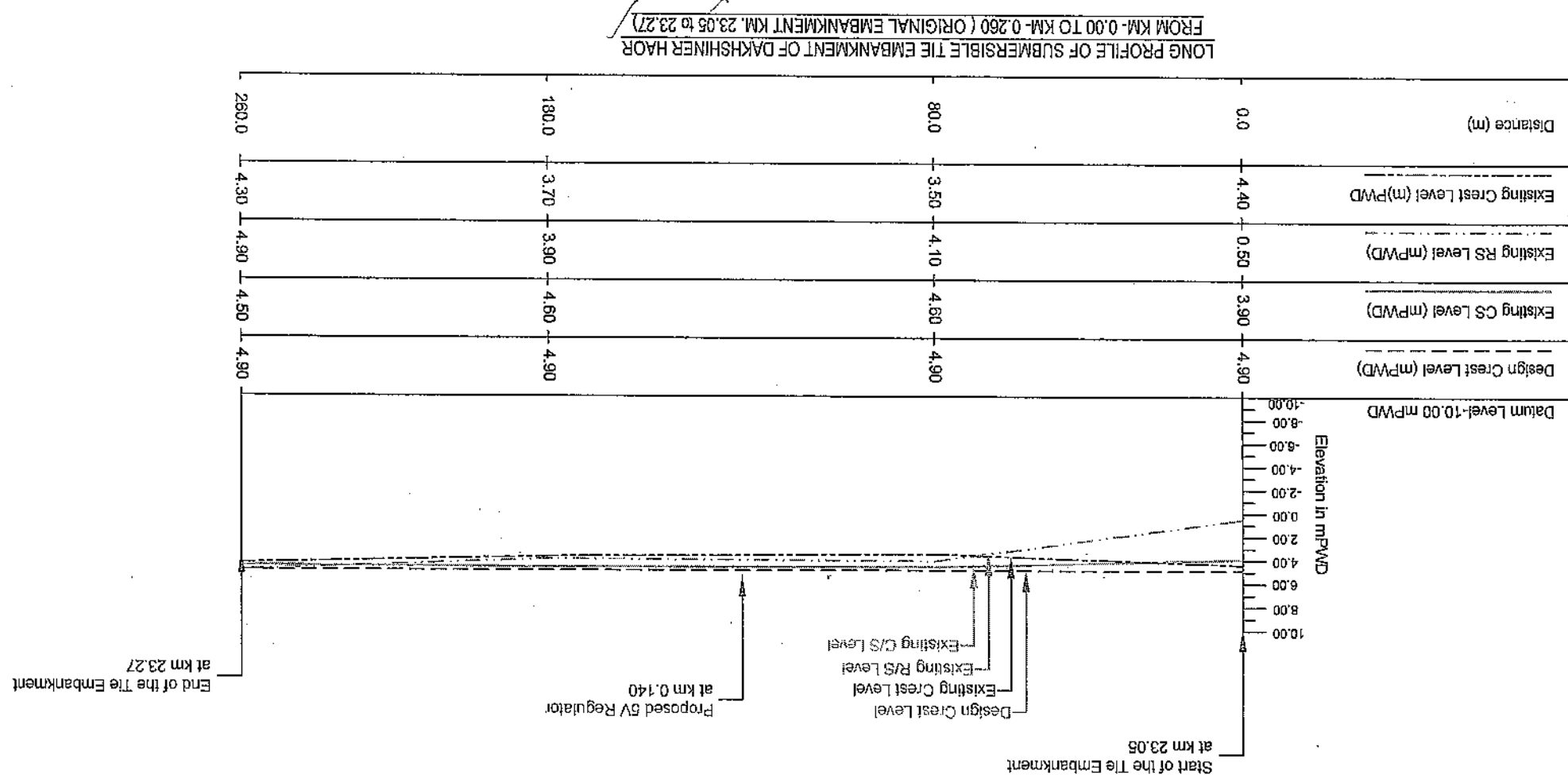
## **DAKSHINER HAOR SUB-PROJECT**

SUBMERSIBLE TIE EMBANKMENT OF DAKSHINER HAOR  
FROM KM-0.00 TO KM-0.260 CONNECTING SV-REGULATOR ON SHANKIR KHAL  
( ORIGINAL EMBANKMENT KM. 23.05 to 23.27 )



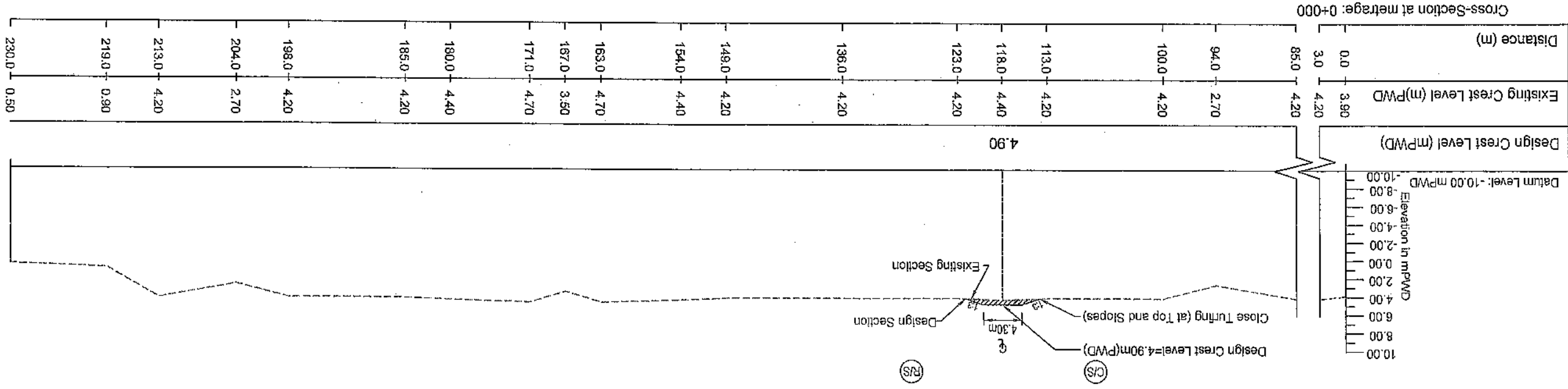
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NO.	DATE	MADE	CHKD.	RECOM.	APPV.	AUTO CAD OPERATOR	DESIGN ENGINEER	CO-TEAM LEADER	CO-TEAM LEADER	DWG. NO. KISHORE-DAKSHINER HAOR-EMB-00000	SHEET: 56/82
							ANISUR KAWSER WAWSI	A.O. MOHAMMAD ALI	A.O. MOHAMMAD ALI	SE, DESIGN CIRCLE - I	CE, DESIGN
1						Ms. Tahura Chowdhury	DESIGNED BY: <i>W. K. Wawsi</i>	CHECKED BY: <i>A. O. Mohammad Ali</i>	RECOMMENDED BY: <i>A. O. Mohammad Ali</i>	Farzana Aftab	Saeeda Nazreen
2							CONSULTANTS: Nippon Koei Co. Ltd (NK), Joint Venture with BETS-CNRS			CHECKED BY:	APPROVED BY:
							LONG PROFILE OF SUBMERSIBLE TIE EMBANKMENT OF DAKSHINER HAOR FROM KM. 0.00 TO KM. 0.260 (ORIGINAL EMBANKMENT KM. 23.05 TO 23.27)				
							SUBMERSIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)				
							Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)				
							BANGLADESH WATER DEVELOPMENT BOARD				





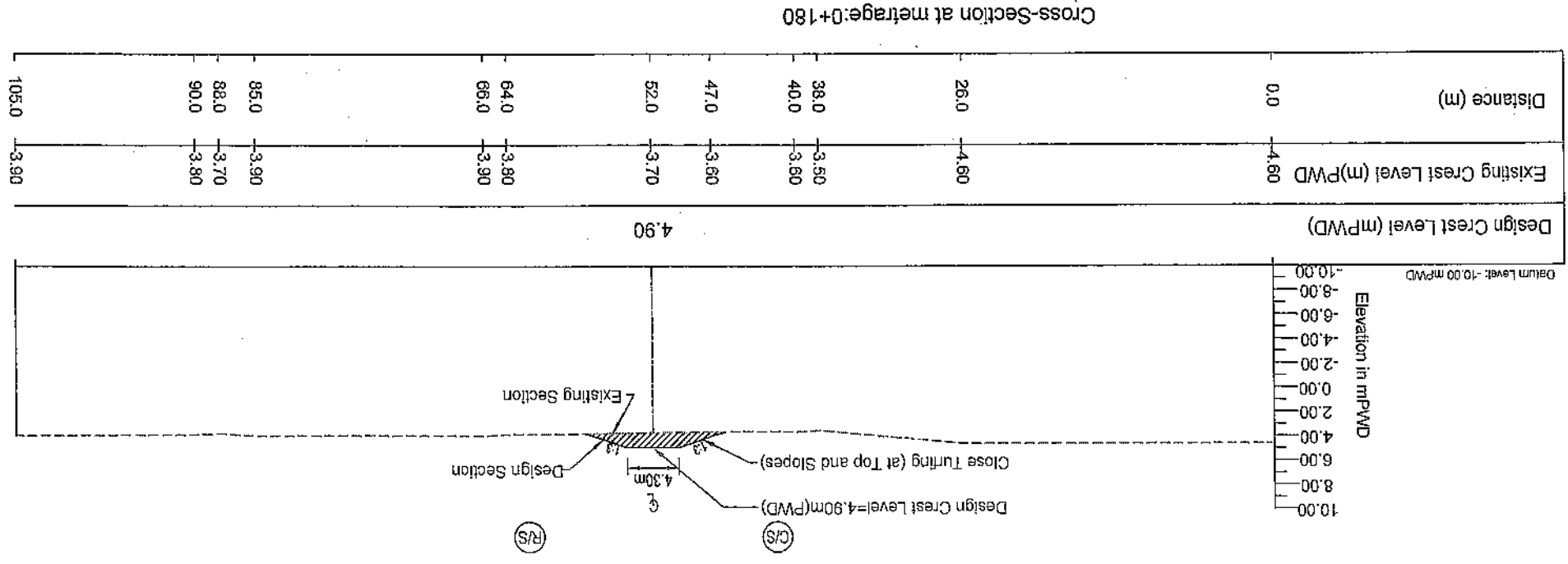
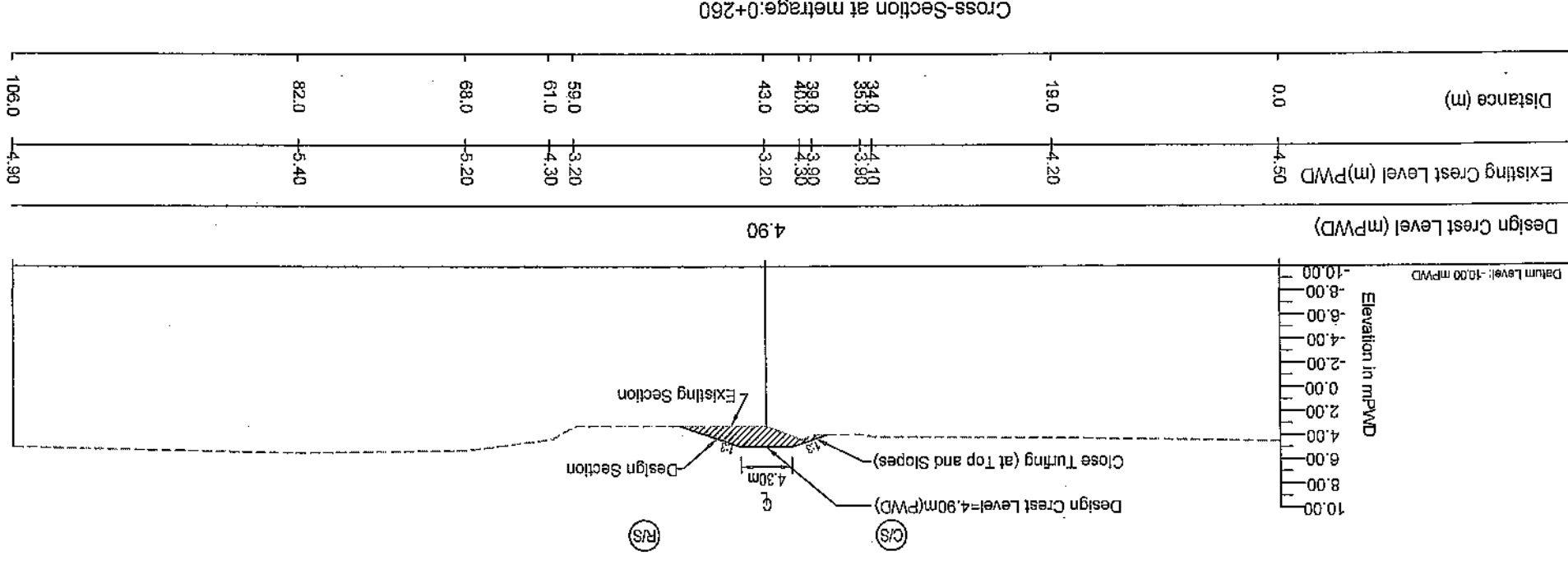
BANGLADESH WATER DEVELOPMENT BOARD																											
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWBDB Part)																											
SUBMERSIBLE EMBANKMENT AROUND DAKKSHINER HAOR (FROM KM 0.00 TO KM 33.520)																											
CROSS SECTIONS WITH DESIGN SECTIONS (THE EMBANKMENT)																											
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CHECKED BY:		RECOMMENDED BY:		APPROVED BY:																							
Fazana Aftreen		Yasmin Begum		Saeeda Nazreen																							
EE, DESIGN CIRCLE - 1		SE, DESIGN CIRCLE - 1		CE, DESIGN																							
DWG. NO.: KISHORE-DAKKSHINER HAOR-FEMB-00000 SHEET: 57 /62																											



Scale: As shown

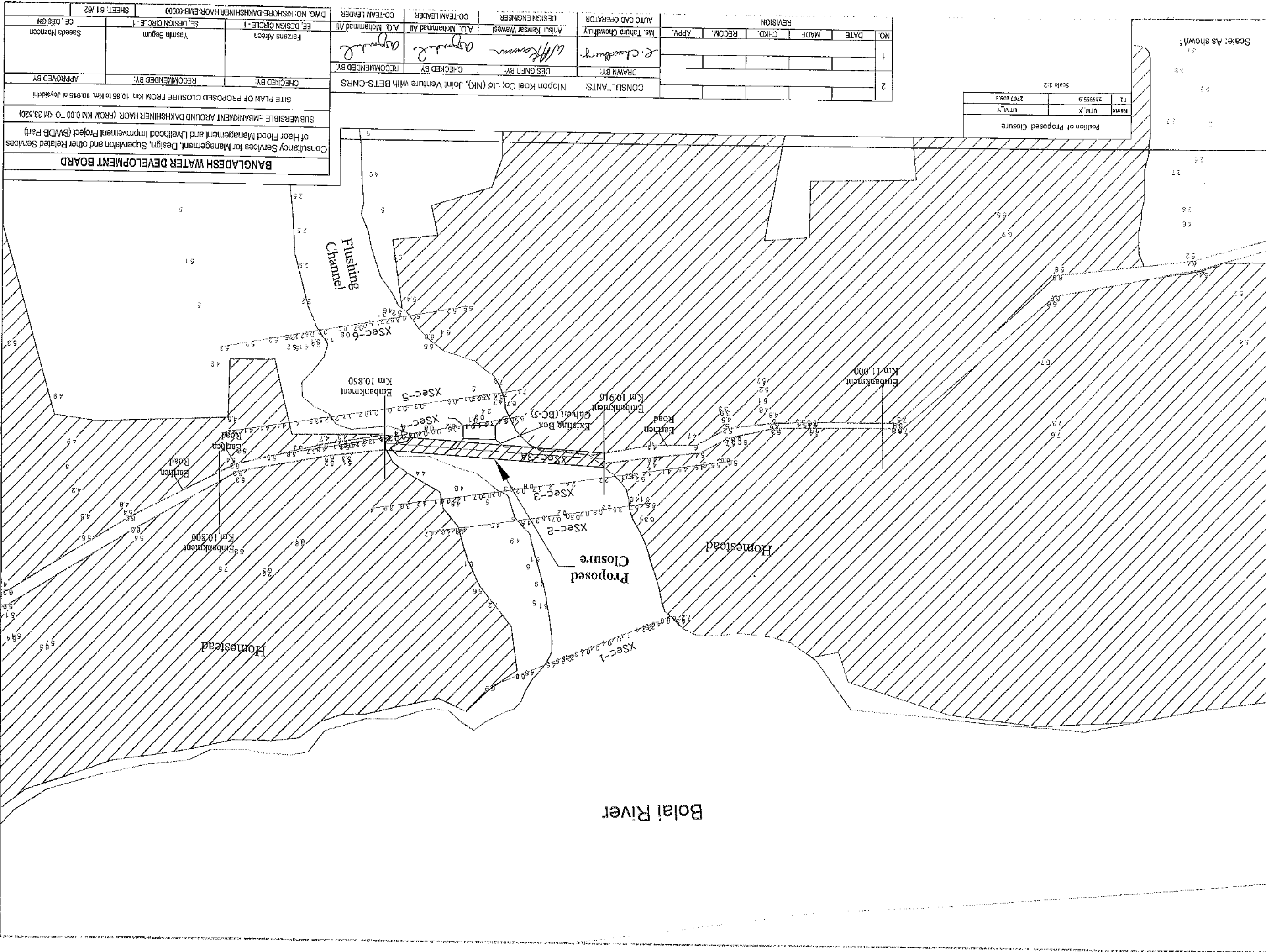
NO.	DATE	MADE	CHKD.	RECOM.	APPV.	REVISION			
1									
2									
CONSULTANTS:						Nippon Koei Co. Ltd (NK), Joint Venture with BETS-CNRS			
DRAWN BY:						A. Q. Mohammed Ali			
DESIGNED BY:						A. Q. Mohammed Ali			
CHECKED BY:						A. Q. Mohammed Ali			
RECOMMENDED BY:						A. Q. Mohammed Ali			
CO-TEAM LEADER						Farzana Afreen			
CO-TEAM LEADER						Yasmin Begum			
DWG. NO. KISHORE-DAKSHINER HAOR-EMR-00000						SHEET: 58/62			

BANGLADESH WATER DEVELOPMENT BOARD	
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)	
SUBMERGIBLE EMBANKMENT AROUND DAKSHINER HAOR (FROM KM 0.00 TO KM 33.520)	
CROSS SECTIONS WITH DESIGN SECTIONS (THE EMBANKMENT)	
CHECKED BY:	
RECOMMENDED BY:	
APPROVED BY:	









1. SURVEY DATA FOR THIS DRAWING HAS BEEN CONDUCTED BY IWM.

12. EARTHWORK SHOULD BE COMPLETED BY FEBRUARY FOR EFFECTIVENESS OF WORK.

13. CREST WIDTH OF CLOSURE IS KEPT AS 4.30 m AS THE CLOSURE ARE PLANNED TO

- BE USED AS ROAD BY THE PEOPLE, SIDE SLOPE OF 1:3 ON BOTH SIDES WAS RECOMMENDED BY IICA PREPARATORY STUDY CONSIDERING DECREASE OF

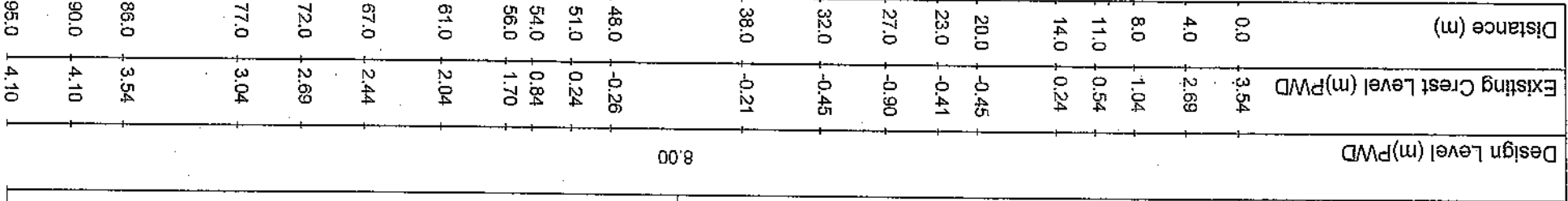
- STRENGTH BY 60% FOUND IN DRY-WET CYCLE TEST WITH 90% DEGREE OF

- COMPACTION WITH REFERENCE TO STANDARD PROCTOR TEST (ASTM-698).

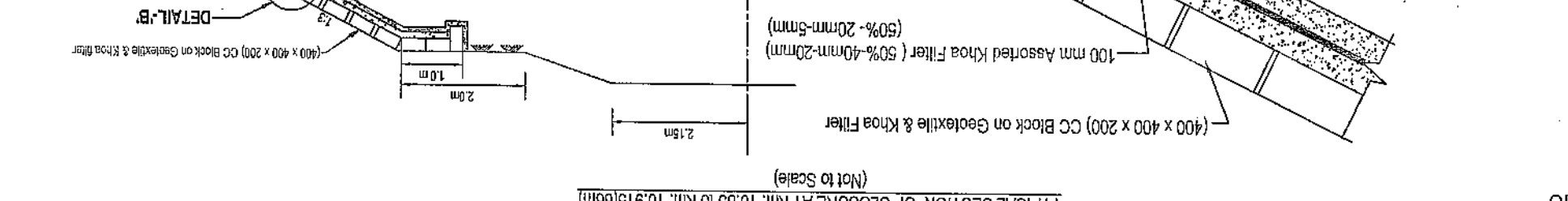
- 2.00 BENCH MARK TO BE PLACED BELOW 1.00 INCH OF GEOSYNTHETIC LEVEL  
C.C. BLOCK (400 x 400 x 200) WILL BE PLACED ON THE SLOPE BELOW

- BERM OVER GEOTEXTILE AND KHOA

BERM OVER GEOTEXTILE AND KHOA



LONG SECTION 3A AT Km. 10.850 to Km. 10.915



**DETAIL-A'**

DETAIL 'B'

DETAIL-B

100 mm Thick Sand Filter (FM > 1.50)

2.0 mm Thick Geotextile Filter Cloth

100 mm Assorted Khao Filter (50% -)

(400 x 400 x 200) CC Block on Geotextile & Khao

2.0 mm Thick Geotextile Filter Cloth.

2					CONSULTANTS:	Nippon Keel Co., Ltd (NKK), Joint Venture with BETS-CNRS		CHECKED BY:		RECOMMENDED BY:		APPROVED BY:																			
						DRAWN BY:		DESIGNED BY:		CHECKED BY:		RECOMMENDED BY:																			
1					E. Chowdhury	W. K. K. K.																									
						Antur Kawsar Wakes		A.Q. Mohammad Ali		EE, DESIGN CIRCLE - 1		SE, DESIGN CIRCLE - 1		Saeeda Nazreen																	
NO.				DATE				MADE				RECOM.				APV.				REVISION				AUTO CAD OPERATOR							
CO-TEAM LEADER				CO-TEAM LEADER				DESIGN ENGINEER				CO-TEAM LEADER				CO-TEAM LEADER				DWG. NO.: KISHORE-DAKSHINER HAOR-EMB-00000				SHEET: 62 / 62				CE, DESIGN			