

# Bangladesh Water Development Board

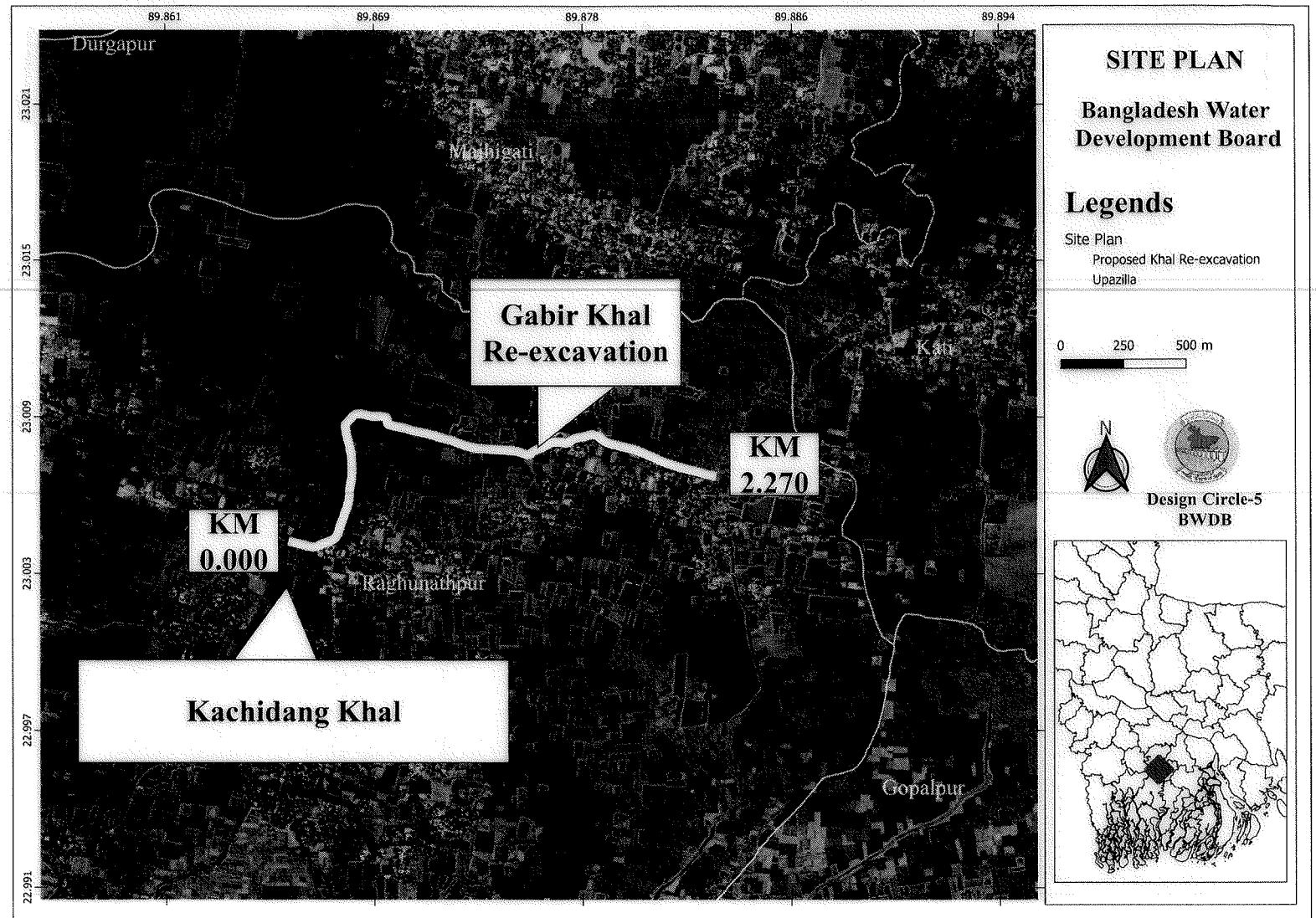
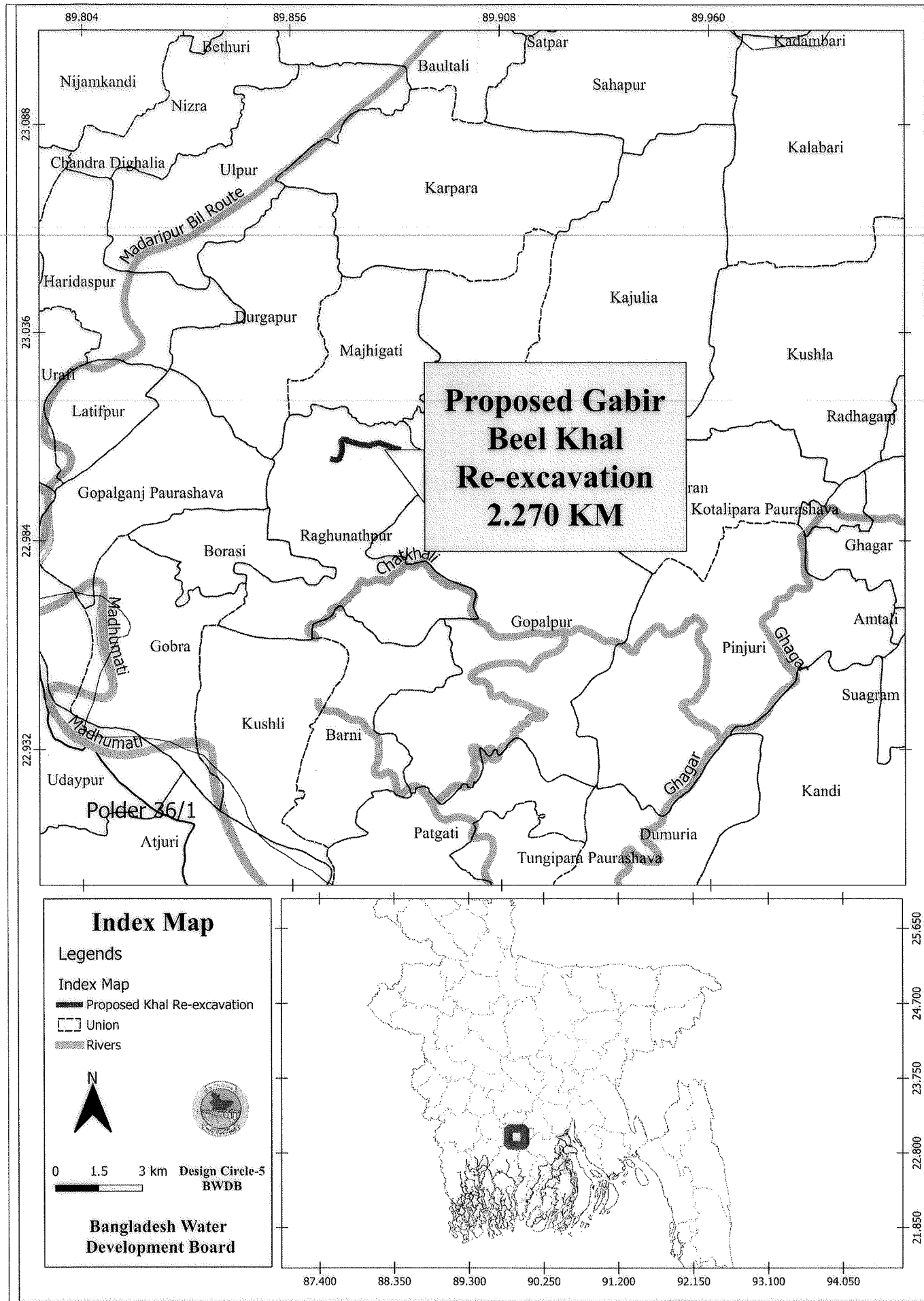
## CRISP-WRM

Re-excavation of Gabir Beel Khal from km. 0.000 to km. 2.270 in polder -2 in c/w Tarail-Pachuria  
Sub-Project under CRISP-WRM under Specialized Division. BWDB, Gopalganj during the year 2024-2025

SMO, IDWRM-KT

Designed by: Design Circle-5, BWDB, Dhaka

February, 2025




Bangladesh Water Development Board


Office of The Superintending Engineer, Design Circle-5


CRISP-WRM

Re-excavation of Gabir Beel Khal from km. 0.000 to km. 2.270 in polder -2 in c/w Tarail-Pachuria Sub-Project under CRISP-WRM under Specialized Division. BWDB, Gopalganj during the year 2024-2025

INDEX MAP & SITE MAP FOR GABIR BEEL KHAL

DESIGNED BY:  
  
(MD. MOSTAFA KAMAL), AE

APPROVED BY:  
  
(JAKARIA PERVEZ), SE

CHECKED AND RECOMMENDED BY:  
  
(KAMRUL HASAN), EE

Date:04/02/2025




Drawing No:DC5-5781-01/15

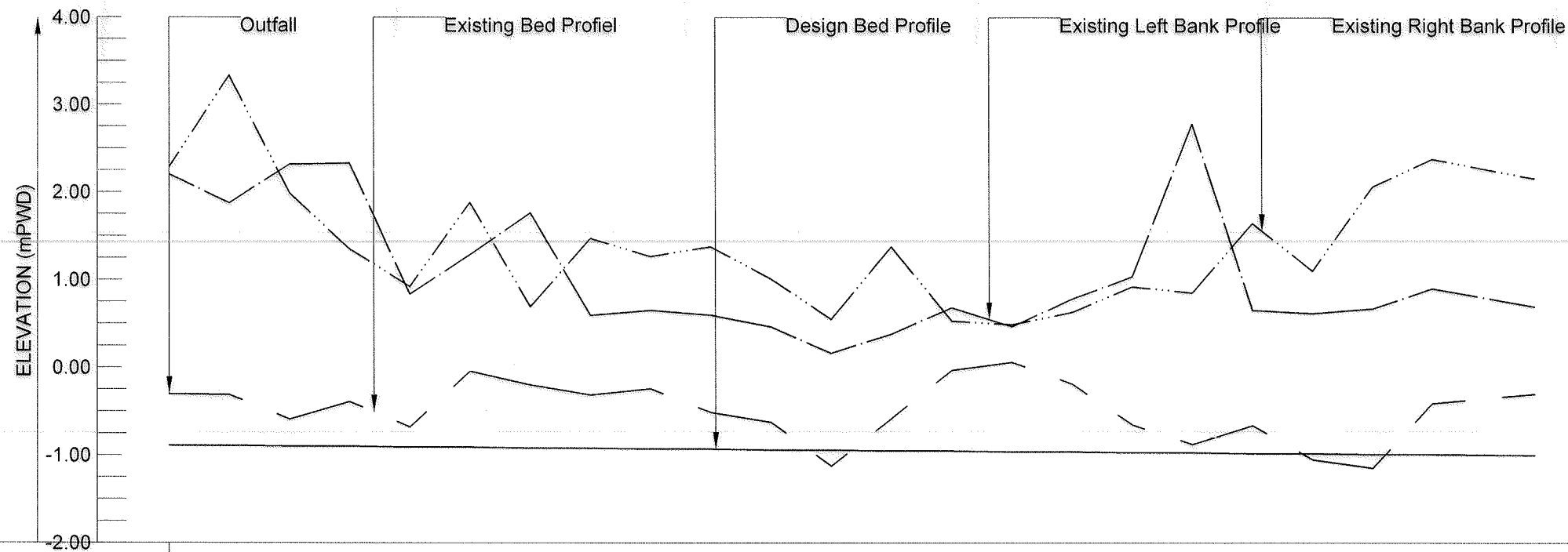
Adminstrative Notes. :

1. FOR ANY ERROR, OMISSION OR CONFUSION PLEASE REFER TO THIS OFFICE AS QUICK AS POSSIBLE FOR FURTHER NECESSARY ACTION
2. WORK SHALL BE EXECUTED AFTER ADMINISTRATIVE AND FINANCIAL APPROVAL AND TECHNICAL SANCTION FROM THE COMPETENT AUTHORITY AND WITHIN THE DPP / BUDGET PROVISION.
3. ALL DIMENSIONS AND ELEVATIONS ARE IN MILLIMETER AND METER(PWD) RESPECTIVELY UNLESS OTHERWISE MENTIONED IN THE DRAWING.
4. ALL MATERIALS AND WORK MUST CONFIRM WITH BWDB TECHNICAL SPECIFICATION.
5. NECESSARY LAND (IF REQUIRED) SHALL BE ARRANGED BY THE FIELD OFFICE FOR RE-EXCAVATION & CONSTRUCTION OF DYKE (IF REQUIRED).
6. THE RE-EXCAVATION OF THE KHAL SHALL START FROM DOWNSTREAM SIDE.
7. A SMOOTH TRANSITION SHALL BE PROVIDED BETWEEN THE EXCAVATED SECTION OF THE KHAL AND THE EXISTING SECTION.
8. A SMOOTH TRANSITION 1:100 SHALL BE PROVIDED AT THE POINT WHERE DESIGN BED WIDTH OR BED LEVEL CHANGES.
9. A SMOOTH TRANSITION AT A SLOPE OF 1:100 SHALL BE KEPT BETWEEN APRON LEVEL OF CONNECTING STRUCTURE (IF ANY) TO DESIGN BED LEVEL OF KHAL.
10. THE RE-EXCAVATION WORK SHALL BE DONE IN THE DRY SEASON WHEN WATER LEVEL IS AT OR NEAR LOW WATER LEVEL
11. NO FILLING SHALL BE DONE WHERE THE EXISTING BED LEVEL OF THE KHAL IS LOWER THAN THE DESIGN BED LEVEL AND EXISTING SIDE SLOPE IS FLATTER THAN DESIGN SECTION.
12. ANY OUTFALL/OFFTAKE RIVER/KHAL WHICH IS CONNECTED WITH THE PROPOSED KHAL SHALL BE KEPT OPEN.
13. TYPICAL DESIGN SECTIONS ARE PROVIDED IN THIS DESIGN FOR RE-EXCAVATION. CROSS SECTIONS AT AN INTERVAL NOT MORE THAN 150.00M TO BE TAKEN BY THE FIELD OFFICE FOR THE ESTIMATION OF ACTUAL VOLUME OF EARTH CUTTING.
- 14.EXCAVATED EARTH TO BE COLLECTED FROM RIVER CAREFULLY CONSIDERING NO ADVERSE EFFECT ON CHANNEL FLOW AND BANK ERROSION.
15. ANY PROPOSED BOX CULVERT /BRIDGE OVER THIS KHAL WILL BE DESIGNED CONSIDERING DESIGN SECTIONS OF THIS KHAL

SPECIAL NOTES :

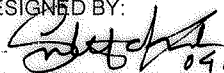

1. THIS REVISED DRAWING HAS BEEN PREPARED AS PER PROPOSAL AND DESIGN DATA SUBMITTED BY PD,CRISP-WRM HIS OFFICE MEMO NO-PMO/190; DATE: 11/11/2024
2. THIS RE-REEXCAVATION WORK HAS ALSO BEEN DESIGNED CONSIDERING THE WATER RESERVOIR AS WELL AS FOR IRRIGATION PURPOSE.
3. IF THE EXISTING BED LEVEL OF THE OUTFALL (RIVER / KHAL) IS HIGHER THAN DESIGN BED LEVEL OF THIS KHAL, RE-EXCAVATION OF THIS KHAL MUST BE DONE IN PARALLEL/ AFTER THE RE-EXCAVATION OF ITS OUTFALL RIVER / KHAL AS PER APPROVED DESIGN.
4. IF THERE EXISTS ANY STRUCTURE ( REGULATOR, BOX CULVERT ETC.) OTHER THAN BRIDGE WITHIN THE PROPOSED LENGTH OF THE KHAL, RE-EXCAVATION WORK IS PROHIBITED THROUGHTOUT THE LENGTH OF THAT STRUCTURE.
5. DESIGN BED LEVEL OF THE KHAL SHALL NOT BE BELOW THE FOUNDATION TOP LEVEL OF THE EXISTING STRUCTURES (IF ANY) IN THE KHAL. IF THE DESIGN BED LEVEL IS BELOW THE FOUNDATION TOP LEVEL THEN THE DIFFERENCE BETWEEN THESE LEVELS SHALL BE MATCHED IN A SLOPE 1:100, OR A DISTANCE OF 100 M, WHICHEVER IS HEIGHER (U/S AND D/S OF THE STRUCTURE), (OR AS SHOWN IN THE DRAWING).
6. DESIGN BED LEVEL & BED WIDTH OF THIS KHAL HAVE BEEN FIXED CONSIDERING THE BED LEVEL & BED WIDTH OF EXISTING KHAL/ FLOOR LEVEL OF EXISTING HYDRAULIC STRUCTURE.
7. ALL SAFETY PRECAUTION MUST BE TAKEN DURING EXECUTION OF WORK.

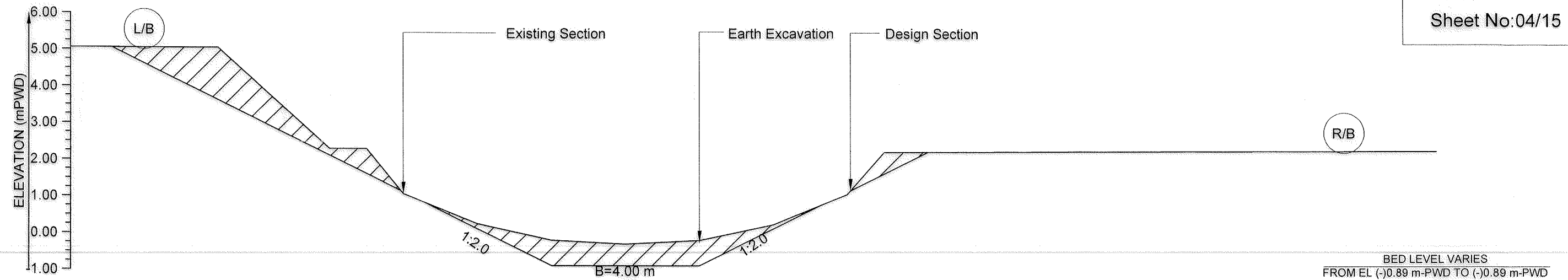
Bangladesh Water Development Board	
Office of The Superintending Engineer,Design Circle-5	
CRISP-WRM	
Re-excavation of Gabir Beel Khal from km. 0.000 to km. 2.270 in polder -2 in c/w Tarail-Pachuria Sub-Project under CRISP-WRM under Specialized Division. BWDB, Gopalganj during the year 2024-2025	
NOTES FOR GABIR BEEL KHAL	
DESIGNED BY:  (MD. MOSTAFA KAMAL),AE	APPROVED BY:  (JAKARIA PERVEZ),SE
CHECKED AND RECOMMENDED BY:  (KAMRUL HASAN),EE	
Date:04/02/2025	Drawing No:DC5-5781-02/15



Distance(Km)	Existing Right Bank Level (mPWD)	Existing Left Bank Level (mPWD)	Existing Bed Level (mPWD)	Design Bed Level (mPWD)	Design Bed Width(m)
0.000	2.200	2.284	(-)0.304	(-)0.890	-2.00
0.100	1.875	3.332	(-)0.313		
0.200	2.316	1.988	(-)0.592	(-)0.900	
0.300	2.331	1.351	(-)0.392		
0.400	0.833	0.921	(-)0.681	(-)0.910	
0.500	1.284	1.880	(-)0.047		
0.600	1.763	0.691	(-)0.201	(-)0.920	
0.700	0.592	1.470	(-)0.314		
0.800	0.649	1.265	(-)0.244	(-)0.930	
0.900	0.597	1.375	(-)0.513		
1.000	0.463	1.012	(-)0.624	(-)0.940	
1.100	0.163	0.551	(-)1.123		
1.200	0.382	1.378	(-)0.581	(-)0.950	
1.300	0.682	0.531	(-)0.032		
1.400	0.468	0.489	0.060	(-)0.960	
1.500	0.781	0.629	(-)0.189		
1.600	1.034		(-)0.654	(-)0.970	
1.700	2.783	0.852	(-)0.876		
1.800	0.652	1.645	(-)0.663	(-)0.980	
1.900	0.616	1.101	(-)1.052		
2.000	0.671	2.064	(-)1.147	(-)0.990	
2.100	0.901	2.379	(-)0.409		
2.270	0.693	2.157	(-)0.303	(-)1.000	

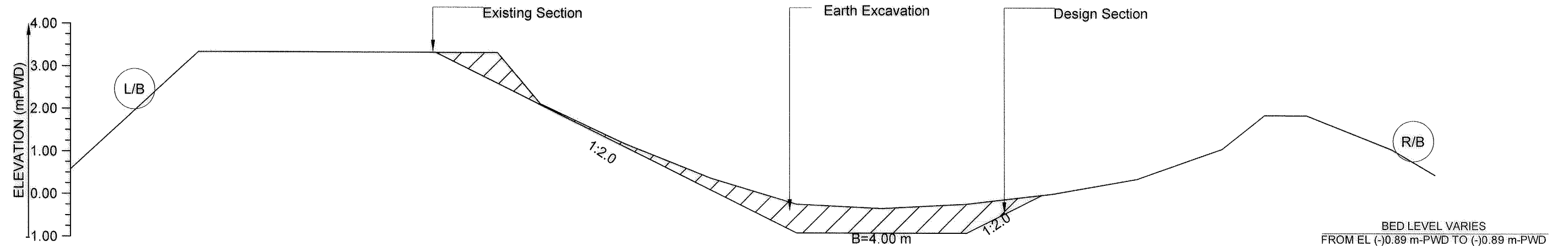
LONG SECTION OF GABIR BEEL KHAL APPLICABLE FROM KM 0.000 TO KM 2.270

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CHECKED AND RECOMMENDED BY:  (KAMRUL HASAN), EE	
Date: 04/02/2025	Drawing No: DC5-5781-03/15




Design Bed Level in (mPWD)	Existing Bed Level in (mPWD)	Distance(m)
	5.053	0.000
		4.000 5.041
		7.000 2.293
		8.000 2.284
		9.000 1.057
		9.564 0.828
		11.000 0.245
		11.282 0.182
		13.000 -0.200(-0.890)
		15.000 -0.304(-0.890)
		17.000 -0.202(-0.890)
		18.649 0.147
		19.000 0.221
		20.298 0.759
		21.000 1.050
		22.000 2.200
		27.000 2.222
		32.000 2.233
		37.000 2.245

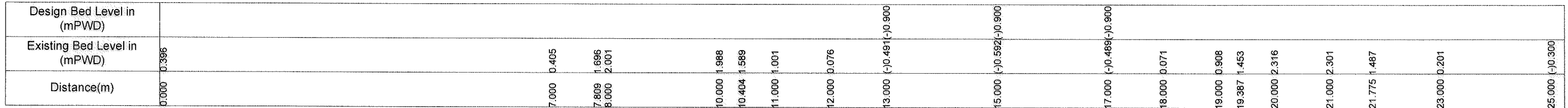
TYPICAL CROSS SECTION OF GABIR BEEL KHAL AT KM 0.000  
APPLICABLE FROM KM 0.000 TO KM 0.050



Design Bed Level in (mPWD)																					
Existing Bed Level in (mPWD)	0.575																				
Distance(m)	0.000	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	10.000	11.000	11.886	12.771	13.000	15.000	17.000	18.000	19.000	21.000	22.000
		3.344	3.334	3.332	2.131	1.290	1.184	0.387	-0.214	-0.390	-0.209	-0.390	-0.107	-0.004	0.022	0.376	0.083	0.875	0.866	0.071	0.473

TYPICAL CROSS SECTION OF GABIR BEEL KHAL AT KM 0.100  
APPLICABLE FROM KM 0.050 TO KM 0.150

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Re-excavation of Gabir Beel Khai from km. 0.000 to km. 2.270 in polder -2 in c/w Tarail-Pachuria Sub-Project under CRISP-WRM under Specialized Division. BWDB, Gopalganj during the year 2024-2025	
TYPICAL CROSS SECTION OF GABIR BEEL KHAL	
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Date: 04/02/2025	Drawing No: DC5-5781-04/15

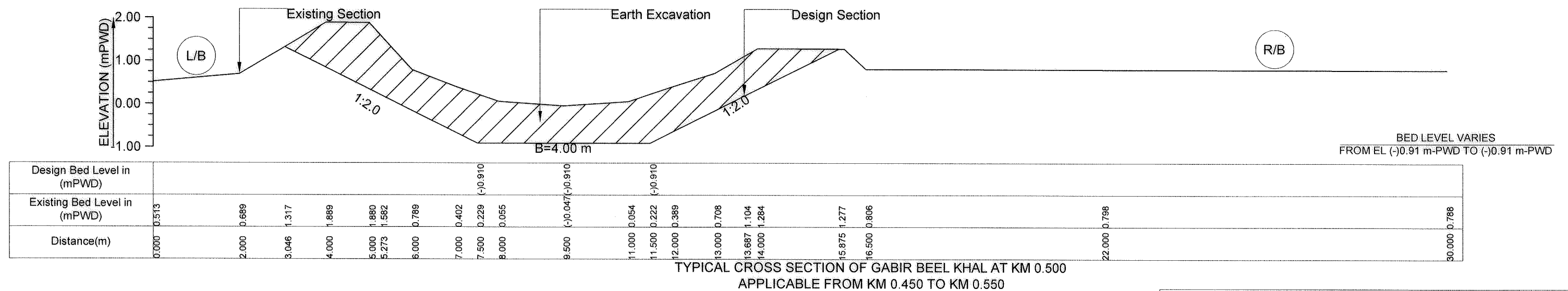
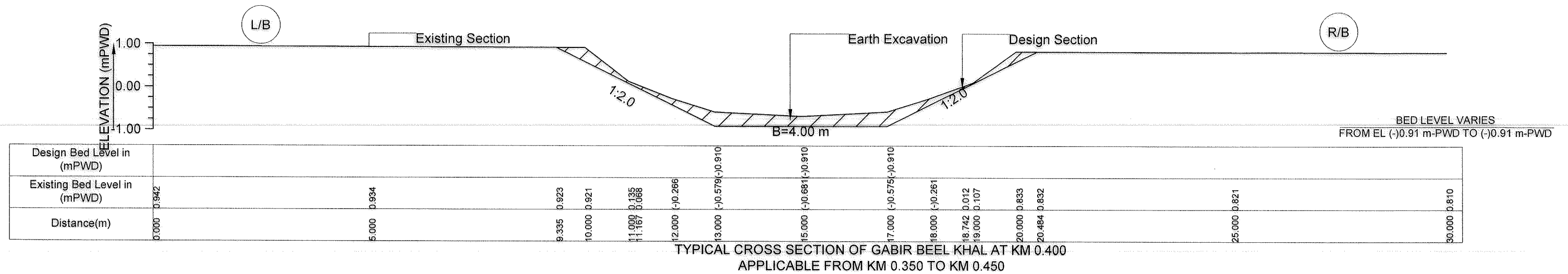


The diagram illustrates a cross-section of a road profile. The vertical axis represents ELEVATION (mPWD) from -1.00 to 3.00. The horizontal axis represents BED LEVEL FROM EL (-)0.90 m-PWD. The road profile is shown with a 4.00 m wide excavation (B=4.00 m) and a 1:2.0 slope. The existing section is on the left, and the design section is on the right. The road is labeled L/B and R/B.

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DESIGNED BY:  (MD. MOSTAFA KAMAL), AE	APPROVED BY:  (JAKARIA PERVEZ), SE
CHECKED AND RECOMMENDED BY:  (KAMRUL HASAN), EE	
Date: 04/02/2025	Drawing No: DC5-5781-05/15





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Office of The Superintending Engineer, Design Circle-5


CRISP-WRM

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TYPICAL CROSS SECTION OF GABIR BEEL KHAL

DESIGNED BY:  09.02.25  
(MD. MOSTAFA KAMAL), AE

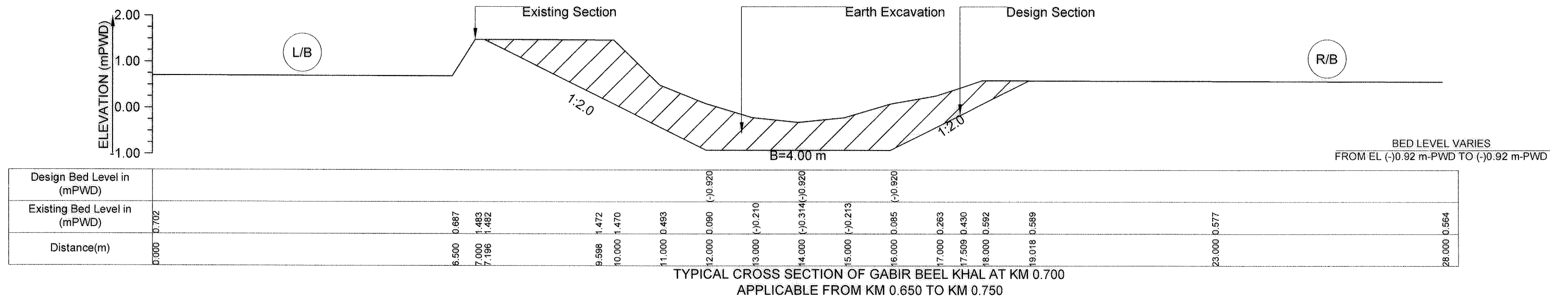
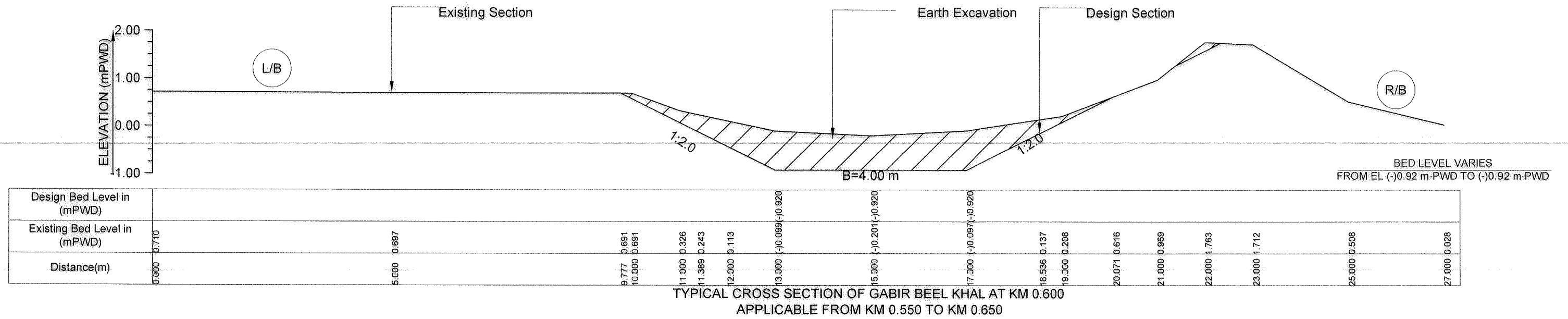
APPROVED BY:




CHECKED AND RECOMMENDED BY:  
  
 (KAMRUL HASAN), EE

(JAKARIA PERVEZ),SE

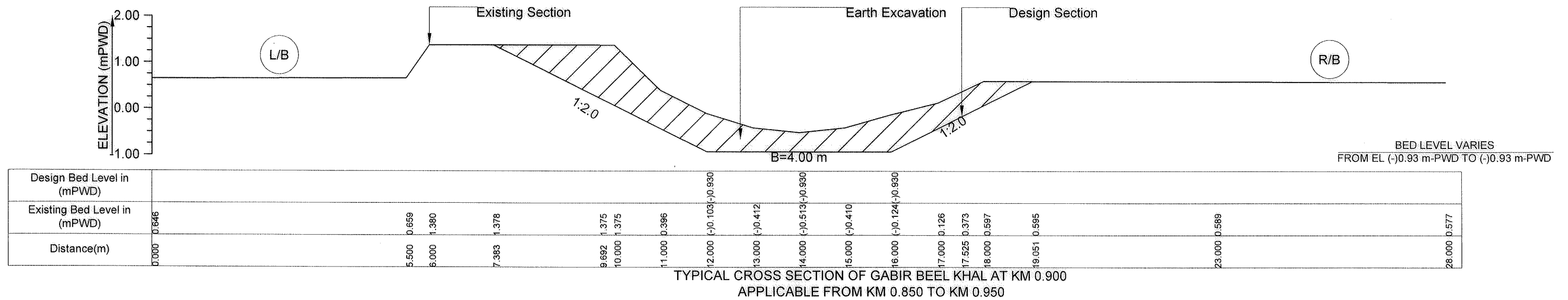
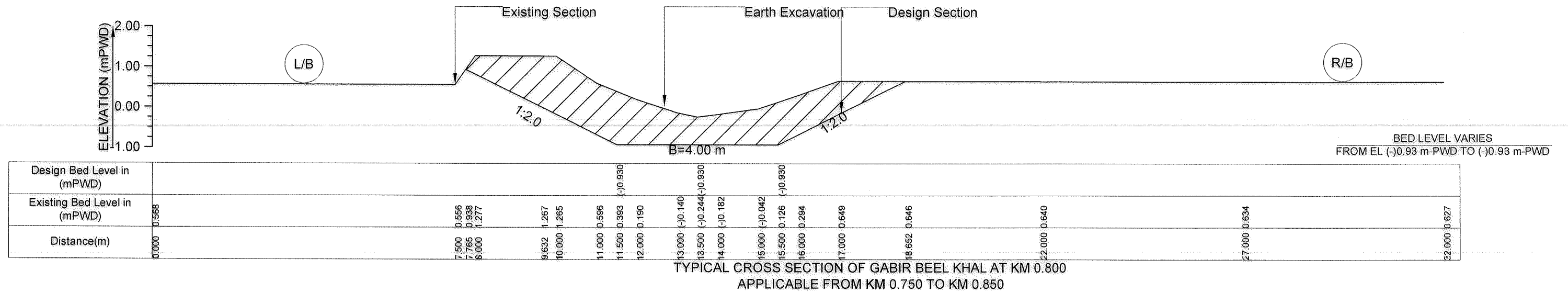
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Drawing No:DC5-5781-06/15

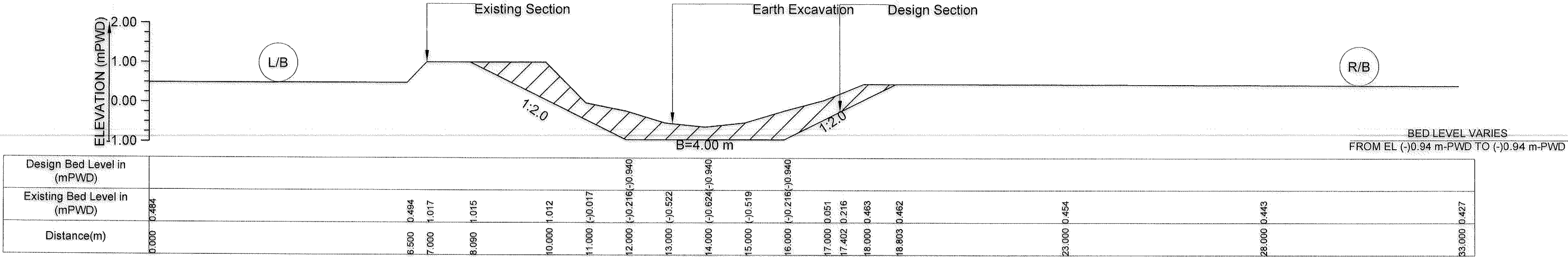


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TYPICAL CROSS SECTION OF GABIR BEEL KHAL AT KM 1.000  
APPLICABLE FROM KM 0.950 TO KM 1.050

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TYPICAL CROSS SECTION OF GABIR BEEL KHAL

DESIGNED BY:  
*[Signature]*  
(MD. MOSTAFA KAMAL),AE

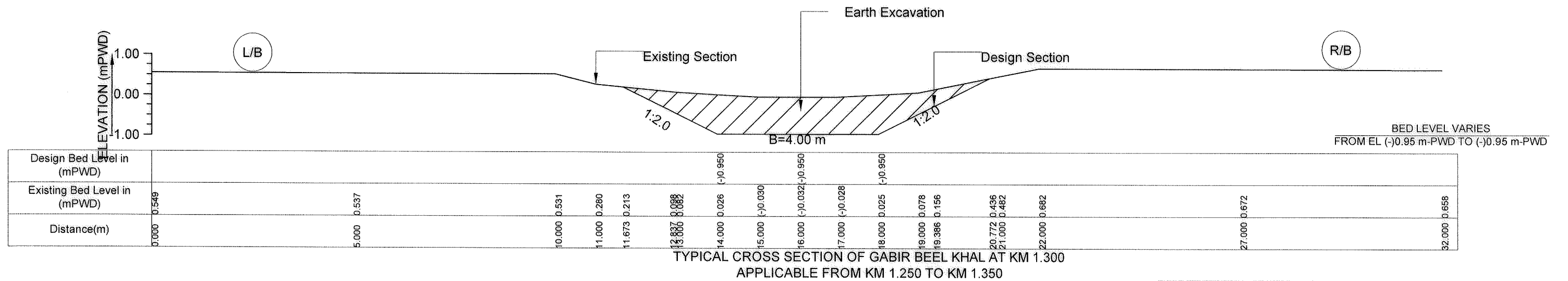
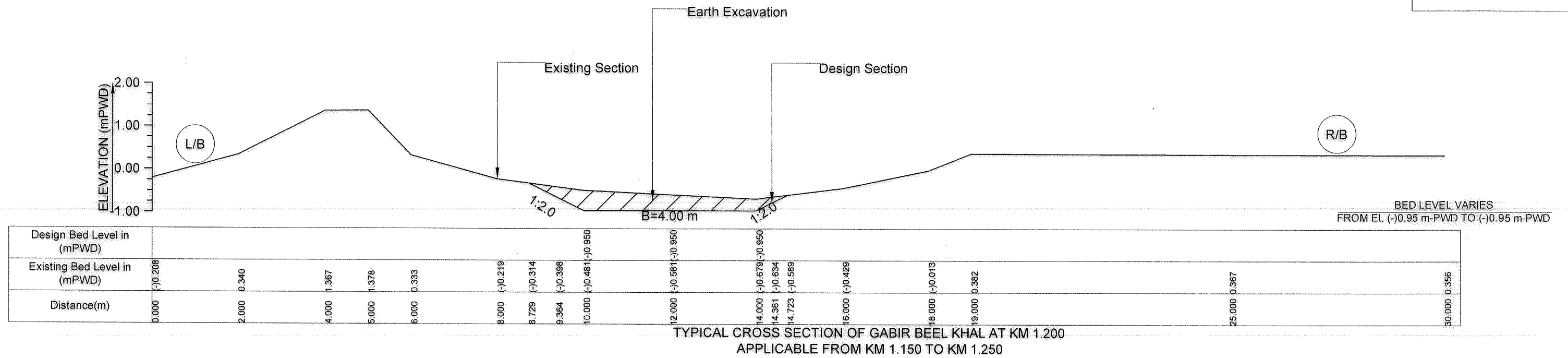
APPROVED BY:

*[Signature]*  
(JAKARIA PERVEZ),SE

CHECKED AND RECOMMENDED BY:  
*[Signature]*  
(KAMRUL HASAN),EE

Date:04/02/2025

Drawing No:DC5-5781-09/15



Bangladesh Water Development Board

Office of The Superintending Engineer, Design Circle-5


CRISP-WRM
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TYPICAL CROSS SECTION OF GABIR BEEL KHAL

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APPROVED BY: \_\_\_\_\_

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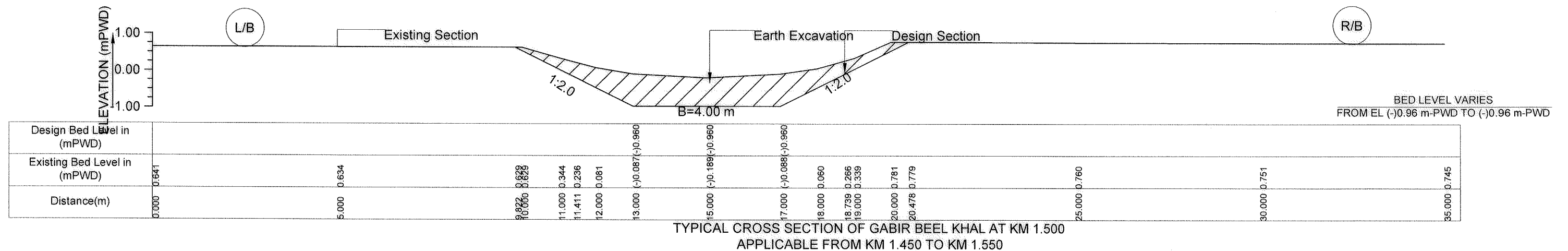
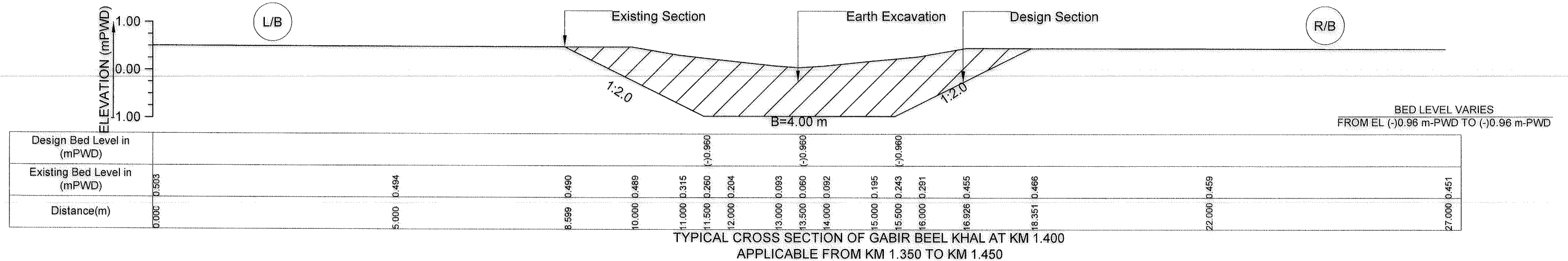
APPROVED BY:

  
04.02.25

(JAKARIA PERVEZ), SE

Date:04/02/2025

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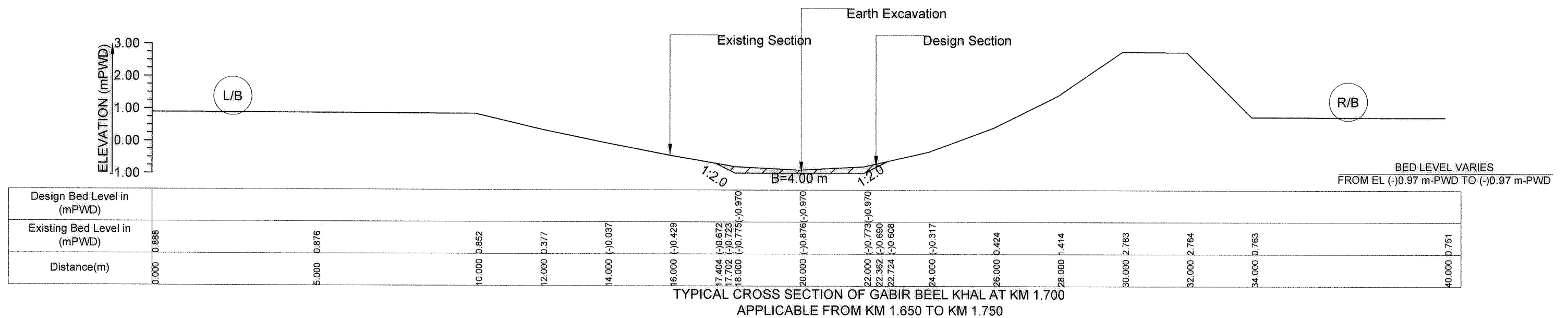
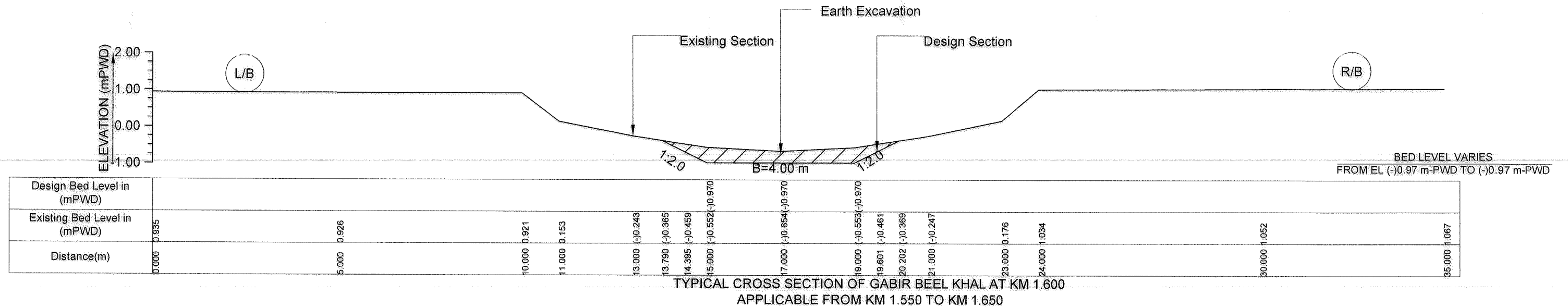
(KAMRUL HASAN), EE

APPROVED BY:

(JAKARIA PERVEZ), SE

Date: 04/02/2025

Drawing No: DC5-5781-11/15



Bangladesh Water Development Board

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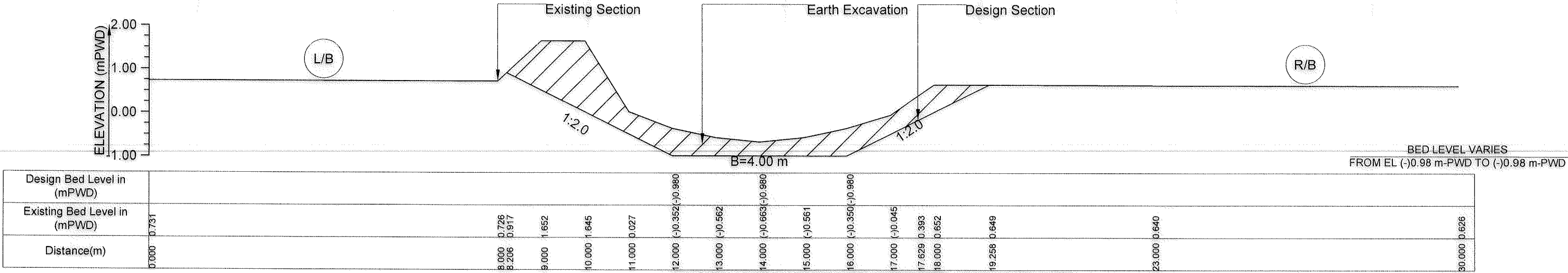
(KAMRUL HASAN), EE

APPROVED BY:

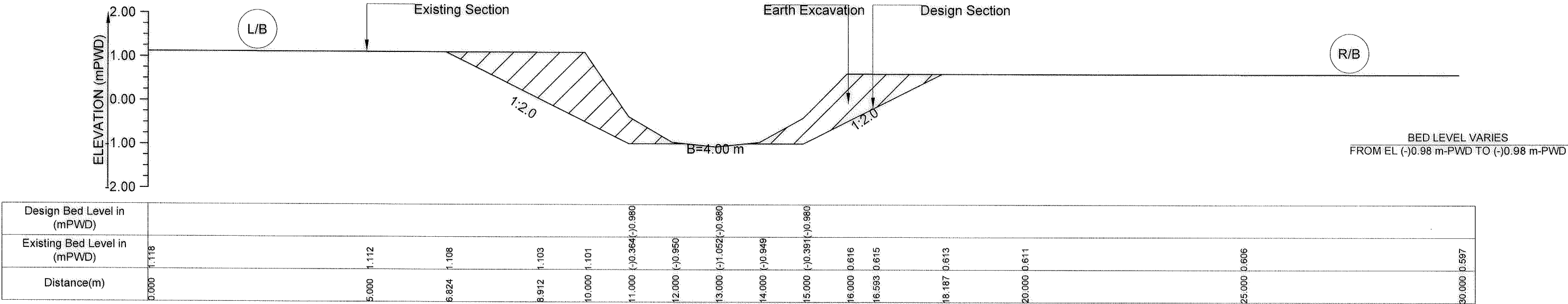
(JAKARIA PERVEZ), SE

Date: 04/02/2025



Drawing No: DC5-5781-12/15



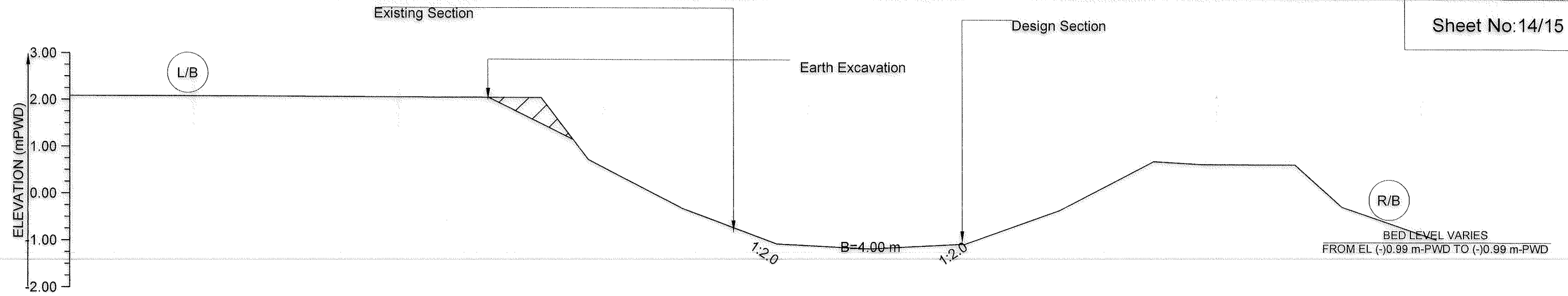
TYPICAL CROSS SECTION OF GABIR BEEL KHAL AT KM 1.800  
APPLICABLE FROM KM 1.750 TO KM 1.850



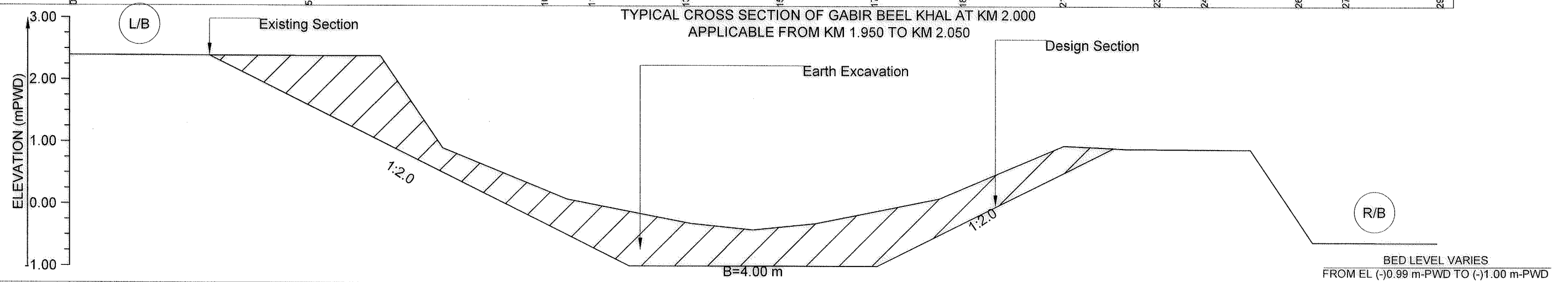
TYPICAL CROSS SECTION OF GABIR BEEL KHAL AT KM 1.900  
APPLICABLE FROM KM 1.850 TO KM 1.950

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Date:04/02/2025	Drawing No:DC5-5781-13/15





Design Bed Level in (mPWD)	
Existing Bed Level in (mPWD)	2.084
Distance(m)	0.000 2.000 4.000 6.000 8.000 10.000 12.000 14.000 16.000 18.000 20.000 22.000 24.000 26.000 28.000 30.000
	2.084 2.078 2.064 2.042 2.025 2.004 1.948 1.990 1.947 1.950 1.9322 1.733 1.671 1.664 1.236 1.929



Design Bed Level in (mPWD)	Existing Bed Level in (mPWD)	Distance(m)
	2.393	0.000
	2.387	2.247
	2.379	6.000
	1.458	6.623
	0.901	6.000
	0.082	8.000
	(-0.112)(-0.990)	9.000
	(-0.306)	10.000
	(-0.408)(-0.990)	11.000
	(-0.308)	12.000
	(-0.107)(-0.990)	13.000
	0.094	14.000
	0.480	14.901
	0.950	16.000
	0.911	16.801
		17.000
	0.889	19.000
	(-0.602)	20.000
		22.000
	(-0.606)	

TYPICAL CROSS SECTION OF GABIR BEEL KHAL AT KM 2.100  
APPLICABLE FROM KM 2.050 TO KM 2.185

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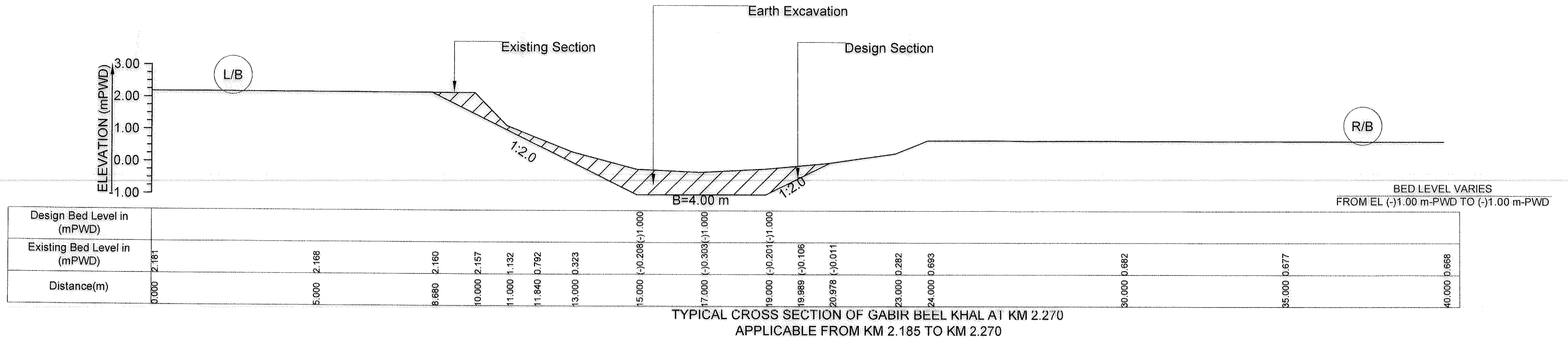
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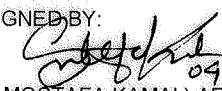


CHECKED AND RECOMMENDED BY:  
  
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(JAKARIA PERVEZ), SE

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Drawing No:DC5-5781-14/15



Bangladesh Water Development Board	
Office of The Superintending Engineer,Design Circle-5	
CRISP-WRM	
Re-excavation of Gabir Beel Khal from km. 0.000 to km. 2.270 in polder -2 in c/w Tarail-Pachuria Sub-Project under CRISP-WRM under Specialized Division. BWDB, Gopalganj during the year 2024-2025	
TYPICAL CROSS SECTION OF GABIR BEEL KHAL	
DESIGNED BY:  (MD. MOSTAFA KAMAL),AE	APPROVED BY:  (JAKARIA PERVEZ),SE
CHECKED AND RECOMMENDED BY:  (KAMRUL HASAN),EE	
Date:04/02/2025	Drawing No:DC5-5781-15/15