

# Bangladesh Water Development Board

Protection of Talbaria area of Mirpur Upazila & Kamorkandi area of Shelaiddah Union of Kumarkhali Upazila in Kushtia District from the erosion of Padma River

Design of Protective Work along the R/B of Padma River from KM 6.720 to KM 15.720=9.000 KM at Talbaria, Baruipara and Bahalbaria union, Upazila: Mirpur, District: Kushtia Kushtia O & M Division, BWDB, Kushtia.

Kushtia O&M Division-1

Designed by:Design Circle-5,BWDB,Dhaka

January,2025

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**Bangladesh Water Development Board**

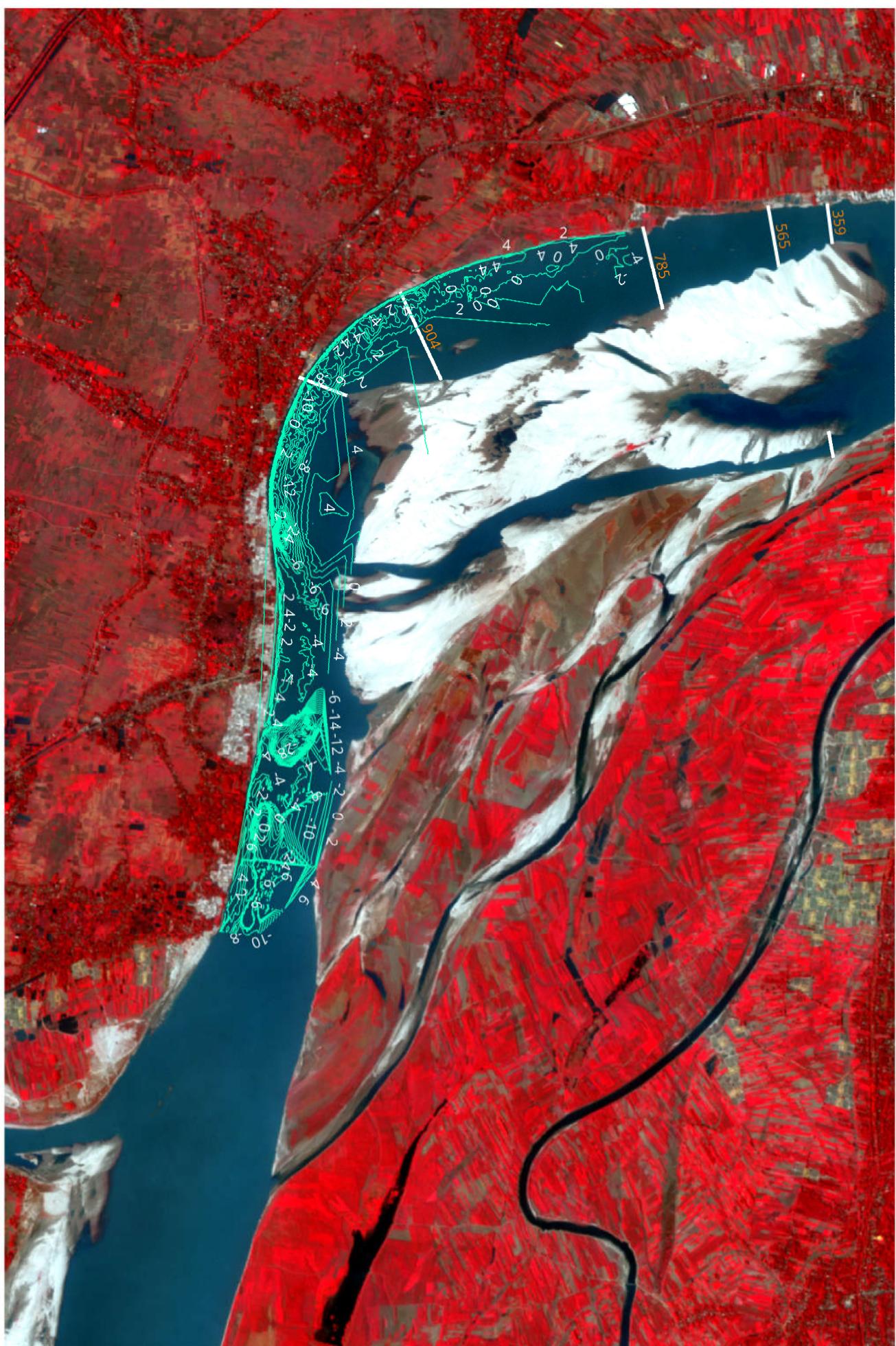
**Office of The Superintending Enginner,Design Circle-2**

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Kushtia District from the erosion of Padma River

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at Talbaria, Baruipara and Bahabaria union, Upazila: Mijpur, District: Kushtia Kushtia O & N  
Division, BWDB, Kushtia.

**DETAILS**

DESIGNED BY: (SHAMMI AKHTER),SDE	RECOMMENDED BY: (JAKARIA PERVEZ),SE
CHECKED BY: (MST.TASMEM JAHAN),EE	APPROVED BY: (MD MAHFUZUR RAHMAN),CE,DESIC
DATE:XX-XX-XXXX	Drawing No:DC-5-XXXX-XX/XX



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(MST.TASMEM JAHAN),EE	(MD MAHFUZR RAHMAN),CE,DESIC

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<b>Office of The Superintending Engineer, Design Circle-2</b>	
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<b>SITE PLAN</b>	
DESIGNED BY:  (SHAMMI AKHTER),SDE	RECOMMENDED BY:  (JAKARIA PERVEZ),SE
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DATE:XX-XX-XXXX	Drawing No:DC-5-XXXX-XX/XX

# MINUTES OF DESIGN REVIEW MEETING

<b>Bangladesh Water Development Board</b>	
<b>Office of The Superintending Engineer, Design Circle-2</b>	
<p>Protection of Talbaria area of Mipur Upazila &amp; Kamarkandi area of Shelaiddah Union of Kumirkhali Upazila Kushtia District from the erosion of Padma River</p> <p>Design of Protective Work along the R/B of Padma River from KM 6.720 to KM 15.720-9.000 ft at Talbaria, Baruapara and Bahabaria union, Upazila: Mipur, District: Kushtia O &amp; N Division, BWDB, Kushtia.</p>	
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<b>NOTES</b>	
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CHECKED BY:  (MST.TASMEM JAHAN),EE	APPROVED BY:  (MD. MAHFUZR RAHMAN),CE,DESIC
DATE:XX-XX-XXXX	Drawing No:DC-5-XXXX-XX/XX

1. THIS WORKING DRAWING FOR PROTECTION WORK HAS BEEN PREPARED BASED ON DATA SENT BY THE SUPERINTENDING ENGINEER, KUSHTIA O&M CIRCLE, BWDB, KUSHTIA VIDE HIS OFFICE MEMO NO: 6P-14/1045, DATE: 24/01/2024.
2. FOR ANY ERROR, OMISSION OR CONFUSION PLEASE REFER TO THIS OFFICE AS QUICK AS POSSIBLE FOR NECESSARY ACTION.
3. THE WORK SHALL BE EXECUTED WITH PRIOR FINANCIAL & ADMINISTRATIVE APPROVAL, TECHNICAL SANCTION FROM THE COMPETENT AUTHORITY AND WITHIN DPP/BUDGET PROVISION.
4. ALL DIMENSIONS ARE IN MILLIMETRE (mm) AND ALL ELEVATIONS ARE IN METRE (PWD) UNLESS OTHERWISE MENTIONED IN THE DRAWING.
5. THE MATERIAL & WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF BWDB MANUAL.
6. NECESSARY LAND (IF REQUIRED) SHALL BE ARRANGED BY FIELD OFFICE BEFORE EXECUTION OF WORK.
7. THE GEO-TEXTILE FILTER HAVE THICKNESS  $\geq$  3.00 mm.
8. GEO-TEXTILE FILTER SHALL BE EXTENDED UPTO 1000 mm BELOW THE WORKING LOW W.L./TOE OF PITCHING WORK AS SHOWN IN THE DRAWING.
9. GEO-TEXTILE MATERIALS SHALL BE PRESERVED AGAINST UV RAY AND FROM ANY OTHER DAMAGES.
10. GEO-TEXTILE MATERIALS AFTER PLACING SHALL NEVER BE EXPOSED TO SUNLIGHT. GEO-TEXTILE FILTER SHALL BE COVERED IMMEDIATELY AFTER PLACEMENT.
11. TO MAKE SAND LAYER BELOW GEO-TEXTILE BY USING F.M. 1.0 TO 1.50 OF SAND.
12. FULL LENGTH OF PROPOSED PROTECTIVE WORK SHALL BE DONE AT A TIME IN ONE DRY SEASON FOR EFFECTIVENESS.
13. IF THERE ARE ANY POND OR DITCH EXISTS WITHIN 100 m DISTANCE FROM THE RIVER BANK, IT MUST BE PROPERLY FILLED UPTO G.L WITH LOCAL EARTH AND SHALL BE COMPACTED AS PER SCHEDULE BEFORE STARTING THE PROTECTIVE WORK.
14. SLOPE OF PITCHING WORK SHALL BE MAINTAINED AS PER EXISTING SLOPE OR AS PER DESIGN SECTION, BUT NOT STEEPER THAN 3H:1V. ALL BANK IRREGULARITIES ABOVE WORKING WATER LEVEL SHALL BE REMOVED. NECESSARY CUTTING & FILLING SHALL BE DONE IN THIS RESPECT AS PER FIELD REQUIREMENT.
15. A SMOOTH TRANSITION TO BE PROVIDED BETWEEN HIGHER & LOWER LEVEL AND FLATTER & STEEPER SLOPE OF THE PROTECTIVE WORK. TOP LEVEL & SLOPE OF PITCHING WORK SHALL BE

16. AT THE STARTING AND AT THE END OF THE PROTECTIVE WORK TRANSITION TO THE EXISTING UNPROTECTED BANK OR THE PREVIOUSLY COMPLETED WORK MUST BE GRADUAL AND TANGENTIAL.
17. a) TO PREVENT BANK LINE SHIFTING AND CONSIDERING MANUFACTURING TIME OF C.C. BLOCK ADDITIONAL PROTECTION WORK MAY BE DONE AS PER DETAILS "A" (SEE SHEET NO. 27 of 33) (IF REQUIRED).
3. THE WORK SHALL BE EXECUTED WITH PRIOR FINANCIAL & ADMINISTRATIVE APPROVAL, TECHNICAL SANCTION FROM THE COMPETENT AUTHORITY AND WITHIN DPP/BUDGET PROVISION.
4. COUNTING AND QUALITY CONTROL FOR SUCH WORK SHALL CONFORM STANDARD PRACTICE OF BWDB.
5. THE MATERIAL & WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF BWDB MANUAL.
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**BANGLADESH WATER DEVELOPMENT BOARD**  
**OFFICE OF THE SUPERINTENDING ENGINEER**  
**DESIGN CIRCLE-5**

"Protection of Talbaria area of Mirpur Upazila & Kamarkandi area of Shelaiddah Union of Kumarkhali Upazila in Kushtia District from the erosion of Padma River"

Design of Protective Work along the R/B of Padma River from KM 6.720 to KM 15.720=9,000 KM at Talbaria, Baruipara and Bahalbaria union, Upazila: Mirpur, District: Kushtia  
 Kushtia O & M Division, BWDB, Kushtia.

**NOTES**

DESIGNED BY:

RECOMMENDED BY:

(SHAMMI AKHTER), SDE

CHECKED BY:

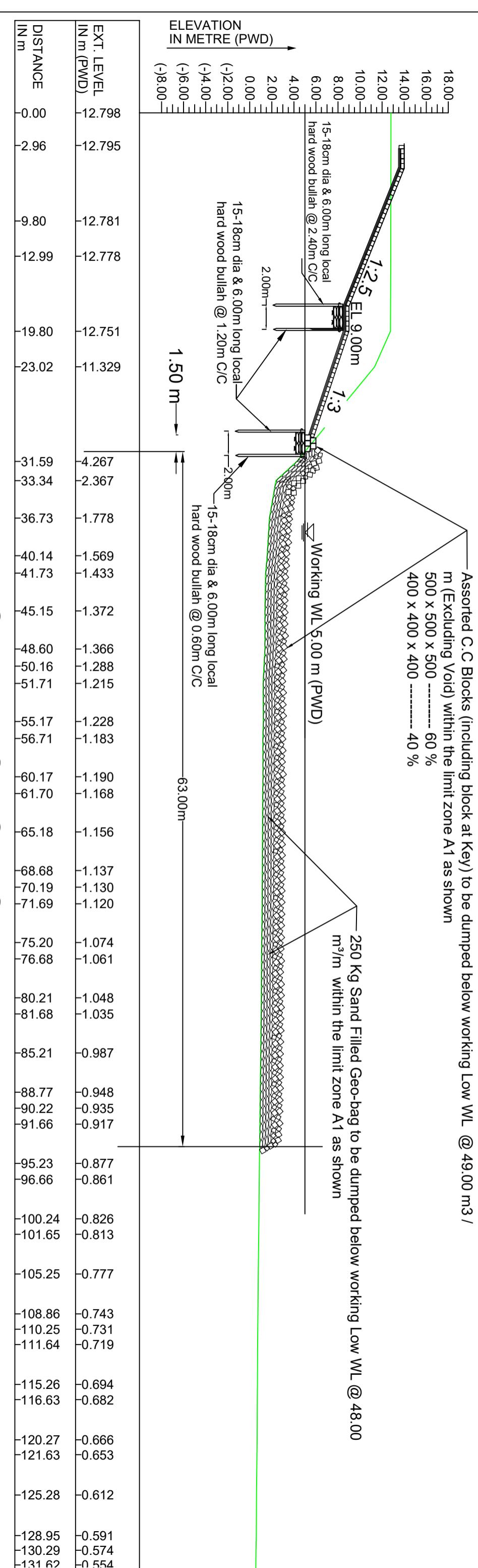
(JAKARIA PERVEZ), SE

APPROVED BY:

(MST. TASMEM JAHAN), EE

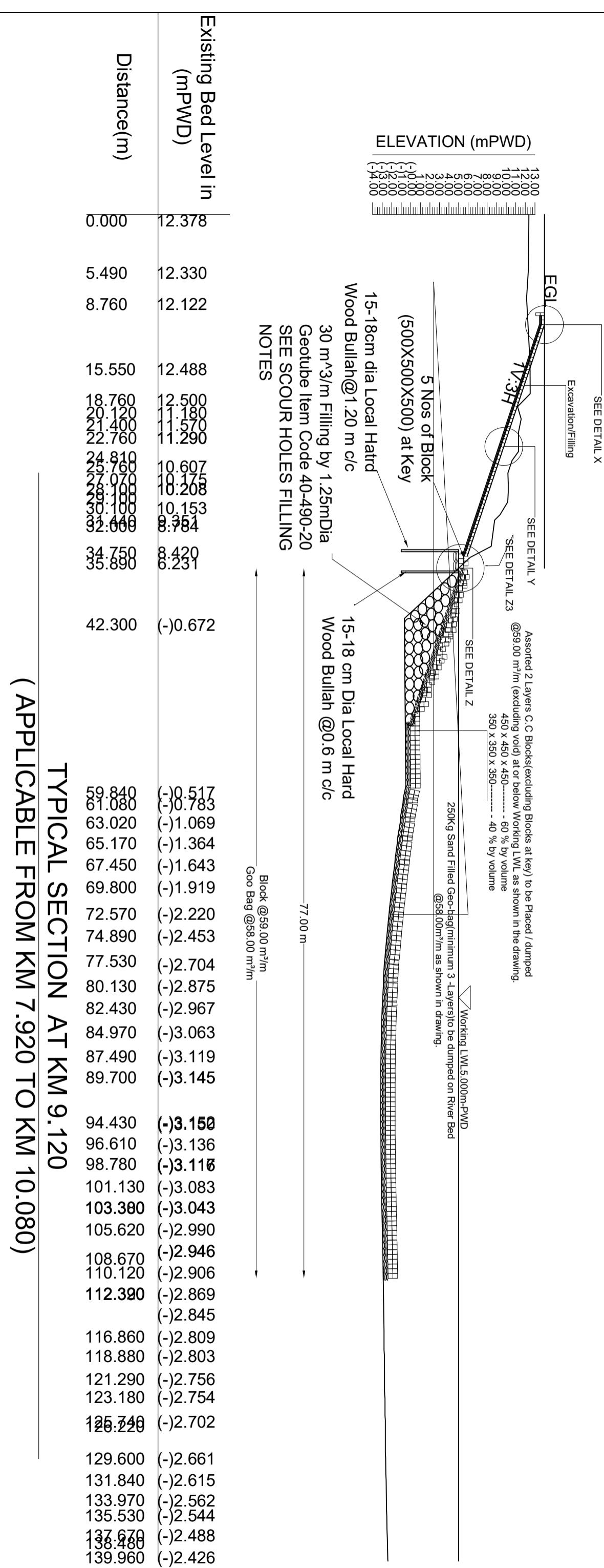
DATE: XX-XX-2025

DWG NO.: DC-5-0000-05/XXX

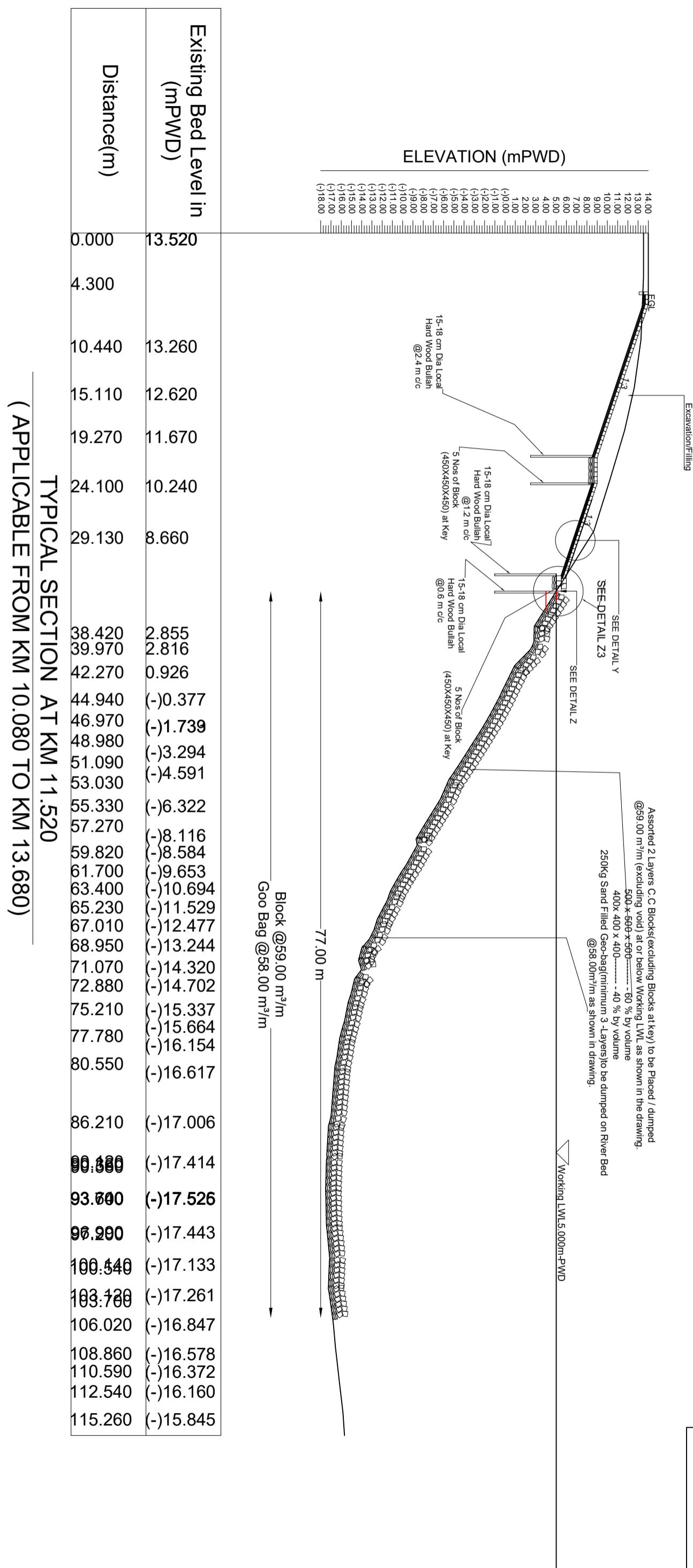


## TYPICAL X-SECTION AT KM 7.480 (Applicable from KM 6.720 TO KM 7.920)

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SECTION OF PROTECTIVE WORK AT KM 6.720
DESIGNED BY:
(SHAMMI AKHTER, SDE)
CHECKED BY:
(MST. TASMEM JAHAN, EE)
RECOMMENDED BY:
(JAKARIA PERVEZ), SE
APPROVED BY:
DATE: XX-XX-2025   DWG NO.: DC-5-0000-05/XXX

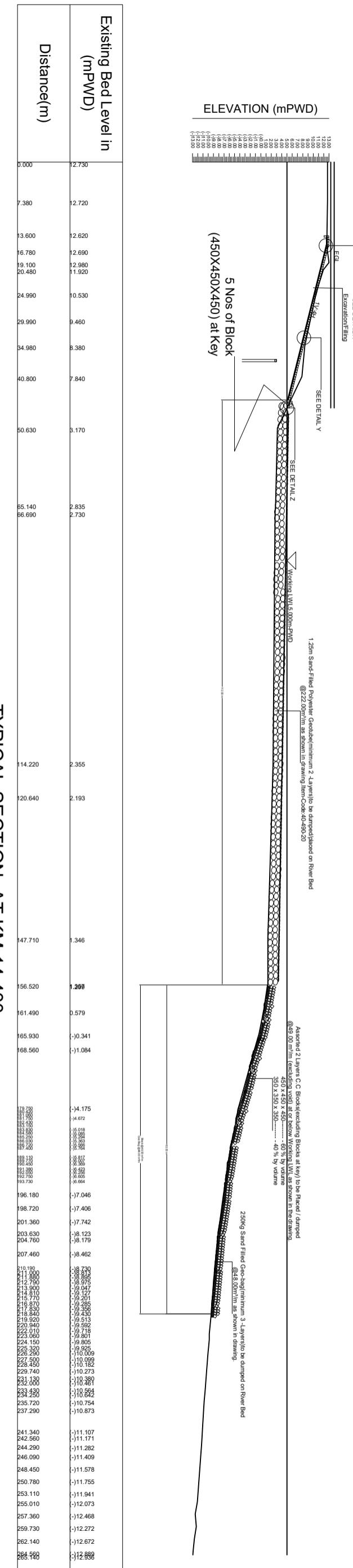


Bangladesh Water Development Board	
Office of The Superintending Engineer,Design	
Circle-5	
Protection of Talbaria area of Mirpur Upazila & Kamarkandi area of Shelaiahd Union	
Kumarkhali Upazila in Kushita District from the erosion of Padma River	
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15.720=9.000 KM at Talbaria, Barujpara and Bahalbaria union, Upazila: Mirpur, Distri	
Kushita Kushita O & M Division, BWDB, Kushita.	
<b>TYPICAL CROSS SECTION OF TALBARIA PROTECTIVE WORK</b>	
DESIGNED BY:	RECOMMENDED BY:
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CHECKED BY:	APPROVED BY:
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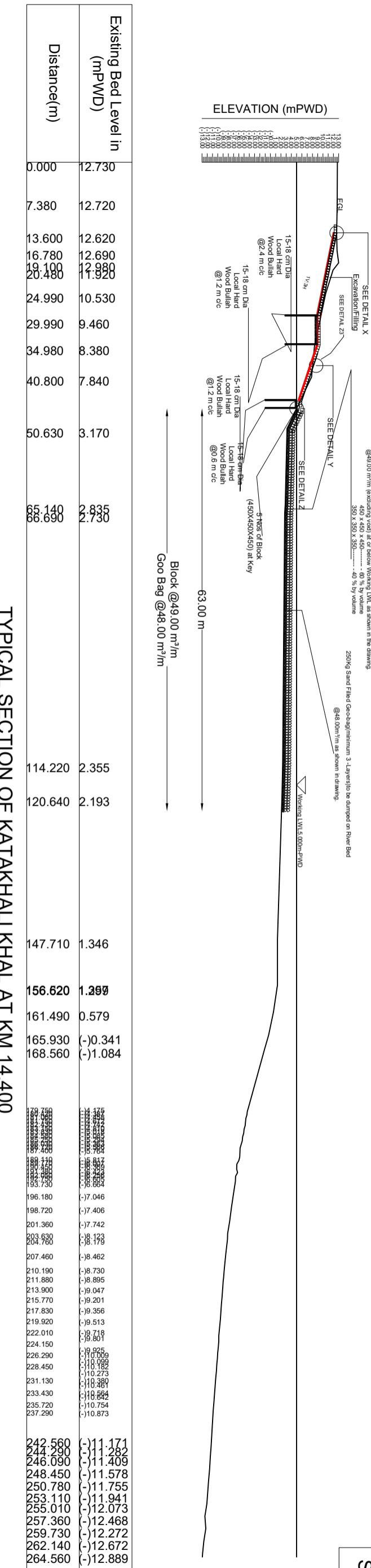


<b>Bangladesh Water Development Board</b>	
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<b>TYPICAL CROSS SECTION OF TALBARIA PROTECTIVE WORK</b>	<b>Kushtia</b>
DESIGNED BY:	RECOMMENDED BY:
(SHAMMI AKHTER),AE	(JAKARIA PERVEZ),SE
CHECKED BY:	APPROVED BY:
(MST.TASMEM JAHAN),EE	(MD. MAHFUZUR RAHMAN),CE,DESI
DATE:06-06-2021	Drawing No:DC-8-00773-06/09

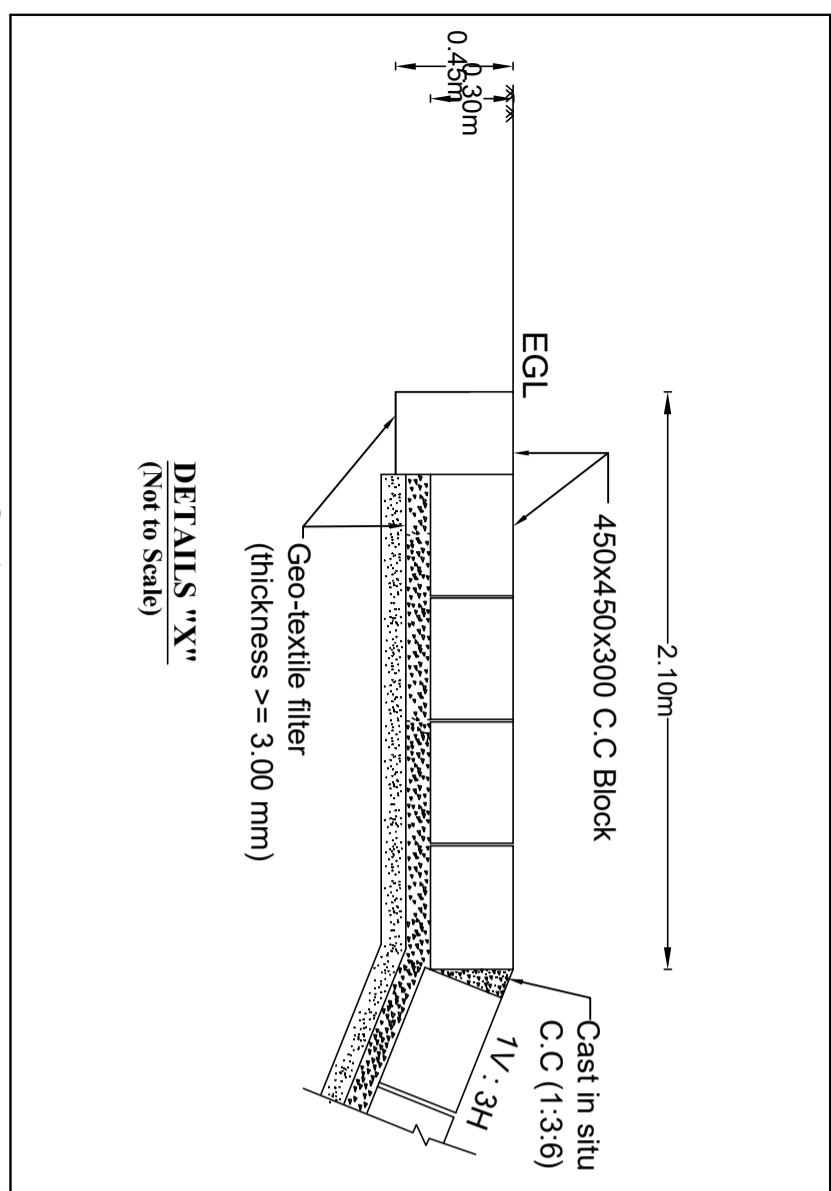
**TYPICAL SECTION AT KM 14.400  
(APPLICABLE FROM KM 13.680 TO KM 15.360)**



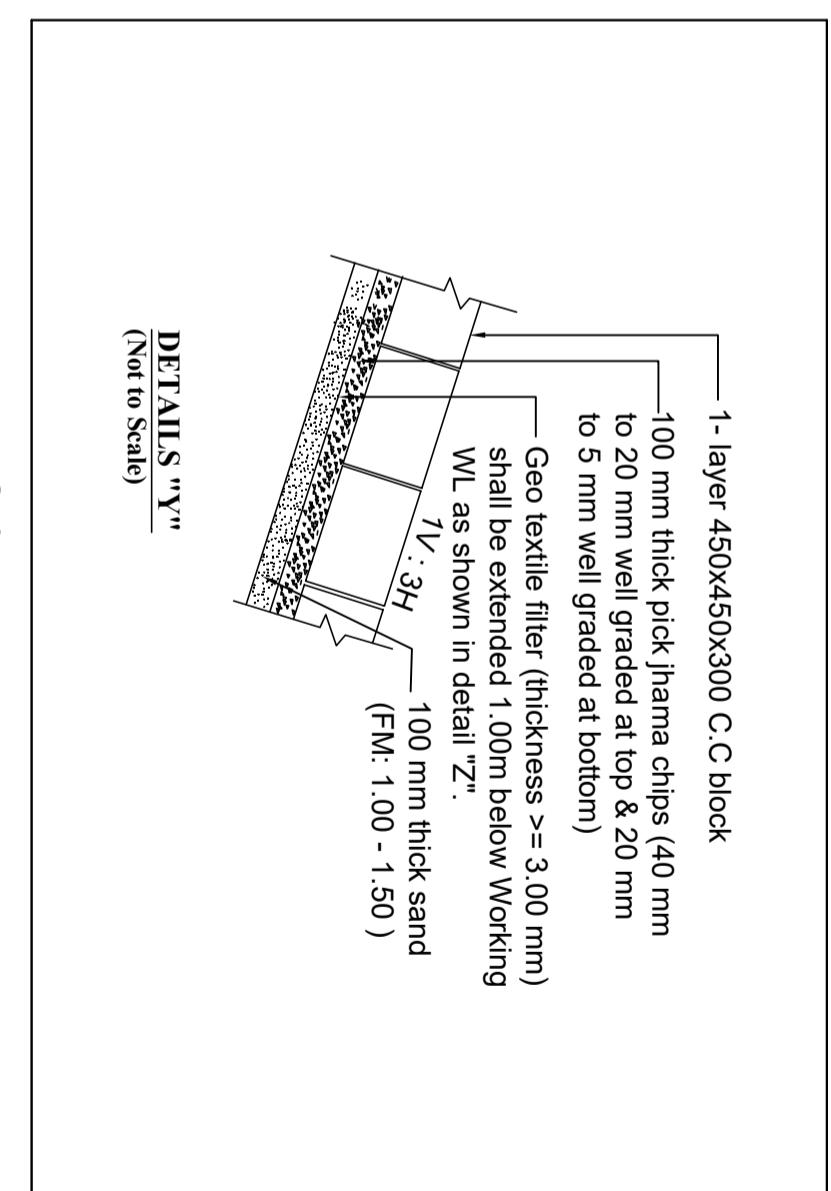
Bangladesh Water Development Board	
<b>Office of The Superintending Engineer, Design Circle-2</b>	
<b>Protection of Talbaria area of Mirpur Upazila &amp; Kamarkandi area of Shelaibaidah Union</b>	
<b>Kumarkhali Upazila in Kushhtia District from the erosion of Padma River</b>	
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DATE:XX-XX-2025	Drawing No:DC-5-00XX-XX/XX



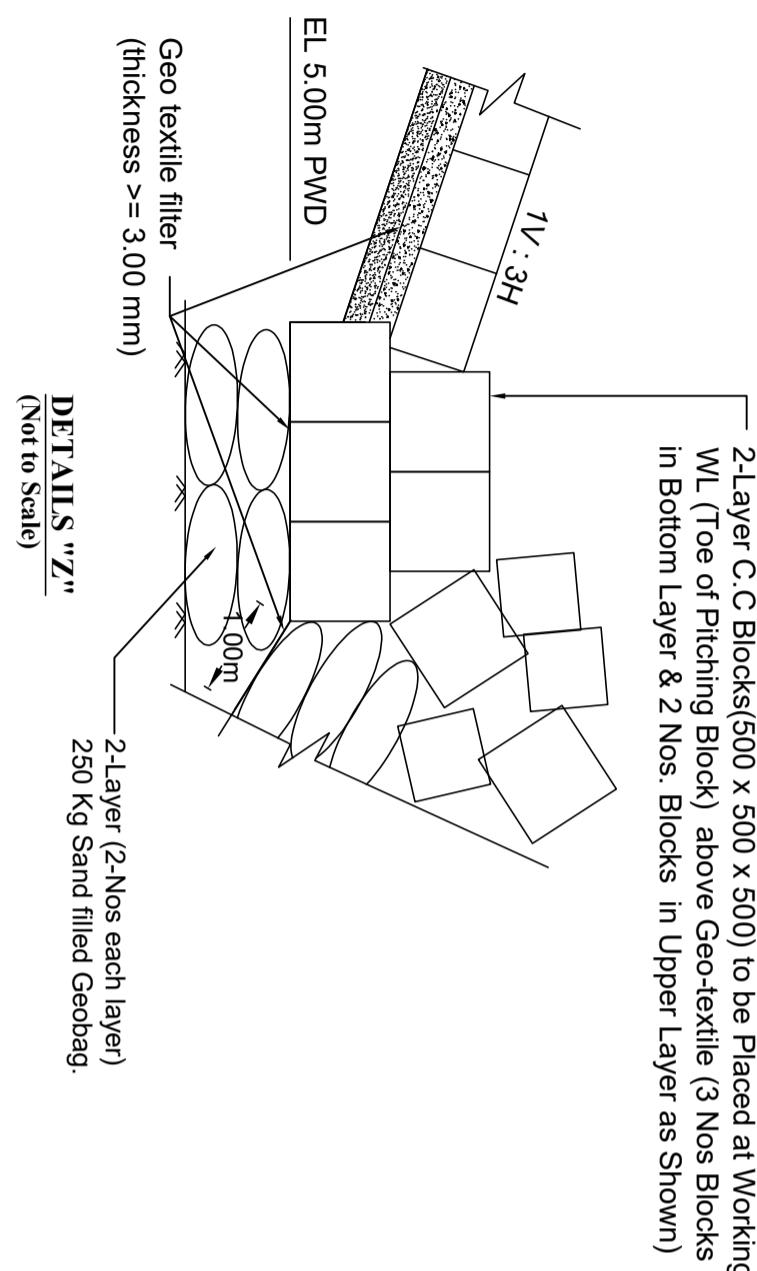
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**DETAILS "X"**  
(Not to Scale)



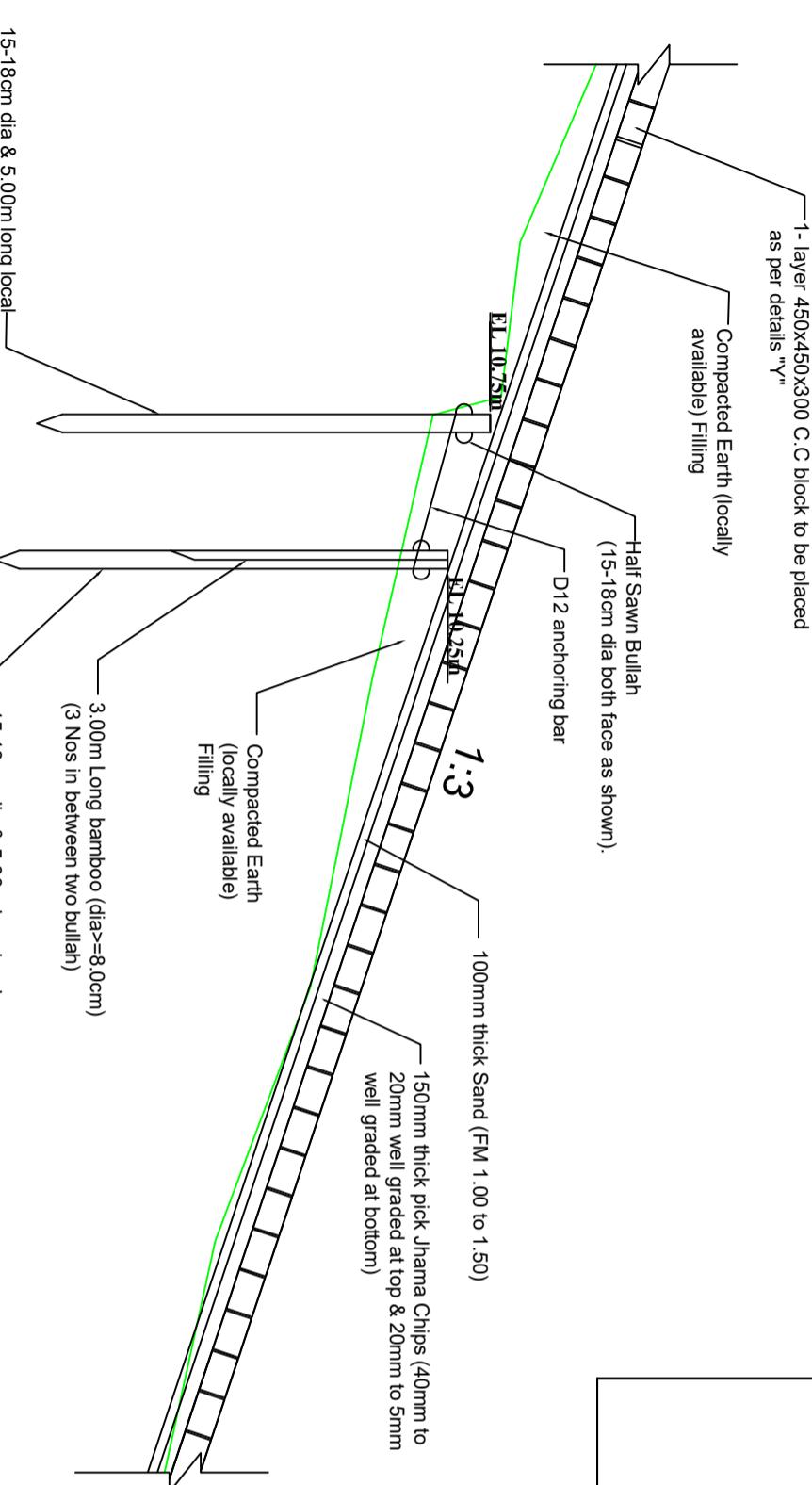
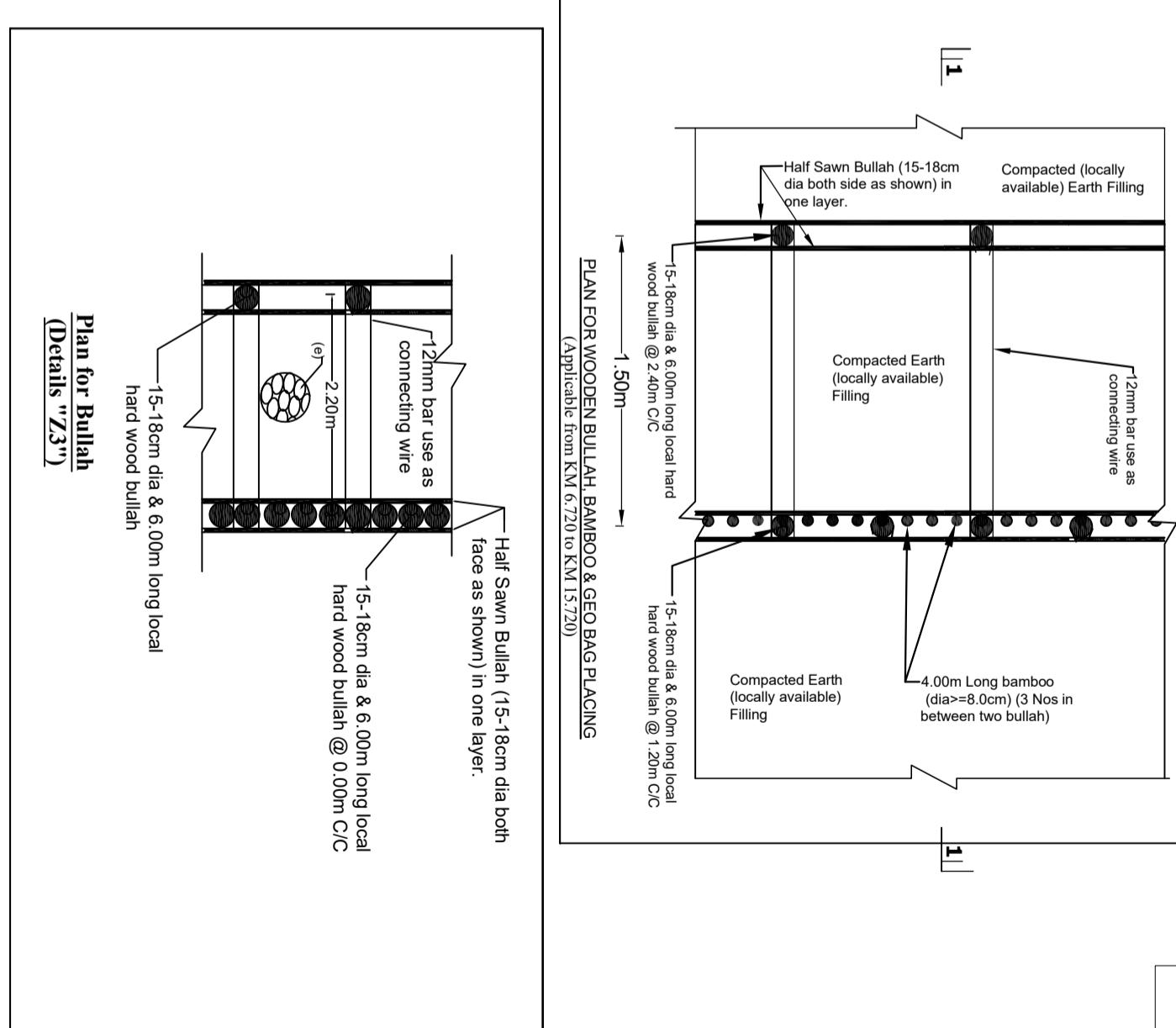
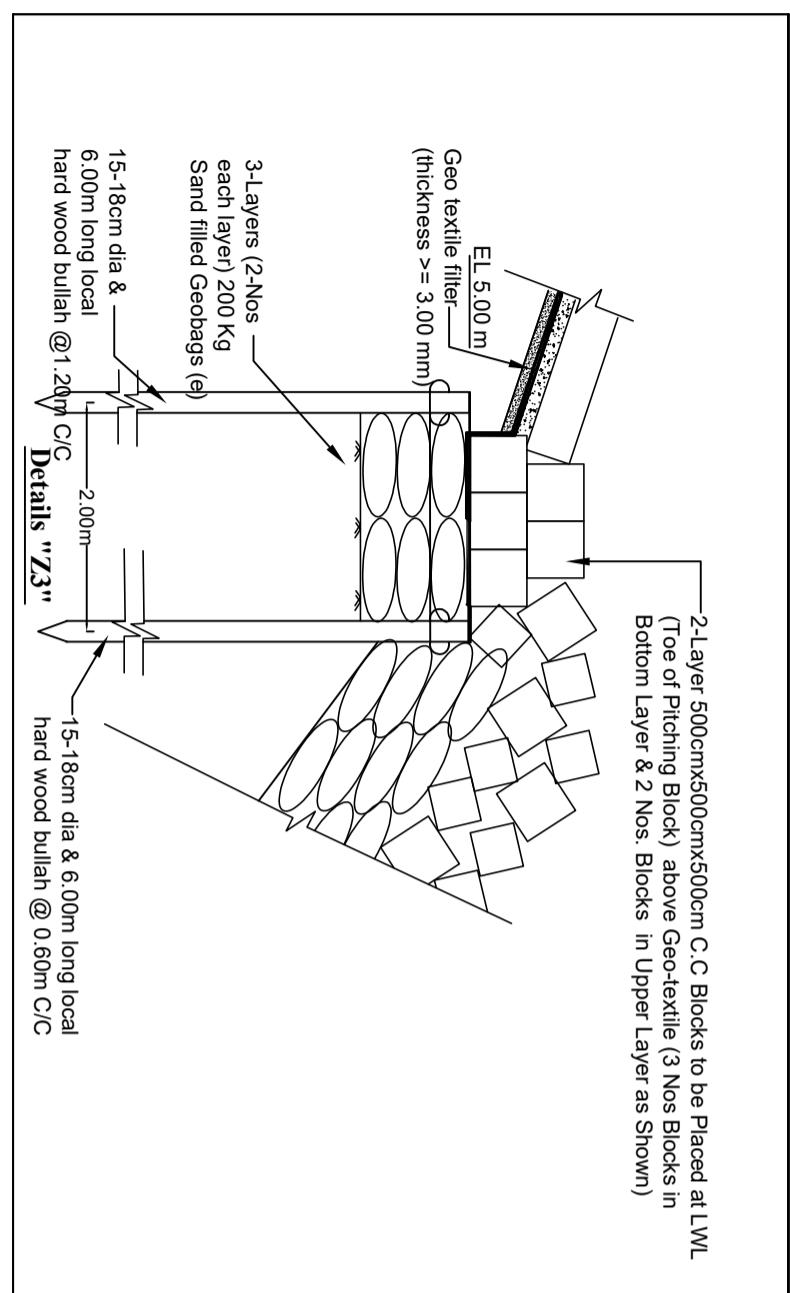
**BOX2**  
(Not to Scale)



**BOX1**  
(Not to Scale)

**DETAILS "Z"**  
(Not to Scale)

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DATE:06-06-2021	Drawing No:DCC-8-0073-08/09



**Plan for Bullock  
(Details "Z3")**

**Bangladesh Water Development Board**

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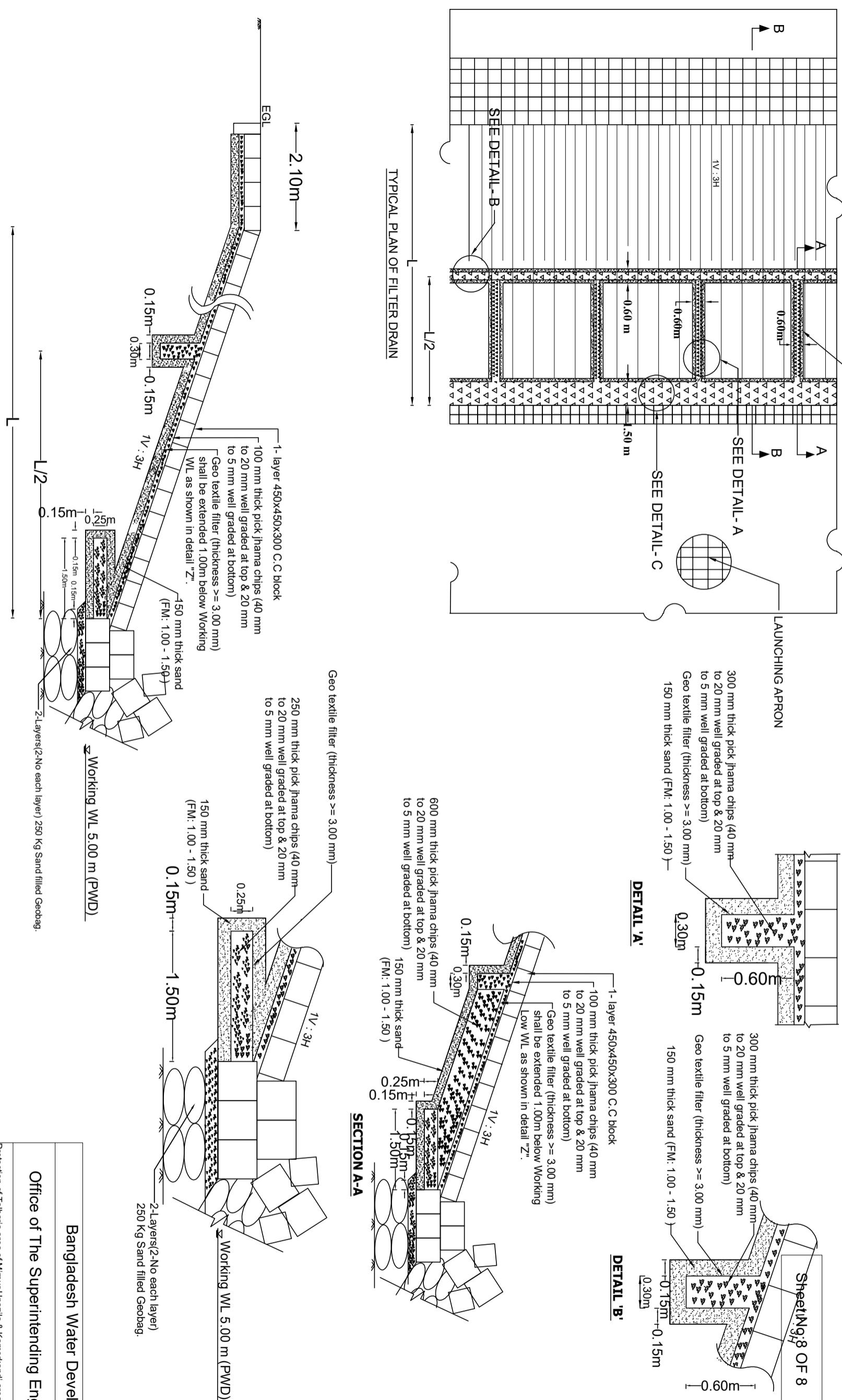
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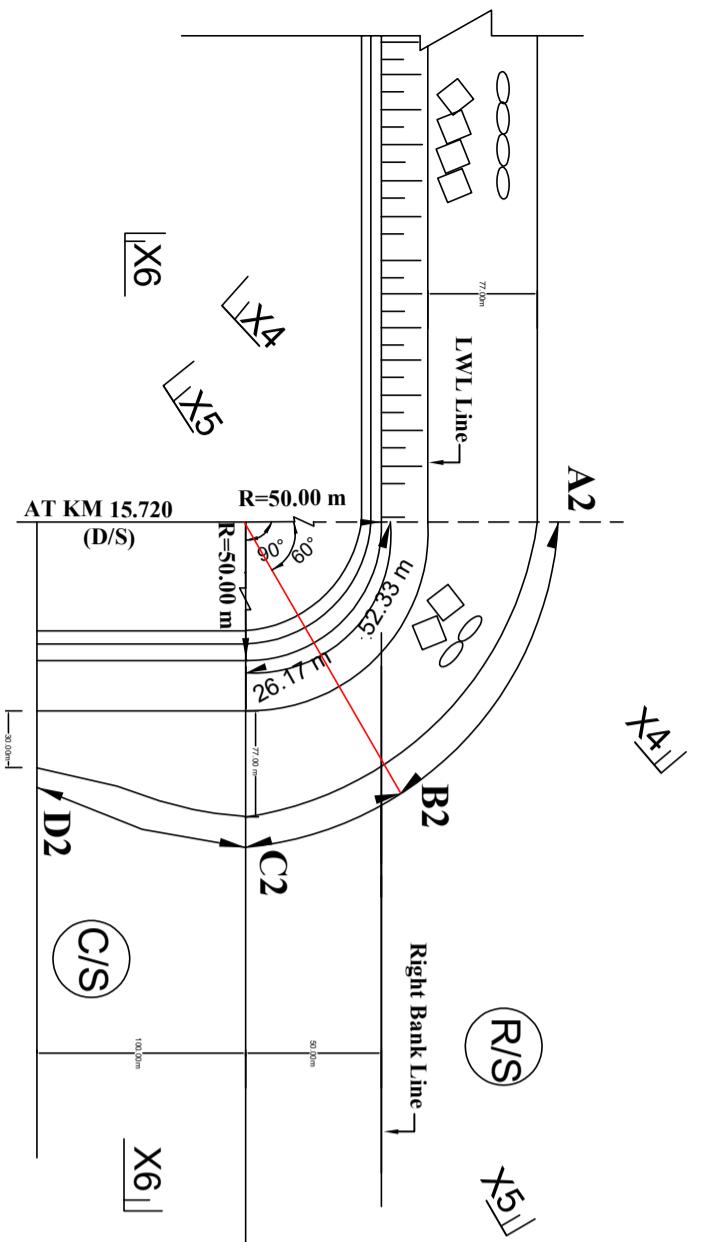
SECTION 1-1  
(Not to Scale)



Bangladesh Water Development Board

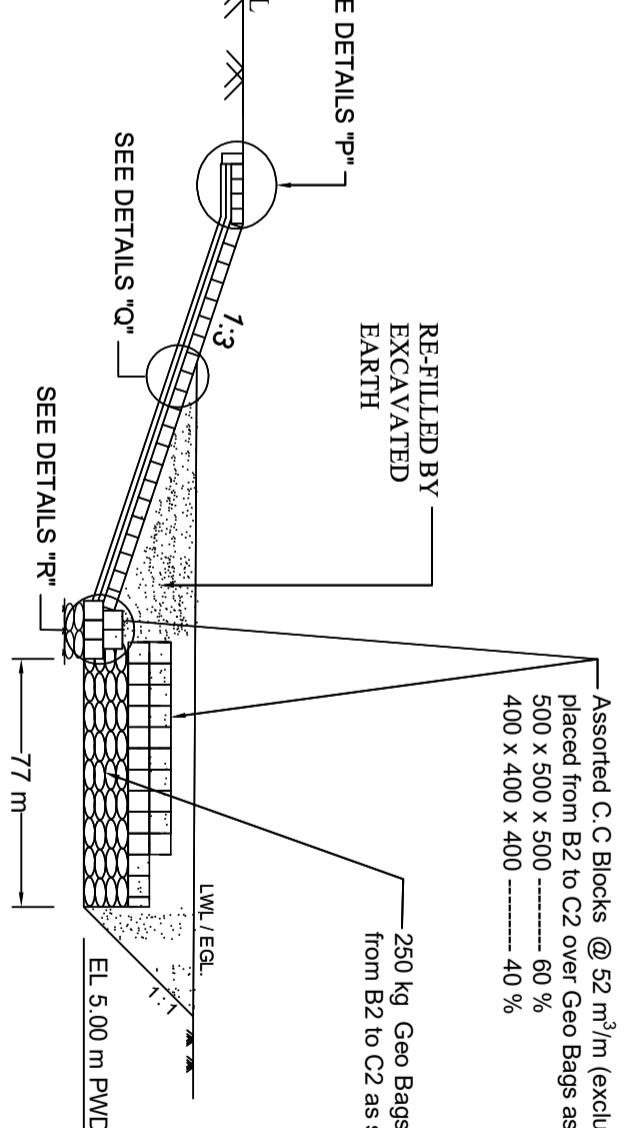
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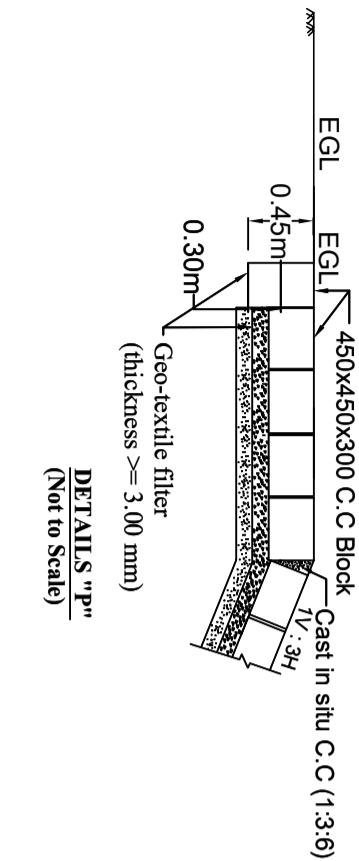


### PLAN OF D/S END TERMINATION

2-Layer C.C Blocks(500 x 500 x 500) to be Placed at Working WL (Toe of Pitching Block) above Geo-Textile (3 Nos Blocks in Bottom Layer & 2 Nos. Blocks in Upper Layer as Shown)



**SECTION AT X5-X5 (Typical)**  
(Limit of work from B2 to C2)



**DETAILS "P"**  
(Not to Scale)

**DETAILS "Q"**  
(Not to Scale)

**Scale:** Not To Scale

Assorted C.C Blocks @ 52 m<sup>3</sup>/m to 24.00 m<sup>3</sup>/m (excluding void) to be dumped / placed from C2 to D2 over Geo Bags as shown.

500 x 500 x 500	60 %
400 x 400 x 400	40 %

RE-FILLED BY  
EXCAVATED  
EARTH

SEE DETAILS "P"

250 kg Geo Bags to be dumped / placed @ 65 m<sup>3</sup>/m to 22.50 m<sup>3</sup>/m from C2 to D2 as shown.

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Kushtha District from the erosion of Padma River

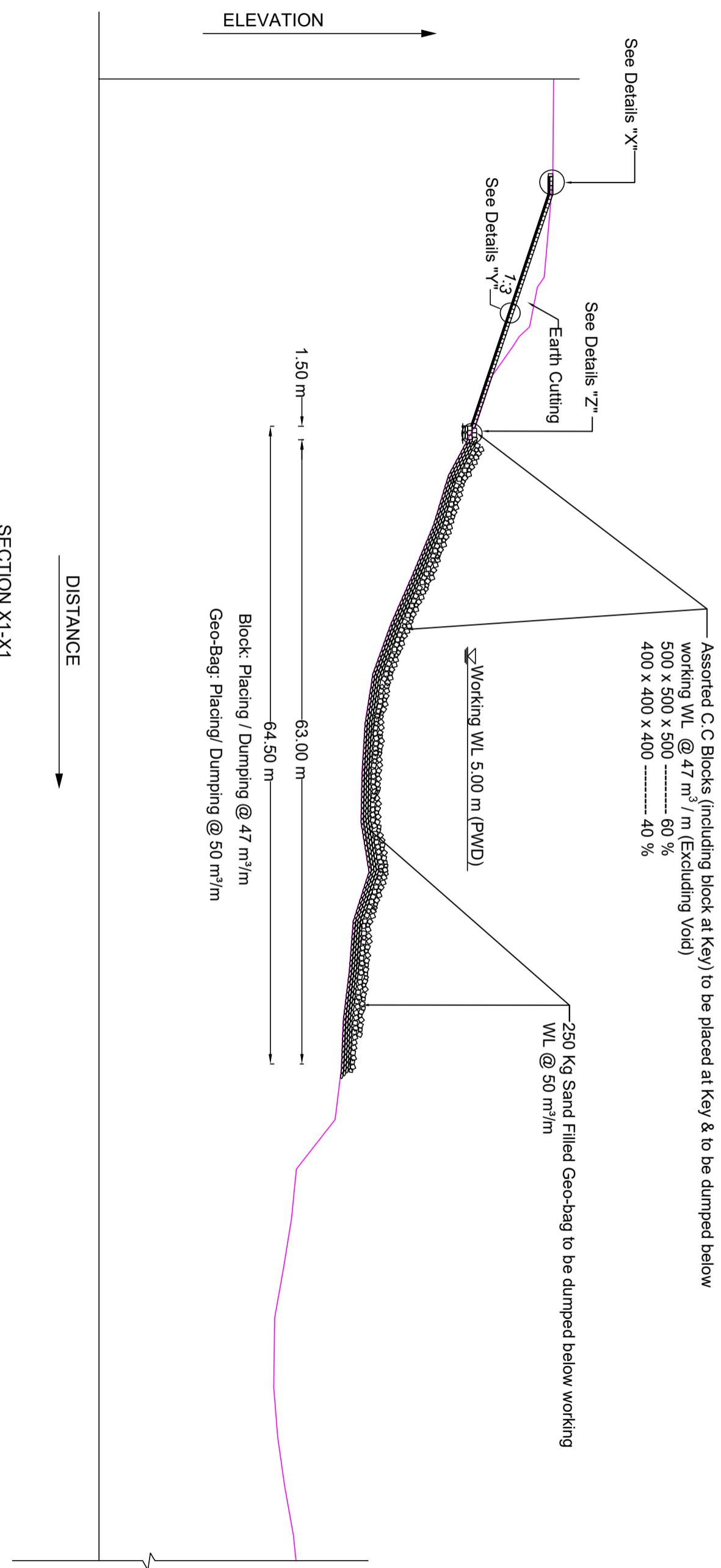
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**DETAILS**

SEE DETAILS "R"  
— 77 m to 30 m —

**SECTION AT X6-X6 (Typical)**  
(Limit of work from C2 to D2)

DESIGNED BY: (SHAMIMI AKHTER),SDE	RECOMMENDED BY: (JAKARIA PERVEZ),SE
CHECKED BY: (MST.TASMEM JAHAN),EE	APPROVED BY: (MD MAHFUZUR RAHMAN),CE,DESIC
DATE:XX-XX-XXXX	Drawing No:DC-5-XXXX-XX/XX



N.B:-  
a) For Details "X", "Y" & "Z" See Sheet No. 27 of 33

