

BANGLADESH WATER DEVELOPMENT BOARD

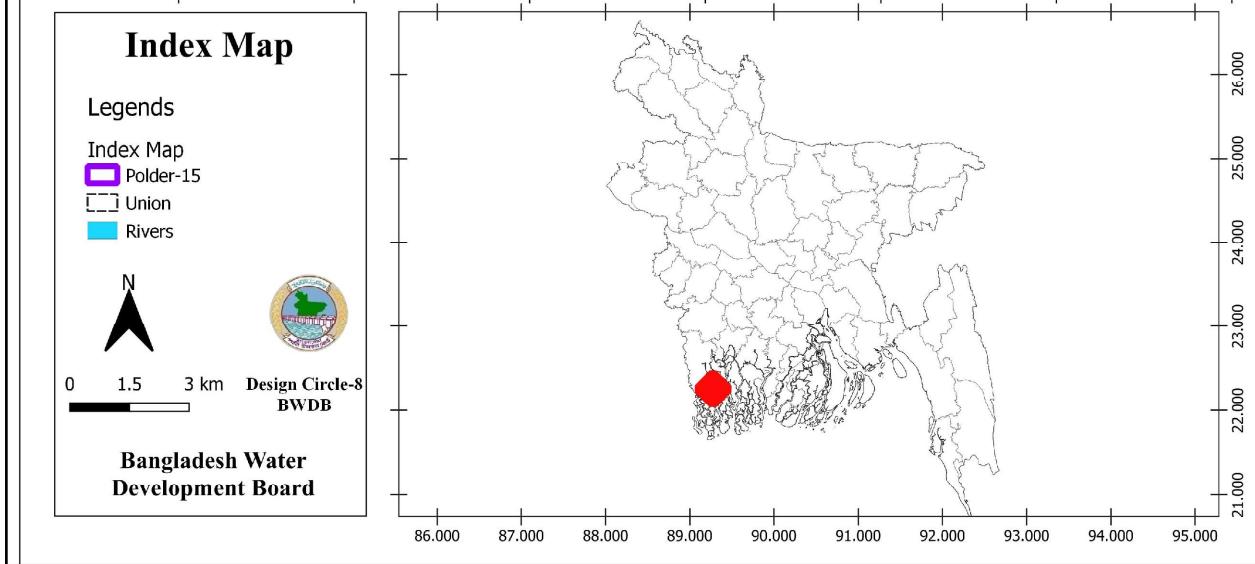
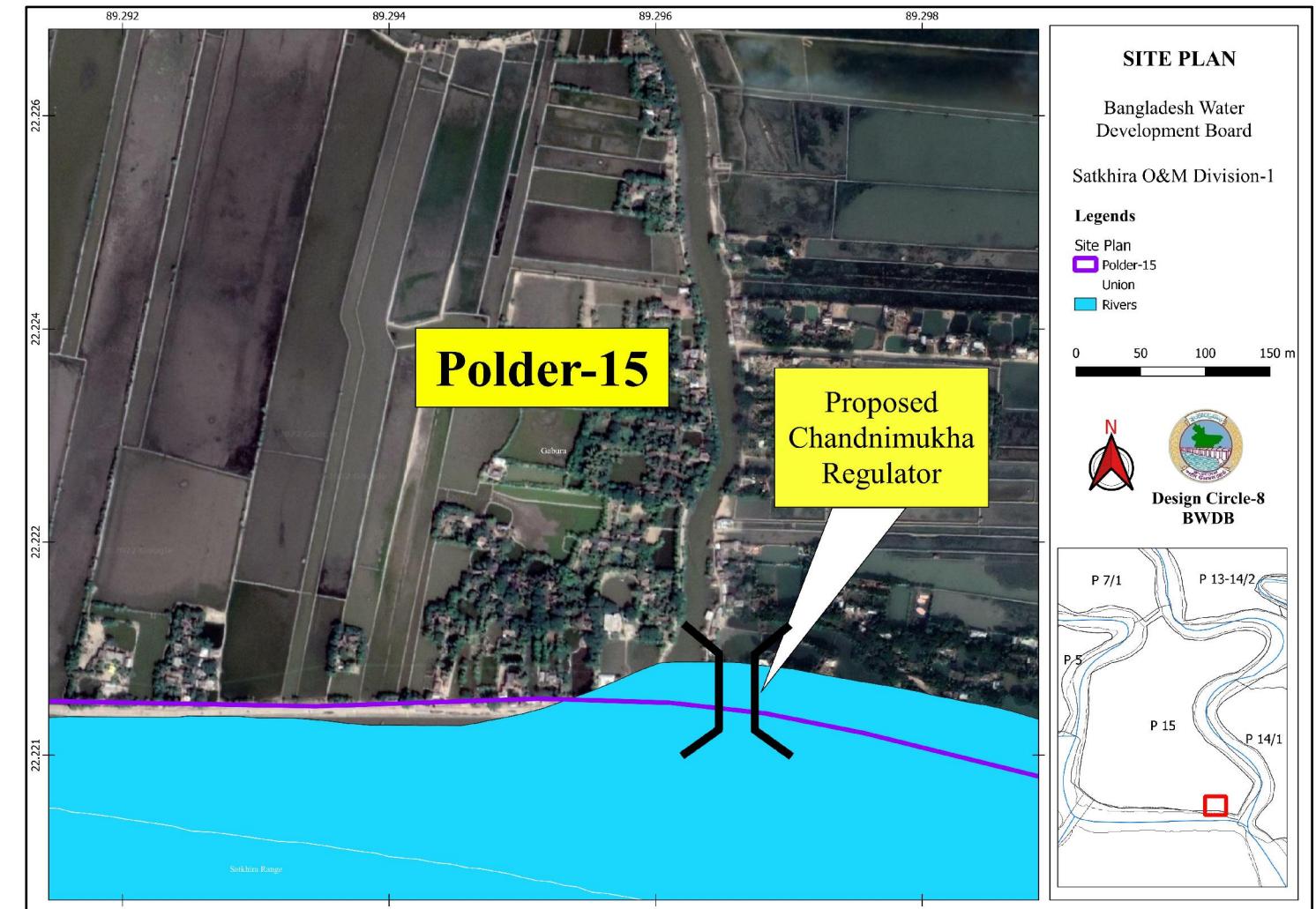
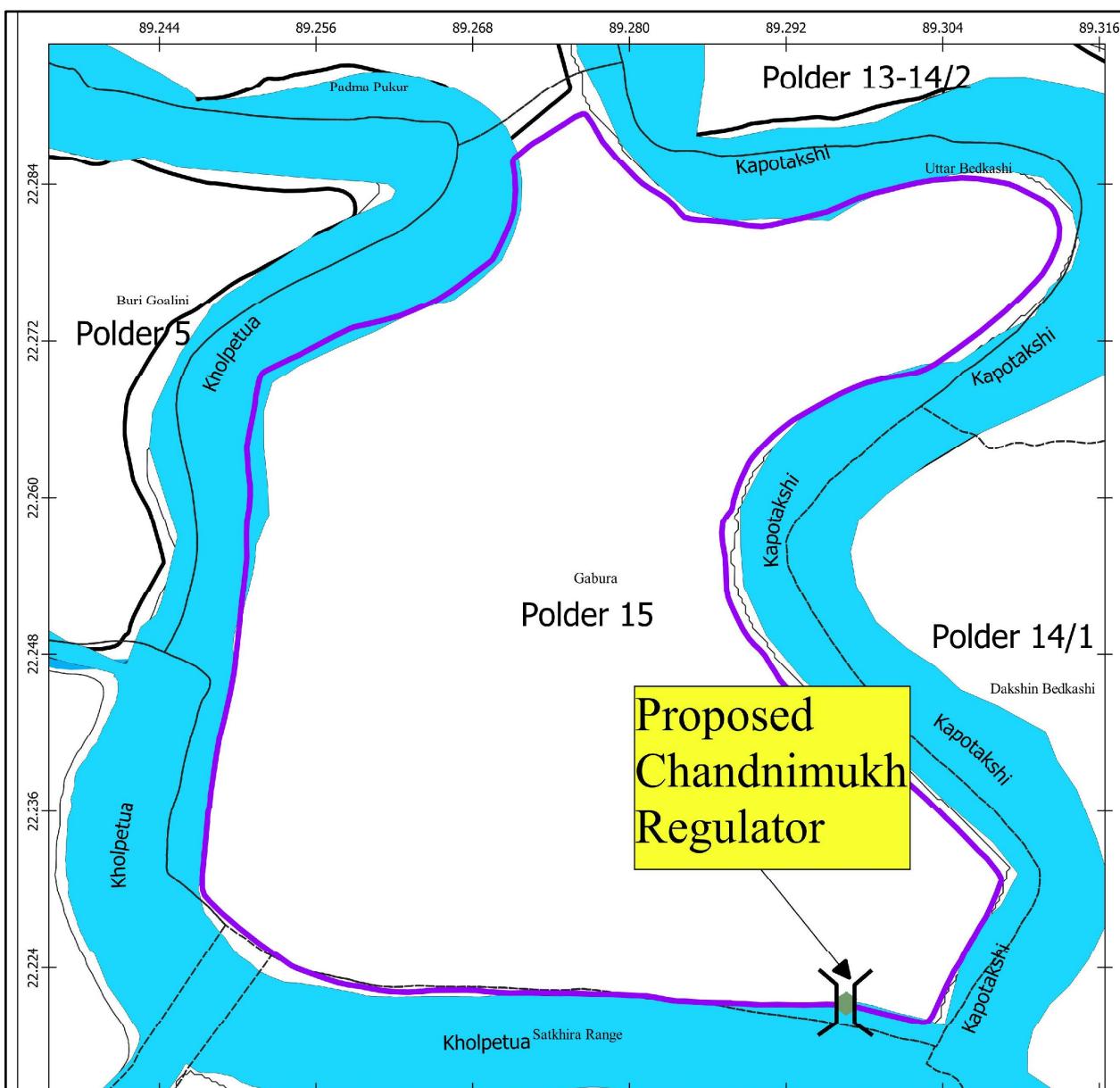


REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT

**DESIGN OF REGULATOR 2-VENT (1.50mX1.80m) AT CHANDNIMUKHA KM 6.515 OVER
CHANDNIMUKHA KHAL IN POLDER NO-15 UNDER 'REHABILITATION OF POLDER-15 AT SATKHIRA
DISTRICT' PROJECT UNDER SATKHIRA O&M DIVISION-1 , BWDB , SATKHIRA.**

SATKHIRA O&M DIVISION-1, BWDB, SATKHIRA

**DESIGNED BY: DESIGN CIRCLE-8, BWDB, DHAKA.
OCTOBER, 2022**



INDEX MAP
(Not to Scale)

SITE PLAN
(Not to Scale)

Bangladesh Water Development Board	
Office of the Superintending Engineer	
Design Circle-8	
REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT	
DESIGN OF REGULATOR 2-VENT (1.50mX1.80m) AT CHANDNIMUKHA KM 6.515 OVER CHANDNIMUKHA KHAL IN POLDER NO-15 UNDER 'REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT' PROJECT UNDER SATKHIRA O&M DIVISION-1 , BWDB , SATKHIRA.	
INDEX MAP & SITE PLAN	
DESIGNED BY : (RAHUL BISWAS), AE	APPROVED BY :
CHECKED & RECOMMENDED BY :	
 (JAKARIA PERVEZ), EE	 (MOHAMMAD SAIF UDDIN), SE
DATE:	DWG. NO.:DC-8-0000-02/25

BANGLADESH WATER DEVELOPMENT BOARD GROUNDWATER HYDROLOGY GROUNDWATER HYDROLOGY DIVISION-2 FIELD BORE LOG											
Project: Rehabilitation of polder no 15 at satkhira district under satkhira o&m division					SITE: Chandnimukha						
					P.S: Shyamnagar		DIST: Satkhira				
LOCATION: Chandnimukha khal					HOLE NO: H2		GROUND LEVEL: 1.7 m				
CLIENT: XEN,O&M DIVISION-1, Satkhira					WATER LEVEL: .90 m		AT	7:00	HRS		
DATE STARTED: 04-06-2022		DATE COMPLETED: 04-06-22		OF DATE-							
DRILLED BY: GWHD-2		UNIT: Rig-21		TOTAL DEPTH: 72 ft							
No of Sample	Type of Sample	Scale (ft)	LITHOLOGICAL DESCRIPTION		PHYSICAL		DISTURBED SAMPLES		PENETRATION TEST		INDEX
					DENSITY	COLOR	MOISTURE	DILATANCY	BLOWS ON SPOON	BLOWS ON CASING	
5											
D1											
10											
D2											
15											
D3											
20											
D4											
25											
D5											
30											
D6											
35											
D7											
40											
D8											
45											
D9											
50											
D10											
55											
D11											
60											
D12											
65											
D13											
70											
D14											

BORE LOG BH-01

BANGLADESH WATER DEVELOPMENT BOARD GROUNDWATER HYDROLOGY DIVISION-2 72 GREEN ROAD, DHAKA-1205. FIELD BORE LOG									
Project: Rehabilitation of polder no 15 at satkhira district under satkhira o&m division					SITE: Chandnimukha				
					P.S: Shyamnagar		DIST: Satkhira		
LOCATION: Chandnimukha khal					HOLE NO: H1-H5		GROUND LEVEL:		
CLIENT: XEN,O&M DIVISION-1, Satkhira					WATER LEVEL:		AT	7:00	HRS
DATE STARTED: 03-06-2022					DATE COMPLETED: 07-06-22		OF DATE-		
DRILLED BY: GWHD-2					UNIT: Rig-21		TOTAL DEPTH: 72 ft		
SOIL SAMPLING									
A) UNDISTURB					B) DISTURB				
SAMPLE NOS:		DIMENSIONS:		NO TAKEN:					
TYPE:		DRILLER: Md. Abu Jafer		GEOLOGIST: Md.Maniruzzaman Bhuiyan					
SAMPLE NOS: D1-D14					DIMENSIONS: 1 3/4 ID X 24 Inch		NO TAKEN: 14 Nos		
TYPE: Split Spoon					WEIGHT OF HAMMER: 140 lb		AVG. DROP: 30 Inces		
HOW SAMPLED: WOODEN/BOX/JARS/CANS/BAGS					DESPATCHED ON:				
CASING									
SIZE:		LENGTH USED:		WT OF HAMMER:		AVG. DROP:			
REMARKS					LOCATION SKETCH				
Drilling was advanced by Chopping method.									
<p style="text-align: right;">4/06/2022</p> <p>মোঃ মনিবুজ্জামান কাহীয়া কাস্টমাইল কুলুরু পার্ক নেওন টপ-বিল্ড বাংলাদেশ, যশোর।</p> <p style="text-align: right;">20/07/22</p> <p>(মো: আফিকে হোসেন) ইস.বিল্ডিং একাডেমী (বালুকা) শ্বামগঞ্জ পার্ক টপ-বিল্ড বাংলাদেশ, গাজীপুর, নতুনবাড়ি।</p>					<p style="text-align: right;">N</p> <p>Existing sluice</p> <p>H3 H4</p> <p>H2 H1</p> <p>Earthen road Earthen road</p> <p>Khelputia river</p> <p>Not drawn to scale</p>				
LOCATION SKETCH (Not to Scale)									
Bangladesh Water Development Board Office of the Superintending Engineer Design Circle-8									
REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT									
DESIGN OF REGULATOR 2-VENT (1.50mX1.80m) AT CHANDNIMUKHA KM 6.515 OVER CHANDNIMUKHA KHAL IN POLDER NO-15 UNDER 'REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT' PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB , SATKHIRA.									
BORE LOG & LOCATION SKETCH									
DESIGNED BY:					APPROVED BY:				
(RAHUL BISWAS), AE									
CHECKED & RECOMMENDED BY:									
(JAKARIA PERVEZ), EE					(MOHAMMAD SAIF UDDIN), SE				
DATE:					DWG. NO.:DC-8-0000-02/25				

BANGLADESH WATER DEVELOPMENT BOARD GROUNDWATER HYDROLOGY GROUNDWATER HYDROLOGY DIVISION-2 FIELD BORE LOG										
Project: Rehabilitation of polder no 15 at satkhira district under satkhira o&m division				SITE: Chandnimukha						
				P.S: Shyamnagar		DIST: Satkhira				
LOCATION: Chandnimukha khal				HOLE NO: H1		GROUND LEVEL: 1.55 m				
CLIENT: XEN,O&M DIVISION-1, Satkhira				WATER LEVEL: 0.0		AT	7:00	HRS		
DATE STARTED: 03-06-2022	DATE COMPLETED: 03-06-22	OF DATE:-								
DRILLED BY: GWHD-2	UNIT: Rig-21	TOTAL DEPTH: 72 ft								
No of Sample	Type of Sample	Scale (ft)	LITHOLOGICAL DESCRIPTION	PHYSICAL	DISTURBED SAMPLES	PENETRATION TEST	INDEX			
					BLOWS ON SPOON	BLOWS ON CASING	NO OF BLOWS PER 1 FT PENETRATION	Disturb	Undisturb	
				DENSITY	COLOR					REMARKS
				DILATANCY	MOISTURE					
5			Very fine sand with trace silt	N.P.	Gray					N.P=Non-plastic v.soft=very soft
D1					Loose					
10										
D2										
15			Clay with trace silt							
D3										
20										
D4										
25										
D5										
30			Clay with some silt							
D6										
35										
D7										
40			Clay with trace silt							
D8										
45			Silt trace clay							
D9										
50			Clay with some silt							
D10										
55										
D11										
60			Very fine sand with trace silt							
D12										
65										
D13										
70										
D14										
Note: >50% Dominant clay, 50-60% sand, 30-40% silt, <30% loam										

BORE LOG BH-03

Bangladesh Water Development Board	
Office of the Superintending Engineer	
Design Circle-8	
DESIGN OF REGULATOR 2-VENT (1.50mX1.80m) AT CHANDNIMUKHA KM 6.515 OVER CHANDNIMUKHA KHAL IN POLDER NO-15 UNDER REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT 'PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB , SATKHIRA.	
BORE LOG & LOCATION SKETCH	
DESIGNED BY:	APPROVED BY:
(RAHUL BISWAS), AE	
CHECKED & RECOMMENDED BY:	
(JAKARIA PERVEZ), EE	(MOHAMMAD SAIF UDDIN), SE
DATE: DWG. NO.:DC-8-0000-02/25	

GENERAL NOTES

1. THE SPECIFICATION OF MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD TECHNICAL SPECIFICATION OF BWDB, IN GENERAL.
2. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL ELEVATIONS ARE IN mPWD UNLESS OTHERWISE MENTIONED IN THE DRAWINGS.
3. COMPRESSIVE STRENGTH OF REINFORCED CEMENT CONCRETE SHALL HAVE MINIMUM 28 DAYS CYLINDER STRENGTH, $f_c \geq 25.00 \text{ N/mm}^2$ (ITEM CODE: 28-230-10) AND SHALL BE CHECKED BY COLLECTING SAMPLES AND TESTING DURING CONSTRUCTION.
4. REINFORCING BAR SHALL BE DEFORMED MILD STEEL HAVING YIELD STRENGTH, $f_y \geq 400.00 \text{ N/mm}^2$. (ITEM CODE: 76-120-10), (MADE FROM BILLET) IN R.C.C. WORK.
5. CONCRETE FOR CC BLOCKS SHALL HAVE MINIMUM STRENGTH, $f_c \geq 10.50 \text{ N/mm}^2$ AT 28 DAYS.
6. CURING OF CONCRETE SHALL BE CONTINUED FOR MINIMUM 21 DAYS AFTER CASTING.
7. CONCRETE SHALL BE POURED IN DRY BED CONDITION.
8. THE SURFACE OF CONSTRUCTION JOINTS SHALL BE WASHED THOROUGHLY WITH WATER JET & SHALL BE CLEAN ENOUGH AFTER THAT, SURFACE SHALL BE DRY PRIOR TO PLACEMENT OF ADJOINING CONCRETE.
9. CONCRETE MIXTURE SHALL BE POURED AS QUICK AS POSSIBLE BUT NOT LATER THAN 45 MINUTES AFTER MIXING.
10. 75 mm LEAN CONCRETE AT BASE SHALL BE IN 1:3:6.
11. THE LEAN CONCRETE AT FOUNDATION OF THE PROPOSED REGULATOR SHALL BE PLACED AFTER PROPERLY PREPARING & COMPACTING EXCAVATED BASE.
12. CLEAR COVER FOR REINFORCEMENT SHALL BE AS FOLLOWS:
 - a) Operating deck & Railing : 25mm
 - b) Concrete adjacent to earth at foundation: 75mm
 - c) Concrete adjacent to earth: 75mm
 - d) Concrete exposed to weather and water or others: 75mm
 - e) Beam: 40mm
13. MINIMUM LAP LENGTH SHALL BE 40 TIMES THE BAR DIAMETER.
14. LAP SHALL BE STAGGERED SO THAT NOT MORE THAN 50% OF BARS ARE LAPPED IN ANY ONE CROSS SECTION. WHERE BARS MUST LAPPED IN ONE CROSS SECTION, THEN LAP LENGTH SHALL NOT BE LESS THAN 1.30 TIMES MINIMUM LAP LENGTH.
15. REINFORCING BAR MUST BE SUPPORTED IN ITS PROPER POSITION BY USE OF MORTAR BLOCK, SUPPORTS OR BY OTHERS APPROVED MEANS.
16. SAND FILLING IN FOUNDATION SHOULD BE DONE WITH SAND OF F.M. ≥ 1.50 IN LAYERS OF 150 mm THICK LAYER BY LAYER AND COMPACTED TO ATTAIN MINIMUM 50% RELATIVE DENSITY.
17. UNLESS OTHERWISE SPECIFIED, BACK FILLING SHALL BE DONE WITH SAND (F.M. ≥ 0.80) FREE FROM VEGETABLE ROOTS AND ORGANIC MATTER, BACK FILLING FOR U-SHAPED WALL SHALL BE DONE SIMULTANEOUSLY ON BOTH WALLS.
18. DESIGN OF GATE AND HOISTING SYSTEM WILL BE PREPARED BY DESIGN CIRCLE-III, BWDB, DHAKA.
19. GATE TO BE OPERATED IN CONTROLLED WAY TO AVOID ANY SCOUR WHEN HEAD DIFFERENCE IS BEYOND 0.60m.
20. THE EMBEDDED PARTS OF GATE TO BE INSTALLED DURING CONSTRUCTION OF BARREL PART AND IT SHALL BE DONE IN ACCORDANCE WITH APPROVED MECHANICAL DRAWING .
21. THE GATE SHALL BE INSTALLED BEFORE THE OPERATION OF THE STRUCTURE.
22. ANY ERROR/OMISSION IF DETECTED SHALL BE REFERRED TO THE CONCERNED DESIGN OFFICE TAKING NECESSARY ACTION.
23. ALL BORE HOLES SHALL BE SEALED BEFORE CONSTRUCTION OF REGULATOR.

SPECIAL NOTES:

1. THIS DRAWING IS PREPARED AS PER PROPOSAL AND DESIGN DATA SUBMITTED BY SE, KHULNA O&M CIRCLE, BWDB, KHULNA VIDE HIS OFFICE MEMO NO: , DATE: AND ADDITIONAL DATA RECEIVED FROM EE, SATKHIRA O&M DIVISION-2 BWDB SATKHIRA TROUGH EMAIL ON .
2. THE WORK SHALL BE EXECUTED WITH PRIOR ADMINISTRATIVE AND FINANCIAL APPROVAL FROM THE COMPETENT AUTHORITY & WITHIN THE DPP / BUDGET PROVISION .
3. EXISTING KHAL/LINK KHAL AT THE U/S & D/S OF THIS PROPOSED REGULATOR TO BE RE-EXCAVATED UPTO THE REQUIRED LENGTH AND LEVEL IF NECESSARY.

NOTES FOR SHEET PILES:

1. HOT ROLLED U-SHAPE STEEL SHEET PILE SHALL BE USED. COLD ROLLED SHEET PILE SHALL NEVER BE USED.
2. COATING SHALL BE PROVIDED OVER SHEET PILE IN THE FOLLOWING WAY :-
 - i) CLEAN THE SHEET PILE SURFACE PREFERABLY WITH SAND BLASTING.
 - ii) PROVIDE 1 (ONE) COAT OF ZINK PHOSPHATE AS PRIMARY COAT,
 - iii) PROVIDE 2 (TWO) COAT OF COALTAR EPOXY COAT OVER PRIMARY COAT.
3. THICKNESS OF SHEET PILE SHALL BE 10.50mm ($\pm 0.50\text{mm}$) (ITEMCODE: 44-240-10).
4. CONCERNED EXECUTIVE ENGINEER MUST ENSURE SHEET PILE INTERLOCKING, LENGTH, & DRIVING.
5. TOP LEVEL OF EVERY CONNECTED SHEET PILES MUST HAVE SAME LEVEL.

NOTES FOR EMBEDDED PARTS, GROOVE AND GATE:

1. ALL EMBEDDED PARTS OF GROOVE AND OTHERS WILL BE STAINLESS STEEL (SUS-304)
2. ALL PARTS OF MECHANICAL GATE WILL BE STAINLESS STEEL (SUS-304).

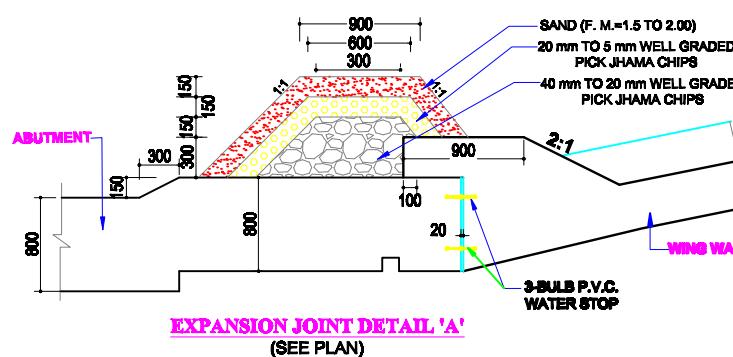
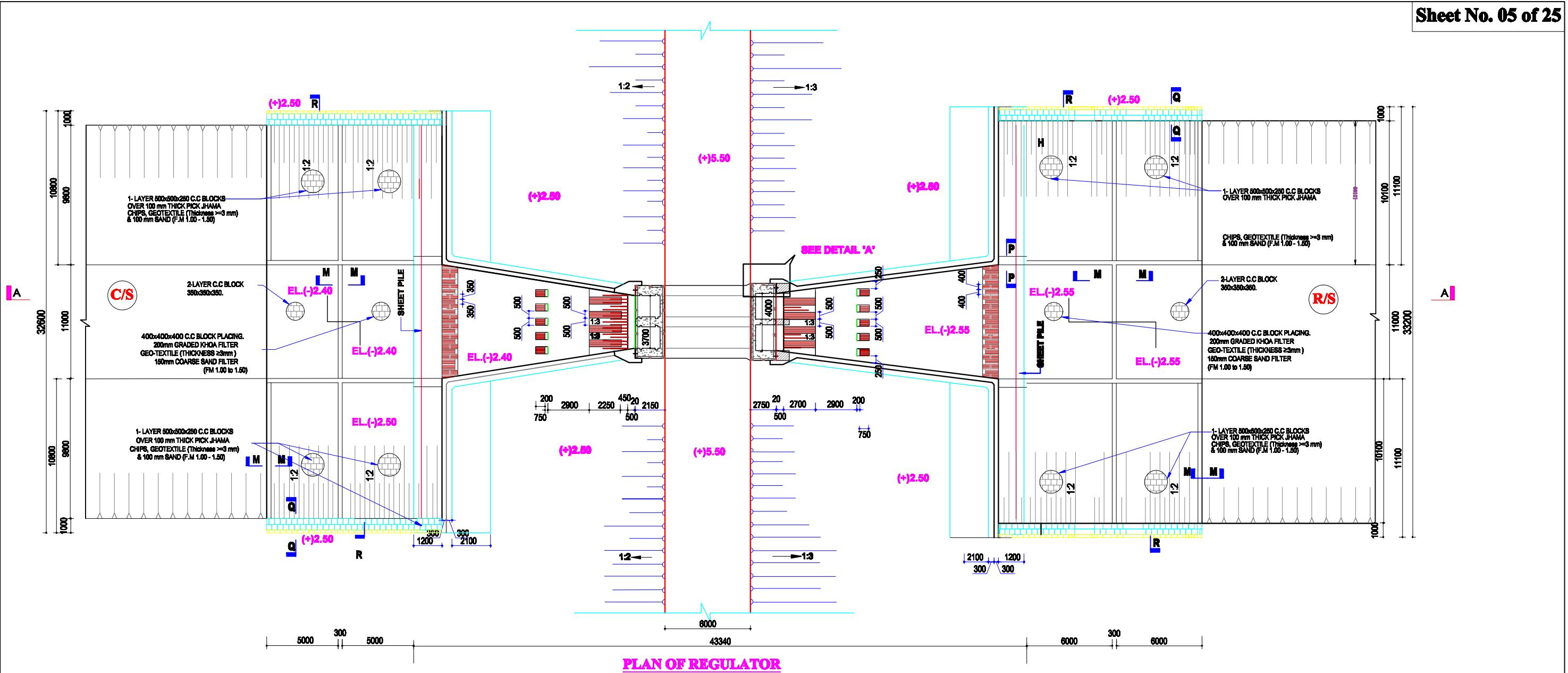
Bangladesh Water Development Board

Office of the Superintending Engineer
Design Circle-8

REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT
DESIGN OF REGULATOR 2-VENT (1.50mx1.80m) AT CHANDNIMUKHA KM 6.515
OVER CHANDNIMUKHA KHAL IN POLDER NO-15 UNDER 'REHABILITATION OF
POLDER-15 AT SATKHIRA DISTRICT' PROJECT UNDER SATKHIRA O&M
DIVISION-1, BWDB, SATKHIRA.

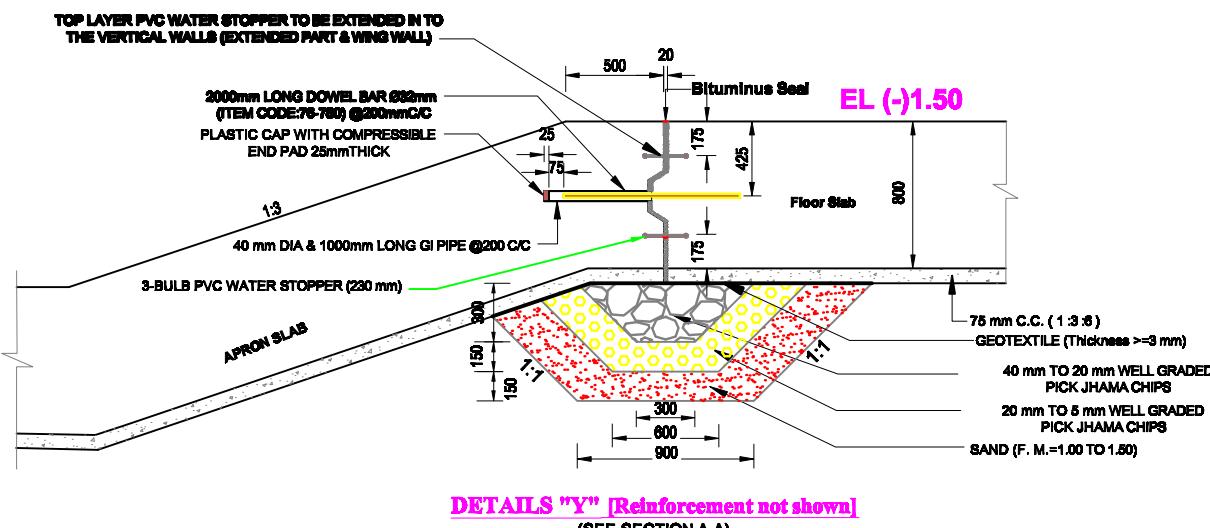
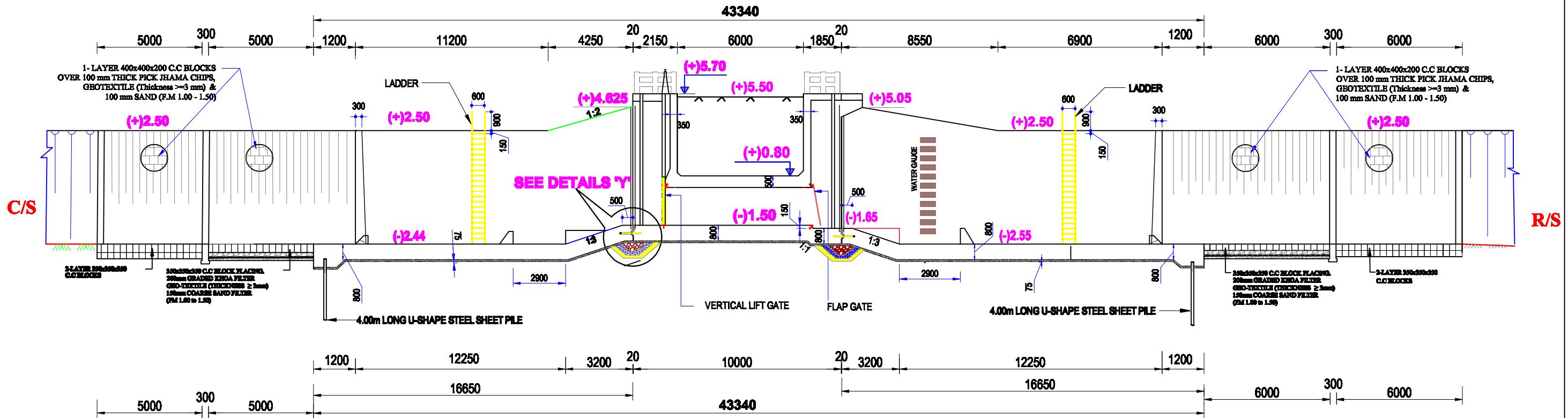
NOTES

DESIGNED BY : (RAHUL BISWAS), AE	APPROVED BY :
CHECKED & RECOMMENDED BY : (JAKARIA PERVEZ), EE	
DATE:	DWG. NO.:DC-8-0000-02/25



Scale : Not To Scale

Bangladesh Water Development Board	
Office of the Superintending Engineer	
Design Circle-8	
REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT	
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PLAN OF REGULATOR	
DESIGNED BY : (RAHUL BISWAS), AE	APPROVED BY :
CHECKED & RECOMMENDED BY :	
JAKARIA PERVEZ, EE	(MOHAMMAD SAIF UDDIN), SE
DATE:00-00-2022 DWG. NO.:DC-8-0000-05/25	



DETAILS "Y" [Reinforcement not shown]
(SEE SECTION A-A)

Bangladesh Water Development Board

Office of the Superintending Engineer
Design Circle-8

REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT

DESIGN OF REGULATOR 2-VENT (1.50mX1.80m) AT CHANDNIMUKHA KM 6.515 OVER CHANDNIMUKHA KHAL IN POLDER NO-15 UNDER REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT' PROJECT UNDER SATKHIRA O&M DIVISION-1 , BWDB , SATKHIRA.

SECTIONAL ELEVATION & DETAIL

DESIGNED BY :

(RAHUL BISWAS), AE

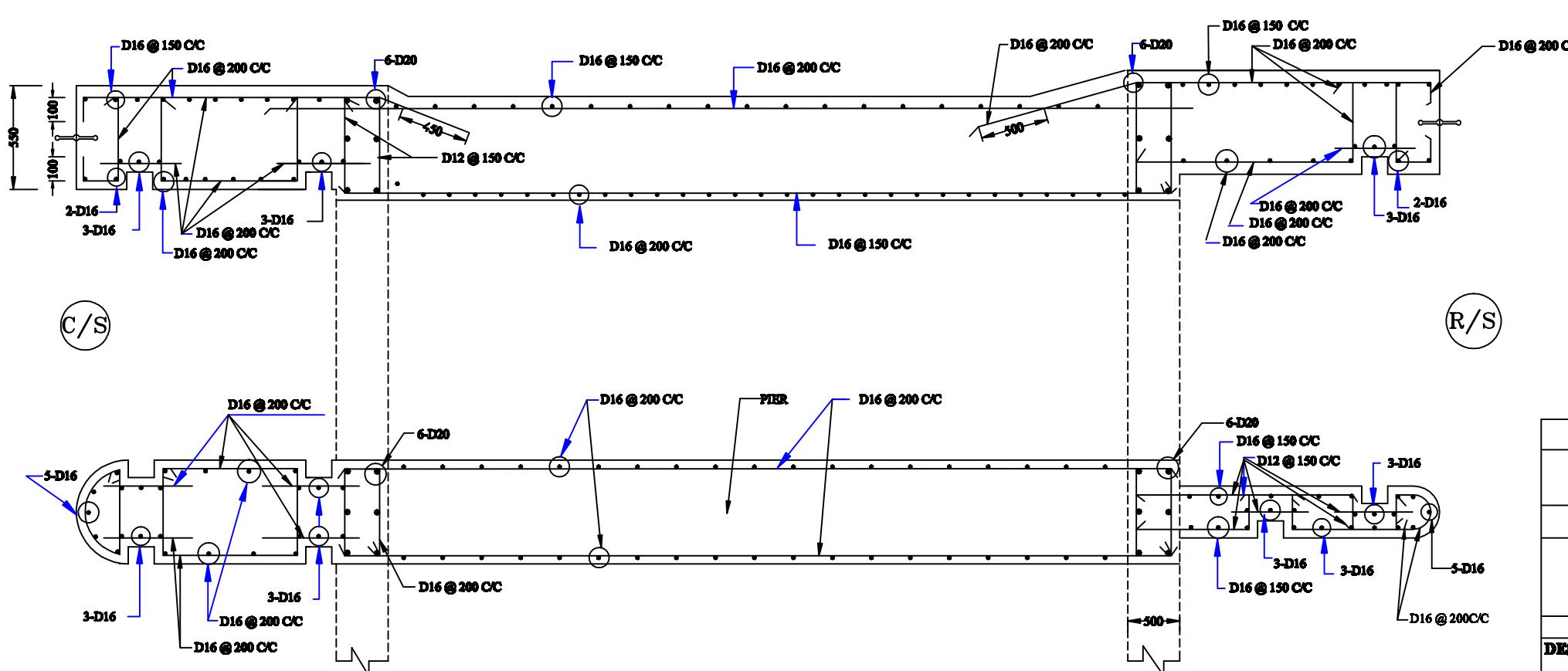
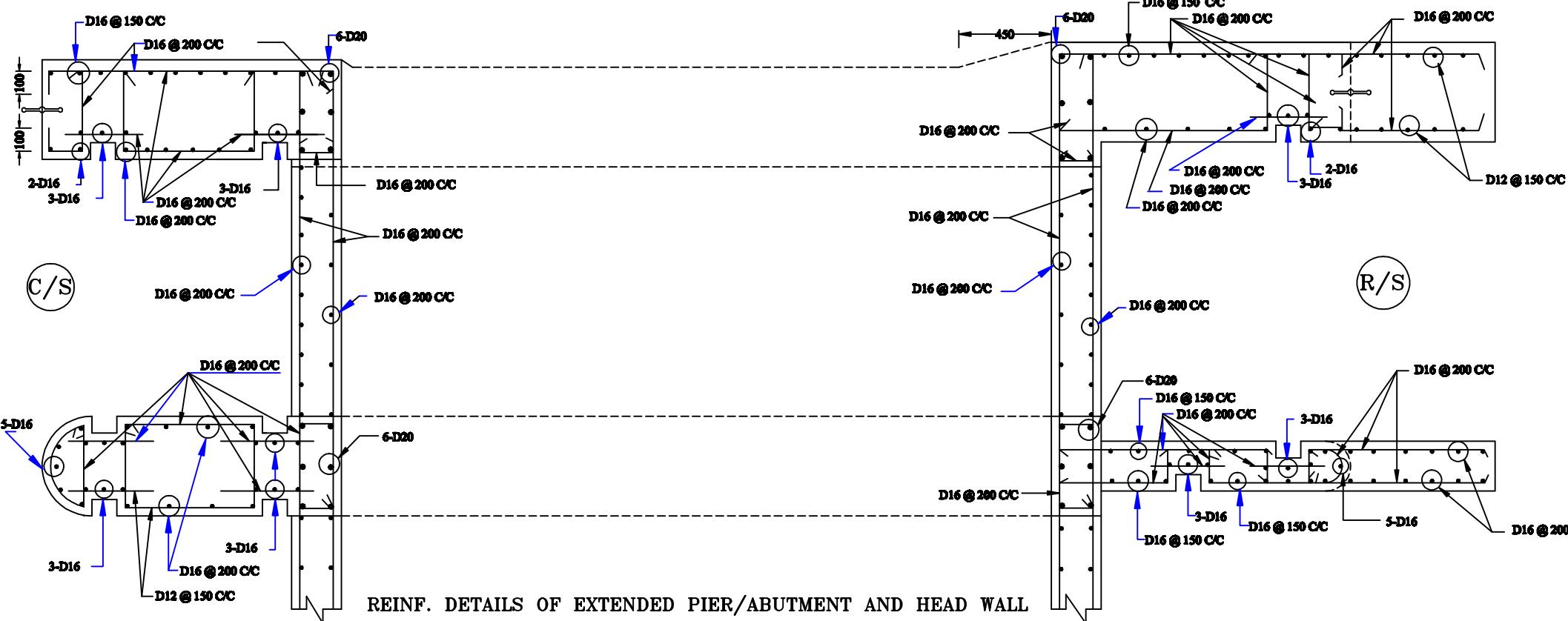
CHECKED & RECOMMENDED BY :

(JAKARIA PERVEZ), EE

APPROVED BY :

(MOHAMMAD SAIF UDDIN), SE

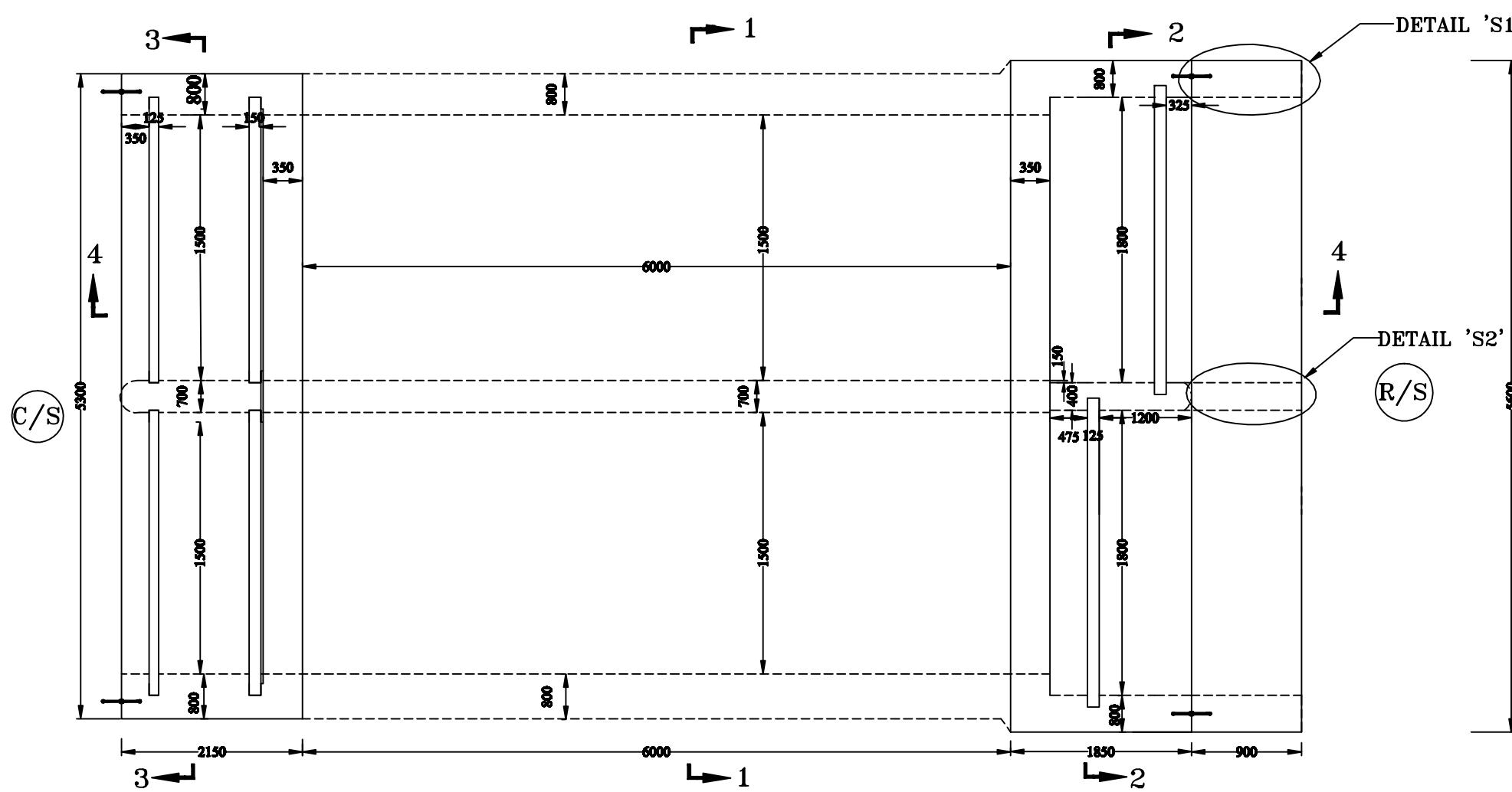
DATE:00-00-2022 DWG. NO.:DC-8-0000-06/25



(NOT TO SCALE)

REINF. DETAILS OF EXTENDED PIER/ABUTMENT AND HEAD WALL
(BELOW TOP SLAB OF CONDUIT)

Bangladesh Water Development Board	
Office of the Superintending Engineer	
Design Circle-8	
REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT	
DESIGN OF REGULATOR 2-VENT (1.50mX1.80m) AT CHANDNIMUKHA KM 6.515 OVER CHANDNIMUKHA KHAL IN POLDER NO-15 UNDER REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT ' PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB, SATKHIRA.	REINFORCEMENT DETAILS OF EXTENDED PART
DESIGNED BY:	APPROVED BY:
(RAHUL BISWAS), AE	
CHECKED & RECOMMENDED BY:	
(JAKARIA PERVEZ), EE	(MOHAMMAD SAIF UDDIN), SE
DATE:	DWG. NO.:DC-8-0000-02/25



PLAN OF ABUTMENT PIER AND HEAD WALL

(NOT TO SCALE)

Bangladesh Water Development BoardOffice of the Superintending Engineer
Design Circle-8**REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT**DESIGN OF REGULATOR 2-VENT (1.50mX1.80m) AT CHANDNIMUKHA KM 6.515
OVER CHANDNIMUKHA KHAL IN POLDER NO-15 UNDER REHABILITATION OF
POLDER-15 AT SATKHIRA DISTRICT PROJECT UNDER SATKHIRA O&M
DIVISION-1, BWDB, SATKHIRA.**PLAN OF DRAINAGE CUM FLUSHING REGULATOR****DESIGNED BY :**

(RAHUL BISWAS), AE

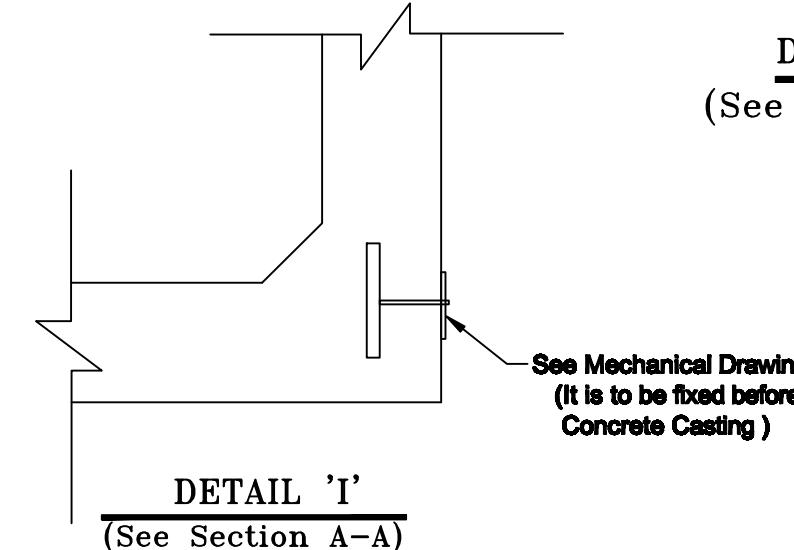
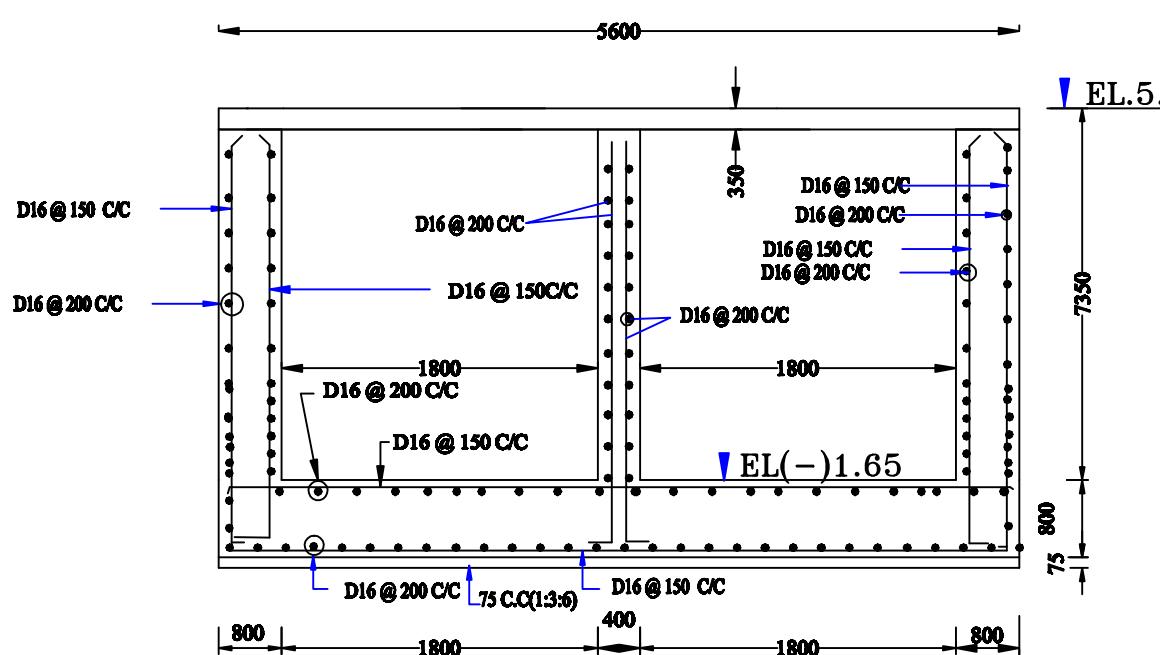
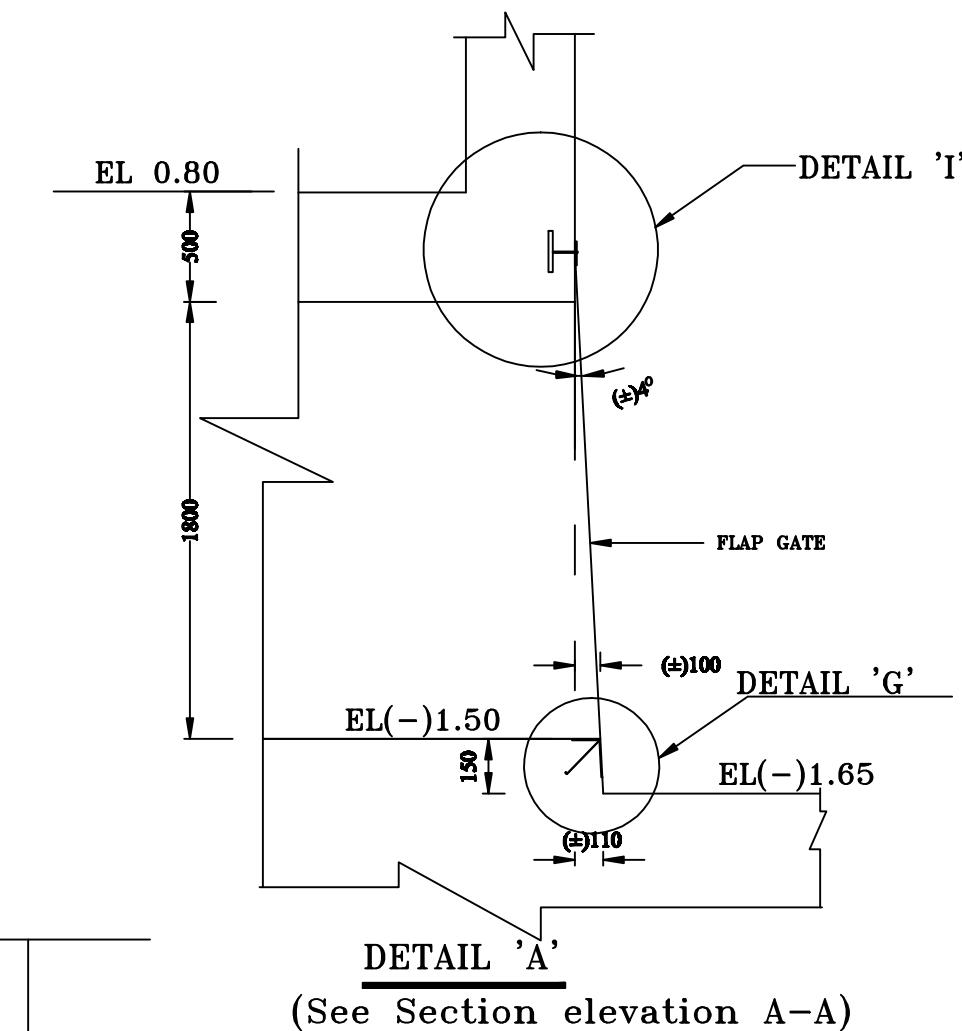
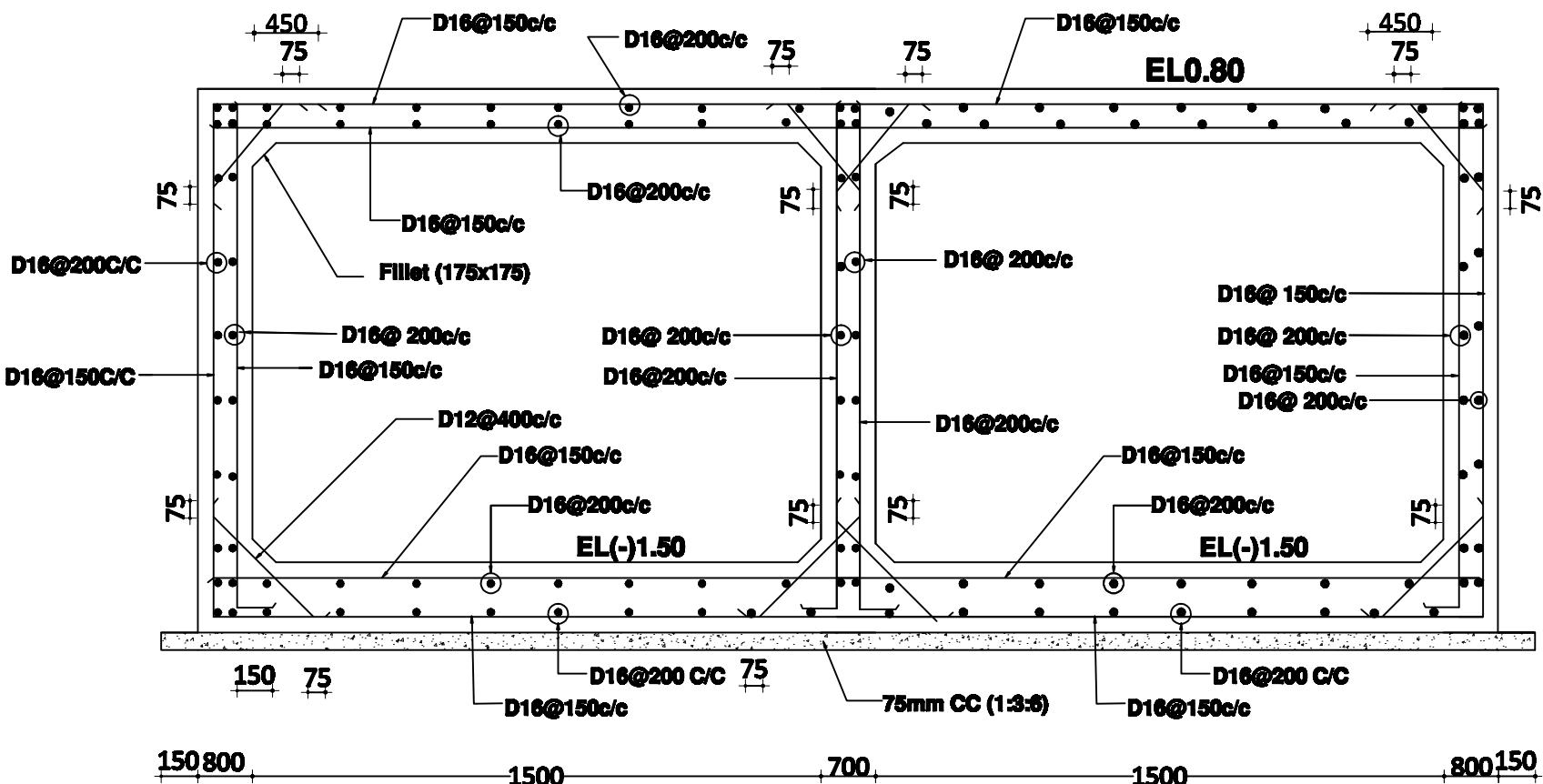
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(JAKARIA PERVEZ), EE

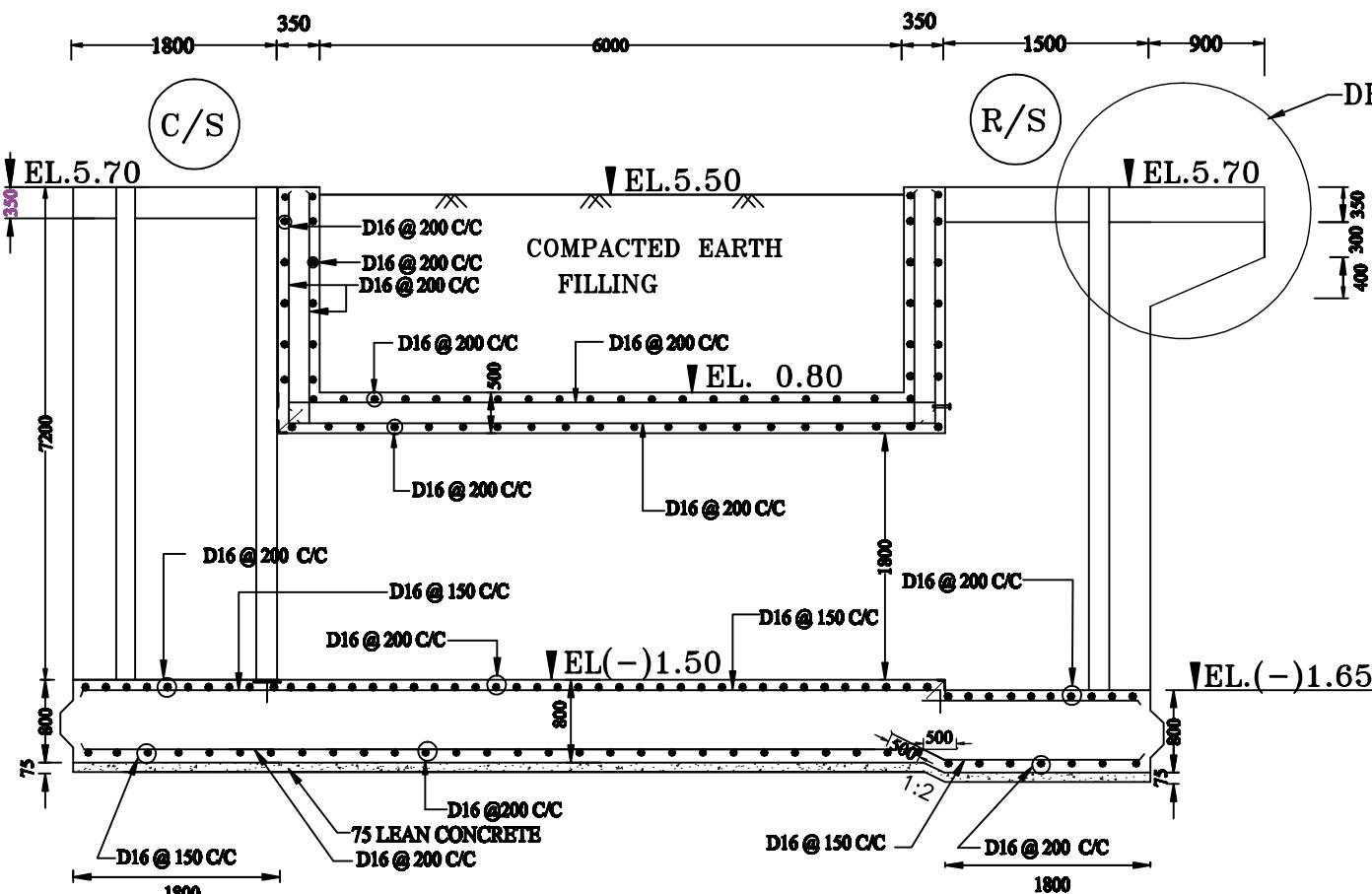
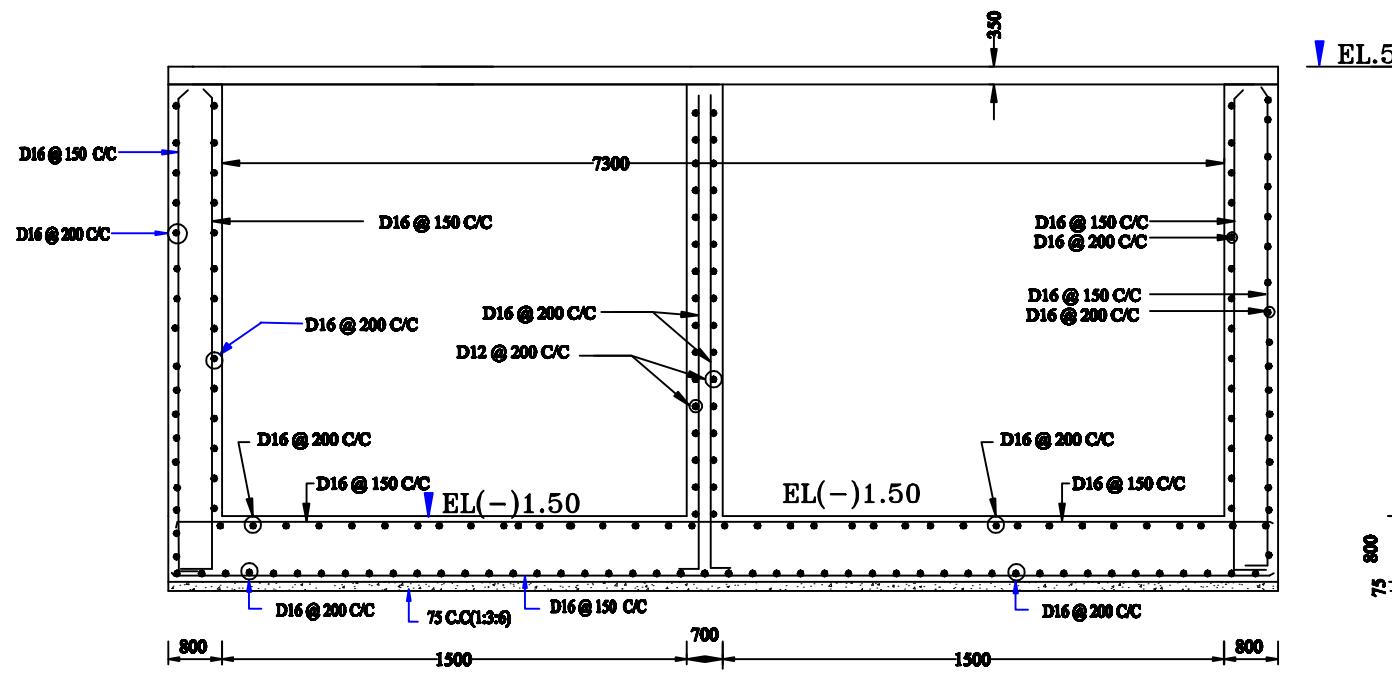
APPROVED BY :

(MOHAMMAD SAIF UDDIN), SE

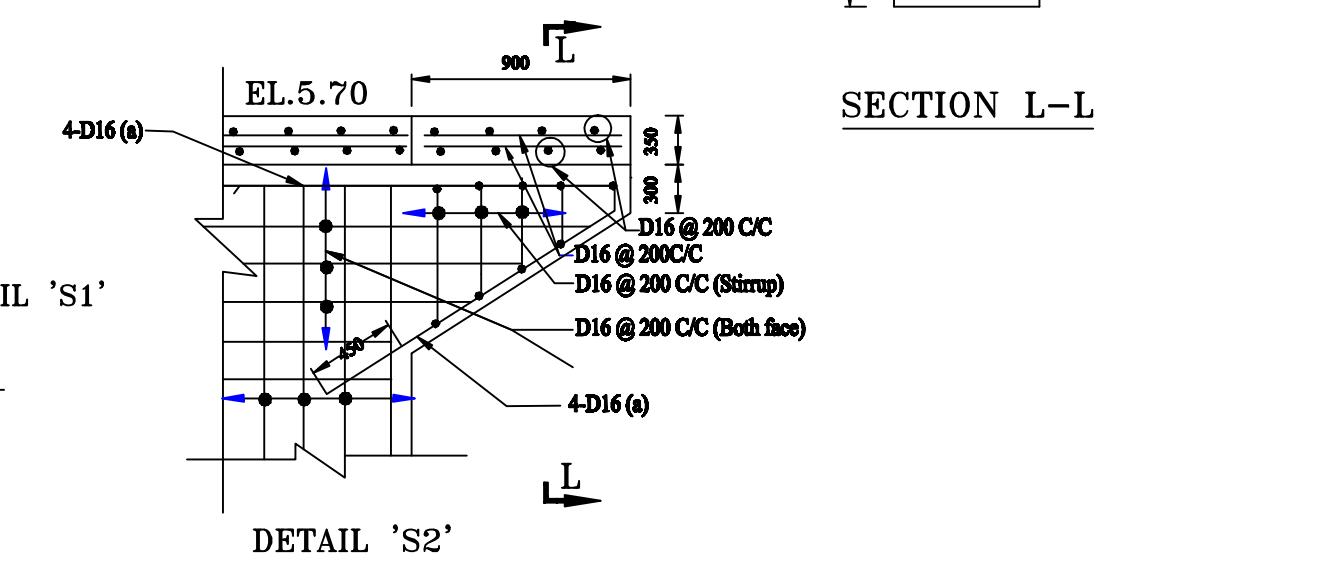
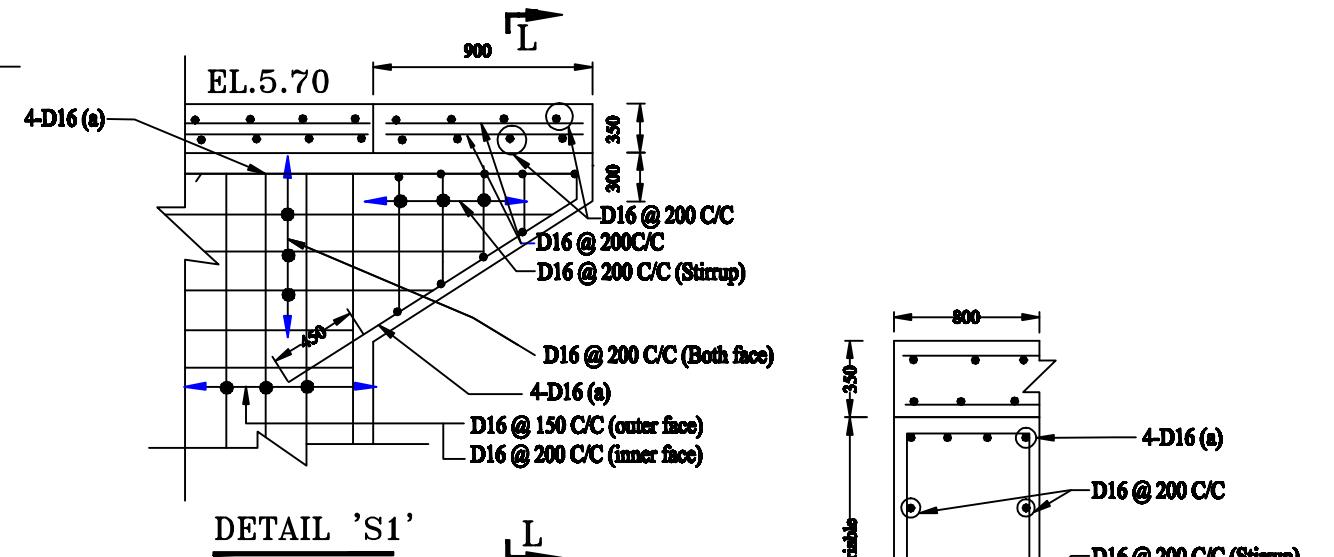
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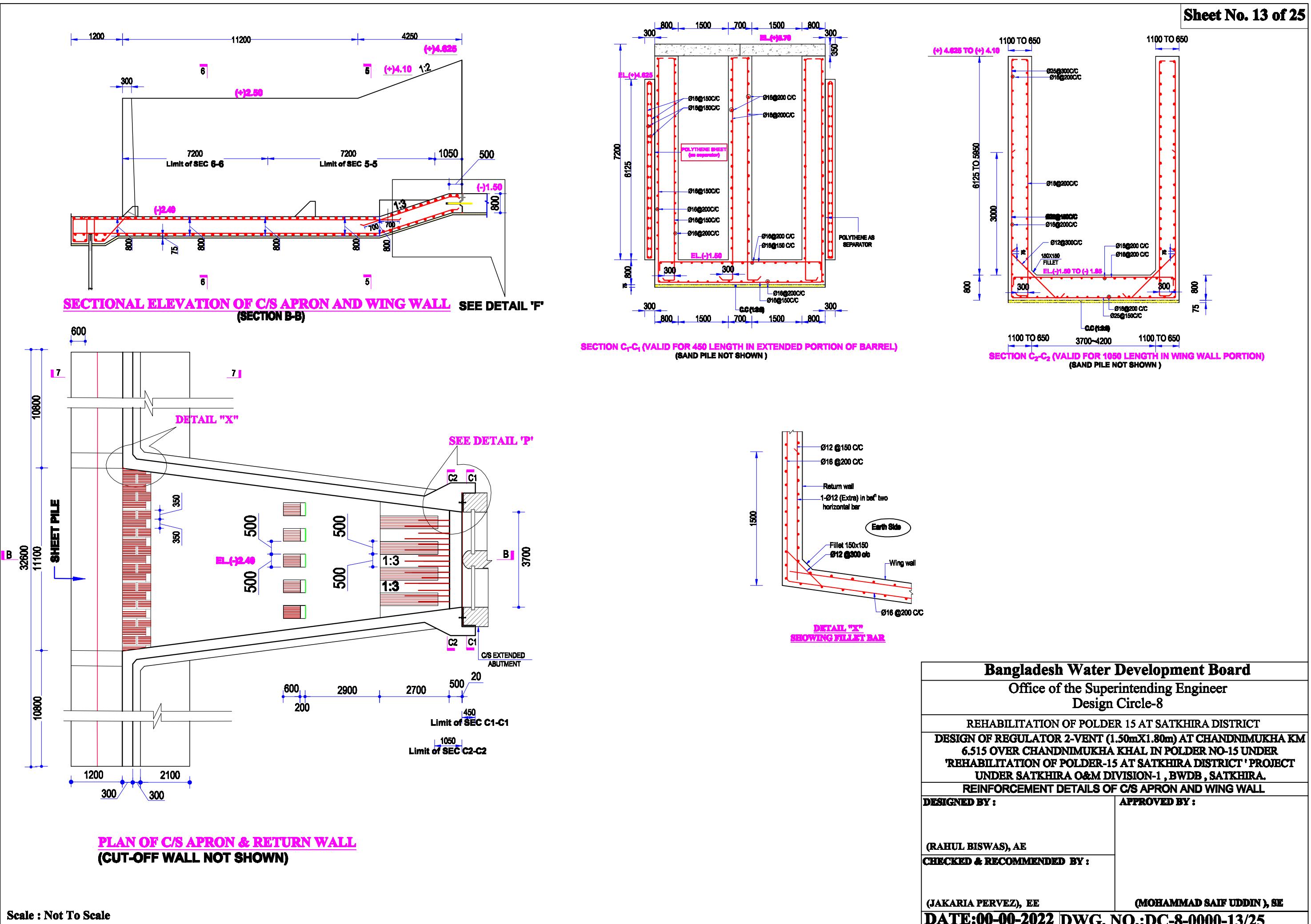
Bangladesh Water Development Board	
Office of the Superintending Engineer	
Design Circle-8	
REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT	
DESIGN OF REGULATOR 2-VENT (1.5mX1.8m) AT CHANDNIMUKHA KM 6.515 OVER CHANDNIMUKHA KHAL IN POLDER NO-15 UNDER 'REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT' PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB, SATKHIRA.	
REINFORCEMENT DETAILS OF ABUTMENT & BARREL	
DESIGNED BY:	APPROVED BY:
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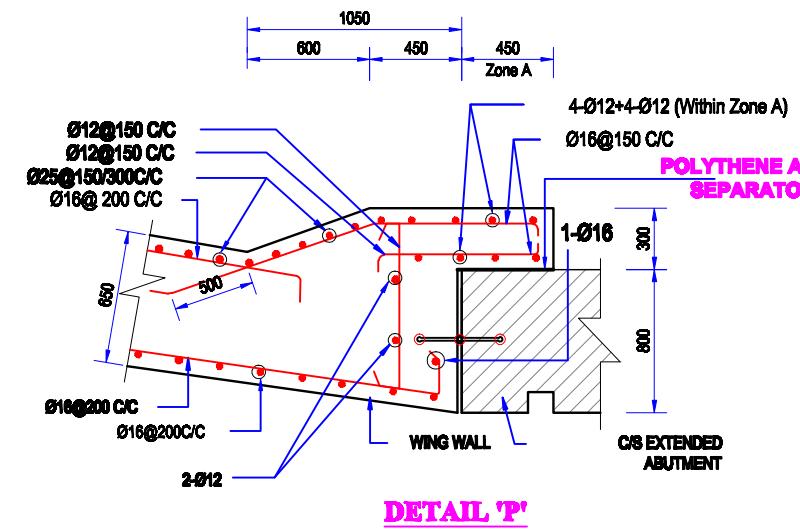
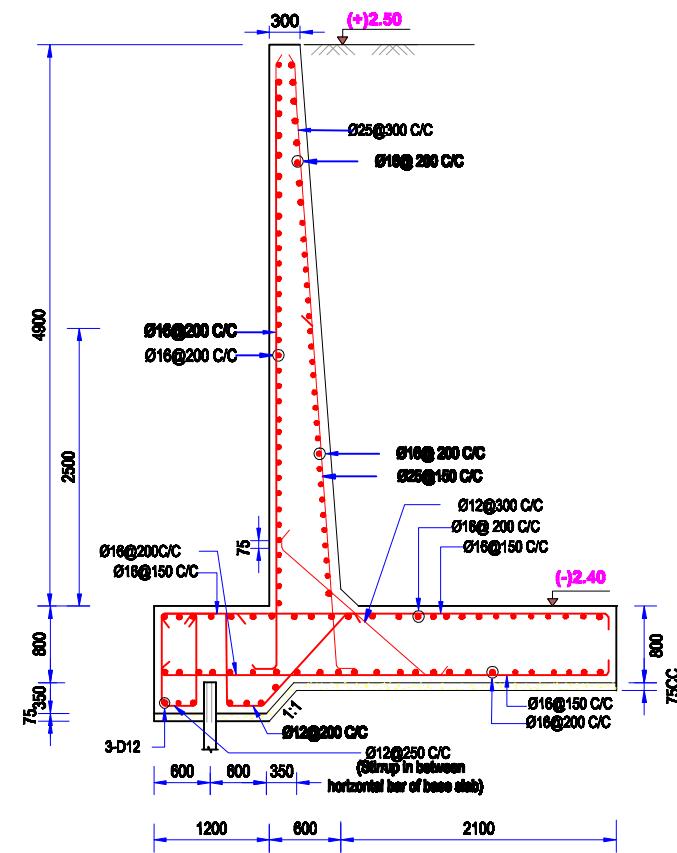
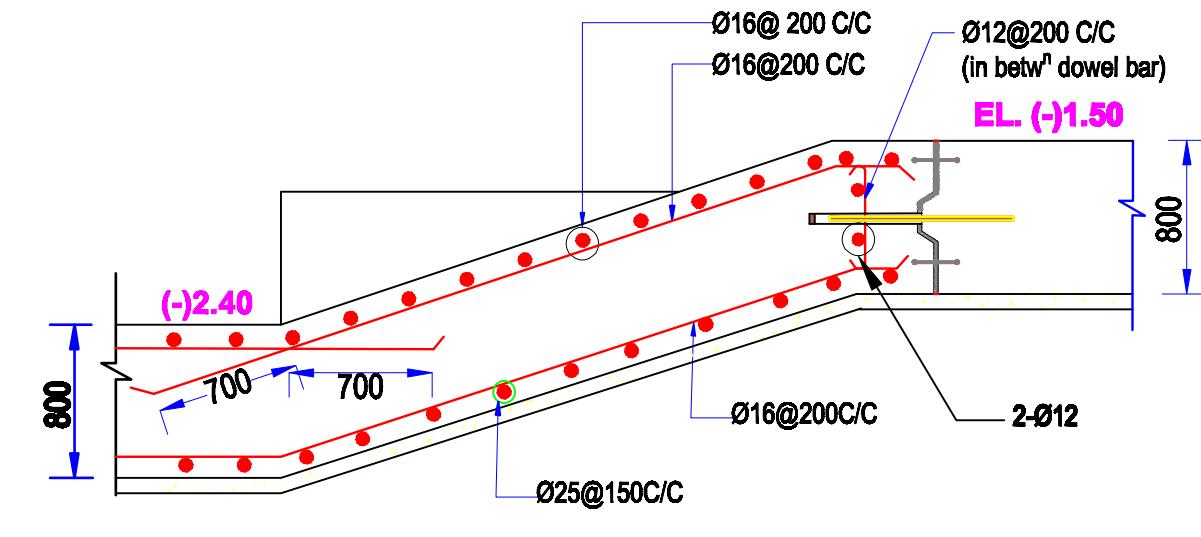
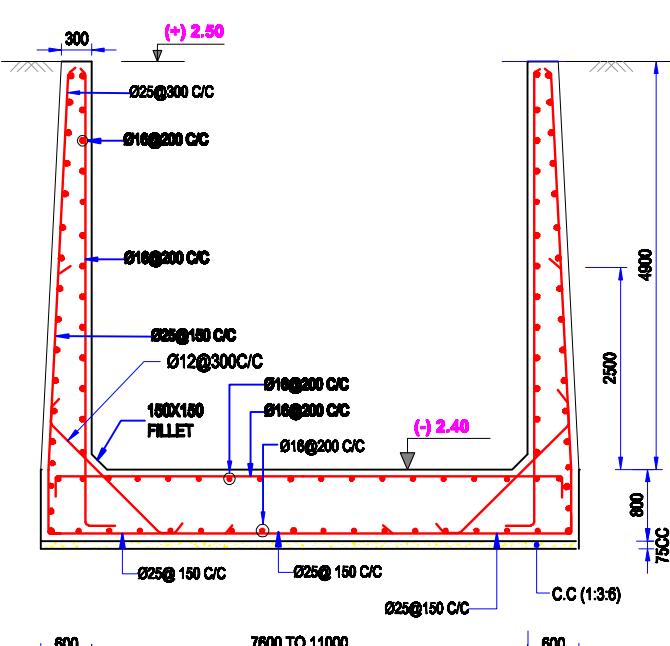
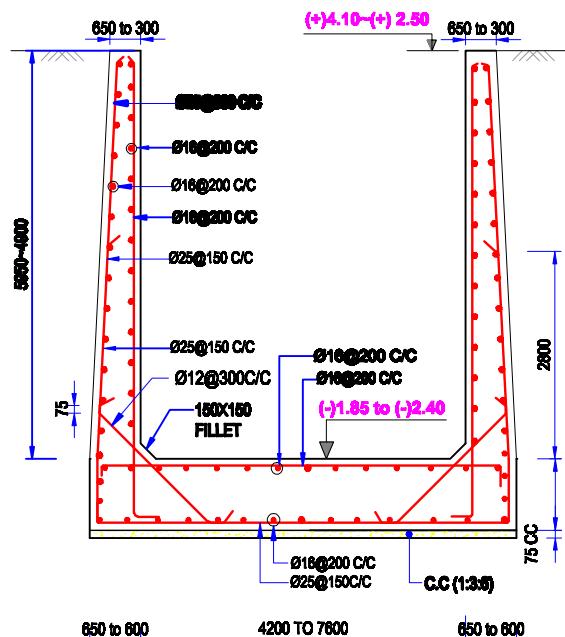


(NOT TO SCALE)



Bangladesh Water Development Board Office of the Superintending Engineer Design Circle-8	
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DESIGN OF REGULATOR 2-VENT (1.50mX1.80m) AT CHANDNIMUKHA KM 6.515 OVER CHANDNIMUKHA KHAL IN POLDER NO-15 UNDER 'REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT' PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB, SATKHIRA.	
REINFORCEMENT DETAILS OF ABUTMENT & BARREL	
DESIGNED BY : (RAHUL BISWAS), AE	APPROVED BY :
CHECKED & RECOMMENDED BY :	
JAKARIA PERVEZ), EE	(MOHAMMAD SAIF UDDIN), SE
DATE: 00-00-2022 DWG. NO.:DC-8-0000-02/25	





Bangladesh Water Development Board

Office of the Superintending Engineer
Design Circle-8

REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT

DESIGN OF REGULATOR 2-VENT (1.50mX1.80m) AT CHANDNIMUKHA KM 6.515 OVER CHANDNIMUKHA KHAL IN POLDER NO-15 UNDER 'REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT' PROJECT UNDER SATKHIRA O&M DIVISION-1 , BWDB , SATKHIRA.

REINFORCEMENT DETAILS OF C/S APRON, WING WALL & RETURN WALL

DESIGNED BY :

(RAHUL BISWAS), AE

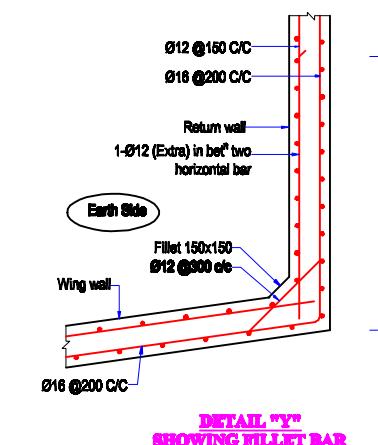
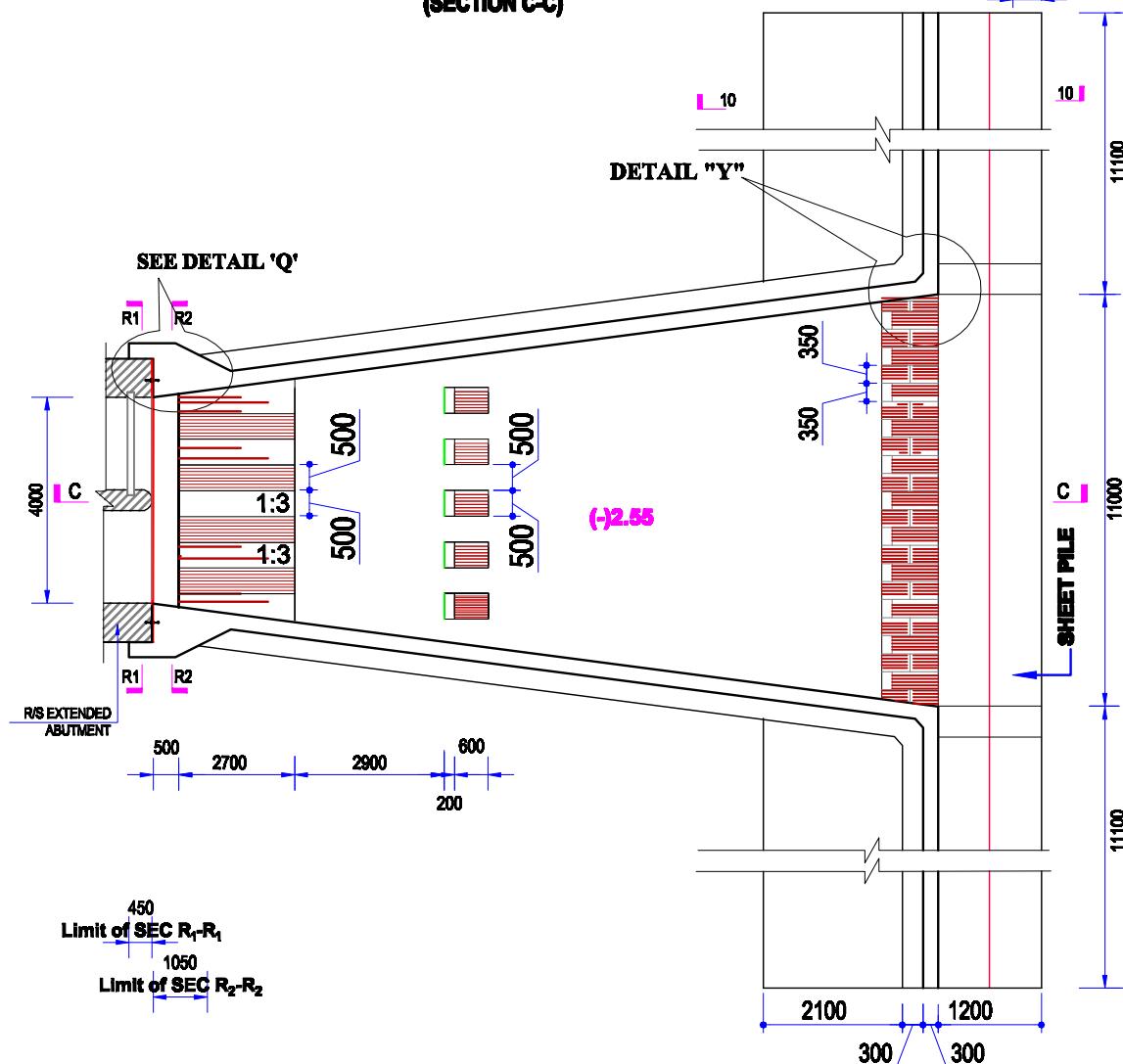
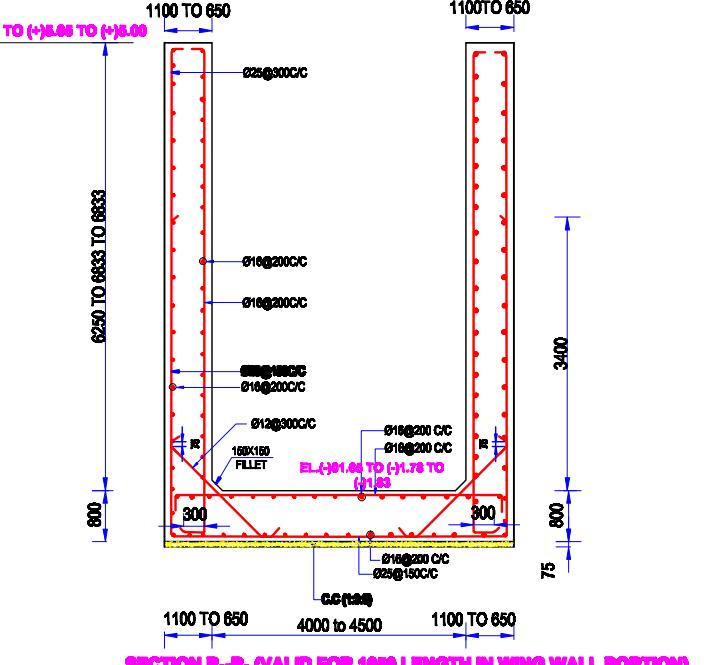
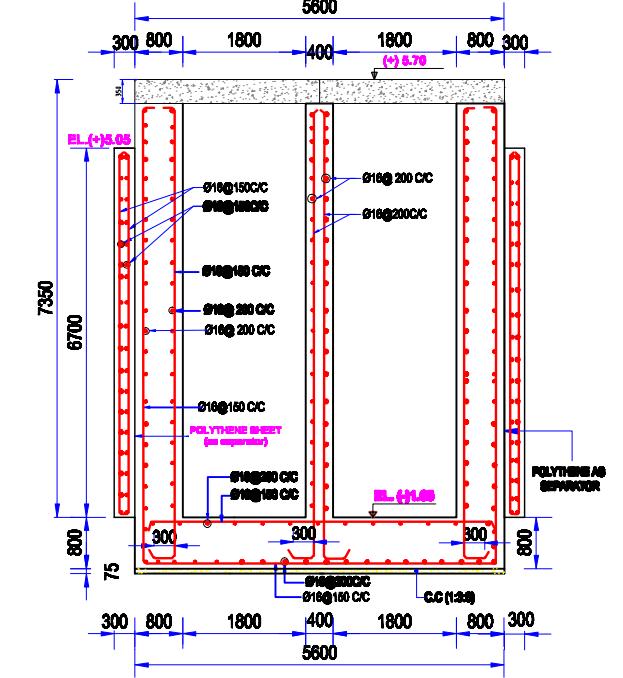
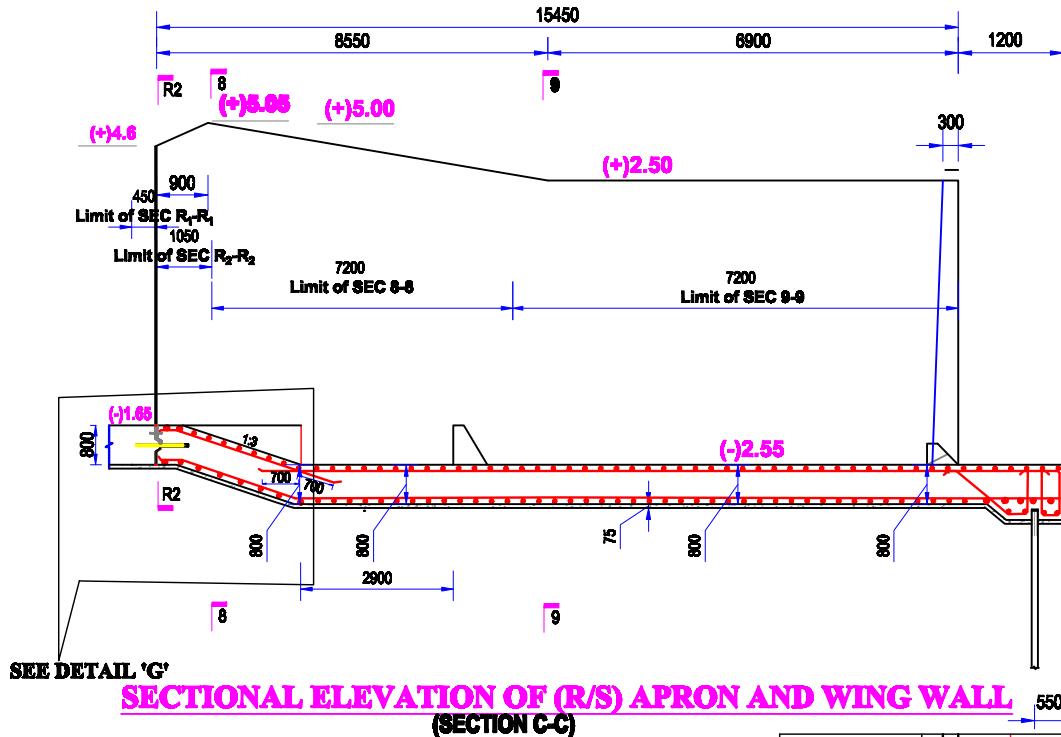
CHECKED & RECOMMENDED BY :

JAKARIA PERVEZ, EE

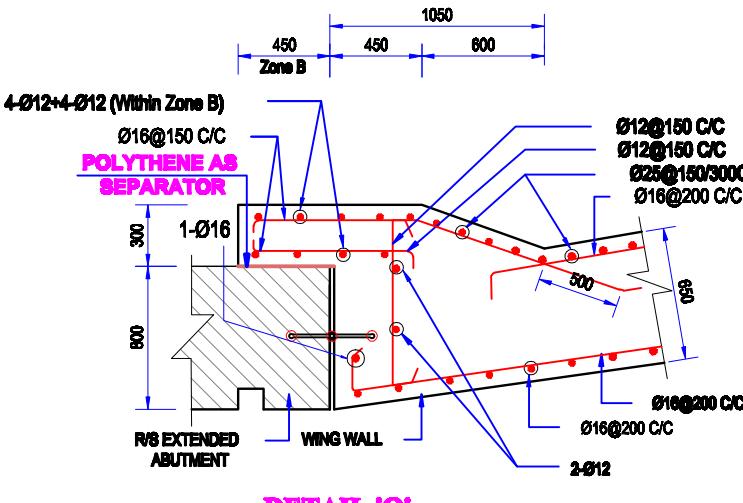
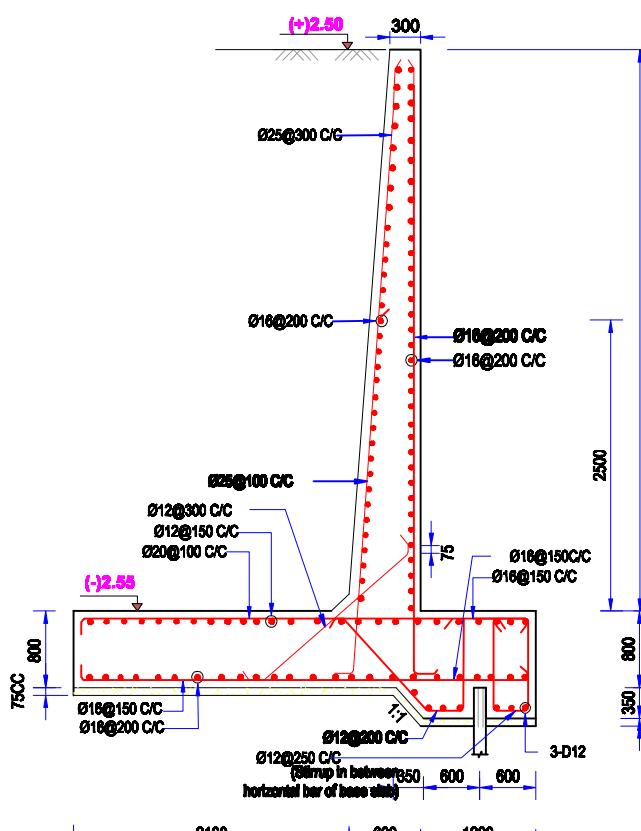
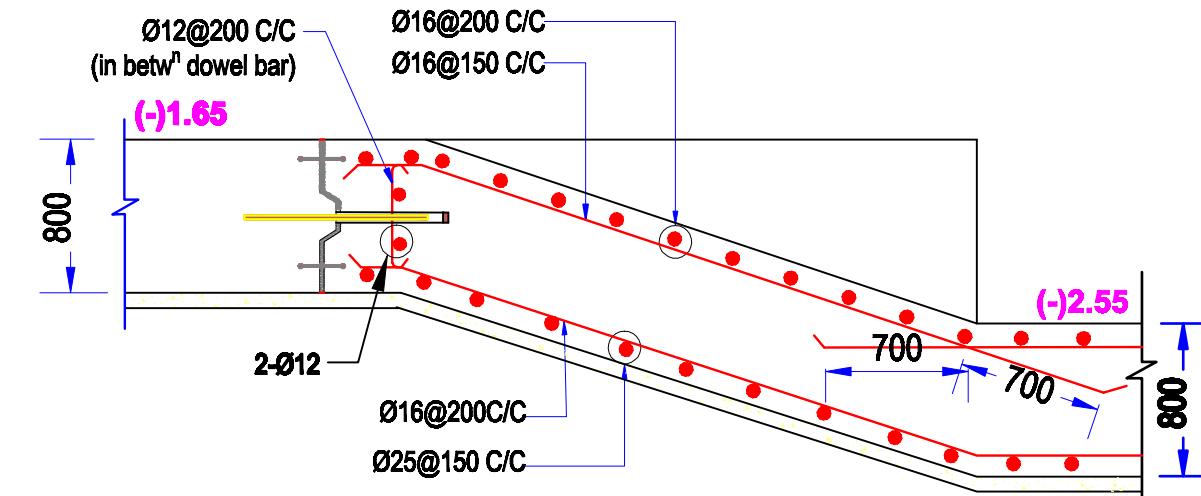
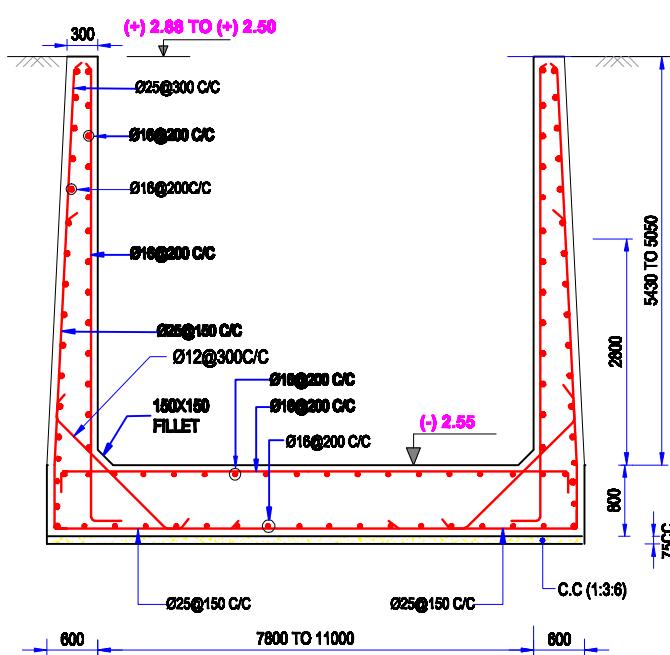
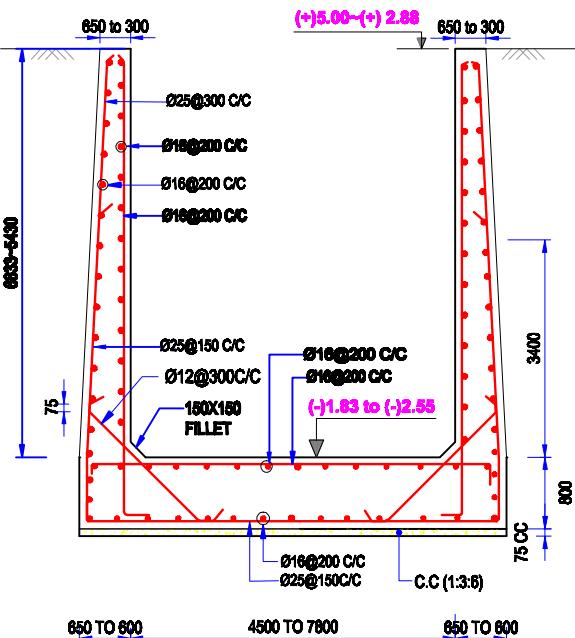
APPROVED BY :

(MOHAMMAD SAIF UDDIN), SE

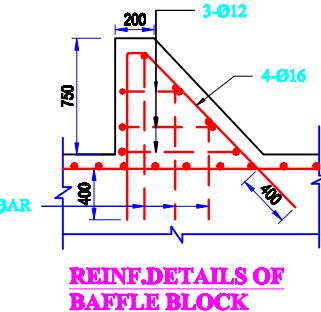
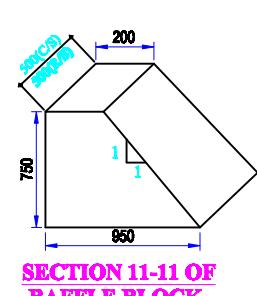
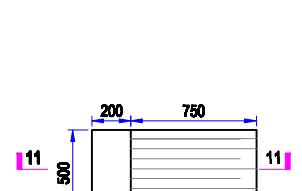
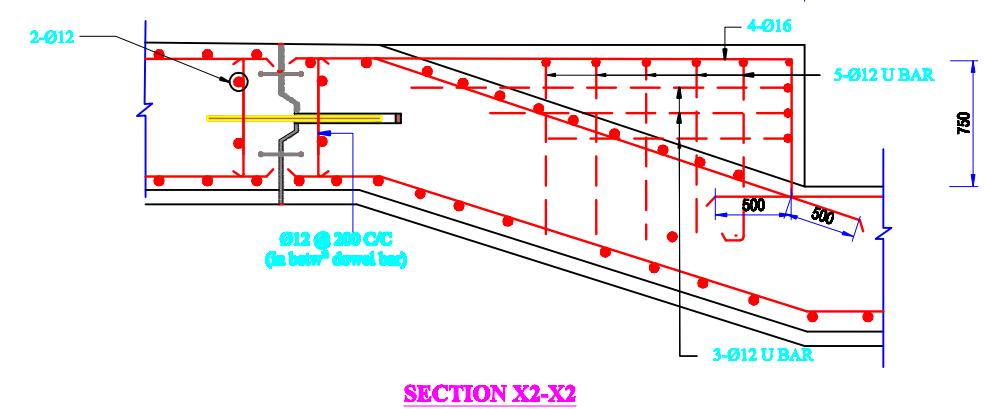
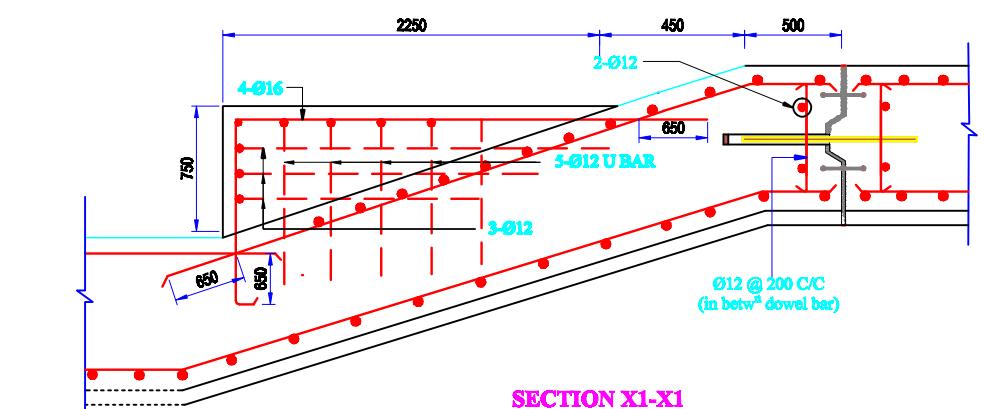
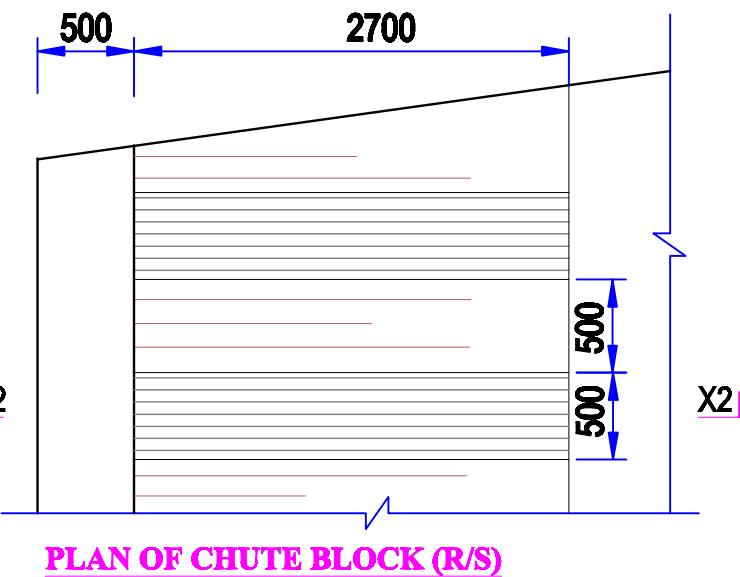
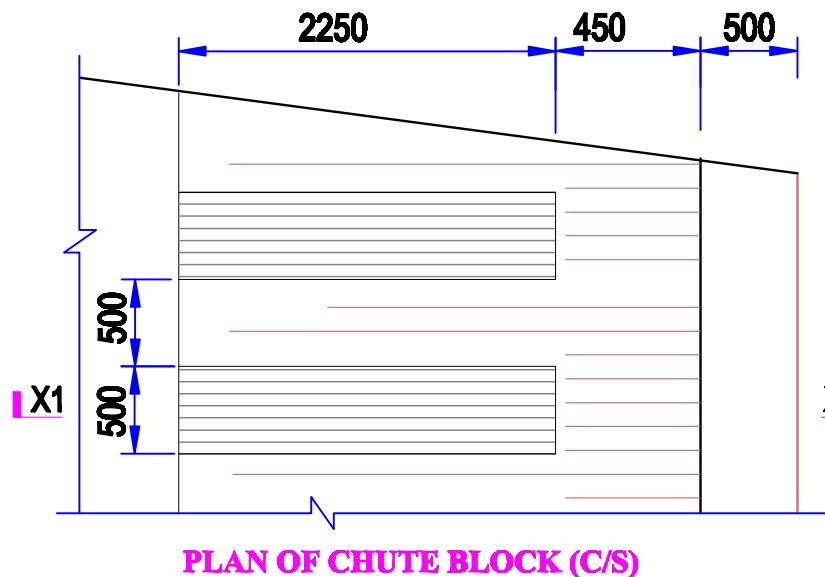
DATE:00-00-2022 DWG. NO.:DC-8-0000-14/25



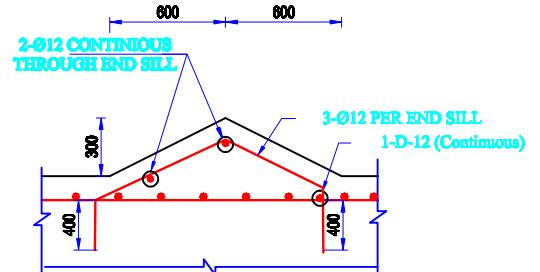
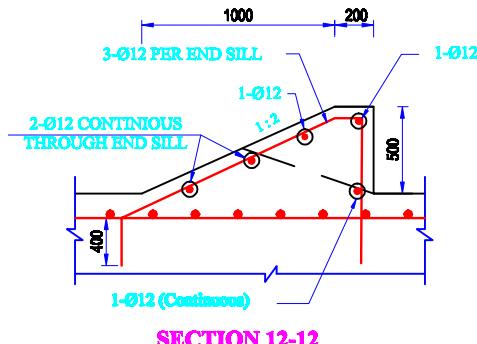
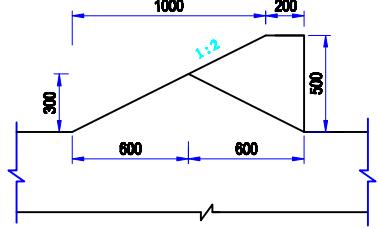
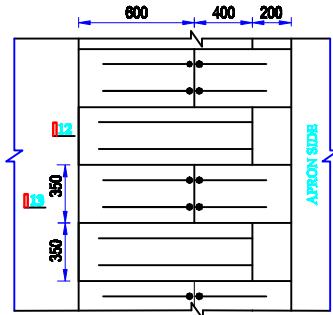
Bangladesh Water Development Board	
Office of the Superintending Engineer	
Design Circle-8	
REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT	
DESIGNED BY :	APPROVED BY :
(RAHUL BISWAS), AE	
CHECKED & RECOMMENDED BY :	
(JAKARIA PERVEZ), EE	(MOHAMMAD SAIF UDDIN), SE
DATE:00-00-2022 DWG. NO.:DC-8-0000-15/25	



Bangladesh Water Development Board Office of the Superintending Engineer Design Circle-8	
REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT	
DESIGN OF REGULATOR 2-VENT (1.50mX1.80m) AT CHANDNIMUKHA KM 6.515 OVER CHANDNIMUKHA KHAL IN POLDER NO-15 UNDER 'REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT' PROJECT UNDER SATKHIRA O&M DIVISION-1 , BWDB , SATKHIRA.	
REINFORCEMENT DETAILS OF R/S APRON, WING WALL & RETURN WALL	
DESIGNED BY : (RAHUL BISWAS), AE	APPROVED BY :
CHECKED & RECOMMENDED BY :	
JAKARIA PERVEZ), EE	(MOHAMMAD SAIF UDDIN), SE
DATE:00-00-2022 DWG. NO.:DC-8-0000-16/25	



BAFFLE BLOCK DETAILS
(Concrete Outline & Reinforcement)



Bangladesh Water Development Board

Office of the Superintending Engineer
Design Circle-8

REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT

DESIGN OF REGULATOR 2-VENT (1.50mX1.80m) AT CHANDNIMUKHA KM 6.515 OVER CHANDNIMUKHA KHAL IN POLDER NO-15 UNDER 'REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT' PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB, SATKHIRA.

CHUTE , ENDSILL & BAFFLE REINFORCEMENT DETAILS

DESIGNED BY :

(RAHUL BISWAS), AE

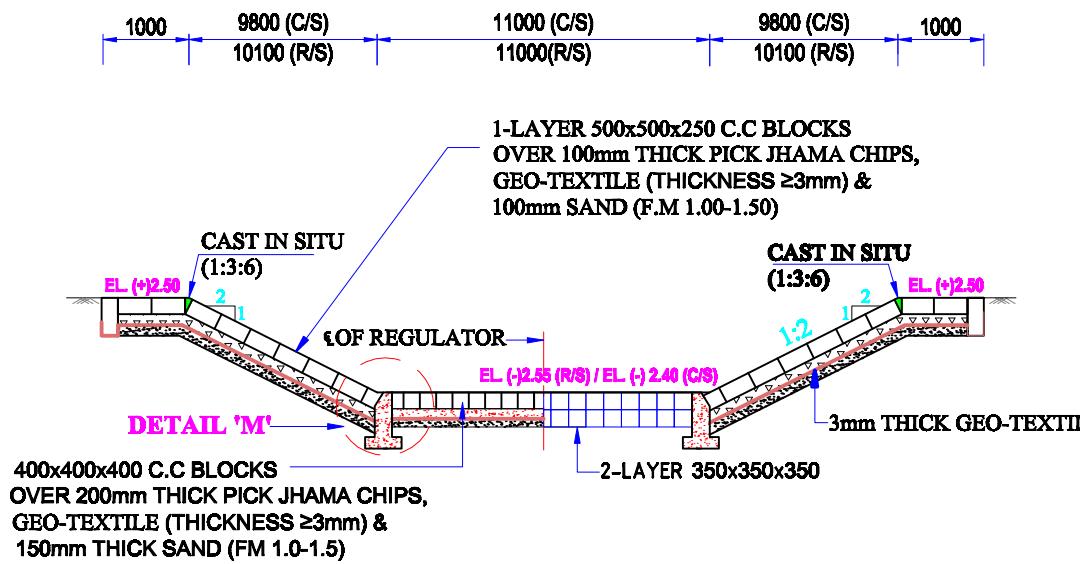
CHECKED & RECOMMENDED BY :

(JAKARIA PERVEZ), EE

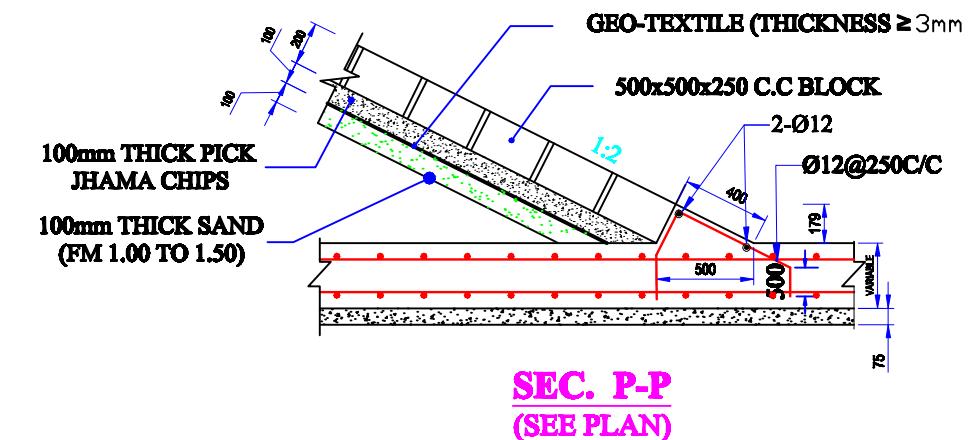
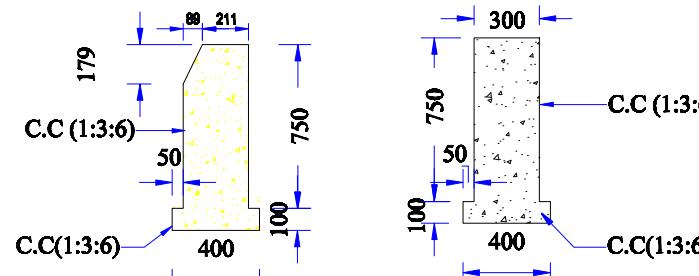
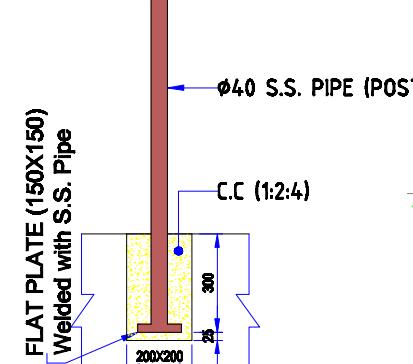
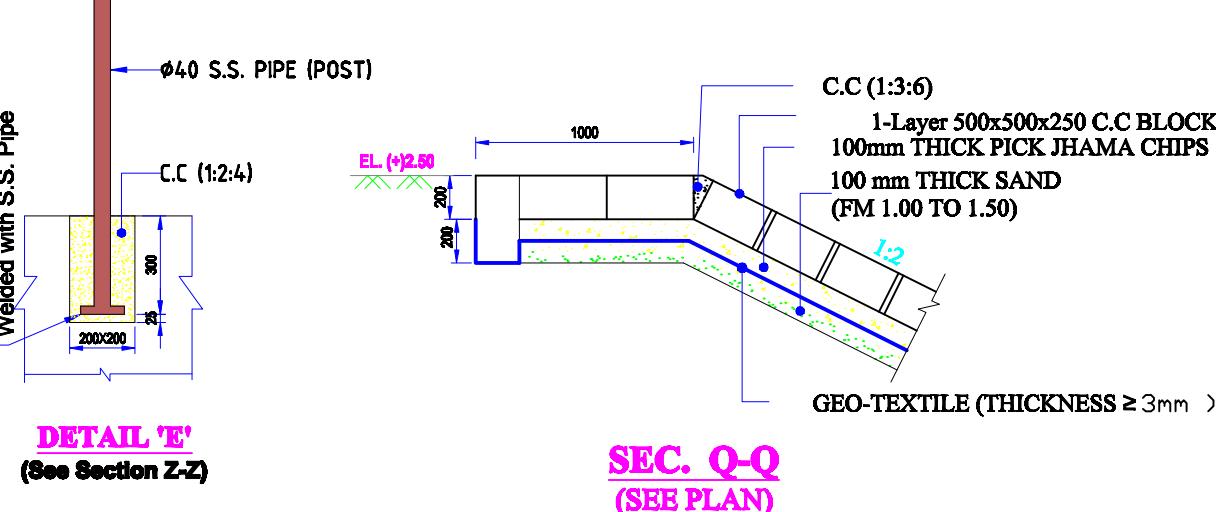
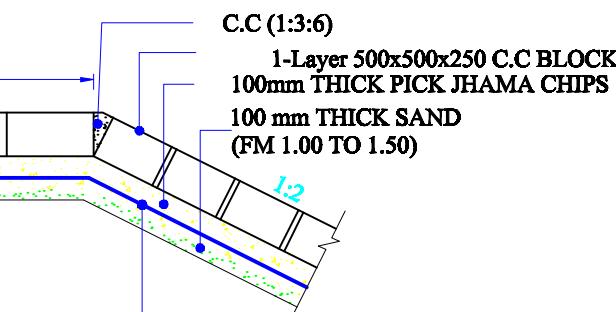
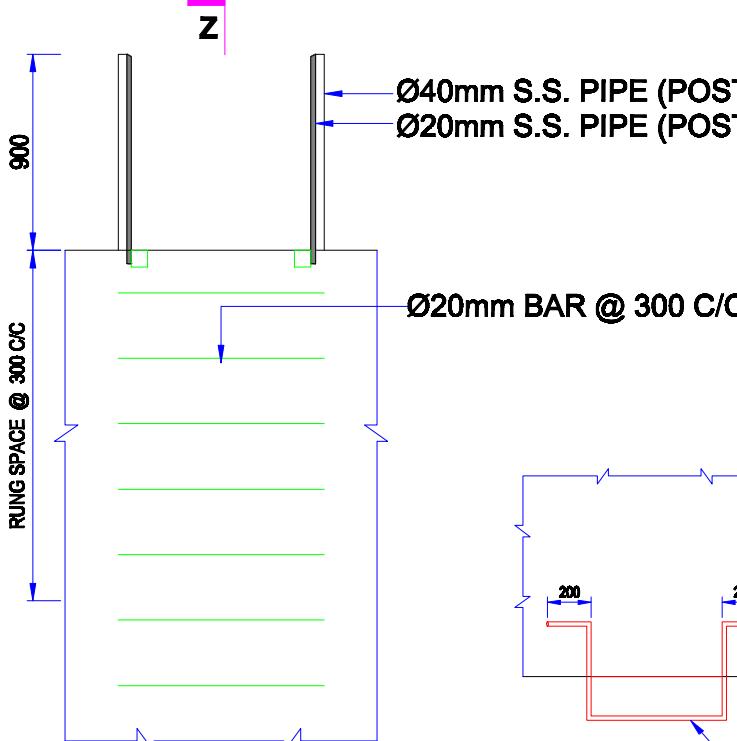
APPROVED BY :

(MOHAMMAD SAIF UDDIN), SE

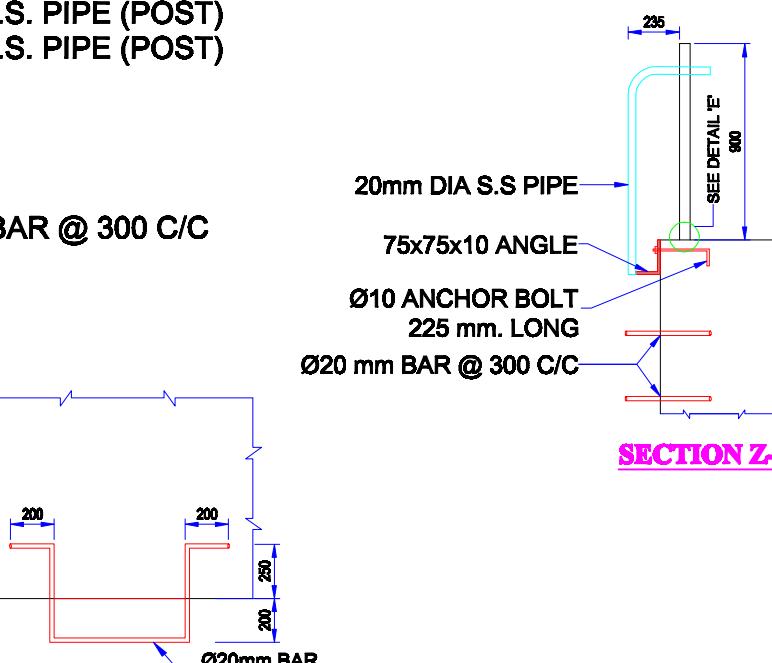
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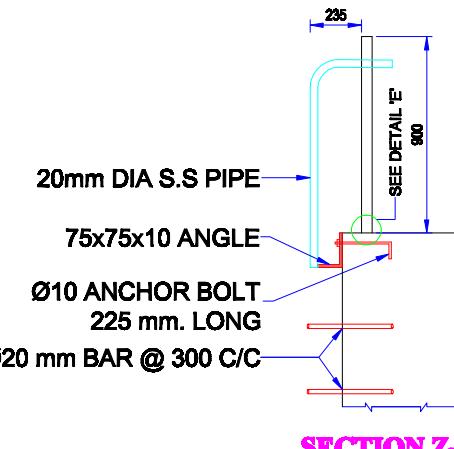
SECTION R-R (SEE PLAN)

SEC. P-P
(SEE PLAN)DETAIL 'M'
(SEE PLAN)SECTION M-M
(SEE PLAN)DETAIL 'E'
(See Section Z-Z)SEC. Q-Q
(SEE PLAN)

RUNG DETAILS



RUNG DETAILS



SECTION Z-Z

Bangladesh Water Development BoardOffice of the Superintending Engineer
Design Circle-8**REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT**

DESIGN OF REGULATOR 2-VENT (1.50mX1.80m) AT CHANDNIMUKHA KM 6.515 OVER CHANDNIMUKHA KHAL IN POLDER NO-15 UNDER REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT 'PROJECT UNDER SATKHIRA O&M DIVISION-1 , BWDB , SATKHIRA.

DETAIL OF PROTECTIVE WORKS & OTHERS

DESIGNED BY :

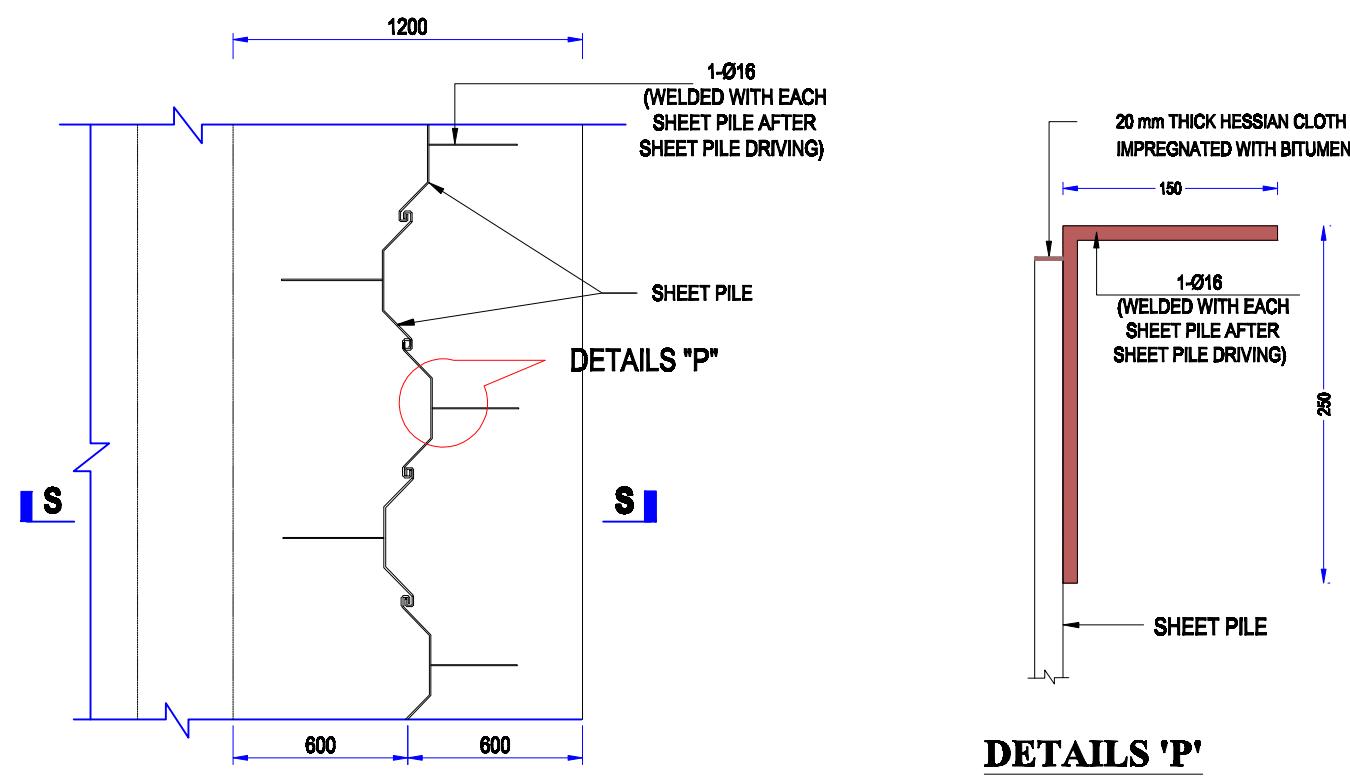
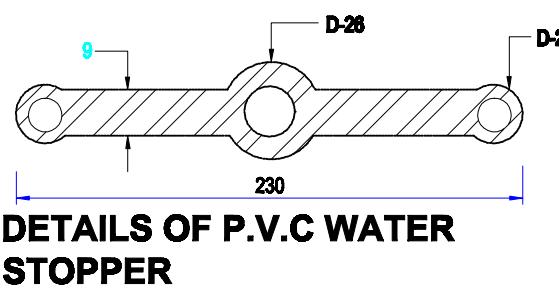
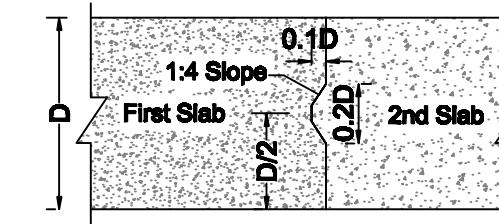
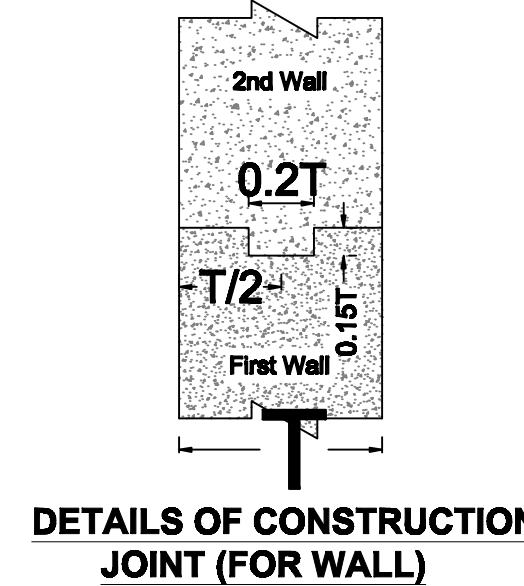
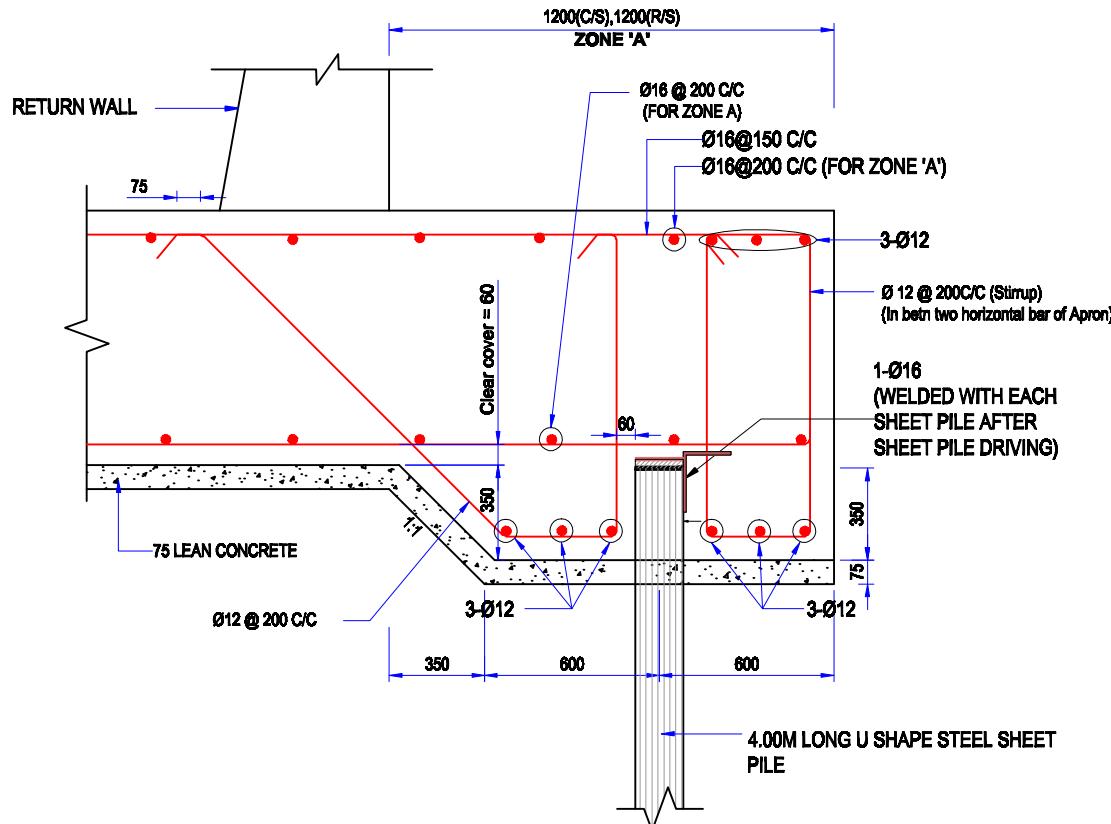
(RAHUL BISWAS), AE

CHECKED & RECOMMENDED BY :

(JAKARIA PERVEZ), EE

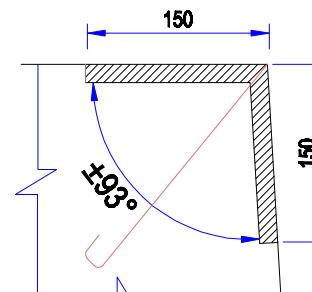
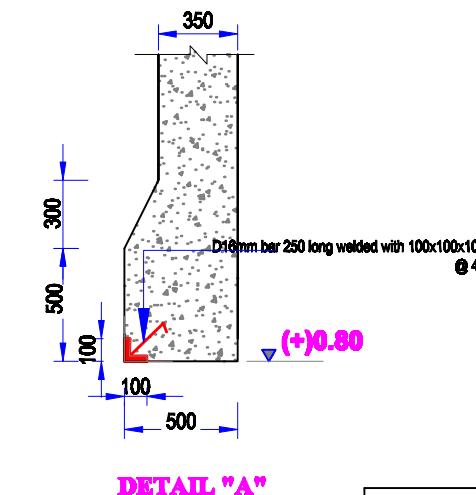
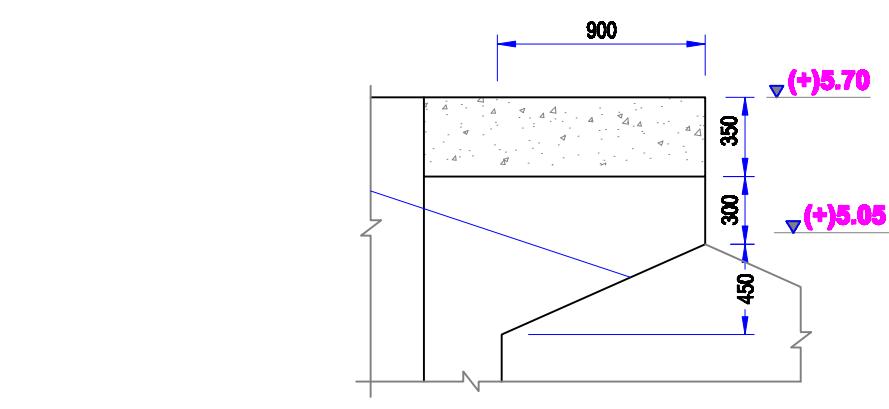
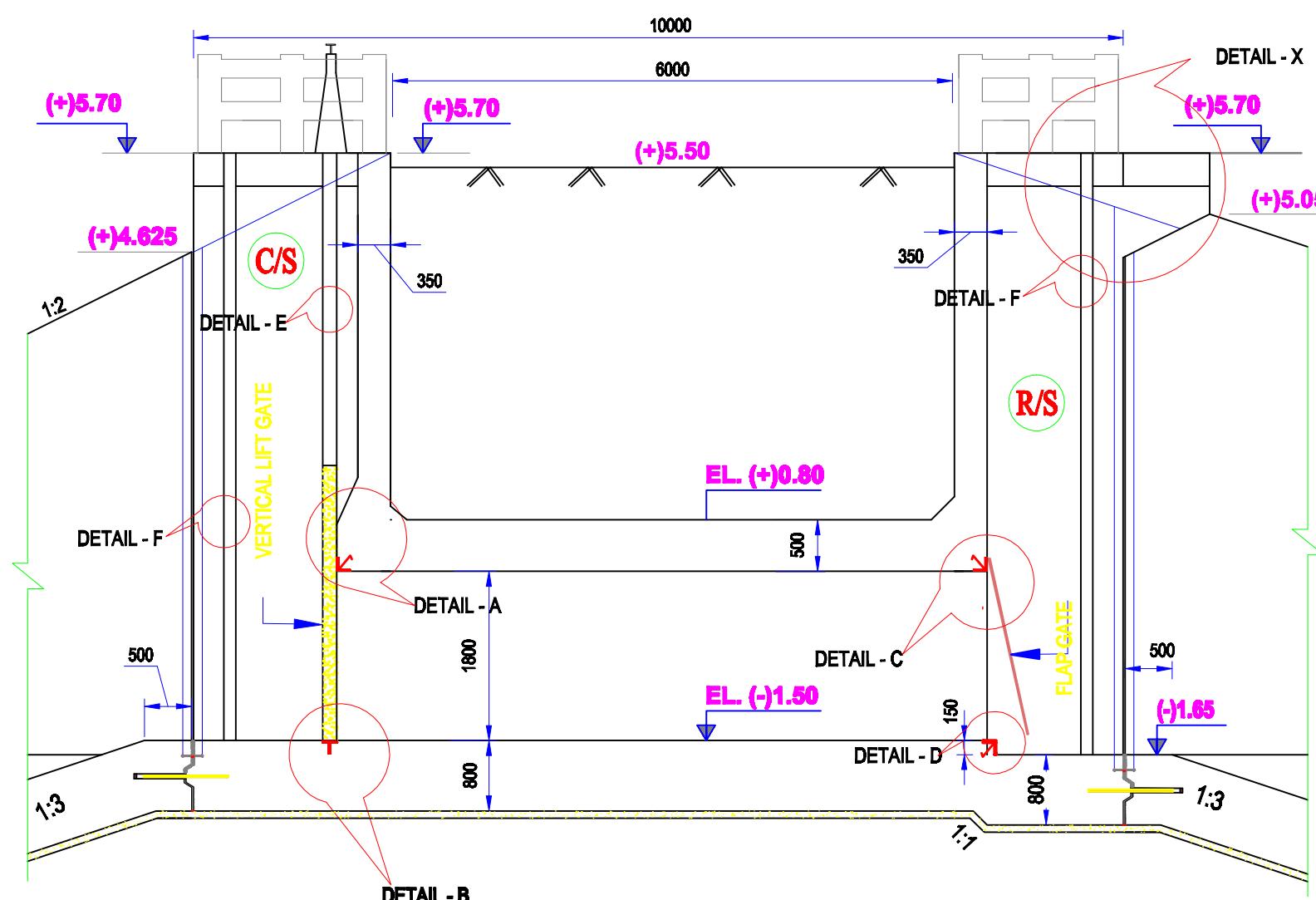
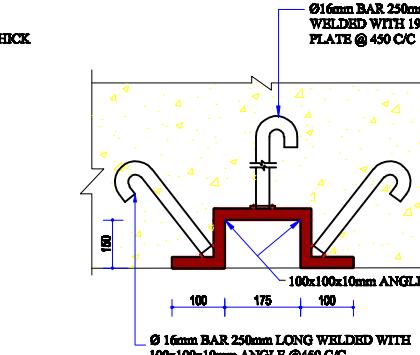
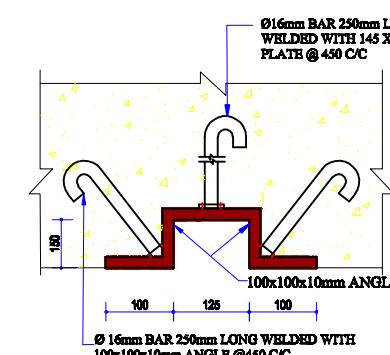
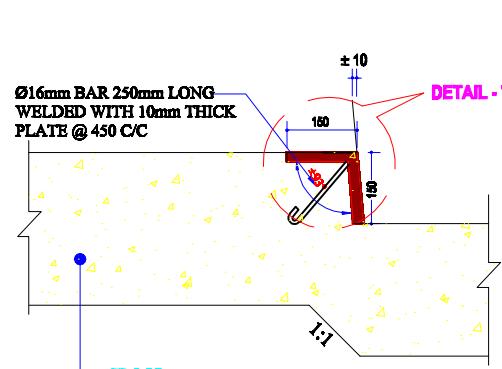
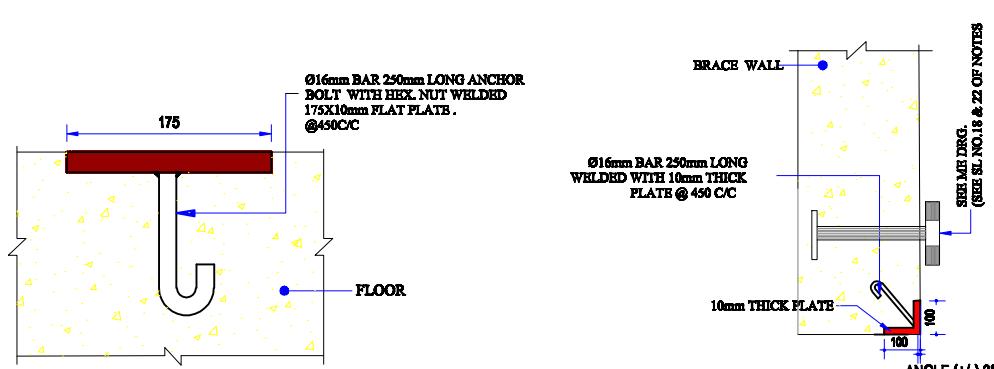
APPROVED BY :

(MOHAMMAD SAIF UDDIN), SE

**DETAILS 'P'**

Bangladesh Water Development Board	
Office of the Superintending Engineer	
Design Circle-8	
REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT	
DESIGNED BY :	APPROVED BY :
(RAHUL BISWAS), AE	
CHECKED & RECOMMENDED BY :	
JAKARIA PERVEZ, EE	MOHAMMAD SAIF UDDIN, SE
DATE:00-00-2022 DWG. NO.:DC-8-0000-19/25	

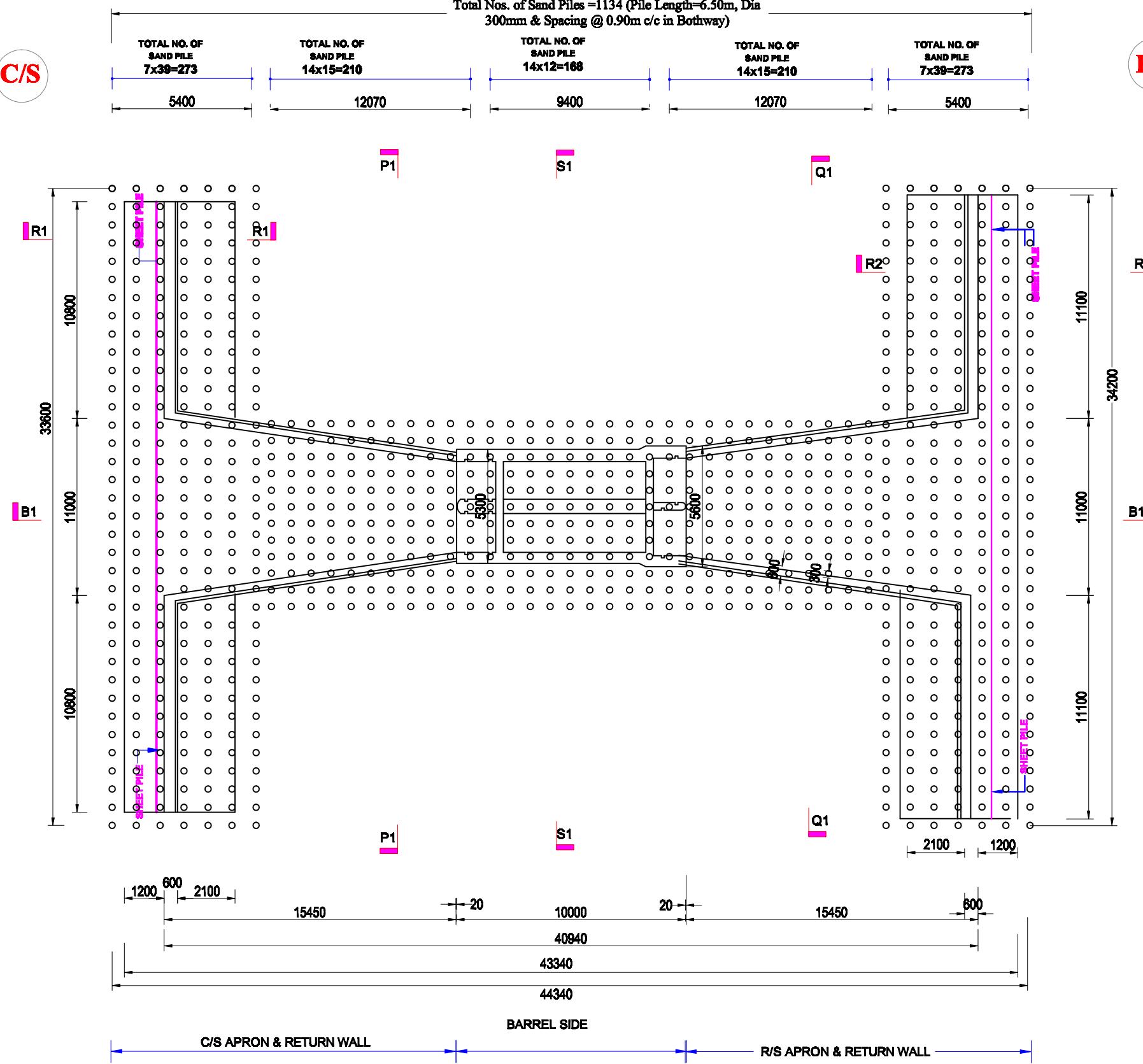
LAYOUT PLAN OF SHEET PILE



Bangladesh Water Development Board	
Office of the Superintending Engineer	
Design Circle-8	
REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT	
DESIGN OF REGULATOR 2-VENT (1.50mX1.80m) AT CHANDNIMUKHA KM 6.515 OVER CHANDNIMUKHA KHAL IN POLDER NO-15 UNDER REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT 'PROJECT UNDER SATKHIRA O&M DIVISION-1 , BWDB , SATKHIRA.	

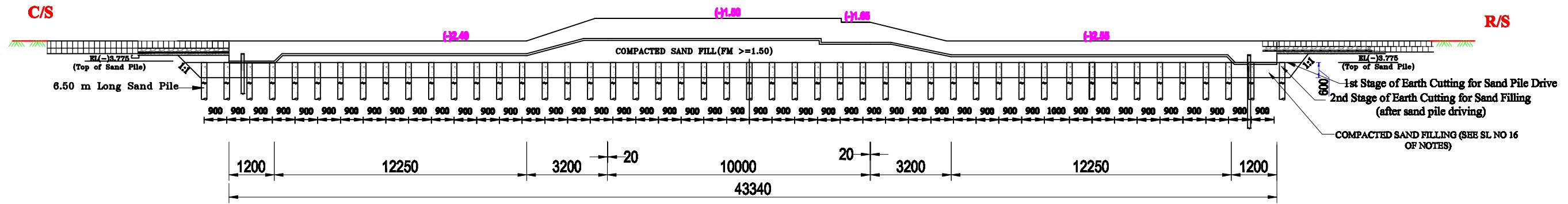
MISCELLANEOUS METAL DETAIL

DESIGNED BY : (RAHUL BISWAS), AE	APPROVED BY :
CHECKED & RECOMMENDED BY :	
JAKARIA PERVEZ), EE	(MOHAMMAD SAIF UDDIN), SE
DATE:00-00-2022 DWG. NO.:DC-8-0000-20/25	

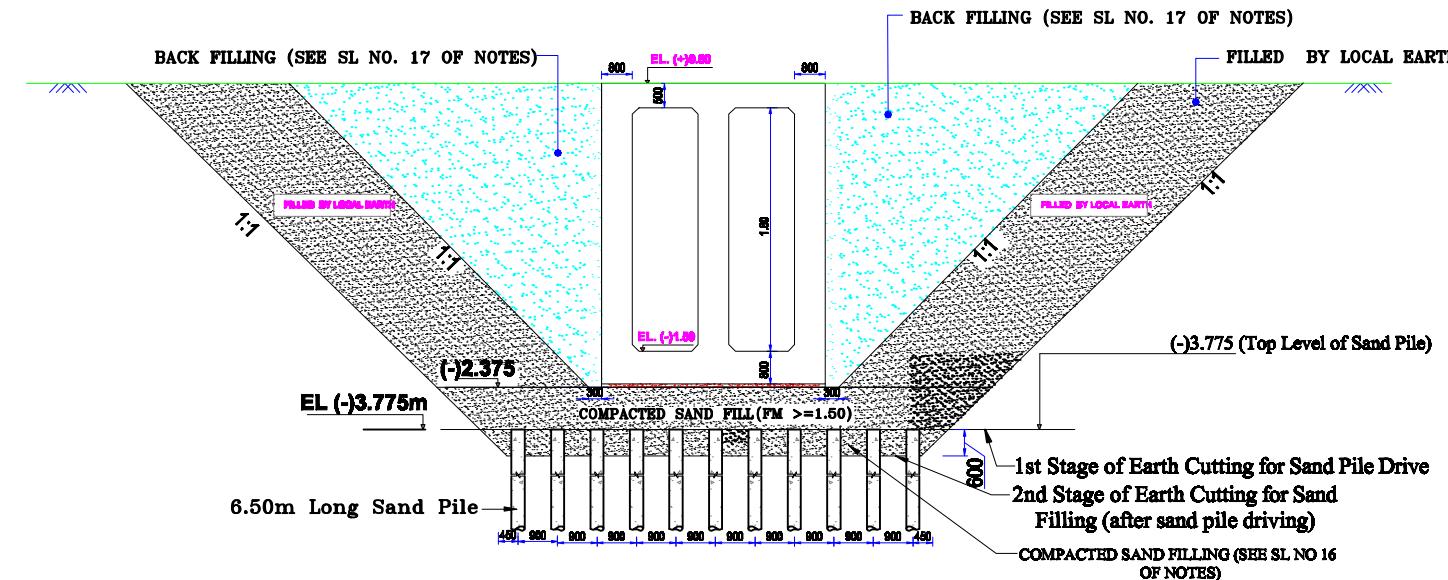
**NOTE FOR SAND PILE:**

1. SAND PILE OF 4.00m LENGTH WITH 300mm CASING DIA. AS SPECIFIED IN THE DRAWING SHALL HAVE TO BE CONSTRUCTED AS PER STANDARD DISPLACEMENT METHOD.
2. SAND TO BE USED IN PILING SHALL BE FREE FROM ALL ORGANIC AND FOREIGN MATERIALS AND SHALL HAVE FM=2.00.
3. DIAMETER LENGTH CONTINUITY OF PILE SHALL HAVE TO BE CHECKED BY MEASURING SAND FORCE VOLUME FOR EACH EXECUTED PILE. THE SAND FORCE VOLUME PER METER AND PER PILE SHALL NOT BE LESS THAN 0.25 CUBIC METER AND 1.00 CUBIC METER RESPECTIVELY (ITEM CODE: 44-400-40).
4. BEFORE EXECUTION AND AFTER EXECUTION OF SAND PILE PLATE BEARING TEST MUST BE CONDUCTED. FOR COHESIVE SOIL CONSOLIDATION TEST SHOULD BE DONE.
5. AFTER EXECUTION OF ALL SAND PILE, SPT VALUES SHALL HAVE TO BE DETERMINED BY THE FIELD TESTS. SPT VALUES ATTAINED AT 1.50 METER INTERVALS SHALL BE DETERMINED.
6. AFTER PILING SPT VALUE IN BETWEEN SAND PILES AT FOUNDATION LEVEL SHALL BE MINIMUM 12 TO 14 .
7. ALL THE RECORDS OF SAND PILING SHALL BE MAINTAINED IN DETAILS WITH CONSTANT SUPERVISION AND IT SHOULD BE SENT TO THE DESIGN OFFICE.

Bangladesh Water Development Board	
Office of the Superintending Engineer	
Design Circle-8	
REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT	
DESIGNED BY : (RAHUL BISWAS), AE CHECKED & RECOMMENDED BY : (JAKARIA PERVEZ), EE	APPROVED BY : (MOHAMMAD SAIF UDDIN), SE
DATE:00-00-2022 DWG. NO.:DC-8-0000-21/25	

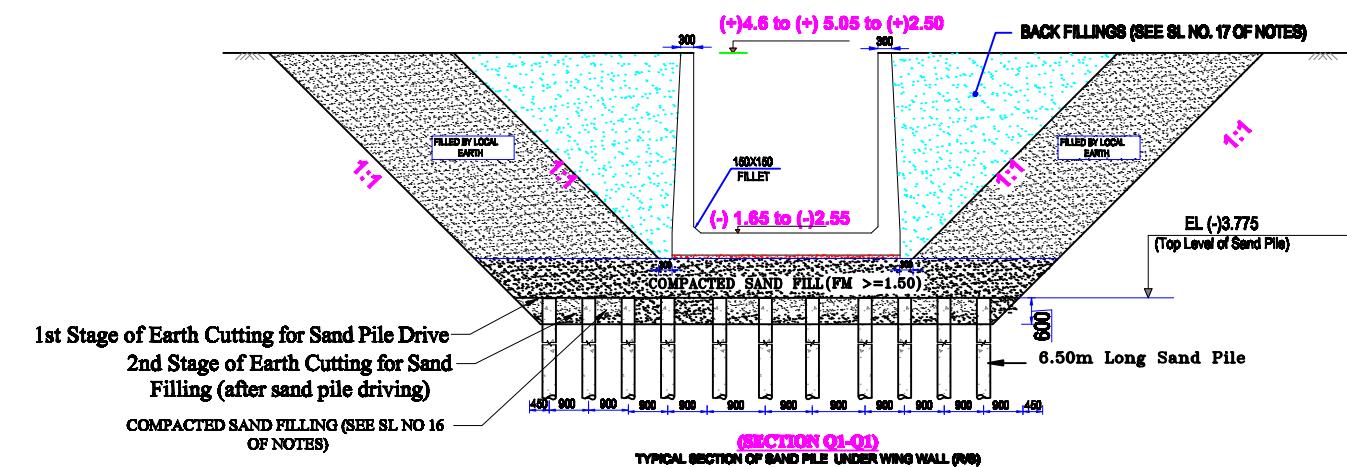
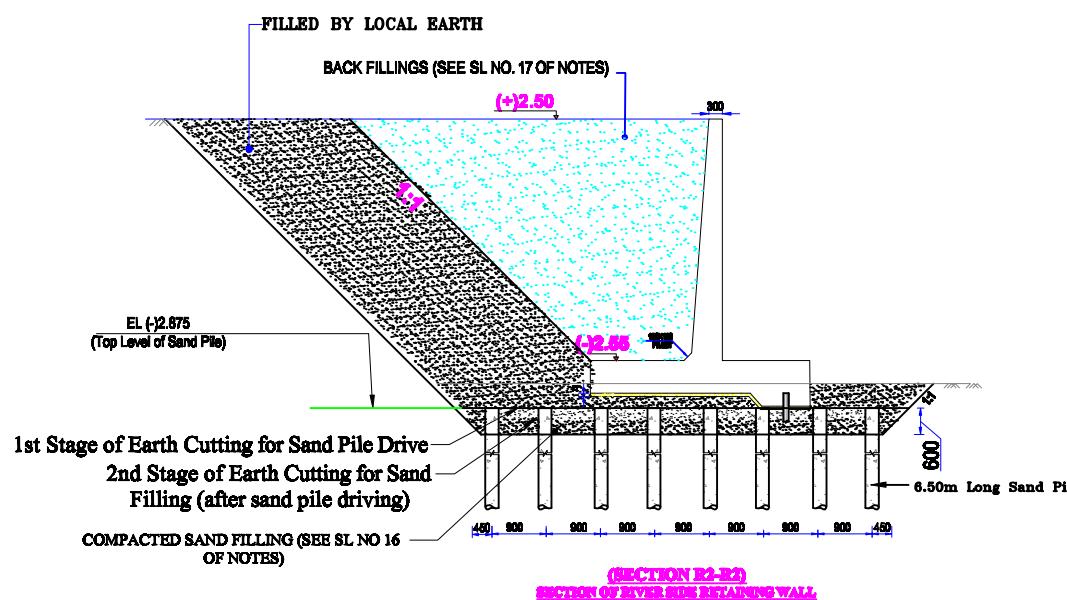
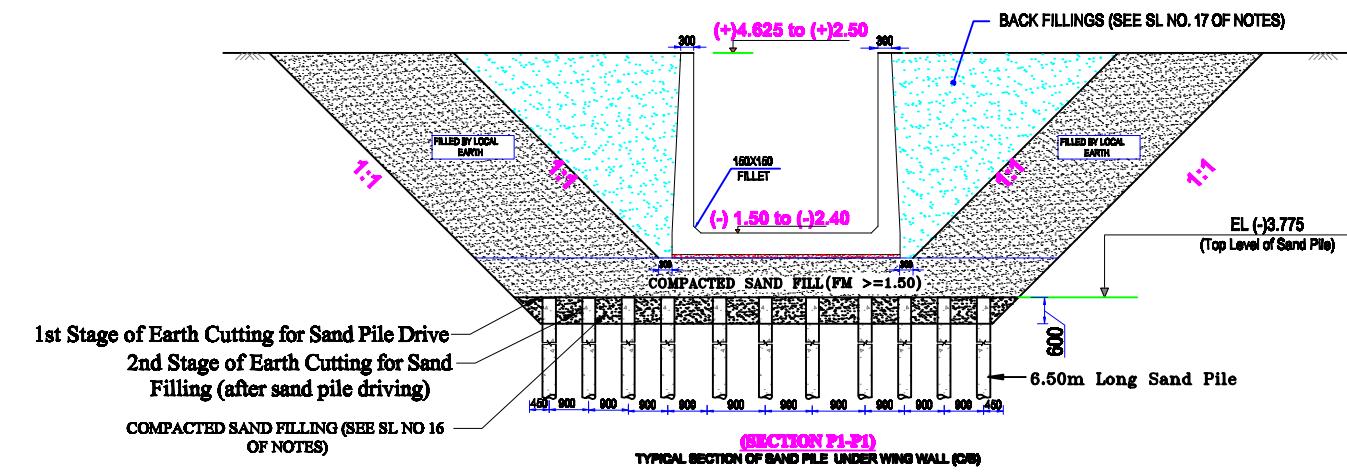
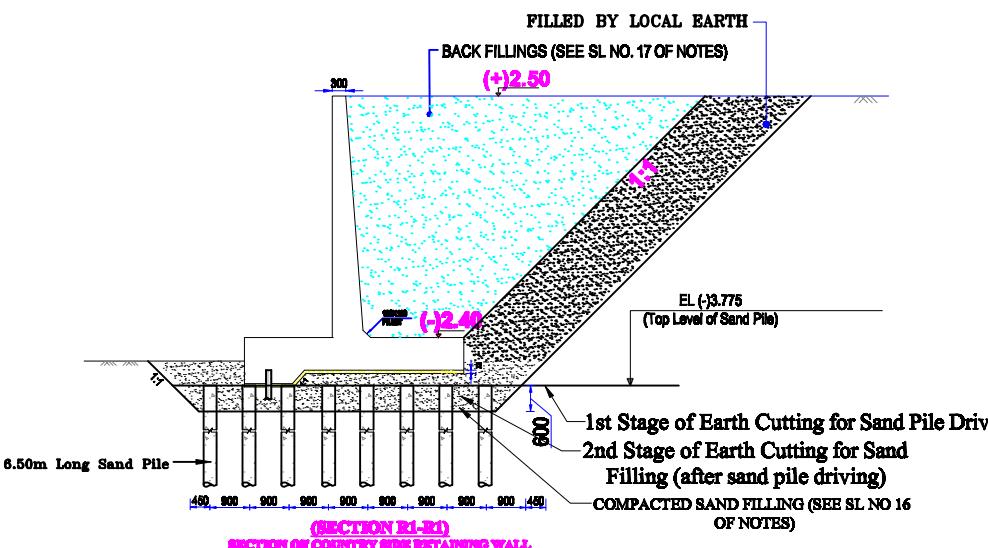


**SECTION (B1-B1) SHOWING
SAND PILE DETAIL**

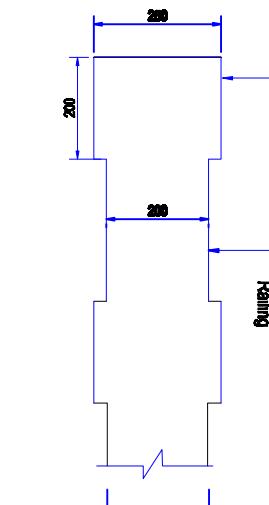
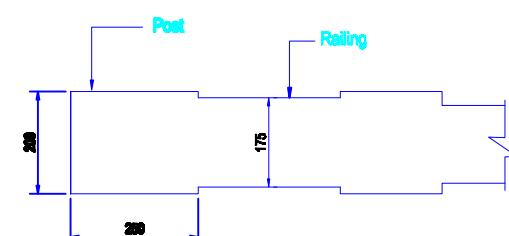
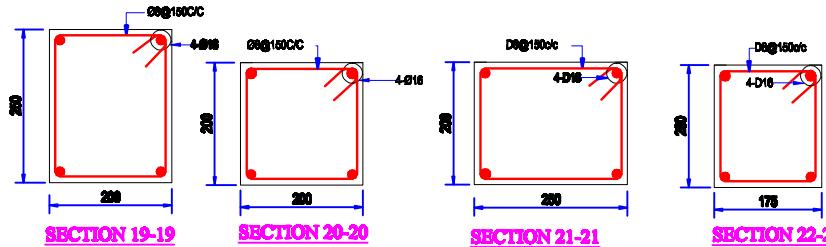
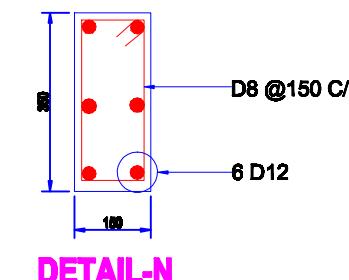
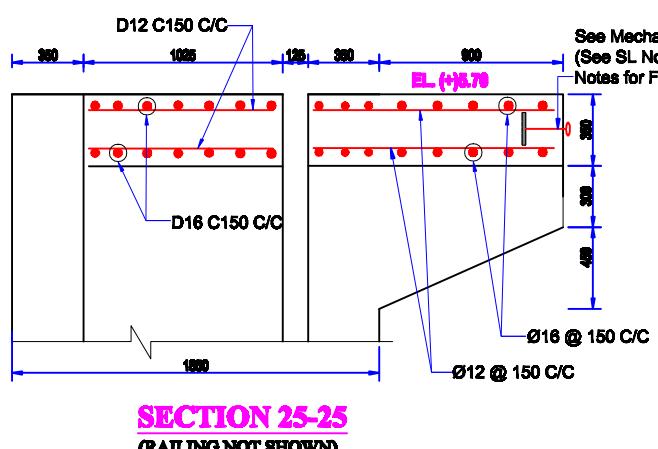
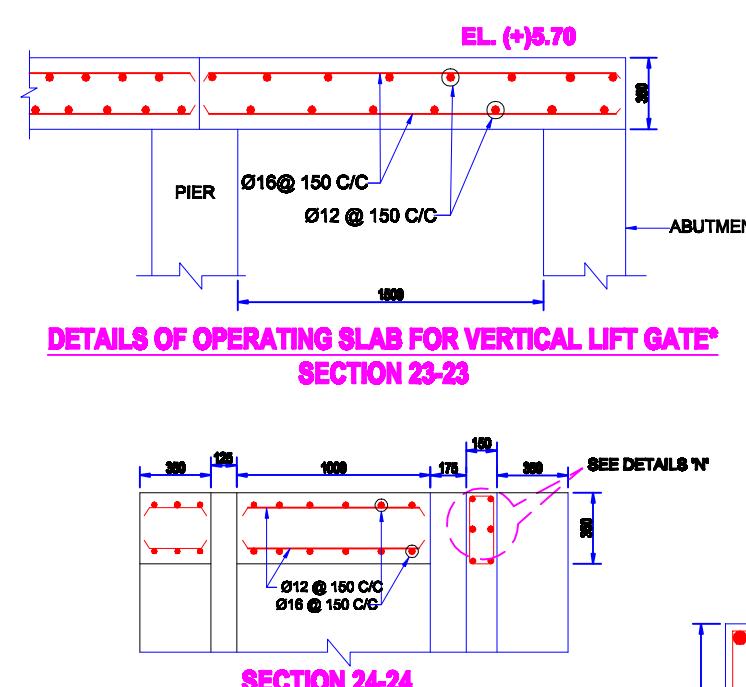
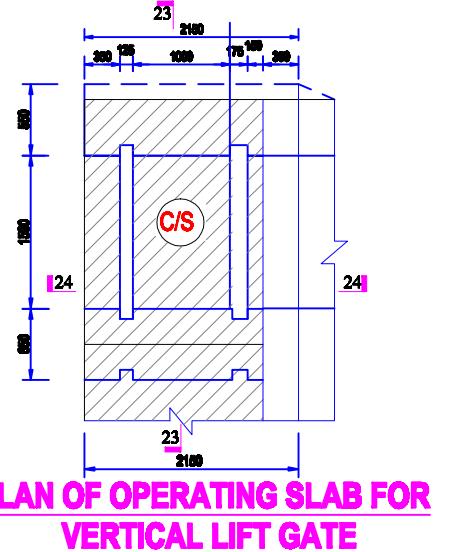
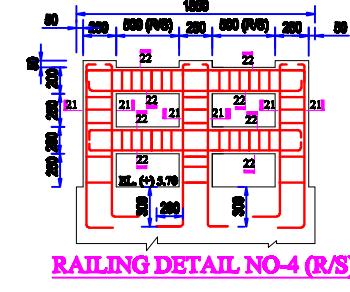
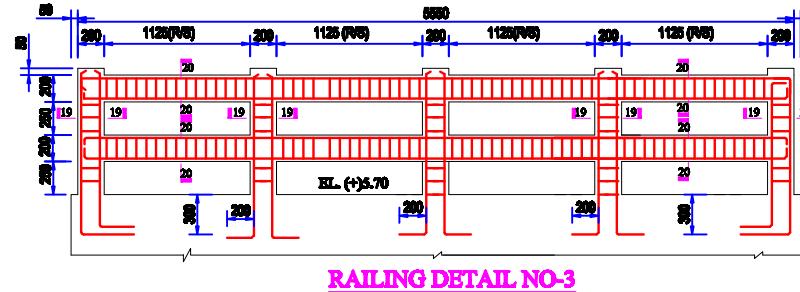
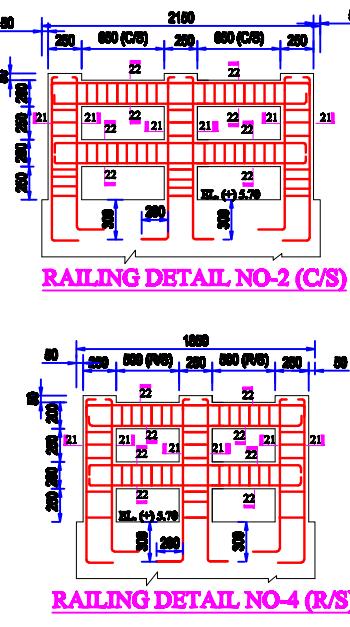
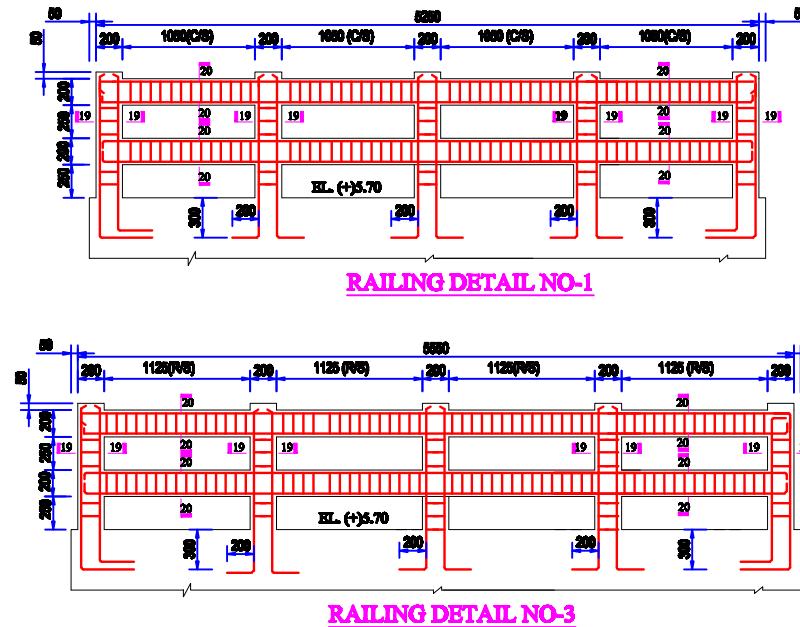
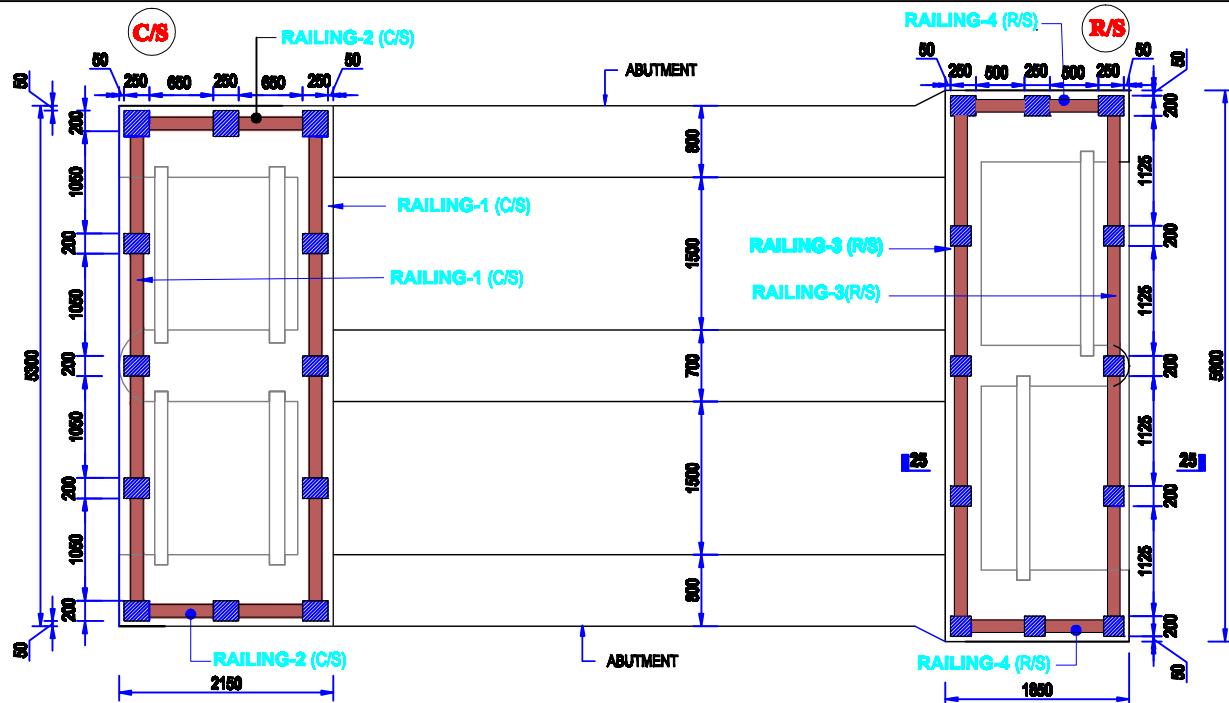


SECTION S1-S1

Bangladesh Water Development Board	
Office of the Superintending Engineer	
Design Circle-8	
REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT	
DESIGNED BY :	APPROVED BY :
(RAHUL BISWAS), AE	
CHECKED & RECOMMENDED BY :	
JAKARIA PERVEZ, EE	(MOHAMMAD SAIF UDDIN), SE
DATE: 00-00-2022 DWG. NO.: DC-8-0000-22/25	



Bangladesh Water Development Board	
Office of the Superintending Engineer	
Design Circle-8	
REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT	
DESIGN OF REGULATOR 2-VENT (1.50mX1.80m) AT CHANDNIMUKHA KM 6.515 OVER CHANDNIMUKHA KHAL IN POLDER NO-15 UNDER 'REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT' PROJECT UNDER SATKHIRA OEM DIVISION-1 , BWDB , SATKHIRA.	
SAND PILE DETAILS OF LONGITUDINAL PROFILE & BOX	
DESIGNED BY :	APPROVED BY :
(RAHUL BISWAS), AE	
CHECKED & RECOMMENDED BY :	
JAKARIA PERVEZ, EEE	(MOHAMMAD SAIF UDDIN), SE
DATE:00-00-2022 DWG. NO.:DC-8-0000-22/25	



Bangladesh Water Development Board

Office of the Superintending Engineer
Design Circle-8

REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT

DESIGN OF REGULATOR 2-VENT (1.50mX1.80m) AT CHANDNIMUKHA KM 6.515 OVER CHANDNIMUKHA KHAL IN POLDER NO-15 UNDER 'REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT' PROJECT UNDER SATKHIRA O&M DIVISION-1 , BWDB , SATKHIRA.

RAILING REINFORCEMENT DETAIL

DESIGNED BY :

(RAHUL BISWAS), AE

CHECKED & RECOMMENDED BY :

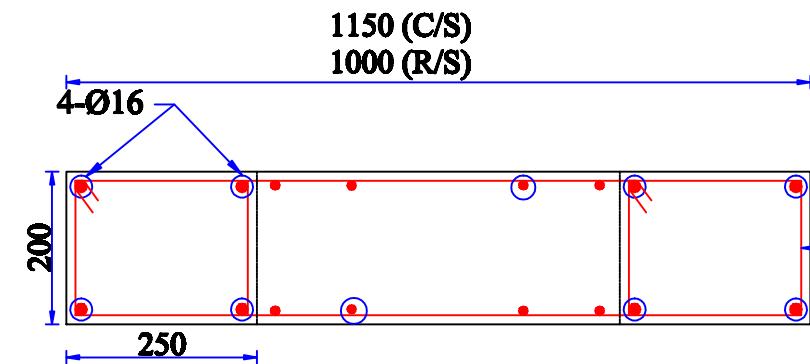
(JAKARIA PERVEZ), EE

APPROVED BY :

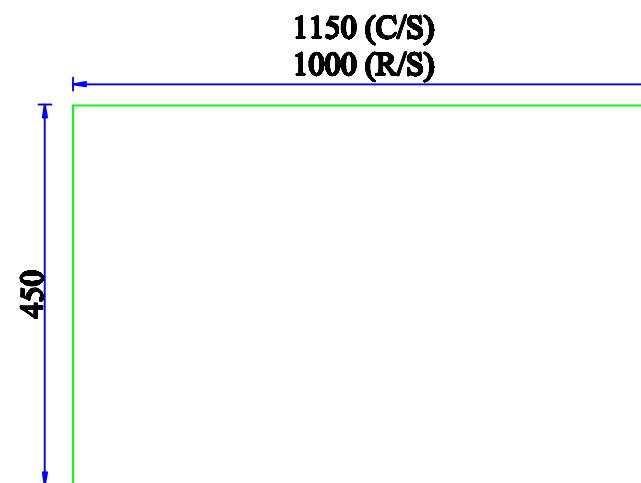
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DATE:00-00-2022 DWG. NO.:DC-8-0000-24/25

1150 (C/S)/1000 (R/S)

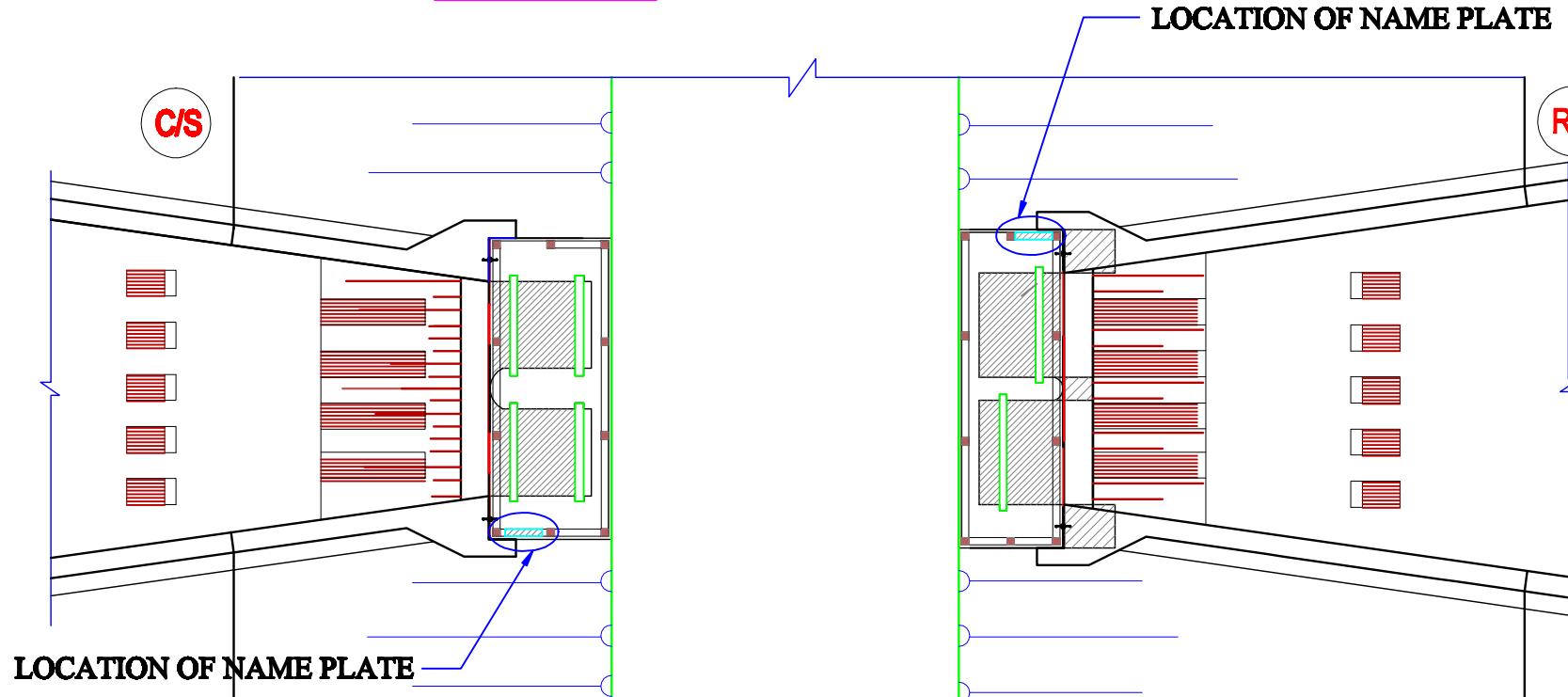


SECTION A-A



NAME PLATE

ELEVATION



PLAN SHOWING NAME PLATE LOCATION ON REGULATOR

Bangladesh Water Development Board	
Office of the Superintending Engineer	
Design Circle-8	
REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT	
DESIGN OF REGULATOR 2-VENT (1.50mX1.80m) AT CHANDNIMUKHA KM 6.515 OVER CHANDNIMUKHA KHAL IN POLDER NO-15 UNDER 'REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT' PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB, SATKHIRA.	
PLAN, ELEVATION & DETAILS OF NAME PLATE	
DESIGNED BY :	APPROVED BY :
(RAHUL BISWAS), AE	
CHECKED & RECOMMENDED BY :	
JAKARIA PERVEZ, JE	(MOHAMMAD SAIF UDDIN), SE
DATE: 00-00-2022 DWG. NO.: DC-8-0000-25/25	