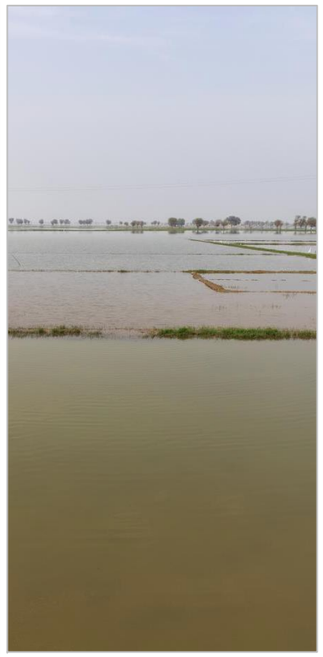
Balochistan Integrated Water Resources Management & Development Project

GOVERNMENT OF BALOCHISTAN



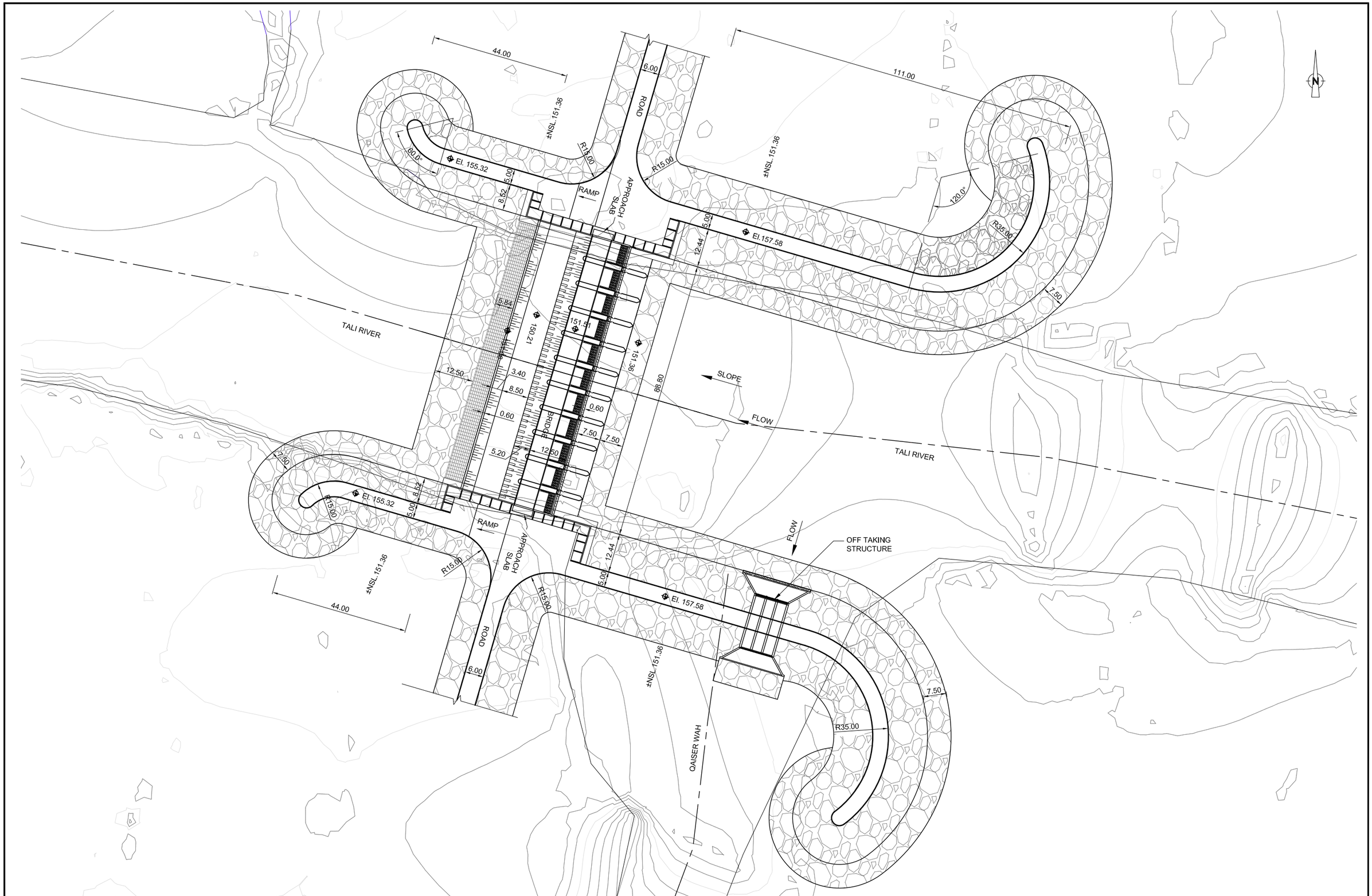




BIDDING DRAWINGS QAISER WAH

MM Pakistan (Pvt) Ltd.

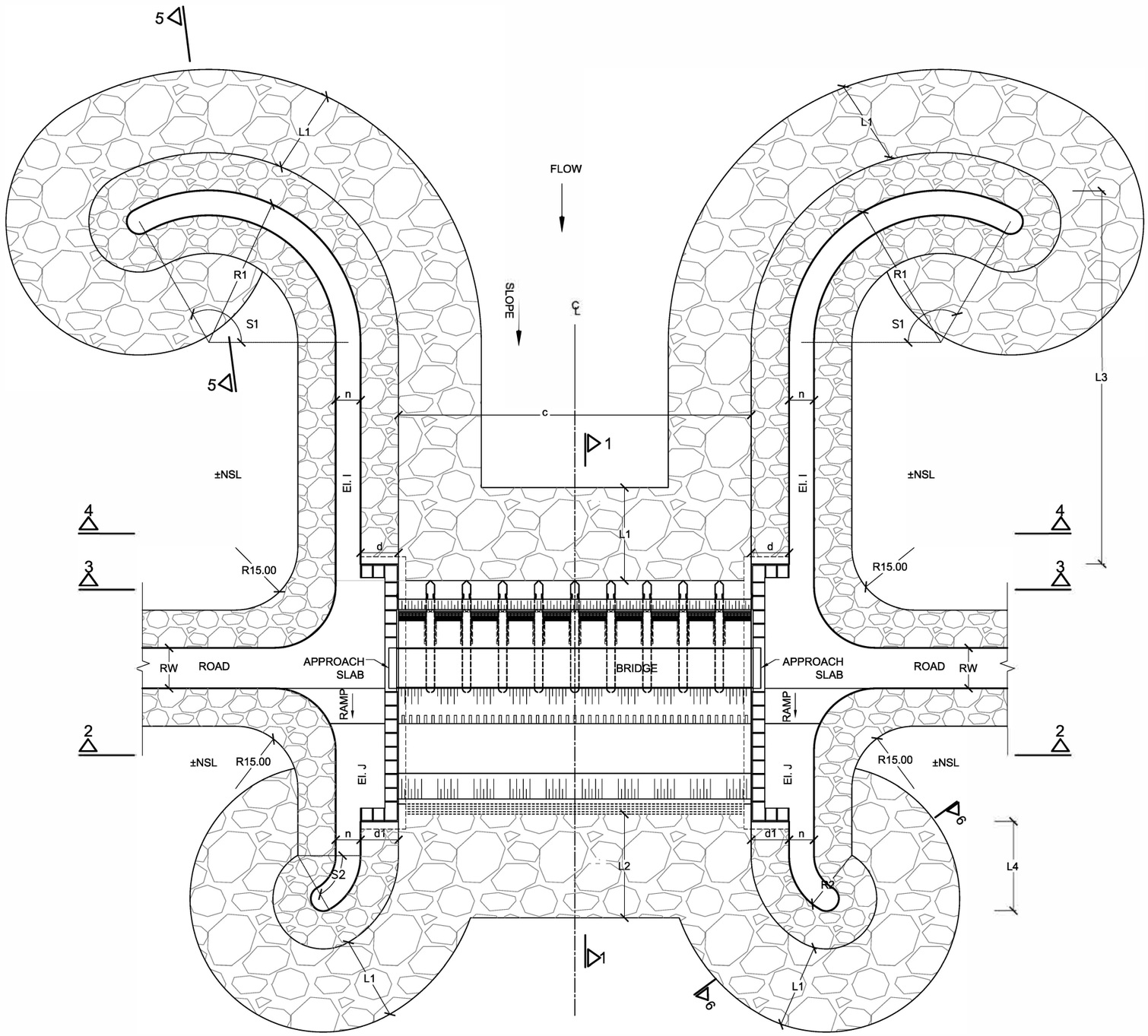
GENERAL LAYOUT PLAN



CLIENT: **IRRIGATION DEPARTMENT GOVERNMENT OF BALOCHISTAN**	CONSULTANTS: *Cavalry Ground, Lahore* House No.267A Link-1 Street 6, *042-36620567* *cdc.mmp@mmpakistan.com* *http://www.mmpakistan.com*	PROJECT: **FEASIBILITY STUDY FOR FLOOD MANAGEMENT OF KACHHI PLAINS FOR PREPARATION OF BALOCHISTAN WATER SECURITY AND PRODUCTIVITY IMPROVEMENT PROJECT**	DRAWING TITLE:- **GENERAL LAYOUT PLAN DISPERSAL STRUCTURE AT QAISAR**	NOTES:- ALL LEVELS AND DIMENSIONS ARE IN METERS UNLESS INDICATED OTHERWISE.	DRAWN BY: NA CHECKED BY: EK DWG NO. MMP-KPWMP-1093-GLP-003	DESIGNED BY: MM SCALE: 1:1200 DATE: JUNE / 2023 SHEET:- 1 OF 1

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PROPOSED DISPERSAL STRUCTURE



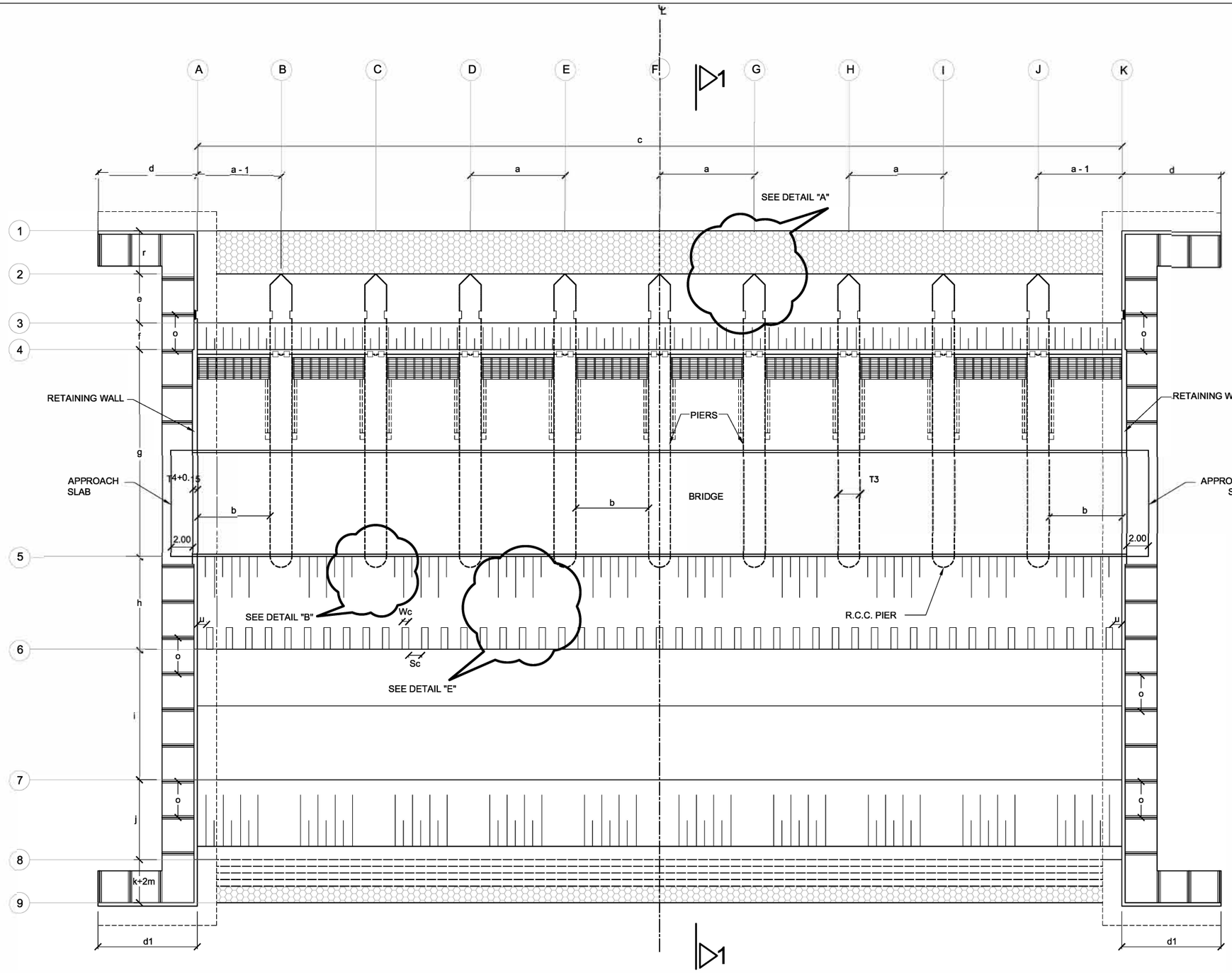
LAYOUT PLAN

SCALE: 1:1250

CLIENT: **IRRIGATION DEPARTMENT GOVERNMENT OF BALOCHISTAN**	CONSULTANTS: MMP (M.M Pakistan (Pvt) Ltd.) *Cavalry Ground, Lahore* House No.267A Link-1 Street 6, *042-36620567* *cdc.mmp@mmpakistan.com* *http://www.mmpakistan.com*	PROJECT: **FEASIBILITY STUDY FOR FLOOD MANAGEMENT OF KACHHI PLAINS FOR PREPARATION OF BALOCHISTAN WATER SECURITY AND PRODUCTIVITY IMPROVEMENT PROJECT**	DRAWING TITLE:- **LAYOUT PLAN DISPERSAL STRUCTURE**

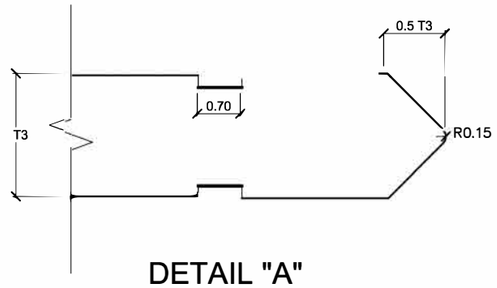
NOTES:-
ALL LEVELS AND DIMENSIONS ARE IN METERS UNLESS INDICATED OTHERWISE.

DRAWN BY: MA	DESIGNED BY: MM
CHECKED BY: EK	SCALE: 1:1250
	DATE: JUN / 2023
DWG NO. MMP-KPWMP-1093-DS-001	SHEET:- 1 OF 14



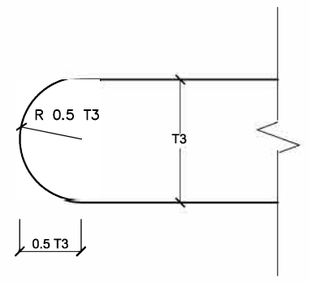
PLAN OF STRUCTURE

SCALE: 1:400



DETAIL "A"

SCALE: 1:100

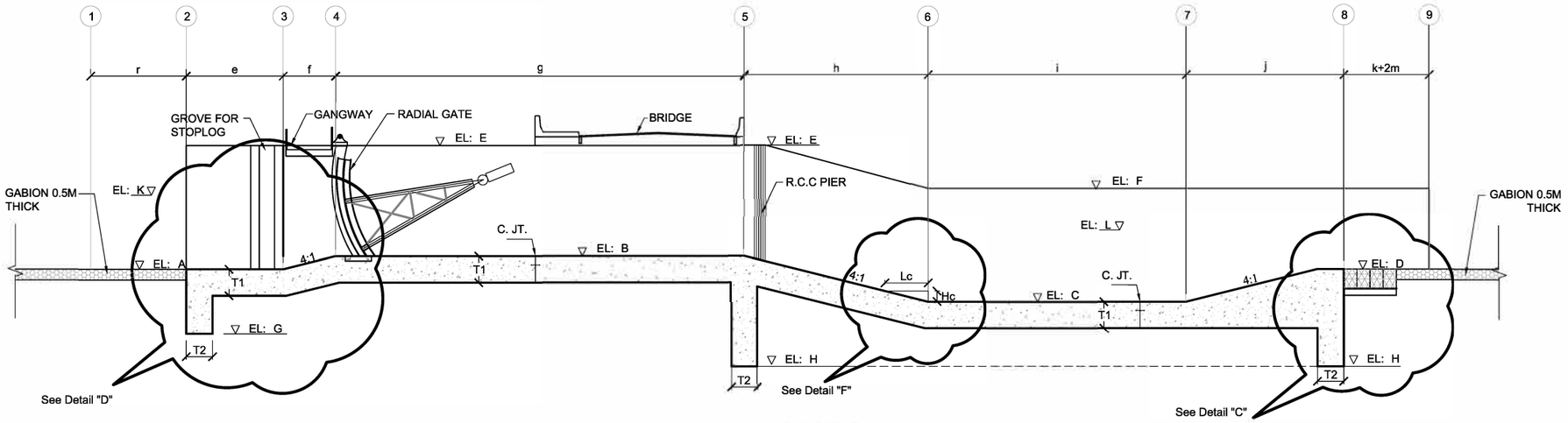


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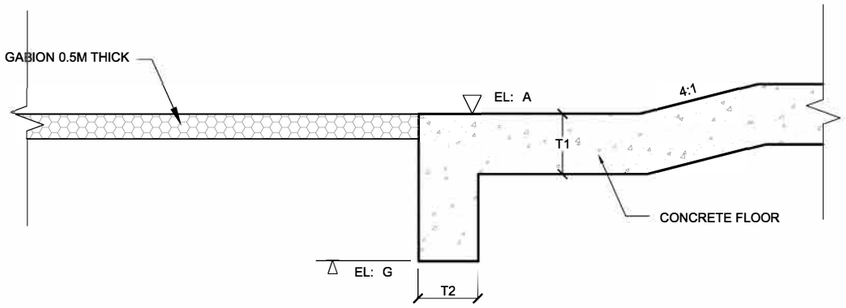
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CLIENT: **IRRIGATION DEPARTMENT GOVERNMENT OF BALOCHISTAN**	CONSULTANTS: MMP (Pvt) Ltd. *Cavalry Ground, Lahore* House No.267A Link-1 Street 6, *042-36620567* *cdc.mmp@mmpakistan.com* *http://www.mmpakistan.com*	PROJECT: **FEASIBILITY STUDY FOR FLOOD MANAGEMENT OF KACHHI PLAINS FOR PREPARATION OF BALOCHISTAN WATER SECURITY AND PRODUCTIVITY IMPROVEMENT PROJECT**	DRAWING TITLE:- **STRUCTURE PLAN AND PIER DETAIL DISPERSAL STRUCTURE**	NOTES:- ALL LEVELS AND DIMENSIONS ARE IN METERS UNLESS INDICATED OTHERWISE.

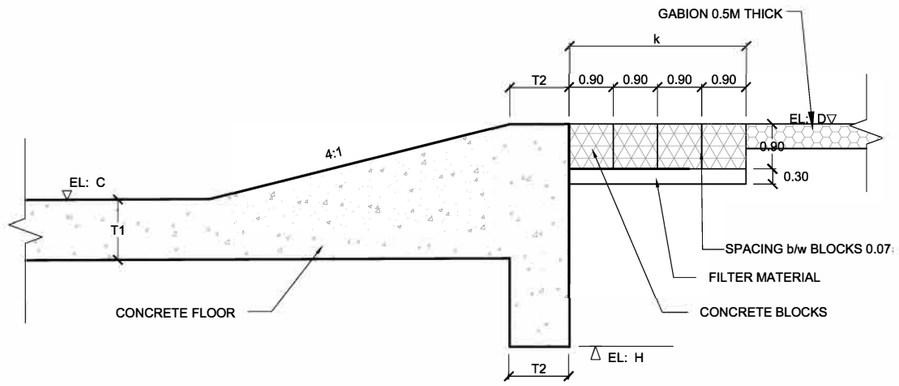
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CHECKED BY: EK	SCALE: 1:400		
FILE PATH:	DATE: JUN / 2023		
DWG NO. MMP-KPWMP-1093-DS-002	SHEET:- 2 OF 14		



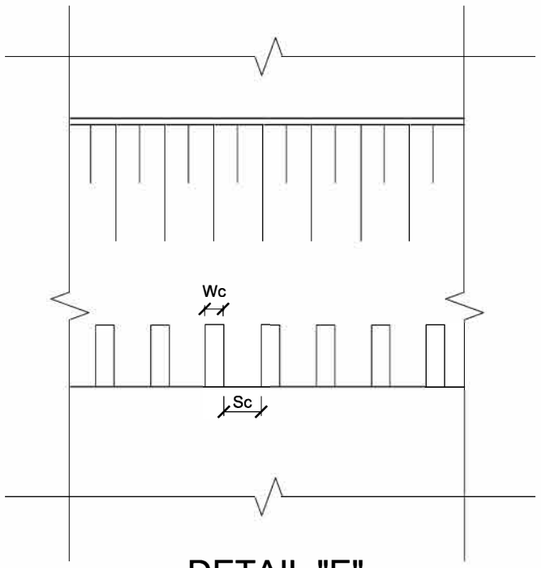
SECTION 1-1
SCALE: 1:250



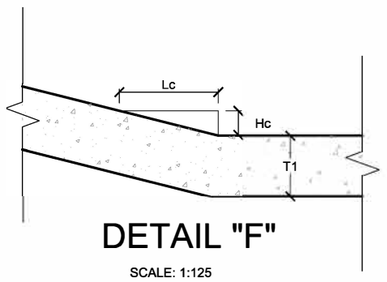
DETAIL "D"
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DETAIL "C"
SCALE: 1:125

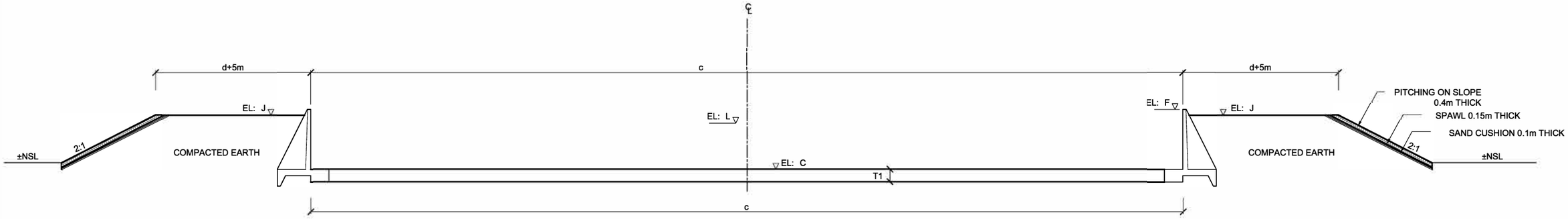


DETAIL "E"
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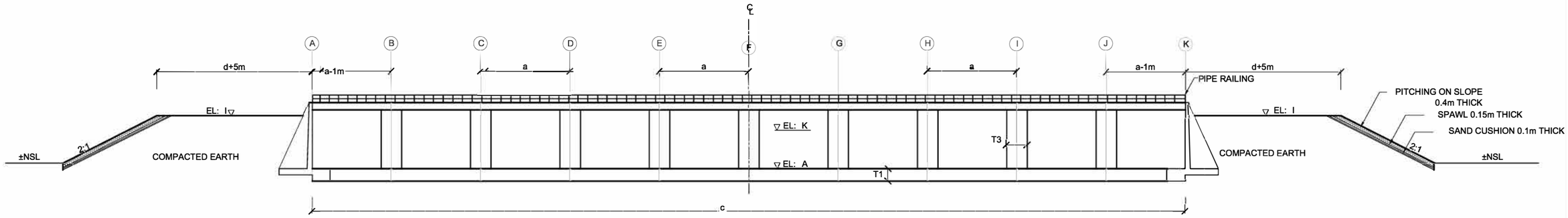
DETAIL "F"
SCALE: 1:125

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NOTES:- ALL LEVELS AND DIMENSIONS ARE IN METERS UNLESS INDICATED OTHERWISE.	DRAWN BY: MA	DESIGNED BY: MM	
	CHECKED BY: EK	SCALE: 1:250	
	FILE PATH:	DATE: JUN / 2023	
	DWG NO. MMP-KPWMP-1093-DS-003	SHEET:- 3 OF 14	



SECTION 2-2

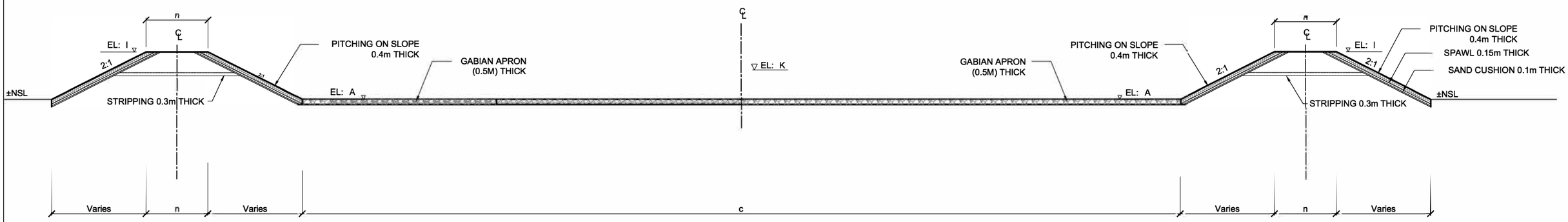
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SECTION 3-3

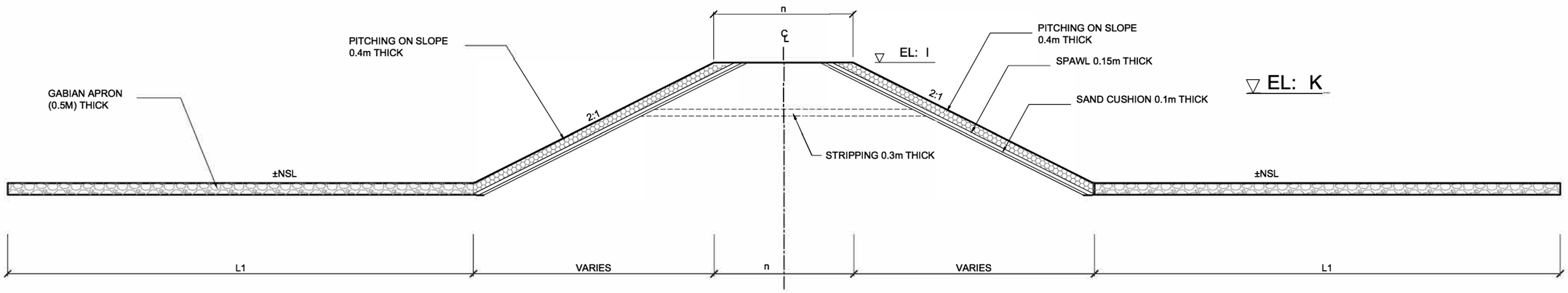
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CLIENT: **IRRIGATION DEPARTMENT** **GOVERNMENT OF BALOCHISTAN**	CONSULTANTS: *Cavalry Ground, Lahore* House No.267A Link-1 Street 6, *042-36620567* *cdc.mmp@mmpakistan.com* *http://www.mmpakistan.com*	PROJECT: **FEASIBILITY STUDY FOR FLOOD MANAGEMENT OF KACHHI PLAINS FOR PREPARATION OF BALOCHISTAN WATER SECURITY AND PRODUCTIVITY IMPROVEMENT PROJECT**	DRAWING TITLE:- **SECTION 2-2 & 3-3** **DISPERSAL STRUCTURE**	NOTES:- ALL LEVELS AND DIMENSIONS ARE IN METERS UNLESS INDICATED OTHERWISE.	DRAWN BY: MA CHECKED BY: EK FILE PATH: DWG NO. MMP-KPWMP-1093-DS-004	DESIGNED BY: MM SCALE: 1:400 DATE: JUN / 2023 SHEET:- 4 OF 14



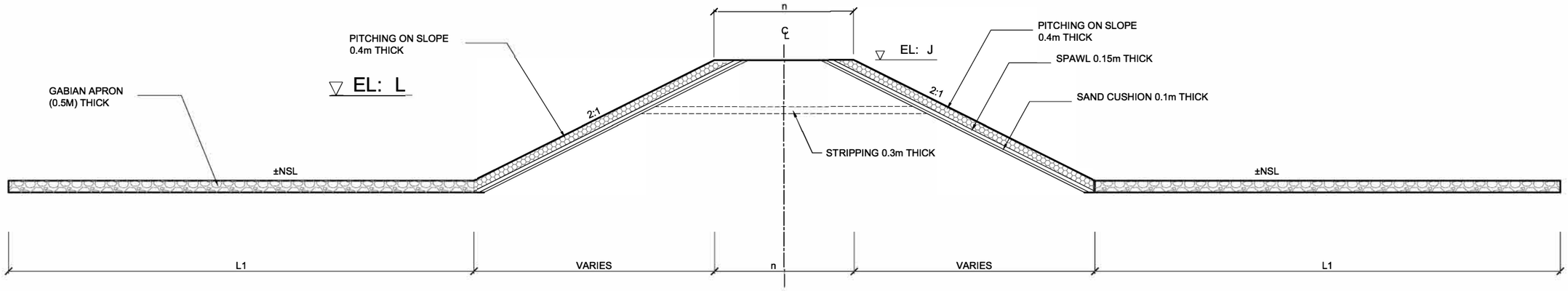
SECTION 4-4

SCALE=1: 400



SECTION 5-5

SCALE=1: 200



SECTION 6-6

SCALE=1: 200

CLIENT:

IRRIGATION DEPARTMENT
GOVERNMENT OF BALOCHISTAN

CONSULTANTS:

Cavalry Ground, Lahore
House No.267A Link-1 Street 6,
042-36620567
cdc.mmp@mmpakistan.com
http://www.mmpakistan.com

PROJECT:

FEASIBILITY STUDY FOR FLOOD MANAGEMENT OF KACHHI PLAINS FOR PREPARATION OF BALOCHISTAN WATER SECURITY AND PRODUCTIVITY IMPROVEMENT PROJECT

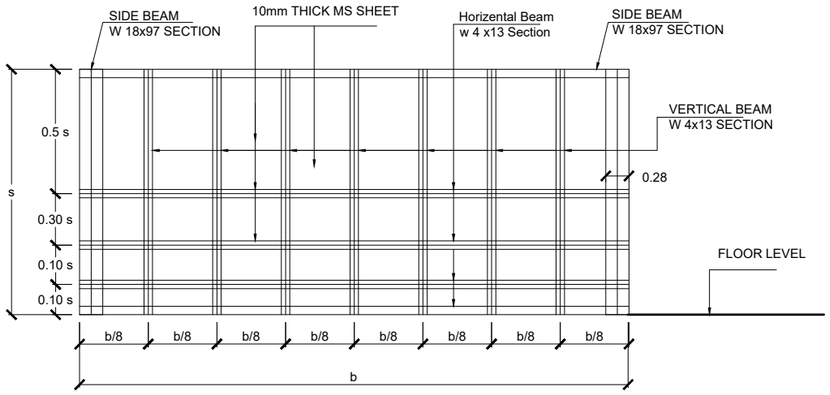
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SECTION 4-4, 5-5 & 6-6
DISPERSAL STRUCTURE

NOTES:-

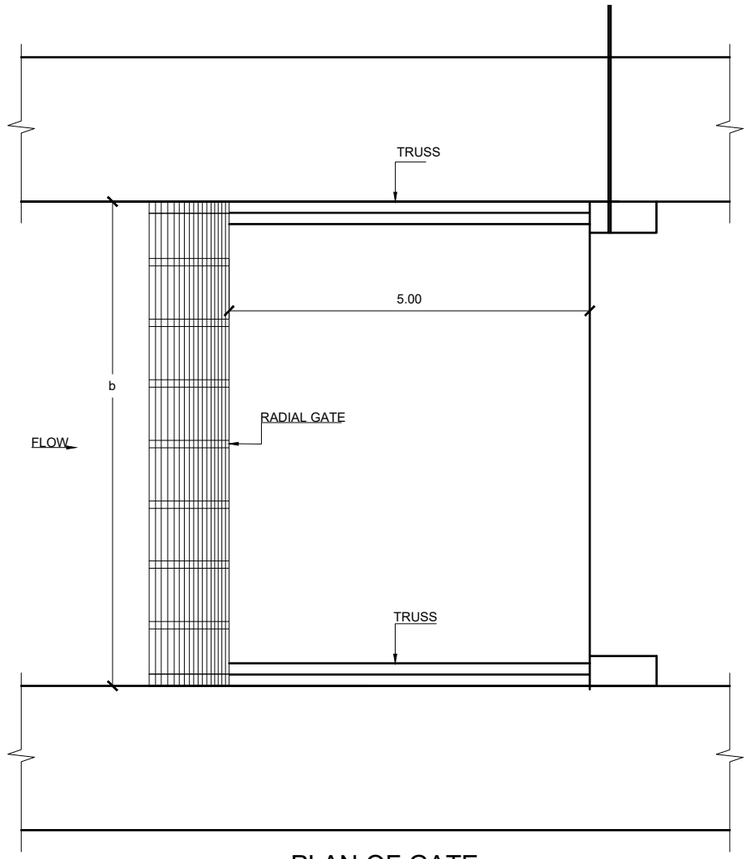
ALL LEVELS AND DIMENSIONS ARE IN METERS UNLESS INDICATED OTHERWISE.

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FILE PATH:	DATE: JUN / 2023
DWG NO. MMP-KPWMP-1093-DS-005	SHEET:- 5 OF 14



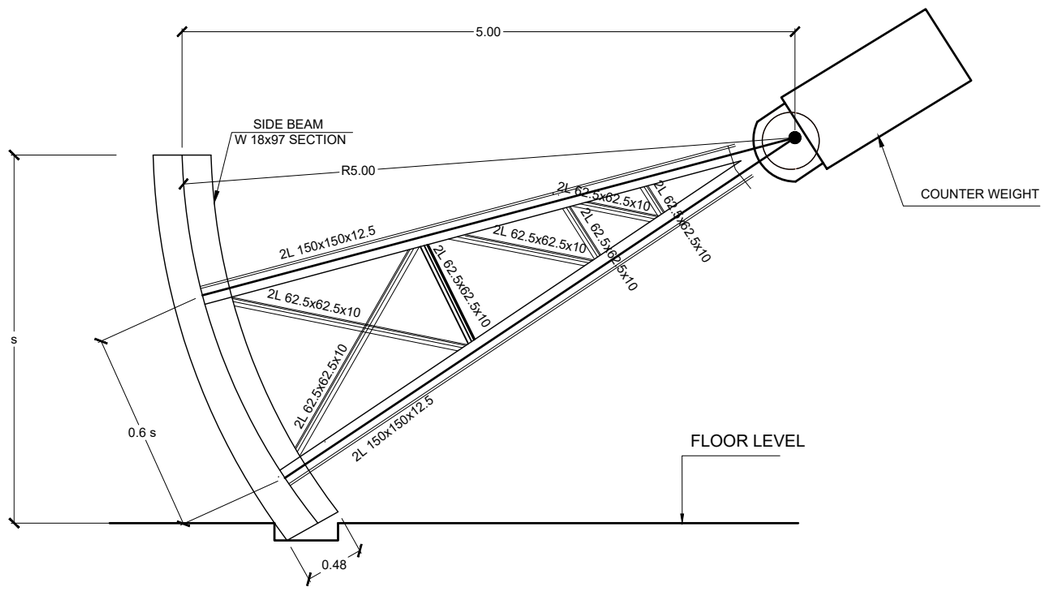
FRONT ELEVATION OF GATE

SCALE = 1:75



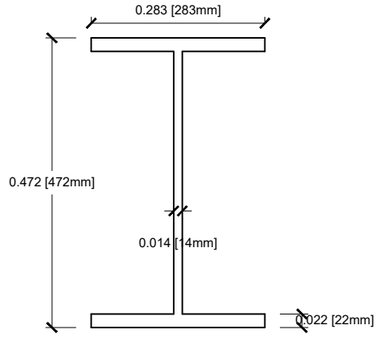
PLAN OF GATE

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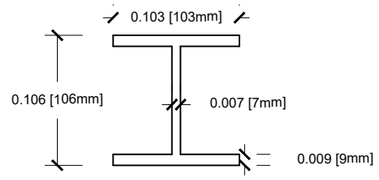
FRONT ELEVATION GATE

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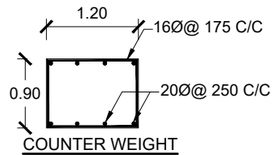
W 18x97 SECTION DETAIL

SCALE= 1:10



W 14x13 SECTION DETAIL

SCALE= 1:5



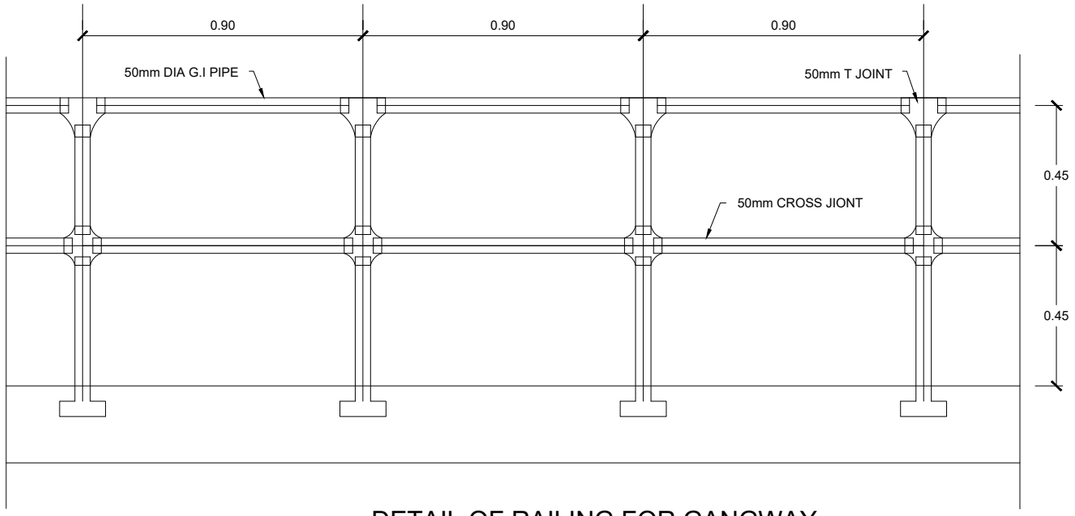
COUNTER WEIGHT

SCALE = 1: 80

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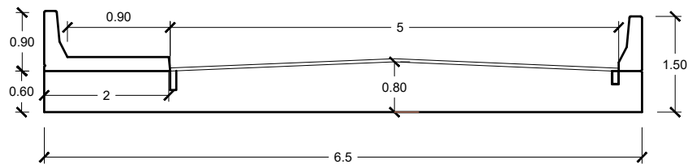
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ALL LEVELS AND DIMENSIONS ARE IN METERS UNLESS INDICATED OTHERWISE.

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CHECKED BY: EK	SCALE:
FILE PATH:	DATE: JUN / 2023
DWG NO. MMP-KPWMP-1093-DS-006	SHEET:- 6 OF 14



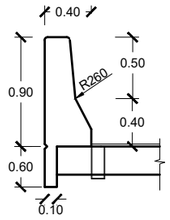
DETAIL OF RAILING FOR GANGWAY

SCALE 1:20



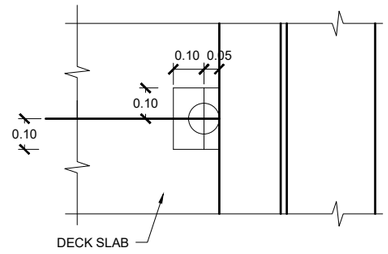
BRIDGE X-SECTION

SCALE: 1:100



END BARRIER DETAIL

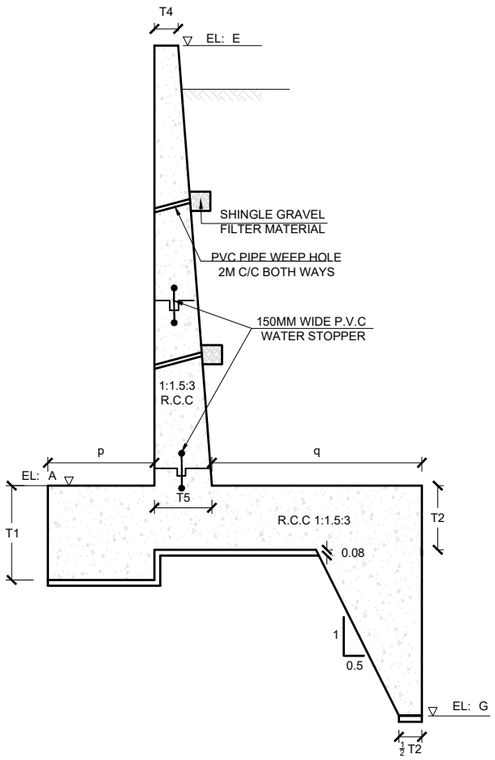
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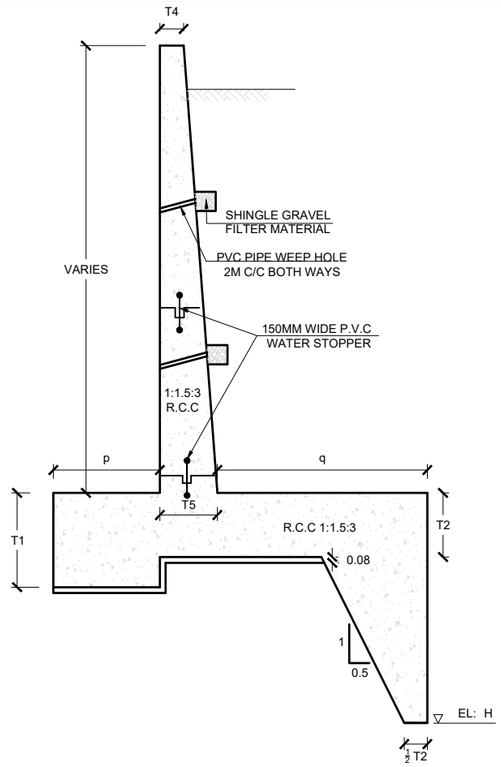
DRAIN IN CARRIAGEWAY PLAN

SCALE: 1:20

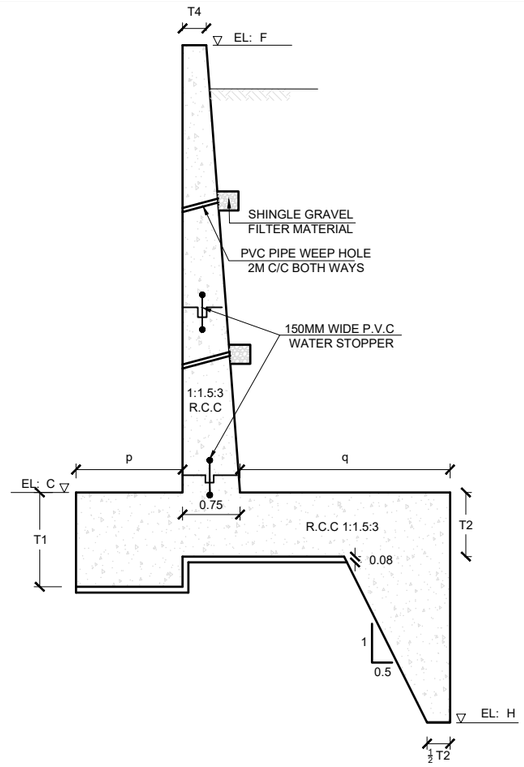
CLIENT: **IRRIGATION DEPARTMENT** **GOVERNMENT OF BALOCHISTAN**	CONSULTANTS: MMP (M Pakistan (Pvt) Ltd.) *Cavalry Ground, Lahore* House No.267A Link-1 Street 6, *042-36620567* *cdc.mmp@mmpakistan.com* *http://www.mmpakistan.com*	PROJECT: **FEASIBILITY STUDY FOR FLOOD MANAGEMENT OF KACHHI PLAINS FOR PREPARATION OF BALOCHISTAN WATER SECURITY AND PRODUCTIVITY IMPROVEMENT PROJECT**	DRAWING TITLE:- **BRIDGE DETAIL** **DISPERSAL STRUCTURE**	NOTES:- ALL LEVELS AND DIMENSIONS ARE IN METERS UNLESS INDICATED OTHERWISE.	DRAWN BY: MA CHECKED BY: EK FILE PATH: DWG NO. MMP-KPWMP-1093-DS-007	DESIGNED BY: MM SCALE: DATE: JUN / 2023 SHEET:- 7 OF 14



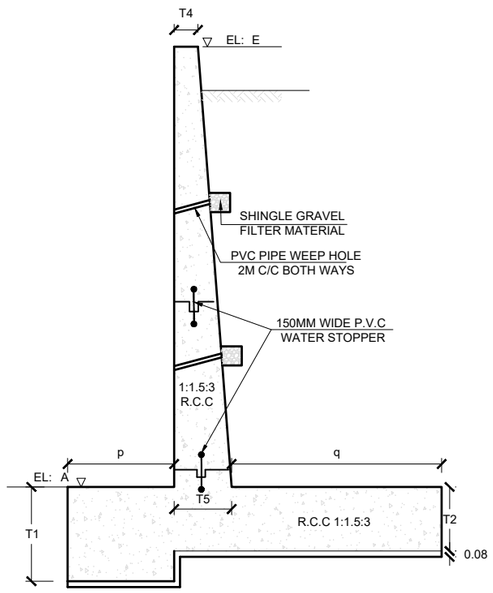
RETAINING WALL X-SECTION
BETWEEN GRID (1-2)
SCALE 1:80



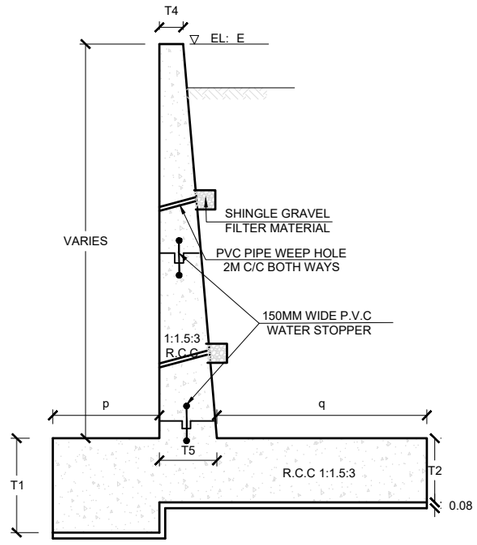
RETAINING WALL X-SECTION
BETWEEN GRID (5-6)
SCALE 1:80



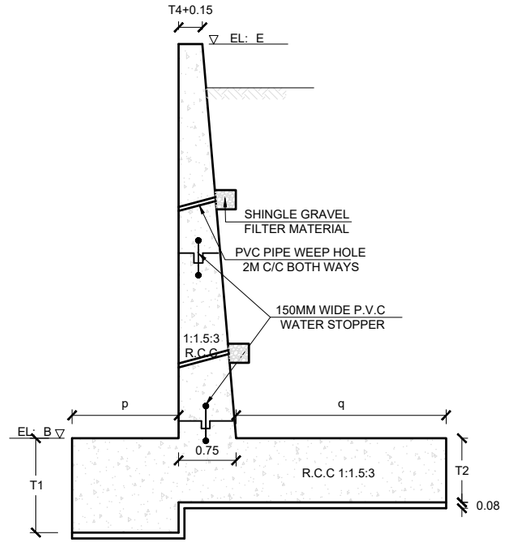
RETAINING WALL X-SECTION
BETWEEN GRID (6-7)
SCALE 1:80



RETAINING WALL X-SECTION
BETWEEN GRID (2-3)
SCALE 1:80



RETAINING WALL X-SECTION
BETWEEN GRID (3-4)
SCALE 1:80



RETAINING WALL X-SECTION
BETWEEN GRID (4-5)
SCALE 1:80

CLIENT:

IRRIGATION DEPARTMENT
GOVERNMENT OF BALOCHISTAN

CONSULTANTS:

MMP
MM Pakistan (Pvt) Ltd.
Cavalry Ground, Lahore
House No.267A Link-1 Street 6,
042-36620567
cdc.mmp@mmpakistan.com
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PROJECT:

FEASIBILITY STUDY FOR FLOOD MANAGEMENT OF KACHHI PLAINS FOR PREPARATION OF BALOCHISTAN WATER SECURITY AND PRODUCTIVITY IMPROVEMENT PROJECT

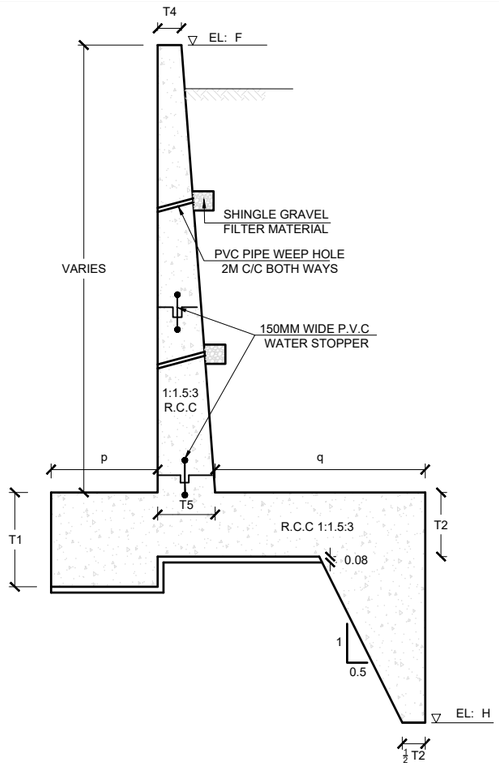
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RETAINING WALLS DISPERSAL STRUCTURE

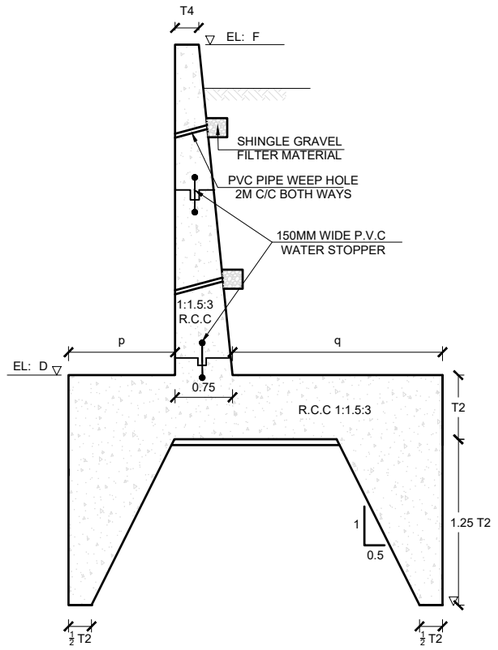
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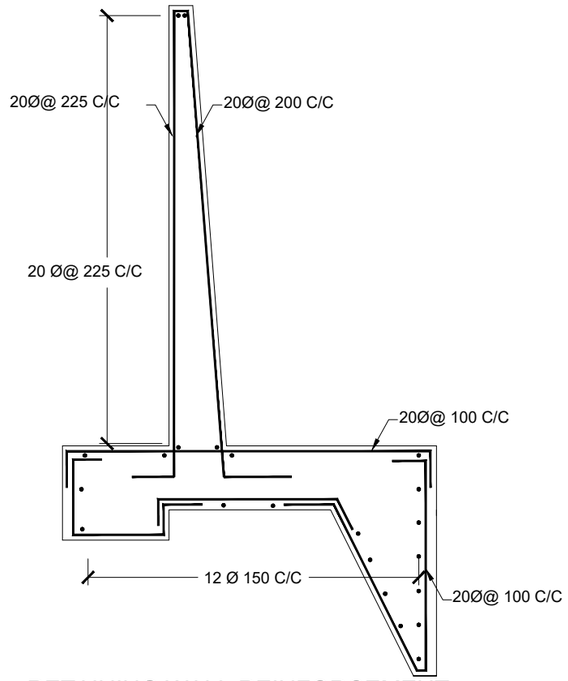
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DWG NO. MMP-KPWMP-1093-DS-008	SHEET:- 8 OF 14



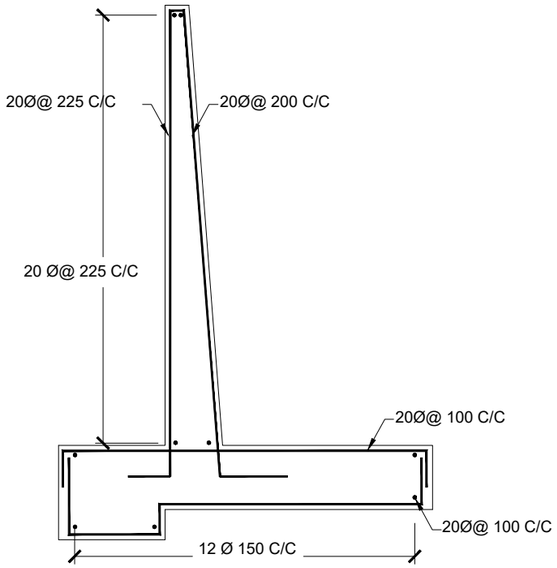
RETAINING WALL X-SECTION
BETWEEN GRID (7-8)
SCALE 1:80



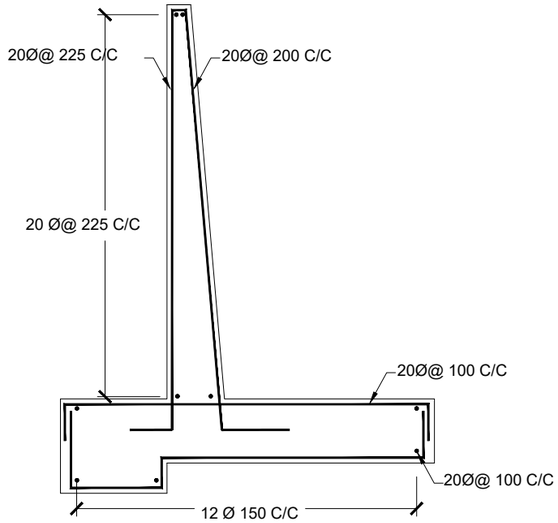
RETAINING WALL X-SECTION
BETWEEN GRID (8-9)
SCALE 1:80



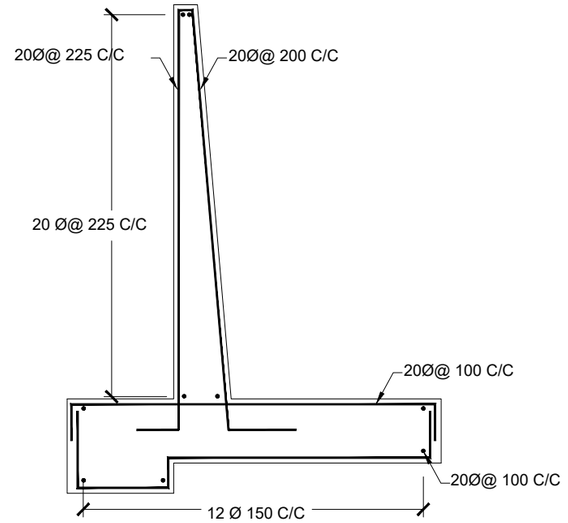
RETAINING WALL REINFORCEMENT
BETWEEN GRID (1-2)
SCALE 1:80



RETAINING WALL REINFORCEMENT
BETWEEN GRID (2-3)
SCALE 1:80



RETAINING WALL REINFORCEMENT
BETWEEN GRID (3-4)
SCALE 1:80



RETAINING WALL REINFORCEMENT
BETWEEN GRID (4-5)
SCALE 1:80

CLIENT:

IRRIGATION DEPARTMENT
GOVERNMENT OF BALOCHISTAN

CONSULTANTS:

Cavalry Ground, Lahore
House No.267A Link-1 Street 6,
042-36620567
cdc.mmp@mmpakistan.com
http://www.mmpakistan.com

PROJECT:

FEASIBILITY STUDY FOR FLOOD MANAGEMENT OF KACHHI PLAINS FOR PREPARATION OF BALOCHISTAN WATER SECURITY AND PRODUCTIVITY IMPROVEMENT PROJECT

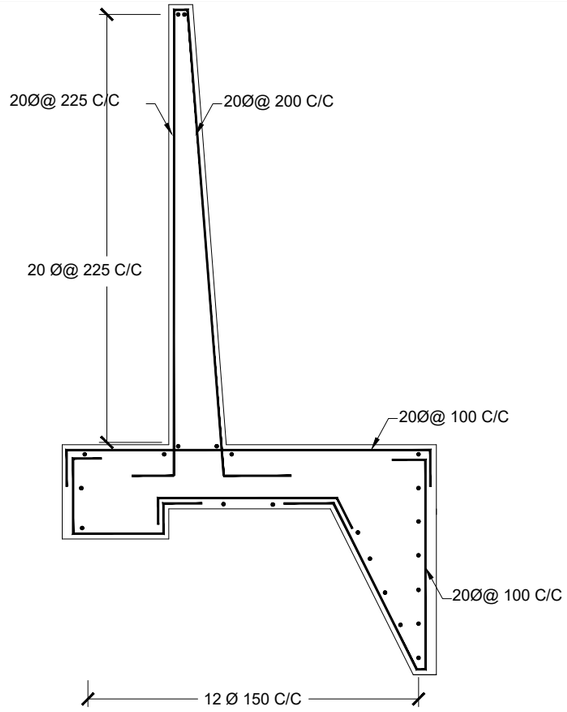
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RETAINING WALLS & REINFORCEMENT DETAILS DISPERSAL STRUCTURE

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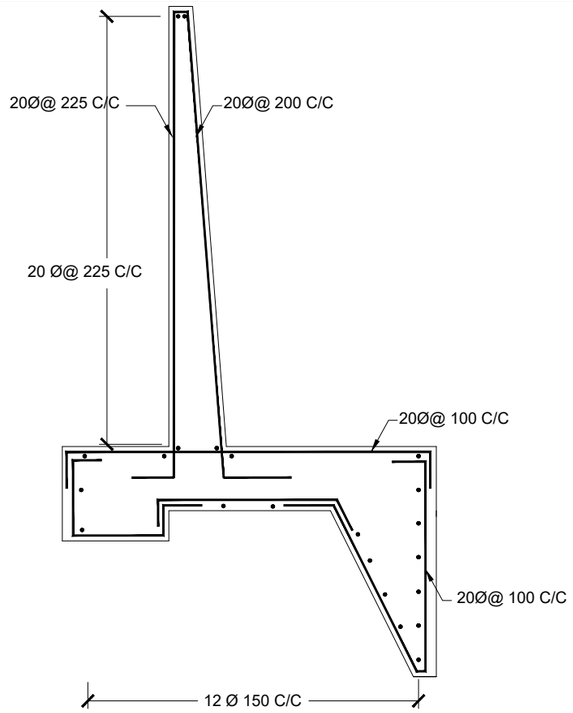
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FILE PATH:	DATE: JUN / 2023
DWG NO. MMP-KPWMP-1093-DS-009	SHEET:- 9 OF 14



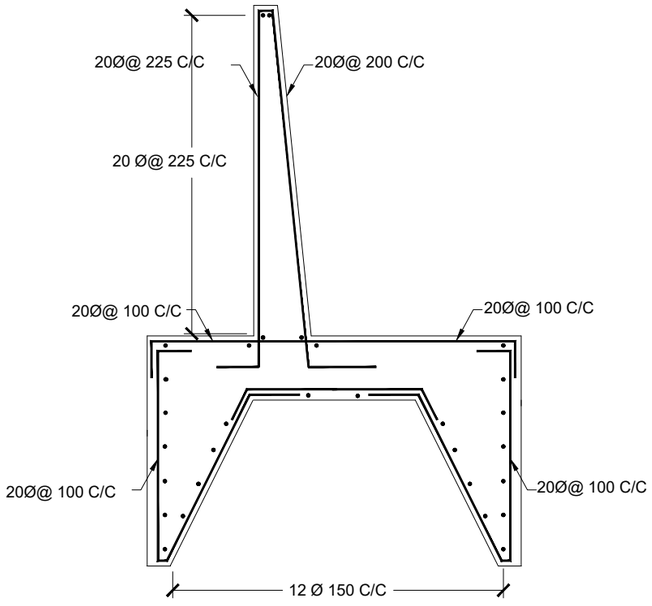
RETAINING WALL REINFORCEMENT
BETWEEN GRID (5-6)

SCALE 1:80



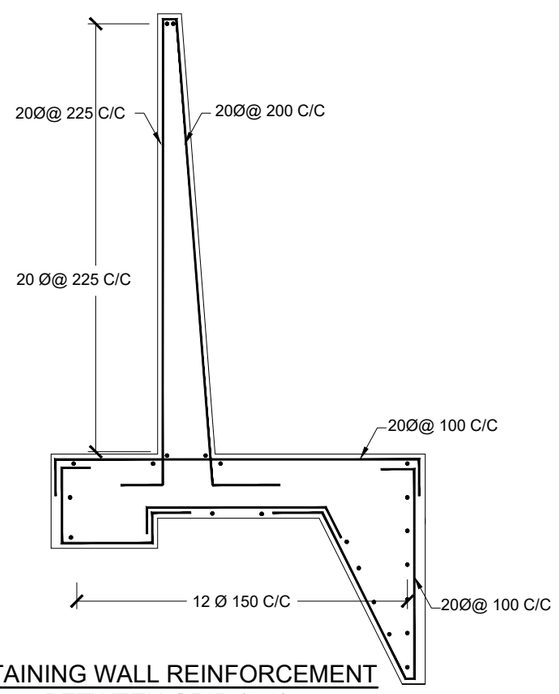
RETAINING WALL REINFORCEMENT
BETWEEN GRID (6-7)

SCALE 1:80



RETAINING WALL REINFORCEMENT
BETWEEN GRID (8-9)

SCALE 1:80



RETAINING WALL REINFORCEMENT
BETWEEN GRID (7-8)

SCALE 1:80

CLIENT:

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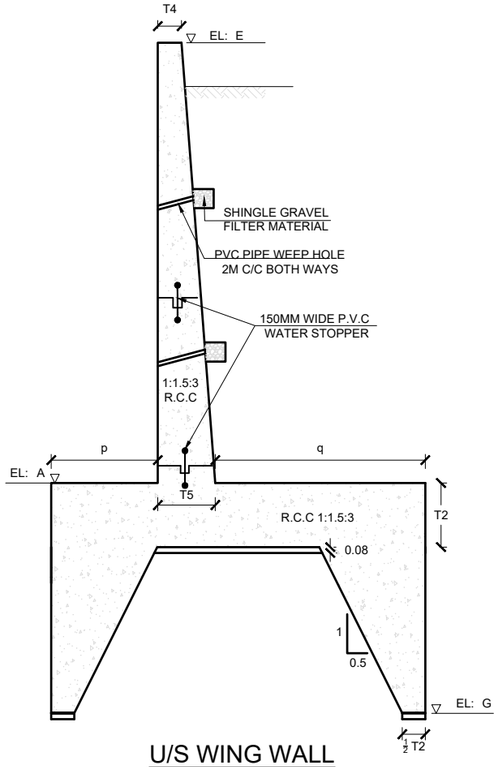
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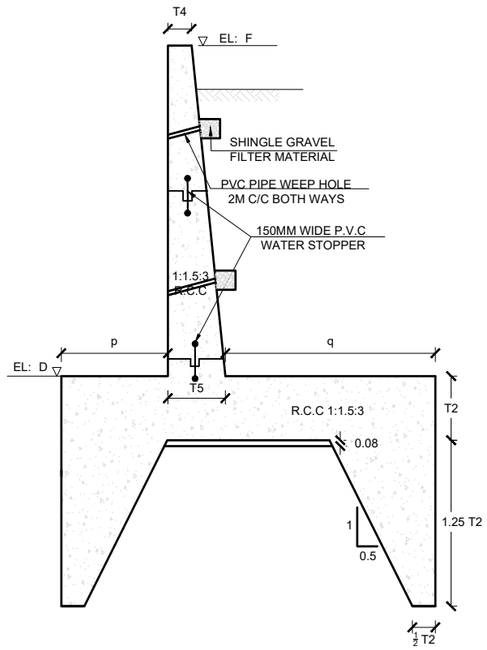
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DWG NO. MMP-KPWMP-1093-DS-010		SHEET:-	10 OF 14



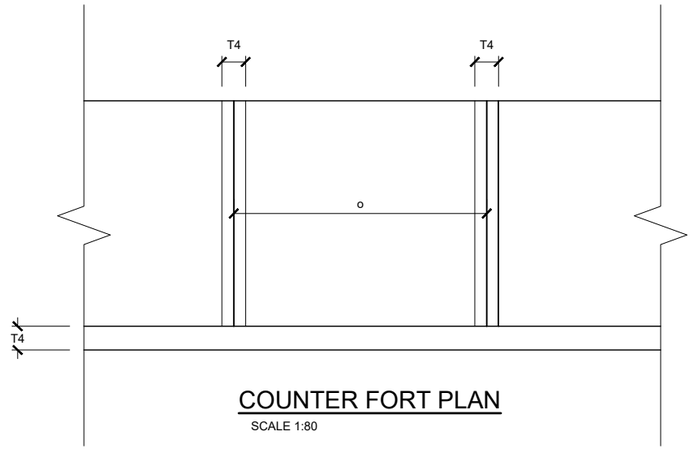
U/S WING WALL X-SECTION

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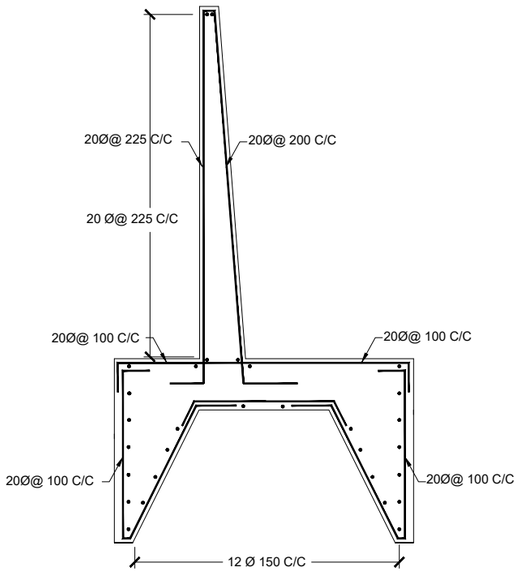
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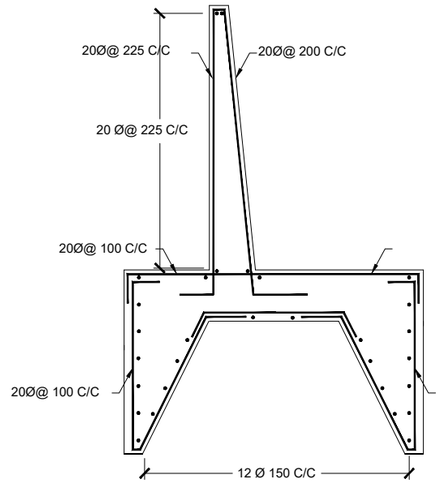
COUNTER FORT PLAN

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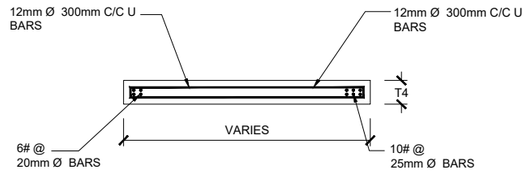
U/S WING WALL REINFORCEMENT X-SECTION

SCALE 1:100



D/S WING WALL REINFORCEMENT X-SECTION

SCALE 1:100



COUNTER FORT PLAN REINFORCEMENT

SCALE 1:80

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GOVERNMENT OF BALOCHISTAN

CONSULTANTS:

Cavalry Ground, Lahore
House No.267A Link-1 Street 6,
042-36620567
cdc.mmp@mmpakistan.com
http://www.mmpakistan.com

PROJECT:

FEASIBILITY STUDY FOR FLOOD MANAGEMENT OF KACHHI PLAINS FOR PREPARATION OF BALOCHISTAN WATER SECURITY AND PRODUCTIVITY IMPROVEMENT PROJECT

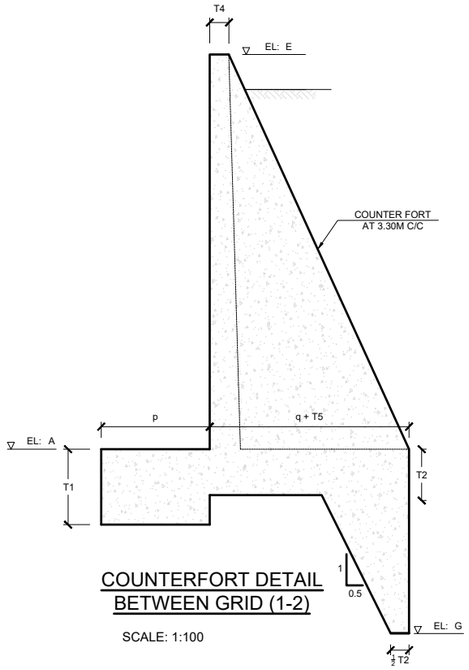
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U/S, D/S WING WALL & COUNTER FORT PLAN, DETAILS & REINFORCEMENT DISPERSAL STRUCTURE

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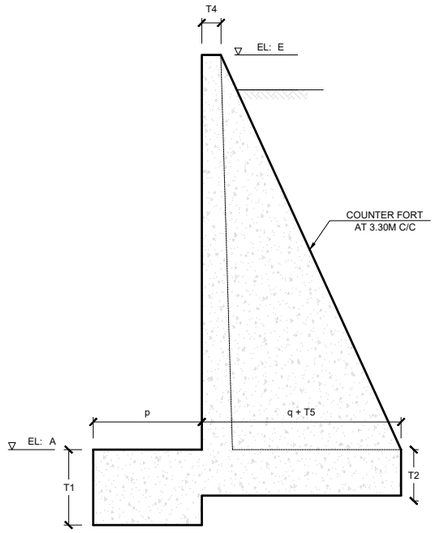
ALL LEVELS AND DIMENSIONS ARE IN METERS UNLESS INDICATED OTHERWISE.

DRAWN BY: MA	DESIGNED BY: MM
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FILE PATH:	DATE: JUN / 2023
DWG NO. MMP-KPWMP-1093-DS-011	SHEET:- 11 OF 14



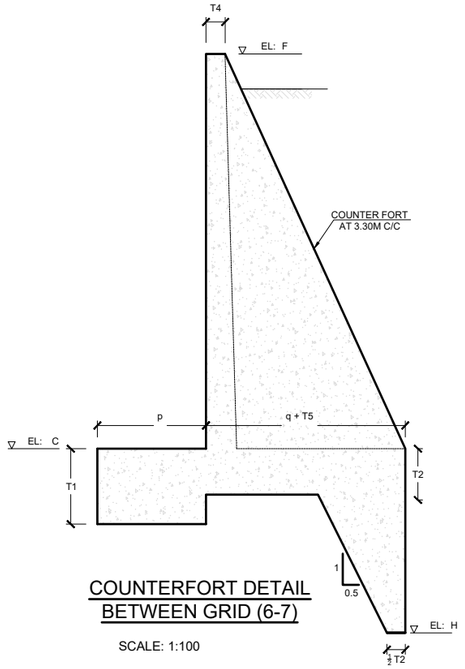
COUNTERFORT DETAIL
BETWEEN GRID (1-2)

SCALE: 1:100



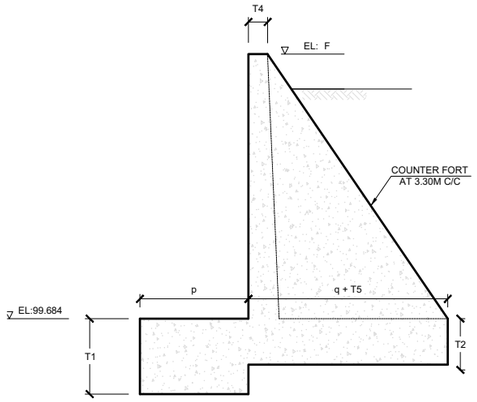
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BETWEEN GRID (2-3)

SCALE: 1:100



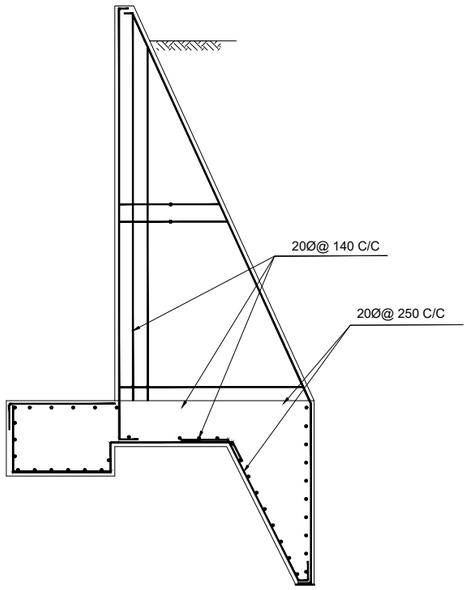
COUNTERFORT DETAIL
BETWEEN GRID (6-7)

SCALE: 1:100



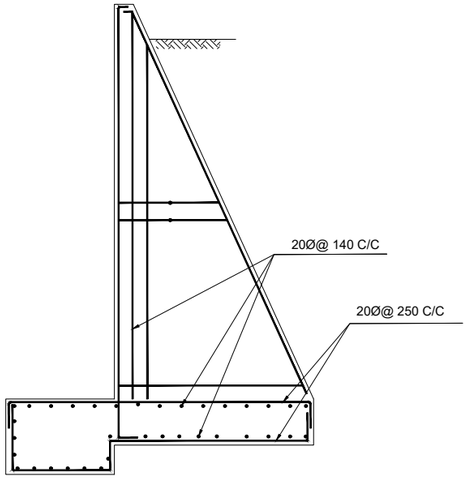
COUNTERFORT DETAIL
BETWEEN GRID (8-9)

SCALE: 1:100



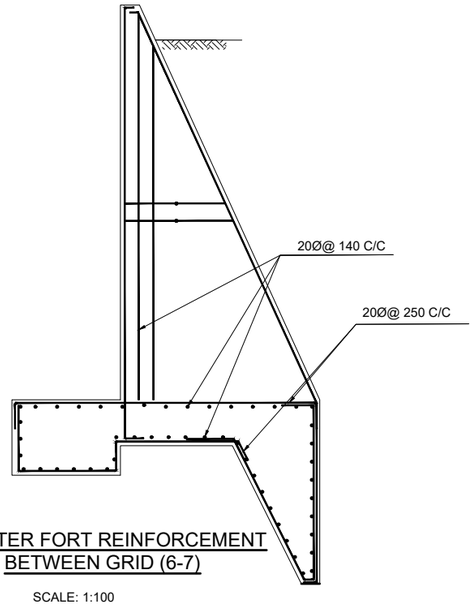
COUNTER FORT REINFORCEMENT
BETWEEN GRID (1-2)

SCALE: 1:100



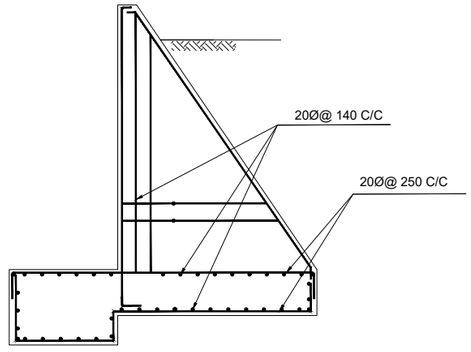
COUNTER FORT REINFORCEMENT
BETWEEN GRID (2-3)

SCALE: 1:100



COUNTER FORT REINFORCEMENT
BETWEEN GRID (6-7)

SCALE: 1:100



COUNTER FORT REINFORCEMET
BETWEEN GRID (8-9)

SCALE: 1:100

CLIENT:

IRRIGATION DEPARTMENT
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CONSULTANTS:

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House No.267A Link-1 Street 6,
042-36620567
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PROJECT:

FEASIBILITY STUDY FOR FLOOD MANAGEMENT OF KACHHI PLAINS FOR PREPARATION OF BALOCHISTAN WATER SECURITY AND PRODUCTIVITY IMPROVEMENT PROJECT

DRAWING TITLE:-

COUNTER FORT DETAILS DISPERSAL STRUCTURE

NOTES:-

ALL LEVELS AND DIMENSIONS ARE IN METERS UNLESS INDICATED OTHERWISE.

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TYPICAL REGULATION STRUCTURE - TABLE OF DIMENSIONS & ELEVATIONS

SR. NO.	NULLAH	River	DISCHARGE (50 Year)	El. A	El. B	El. C	El. D	El. E	El. F	El. G	El. H	El. I	El. J	NSL	El. K	El. L	a	b	c	d
			(cumec)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)
1	Qaiser	Talli	650	151.36	151.51	150.21	151.46	157.73	155.47	146.69	146.43	157.58	155.32	151.36	154.23	153.97	8.21	6.71	88.8	12.44

SR. NO.	NULLAH	River	DISCHARGE (50 Year)	d1	e	f	g	h	i	j	k	r	n	o	p	q	s	RW	S1	S2
			(cumec)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	degree	degree
1	Qaiser	Talli	650	8.52	7.50	0.60	12.50	5.20	8.50	4.00	3.84	5.00	5.00	3.30	1.40	2.75	6.0	6.0	120	60

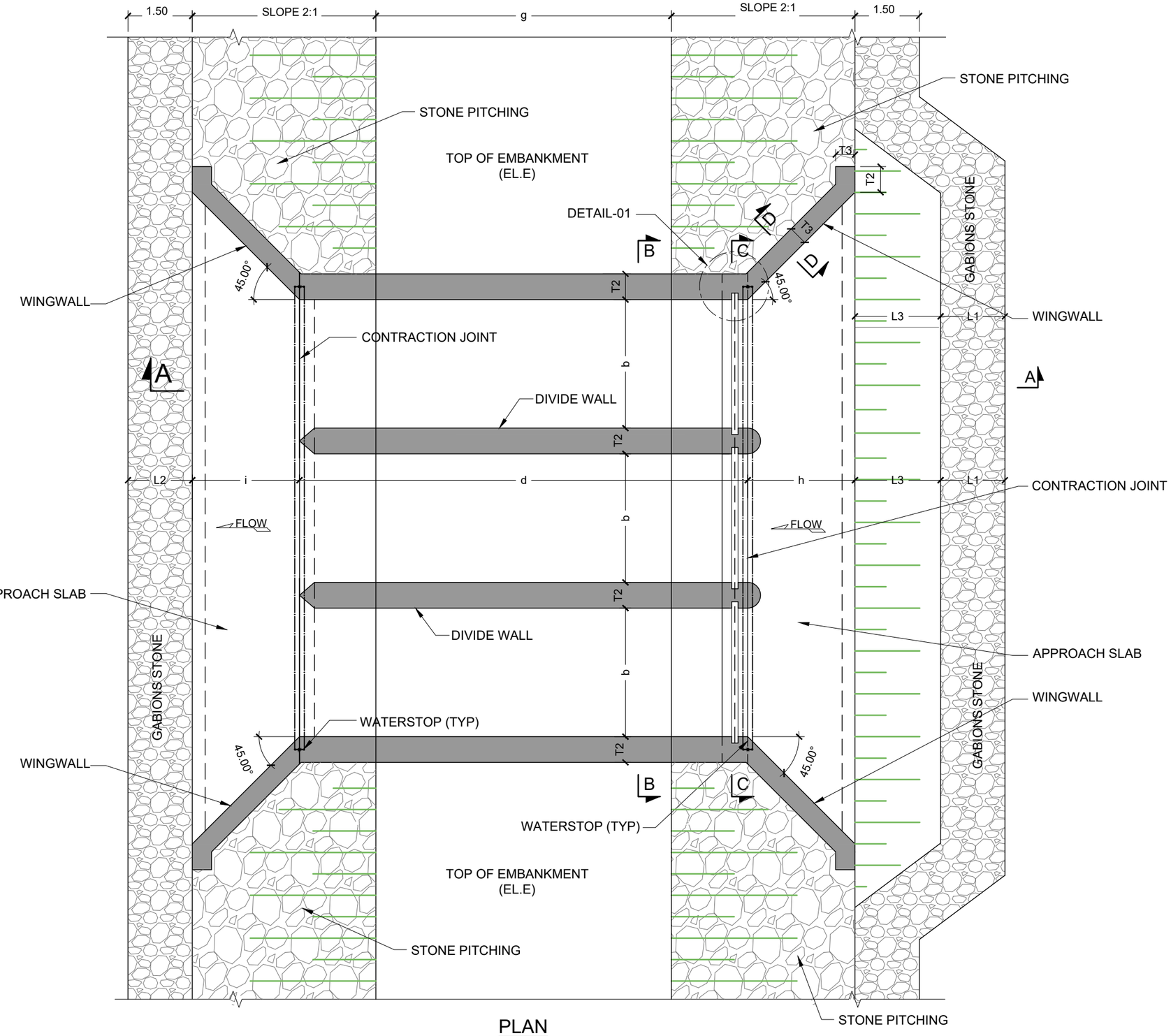
SR. NO.	NULLAH	River	DISCHARGE (50 Year)	No. of Bays	No. of Pier	L1	L2	L3	L4	T1	T2	T3	T4	T5	R1	R2
			(cumec)	y	z	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)
1	Qaiser	Talli	650	11	10	7.50	12.50	111	44	1.00	0.60	1.50	0.30	0.60	35.0	15.0

EL. A	U/S Floor Level	EL. I	U/S Bank Top Level	d	U/S Embeded Retaining Wall	k	D/S Concrete Block Length	S1	U/S Guide Bank Angle	T1	Floor Thickness
EL. B	Crest Level	EL. J	D/S Bank Top Level	d1	D/S Embeded Retaining Wall	n	U/S & D/S Guide Bank Top Width	S2	D/S Guide Bank Angle	T2	Cuttoff Wall Thickness
EL. C	D/S Floor Level	NSL	Avg.Natural Surface Level	e	U/S Floor Length	o	C/C Counter Fort Spacing	y	No. of Bays	T3	Pier Thickness
EL. D	End Sill Top Level	EL. K	U/S Water Level	f	U/S Glacis Length	p	Retaining Wall Toe Width	z	No. of Piers	T4	Retaining Wall Top Thickness
EL. E	U/S Top of Wall	EL. L	Tailwater	g	Crest Length	q	Retaining Wall Heel Width	L1	U/S Gabion Length	T5	Retaining Wall Bottom Thickness
EL. F	D/S Top of Wall	a	C/C Bay Width	h	D/S Glacis Length	r	U/S Retaining Wall Length	L2	D/S Gabion Length	R1	U/S Guide Bank Radius
EL. G	U/S Cuttoff Wall	b	Clear Bay Width	i	D/S Floor Length	s	Gate Height	L3	U/S Guide Bank Length	R2	D/S Guide Bank Radius
EL. H	D/S Cutoff Wall	c	Total Width of Structure	j	End Sill Length	RW	Road Width	L4	D/S Guide Bank Length		

STILLING BASIN PARAMETERS

SR. NO.	Desription	BASIN					CHUTE BLOCKS					FILTER BLOCKS D/S				
		Floor Length	Glacis Length	Total Clear Waterway	One Bay Clear Width	Chute Blocks	Height	Length	Width	Spacing b/w Blocks	Wall End Spacing	Filter Block	Height	Length	Width	Spacing b/w Blocks
		i	h		**b**	**no.**	Hc	Lc	Wc	Sc	u	**no.**	**m**	**m**	**m**	**m**
		(m)	**(m)**	**(m)**	**(m)**		**(m)**	**(m)**	**(m)**	**(m)**	**(m)**					
1	Qaiser	8.50	5.20	82.8	6.71	46.00	0.60	2.40	0.60	1.20	0.605	4.00	0.90	0.90	0.90	0.08

PROPOSED OFFTAKING STRUCTURES



PLAN
SCALE 1:100

NOTES:

1. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE

2. FOUNDATION IS DESIGNED FOR AN ASSUMED BEARING PRESSURE OF 2TSF (214 KN/m^2). CONTRACTOR SHALL VERIFY AND RECONFIRM SOIL CHARACTERISTICS INCLUDING BEARING CAPACITY THROUGH SOIL INVESTIGATION BEFORE EXECUTION OF WORK AT SITE. DESIGN MAY REVISED IF ANY VARIATION AND OBSERVATION FOUND IN SOIL INVESTIGATION.

3. MINIMUM COMPRESSIVE CYLINDRICAL STRENGTH (f'c) OF CONCRETE AT 28 DAYS SHALL NOT BE LESS THAN SHOWN AS FOLLOWS

   C-25 = 25MPA
   C-13 = 13MPA (LEAN CONCRETE)

4. REINFORCING STEEL SHALL BE CONFIRMING WITH ASTM-615 GRADE 420 DEFORMED HIGH YIELD STEEL BARS, HAVING MINIMUM YIELD STRENGTH OF fy = 420MPa (N/mm^2)

5. MINIMUM CLEAR COVER TO MAIN REINFORCEMENT IS AS FOLLOWS:
   TOP SLAB = 20mm
   BASE SLAB AND WALLS = 50mm
   BASE SLAB AND WALLS INTERACTS WITH EARTH = 75mm

6. ALL LAP SHOWN IN DRAWINGS ARE INDICATIVE SHALL BE PROVIDED WITH CONCERN TO THE ENGINEER INCHARGE, WHEREVER NEEDED. MINIMUM LAP LENGTH SHALL BE 48 BAR DIAMETER OF LARGER BAR, UNLESS NOTED OTHERWISE.

CLIENT:
IRRIGATION DEPARTMENT GOVERNMENT OF BALOCHISTAN

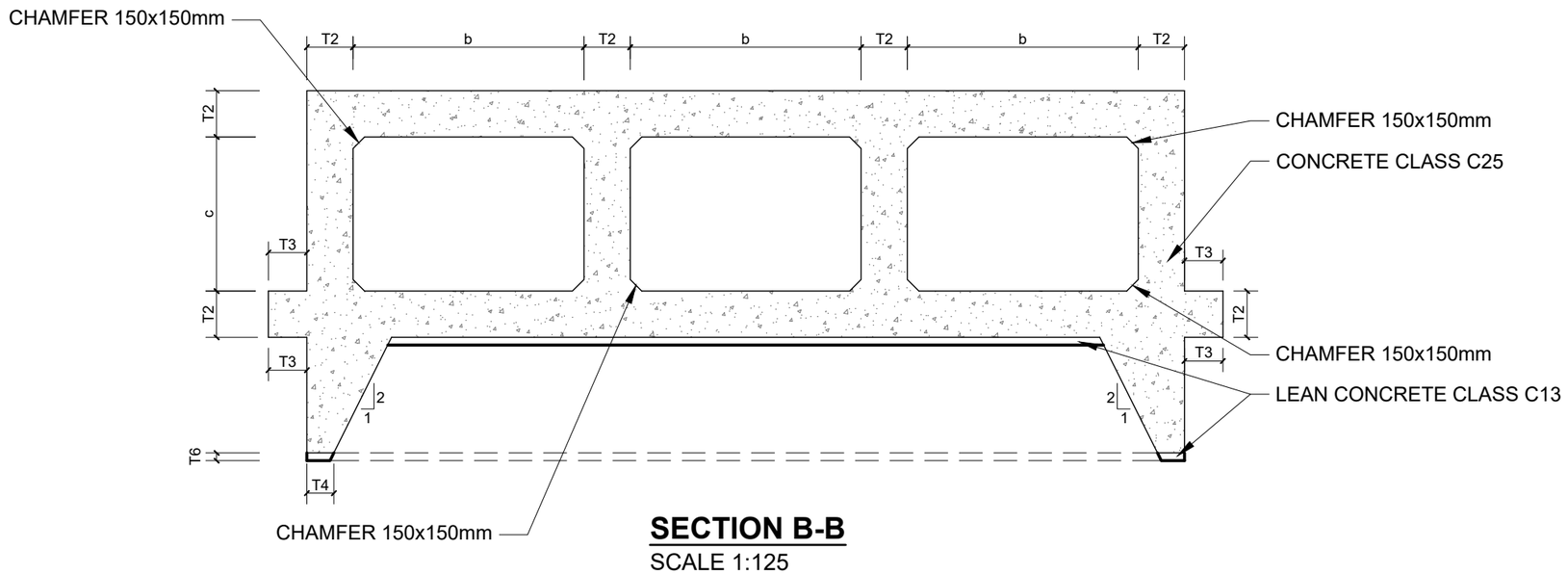
CONSULTANTS:
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MM Pakistan (Pvt.) Ltd.
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PROJECT:
FEASIBILITY STUDY FOR FLOOD MANAGEMENT OF KACHHI PLAINS FOR PREPARATION OF BALOCHISTAN WATER SECURITY AND PRODUCTIVITY IMPROVEMENT PROJECT

DRAWING TITLE:-
PLAN
OFF-TAKING STRUCTURE
TYPE-II

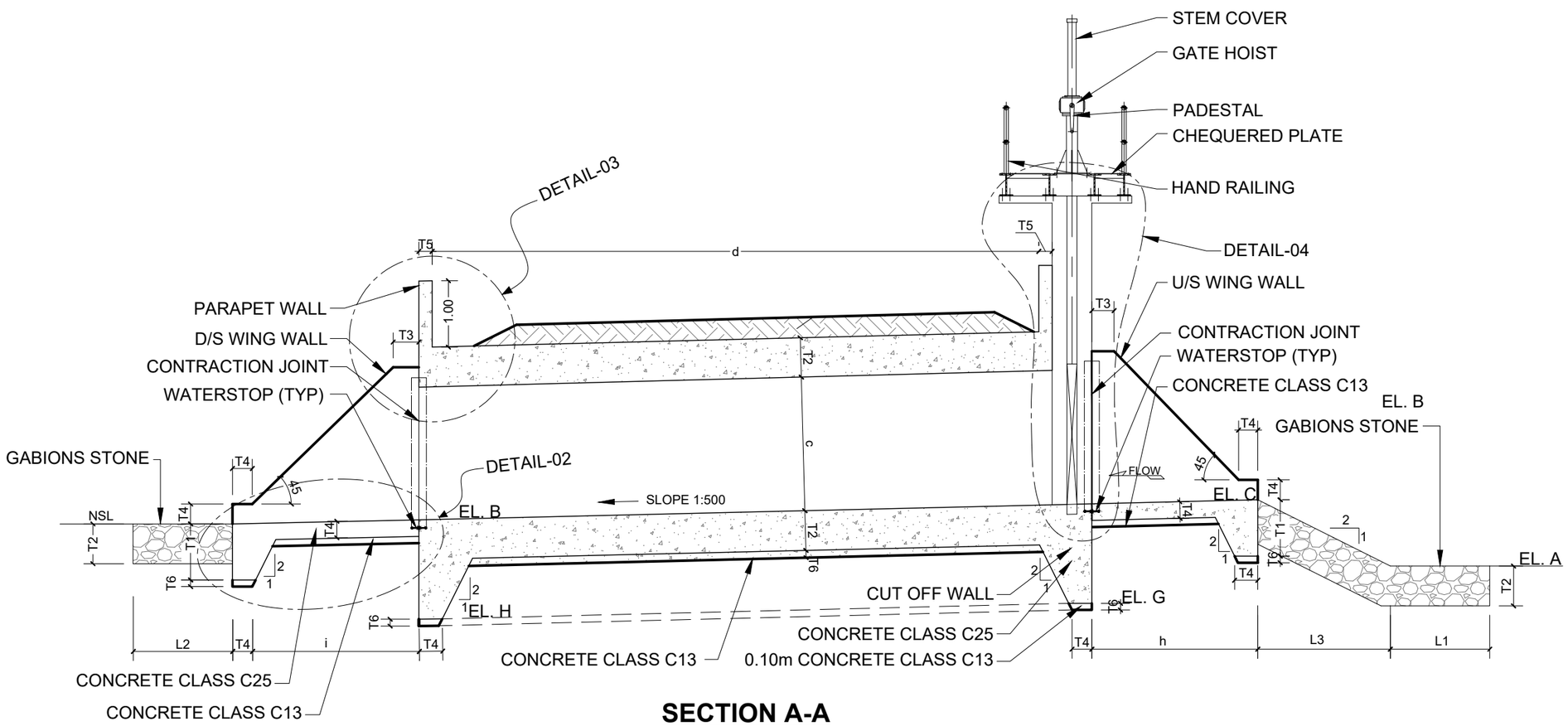
NOTES:-
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DRAWING NO. MMP-KPWMP-1093-BC-007	SHEET:- 1 OF 6



SECTION B-B

SCALE 1:125



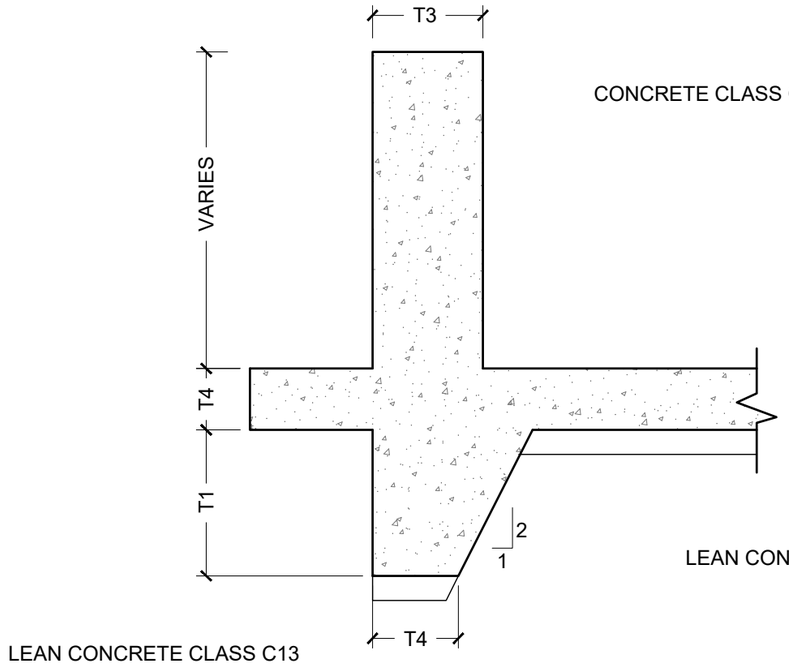
SECTION A-A

SCALE 1:125

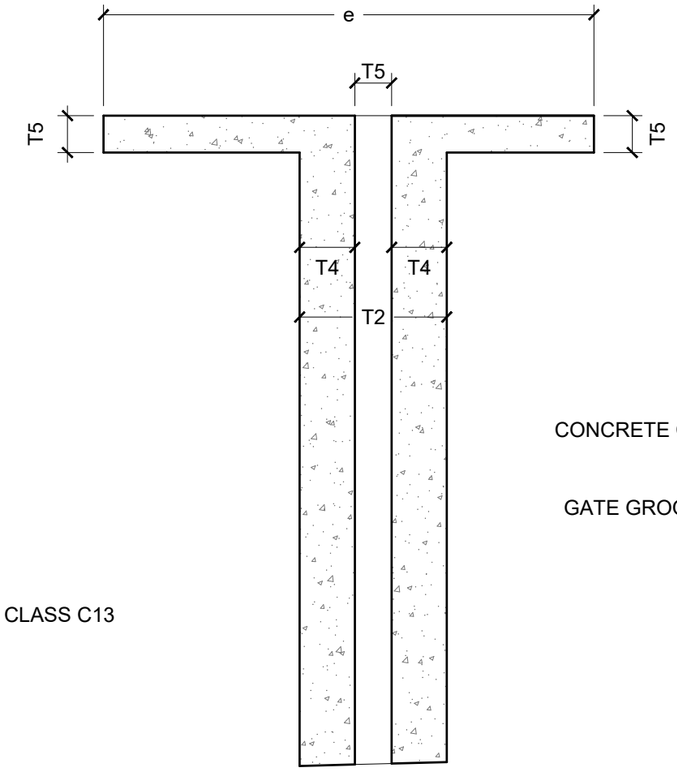
CLIENT: **IRRIGATION DEPARTMENT GOVERNMENT OF BALOCHISTAN**	CONSULTANTS: MMP MM Pakistan (Pvt.) Ltd. *Cavalry Ground, Lahore* House No.267A Link-1 Street 6, *042-36620567* *cdc.mmp@mmpakistan.com* *http://www.mmpakistan.com*	PROJECT: **FEASIBILITY STUDY FOR FLOOD MANAGEMENT OF KACHHI PLAINS FOR PREPARATION OF BALOCHISTAN WATER SECURITY AND PRODUCTIVITY IMPROVEMENT PROJECT**	DRAWING TITLE:- **SECTION A-A & B-B OFF-TAKING STRUCTURE TYPE-II**

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ALL LEVELS AND DIMENSIONS ARE IN METERS UNLESS INDICATED OTHERWISE.

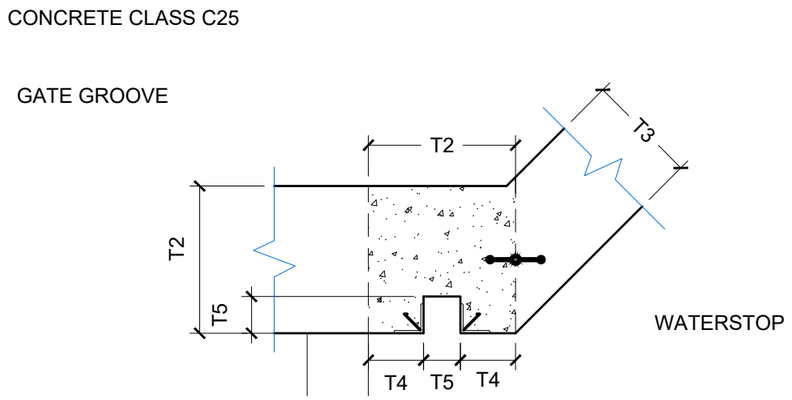
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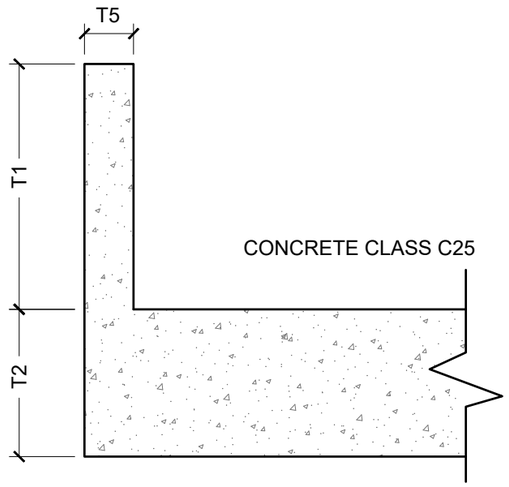
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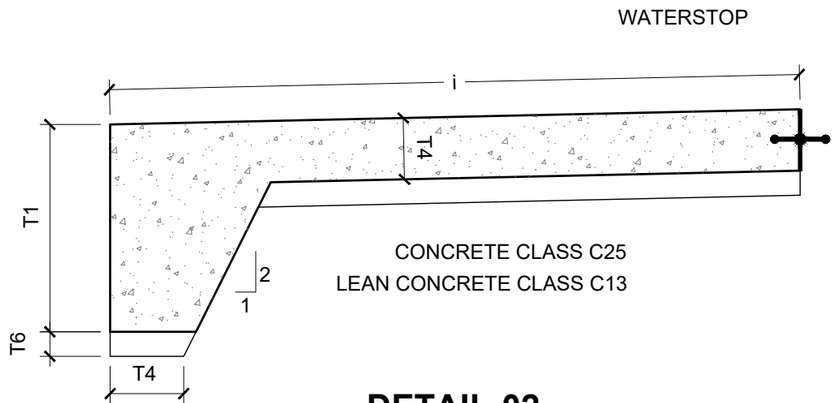
DETAIL-04



DETAIL-01



DETAIL-03

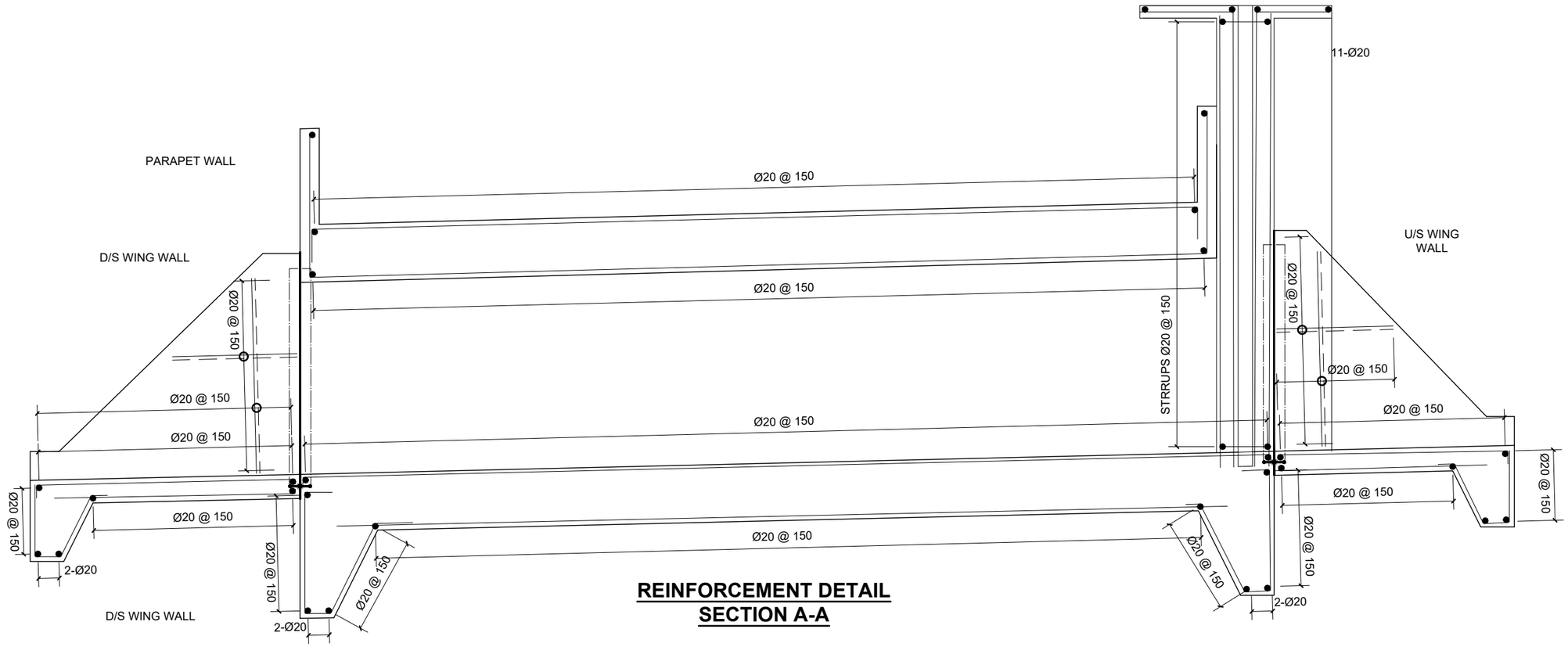


DETAIL-02

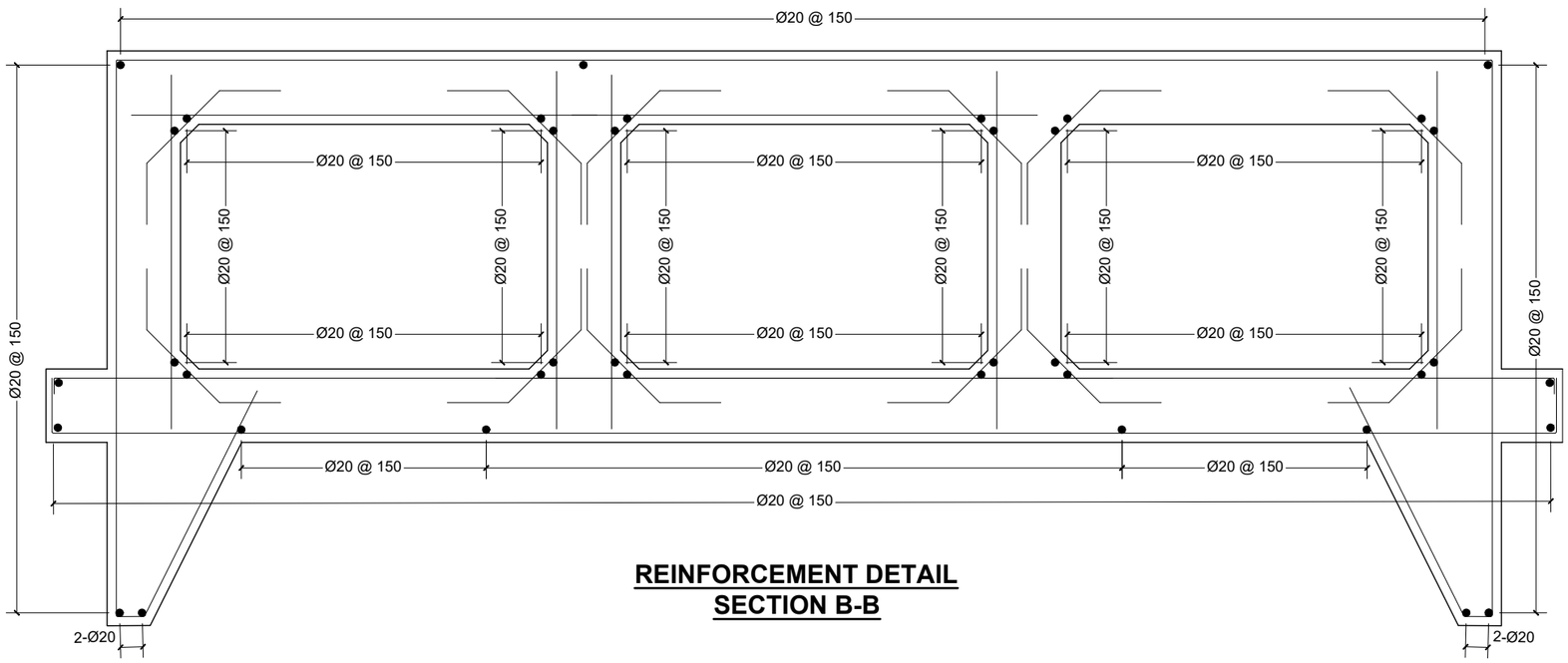
CLIENT: IRRIGATION DEPARTMENT GOVERNMENT OF BALOCHISTAN	CONSULTANTS: MM Pakistan (Pvt.) Ltd. — *Cavalry Ground, Lahore*, House No.267A Link-1 Street 6, *042-36620567*, *cdc.mmp@mmpakistan.com*, *http://www.mmpakistan.com*	PROJECT: **FEASIBILITY STUDY FOR FLOOD MANAGEMENT OF KACHHI PLAINS FOR PREPARATION OF BALOCHISTAN WATER SECURITY AND PRODUCTIVITY IMPROVEMENT PROJECT**	DRAWING TITLE:- **DETAILS OF WING WALL, CUT OFF WALL, PARAPET & HOISTING COLUMN OFF-TAKING STRUCTURE TYPE-II**

NOTES:-
ALL LEVELS AND DIMENSIONS ARE IN METERS UNLESS INDICATED OTHERWISE.

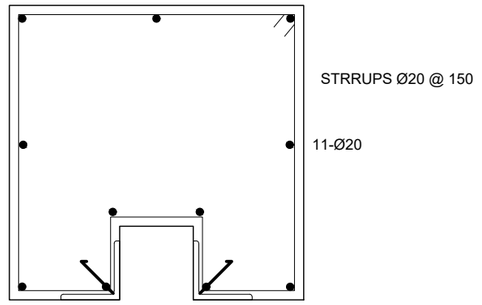
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CHECKED BY: EK	SCALE: 1:25
	DATE: JUN/2023
DRAWING NO. MMP-KPWMP-1093-BC-009	SHEET:- 3 OF 6



REINFORCEMENT DETAIL
SECTION A-A



REINFORCEMENT DETAIL
SECTION B-B

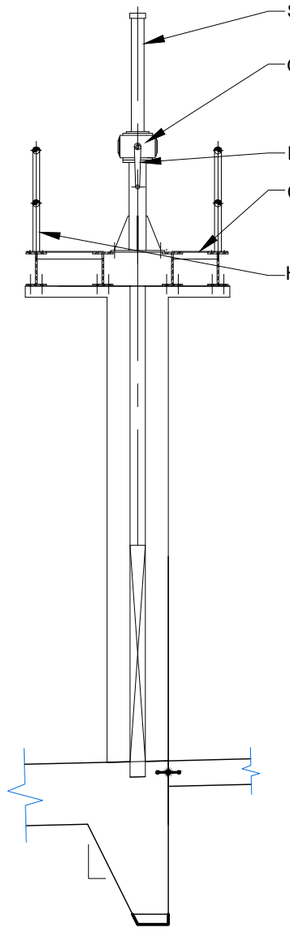


REINFORCEMENT DETAIL
DETAIL-01

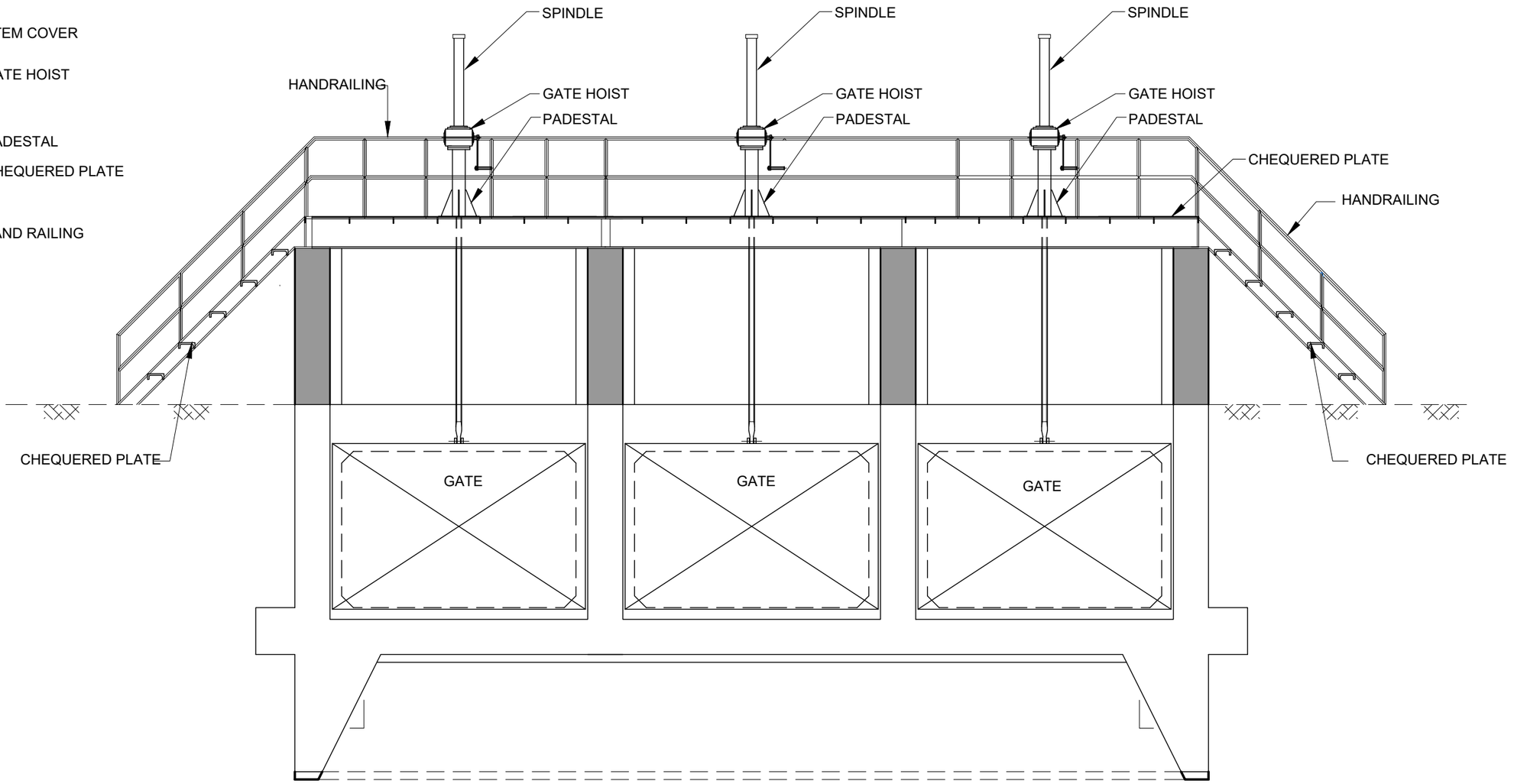
CLIENT: IRRIGATION DEPARTMENT GOVERNMENT OF BALOCHISTAN	CONSULTANTS: MMP Pakistan (Pvt.) Ltd. — Cavalry Ground, Lahore; House No.267A Link-1 Street 6, 042-36620567, cdc.mmp@mmpakistan.com, http://www.mmpakistan.com	PROJECT: FEASIBILITY STUDY FOR FLOOD MANAGEMENT OF KACHHI PLAINS FOR PREPARATION OF BALOCHISTAN WATER SECURITY AND PRODUCTIVITY IMPROVEMENT PROJECT	DRAWING TITLE:- REINFORCEMENT DETAILS OFF-TAKING STRUCTURE TYPE-II

NOTES:-
ALL LEVELS AND DIMENSIONS ARE IN METERS UNLESS INDICATED OTHERWISE.

DRAWN BY: MW		DESIGNED BY: MM	
CHECKED BY: EK		SCALE:	1:50
		DATE:	JUN/2023
DRAWING NO. MMP-KPWMP-1093-BC-010		SHEET:-	4 OF 6



SECTION D-D
SCALE 1:60



SECTION C-C
SCALE 1:60

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NOTES:-
ALL LEVELS AND DIMENSIONS ARE IN METERS UNLESS INDICATED OTHERWISE.

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	DATE: JUN/2023
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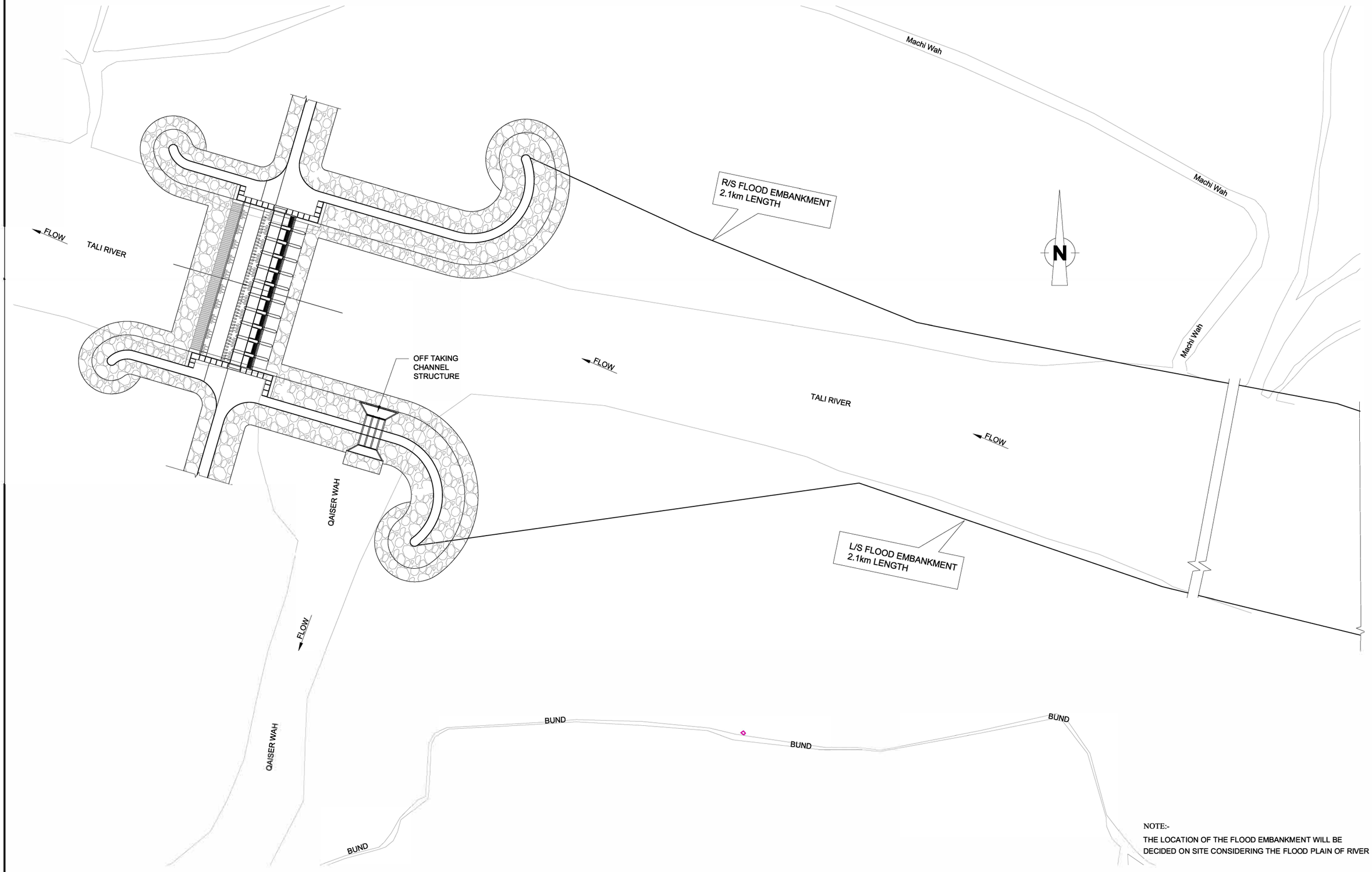
OFFTAKING STRUCTURE - TABLE OF DIMENSIONS & ELEVATIONS

SR. NO.	Location	No. of Offtaking Wah		DISCHARGE	El. A	El. B	El. C	El. D	El. E	El. F	El. G	El. H	a	b	c	d	e	f	
		Right	Left	(cumec)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	Width	Height
1	Qaiser	-	1	72.00	151.36	154.23	151.66	150.78	157.58	158.66	148.41	147.53	3.00	3.00	2.75	17.68	2.00	3.30	3.05

SR. NO.	Location	No. of Offtaking Wah		DISCHARGE	g	h	i	L1	L2	L3	T1	T2	T3	T4	T5	T6
		Right	Left	(cumec)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)
1	Qaiser	-	1	72.00	5.00	5.50	5.50	5.00	7.50	0.60	0.90	0.60	0.45	0.30	0.15	0.10

El. A	U/S Bed Level	a	Number of Bays	i	D/S approach Slab Length	T5	Thickness		
El. B	U/S water Level	b	Clear Bay Width	L1	U/S Gabion Length	T6	Thickness		
El. C	U/S Intake Bed Level	c	Height of Bay	L2	D/S Gabion Length				
El. D	D/S intake Bed Level	d	Length of intake Structure	L3	U/S Glacis Length				
El. E	Top of Embankment Level	e	Hoisting Platform width	T1	Thickness				
El. F	Cheaquered Plate Level	f	Gate Size	T2	Thickness				
El. G	U/S Cutoff Wall Reduce Level	g	Bank Top Width	T3	Thickness				
El. H	D/S Cutoff Wall Reduce Level	h	U/S approach Slab Length	T4	Thickness				

FLOOD PROTECTION EMBANKMENT PLANS



NOTE:-
THE LOCATION OF THE FLOOD EMBANKMENT WILL BE DECIDED ON SITE CONSIDERING THE FLOOD PLAIN OF RIVER

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042-36620567
cdc.mmp@mmpakistan.com
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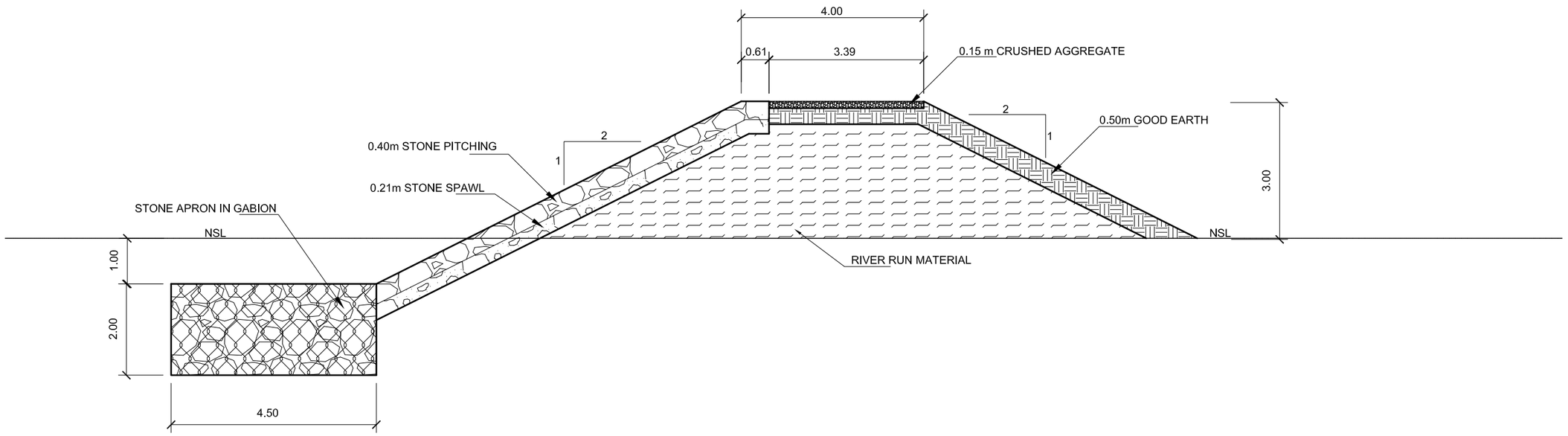
DRAWING TITLE:-
SINGLE LINE PLAN FOR FLOOD EMBANKMENT AT DISPERSAL STRUCTURE, QAISAR

NOTES:-
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	DATE: JULY / 2023
DWG NO. MMP-KPWMP-1093-EP-003	SHEET:- 1 OF 1

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FLOOD PROTECTION EMBANKMENTS



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042-36620567
cdc.mmp@mmpakistan.com
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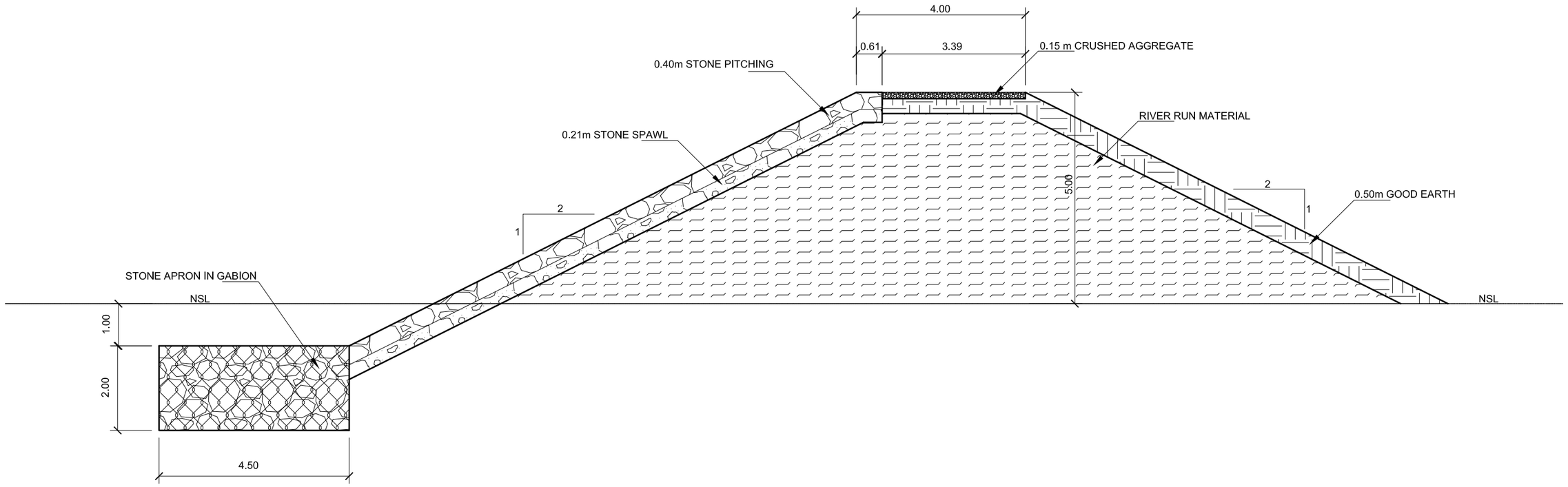
DRAWING TITLE:-

TYPICAL 3M HIGH EARTHEN FLOOD PROTECTION EMBANKMENT WITH SIDE PROTECTION ON RIVER SIDE

NOTES:-

ALL LEVELS AND DIMENSIONS ARE IN METERS UNLESS INDICATED OTHERWISE.

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	DATE: FEB / 2023
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042-36620567
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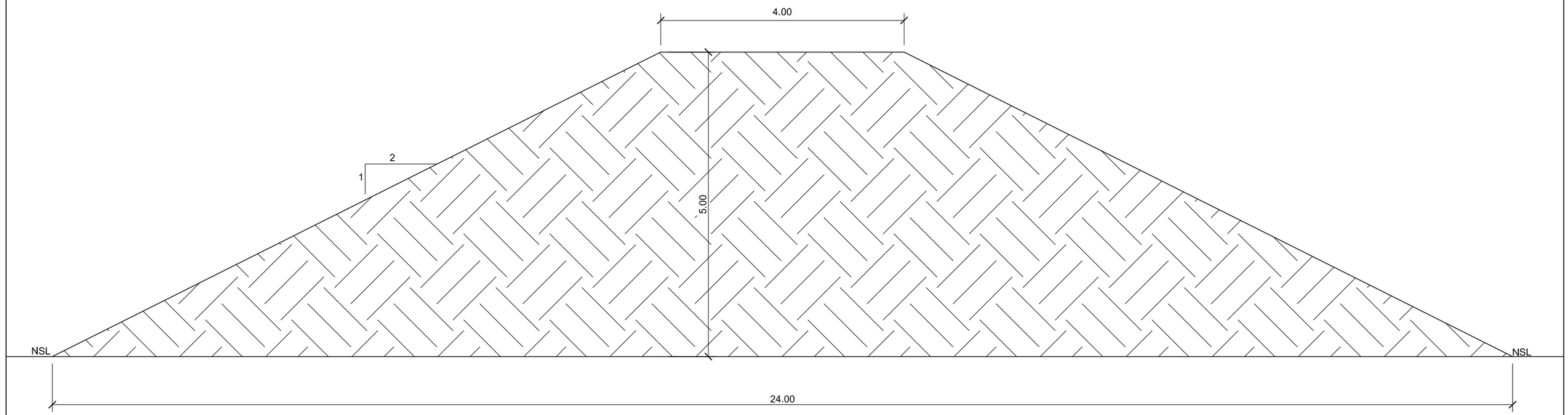
DRAWING TITLE:-

TYPICAL 5M HIGH EARTHEN FLOOD PROTECTION EMBANKMENT WITH SIDE PROTECTION ON RIVER SIDE

NOTES:-

ALL LEVELS AND DIMENSIONS ARE IN METERS UNLESS INDICATED OTHERWISE.

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	DATE: FEB / 2023
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TYPICAL CROSS SECTION

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