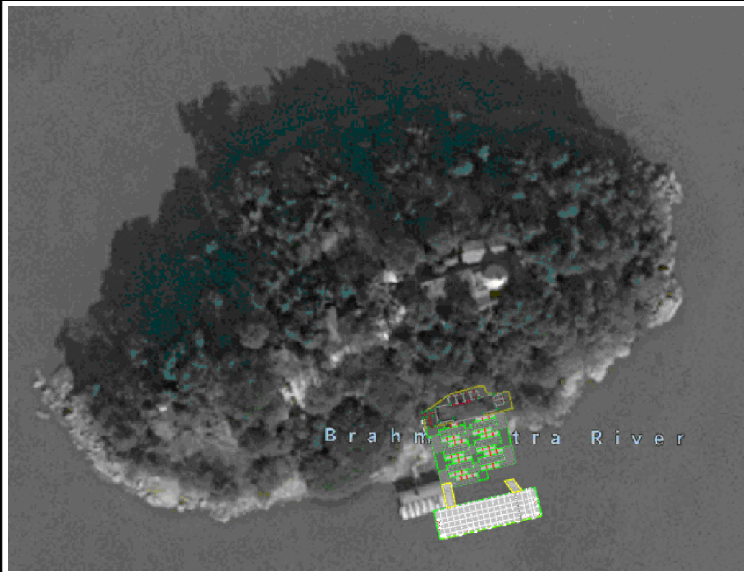




KEY PLAN

NOTES

1. ALL DIMENSIONS ARE IN METERS.
2. ALL LEVELS ARE IN METERS RELATIVE TO MEAN SEA LEVEL (MSL), UNLESS NOTED OTHERWISE.
3. DRAWINGS ARE NOT TO BE SCALED, WRITTEN DIMENSIONS SHOULD BE FOLLOWED AND VERIFIED WITH THE DETAILS.
4. ANY DISCREPANCIES FOUND IN DRAWINGS ARE TO BE REPORTED TO THE ENGINEER.
5. REFERENCE ELEVATION AND HFL(48.40) WAS OBTAINED FROM CWC OFFICE.
6. WATER LEVEL DURING HYDROGRAPHIC SURVEY WAS 41.550m. AT UMANANDA TEMPLE GHAT LOCATION.
7. REFERENCE PILLAR CO-ORDINATES & LEVELS AT UMANANDA TEMPLE GHAT LOCATION.

REFERENCE POINT	EASTING (m)	NORTHING (m)	LEVEL (m)
C-2	374674.803	2898033.826	46.393
C-3	374570.276	2897988.503	43.256
C-3	374605.113	2898024.527	60.754

LEGEND

SL.NO.	DESCRIPTION	SYMBOL
1.	ELECTRIC POST / LIGHT POST	
2.	HUT / SEMI PUCCA BUILDING	
3.	TREE / REFERENCE POINT	
4.	SPOT ELEVATION / GATE	
5.	CONTOUR	
6.	WATER EDGE (ASSUMED LWL)	
7.	HIGH FLOOD LEVEL	
8.	CANAL	
9.	PLAN LEVEL	

LEGEND :

- HFL - HIGH FLOOD LEVEL
LWL - LOW WATER LEVEL
FGL - FINISHED GROUND LEVEL
FFL - FINISHED FLOOR LEVEL
- RIVER WATER AREA
- PEDESTRIAN ENTRY QUEUING
- PEDESTRIAN EXIT
- DRY AND WET WASTE BINS

FOR TENDER

NOT FOR
CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	ZR	GPS	BVD
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



CONSULTANT
HaskoningDHV Consulting Private Limited
502-505, 5th Floor, Platinum Techno Park
Plot 17 & 18, Sector 30 A, Vashi
New Mumbai - 400 703, INDIA
Tel: +91 (0) 22 61395000
Email: info.india@hnhv.com
www.royalhaskoningdhv.com



PROJECT

Assam Inland Water Transport Project (AIWTP)

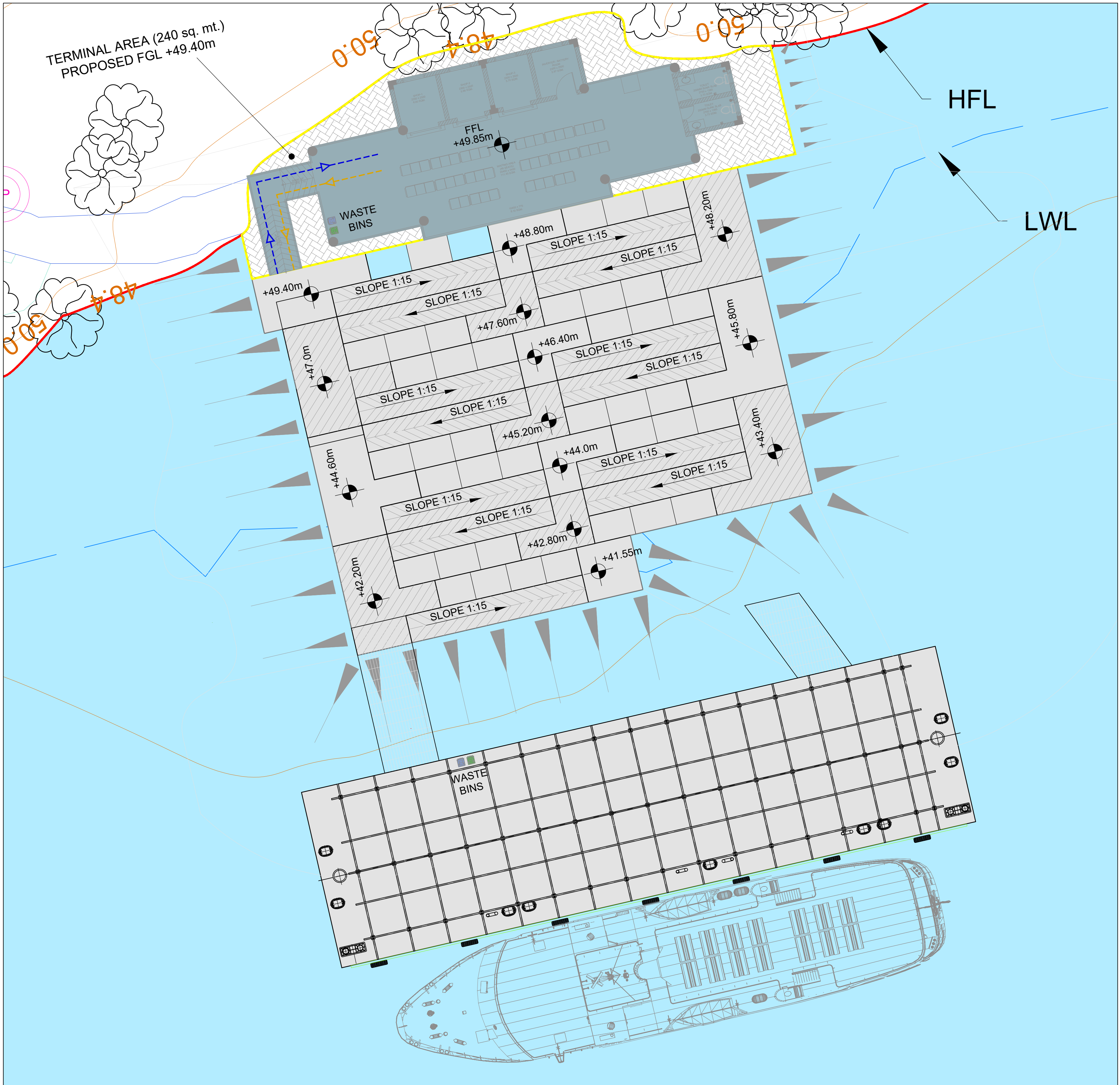
ASSIGNMENT

Preparation of DPR along with Engineering Design, Drawings, Tender Documents for Construction of Modular Terminal at Ferry Services of NW-2 and NW-16 in Assam

TITLE

CENTER CLUSTER
UMANANDA TEMPLE GHAT
LANDSIDE FACILITY LAYOUT

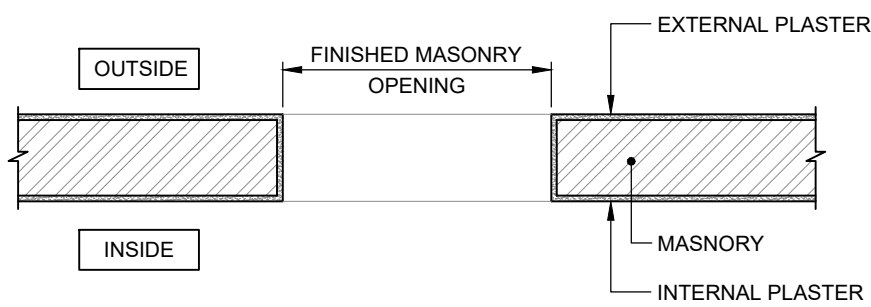
DRAWN	ZR	CHECKED	GPS	APPROVED	BVD
DATE	FEB 2023	SCALE	@A1	AS SHOWN	REF.
DRAWING No.	D11530-RHD-ZZ-UA-DR-A-2220	SUITABILITY	A3	REVISION	P01



OVERALL LAYOUT
SCALE 1:500

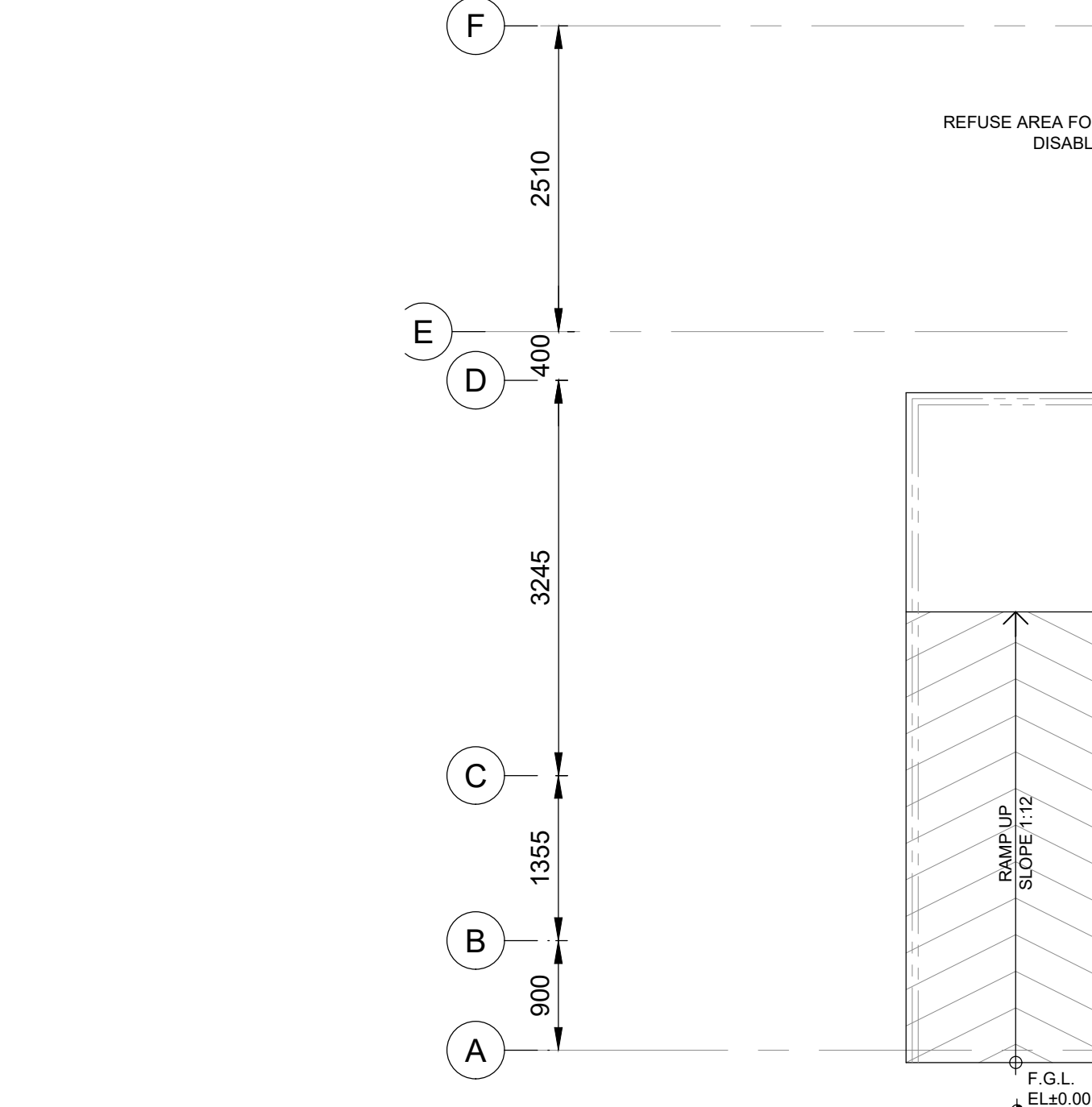
DOOR SCHEDULE FINISHED

S. NO.	DOOR NO.	SIZE (FINISHED MASONRY OPENING)		TYPE	DESCRIPTION
		WIDTH	HEIGHT		
01	D5	1200	2100	SINGLE LEAF	ALUMINUM FLUSH DOOR WITH VISION PANEL
02	D8	750	2100	SINGLE LEAF	ALUMINUM FLUSH DOOR WITH VISION PANEL
03	RS1	1500	2100	GEAR OPERATED	ROLLING SHUTTER



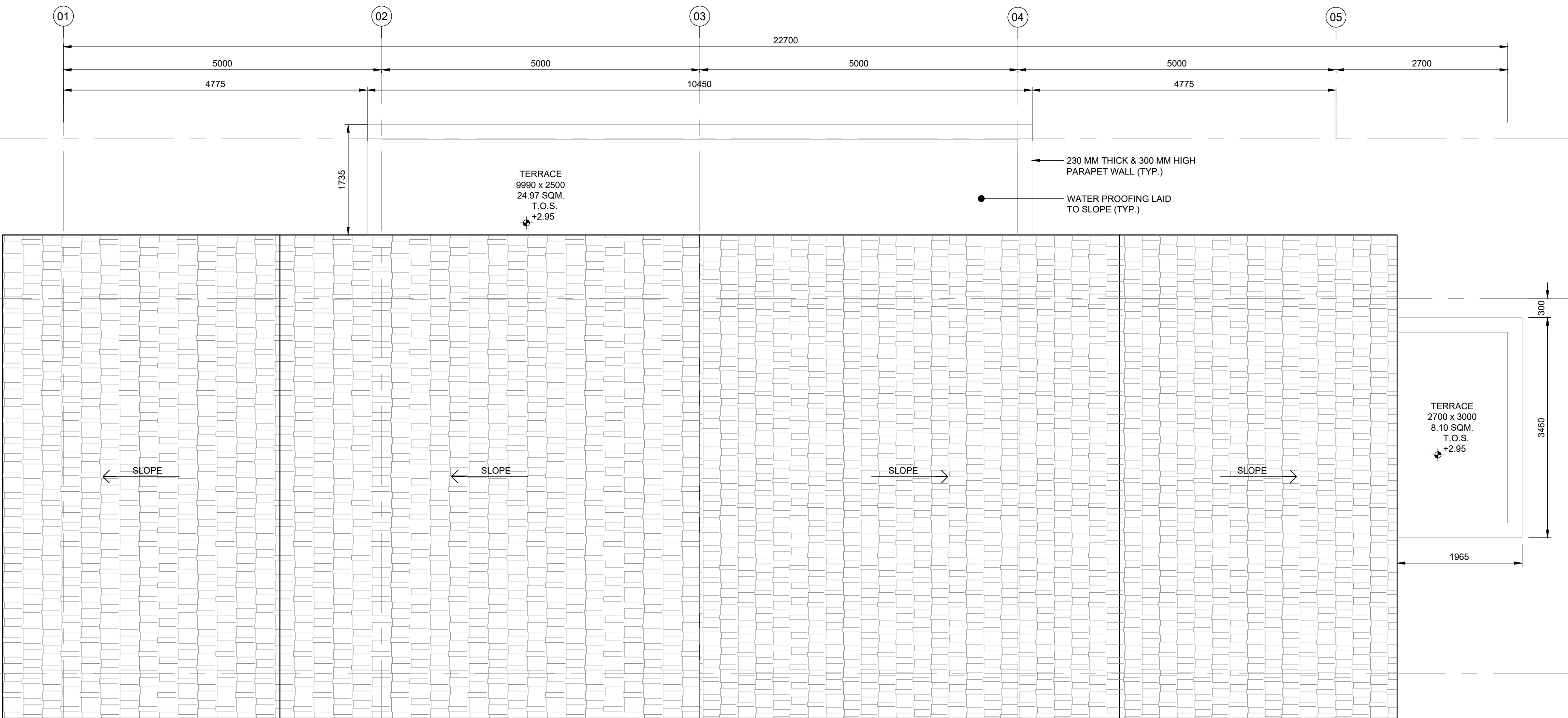
TYPICAL DETAIL OF MASONRY OPENING
(SCALE 1:20)

FINISHING SCHEDULE					
GROUND FLOOR					
S. NO.	ROOM NAME	FLOOR	CEILING	INTERIOR WALL	EXTERIOR WALL
01	WAITING AREA & RAMP	KOTA STONE	-	-	ACRYLIC EMULSION WEATHER PROOF PAINT ON OUTDOOR PUTTY/ AS PER VENDOR SPECIFICATIONS OF 2-3 COATS
02	SHOPS & BATTERY ROOM	KOTA STONE	PLASTER WITH WALL PUTTY & EMULSION PAINT	12mm THK. PLASTER FINISHED WITH ACRYLIC EMULSION PAINT WITH PRIMER & WALL PUTTY ON SURFACE	ACRYLIC EMULSION WEATHER PROOF PAINT ON OUTDOOR PUTTY/ AS PER VENDOR SPECIFICATIONS OF 2-3 COATS
03	TOILETS	ANTI-SKID CERAMIC TILE	GYPSUM BOARD + MODULAR GRID (600x600) CEILING	12mm THK. PLASTER/ CERAMIC TILE DADO SIZED 400x600mm HORIZONTAL UP TO FALSE CEILING	ACRYLIC EMULSION WEATHER PROOF PAINT ON OUTDOOR PUTTY/ AS PER VENDOR SPECIFICATIONS OF 2-3 COATS

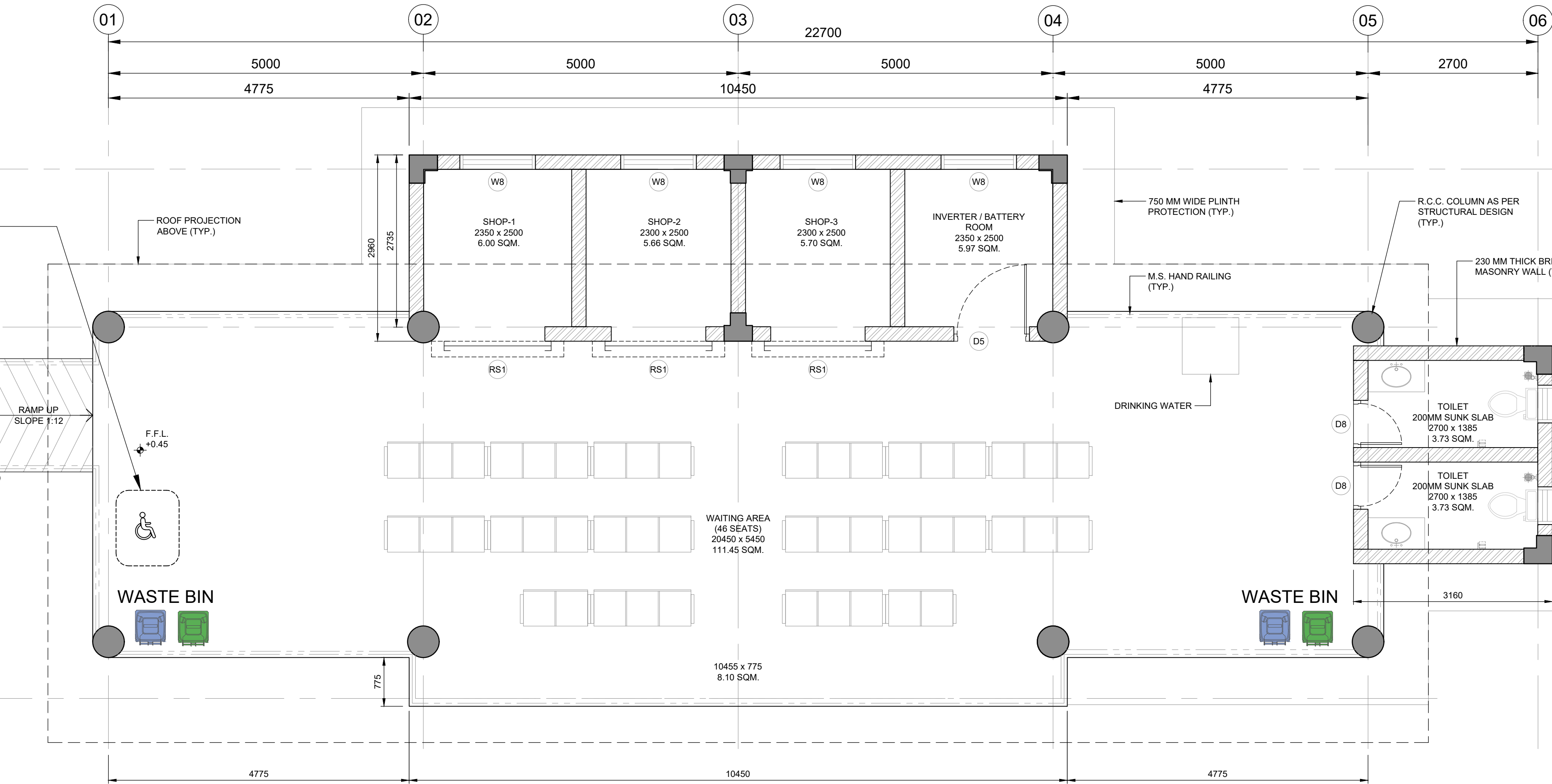


WINDOW SCHEDULE FINISHED

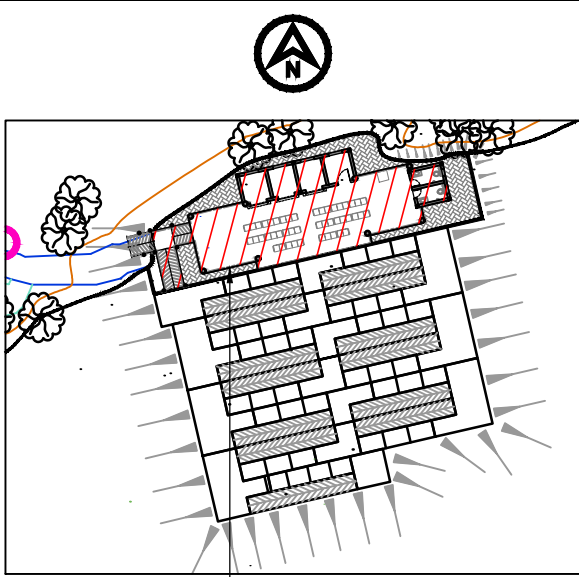
S. NO.	WINDOW NO.	SIZE (FINISHED MASONRY OPENING)		DESCRIPTION
		WIDTH	HEIGHT	
01	W8	1200	1200	POWDER COATED ALUMINUM GLASS OPENABLE SHUTTER WINDOW
02	V4	600	600	FROSTED GLASS LOUVERS ALUMINUM VENTILATOR



ROOF PLAN
SCALE 1:50



GROUND FLOOR PLAN
SCALE 1:50



KEY PLAN

NOTES

- ALL DIMENSIONS ARE IN METERS.
- ALL LEVELS ARE IN METERS RELATIVE TO MEAN SEA LEVEL (MSL), UNLESS NOTED OTHERWISE.
- DRAWINGS ARE NOT TO BE SCALED, WRITTEN DIMENSIONS SHOULD BE FOLLOWED AND VERIFIED WITH THE DETAILS.
- ANY DISCREPANCIES FOUND IN DRAWINGS ARE TO BE REPORTED TO THE ENGINEER.
- ALL SERVICES ROUTINGS SHALL HAVE TO BE CO-ORDINATED BY THE CONTRACTOR FINISHING WORKS.
- UNLESS SPECIFIED OTHERWISE CONTRACTOR TO FOLLOW TENDER SPECIFICATIONS FOR BUILDING FINISHING WORKS.

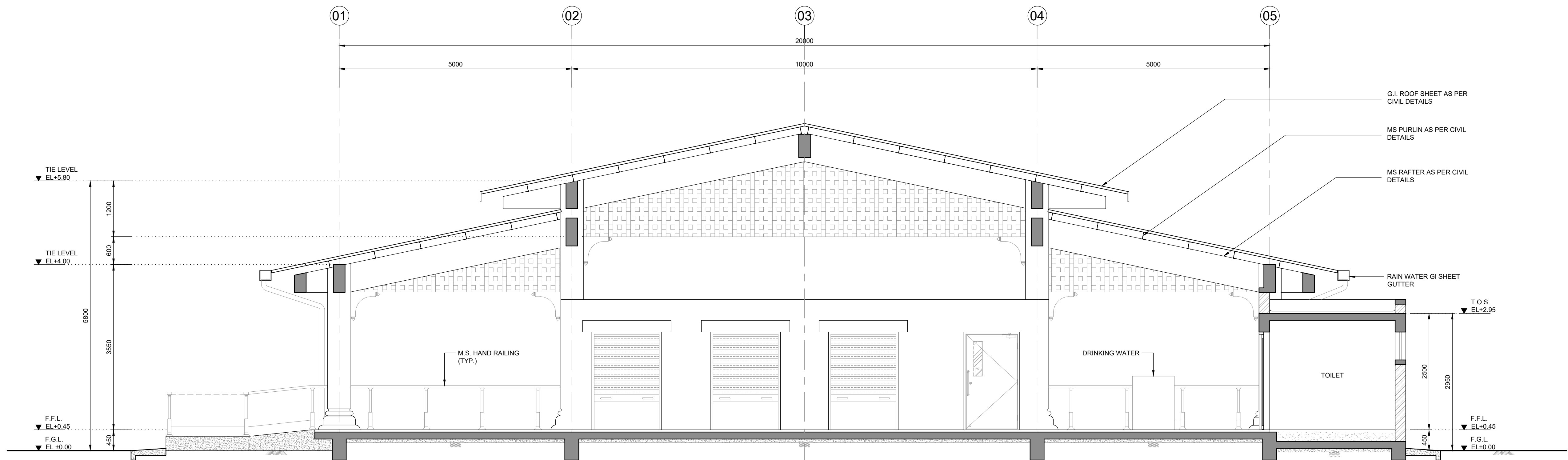
LEGEND

- 230 MM THICK BRICK MASONRY WALL
- 115 MM THICK BRICK MASONRY WALL
- 100 MM THICK DEAD PARTITION
- R.C.C.
- 12 MM THICK TOUGHEN CLEAR GLASS PARTITION
- HPL PARTITION (TOILET CUBICLES)
- F.G.L. - FINISH GROUND LEVEL
- F.P.L. - FINISH PLINTH LEVEL
- F.F.L. - FINISH FLOOR LEVEL
- T.O.S. - TOP OF SLAB
- HP - HIGHER POINT
- LP - LOWER POINT

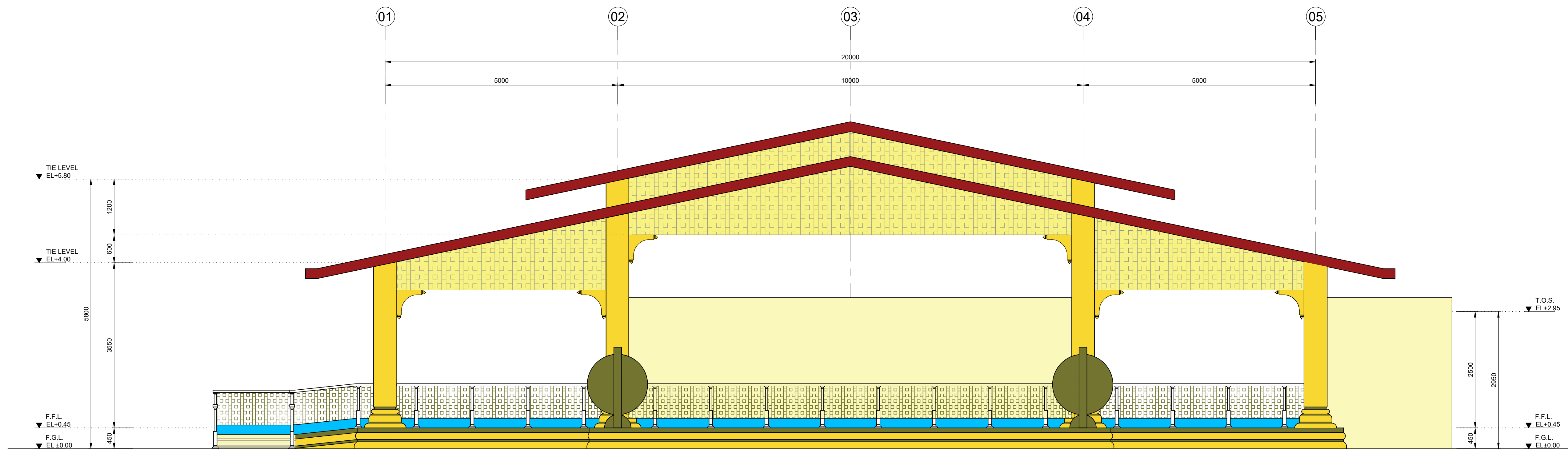
FOR TENDER

NOT FOR
CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	ZR	GPS	BVD
REV	DATE	DESCRIPTION	BY	CHK	APP
REVISIONS					
CLIENT					
Assam Inland Water Transport Development Society (AIWTDS)					
CONSULTANT					
HaskoningDHV Consulting Private Limited 502-505, 5th Floor, Platinum Techno Park Plot 17 & 18, Sector 30 A, Vashi New Mumbai - 400 703, INDIA Tel +91 (0) 22 61395000 Email info.india@hnhv.com www.royalhaskoningdhv.com					
PROJECT					
Assam Inland Water Transport Project (AIWTP)					
ASSIGNMENT					
Preparation of DPR along with Engineering Design, Drawings, Tender Documents for Construction of Modular Terminal at Ferry Services of NW-2 and NW-16 in Assam					
TITLE					
CENTER CLUSTER UMANANDA TEMPLE GHAT FLOOR PLANS					
DRAWN	ZR	CHECKED	GPS	APPROVED	BVD
DATE	FEB 2023	SCALE @A1	AS SHOWN	REF.	
DRAWING No. DI1530-RHD-ZZ-UA-DR-A-2221				SUITABILITY	REVISION
				A3	P01



SECTION A-A
SCALE 1:50



FRONT SIDE ELEVATION
SCALE 1:50

NOTES

1. ALL DIMENSIONS ARE IN METERS.
2. ALL LEVELS ARE IN METERS RELATIVE TO MEAN SEA LEVEL (MSL), UNLESS NOTED OTHERWISE.
3. DRAWINGS ARE NOT TO BE SCALED. WRITTEN DIMENSIONS SHOULD BE FOLLOWED AND VERIFIED WITH THE DETAILS.
4. ANY DISCREPANCIES FOUND IN DRAWINGS ARE TO BE REPORTED TO THE ENGINEER.
5. ALL SERVICES ROUTINGS SHALL HAVE TO BE CO-ORDINATED BY THE CONTRACTOR FINISHING WORKS.
6. UNLESS SPECIFIED OTHERWISE CONTRACTOR TO FOLLOW TENDER SPECIFICATIONS FOR BUILDING FINISHING WORKS.

LEGEND

- 230 MM THICK BRICK MASONRY WALL
- 115 MM THICK BRICK MASONRY WALL
- 100 MM THICK DEAD PARTITION
- R.C.C.
- 12 MM THICK TOUGHEN CLEAR GLASS PARTITION
- HPL PARTITION (TOILET CUBICLES)
- F.G.L. - FINISH GROUND LEVEL
- F.P.L. - FINISH PLINTH LEVEL
- F.F.L. - FINISH FLOOR LEVEL
- T.O.S. - TOP OF SLAB
- HP - HIGHER POINT
- LP - LOWER POINT

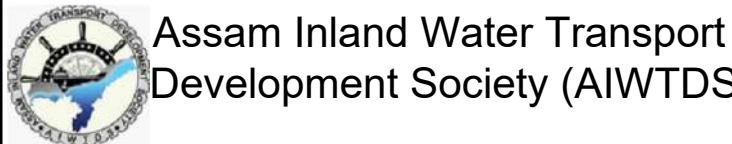
FOR TENDER

NOT FOR
CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	ZR	GPS	BVD
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



CONSULTANT
Royal HaskoningDHV
Enhancing Society Together

PROJECT
Assam Inland Water Transport Project (AIWTP)

ASSIGNMENT
Preparation of DPR along with Engineering Design, Drawings, Tender Documents for Construction of Modular Terminal at Ferry Services of NW-2 and NW-16 in Assam

TITLE

CENTER CLUSTER
UMANANDA TEMPLE GHAT
SECTION & ELEVATION

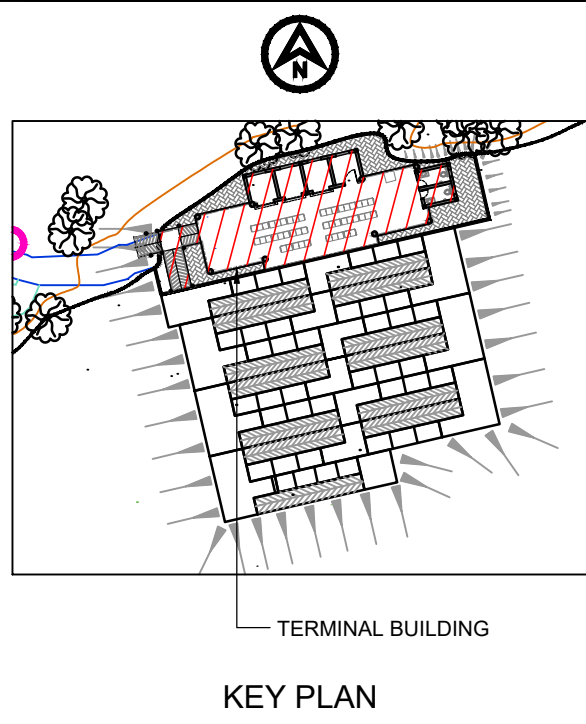
DRAWN	ZR	CHECKED	GPS	APPROVED	BVD
DATE	FEB 2023	SCALE	@A1	AS SHOWN	REF.
DRAWING No.	D11530-RHD-ZZ-UA-DR-A-2222	SUITABILITY	A3	REVISION	P01



3D VIEW 1

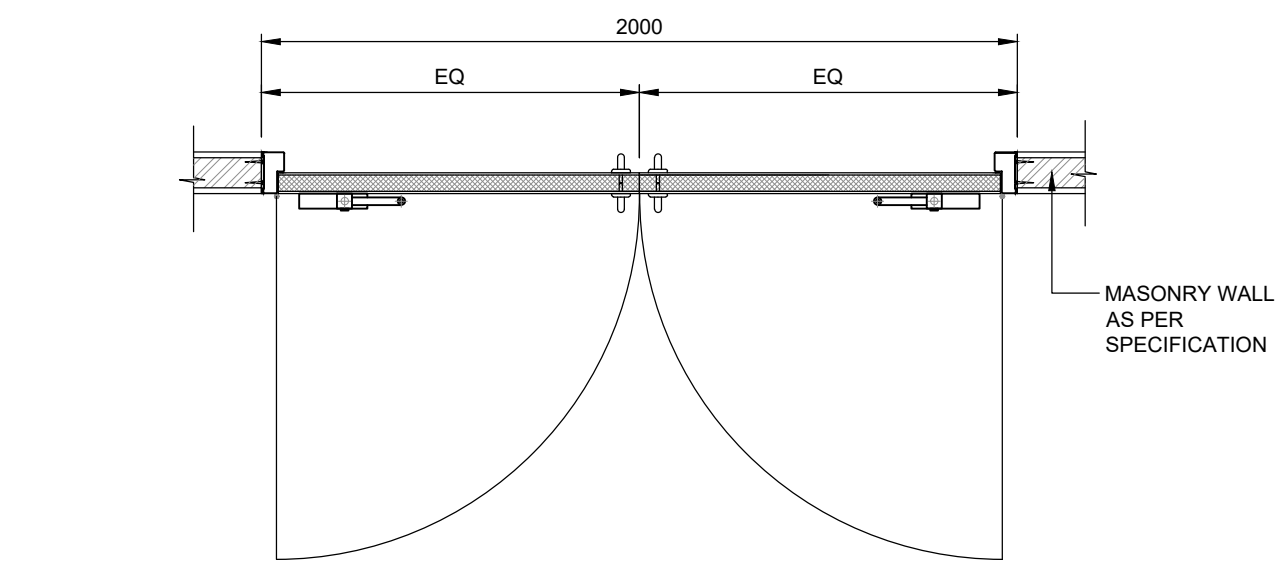
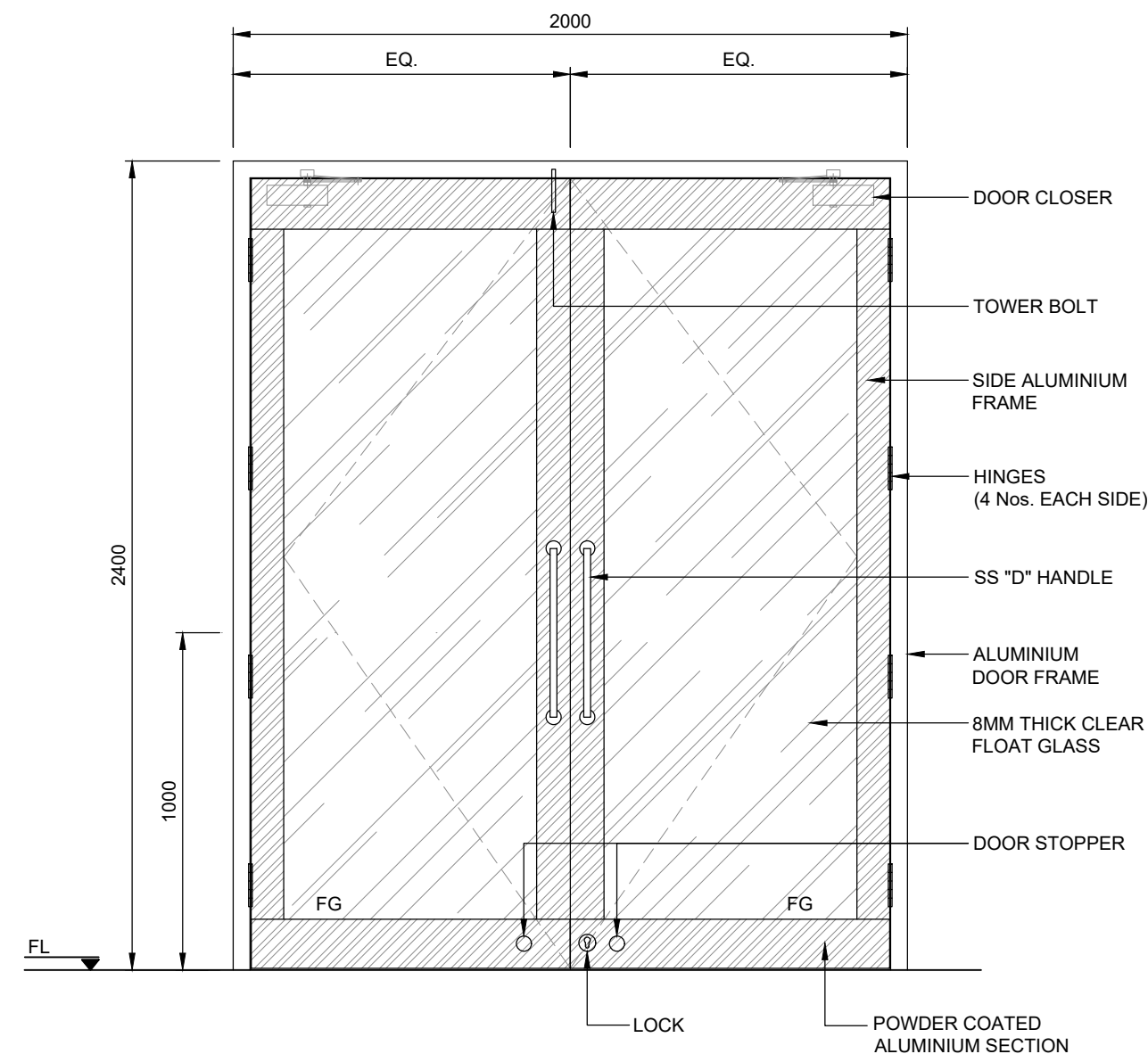


3D VIEW 2



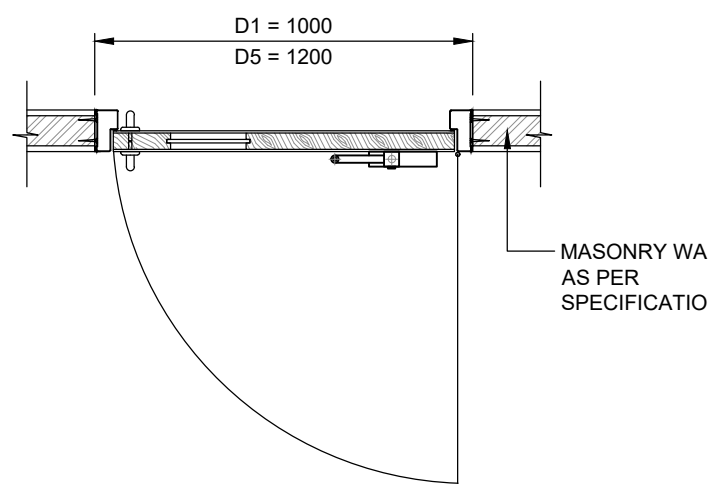
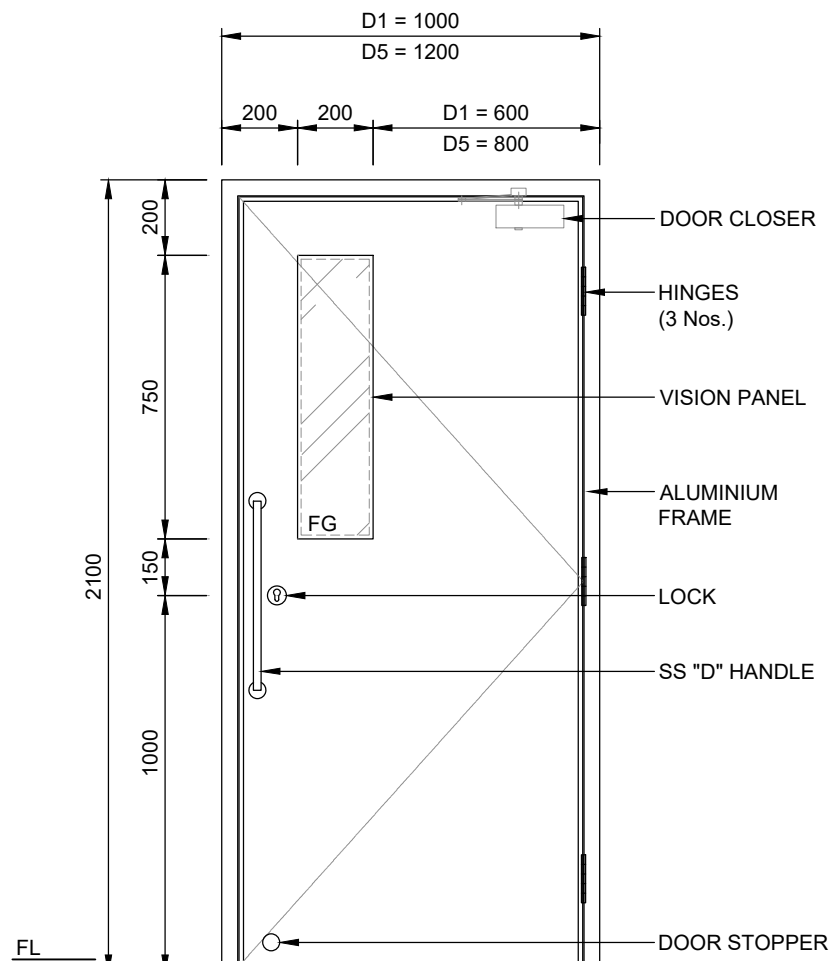
FOR TENDER
NOT FOR
CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	AI	GPS	BVD
REV	DATE	DESCRIPTION	BY	CHK	APP
REVISIONS					
CLIENT					
 Assam Inland Water Transport Development Society (AIWTDS)					
CONSULTANT					
 HaskoningDHV Consulting Private Limited 502/505, 5th Floor, Platinum Techno Park Plot 17 & 18, Sector 30 A, Vashi Navi Mumbai - 400 703, INDIA Tel: +91 (0) 22 61385000 Email: info.india@rhdhv.com www.royalhaskoningdhv.com					
PROJECT					
Assam Inland Water Transport Project (AIWTP)					
ASSIGNMENT					
Preparation of DPR along with Engineering Design, Drawings, Tender Documents for Construction of Modular Terminal at Ferry Services of NW-2 and NW-16 in Assam					
TITLE					
CENTER CLUSTER UMANANDA TEMPLE GHAT 3D VIEWS					
DRAWN	AI	CHECKED	GPS	APPROVED	BVD
DATE	FEB 2023	SCALE	@A1	AS SHOWN	REF.
DRAWING No.	DI1530-RHD-ZZ-UA-DR-A-2223	SUITABILITY	A3	REVISION	P01



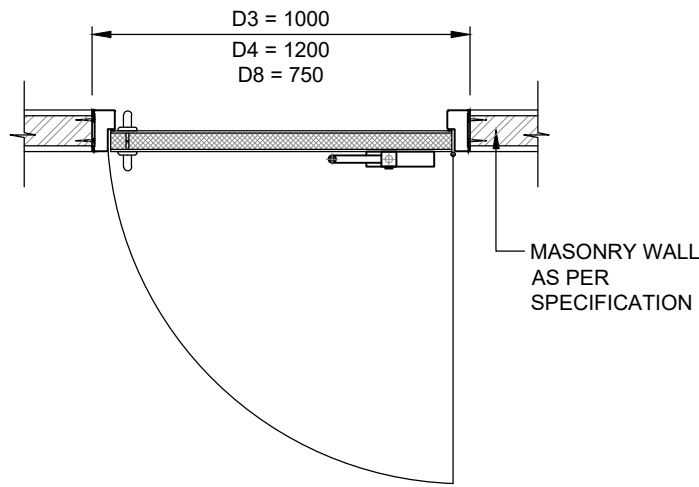
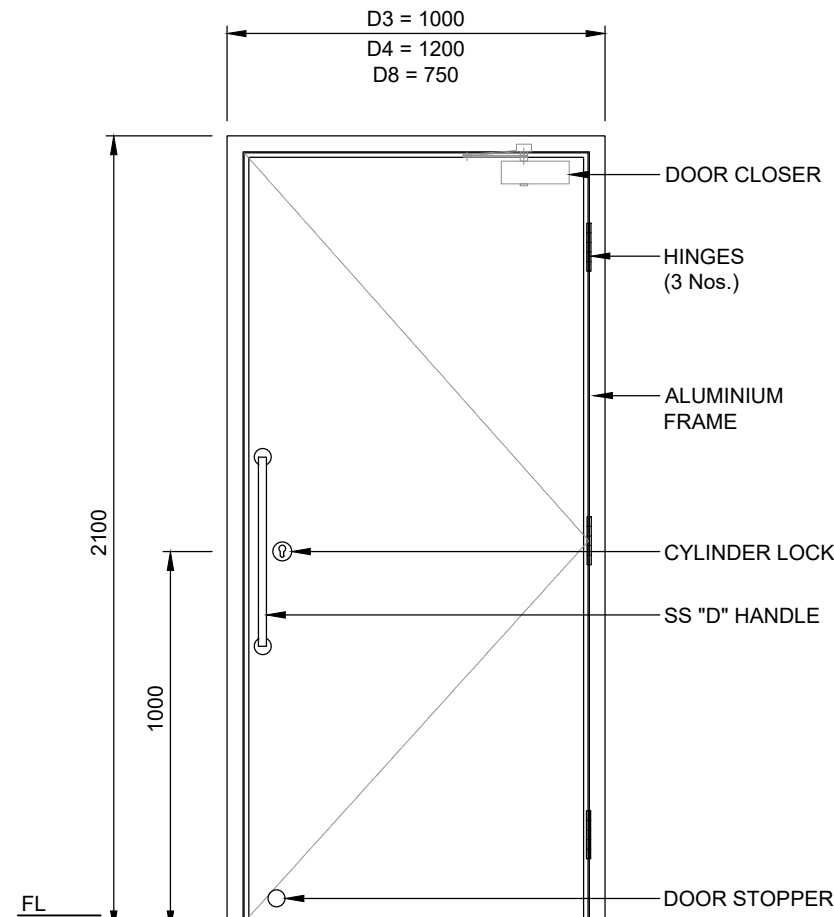
** NOTE : FG = FIXED GLASS

DOOR NAME	D1
DESCRIPTION	DOUBLE LEAF DOOR WITH CLEAR FLOAT GLASS WITH SIDE ALUMINIUM FRAMES, TOP & BOTTOM RAIL ALUMINIUM SECTION
LEAF DIMENSIONS (W.H)	2000 x 2400
FINISH	8 MM THICK CLEAR FLOAT GLASS WITH SS BRUSH FINISH 18" LONG HANDLE
FIRE RATED	---

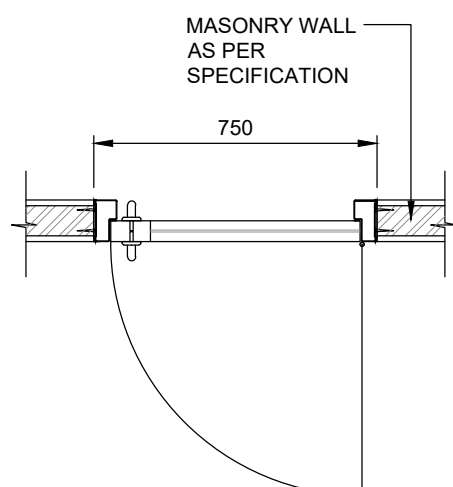
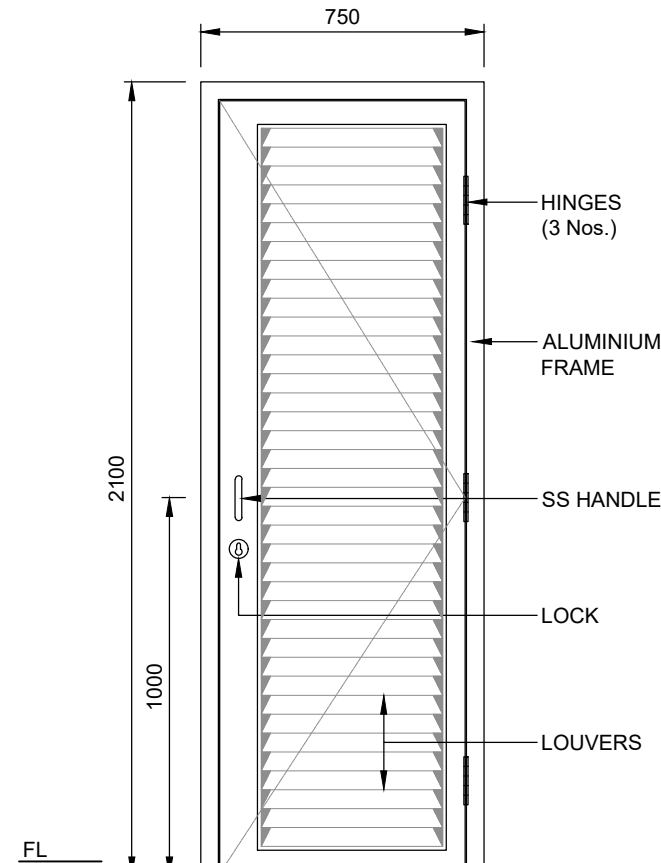


** NOTE : FG = FIXED GLASS

DOOR NAME	D2 / D5
DESCRIPTION	SINGLE LEAF ALUMINIUM SHUTTER FLUSH DOOR WITH VISION PANEL
LEAF DIMENSIONS (W.H)	D2 = 1000 x 2100 / D5 = 1200 x 2100
FINISH	POWDER COATED ALUMINIUM FLUSH DOOR PANEL
FIRE RATED	---

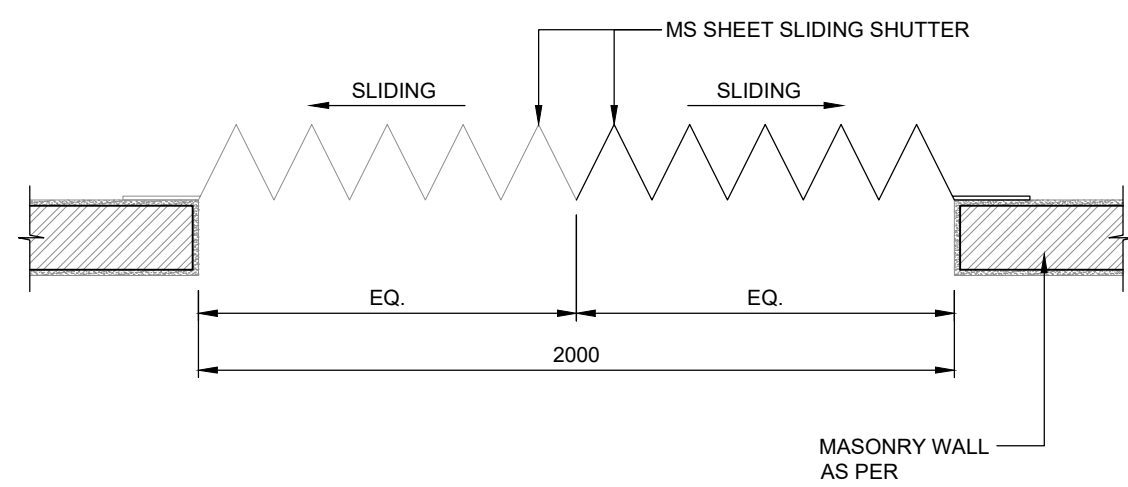
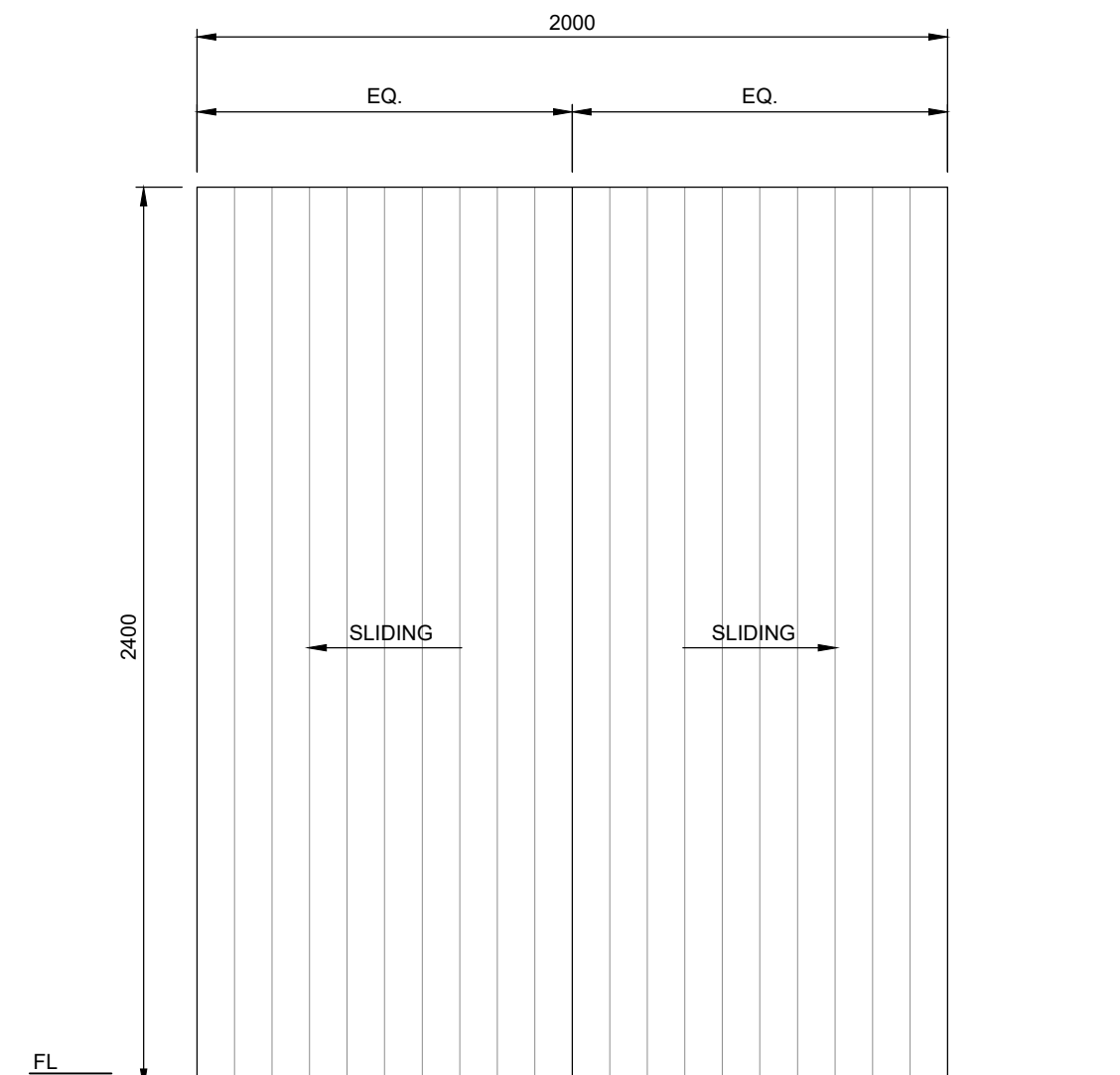


DOOR NAME	D3 / D4 / D8
DESCRIPTION	SINGLE LEAF ALUMINIUM SHUTTER FLUSH DOOR
LEAF DIMENSIONS (W.H)	D3 = 1000 x 2100 / D4 = 1200 x 2100 / D8 = 750 x 2100
FINISH	POWDER COATED ALUMINIUM FLUSH DOOR PANEL
FIRE RATED	---



** NOTE : FG = FIXED GLASS

DOOR NAME	D6
DESCRIPTION	ALUMINIUM LOUVERS DOOR
LEAF DIMENSIONS (W.H)	750 x 2100
FINISH	ALUMINIUM LOVERS DOOR
FIRE RATED	---



** NOTE : FG = FIXED GLASS

DOOR NAME	SG1
DESCRIPTION	SLIDING SHUTTER DOOR
LEAF DIMENSIONS (W.H)	2000 x 2400
FINISH	MS SHEET SLIDING SHUTTER DOOR
FIRE RATED	---

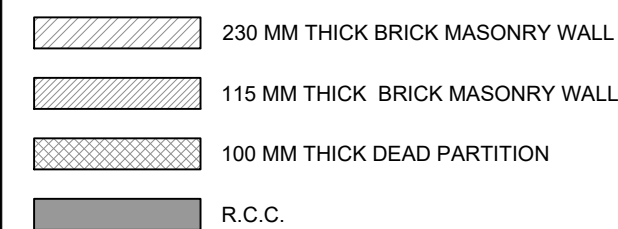
DOORS - HARDWARE SCHEDULE

HARDWARE	PRODUCT	QUANTITY							
		D1 (EACH)	D2 (EACH)	D3 (EACH)	D4 (EACH)	D5 (EACH)	D6 (EACH)	D8 (EACH)	
FLUSH HINGE	FLUSH HINGE 127 x 78 x 3 MM SS 304, SATIN FINISH, MAX WT - 60 KG.	8	3	3	3	3	3	3	
CYLINDER LOCK	EURO PROFILE CYLINDER WITH KEYS 3225, 65 MM KEY x KEY, SATIN SILVER FINISH	-	1	1	1	1	-	1	
PULL HANDLE	PULL HANDLE 350 x 25 MM, CTC - 350 MM, D - 25 MM, BACK TO BACK FIXING WITH SUITABLE FIXING ACCESSORIES, SS 304, FINISH : SATIN	2	1	1	1	1	1	1	
DOOR CLOSER	RACK AND PINION DOOR CLOSER TS 72 EN SIZE 2-4, WITH STD. ARM AND WITH TWO INDEPENDENT CLOSING VALVES AND LATCHING SPEED ADJUSTABLE BY ARM. ALL ADJUSTMENT SCREWS FACE FIXED. SILVER FINISH, AS PER EN 1154.	2	1	1	1	1	-	1	
FLOOR DOOR STOP	FLOOR DOOR STOP HALF DOME WITH 45 MM DIA, 626 SATIN CHROME FINISH	2	1	1	1	1	-	1	
FIRE RATED GLASS	CLEAR FIRE RATED GLASS, 6 MM, 120 MIN, OF SIZE 200 x 300 MM	-	1	-	-	1	-	-	
NARROW STILE DEAD LOCK	NARROW STILE DEAD LOCK PACKAGE CONSISTING OF NARROW STILE DEAD LOCK 25 MM BACKSET WITH STRIKE PLATE, EPG 70 MM AND ESCUTCHEONS, FINISH = SSS	1	-	-	-	-	1	-	
FLUSH BOLT	LEVER ACTION FLUSH BOLT WITH 19 MM PROJECTING BOLT L = 300 MM FOR METAL DOOR IN SATIN CHROME	1	-	-	-	-	-	-	

NOTES

1. ALL DIMENSIONS ARE IN METERS.
2. ALL LEVELS ARE IN METERS RELATIVE TO MEAN SEA LEVEL (MSL), UNLESS NOTED OTHERWISE.
3. DRAWINGS ARE NOT TO BE SCALED. WRITTEN DIMENSIONS SHOULD BE FOLLOWED AND VERIFIED WITH THE DETAILS.
4. ANY DISCREPANCIES FOUND IN DRAWINGS ARE TO BE REPORTED TO THE ENGINEER.

LEGEND



FOR TENDER

NOT FOR
CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	ZR	GPS	BVD
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



PROJECT

Assam Inland Water Transport Project (AIWTP)

ASSIGNMENT

Preparation of DPR along with Engineering Design, Drawings, Tender Documents for Construction of Modular Terminal at Ferry Services of NW-2 and NW-16 in Assam

TITLE

DOOR DETAILS & SCHEDULE
SHEET-1

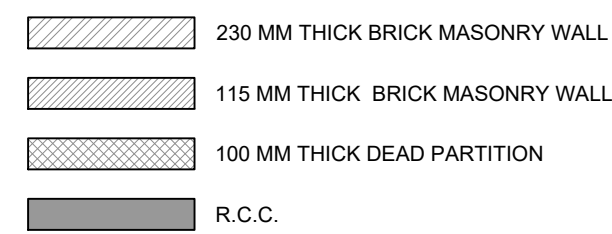
DRAWN	ZR	CHECKED	GPS	APPROVED	BVD
DATE	FEB 2023	SCALE	@A1	REF.	

DRAWING No.	SUITABILITY	REVISION
DI1530-RHD-ZZ-ZZ-DR-A-1002	A3	P01

NOTES

1. ALL DIMENSIONS ARE IN METERS.
2. ALL LEVELS ARE IN METERS RELATIVE TO MEAN SEA LEVEL (MSL), UNLESS NOTED OTHERWISE.
3. DRAWINGS ARE NOT TO BE SCALED. WRITTEN DIMENSIONS SHOULD BE FOLLOWED AND VERIFIED WITH THE DETAILS.
4. ANY DISCREPANCIES FOUND IN DRAWINGS ARE TO BE REPORTED TO THE ENGINEER.

LEGEND



FOR TENDER

NOT FOR
CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	ZR	GPS	BVD
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



CONSULTANT
HaskoningDHV Consulting Private Limited
502/505, 5th Floor, Platinum Techno Park
Plot 17 & 18, Sector 30 A, Vashi
Navi Mumbai - 400 703, INDIA
Tel: +91 (0) 22 61395000
Email: info.india@hdhv.com
www.royalhaskoningdhv.com

Royal HaskoningDHV
Enhancing Society Together

PROJECT

Assam Inland Water Transport Project (AIWTP)

ASSIGNMENT

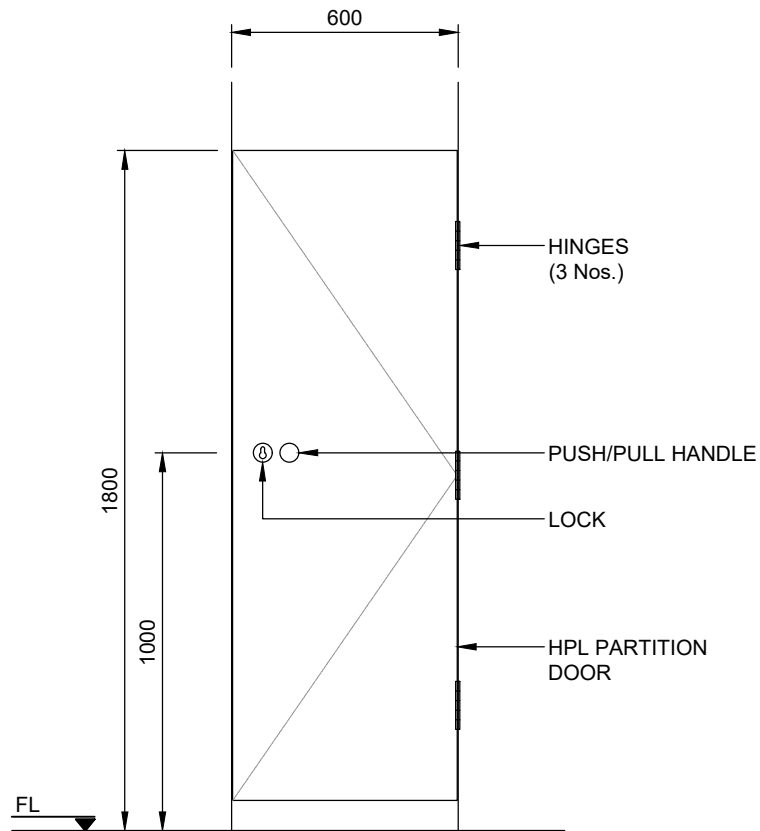
Preparation of DPR along with Engineering Design, Drawings, Tender Documents for Construction of Modular Terminal at Ferry Services of NW-2 and NW-16 in Assam

TITLE

DOOR DETAILS & SCHEDULE
SHEET-2

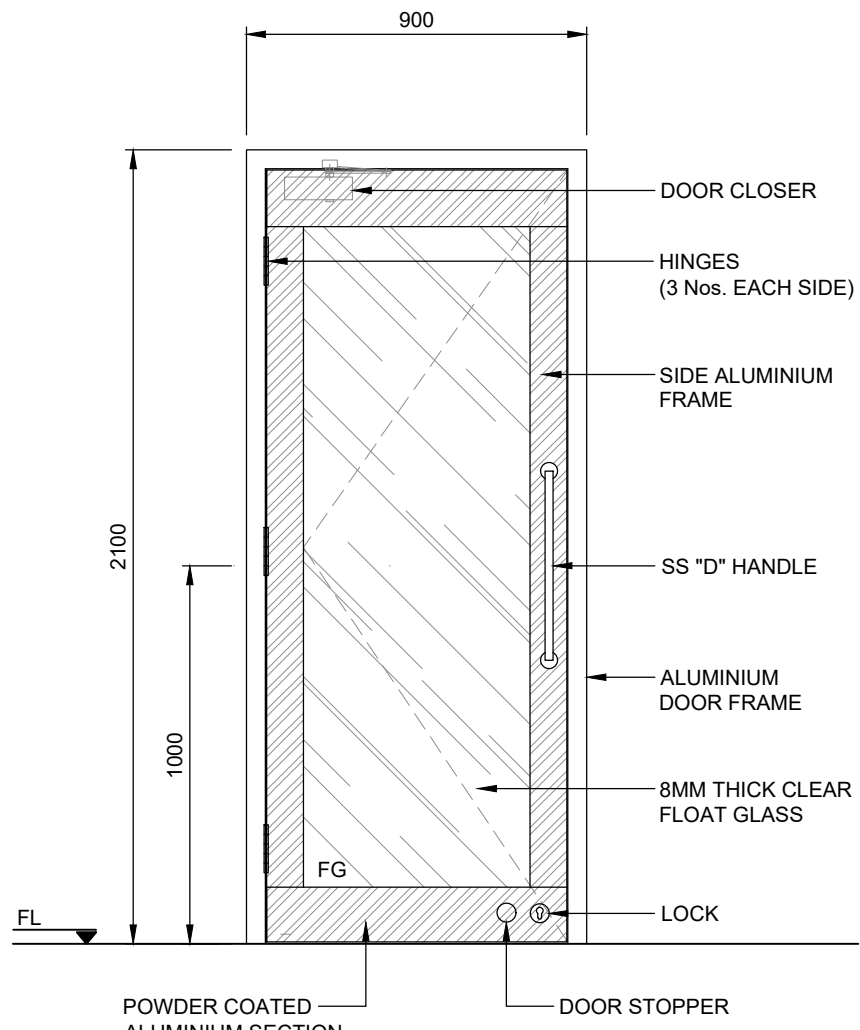
DRAWN	ZR	CHECKED	GPS	APPROVED	BVD
DATE	FEB 2023	SCALE	@A1	N.T.S.	REF.

DRAWING No.	SUITABILITY	REVISION
DI1530-RHD-ZZ-ZZ-DR-A-1003	A3	P01



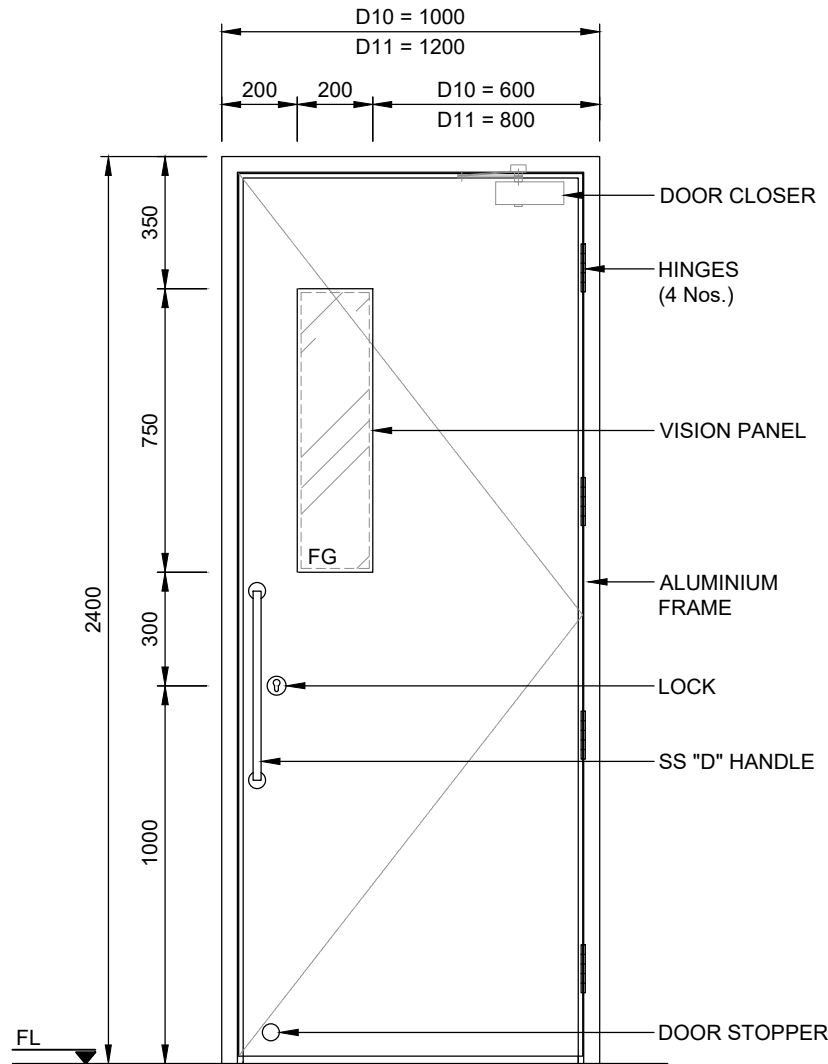
** NOTE : FG = FIXED GLASS

DOOR NAME	D7
DESCRIPTION	SINGLE LEAF DOOR
LEAF DIMENSIONS (W,H)	600 x 1800
FINISH	HIGH PRESSURE LAMINATE WATER RESISTANT PANEL
FIRE RATED	---



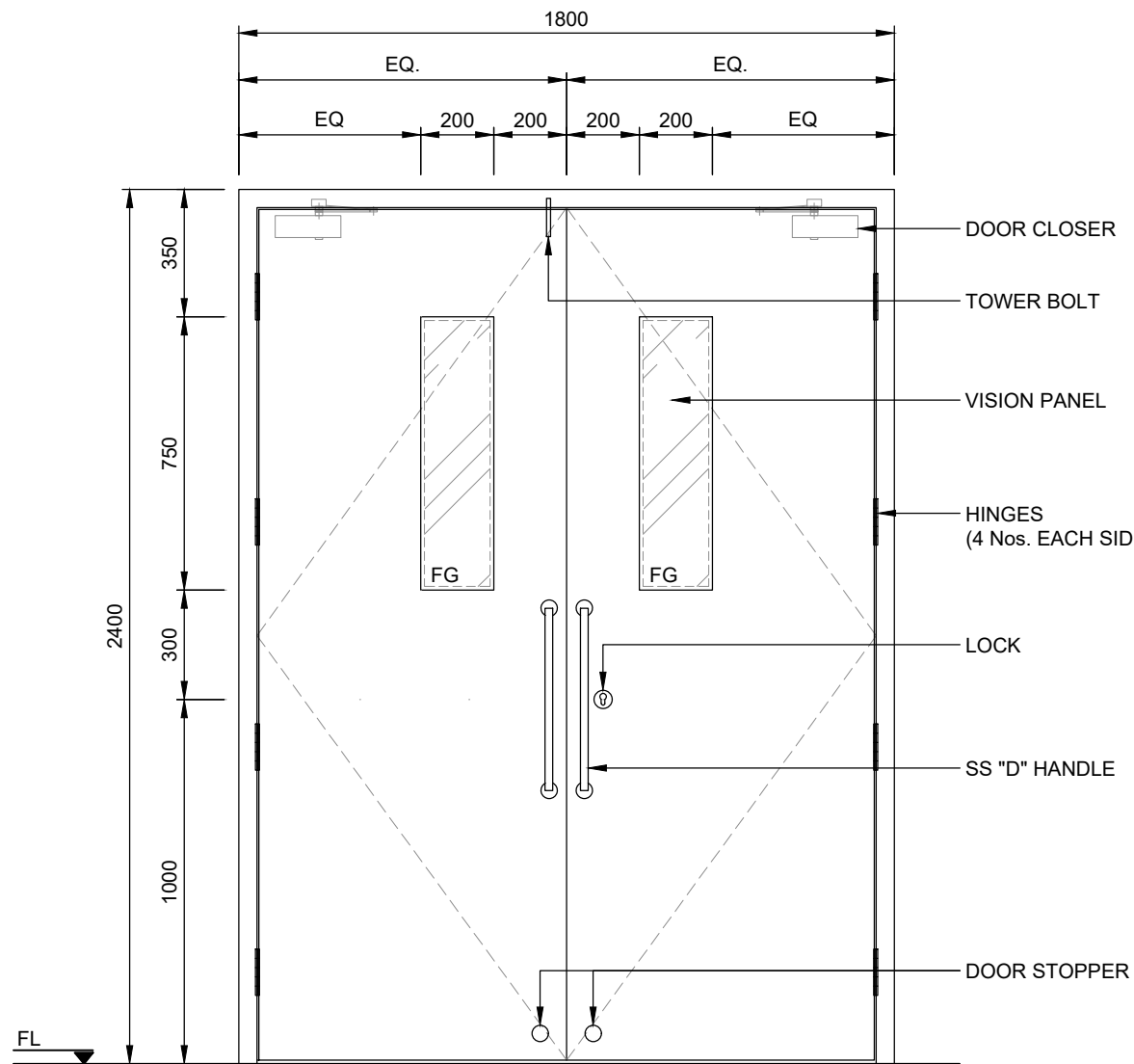
** NOTE : FG = FIXED GLASS

DOOR NAME	D9
DESCRIPTION	SINGLE LEAF DOOR WITH CLEAR FLOAT GLASS WITH SIDE ALUMINIUM FRAMES, TOP & BOTTOM RAIL ALUMINIUM SECTION
LEAF DIMENSIONS (W,H)	900 x 2100
FINISH	8 MM CLEAR FLOAT GLASS WITH SS BRUSH FINISH 18" LONG HANDLE
FIRE RATED	---



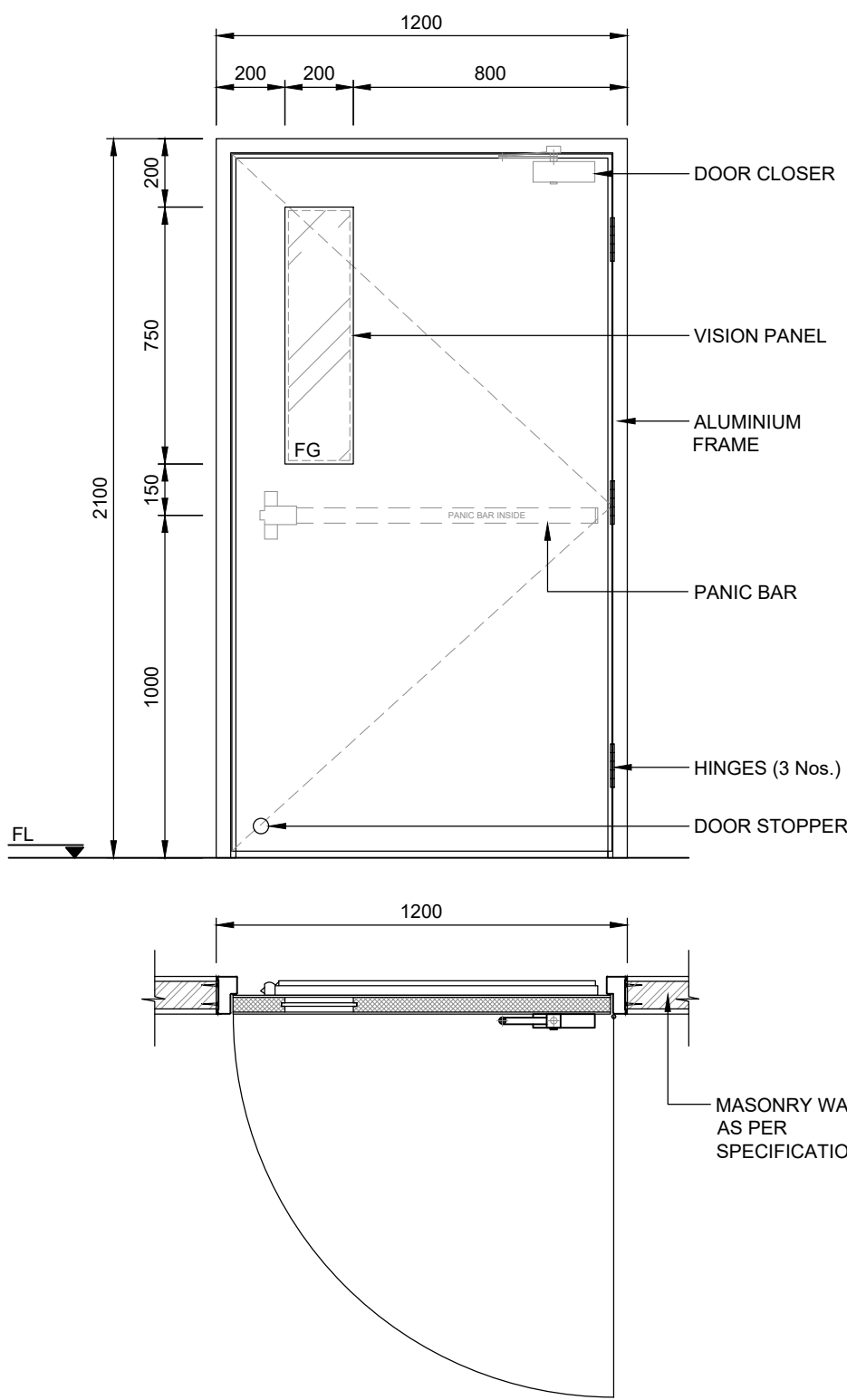
** NOTE : FG = FIXED GLASS

DOOR NAME	D10 / D11
DESCRIPTION	SINGLE LEAF ALUMINIUM SHUTTER FLUSH DOOR WITH VISION PANEL
LEAF DIMENSIONS (W,H)	D10 = 1000 x 2400 / D11 = 1200 x 2400
FINISH	POWDER COATED ALUMINIUM FLUSH DOOR PANEL
FIRE RATED	---



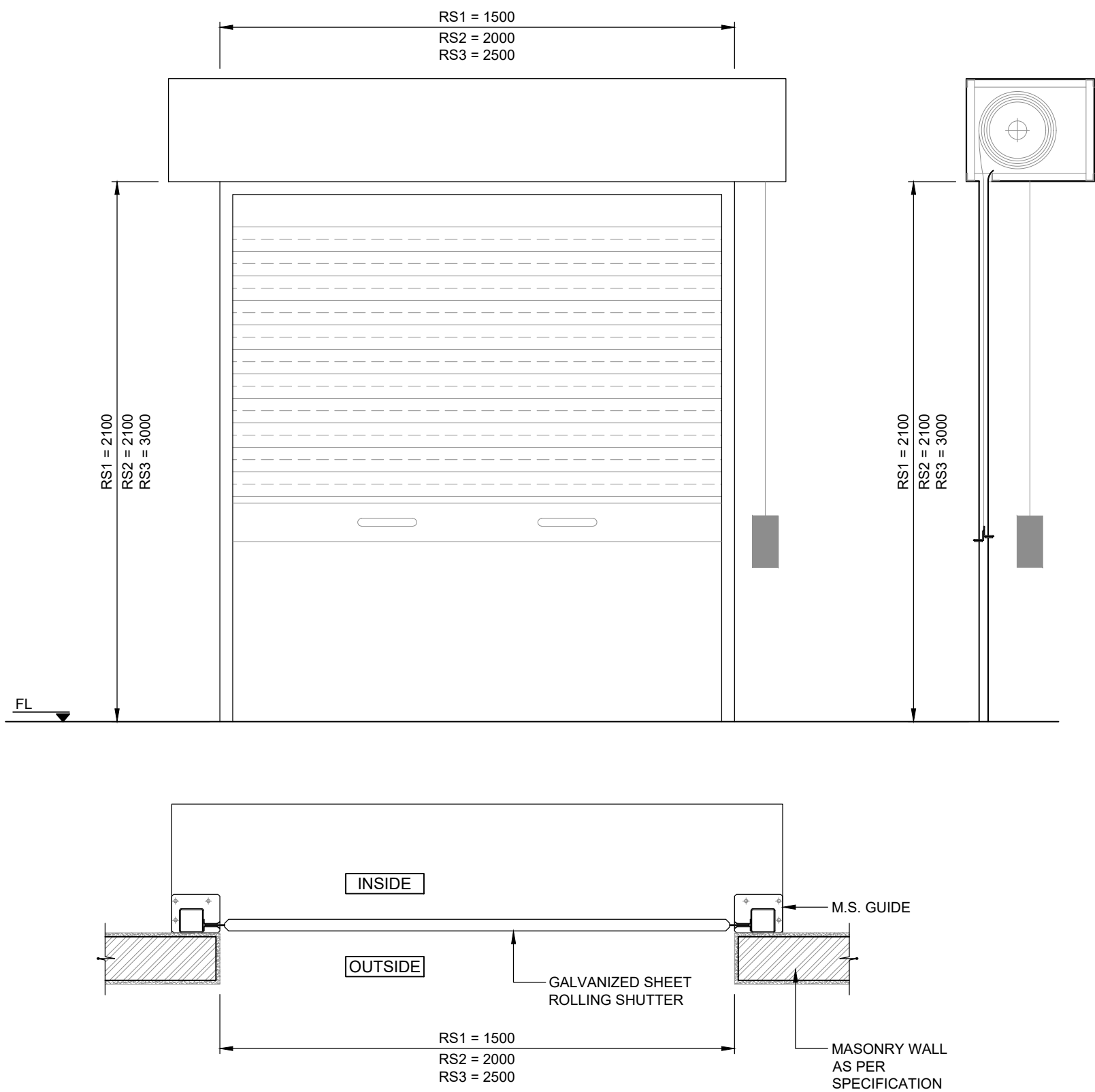
** NOTE : FG = FIXED GLASS

DOOR NAME	D12
DESCRIPTION	DOUBLE LEAF ALUMINIUM SHUTTER FLUSH DOOR WITH VISION PANEL
LEAF DIMENSIONS (W,H)	1800 x 2400
FINISH	POWDER COATED ALUMINIUM FLUSH DOOR PANEL
FIRE RATED	---



** NOTE : FG = FIXED GLASS

DOOR NAME	ED1
DESCRIPTION	SINGLE LEAF G.I. SHUTTER FLUSH DOOR WITH VISION PANEL
LEAF DIMENSIONS (W,H)	1200 x 2100
FINISH	G.I. PAINTED FIRE RATED DOOR
FIRE RATED	02 HOURS

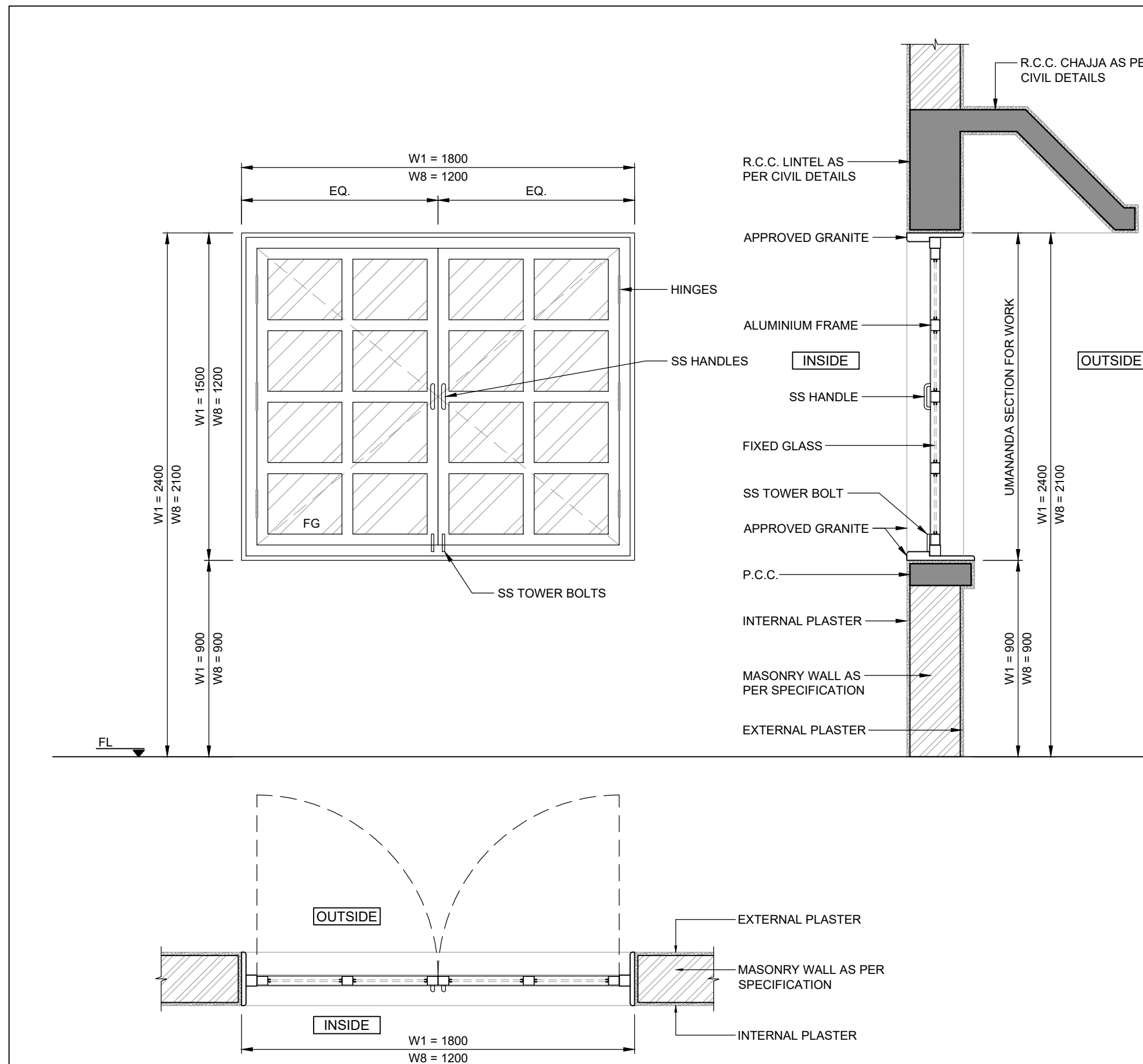


** NOTE : FG = FIXED GLASS

DOOR NAME	RS1 / RS2 / RS3
DESCRIPTION	GALVANIZED ROLLING SHUTTER
LEAF DIMENSIONS (W,H)	RS1 = 1500 x 2100 / RS2 = 2000 x 2100 / RS3 = 2500 x 3000
FINISH	18 GAUGE (1.25mm) PRE PAINTED HOT DIP GALVANIZED STEEL GEAR OPERATED ROLLING SHUTTER DOOR
FIRE RATED	---

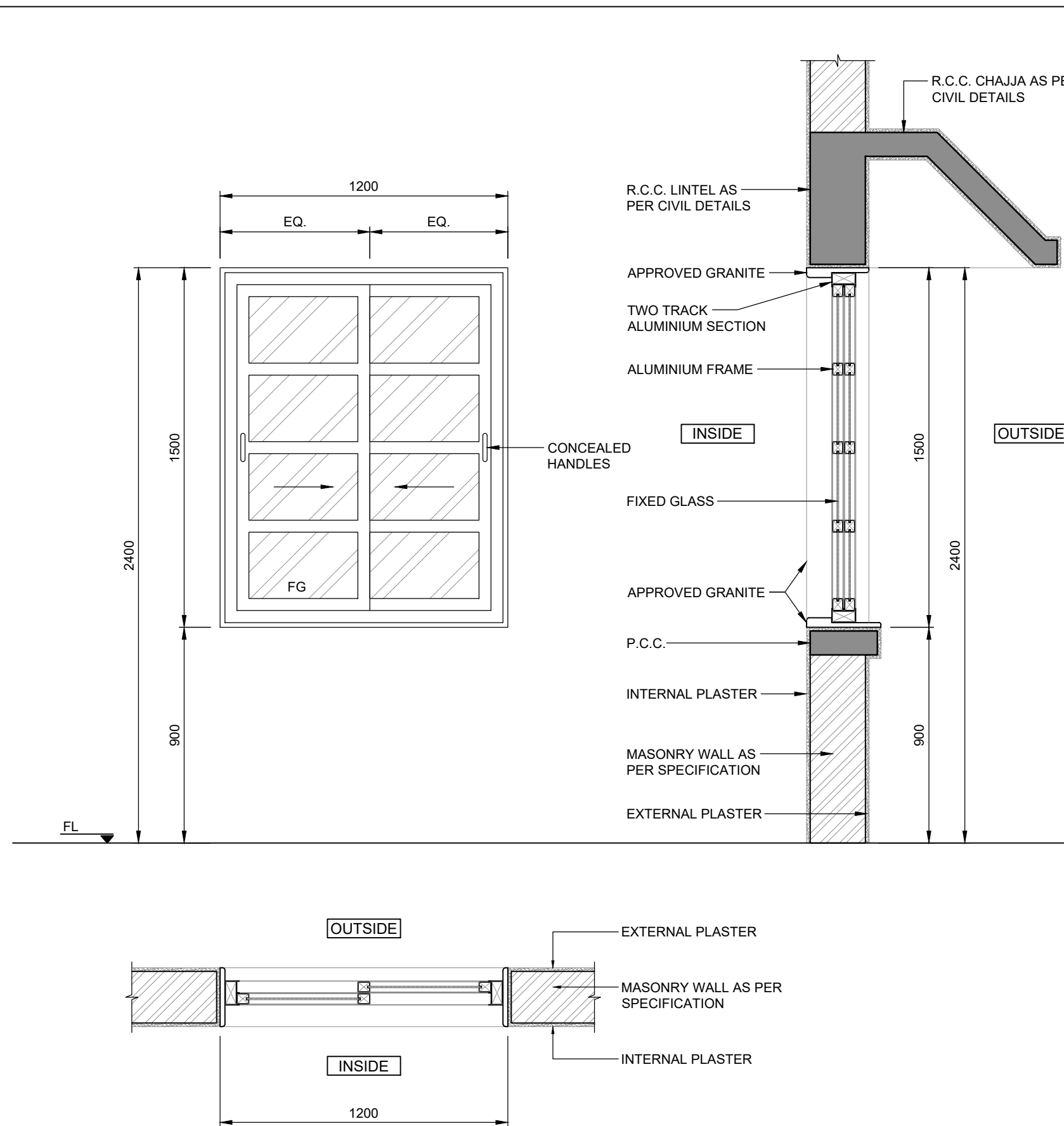
DOORS - HARDWARE SCHEDULE

HARDWARE	PRODUCT	QUANTITY					
		D7 (EACH)	D9 (EACH)	D10 (EACH)	D11 (EACH)	D12 (EACH)	ED1 (EACH)
FLUSH HINGE	FLUSH HINGE 127 x 78 x 3 MM SS 304, SATIN FINISH, MAX WT - 60 KG.	3	3	4	4	8	-
CYLINDER LOCK	EURO PROFILE CYLINDER WITH KEYS 3225, 65 MM KEY x KEY, SATIN SILVER FINISH	-	-	1	1	1	-
PULL HANDLE	PULL HANDLE 350 x 25 MM, CTC - 350 MM, D - 25 MM, BACK TO BACK FIXING WITH SUITABLE FIXING ACCESSORIES, SS 304, FINISH : SATIN	-	1	1	1	2	-
DOOR CLOSER	RACK AND PINION DOOR CLOSER TS 72 EN SIZE 2-4, WITH STD. ARM AND WITH TWO INDEPENDENT CLOSING VALVES AND LATCHING SPEED ADJUSTABLE BY ARM. ALL ADJUSTMENT SCREWS FACE FIXED. SILVER FINISH, AS PER EN 1154.	-	1	1	1	2	1
FLOOR DOOR STOP	FLOOR DOOR STOP HALF DOME WITH 45 MM DIA, 626 SATIN CHROME FINISH	-	1	1	1	2	-
FIRE RATED GLASS	CLEAR FIRE RATED GLASS, 6 MM, 120 MIN, OF SIZE 200 x 300 MM	-	-	1	1	2	1
BUTT HINGE	BALL BEARING BUTT HINGE, BB3090F, SS304, OF SIZE 100 x 75 x 3 MM WITH SCREW IN SSS	-	-	-	-	-	3
SURFACE PANIC LATCH	SURFACE PANIC LATCH PHA 2000, SILVER FINISH	-	-	-	-	-	1
PANIC STRIKE PLATE	PANIC STRIKE PLATE WITH 3 NOS SHIMS 1.5 MM - HORMANN	-	-	-	-	-	1
EXTERNAL TRIM PLATE	EXTERNAL TRIM FOR PANIC DEVICE PHT 3905, WITHOUT HALF CYLINDER, SILVER FINISH	-	-	-	-	-	1
GASKET	GASKET, FIRE RATED 4 MM THICK x 13 MM, BLACK	-	-	-	-	-	4
FIRE AND SMOKE SEAL	FIRE AND SMOKE SEAL C421 (ART. NO. 315092), BLACK	-	-	-	-	-	7
INSTALLATION KIT	INSTALLATION KIT : NYLON ANCHOR & OTHER MISC ITEMS	-	-	-	-	-	1
PUSH/PULL HANDLE	PUSH/PULL HANDLE BACK TO BACK WITH ADJUSTABLE FIXING FOR HPL PANEL, SSS	1	-	-	-	-	-
LOCK	AOGAO 30-2 STAINLESS STEEL 304 TOILET DOOR LOCK	1	-	-	-	-	-
NARROW STILE DEAD LOCK	NARROW STILE DEAD LOCK PACKAGE CONSISTING OF NARROW STILE DEAD LOCK 25 MM BACKSET WITH STRIKE PLATE, EPC 70 MM AND ESCUTCHEONS, FINISH = SSS	-	1	-	-	-	-



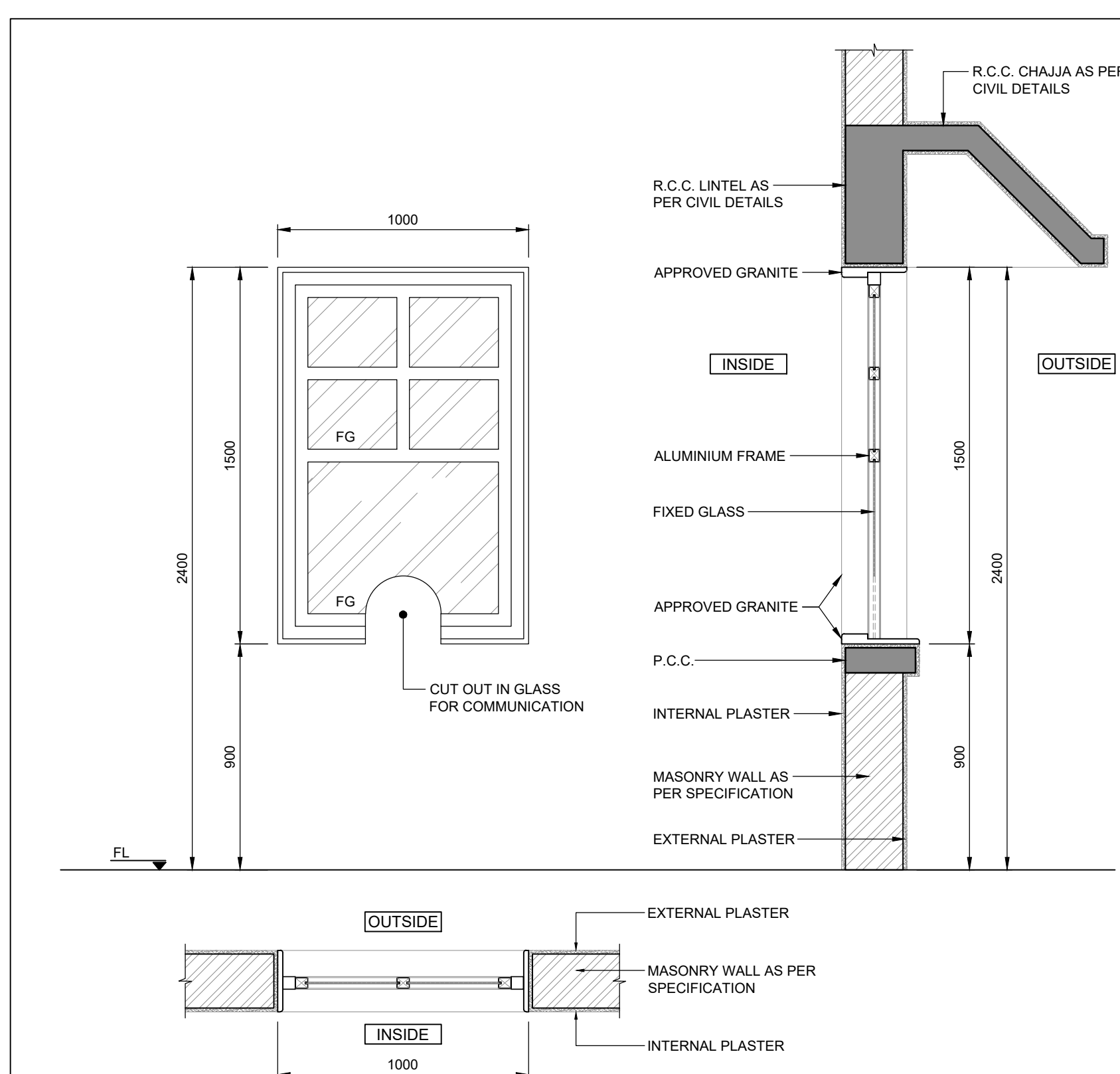
** NOTE : FG = FIXED GLASS

WINDOW NAME	W1 / W8
DESCRIPTION	CLEAR GLASS + ALUMINIUM OPENABLE SHUTTER WINDOW
LEAF DIMENSIONS (W,H)	W1 = 1800 x 1500 / W8 = 1200 x 1200
FINISH	SINGLE GLAZED WINDOW WITH ALUMINIUM (16 GAUGE) EXTRUDED POWDER COATED SECTION
QUANTITY	-
FIRE RATED	---



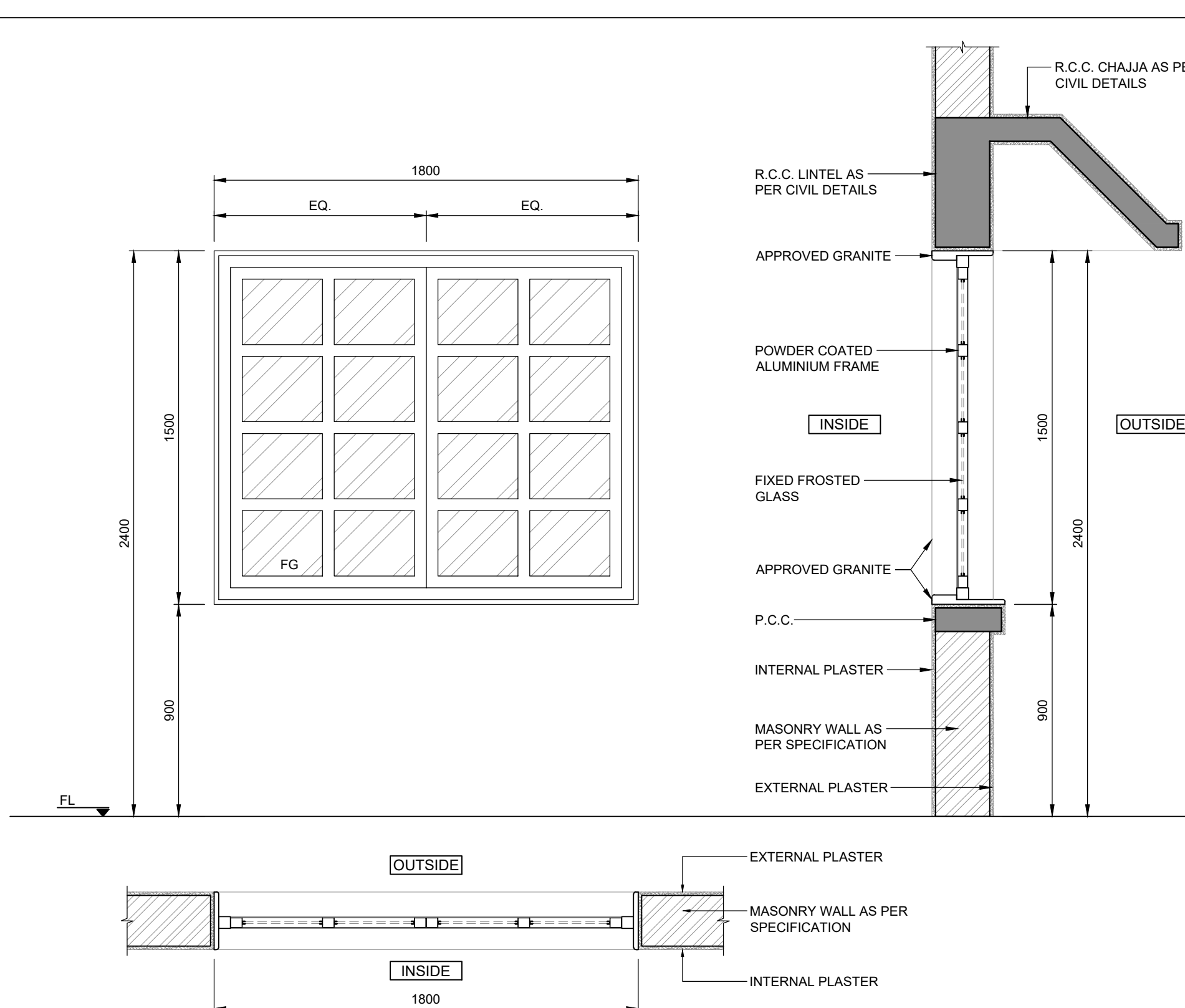
** NOTE : FG = FIXED GLASS

WINDOW NAME	W2
DESCRIPTION	TWO TRACK ALUMINIUM SLIDING WINDOW WITH 5MM. THICK FLOAT GLASS
LEAF DIMENSIONS (W,H)	1200 x 1500
FINISH	CLEAR GLASS WINDOW WITH ALUMINIUM (16 GAUGE) EXTRUDED POWDER COATED SECTION
QUANTITY	-
FIRE RATED	---



** NOTE : FG = FIXED GLASS

WINDOW NAME	W3
DESCRIPTION	FIXED CLEAR GLASS COMMUNICATION WINDOW
LEAF DIMENSIONS (W,H)	1000 x 1500
FINISH	CLEAR GLASS WINDOW WITH ALUMINIUM (16 GAUGE) EXTRUDED POWDER COATED SECTION
QUANTITY	-
FIRE RATED	---



** NOTE : FG = FIXED GLASS

WINDOW NAME	W4
DESCRIPTION	FIXED FROSTED GLASS WINDOW
LEAF DIMENSIONS (W,H)	1800 x 1500
FINISH	ALUMINIUM (16 GAUGE) EXTRUDED POWDER COATED SECTION, FROSTED GLASS
QUANTITY	-
FIRE RATED	---

NOTES

1. ALL DIMENSIONS ARE IN METERS.
2. ALL LEVELS ARE IN METERS RELATIVE TO MEAN SEA LEVEL (MSL), UNLESS NOTED OTHERWISE.
3. DRAWINGS ARE NOT TO BE SCALED. WRITTEN DIMENSIONS SHOULD BE FOLLOWED AND VERIFIED WITH THE DETAILS.
4. ANY DISCREPANCIES FOUND IN DRAWINGS ARE TO BE REPORTED TO THE ENGINEER.

LEGEND

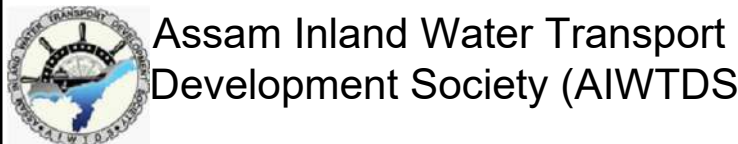
- 230 MM THICK BRICK MASONRY WALL
- 115 MM THICK BRICK MASONRY WALL
- 100 MM THICK DEAD PARTITION
- R.C.C.

FOR TENDER
NOT FOR
CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	ZR	GPS	BVD
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



CONSULTANT
HaskoningDHV Consulting Private Limited
502/505, 5th Floor, Platinum Techno Park
Plot 17 & 18, Sector 30 A, Vashi
Navi Mumbai - 400 705, INDIA
Tel +91 (0) 22 61385000
Email info.india@dhv.com
www.royalhaskoningdhv.com

Royal HaskoningDHV
Enhancing Society Together

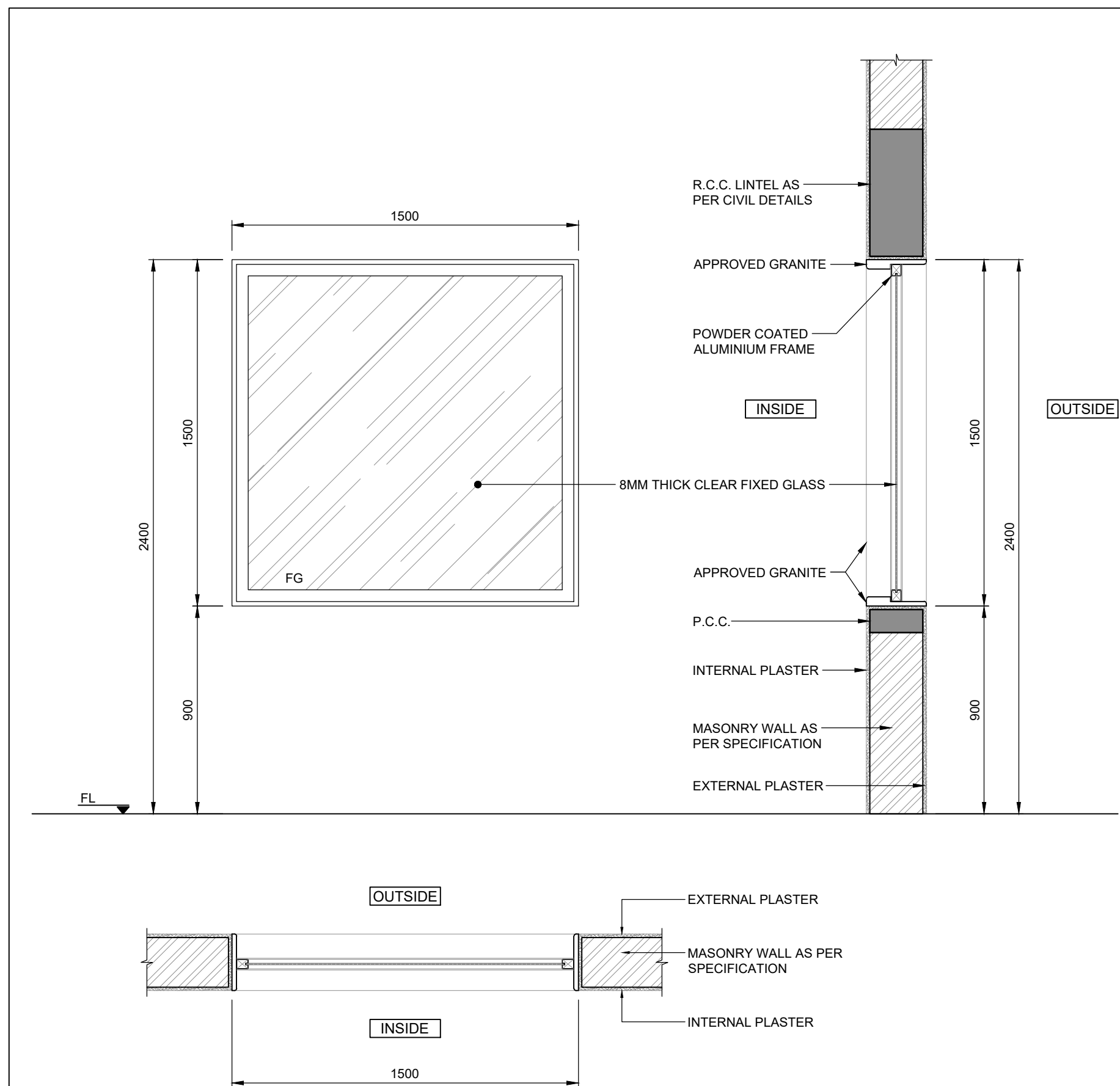
PROJECT
Assam Inland Water Transport Project (AIWTP)

ASSIGNMENT
Preparation of DPR along with Engineering Design,
Drawings, Tender Documents for Construction of Modular
Terminal at Ferry Services of NW-2 and NW-16 in Assam

TITLE

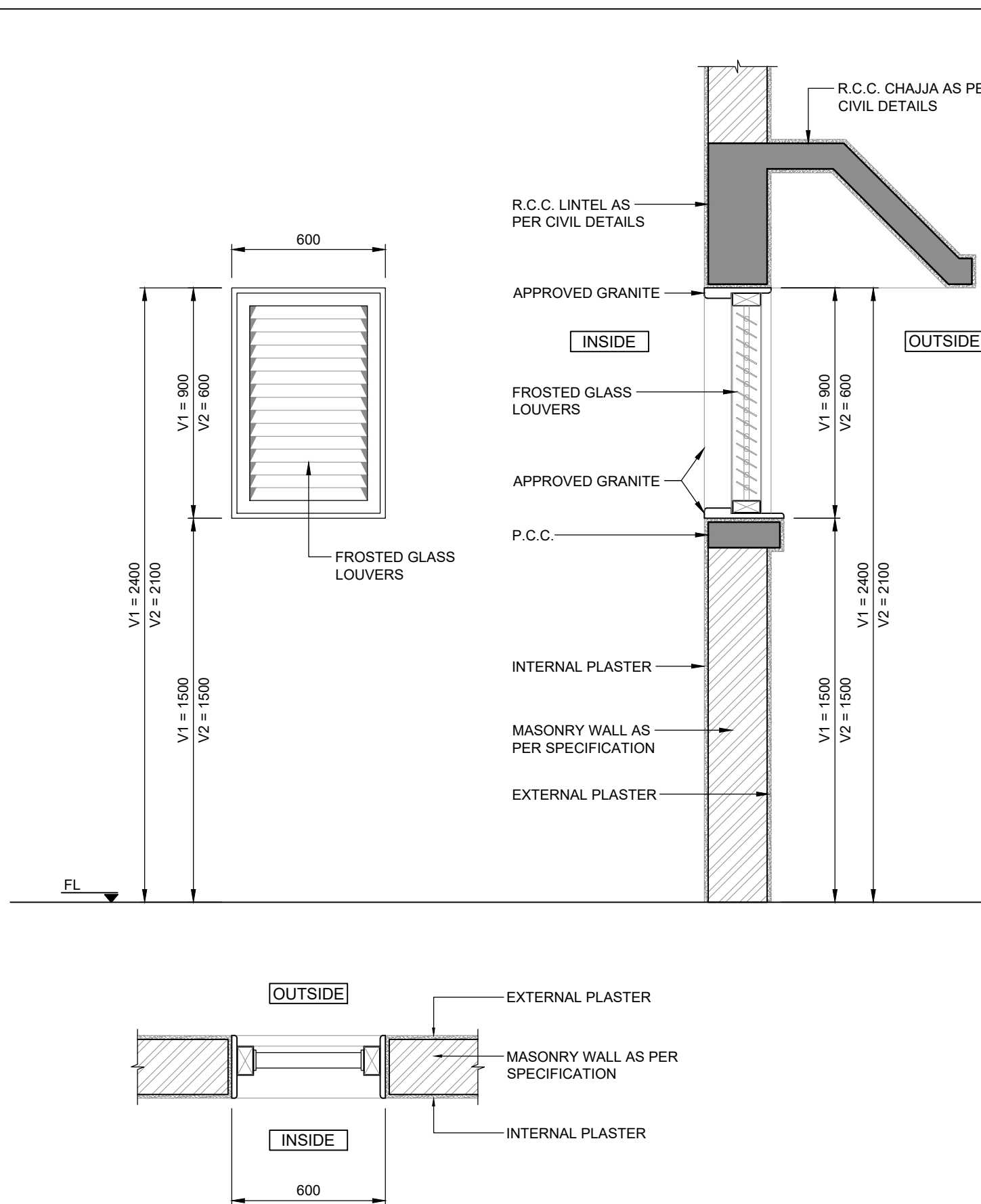
WINDOW DETAILS & SCHEDULE
SHEET-1

DRAWN	ZR	CHECKED	GPS	APPROVED	BVD
DATE	FEB 2023	SCALE	N.T.S.	REF.	
DRAWING No.	DI1530-RHD-ZZ-ZZ-DR-A-1004	SUITABILITY	REVISION		
		A3	P01		



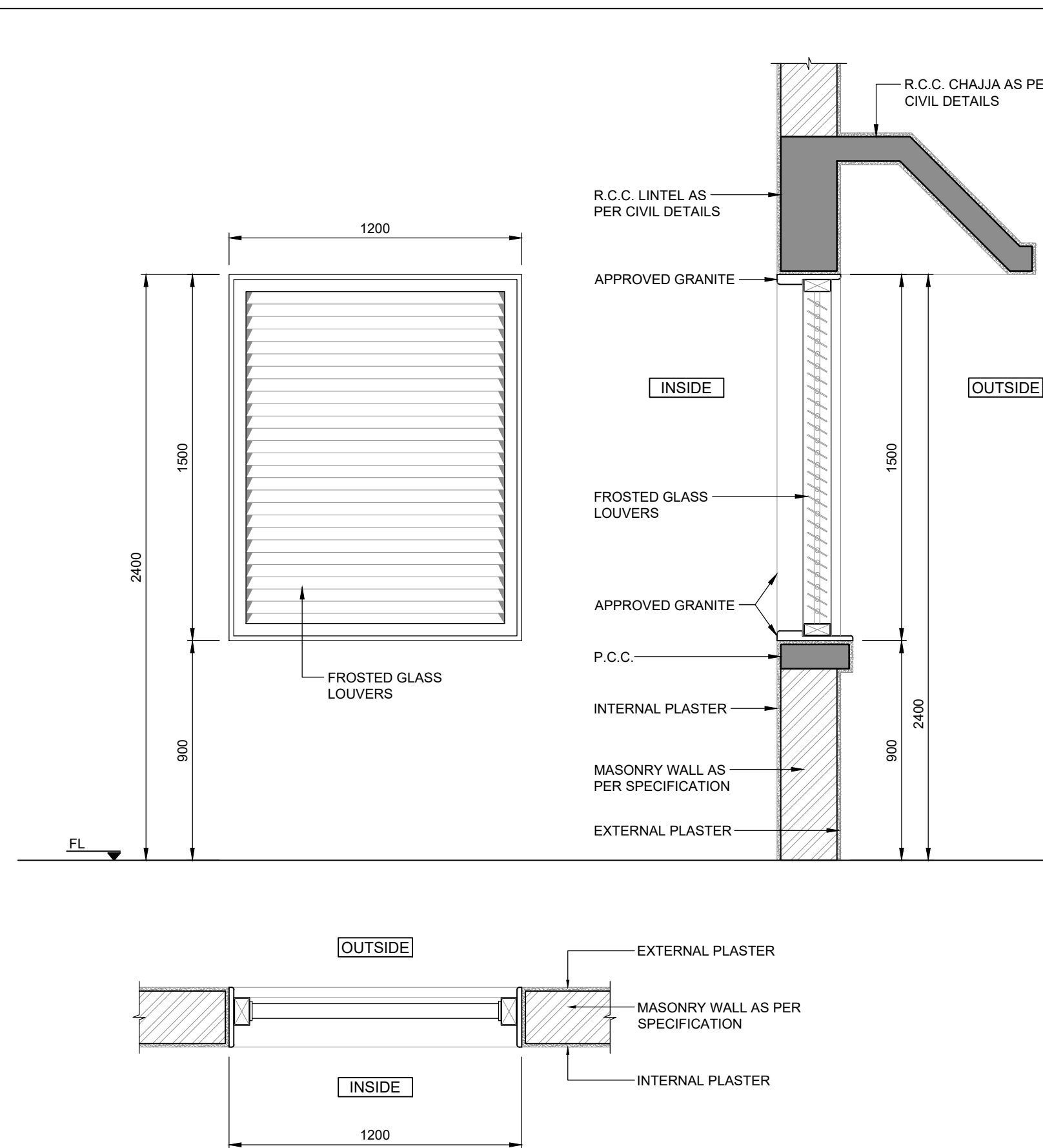
** NOTE : FG = FIXED GLASS

WINDOW NAME	W5
DESCRIPTION	FIXED CLEAR GLASS WINDOW
LEAF DIMENSIONS (W.H)	1500 x 1500
FINISH	ALUMINIUM (16 GAUGE) EXTRUDED POWDER COATED SECTION, 8MM THICK CLEAR GLASS
QUANTITY	-
FIRE RATED	---



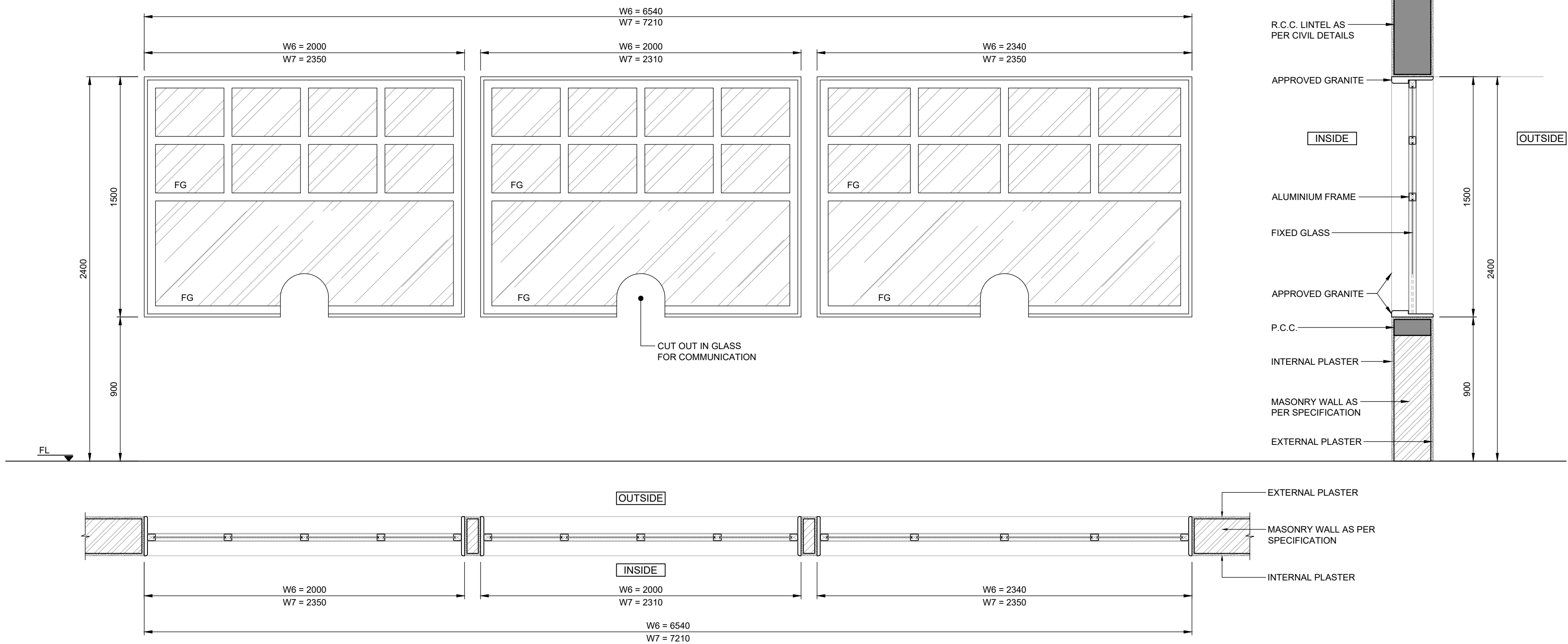
** NOTE : FG = FIXED GLASS

WINDOW NAME	V1 / V4
DESCRIPTION	ALUMINIUM LOUVERS WINDOW WITH 5MM. THICK FROSTED GLASS LOUVERS
LEAF DIMENSIONS (W.H)	V1 = 600 x 900 / V4 = 600 x 600
FINISH	POWDER COATED ALUMINIUM FRAME WITH FROSTED GLASS LOUVERS WINDOW
QUANTITY	-
FIRE RATED	---



** NOTE : FG = FIXED GLASS

WINDOW NAME	V2
DESCRIPTION	ALUMINIUM LOUVERS WINDOW WITH 5MM. THICK FROSTED GLASS LOUVERS
LEAF DIMENSIONS (W.H)	1200 x 1500
FINISH	POWDER COATED ALUMINIUM FRAME WITH FROSTED GLASS LOUVERS WINDOW
QUANTITY	-
FIRE RATED	---



** NOTE : FG = FIXED GLASS

WINDOW NAME	W6	W7
DESCRIPTION	FIXED CLEAR GLASS COMMUNICATION WINDOW	FIXED CLEAR GLASS COMMUNICATION WINDOW
LEAF DIMENSIONS (W.H)	6540 x 1500	7210 x 1500
FINISH	CLEAR GLASS WINDOW WITH ALUMINIUM (16 GAUGE) EXTRUDED POWDER COATED SECTION	CLEAR GLASS WINDOW WITH ALUMINIUM (16 GAUGE) EXTRUDED POWDER COATED SECTION
QUANTITY	-	-
FIRE RATED	---	---

NOTES

1. ALL DIMENSIONS ARE IN METERS.
2. ALL LEVELS ARE IN METERS RELATIVE TO MEAN SEA LEVEL (MSL), UNLESS NOTED OTHERWISE.
3. DRAWINGS ARE NOT TO BE SCALED. WRITTEN DIMENSIONS SHOULD BE FOLLOWED AND VERIFIED WITH THE DETAILS.
4. ANY DISCREPANCIES FOUND IN DRAWINGS ARE TO BE REPORTED TO THE ENGINEER.

LEGEND

- 230 MM THICK BRICK MASONRY WALL
- 115 MM THICK BRICK MASONRY WALL
- 100 MM THICK DEAD PARTITION
- R.C.C.

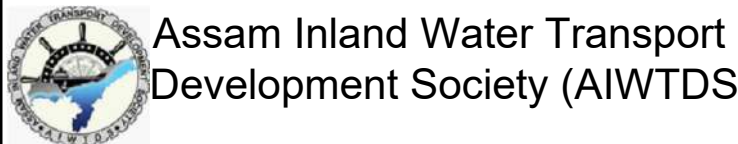
FOR TENDER

**NOT FOR
CONSTRUCTION**

P01	15/02/2023	ISSUED FOR TENDER	ZR	GPS	BVD
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



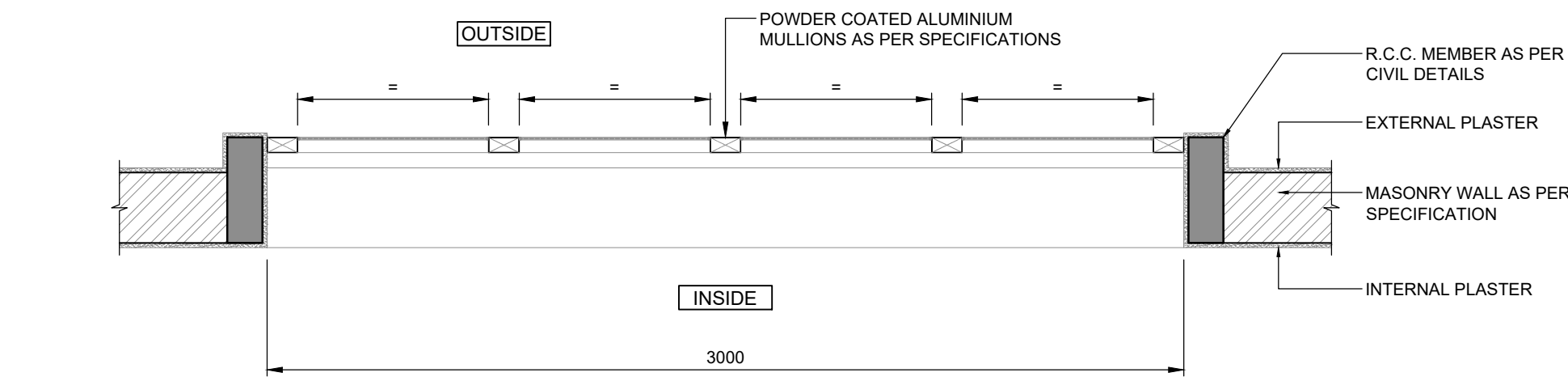
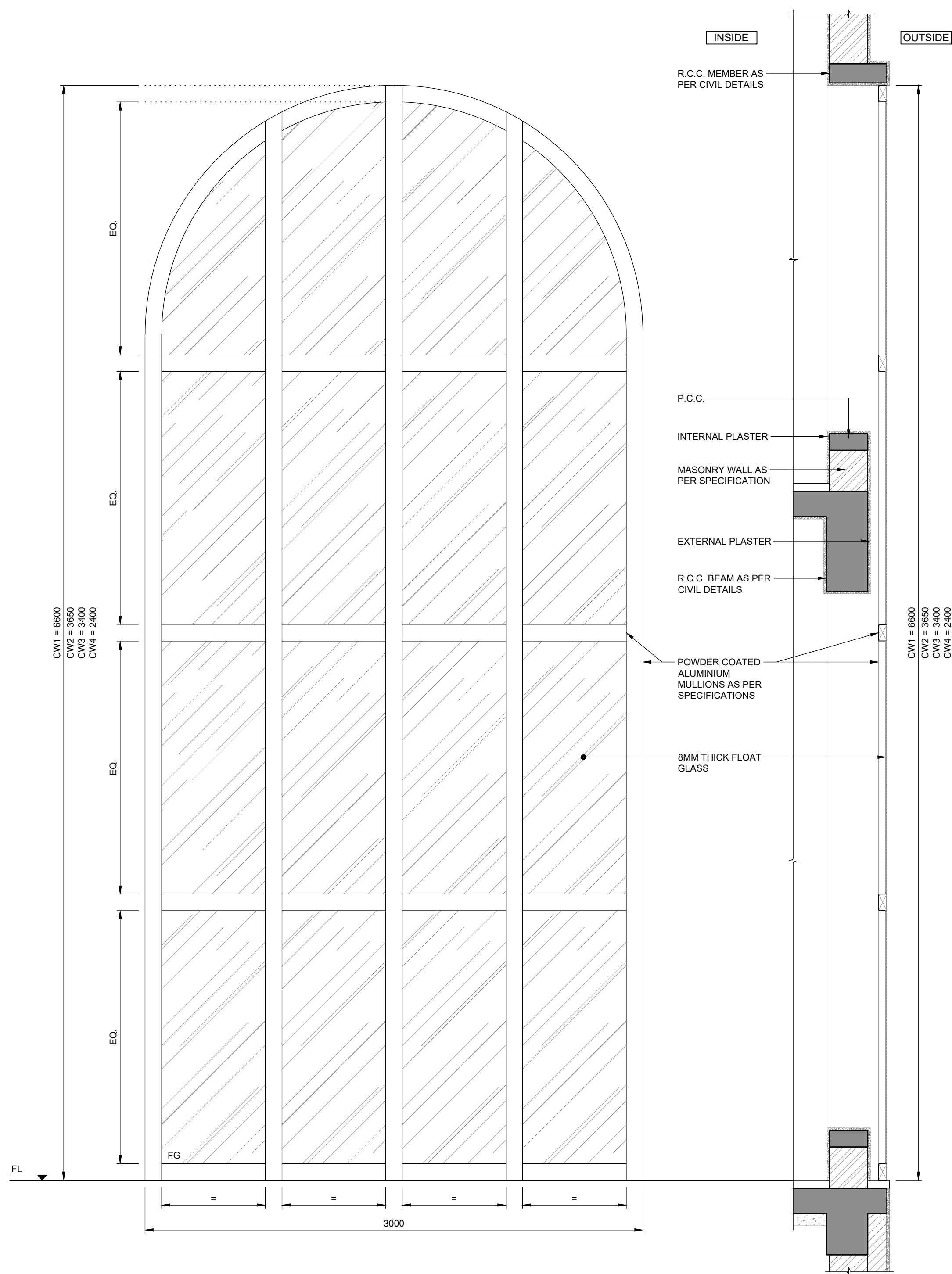
CONSULTANT
HaskoningDHV Consulting Private Limited
502,505, 5th Floor, Platinum Techno Park
Plot 17 & 18, Sector 30 A, Vashi
Navi Mumbai - 400 703, INDIA
Tel +91 (0) 22 61385000
Email info.india@dhv.com
www.royalhaskoningdhv.com

PROJECT
Assam Inland Water Transport Project (AIWTP)

ASSIGNMENT
Preparation of DPR along with Engineering Design,
Drawings, Tender Documents for Construction of Modular
Terminal at Ferry Services of NW-2 and NW-16 in Assam

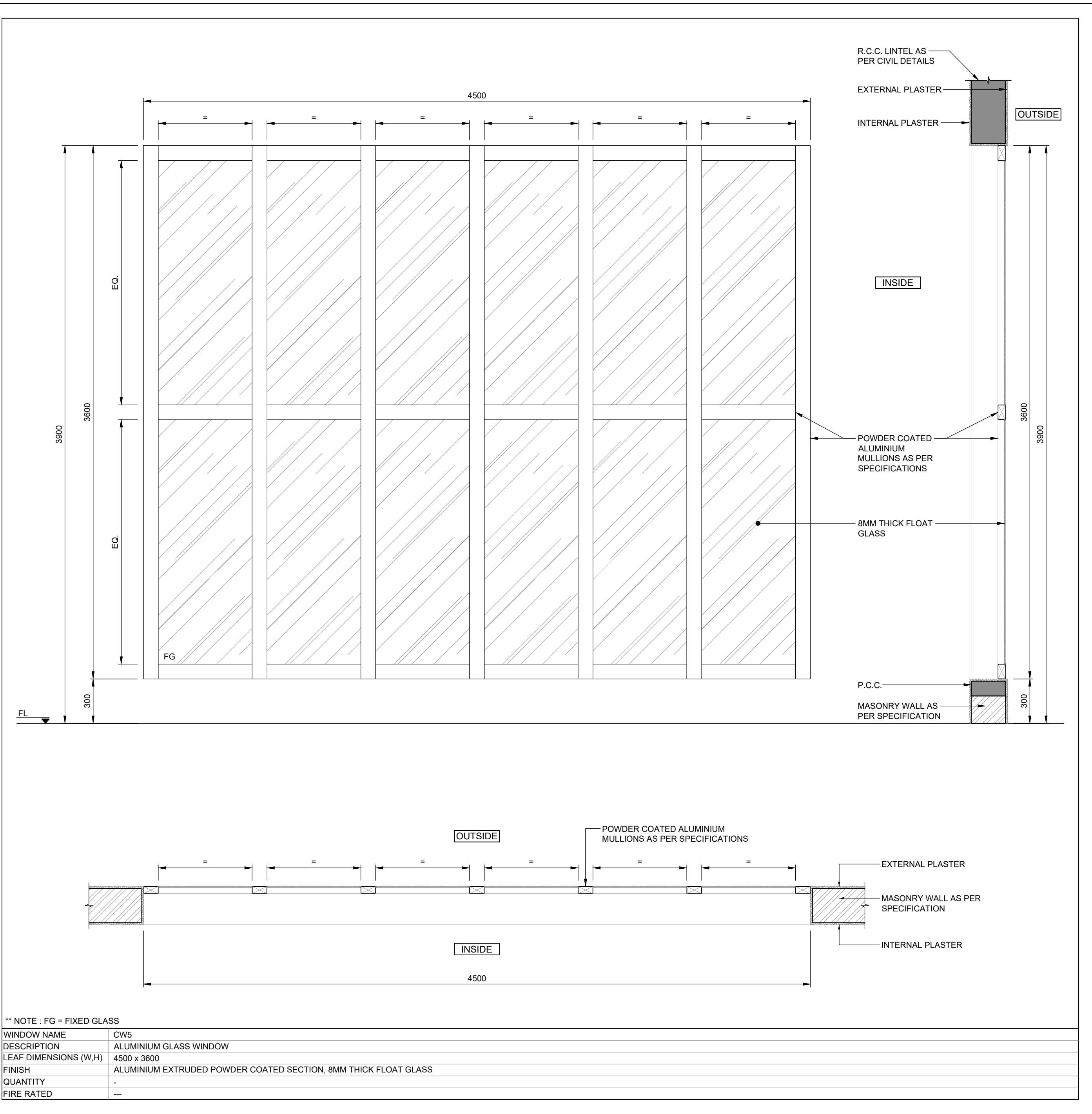
TITLE
WINDOW DETAILS & SCHEDULE
SHEET-2

DRAWN	ZR	CHECKED	GPS	APPROVED	BVD
DATE	FEB 2023	SCALE	@A1	N.T.S.	REF.
DRAWING No.	DI1530-RHD-ZZ-ZZ-DR-A-1005	SUITABILITY	A3	REVISION	P01



** NOTE : FG = FIXED GLASS

WINDOW NAME	CW1 / CW2 / CW3 / CW4
DESCRIPTION	ALUMINIUM GLASS WINDOW
LEAF DIMENSIONS (W,H)	CW1 = 3000 x 6600 / CW2 = 3000 x 3650 / CW3 = 3000 x 3400 / CW4 = 3000 x 2400
FINISH	ALUMINIUM EXTRUDED POWDER COATED SECTION, 8MM THICK FLOAT GLASS
QUANTITY	-
FIRE RATED	---



** NOTE : FG = FIXED GLASS

WINDOW NAME	CW5
DESCRIPTION	ALUMINIUM GLASS WINDOW
LEAF DIMENSIONS (W,H)	4500 x 3600
FINISH	ALUMINIUM EXTRUDED POWDER COATED SECTION, 8MM THICK FLOAT GLASS
QUANTITY	-
FIRE RATED	---

NOTES

1. ALL DIMENSIONS ARE IN METERS.
2. ALL LEVELS ARE IN METERS RELATIVE TO MEAN SEA LEVEL (MSL), UNLESS NOTED OTHERWISE.
3. DRAWINGS ARE NOT TO BE SCALED. WRITTEN DIMENSIONS SHOULD BE FOLLOWED AND VERIFIED WITH THE DETAILS.
4. ANY DISCREPANCIES FOUND IN DRAWINGS ARE TO BE REPORTED TO THE ENGINEER.

LEGEND

- 230 MM THICK BRICK MASONRY WALL
- 115 MM THICK BRICK MASONRY WALL
- 100 MM THICK DEAD PARTITION
- R.C.C.

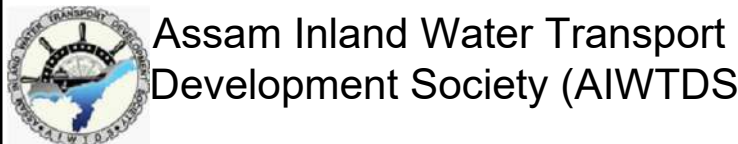
FOR TENDER

**NOT FOR
CONSTRUCTION**

P01	15/02/2023	ISSUED FOR TENDER	ZR	GPS	BVD
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



CONSULTANT

HaskoningDHV Consulting Private Limited
502,505, 5th Floor, Platinum Techno Park
Plot 17 & 18, Sector 30 A, Vashi
Navi Mumbai - 400 703, INDIA
Tel +91 (0) 22 61395000
Email info.india@dhv.com
www.royalhaskoningdhv.com



PROJECT

Assam Inland Water Transport Project (AIWTP)

ASSIGNMENT

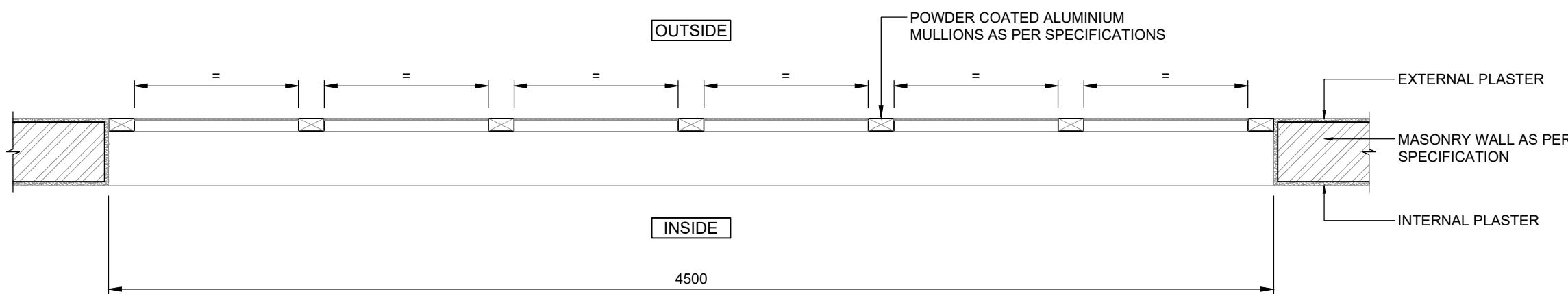
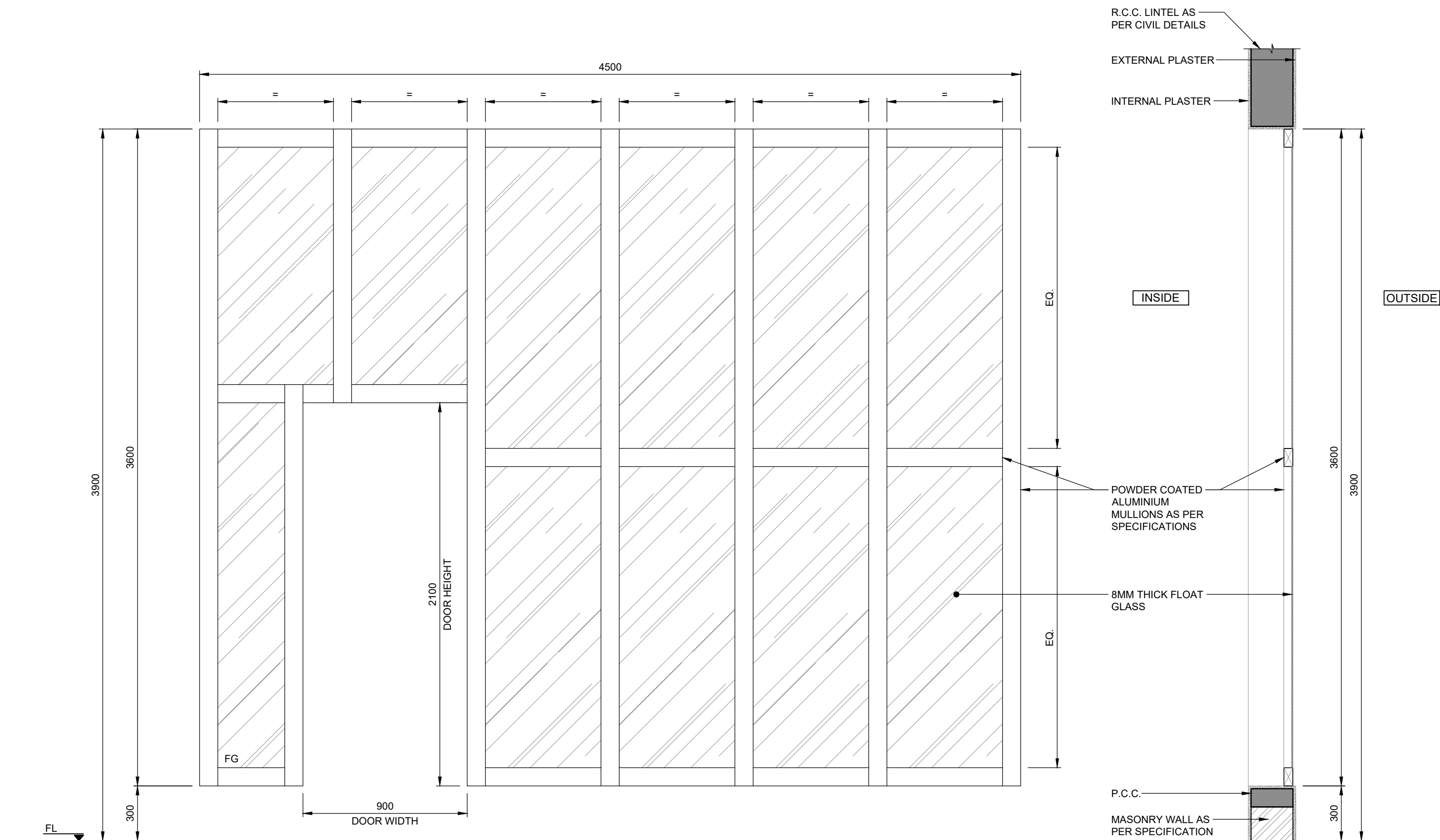
Preparation of DPR along with Engineering Design,
Drawings, Tender Documents for Construction of Modular
Terminal at Ferry Services of NW-2 and NW-16 in Assam

TITLE

**WINDOW DETAILS & SCHEDULE
SHEET-3**

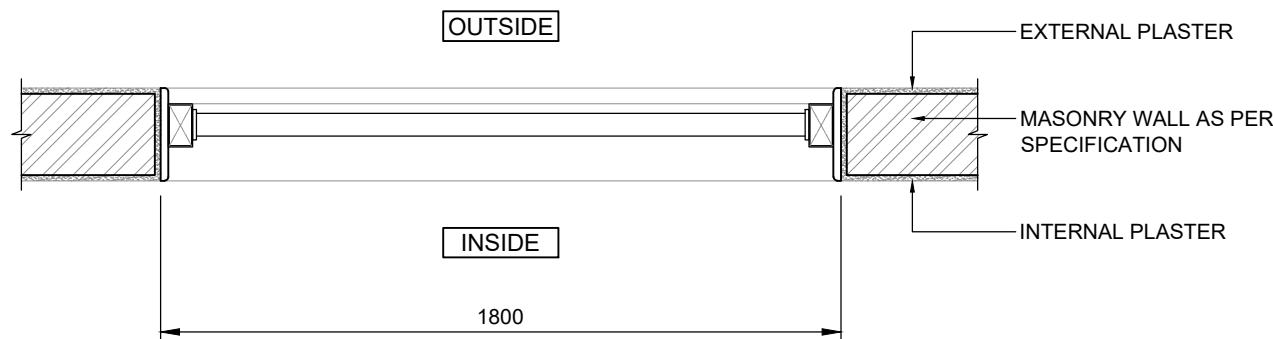
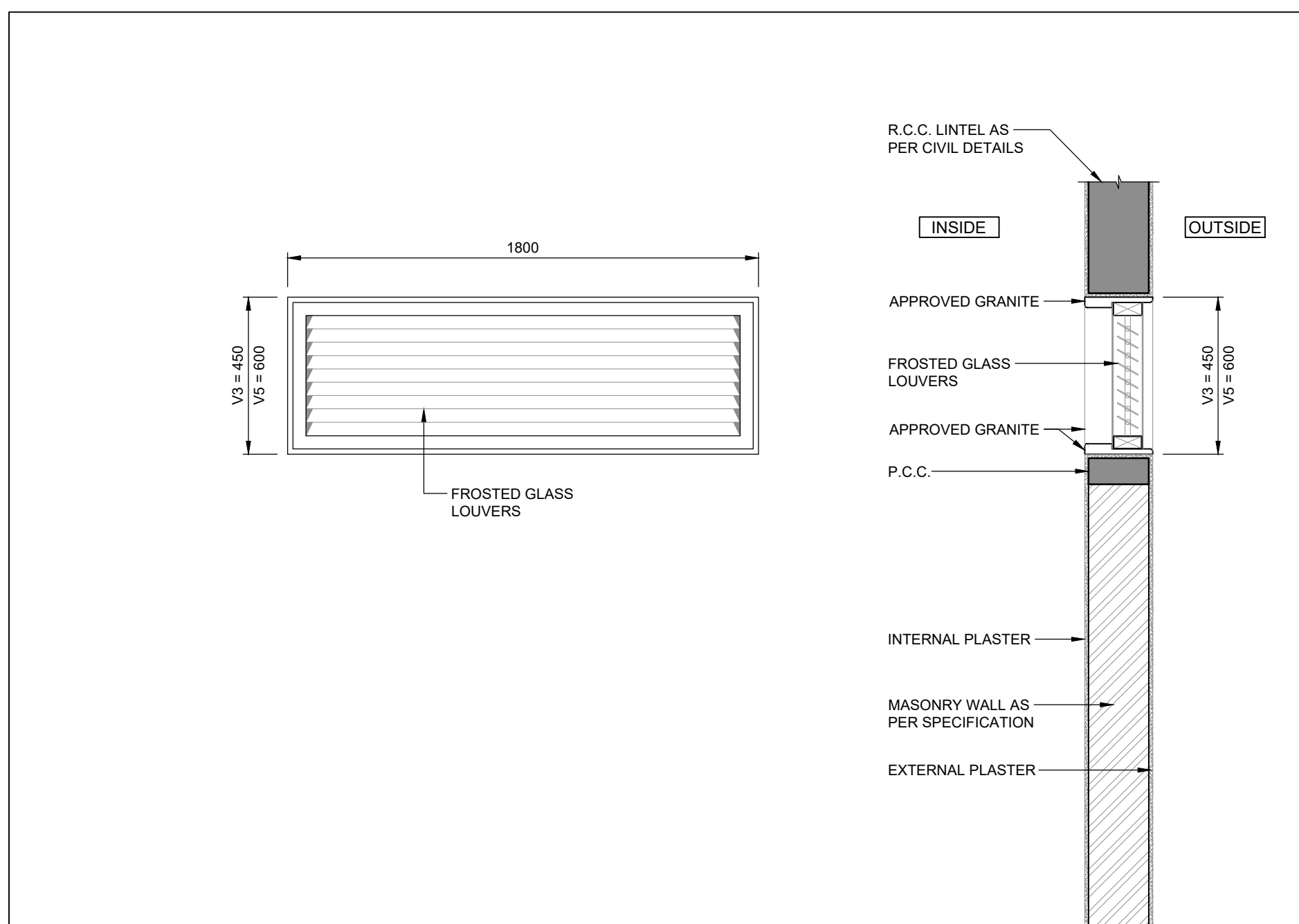
DRAWN	ZR	CHECKED	GPS	APPROVED	BVD
DATE	FEB 2023	SCALE	@A1	N.T.S.	REF.

DRAWING No.	DI1530-RHD-ZZ-ZZ-DR-A-1006	SUITABILITY	A3	REVISION	P01
-------------	----------------------------	-------------	----	----------	-----



** NOTE : FG = FIXED GLASS

WINDOW NAME	CWS
DESCRIPTION	ALUMINIUM GLASS WINDOW
LEAF DIMENSIONS (W,H)	4500 x 3600
FINISH	ALUMINIUM EXTRUDED POWDER COATED SECTION, 8MM THICK FLOAT GLASS
QUANTITY	-
FIRE RATED	---



** NOTE : FG = FIXED GLASS

WINDOW NAME	V3 / V5
DESCRIPTION	ALUMINIUM LOUVERS WINDOW WITH 5MM. THICK FROSTED GLASS LOUVERS
LEAF DIMENSIONS (W,H)	V1 = 1800 x 450 / V5 = 1800 x 600
FINISH	POWDER COATED ALUMINIUM FRAME WITH FROSTED GLASS LOUVERS WINDOW
QUANTITY	-
FIRE RATED	---

NOTES

1. ALL DIMENSIONS ARE IN METERS.
2. ALL LEVELS ARE IN METERS RELATIVE TO MEAN SEA LEVEL (MSL), UNLESS NOTED OTHERWISE.
3. DRAWINGS ARE NOT TO BE SCALED. WRITTEN DIMENSIONS SHOULD BE FOLLOWED AND VERIFIED WITH THE DETAILS.
4. ANY DISCREPANCIES FOUND IN DRAWINGS ARE TO BE REPORTED TO THE ENGINEER.

LEGEND

- 230 MM THICK BRICK MASONRY WALL
- 115 MM THICK BRICK MASONRY WALL
- 100 MM THICK DEAD PARTITION
- R.C.C.

FOR TENDER

NOT FOR
CONSTRUCTION

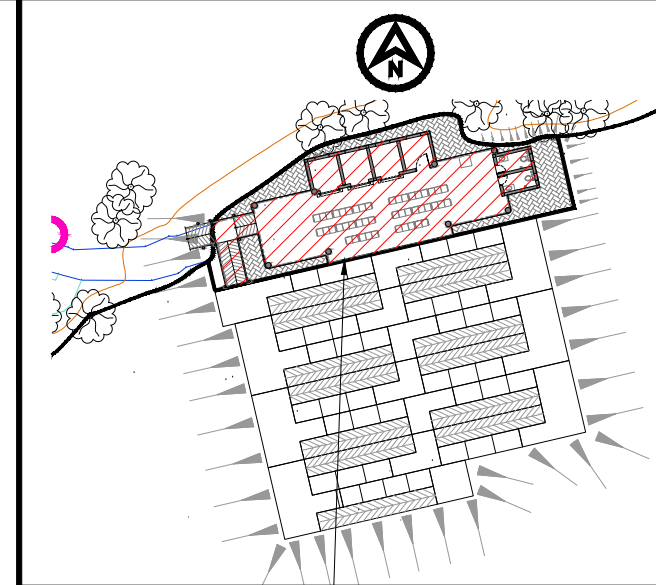
P01	15/02/2023	ISSUED FOR TENDER	ZR	GPS	BVD
REV	DATE	DESCRIPTION	BY	CHK	APP
REVISIONS					
CLIENT					
 Assam Inland Water Transport Development Society (AIWTDS)					

CONSULTANT	HaskoningDHV Consulting Private Limited 502,505, 5th Floor, Platinum Techno Park Plot 17 & 18, Sector 30 A, Vashi Navi Mumbai - 400 705, INDIA Tel +91 (0) 22 61385000 Email info.india@haskoningdhv.com www.royalhaskoningdhv.com
	

PROJECT	Assam Inland Water Transport Project (AIWTP)
ASSIGNMENT	Preparation of DPR along with Engineering Design, Drawings, Tender Documents for Construction of Modular Terminal at Ferry Services of NW-2 and NW-16 in Assam

TITLE	WINDOW DETAILS & SCHEDULE SHEET-4
-------	-----------------------------------

DRAWN	ZR	CHECKED	GPS	APPROVED	BVD
DATE	FEB 2023	SCALE	N.T.S.	REF.	
DRAWING No.	DI1530-RHD-ZZ-ZZ-DR-A-1007	SUITABILITY	A3	REVISION	P01



TERMINAL BUILDING

KEY PLAN

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS UNLESS STATED OTHERWISE.
2. REFER ARCHITECTURAL DRAWINGS FOR ALL REFERENCE LEVELS.
3. MINIMUM CONCRETE GRADE SHALL BE M40 MINIMUM GRADE OF LEAN CONCRETE BELOW FOUNDATION SHALL BE M20 ACCORDING TO IS:456 UNLESS NOTED OTHERWISE.
4. ALL STEEL REINFORCEMENT IS TO BE IN ACCORDANCE WITH IS:1786-2008. DEFINITION GRADE Fe 500D (CORROSION RESISTANT).
5. ALL STRUCTURAL STEEL IS TO BE IN ACCORDANCE WITH IS:2062-2011. DEFINITION GRADE A.

LEGEND

- C - COLUMN
F - FOOTING
PCC - PLAIN CEMENT CONCRETE
TYP - TYPICAL

FOR TENDER

NOT FOR
CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	TSM	RK	AK
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



Assam Inland Water Transport
Development Society (AIWTDS)

CONSULTANT

HaskoningDHV Consulting Private Limited
502-505, 5th Floor, Platinum Techno Park,
Plot 17 & 18, Sector 50 A, Vashi,
Navi Mumbai - 400 703, INDIA
Tel: +91 (0) 22 61385000
Email: info.india@mhv.com
www.royalhaskoningdhv.com

Royal HaskoningDHV
Enhancing Society Together

PROJECT

Assam Inland Water Transport Project (AIWTP)

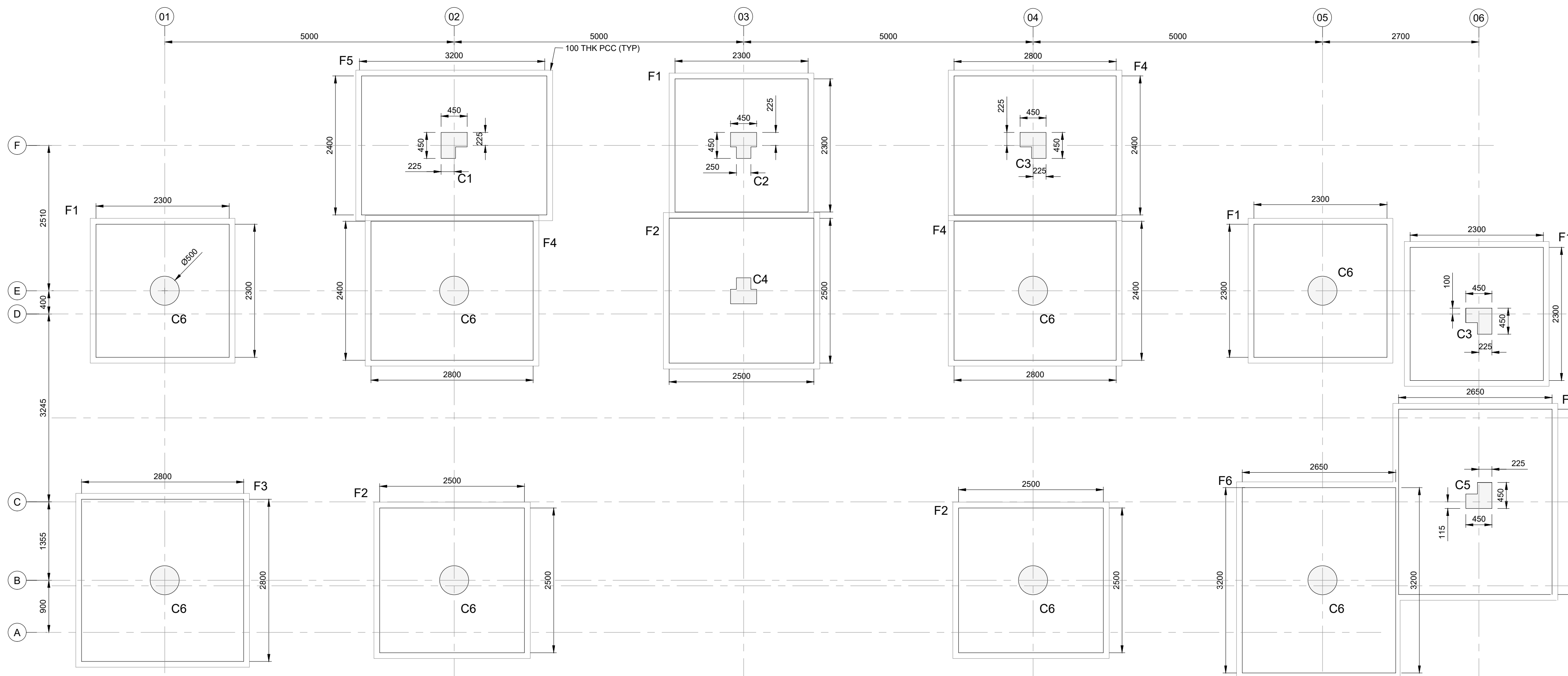
ASSIGNMENT

Preparation of DPR along with Engineering Design,
Drawings, Tender Documents for Construction of Modular
Terminal at Ferry Services of NW-2 and NW-16 in Assam

TITLE

CENTRAL CLUSTER
(UMANANDA TEMPLE GHAT)
FOOTING & COLUMN LAYOUT

DRAWN	TSM	CHECKED	RK	APPROVED	AK
DATE	FEB' 2023	SCALE	AS SHOWN	REF:	
	@A1				
DRAWING No.	DI1530-RHD-ZZ-UA-DR-S-2235	SUITABILITY	A3	REVISION	P01



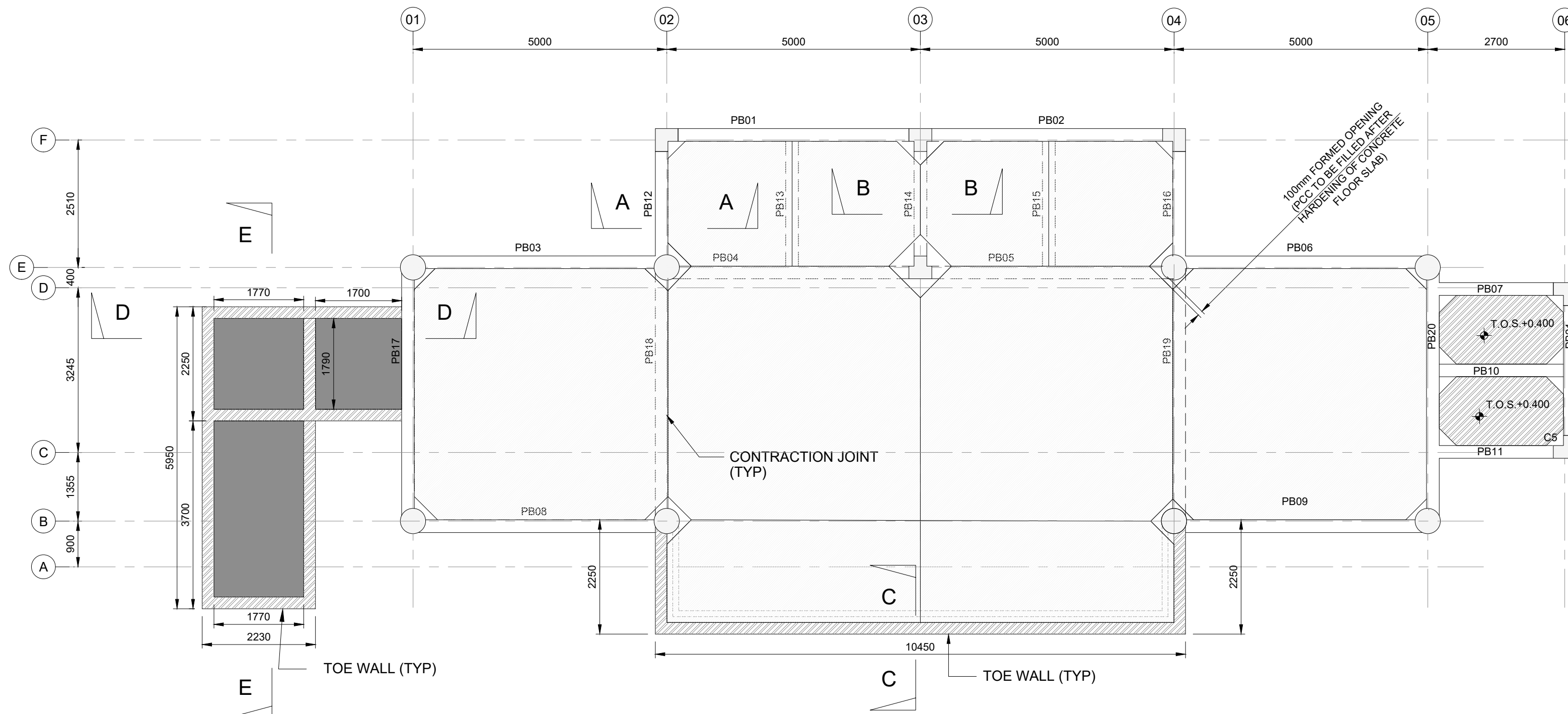
COLUMN & FOOTING LAYOUT

SCALE 1:100

SUMMARY TABLE OF COLUMN & FOOTING

MEMBERS	SECTION (mm)	DESCRIPTION
C1,C2,C3,C4 & C5	AS PER PLAN	COLUMN
C6	Ø900	COLUMN
F1	2300x2300x375 DEEP	FOOTING
F2	2500 x 2500 x 400 DEEP	FOOTING
F3	2800x2800x475 DEEP	FOOTING
F4	2800x2400x475 DEEP	FOOTING
F5	3200x2400x525 DEEP	FOOTING
F6	3200x2650x525 DEEP	FOOTING

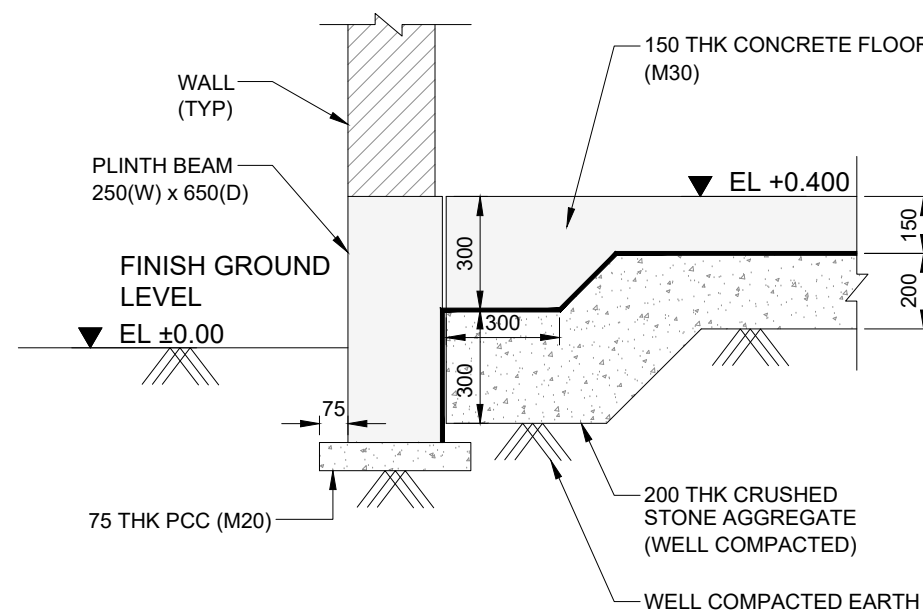
DO NOT SCALE



PLAN AT TOC +0.450m LEVEL

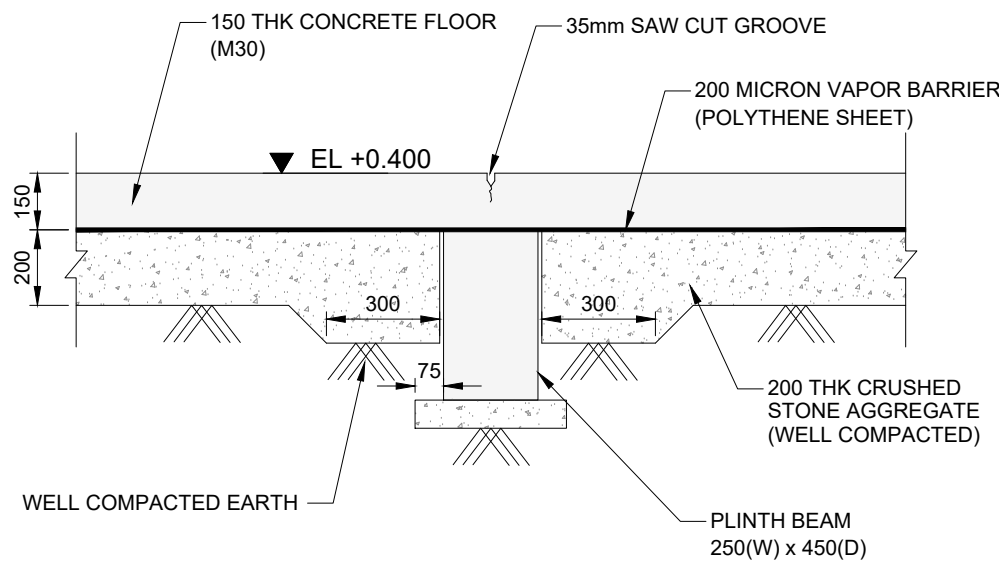
(PLINTH BEAM LAYOUT)

SCALE 1:75



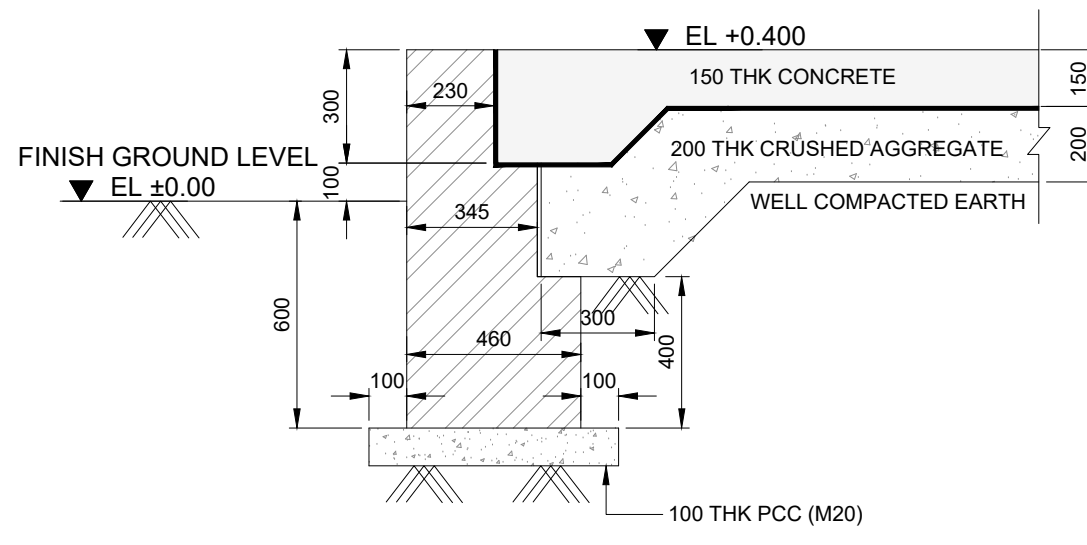
SECTION A-A

SCALE 1:20



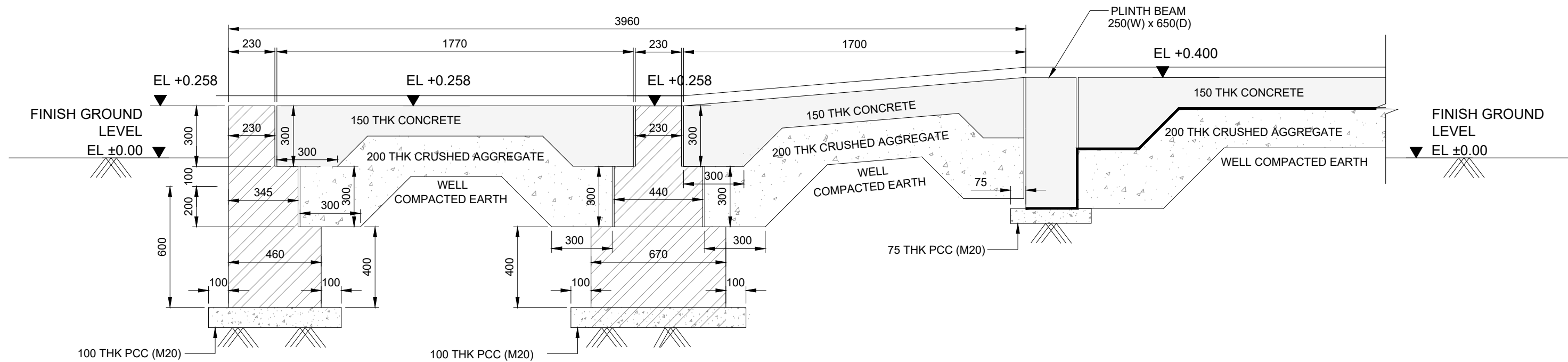
SECTION B-B

SCALE 1:20



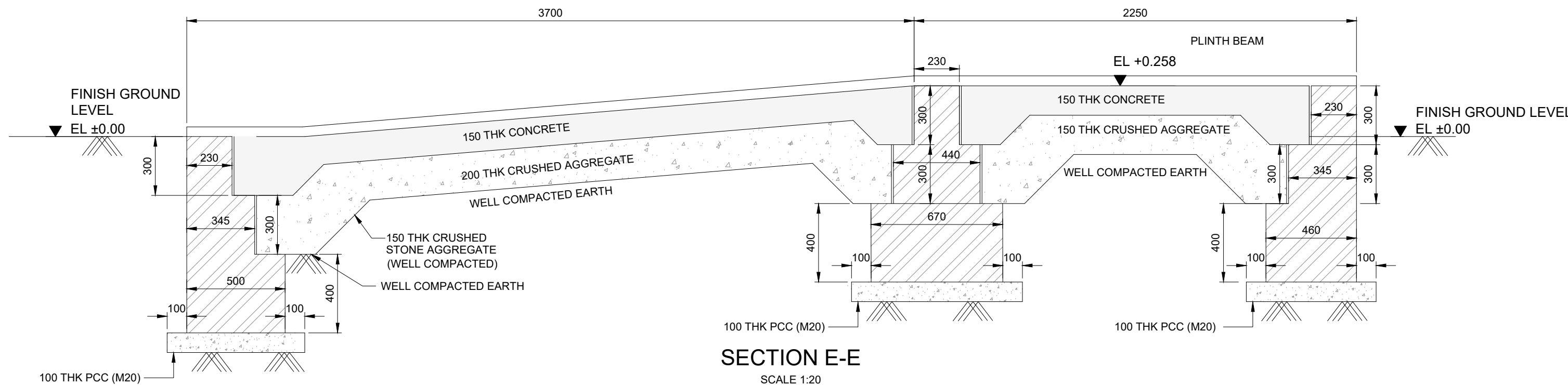
SECTION C-C

SCALE 1:20



SECTION D-D

SCALE 1:20



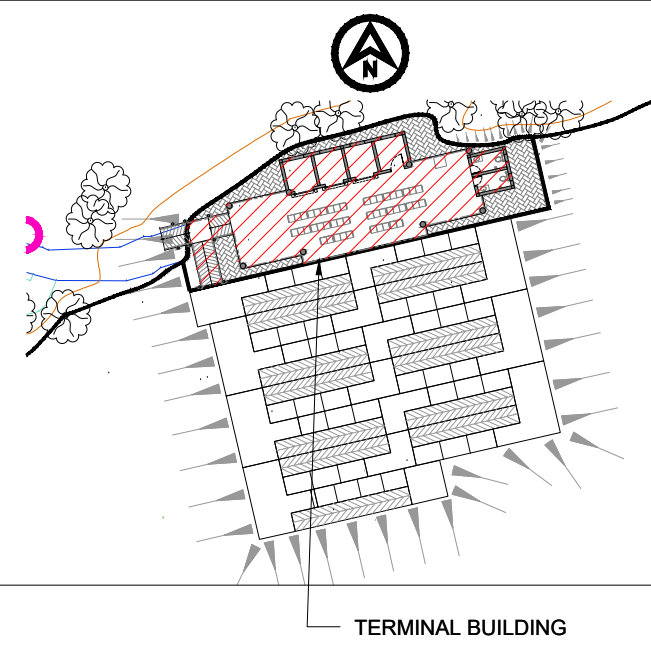
SECTION E-E

SCALE 1:20



SUMMARY TABLE OF RC MEMBERS
(PLINTH BEAMS)

MEMBERS	SECTION B x D (mm)	T.O.B	DESCRIPTION
PB01	250 x 650	+0.400	PLINTH BEAM
PB02	250 x 650	+0.400	
PB03	250 x 650	+0.400	
PB04	250 x 450	+0.250	
PB05	250 x 450	+0.250	
PB06	250 x 650	+0.400	
PB07	250 x 650	+0.400	
PB08	250 x 650	+0.400	
PB09	250 x 650	+0.400	
PB10	250 x 450	+0.200	
PB11	250 x 650	+0.400	
PB12	250 x 650	+0.400	
PB13	250 x 450	+0.250	
PB14	250 x 450	+0.250	
PB15	250 x 450	+0.250	
PB16	250 x 650	+0.400	
PB17	250 x 650	+0.400	
PB18	250 x 450	+0.250	
PB19	250 x 450	+0.250	
PB20	250 x 650	+0.400	
PB21	250 x 650	+0.400	



TERMINAL BUILDING

KEY PLAN

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS UNLESS STATED OTHERWISE.
- REFER ARCHITECTURAL DRAWINGS FOR ALL REFERENCE LEVELS.
- MINIMUM CONCRETE GRADE SHALL BE M40 MINIMUM GRADE OF LEAN CONCRETE BELOW FOUNDATION AND FLOOR SHALL BE M20 ACCORDING TO IS:456 UNLESS NOTED OTHERWISE.
- ALL STEEL REINFORCEMENT IS TO BE IN ACCORDANCE WITH IS:1786-2008. DEFINITION GRADE Fe 500D (CORROSION RESISTANT)
- ALL STRUCTURAL STEEL IS TO BE IN ACCORDANCE WITH IS:2062-2011. DEFINITION GRADE A.

LEGEND

- C - COLUMN
- F - FOOTING
- PCC - PLAIN CEMENT CONCRETE
- TYP - TYPICAL
- 200mm SUNK SLAB

FOR TENDER

NOT FOR
CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	TSM	RK	AK
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



CONSULTANT
HaskoningDHV Consulting Private Limited
502-505, 5th Floor, Platinum Techno Park,
Plot 17 & 18, Sector 30 A, Vashi,
New Mumbai - 400 703, INDIA
Tel: +91 (0) 22 61385000
Email: info.india@haskoningdhv.com
www.royalhaskoningdhv.com

Royal
HaskoningDHV
Enhancing Society Together

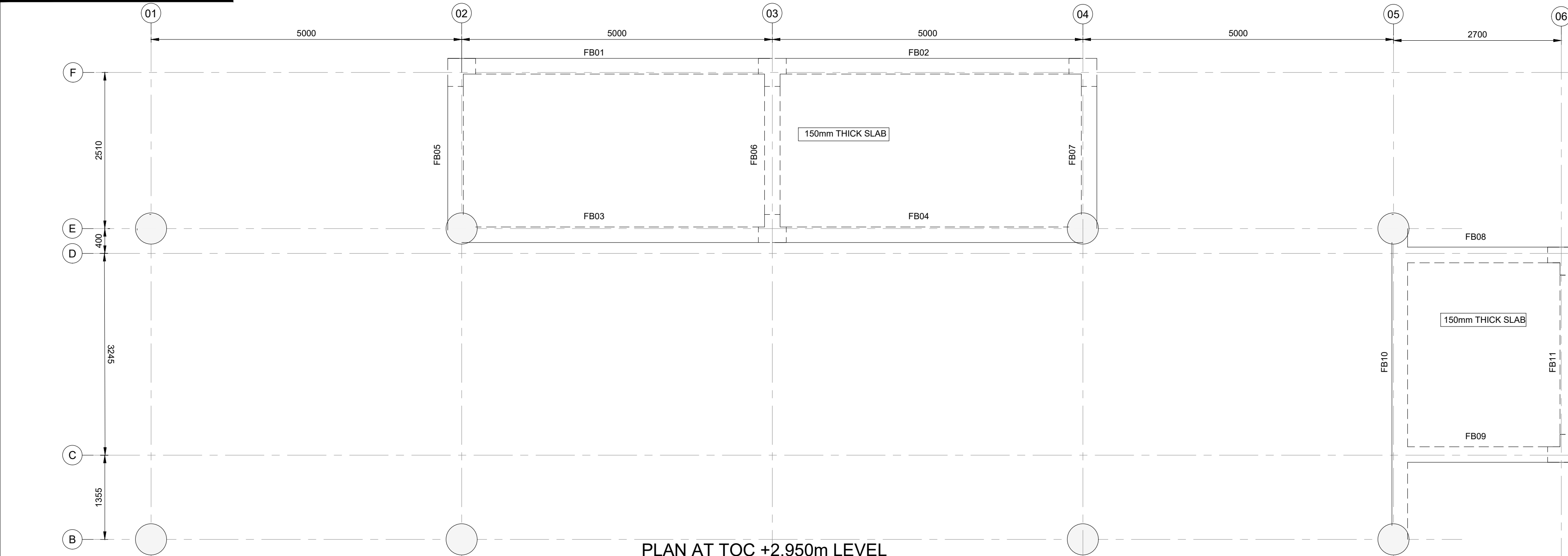
PROJECT
Assam Inland Water Transport Project (AIWTP)

ASSIGNMENT
Preparation of DPR along with Engineering Design,
Drawings, Tender Documents for Construction of Modular
Terminal at Ferry Services of NW-2 and NW-16 in Assam

TITLE

CENTRAL CLUSTER
(UMANANDA TEMPLE GHAT)
PLINTH BEAM LAYOUT

DRAWN	TSM	CHECKED	RK	APPROVED	AK
DATE	FEB' 2023	SCALE	@A1	AS SHOWN	REF:
DRAWING No.	DI1530-RHD-ZZ-UA-DR-S-2236	SUITABILITY	A3	REVISION	P01

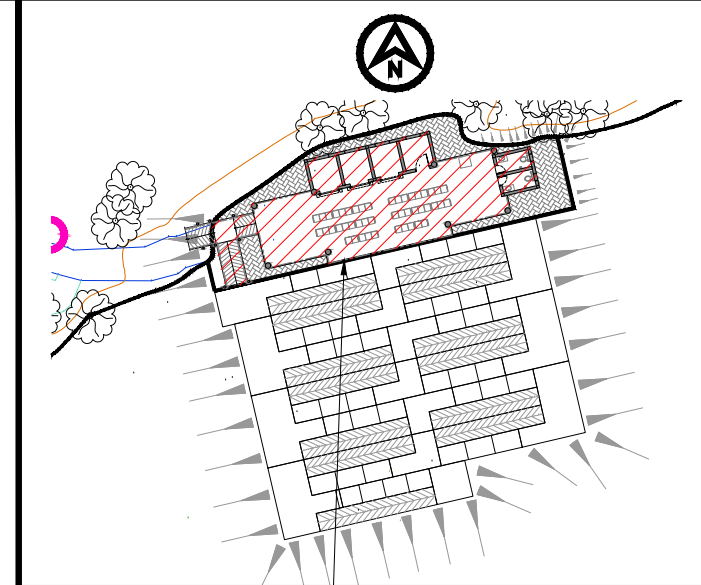
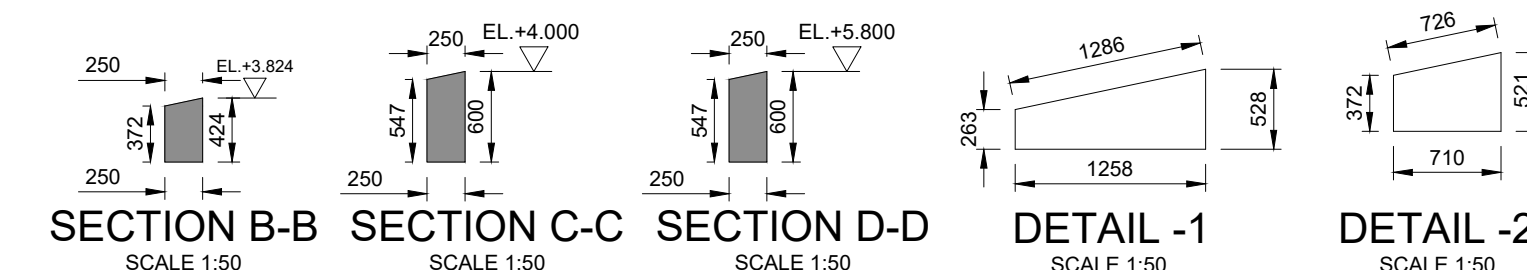
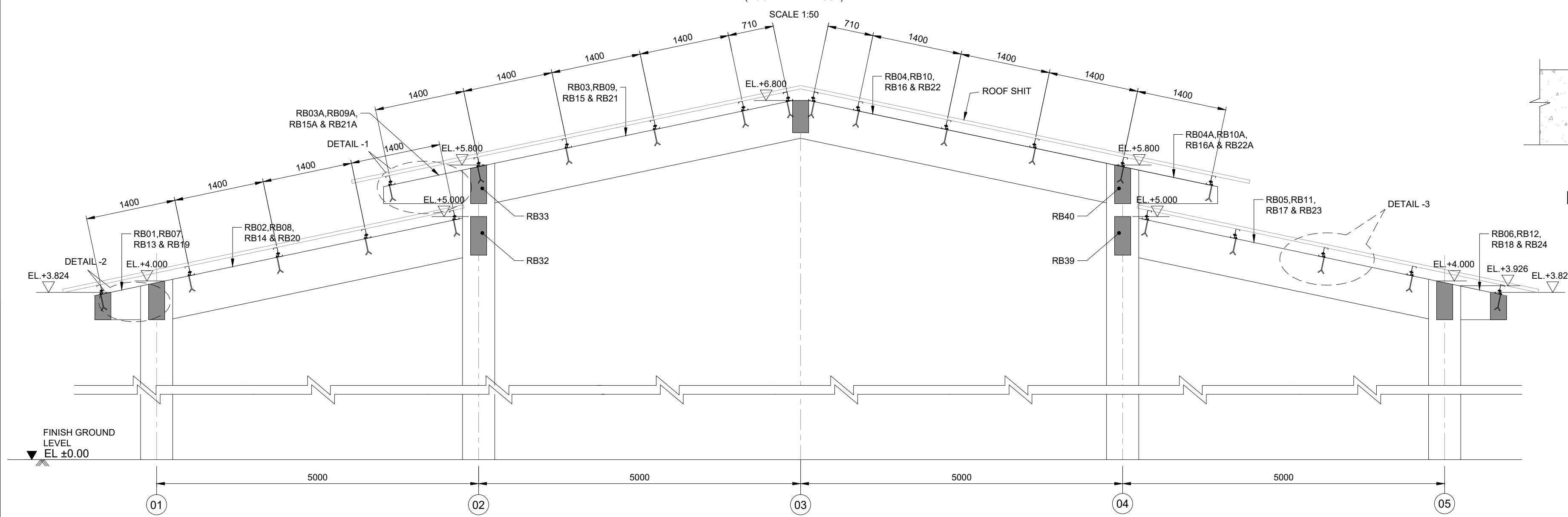
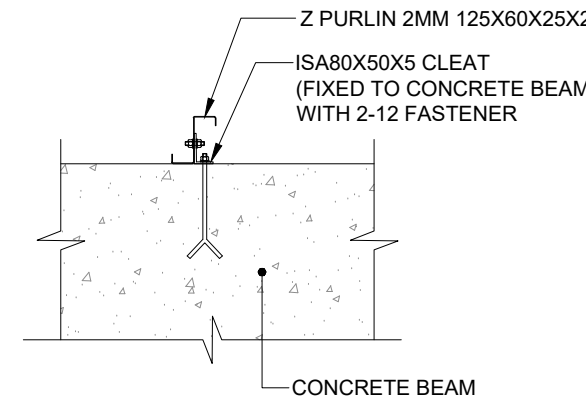
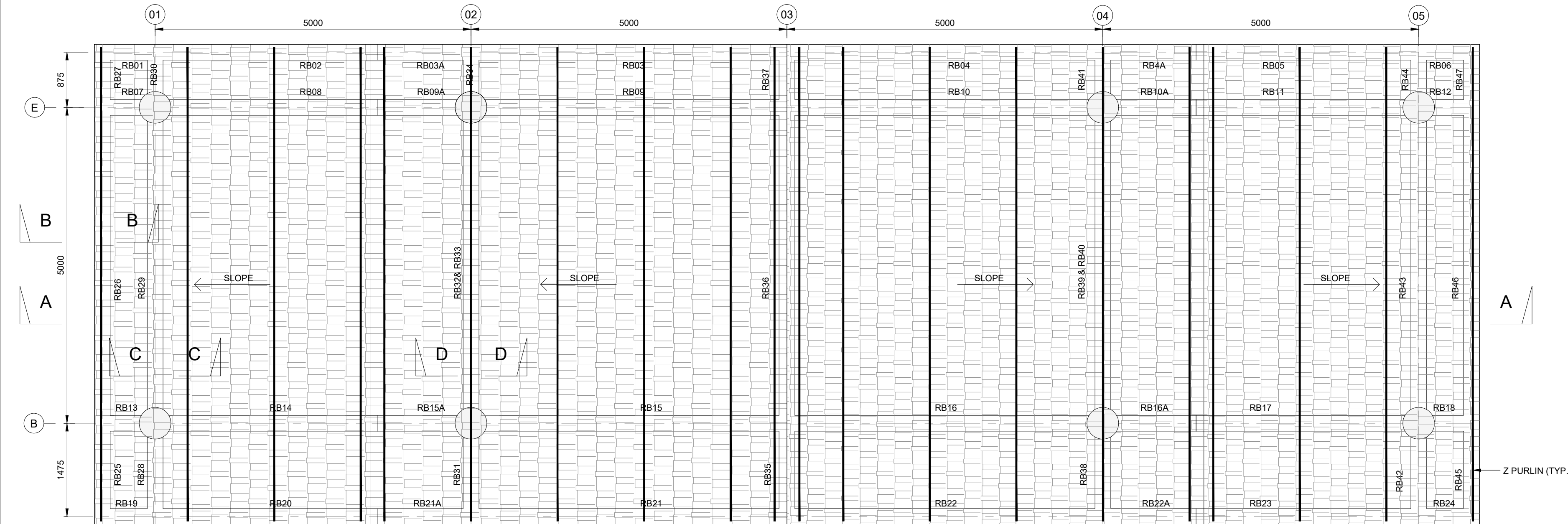


SUMMARY TABLE OF RC MEMBERS (FLOOR BEAMS)

MEMBERS	SECTION B x D (mm)	T.O.B	DESCRIPTION
FB01	250 x 600	+2.950	FLOOR BEAM
FB02	250 x 600	+2.950	
FB03	250 x 500	+2.950	
FB04	250 x 600	+2.950	
FB05	250 x 600	+2.950	
FB06	250 x 600	+2.950	
FB07	250 x 600	+2.950	
FB08	250 x 600	+2.950	
FB09	250 x 600	+2.950	
FB10	250 x 600	+2.950	
FB11	250 x 600	+2.950	

SUMMARY TABLE OF RC MEMBERS (ROOF BEAMS)

MEMBERS	SECTION B x D (mm)	T.O.B	DESCRIPTION
RB01	REFER DETAIL-2	REFER DETAIL-2	ROOF BEAM
RB02	250 x 600	REFER SECTION	
RB03	250 x 600	REFER SECTION	
RB03A	REFER DETAIL-1	REFER DETAIL-1	
RB04	250 x 600	REFER SECTION	
RB04A	REFER DETAIL-1	REFER DETAIL-1	
RB05	250 x 600	REFER SECTION	
RB06	REFER DETAIL-2	REFER DETAIL-2	
RB07	REFER DETAIL-2	REFER DETAIL-2	
RB08	250 x 600	REFER SECTION	
RB09	250 x 600	REFER SECTION	
RB09A	REFER DETAIL-1	REFER DETAIL-1	
RB10	250 x 600	REFER SECTION	
RB10A	REFER DETAIL-1	REFER DETAIL-1	
RB11	250 x 600	REFER SECTION	
RB12	REFER DETAIL-2	REFER DETAIL-2	
RB13	REFER DETAIL-2	REFER DETAIL-2	
RB14	250 x 600	REFER SECTION	
RB15	250 x 600	REFER SECTION	
RB15A	REFER DETAIL-1	REFER DETAIL-1	
RB16	250 x 600	REFER SECTION	
RB16A	REFER DETAIL-1	REFER DETAIL-1	
RB17	250 x 600	REFER SECTION	
RB18	REFER DETAIL-2	REFER DETAIL-2	
RB19	REFER DETAIL-2	REFER DETAIL-2	
RB20	250 x 600	REFER SECTION	
RB21	250 x 600	REFER SECTION	
RB21A	REFER DETAIL-1	REFER DETAIL-1	
RB22	250 x 600	REFER SECTION	
RB22A	REFER DETAIL-1	REFER DETAIL-1	
RB23	250 x 600	REFER SECTION	
RB24	REFER DETAIL-2	REFER DETAIL-2	
RB25	REFER SECTION B-B	REFER SECTION B-B	
RB26	REFER SECTION B-B	REFER SECTION B-B	
RB27	REFER SECTION B-B	REFER SECTION B-B	
RB28	REFER SECTION C-C	REFER SECTION C-C	
RB29	REFER SECTION C-C	REFER SECTION C-C	
RB30	REFER SECTION C-C	REFER SECTION C-C	
RB31	REFER SECTION D-D	REFER SECTION D-D	
RB32	REFER SECTION D-D	REFER SECTION D-D	
RB33	REFER SECTION D-D	REFER SECTION D-D	
RB34	REFER SECTION D-D	REFER SECTION D-D	
RB35	250 x 600	+6.800	
RB36	250 x 600	+6.800	
RB37	250 x 600	+6.800	
RB38	REFER SECTION D-D	REFER SECTION D-D	
RB39	REFER SECTION D-D	REFER SECTION D-D	
RB40	REFER SECTION D-D	REFER SECTION D-D	
RB41	REFER SECTION D-D	REFER SECTION D-D	
RB42	REFER SECTION C-C	REFER SECTION C-C	
RB43	REFER SECTION C-C	REFER SECTION C-C	
RB44	REFER SECTION C-C	REFER SECTION C-C	
RB45	REFER SECTION B-B	REFER SECTION B-B	
RB46	REFER SECTION B-B	REFER SECTION B-B	
RB47	REFER SECTION B-B	REFER SECTION B-B	



TERMINAL BUILDING
KEY PLAN

- NOTES:
- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS UNLESS STATED OTHERWISE.
 - REFER ARCHITECTURAL DRAWINGS FOR ALL REFERENCE LEVELS.
 - MINIMUM CONCRETE GRADE SHALL BE M40 SUBSTRUCTURE & M30 FOR SUPER STRUCTURE ACCORDANCE WITH IS:456 UNLESS NOTED OTHERWISE.
 - ALL STEEL REINFORCEMENT IS TO BE IN ACCORDANCE WITH IS:1786-2008, DEFINITION GRADE Fe 500D (CORROSION RESISTANT)
 - ALL STRUCTURAL STEEL IS TO BE IN ACCORDANCE WITH IS:2062-2011, DEFINITION GRADE A.

- LEGEND
- C - COLUMN
 - F - FOOTING
 - PCC - PLAIN CEMENT CONCRETE
 - TYP - TYPICAL

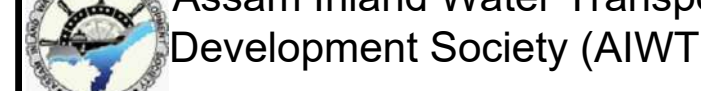
FOR TENDER
NOT FOR CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	TSM	RK	AK
-----	------------	-------------------	-----	----	----

REV	DATE	DESCRIPTION	BY	CHK	APP
-----	------	-------------	----	-----	-----

REVISIONS

CLIENT



ASSAM INLAND WATER TRANSPORT DEVELOPMENT SOCIETY (AIWTDS)

CONSULTANT

HaskoningDHV Consulting Private Limited

502-505, 5th Floor, Platinum Techno Park, Plot 17 & 18, Sector 30 A, Vashi, New Mumbai - 400 703, INDIA

Tel: +91 (0) 22 61385000

Email: info.india@haskoningdhv.com

www.royalhaskoningdhv.com

PROJECT

Assam Inland Water Transport Project (AIWTP)

ASSIGNMENT

Preparation of DPR along with Engineering Design, Drawings, Tender Documents for Construction of Modular Terminal at Ferry Services of NW-2 and NW-16 in Assam

TITLE

CENTRAL CLUSTER (UMANANDA TEMPLE GHAT)

FLOOR & ROOF BEAM LAYOUT

DRAWN TSM

CHECKED RK

APPROVED AK

DATE FEB '23

SCALE @A1

AS SHOWN

REF.

DRAWING No.

DI1530-RHD-ZZ-UA-DR-S-2237

SUITABILITY

REVISION

A3

P01

SUMMARY TABLE OF COLUMN DETAILS

COLUMN NAME LEVEL	(TYPE 1) C1	(TYPE 2) C2	(TYPE 3) C3	(TYPE 4) C4	(TYPE 5) C5	(TYPE 6) C6
(FOUNDATION TO ROOF FLOOR) ▽						
	MAIN BAR: 8-B16 + 4-B12	MAIN BAR: 8-B16 + 6-B12	MAIN BAR: 8-B16 + 4-B12	MAIN BAR: 8-B16 + 6-B12	MAIN BAR: 8-B16 + 4-B12	Main bar: 10-B20
	OUTER TIES: B8-75-@ SUPPORT & B8-150 @ SPAN	OUTER TIES: B8-75-@ SUPPORT & B8-150 @ SPAN	OUTER TIES: B8-75-@ SUPPORT & B8-150 @ SPAN	OUTER TIES: B8-75-@ SUPPORT & B8-150 @ SPAN	OUTER TIES: B8-75-@ SUPPORT & B8-150 @ SPAN	Ties: B12-80-AT SUPPORT B12-150-AT SPAN
	INNER TIES: B8-150	INNER TIES: B8-150	INNER TIES: B8-150	INNER TIES: B8-150	INNER TIES: B8-150	
	M40 : Fe500 : Cover = 40mm 	M40 : Fe500 : Cover = 40mm 	M40 : Fe500 : Cover = 40mm 			
	OUTER TIES: INNER TIES:	OUTER TIES: INNER TIES:	INNER TIES: OUTER TIES:	OUTER TIES: INNER TIES:	OUTER TIES: INNER TIES:	

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS UNLESS STATED OTHERWISE.
- REFER ARCHITECTURAL DRAWINGS FOR ALL REFERENCE LEVELS.
- MINIMUM CONCRETE GRADE SHALL BE M40 ACCORDANCE WITH IS:456 UNLESS NOTED OTHERWISE.
- ALL STEEL REINFORCEMENT IS TO BE IN ACCORDANCE WITH IS:1786-2008. DEFINITION GRADE Fe 500D (CORROSION RESISTANT)
- ALL STRUCTURAL STEEL IS TO BE IN ACCORDANCE WITH IS:2062-2011. DEFINITION GRADE A.
- MIN COVER TO -
COLUMN = 40mm
BEAM = 50mm
SLAB = 30mm
FOUNDATION = 75mm
- ALL STRUCTURAL ELEMENT (FOUNDATION, SLAB ON GRADE ETC) SHALL BE FOUNDED ON FIRM GROUND.
- ANY EXCAVATED EARTH BELOW FOUNDATION SHALL BE REPLACED WITH LEAN CONCRETE.
- SBC CONSIDERED AT FOUNDATION LEVEL IS 15 TON / SQM.

LEGEND

- C - COLUMN
F - FOOTING
PCC - PLAIN CEMENT CONCRETE
TYP - TYPICAL

SUMMARY TABLE OF REINFORCEMENT DETAILS OF FOOTINGS

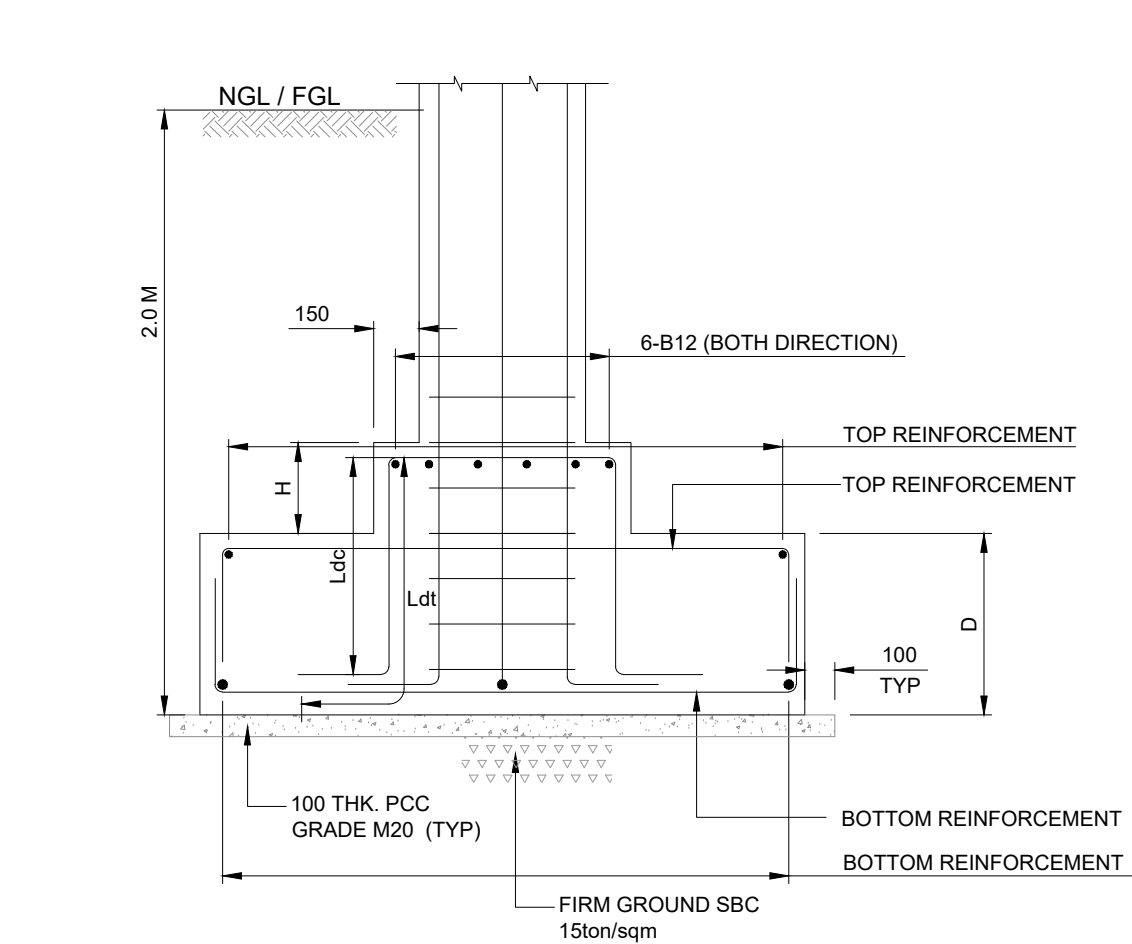
FOOTING TYPE	SIZE (mm) (L x W x D)	BOTTOM REINFORCEMENT	TOP REINFORCEMENT	LOCATION AT GRID
F1	2300 x 2300 x 375	B12 @ 100 C/C	B10 @ 200 C/C	D6, E1, E5, F3
F2	2500 x 2500 x 400	B16 @ 125 C/C	B10 @ 200 C/C	B2, B4, E3
F3	2800 x 2800 x 475	B16 @ 125 C/C	B10 @ 200 C/C	B1
F4	2800 x 2400 x 475	B16 @ 125 C/C (B1) B12 @ 100 C/C (B2)	B10 @ 200 C/C	E2, E4, F4
F5	3200 x 2400 x 525	B16 @ 100 C/C (B1) B16 @ 125 C/C (B2)	B12 @ 200 C/C (T1) B10 @ 200 C/C (B2)	F2
F6	3200 x 2650 x 525	B16 @ 100 C/C (B1) B16 @ 125 C/C (B2)	B12 @ 200 C/C (T1) B10 @ 200 C/C (B2)	B5, C6

DEVELOPMENT LENGTH

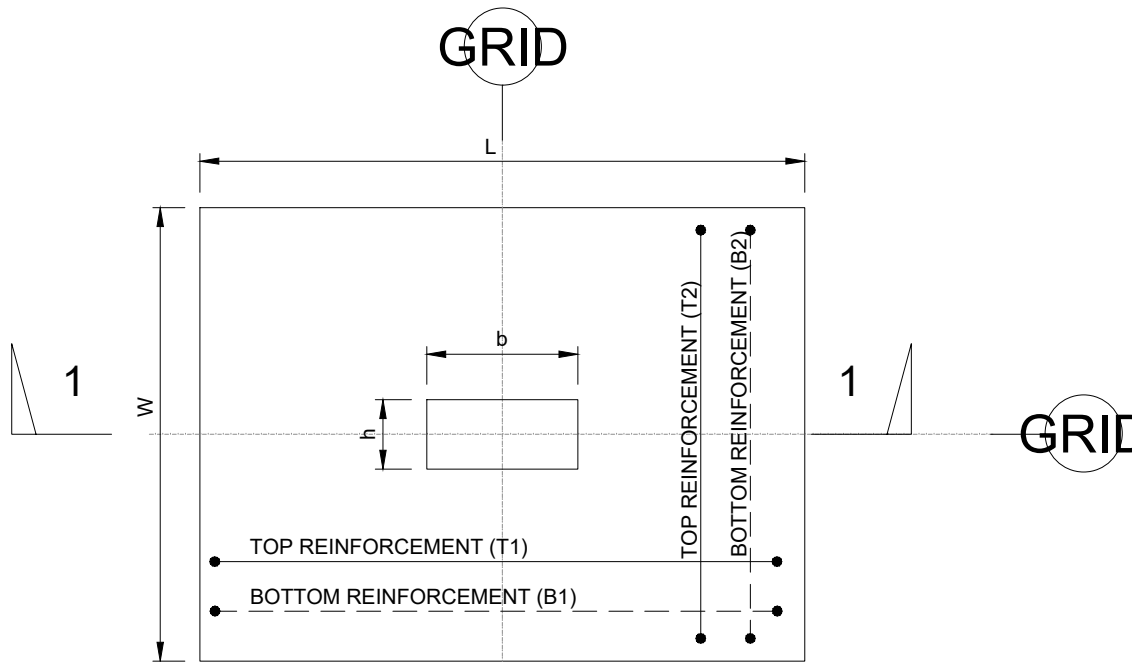
Ldc (DEVELOPMENT LENGTH IN COMPRESSION) IN mm	LD (OR LDT) DEVELOPMENT LENGTH IN TENSION MM FOR M-40 GRADE CONCRETE = 35XDIA OF DEFORMED REBAR
B32 = 960mm	
B25 = 750mm	
B20 = 600mm	
B16 = 480mm	
NOTE: 'H' min WILL BE BASED ON COLUMN REBAR'S Ldc	

SUMMARY TABLE FOR COLUMNS

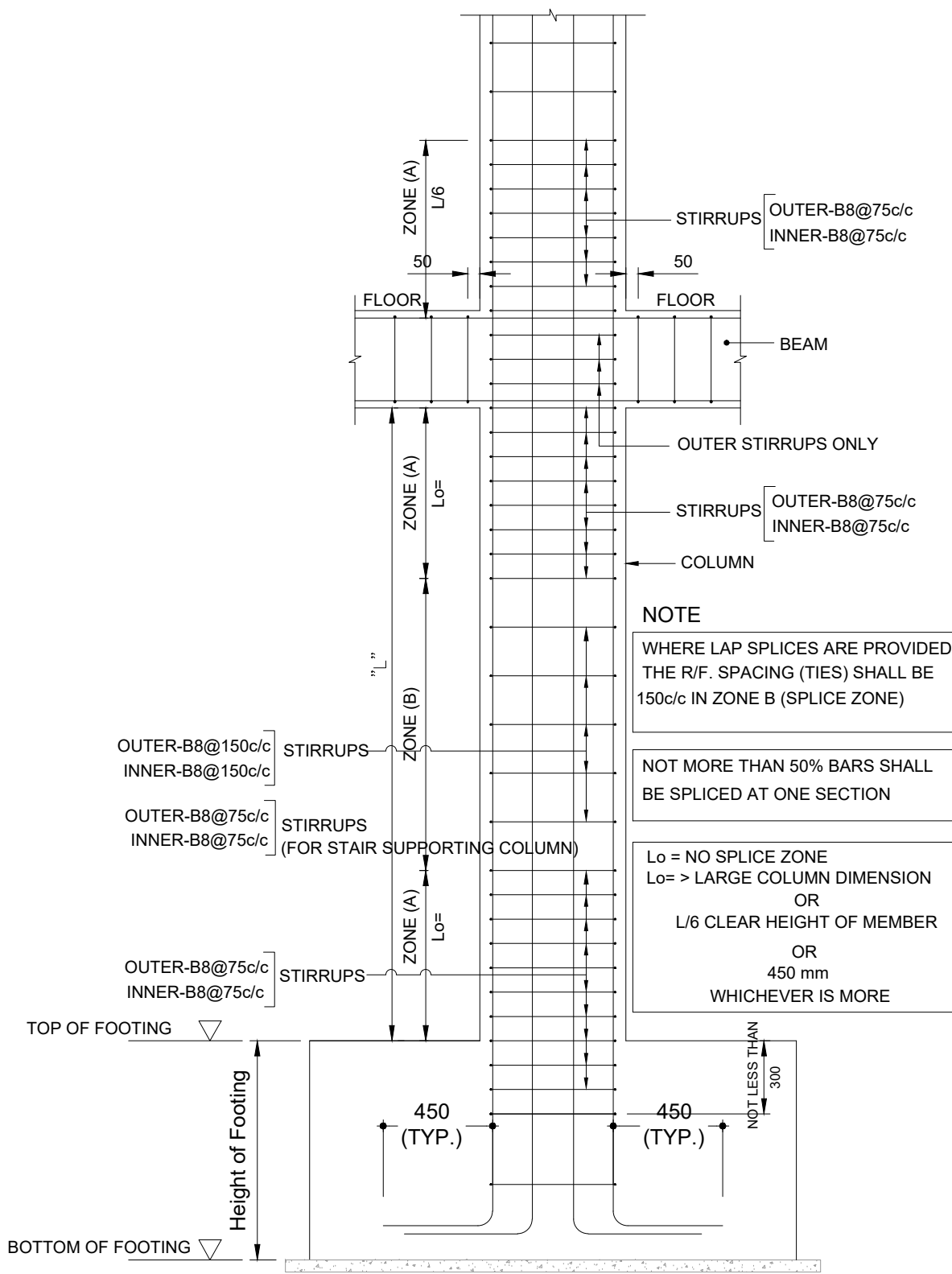
TYPE	SIZE (mm)	DESCRIPTION	LOCATION AT GRID
C1	AS PER PLAN	COLUMN	F2
C2		COLUMN	F3
C3		COLUMN	F4,D6
C4		COLUMN	F3
C5		COLUMN	C6
C6	Ø500	COLUMN	B1,B2,B4,B5,E1,E2,E4,E5.



SECTION 1-1
SCALE 1:25



TYPICAL FOOTING PLAN
SCALE 1:25



TYPICAL RC COLUMN DETAIL
SCALE 1:25

NOTE:- COLUMN REINFORCEMENT SHOWN IN THE DRAWING IS BASED ON DESIGN REQUIREMENT. CONTRACTOR NEEDS TO WORKOUT BBS DETAILING IN COMPLIANCE TO IS-13920 (AS SHOWN IN TYP ELEVATION).

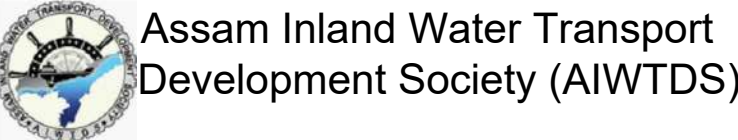
FOR TENDER

NOT FOR
CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	RAK	RK	AK
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



CONSULTANT
Royal HaskoningDHV
Enhancing Society Together

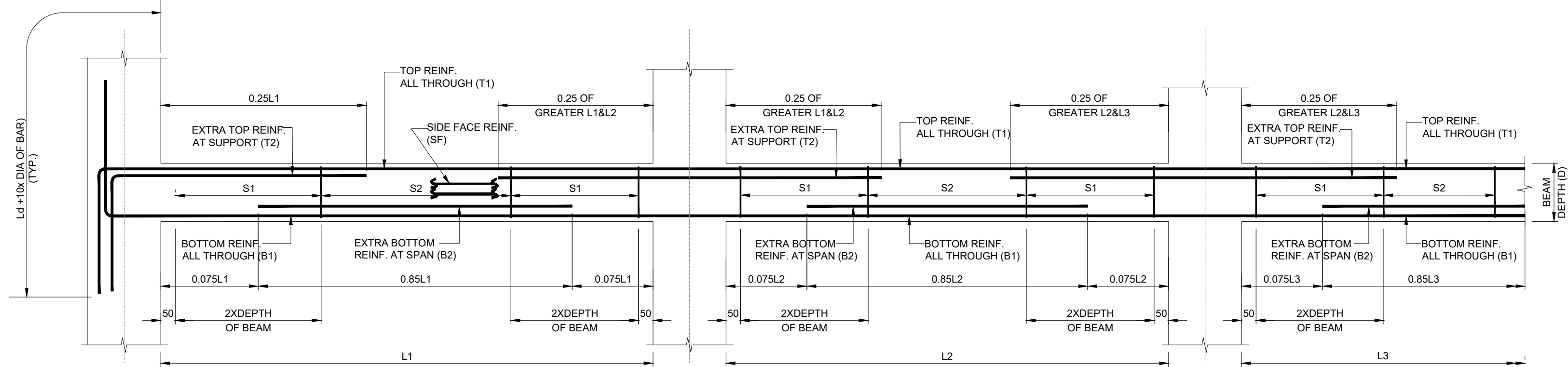
PROJECT
Assam Inland Water Transport Project (AIWTP)

ASSIGNMENT
Preparation of DPR along with Engineering Design, Drawings, Tender Documents for Construction of Modular Terminal at Ferry Services of NW-2 and NW-16 in Assam

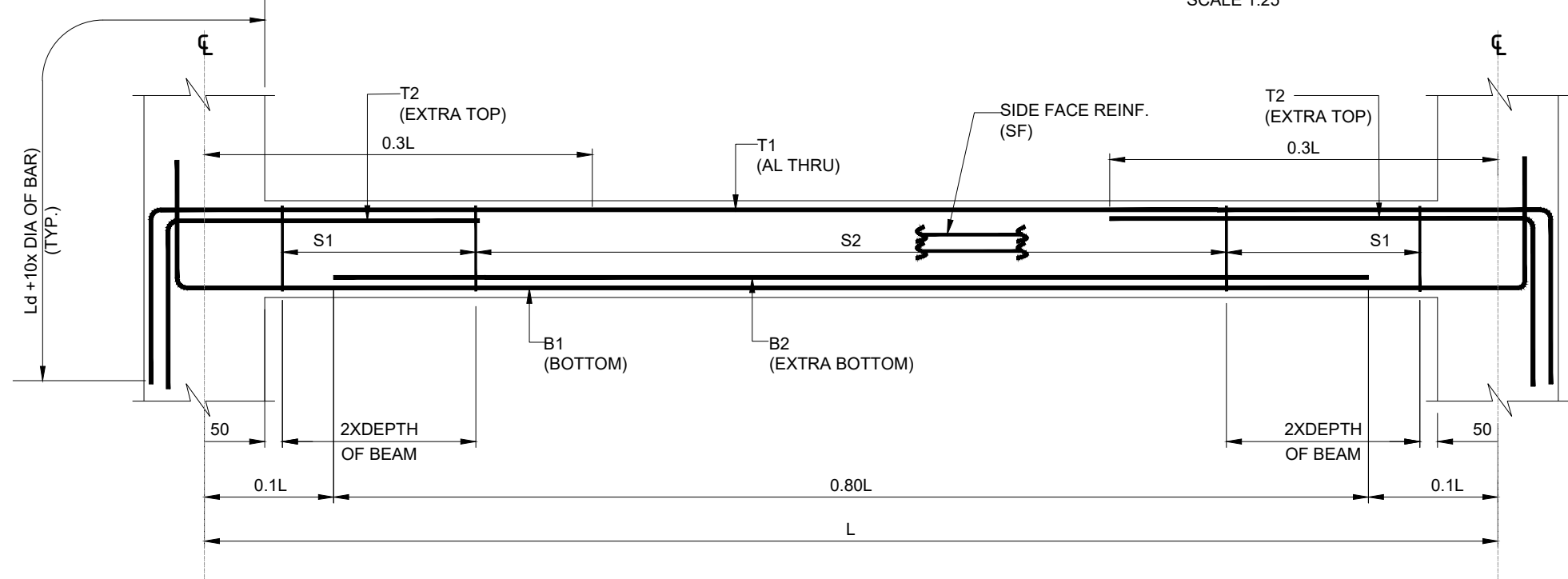
TITLE

CENTRAL CLUSTER
(UMANANDA TEMPLE GHAT)
COLUMN & FOOTING
REINFORCEMENT DETAILS

DRAWN YSK	CHECKED RK	APPROVED AK
DATE FEB' 2023	SCALE @A1	AS SHOWN REF:
DRAWING No. D11530-RHD-ZZ-UA-DR-S-2238	SUITABILITY A3	REVISION P01



TYPICAL LONGITUDINAL SECTION OF BEAM
COLUMN TO COLUMN CONNECTION (MULTIPLE SPAN)
SCALE 1:25

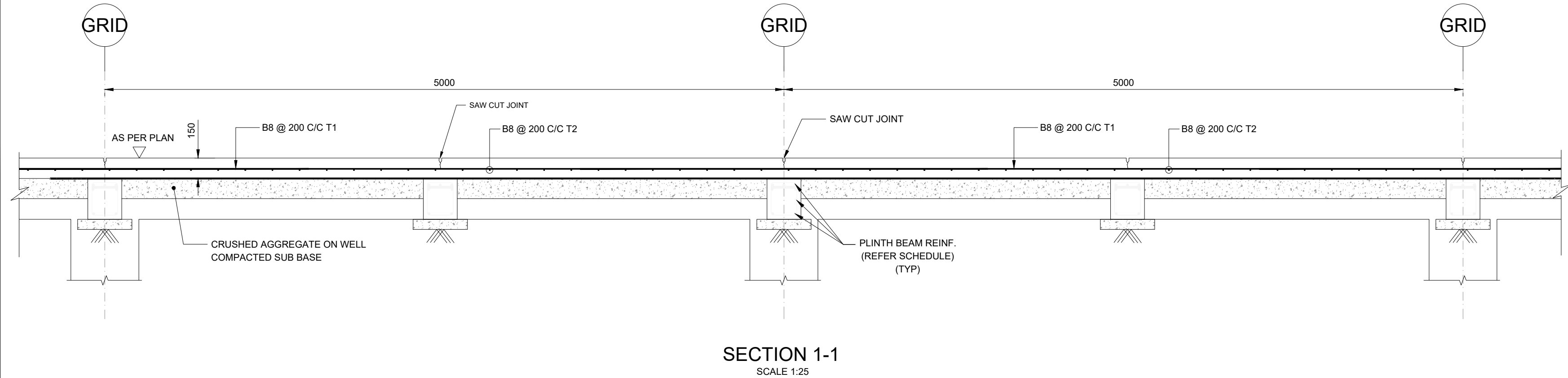


TYPICAL LONGITUDINAL SECTION OF BEAM
COLUMN TO COLUMN CONNECTION (SINGLE SPAN)
SCALE 1:25

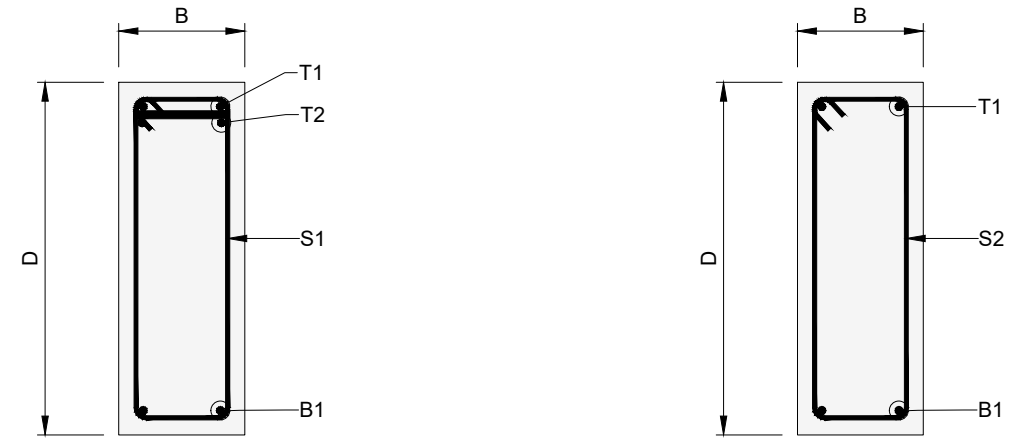
SUMMARY TABLE FOR PLINTH BEAM

LEVEL (TOB) (M)	BEAM MKD.	SECTION B x D (mm)	REINFORCEMENT						
			TOP REINFORCEMENT		BOTTOM REINFORCEMENT		SIDE FACE REINFORCEMENT	STIRRUPS (S)	
			AL THRU (T1)	EXTRA (T2)	AL THRU (B1)	EXTRA (B2)		AT SUPPORT (S1)	AT SPAN (S2)
+0.400	PB01	250 x 650	2-B20	2-B20	2-B25	1-B20	-	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
+0.400	PB02	250 x 650	2-B20	2-B20	2-B25	1-B20	-	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
+0.400	PB03	250 x 650	2-B20	2-B20	2-B25	1-B20	-	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
+0.250	PB04	250 x 450	2-B20	2-B16	2-B25	-	-	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
+0.250	PB05	250 x 450	2-B20	2-B16	2-B25	-	-	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
+0.400	PB06	250 x 650	2-B20	2-B20	2-B25	1-B20	-	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
+0.400	PB07	250 x 650	2-B20	2-B20	2-B25	1-B20	-	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
+0.400	PB08	250 x 650	2-B20	2-B20	2-B25	1-B20	-	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
+0.400	PB09	250 x 650	2-B20	2-B20	2-B25	1-B20	-	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
+0.200	PB10	250 x 450	2-B20	2-B16	2-B25	-	-	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
+0.400	PB11	250 x 650	2-B20	2-B20	2-B25	1-B20	-	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
+0.400	PB12	250 x 650	2-B20	2-B20	2-B25	1-B20	-	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
+0.250	PB13	250 x 450	2-B20	2-B16	2-B25	-	-	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
+0.250	PB14	250 x 450	2-B20	2-B16	2-B25	-	-	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
+0.250	PB15	250 x 450	2-B20	2-B16	2-B25	-	-	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
+0.400	PB16	250 x 650	2-B20	2-B20	2-B25	1-B20	-	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
+0.400	PB17	250 x 650	2-B20	2-B20	2-B25	1-B20	-	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
+0.250	PB18	250 x 450	2-B20	2-B16	2-B25	-	-	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
+0.250	PB19	250 x 450	2-B20	2-B16	2-B25	-	-	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
+0.400	PB20	250 x 650	2-B20	2-B20	2-B25	1-B20	-	2L-B10 @ 100 C/C	2L-B10 @ 200 C/C
+0.400	PB21	250 x 650	2-B20	2-B20	2-B25	1-B20	-	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C

NOTE- DRAWING IS INDICATING DESIGN REINFORCEMENT. CONTRACTOR NEEDS TO WORKOUT DUCTILE DETAILING AS PER IS 13920-2016.

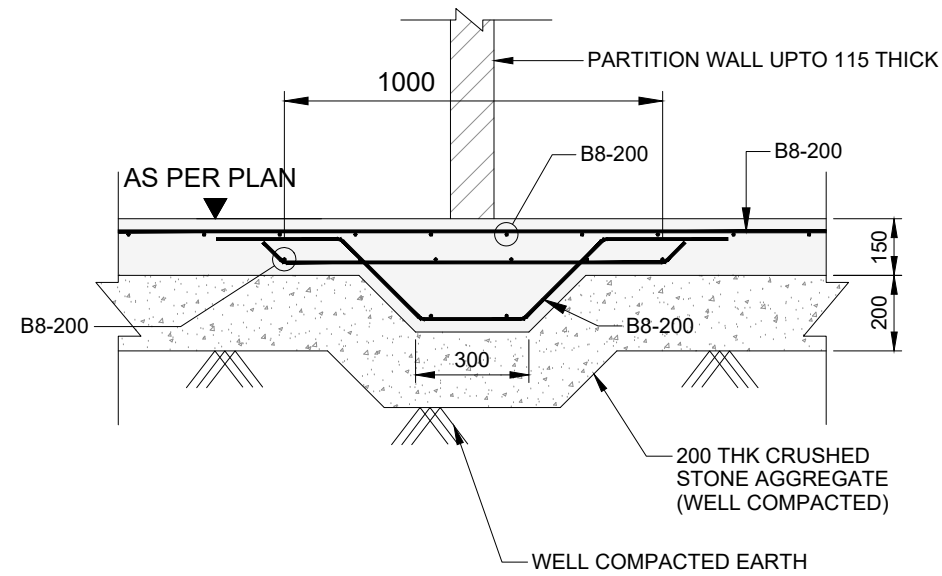


SECTION 1-1
SCALE 1:25

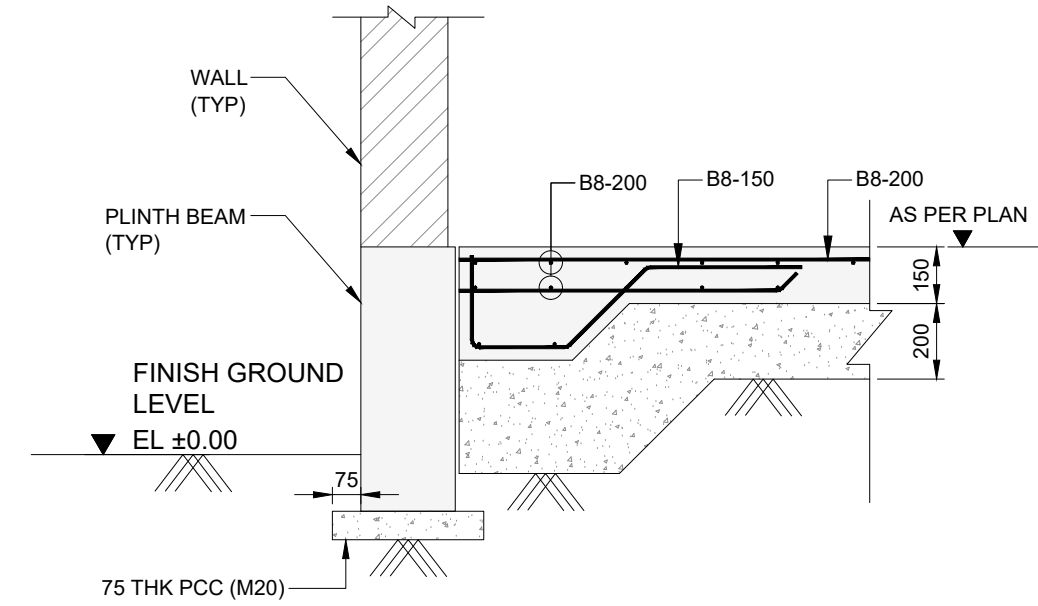


TYPICAL CROSS SECTION OF
PLINTH BEAM AT SUPPORT
SCALE 1:15

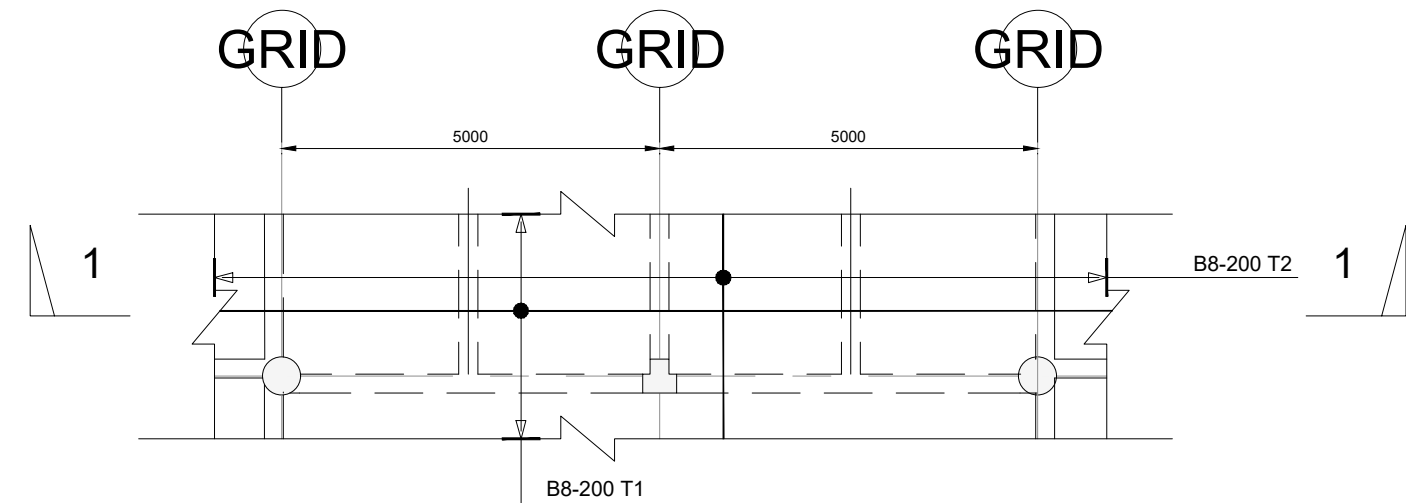
TYPICAL CROSS SECTION OF
PLINTH BEAM AT SPAN
SCALE 1:15



TYPICAL SECTION AT PARTITION WALL
SCALE 1:20



TYPICAL SECTION AT END OF GRADE SLAB
SCALE 1:20



TYPICAL SLAB ON GRADE (PART PLAN)
(PLAN SHOWING REINFORCEMENT DETAILS)
SCALE 1:100

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS UNLESS STATED OTHERWISE.
- REFER ARCHITECTURAL DRAWINGS FOR ALL REFERENCE LEVELS.
- MINIMUM CONCRETE GRADE SHALL BE M40 MINIMUM GRADE OF LEAN CONCRETE BELOW FOUNDATION AND FLOOR SHALL BE M20 ACCORDING TO IS:456 UNLESS NOTED OTHERWISE.
- ALL STEEL REINFORCEMENT IS TO BE IN ACCORDANCE WITH IS:1786-2008. DEFINITION GRADE Fe 500D (CORROSION RESISTANT).
- ALL STRUCTURAL STEEL IS TO BE IN ACCORDANCE WITH IS:2062-2011. DEFINITION GRADE A.

LEGEND

- C - COLUMN
F - FOOTING
PCC - PLAIN CEMENT CONCRETE
TYP - TYPICAL

FOR TENDER

NOT FOR
CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	RVA	RK	AK
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



CONSULTANT
HaskoningDHV Consulting Private Limited
502-505, 5th Floor, Platinum Techno Park,
Plot 17 & 18, Sector 50 A, Vashi,
New Mumbai - 400 703, INDIA
Tel: +91 (0) 22 61385000
Email: info.india@mhv.com
www.royalhaskoningdhv.com

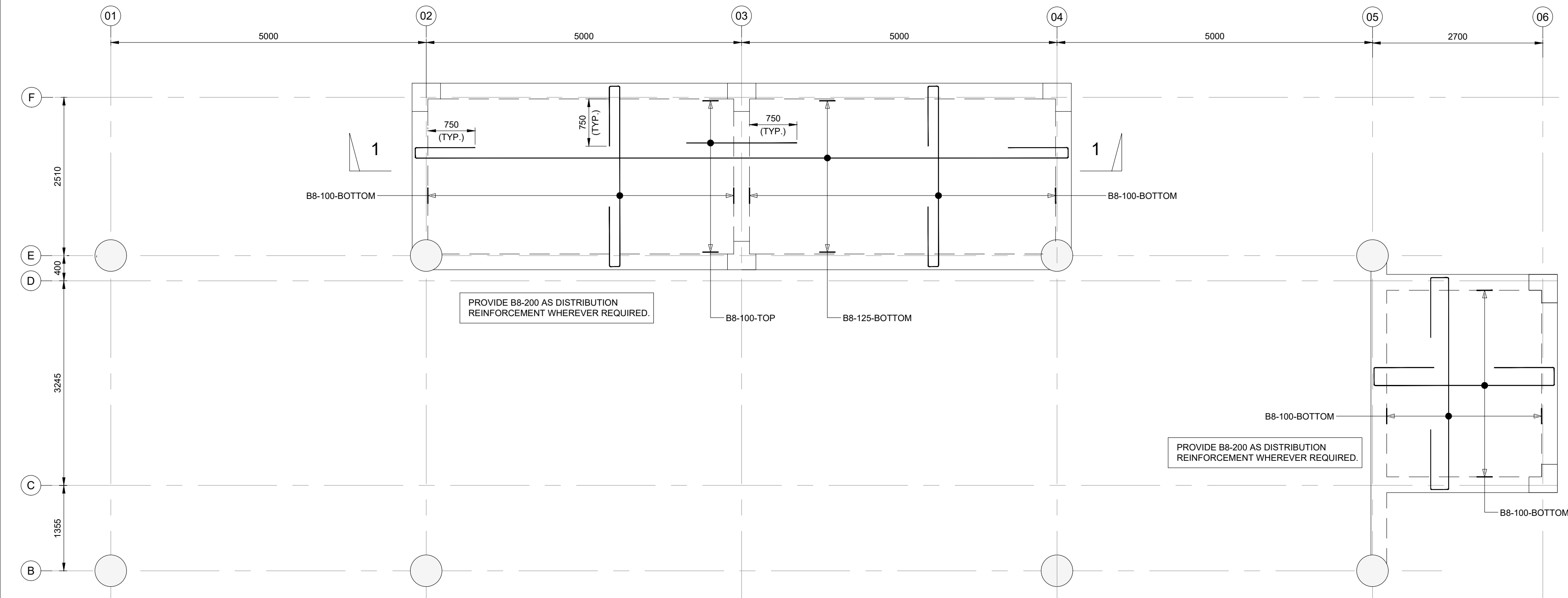
Royal HaskoningDHV
Enhancing Society Together

PROJECT
Assam Inland Water Transport Project (AIWTP)

ASSIGNMENT
Preparation of DPR along with Engineering Design,
Drawings, Tender Documents for Construction of Modular
Terminal at Ferry Services of NW-2 and NW-16 in Assam

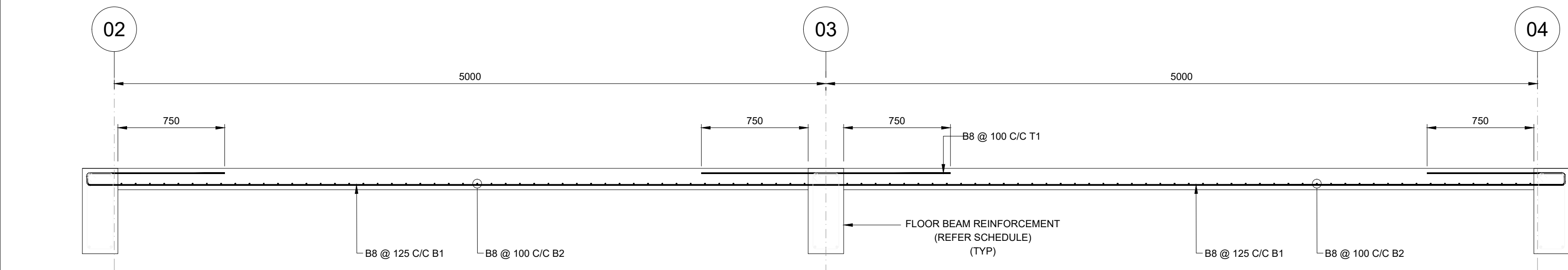
TITLE
CENTRAL CLUSTER
(UMANANDA TEMPLE GHAT)
PLINTH BEAM & GRADE SLAB
REINFORCEMENT DETAILS

DRAWN	YSK	CHECKED	RK	APPROVED	AK
DATE	FEB' 2023	SCALE	@A1	AS SHOWN	REF:
DRAWING No.	DI1530-RHD-ZZ-UA-DR-S-2239	SUITABILITY	A3	REVISION	P01



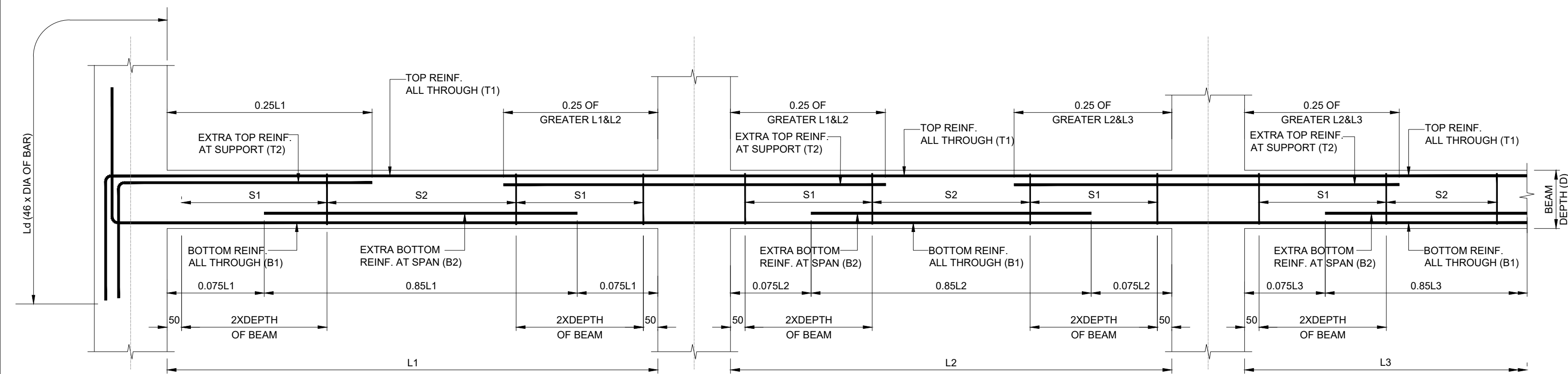
PLAN AT TOC +2.950m CD LEVEL

SCALE 1:50



SECTION 1-1

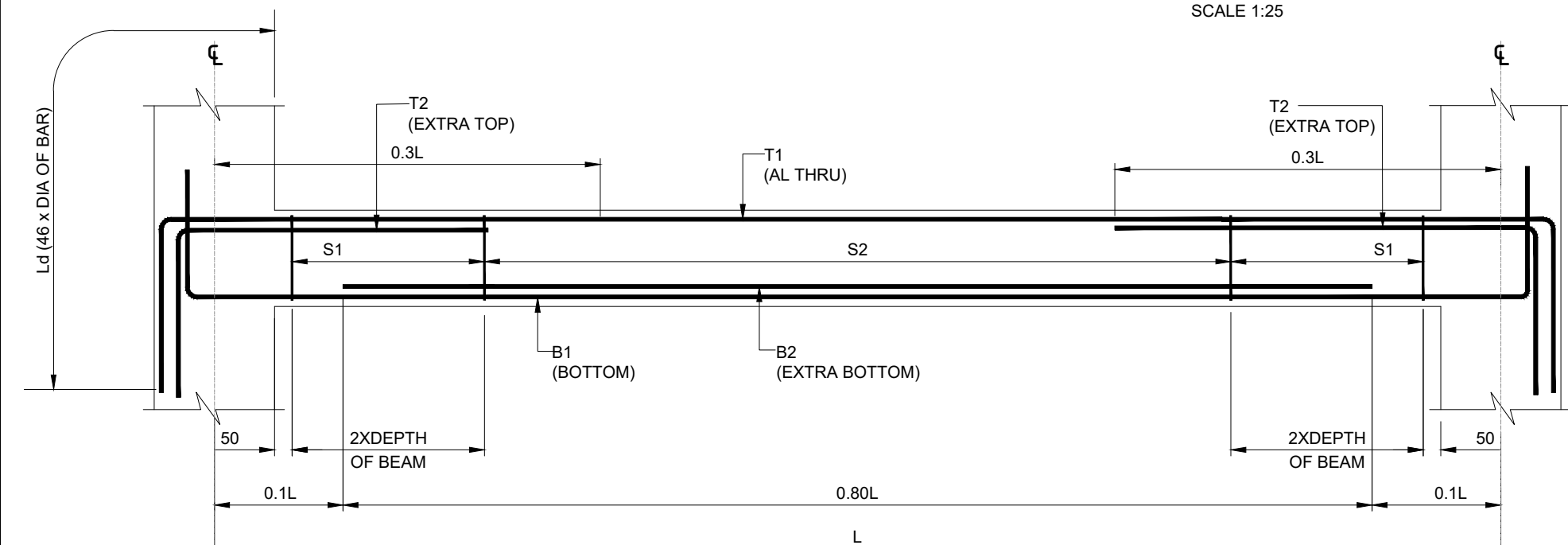
SCALE 1:25



TYPICAL LONGITUDINAL SECTION OF BEAM

COLUMN TO COLUMN CONNECTION (MULTIPLE SPAN)

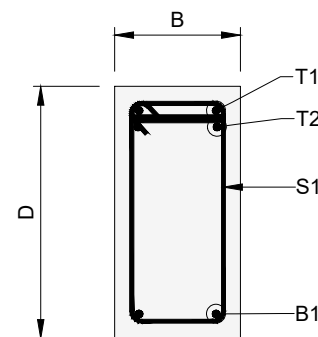
SCALE 1:25



TYPICAL LONGITUDINAL SECTION OF BEAM

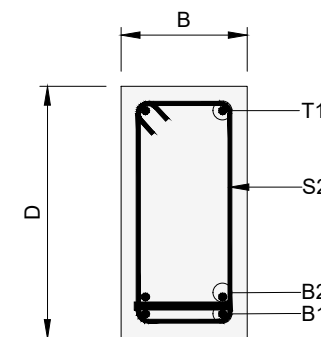
COLUMN TO COLUMN CONNECTION (SINGLE SPAN)

SCALE 1:25



TYPICAL CROSS SECTION OF
TECHNICAL FLOOR BEAM AT
SUPPORT

SCALE 1:15



TYPICAL CROSS SECTION OF
TECHNICAL FLOOR BEAM AT
SPAN

SCALE 1:15

SUMMARY TABLE FOR FLOOR BEAM

LEVEL (TOB) (M)	BEAM MKD.	SIZE OF BEAM (mm) (B x D)	REINFORCEMENT					
			TOP REINFORCEMENT		BOTTOM REINFORCEMENT		STIRRUPS (S)	
			AL THRU (T1)	EXTRA (T2)	AL THRU (B1)	EXTRA (B2)	AT SUPPORT (S1)	AT SPAN (S2)
+2.950	FB01 TO FB11	250 x 600	2-B25	2-B16	2-B25	2-B16	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C

NOTE- DRAWING IS INDICATING DESIGN REINFORCEMENT. CONTRACTOR NEEDS TO WORKOUT DUCTILE DETAILING AS PER IS 13920-2016.

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS WITH RESPECT TO CHART DATUM UNLESS STATED OTHERWISE.
- REFER ARCHITECTURAL DRAWINGS FOR ALL REFERENCE LEVELS.
- MINIMUM CONCRETE GRADE SHALL BE M40 MINIMUM GRADE OF LEAN CONCRETE BELOW FOUNDATION AND FLOOR SHALL BE M20 ACCORDING TO IS:456 UNLESS NOTED OTHERWISE.
- ALL STEEL REINFORCEMENT IS TO BE IN ACCORDANCE WITH IS:1786-2008. DEFINITION GRADE Fe 500D (CORROSION RESISTANT).
- ALL STRUCTURAL STEEL IS TO BE IN ACCORDANCE WITH IS:2062-2011. DEFINITION GRADE A.

LEGEND

- C - COLUMN
F - FOOTING
PCC - PLAIN CEMENT CONCRETE
TYP - TYPICAL

DEVELOPMENT LENGTH

Ldc (DEVELOPMENT LENGTH IN COMPRESSION) IN mm
B32 = 960mm
B25 = 750mm
B20 = 600mm
B16 = 480mm
NOTE: 'l' _d min WILL BE BASED ON COLUMN REBAR'S L _{dc}

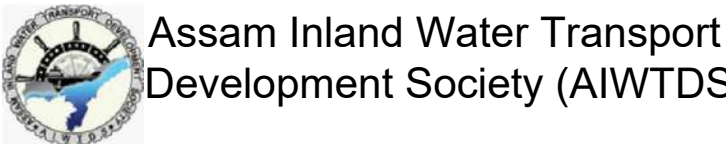
FOR TENDER

NOT FOR
CONSTRUCTION

REV	DATE	DESCRIPTION	BY	CHK	APP
P01	15/02/2023	ISSUED FOR TENDER	RVA	RK	AK

REVISIONS

CLIENT



CONSULTANT
HaskoningDHV Consulting Private Limited
502-505, 5th Floor, Platinum Techno Park,
Plot 17 & 18, Sector 50 A, Vashi,
New Mumbai - 400 703, INDIA
Tel +91 (0) 22 61395000
Email info.india@hnhv.com
www.royalhaskoningdhv.com

Royal
HaskoningDHV
Enhancing Society Together

PROJECT
Assam Inland Water Transport Project (AIWTP)

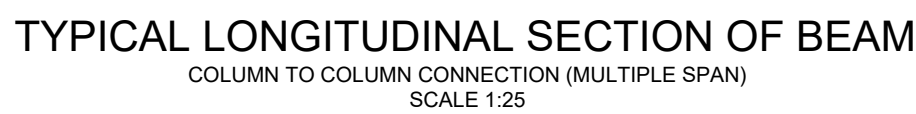
ASSIGNMENT
Preparation of DPR along with Engineering Design,
Drawings, Tender Documents for Construction of Modular
Terminal at Ferry Services of NW-2 and NW-16 in Assam

TITLE

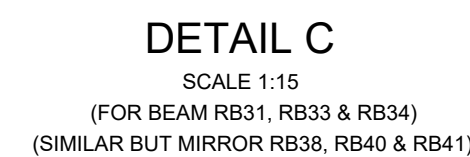
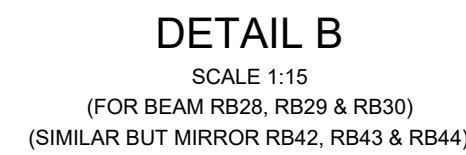
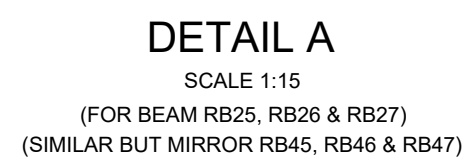
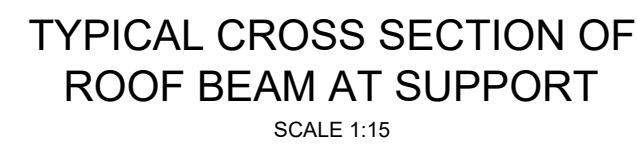
CENTRAL CLUSTER
(UMANANDA TEMPLE GHAT)
FLOOR BEAM REINFORCEMENT
DETAILS

DRAWN	Ysk	CHECKED	RK	APPROVED	AK
DATE	FEB' 2023	SCALE	@A1	AS SHOWN	REF.

DRAWING No.	SUITABILITY	REVISION
DI1530-RHD-ZZ-UA-DR-S-2240	A3	P01



LEVEL (TOB) (M)	BEAM MKD.	SIZE OF BEAM (mm) (B x D)	REINFORCEMENT					
			TOP REINFORCEMENT		BOTTOM REINFORCEMENT		STIRRUPS (S)	
			AL THRU (T1)	EXTRA (T2)	AL THRU (B1)	EXTRA (B2)	AT SUPPORT (S1)	AT SPAN (S2)
-	RB01 RB06 & RB07 RB12 & RB13, RB18 & RB19 RB24		ELEVATION - 1					
-	RB02 & RB05, RB08 & RB11 RB14 & RB17, RB20 & RB23		ELEVATION - 1					
-	RB03A & RB04A, RB09A & RB10A RB15A & RB16A, RB21A & RB22A		ELEVATION - 2					
-	RB03 & RB04, RB09 & RB10 RB15 & RB16 RB21 & RB22		ELEVATION - 2					
EL.+3.824	RB25 TO RB27 RB45 TO RB47	DETAIL A	2-B20	2-B20	2-B25	1-B20	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
EL.+4.000	RB28 TO RB30 RB42 TO RB44	DETAIL B	2-B20	2-B20	2-B25	1-B20	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
EL.+5.800	R31, R33 & RB34 R38, RB40 & RB41	DETAIL C	2-B20	2-B20	2-B25	1-B20	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
EL.+5.000	RB32 & RB39	250 x 600	2-B20	2-B20	2-B25	1-B20	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C
EL.+6.800	RB35 & RB37	250 x 600	2-B20	2-B20	2-B25	1-B20	2L-B8 @ 100 C/C	2L-B8 @ 200 C/C



1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS UNLESS STATED OTHERWISE.
2. REFER ARCHITECTURAL DRAWINGS FOR ALL REFERENCE LEVELS.
3. MINIMUM CONCRETE GRADE SHALL BE M40 MINIMUM GRADE OF LEAN CONCRETE BELOW FOUNDATION AND FLOOR SHALL BE M20 ACCORDING TO IS:456 UNLESS NOTED OTHERWISE.
4. ALL STEEL REINFORCEMENT IS TO BE IN ACCORDANCE WITH IS:1786-2008. DEFINITION GRADE Fe 500D (CORROSION RESISTANT)
5. ALL STRUCTURAL STEEL IS TO BE IN ACCORDANCE WITH IS:2062-2011. DEFINITION GRADE A.

C - COLUMN
F - FOOTING
PCC - PLAIN CEMENT CONCRETE
TYP - TYPICAL

Ldc (DEVELOPMENT LENGTH IN COMPRESSION) IN mm
B32 = 960mm
B25 = 750mm
B20 = 600mm
B16 = 480mm
NOTE: 'H' min WILL BE BASED ON COLUMN REBAR'S Ldc

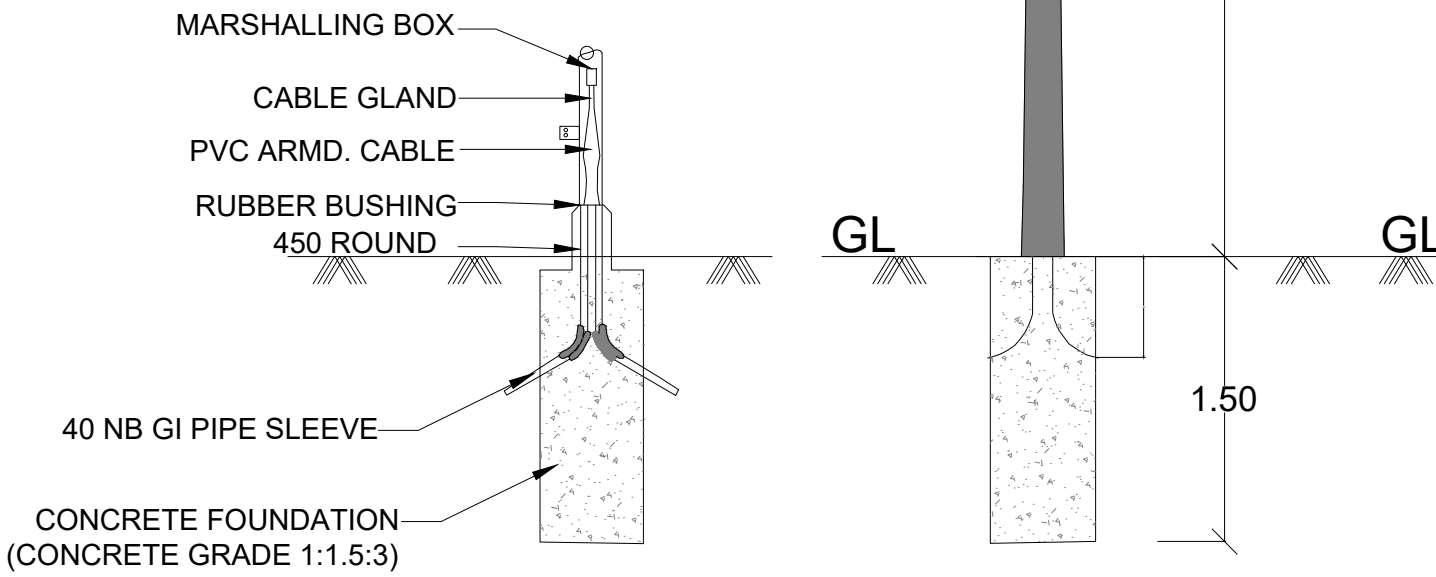
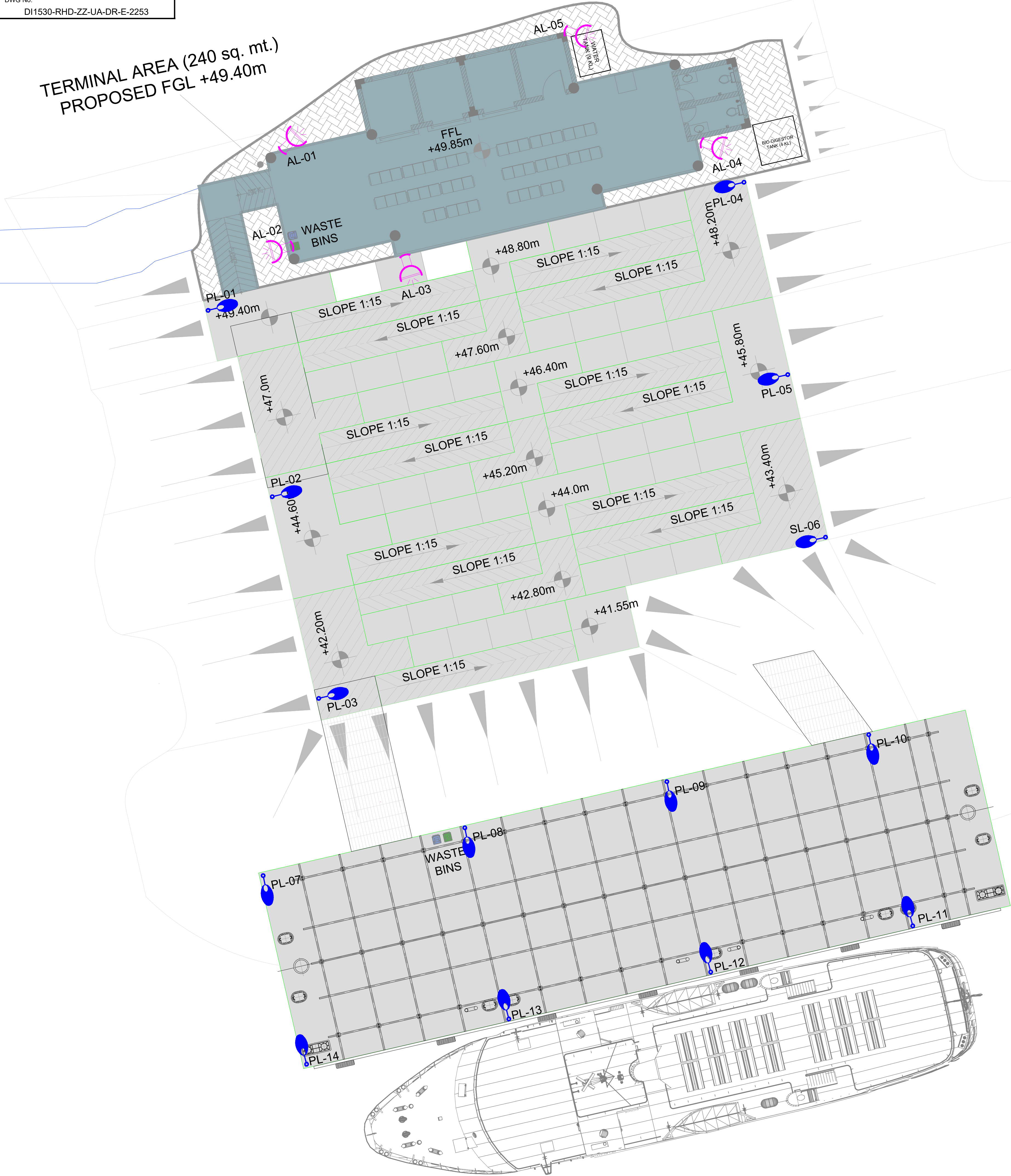
**NOT FOR
CONSTRUCTION**

CLIENT  Assam Inland Water Transport
Development Society (AIWTDS)

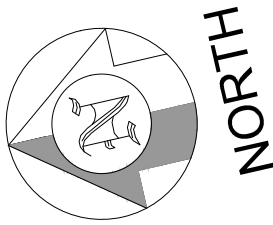
PROJECT	Assam Inland Water Transport Project (AIWTP)
ASSIGNMENT	Preparation of DPR along with Engineering Design, Drawings, Tender Documents for Construction of Modular Terminal at Ferry Services of NW-2 and NW-16 in Assam

DRAWN YSK	CHECKED RK	APPROVED AK	
DATE FEB' 2023	SCALE @A1	AS SHOWN REF.	
DRAWING No. DI1530-RHD-ZZ-UA-DR-S-2241		SUITABILITY A3	REVISION P01

TERMINAL AREA (240 sq. mt.)
PROPOSED FGL +49.40m



TYPICAL INSTALLATION OF
STREET LIGHT FIXTURE



- NOTES:-
- 40 DIA G.I. PIPE SLEEVES FOR LOOPING IN AND LOOPING OUT CABLE ARE PROVIDED. PROVIDED IN POLE FOUNDATION.
 - ALL THE CABLES SHALL BE LAID IN 750 MM BELOW GROUND WITH SAND BRICK PROTECTION AS PER IS.1255.
 - ALL LIGHTING FIXTURES SHALL BE SUPPLIED COMPLETE WITH LAMP, CONTROL GEAR & ALL ACCESSORIES.
 - ALL LIGHTING POLE SHALL BE EARTHED BY 8 SWG. G.I. WIRE BY LOOP IN OUT METHOD.
 - ALL CO-ORDINATES ARE IN METERS AND DIMENSION ARE IN MM. UNLESS OTHERWISE SPECIFIED.
 - CATALOGUE AND DATA SHEET OF LIGHTING FIXTURES SHALL BE SUBMITTED LATER.
 - THE LIGHTING POLES SHALL BE GALVANIZED WITH OCTAGONAL ANGULAR WITH RECTANGULAR BASE PLATE AND FOUNDATION BOLT ARRANGEMENT.
 - MINOR MODIFICATION IN THE LIGHTING LAYOUT MAY OCCUR SUBJECT TO THE SITE REQUIREMENT.

LEGENDS

SL.NO.	DESCRIPTION	SYMBOL
01	IP-66 PROTECTED LED STREET LIGHT, 60W FITTED ON 6.0 MTR. HIGH POLE	
02	IP-66 PROTECTED HIGH POWER LED FLOOD LIGHT, 120W MOUNTED ON BUILDING	

FOR TENDER
NOT FOR
CONSTRUCTION

P01	10/02/23	ISSUED FOR TENDER	AP	BB	AK
REV	DATE	DESCRIPTION	DWN	CHK	APP

REVISIONS

CLIENT



ASSAM INLAND WATER TRANSPORT
DEVELOPMENT SOCIETY (AIWTDS)

CONSULTANT



HaskoningDHV Consulting Private Limited
502-505, 5th Floor, Platinum Techno Park
Plot 17 & 18, Sector 30 A, Vashi
Navi Mumbai - 400 703, INDIA
Tel: +91 (0) 22 61365000
Email: info.india@rhdhv.com
www.royalhaskoningdhv.com

PROJECT

ASSAM INLAND WATER TRANSPORT PROJECT (AIWTP)

ASSIGNMENT

PREPARATION OF DPR ALONG WITH ENGINEERING
DESIGN, DRAWINGS, TENDER DOCUMENTS FOR
CONSTRUCTION OF MODULAR TERMINAL AT FERRY
SERVICES OF NW-2 AND NW-16 IN ASSAM

TITLE

OUTDOOR LIGHTING LAYOUT
UMANANDA

DRAWN	AP	CHECKED	BB	APPROVED	AK
-------	----	---------	----	----------	----

DATE	FEB 2023	SCALE	@A1	1:100	REF.
------	----------	-------	-----	-------	------

DRAWING No.	DI1530-RHD-ZZ-UA-DR-E-2253	SUITABILITY	A3	REVISION	P01
-------------	----------------------------	-------------	----	----------	-----

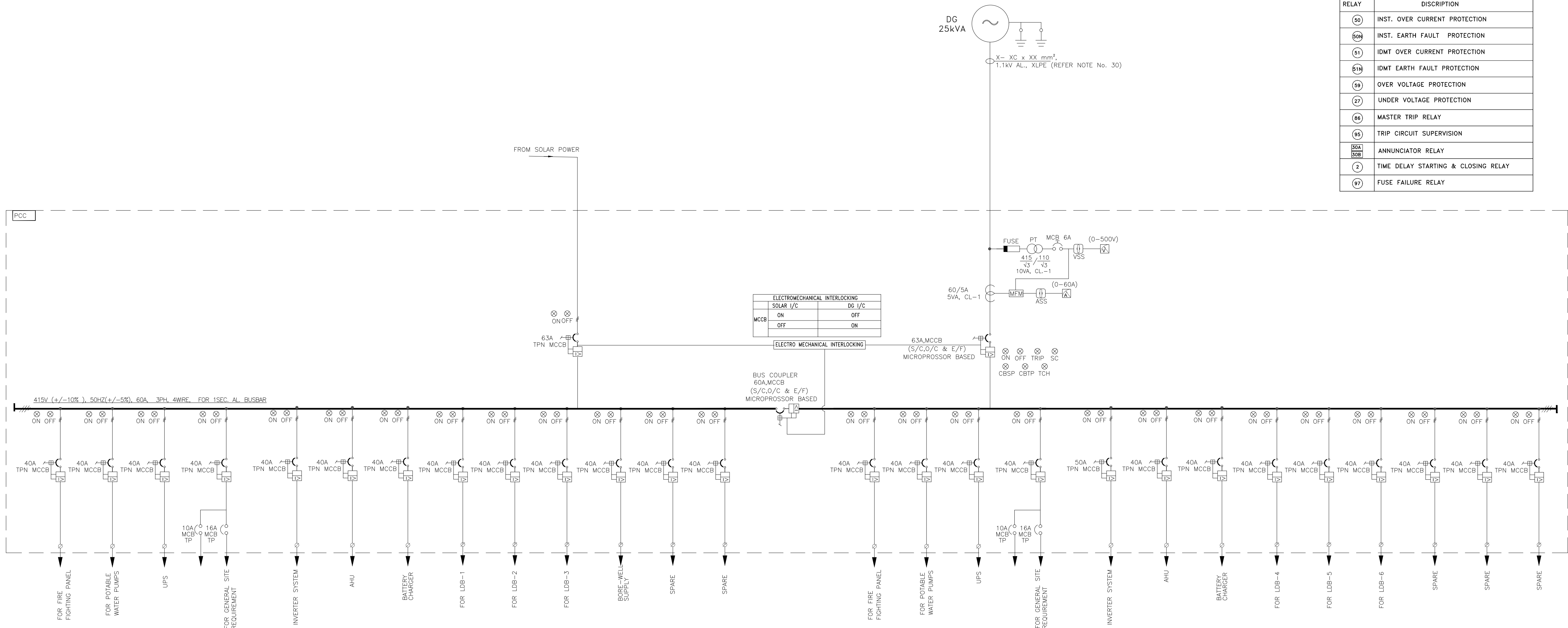
GENERAL NOTE –

1. ENCLOSURE SHALL BE IP54 ONLY.
2. ALL MOTOR STARTER SHALL BE AS PER MANUFACTURER TYPE-2 CO ORDINATION CHART.
3. ALL MOTOR FEEDER SHALL BE LPBS COMPATIBLE.
4. CONTROL SUPPLY SHALL BE 230V AC .
5. ALL MOTOR FEEDER CONTACTOR SHALL BE OF AC3 DUTY.
6. ALL MCCB SHALL BE Icu = 100% OF Ics.
7. CABLE SHALL BE BOTTOM/TOP ENTRY.
8. ALL MV PANEL BOARDS SHOULD HAVE FORM OF SEPERATION FORM 3B.
9. NEOPRINE GASKET WILL BE PROVIDED ON DOORS AND OPENING.
10. ALL DOORS AND OPENING SHALL BE EARTHED BY 1.5 S.Q. MM CU. WIRE.
11. EARTH BUS SHALL BE COPPER.
12. ALL INDICATION LAMP SHALL BE LED CLUSTER TYPE ONLY.
13. CABLE COMPARTMENT SHALL HAVE LED LAMP INTERLOCKING WITH DOOR, SPACE HEATER WITH THERMOSTAT.
14. ALL MPCB SHALL BE 'TP' TYPE ONLY.
15. ALL OUTGOING MCCB OF < IPUTO 250A SHALL BE 'TPN' TYPE WITH THERMAL MAGNETIC RELEASE AND ABOVE THAT MICROPROCESSOR BASED.
16. 100 kVAR SHALL BE SPLIT LINE (5:5:5:5:10:10:15:15:15 kVAR)
17. SUITABLE VFD AND INPUT CHOKE SHALL BE SELECTED FOR THE APPLICATION.
18. VFD SHALL BE OF CISIPWM WITH IGBT/GTO,EACH DRIVE MUST HAVE A SOFT STARTING FEATURE & BYPASS ARRANGEMENT FOR STAR DELTA STARTING OF MOTOR.
19. THE BUS BAR SHALL BE OF ELECTROLYTIC GRADE (E91E) ALUMINIUM AS PER IS SPECIFICATIONS (IS--5082). THE CURRENT DENSITY SHOULD NOT BE MORE THAN 0.8 A/MM2. NEUTRAL BUS BAR SHOULD BE RATED FOR 50% CAPACITY

20. PANEL SHALL BE CONFORMING TO IS 8623
21. POWER CONTACTOR USED IN APFC PANEL SHALL BE CAPACITOR DUTY i.e AC-4.
22. DESIGN AMBIENT TEMPERATURE SHALL BE CONSIDER AS 50°C FOR SELECTION OF ALL COMPONENTS .
23. ALL CAPACITORS SHALL BE HEAVY DUTY APP TYPE OF RATED VOLTAGE 480V & CAPACITORS SHOULD HAVE INBUILT DISCHARGE RESISTOR.
24. FOR APFC PANEL CONTROL VOLTAGE SHALL BE TAPPED FROM PHASE & NEUTRAL.
25. ALL MOTOR FEEDER CIRCUITS AND EQUIPMENT SHALL BE SO DESIGNED AND SELECTED TO OPERATE/CONTROL FROM LOCAL PLC & SCADA AT REMOTE LOCATION.
26. CABLE SIZE/TYPE OF VARIOUS FEEDERS SHALL BE FINALIZED DURING DETAILED ENGINEERING
27. IEEE-519 STANDARD CODE TO BE CONSIDERED FOR HARMONICS MITIGATION AND SUBSEQUENTLY THE REACTORS SHALL BE RATED ACCORDINGLY.
28. THE CURRENT RATINGS OF CIRCUIT BREAKERS HAVE BEEN FINALIZED AS PER THE LATEST INDIAN STANDARD CODES.
29. LT PANEL SHALL BE MANUFACTURED, INSTALLED & COMMISSIONED AS PER THE TENDER DOCUMENT.
30. THE LT PANEL SHALL BE METAL ENCLOSED, DUST PROOF, MODULAR TYPE, SUITABLE FOR INDOOR FLOOR MOUNTING.
31. TOTAL HEIGHT OF SWITCHGEAR SHALL NOT EXCEED 2300 MM. HEIGHT OF SWITCHES, PUSH BUTTONS SHALL NOT EXCEED 1800 MM AND SHALL NOT BE LESS THAN 300 MM FROM FINISHED FLOOR LEVEL
32. THE LT PANEL SHALL BE SINGLE/DOUBLE FRONT EXECUTION AND FIXED TYPE
33. THE LT PANEL SHALL HAVE DESIGNATION LABELS BOTH ON FRONT AND REAR SIDE
34. THE LT PANEL SHALL HAVE THICKNESS OF CRCA SHEET THE PANEL DOORS SHALL BE 2.5MM OR OVER REMOVABLE UNDRILLED GLAND PLATES SHALL BE PROVIDED HAVING 3MM THICKNESS AND FOR THE REST SHALL BE 2.0MM OR OVER
35. THE LT PANEL SHALL FOLLOW IS 5572 /IEC 60079, STANDARD SPECIFICATION AND STANDARD PRACTICE FOR INSTALLATION IN HAZARDOUS AREA.
36. FOR LT PANEL, PHASE TO PHASE MINIMUM CLEARANCE: 25.4MM AND PHASE TO NEUTRAL MINIMUM CLEARANCE:19.4MM.

LEGENDS—RELAYS

RELAY	DISCRPTION
50	INST. OVER CURRENT PROTECTION
50N	INST. EARTH FAULT PROTECTION
51	IDMT OVER CURRENT PROTECTION
51N	IDMT EARTH FAULT PROTECTION
59	OVER VOLTAGE PROTECTION
27	UNDER VOLTAGE PROTECTION
86	MASTER TRIP RELAY
95	TRIP CIRCUIT SUPERVISION
50A 50B	ANNUNCIATOR RELAY
2	TIME DELAY STARTING & CLOSING RELAY
97	FUSE FAILURE RELAY



FOR TENDER

**NOT FOR
CONSTRUCTION**

P01	10/02/23	ISSUED FOR TENDER	AP	IP	AK
REV	DATE	DESCRIPTION	DWN	CHK	APP

REVISIONS



ASSAM INLAND WATER TRANSPORT
DEVELOPMENT SOCIETY (AIWTDS)

CONSULTANT



HaskoningDHV Consulting Private Limited
502-505, 5th Floor, Platinum Techno Park
Plot 17 & 18, Sector 30 A, Vashi
Navi Mumbai - 400 703, INDIA
Tel +91 (0) 22 61395000
Email info.india@rhdhv.com
www.royalhaskoningdhv.com

PROJECT

ASSAM INLAND WATER TRANSPORT PROJECT (AIWTP)

ASSIGNMENT

PREPARATION OF DPR ALONG WITH ENGINEERING
DESIGN, DRAWINGS, TENDER DOCUMENTS FOR
CONSTRUCTION OF MODULAR TERMINAL AT FERRY
SERVICES OF NW-2 AND NW-16 IN ASSAM

TITLE

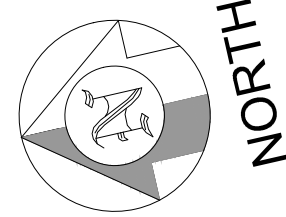
SINGLE LINE DIAGRAM FOR OVERALL
POWER DISTRIBUTION
UMANANDA

DRAWN	AP	CHECKED	IP	APPROVED	AK
DATE	FEB 2023	SCALE	NTS	REF.	
		@A1			

DRAWING No.	SUITABILITY	REVISION
-------------	-------------	----------

DI1530-RHD-ZZ-UA-DR-E-2254

A3



- NOTES:-
1. ALL DIMENSIONS ARE IN METERS.
 2. FINISHED GROUND LEVEL HAS BEEN ASSUMED AT 49.38 M.
 3. SLOPE FOR SEWER NETWORK IS 1:250.
 4. FOR BIO-DIGESTER DRAWING REFER DRAWING NO. DI1530-RHD-ZZ-UA-DR-M-2255.

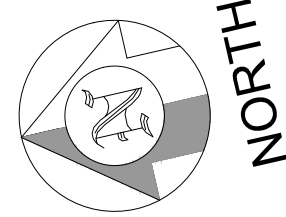
LEGEND:-		
SL.NO.	DESCRIPTION	SYMBOL
1.	GREY WATER NETWORK - PROPOSED	
2.	SEWER NETWORK - PROPOSED	
2.	GULLY TRAP	
2.	INSPECTION CHAMBER	

FGL	- FINISHED GROUND LEVEL
GL	- GROUND LEVEL
IL	- INVERT LEVEL



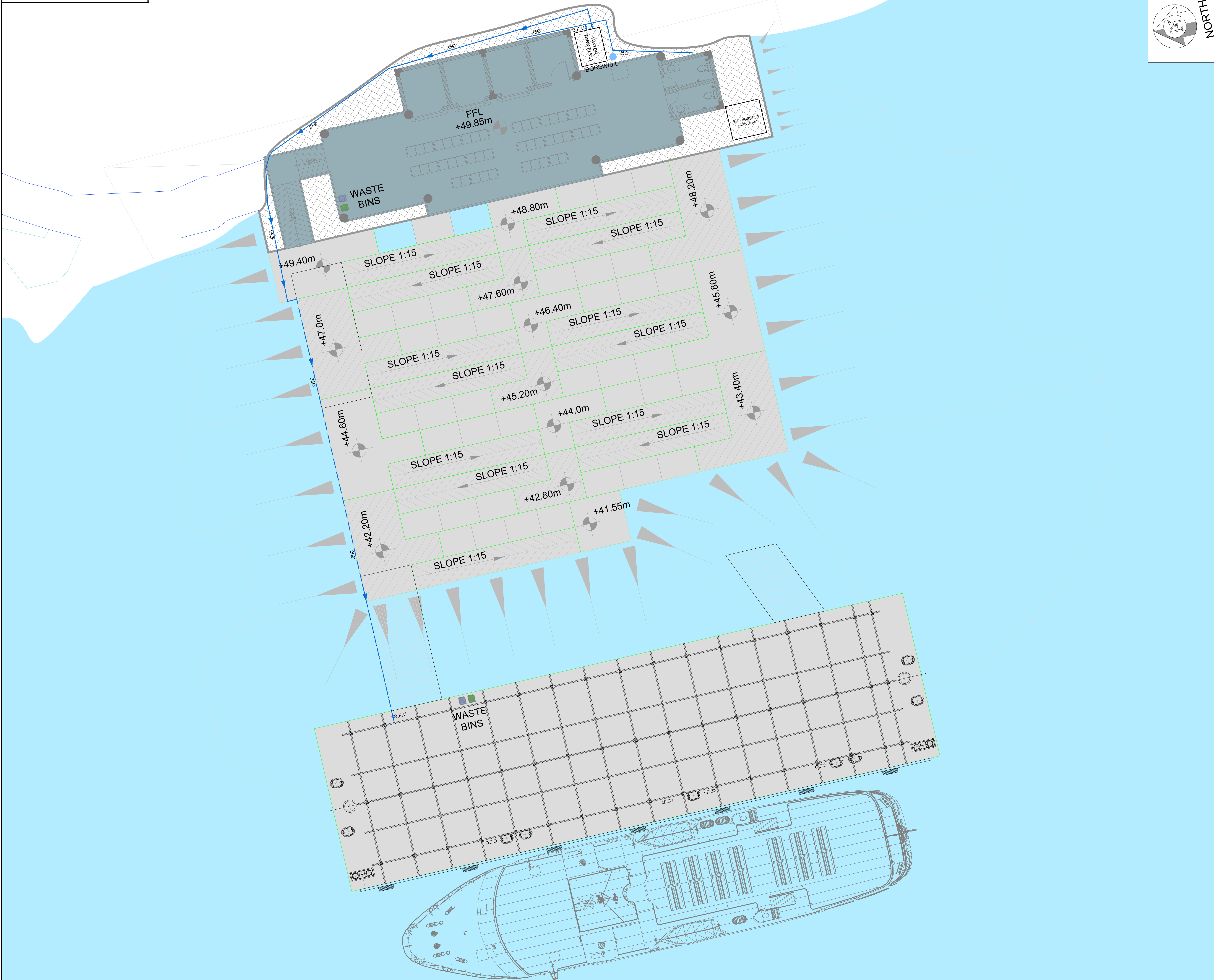
FOR TENDER
NOT FOR
CONSTRUCTION

P01	10/02/23	ISSUED FOR TENDER	AP	BB	AK
REV	DATE	DESCRIPTION	DWN	CHK	APP
REVISIONS					
CLIENT					
ASSAM INLAND WATER TRANSPORT DEVELOPMENT SOCIETY (AIWTDS)					
CONSULTANT					
Royal HaskoningDHV Enhancing Society Together HaskoningDHV Consulting Private Limited 502-505, 5th Floor, Platinum Techno Park Plot 17 & 18, Sector 30 A, Vashi Navi Mumbai - 400 703, INDIA Tel: +91 (0) 22 61365000 Email: info.india@rhdhv.com www.royalhaskoningdhv.com					
PROJECT					
ASSAM INLAND WATER TRANSPORT PROJECT (AIWTP)					
ASSIGNMENT					
PREPARATION OF DPR ALONG WITH ENGINEERING DESIGN, DRAWINGS, TENDER DOCUMENTS FOR CONSTRUCTION OF MODULAR TERMINAL AT FERRY SERVICES OF NW-2 AND NW-16 IN ASSAM					
TITLE					
LAYOUT PLAN OF SEWER NETWORK UMANANDA					
DRAWN	AP	CHECKED	BB	APPROVED	AK
DATE	FEB 2023	SCALE	1:5	REF.	
DRAWING No.	DI1530-RHD-ZZ-UA-DR-M-2251	SUITABILITY	A3	REVISION	P01



- NOTES:-
1. ALL DIMENSIONS ARE IN METERS.
 2. FINISHED GROUND LEVEL HAS BEEN ASSUMED AT 49.38 M.

LEGEND:-		
SL.NO.	DESCRIPTION	SYMBOL
1.	POTABLE WATER PIPE (GI PIPE)	
2.	POLYETHYLENE ALUMINIUM PIPE	
3.	FLOW DIRECTION	
4.	BUTTERFLY VALVE	
5.	BOREWELL	

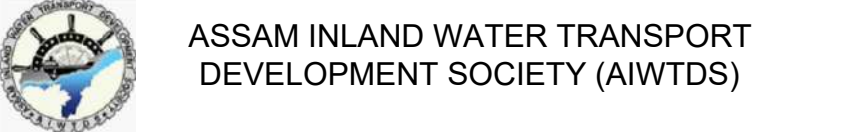


FOR TENDER
NOT FOR
CONSTRUCTION

P01	10/02/23	ISSUED FOR TENDER	AP	BB	AK
REV	DATE	DESCRIPTION	DWN	CHK	APP

REVISIONS

CLIENT



CONSULTANT

Royal HaskoningDHV
Enhancing Society Together

HaskoningDHV Consulting Private Limited
502-505, 5th Floor, Platinum Techno Park
Plot 17 & 18, Sector 90 A, Vashi
Navi Mumbai - 400 703, INDIA
Tel: +91 (0) 22 61365000
Email: info.india@rhdhv.com
www.royalhaskoningdhv.com

PROJECT

ASSAM INLAND WATER TRANSPORT PROJECT (AIWTP)

ASSIGNMENT

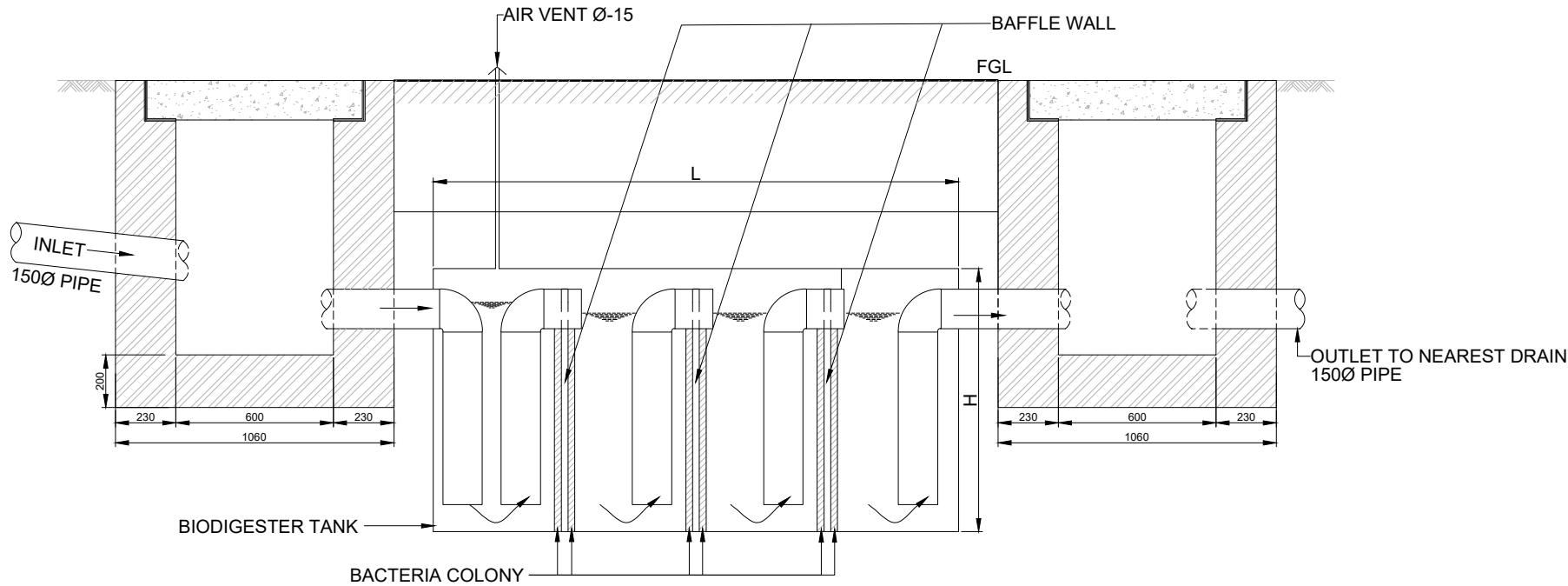
PREPARATION OF DPR ALONG WITH ENGINEERING DESIGN, DRAWINGS, TENDER DOCUMENTS FOR CONSTRUCTION OF MODULAR TERMINAL AT FERRY SERVICES OF NW-2 AND NW-16 IN ASSAM

TITLE

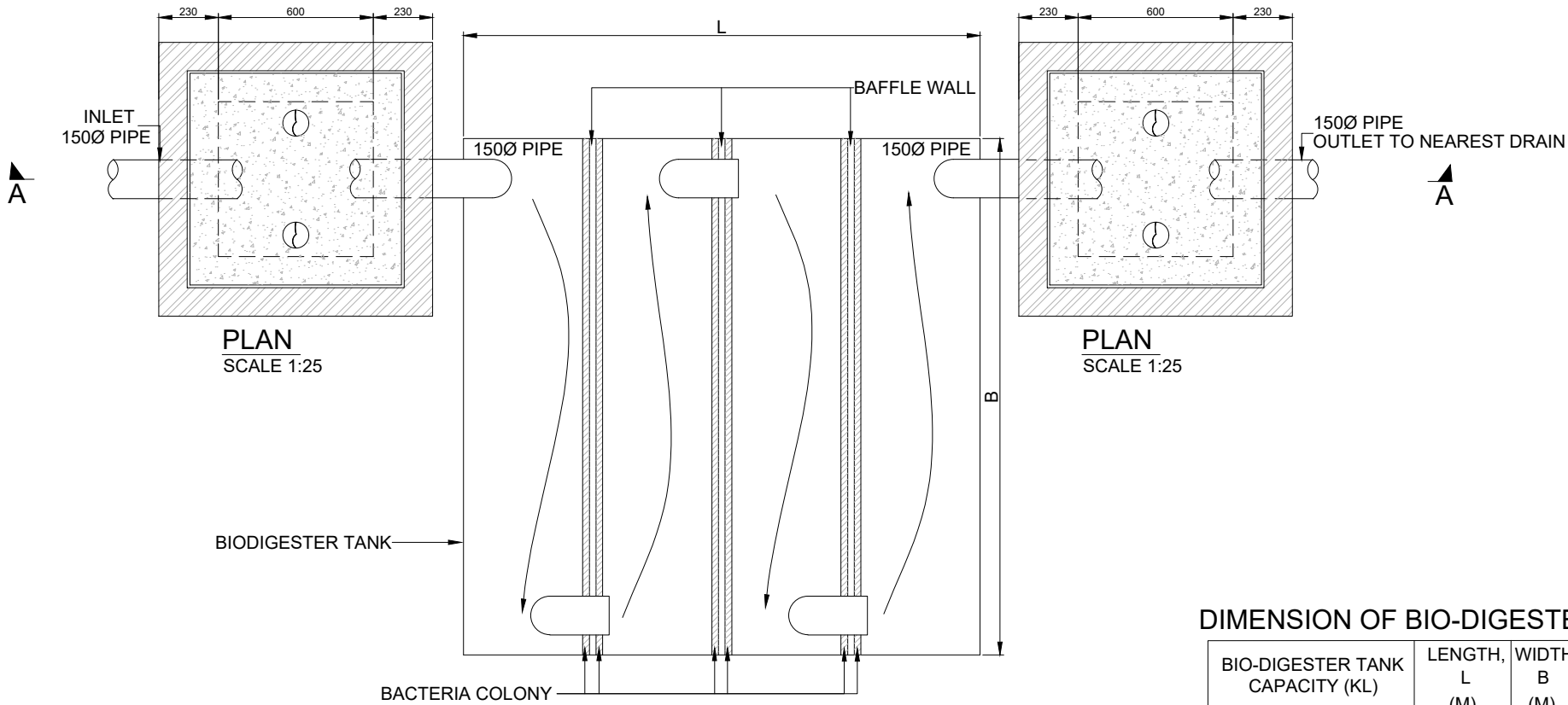
LAYOUT PLAN OF POTABLE WATER NETWORK UMANANDA

DRAWN	AP	CHECKED	BB	APPROVED	AK
DATE	FEB 2023	SCALE @A1	1:100	REF.	

DRAWING No.	SUITABILITY	REVISION
DI1530-RHD-ZZ-UA-DR-M-2252	A3	P01



PROFILE VIEW



PLAN VIEW
BIODIGESTER TANK

DIMENSION OF BIO-DIGESTER TANK

BIODIGESTER TANK CAPACITY (KL)	LENGTH, L (M)	WIDTH, B (M)	HEIGHT, H (M)
4	2	2	1
5	2.5	2	1
12	4	2	1.5

- NOTES:
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
 - ALL LEVELS ARE IN METRES RELATIVE TO MEAN SEA LEVEL (MSL)
 - ALL BACKFILL AND EMBEDMENT SHALL BE COMPACTED TO 95% OF PROCTOR DENSITY AS PER SPECIFICATION.
 - STRUCTURE SHALL BE FOUNDED ON FIRM GROUND. ANY LOOSE FILL UNDERNEATH STRUCTURE SHALL BE REPLACED BY P.C.C BEFORE INSTALLATION OF STRUCTURE.
 - ALL DETAILS/ DIMENSIONS ARE INDICATIVE AND WILL BE CONFIRMED BY THE CONTRACTOR TO OBTAIN APPROVAL FROM THE ENGINEER.
 - FOR SEWERAGE NETWORK REFER DRAWING NO. DI1530-RHD-ZZ-UA-DR-M-2251.

ABBREVIATIONS :-

- FGL - FINISH GROUND LEVEL
SFRC - STEEL FIBER REINFORCED COVER

FOR TENDER
NOT FOR
CONSTRUCTION

P01	10/02/23	ISSUED FOR TENDER	AP	BB	AK
REV	DATE	DESCRIPTION	DWN	CHK	APP
REVISIONS					
CLIENT					
 ASSAM INLAND WATER TRANSPORT DEVELOPMENT SOCIETY (AIWTDS)					
CONSULTANT					
 4th Floor, Green Building, Tower B Sector 35, Noida 201 301, Uttar Pradesh INDIA Phone: +91 120 4001000 Fax: +91 120 4001001 www.royalhaskoningdhv.com					
PROJECT					
ASSAM INLAND WATER TRANSPORT PROJECT (AIWTP)					
ASSIGNMENT					
PREPARATION OF DPR ALONG WITH ENGINEERING DESIGN, DRAWINGS, TENDER DOCUMENTS FOR CONSTRUCTION OF MODULAR TERMINAL AT FERRY SERVICES OF NW-2 AND NW-16 IN ASSAM					
TITLE					
STANDARD DRAWING OF SEWER MANHOLE CHAMBER AND BIO-DIGESTER TANK UMANANDA					
DRAWN	AP	CHECKED	BB	APPROVED	AK
DATE	FEB 2023	SCALE @A3	1:25	REF.	
DRAWING No.	DI1530-RHD-ZZ-UA-DR-M-2255	SUITABILITY	A3	REVISION	P01



1. ALL DIMENSIONS ARE IN MILLIMETER UNLESS NOTED OTHERWISE.
2. FGL SHALL BE MINIMUM 1 M ABOVE HFL.
3. ANY EXTRA CUTTING OF SOIL AT THE BOTTOM SHALL BE BACK FILLED AND LEVELED WITH PCC ONLY.
4. EMBEDMENT MATERIAL SHALL CONFIRM TO IS 13916:1994. ALL BACKFILL AND EMBEDMENT SHALL BE COMPACTED TO 95% OF PROCTOR DENSITY.
5. MINIMUM GRADE OF PCC SHALL BE M10.
6. MINIMUM GRADE OF RCC SHALL BE M25.
7. REINFORCEMENT GRADE OF FE-500D STRENGTH DEFORM BAR SHALL BE USED FOR ALL THE R.C.C WORKS.

FGL - FINISHED GROUND LEVEL
RCC - REINFORCED CEMENT CONCRETE
PCC - PLAIN CEMENT CONCRETE
PB - PLINTH BEAM

**NOT FOR
CONSTRUCTION**

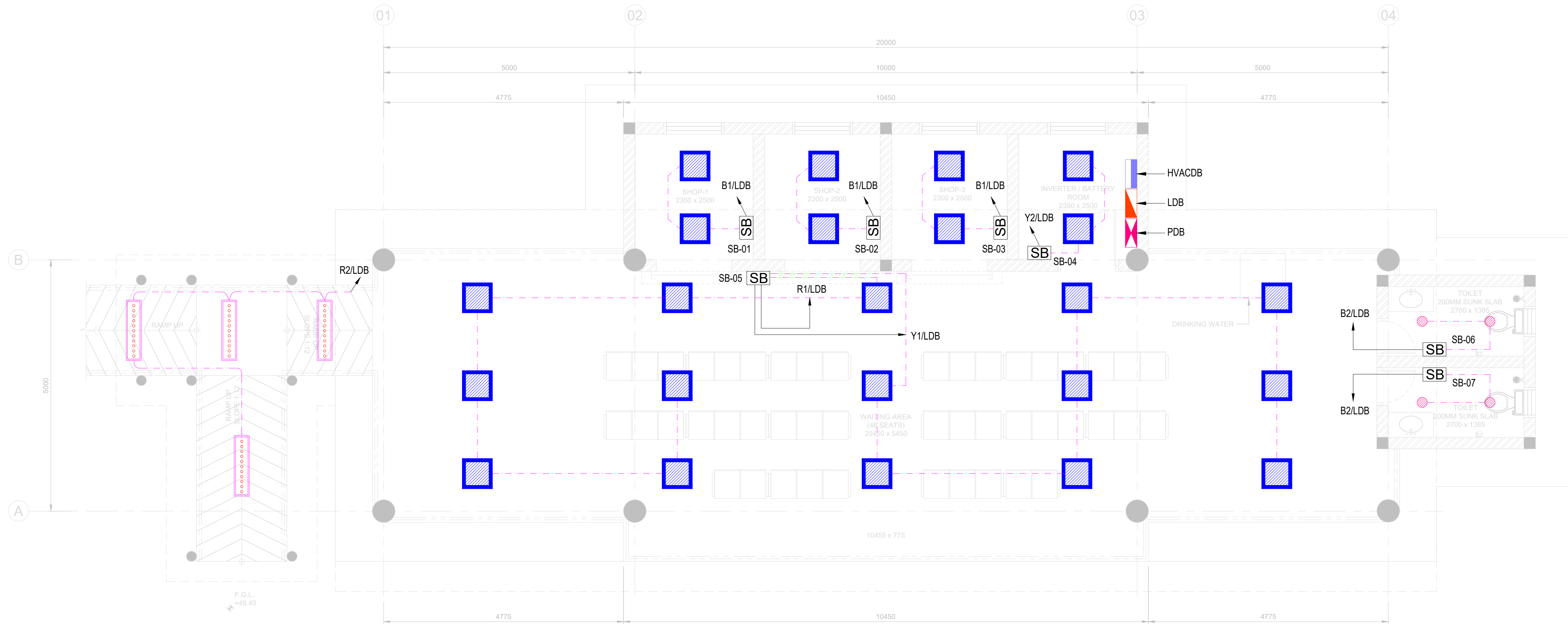
REVISIONS ASSAM INLAND WATER TRANSPORT

PROJECT	
---------	--

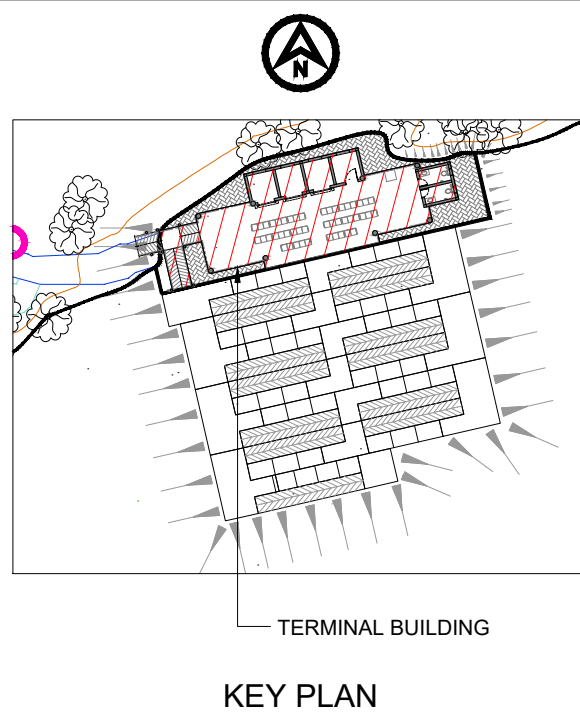
ASSIGNMENT

TITLE

DRAWING No.	SUITABILITY	REVISION
-------------	-------------	----------



GROUND FLOOR PLAN
SCALE 1:50



LEGEND:

- RECESS PANEL LIGHT
- DOWN LIGHTER
- 38W LED BATTEN
- LIGHT CONTROL SWITCHBOARD
- POWER DISTRIBUTION BOARD
- LIGHTING DISTRIBUTION BOARD
- HVAC DB
- CONTROL WIRE

FOR TENDER
NOT FOR
CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	PPP	BAP	RVC
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



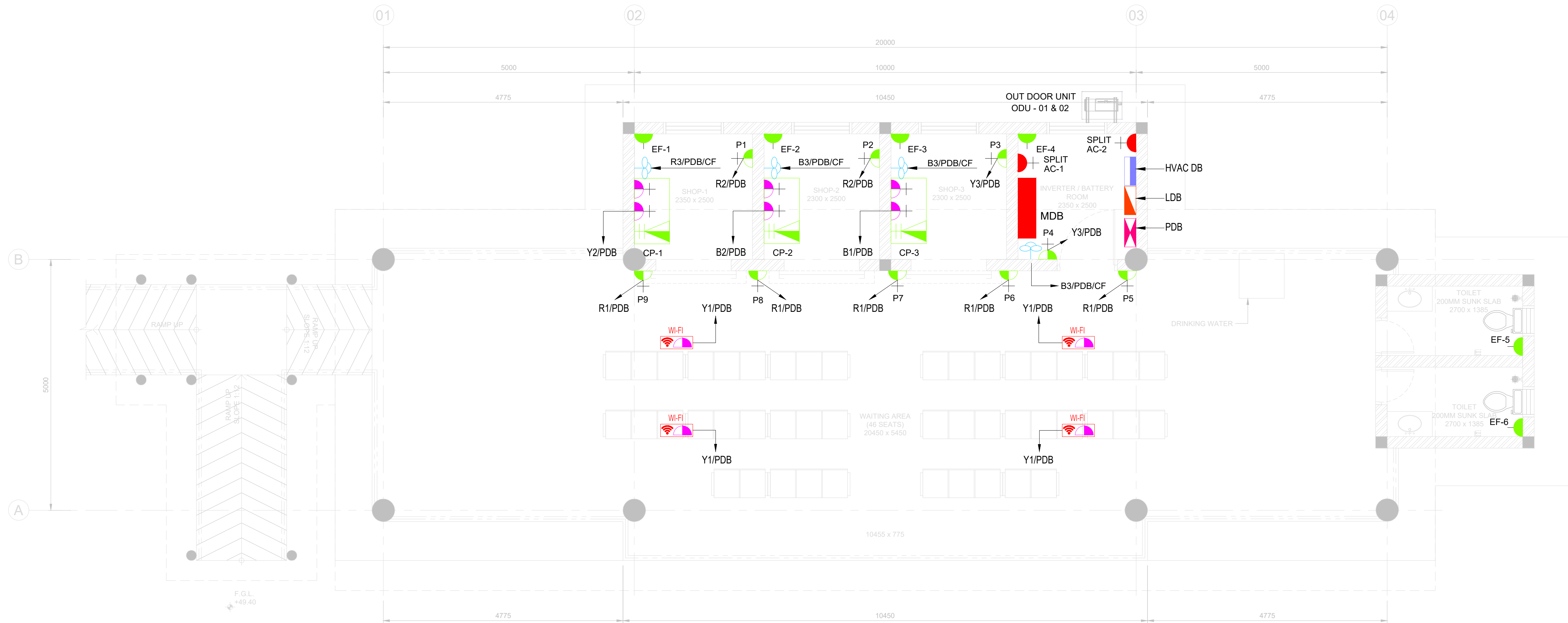
CONSULTANT
Royal HaskoningDHV
Enhancing Society Together

PROJECT
Assam Inland Water Transport Project (AIWTP)

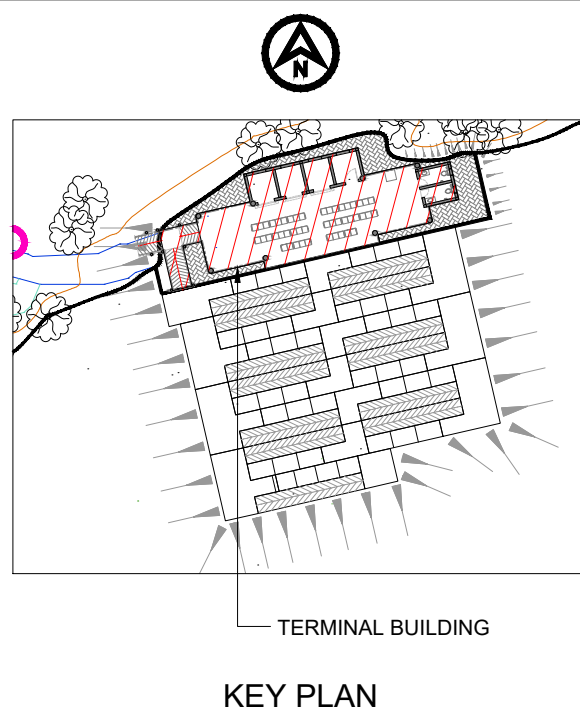
ASSIGNMENT
Preparation of DPR along with Engineering Design,
Drawings, Tender Documents for Construction of Modular
Terminal at Ferry Services of NW-2 and NW-16 in Assam

TITLE
**CENTER CLUSTER
(UMANANDA TEMPLE GHAT)
GROUND FLOOR
LIGHTING LAYOUT**

DRAWN	SH	CHECKED	BAP	APPROVED	RVC
DATE	FEB 2023	SCALE	AS SHOWN	REF.	
DRAWING No.	DI1530-RHD-ZZ-UA-DR-E-2276	SUITABILITY	A3	REVISION	P01



GROUND FLOOR PLAN
SCALE 1:50

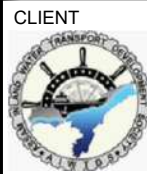


- LEGEND:
- EXHAUST FAN POWER SOCKET OUTLET
 - 6 A/16 A POWER SOCKET
 - SPLIT AC POWER SOCKET
 - DUPLEX OUTLET (1-port TEL + 1 port DATA)
2x6A/16A, SOCKET OUTLET
 - POWER DISTRIBUTION BOARD
 - LIGHTING DISTRIBUTION BOARD
 - HVAC DB
 - MDB
 - WIFI POINT (1 PORT DATA + 1X6A/16A, SOCKET OUTLET)
 - ELECTRICAL POWER CKT

FOR TENDER
NOT FOR
CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	PPP	BAP	RVC
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT
 Assam Inland Water Transport
Society (AIWTDS)

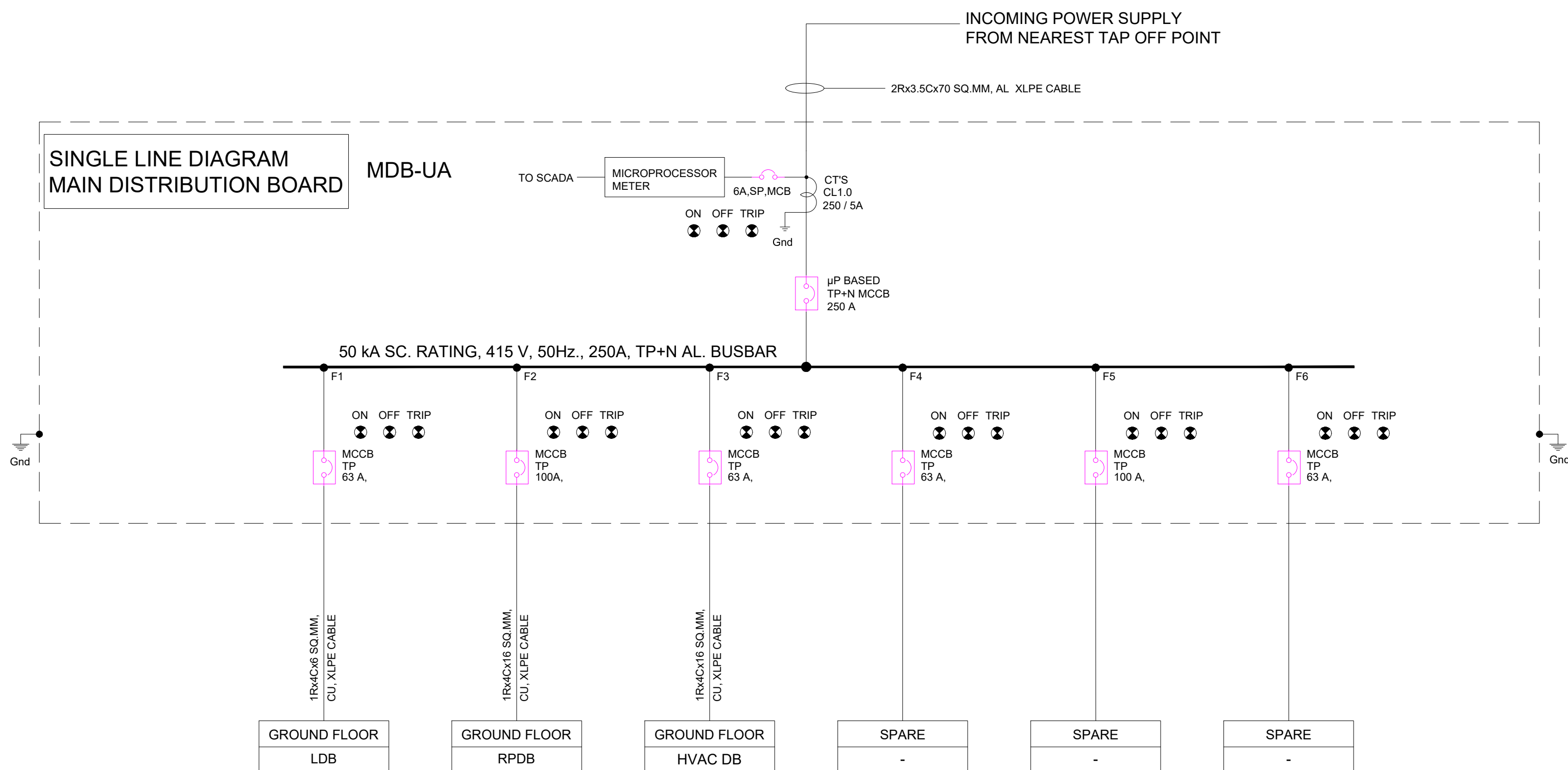
CONSULTANT
 HaskoningDHV Consulting Private Limited
502-505, 5th Floor, Platinum Techno Park
Plot 17 & 18, Sector 50 A, Vashi
New Mumbai - 400 703, INDIA
Tel: +91 (0) 22 61385000
Email: info.india@haskoningdhv.com
www.royalhaskoningdhv.com

PROJECT
Assam Inland Water Transport Project (AIWTP)

ASSIGNMENT
Preparation of DPR along with Engineering Design,
Drawings, Tender Documents for Construction of Modular
Terminal at Ferry Services of NW-2 and NW-16 in Assam

TITLE
CENTER CLUSTER
(UMANANDA TEMPLE GHAT)
GROUND FLOOR
SMALL POWER LAYOUT

DRAWN	SH	CHECKED	BAP	APPROVED	RVC
DATE	FEB 2023	SCALE	AS SHOWN	REF.	
DRAWING No.	DI1530-RHD-ZZ-UA-DR-E-2277	SUITABILITY	REVISION		
		A3	P01		



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS IN METERS .
UNLESS NOTED OTHERWISE.

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	MCB CIRCUIT BREAKER
	CURRENT TRANSFORMER
	INDICATION LAMPS
	FIXED TYPE MCCB BREAKER
	EARTHING OR GROUND

FOR TENDER

NOT FOR
CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	PPP	BAP	RVC
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



Assam Inland Water Transport
Development Society (AIWTDS)

CONSULTANT



HaskoningDHV Consulting Private Limited
502-505, 5th Floor, Platinum Techno Park,
Plot 17 & 18, Sector 50 A, Vashi,
New Mumbai - 400 703, INDIA
Tel: +91 (0) 22 61385000
Email: info.india@haskoningdhv.com
www.royalhaskoningdhv.com

PROJECT

Assam Inland Water Transport Project (AIWTP)

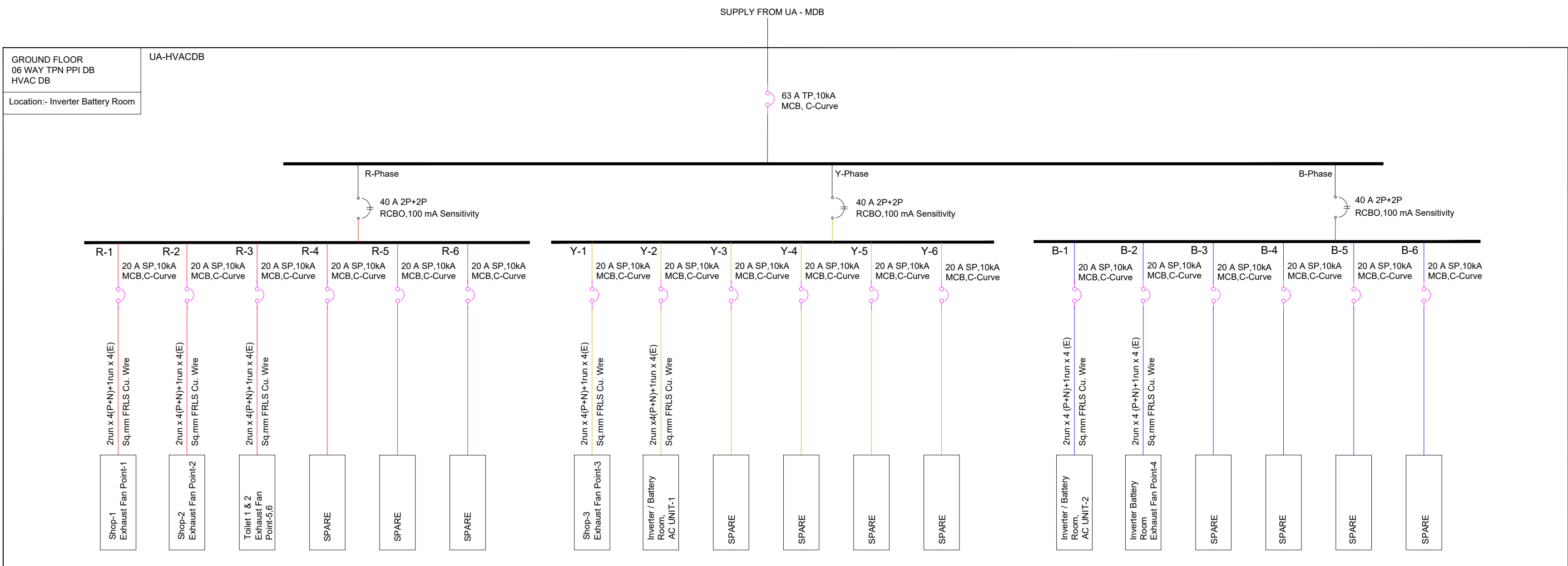
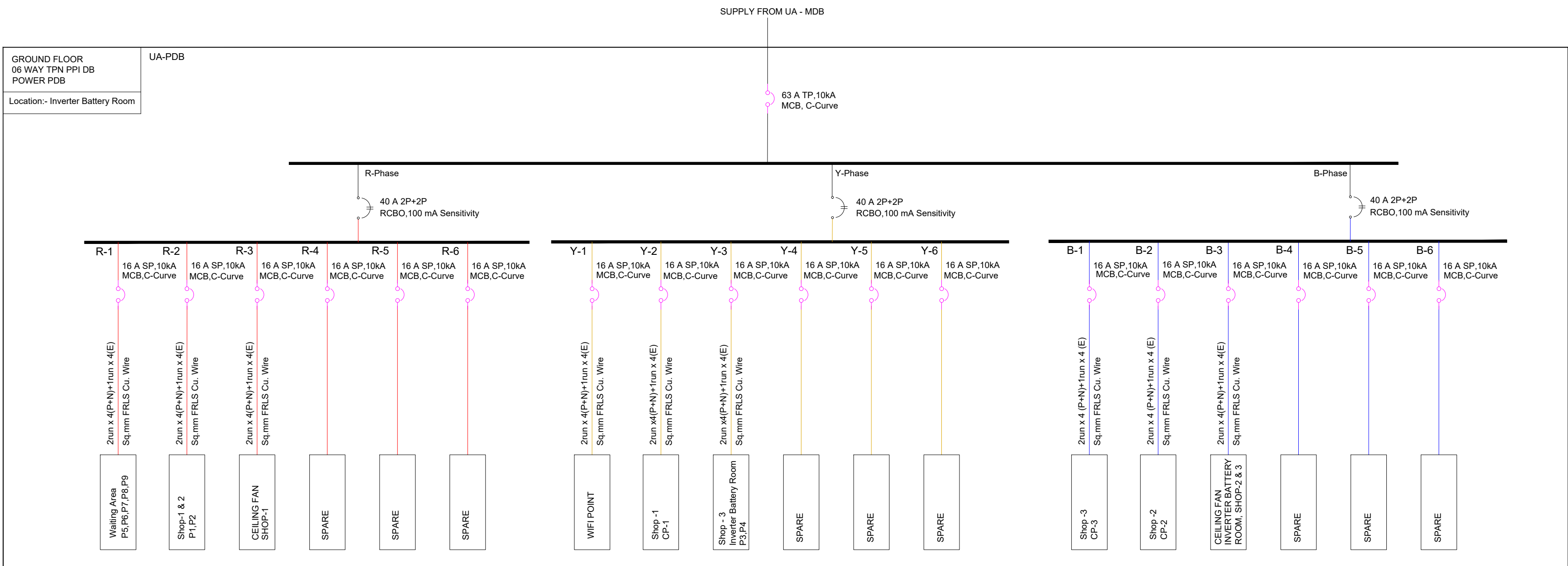
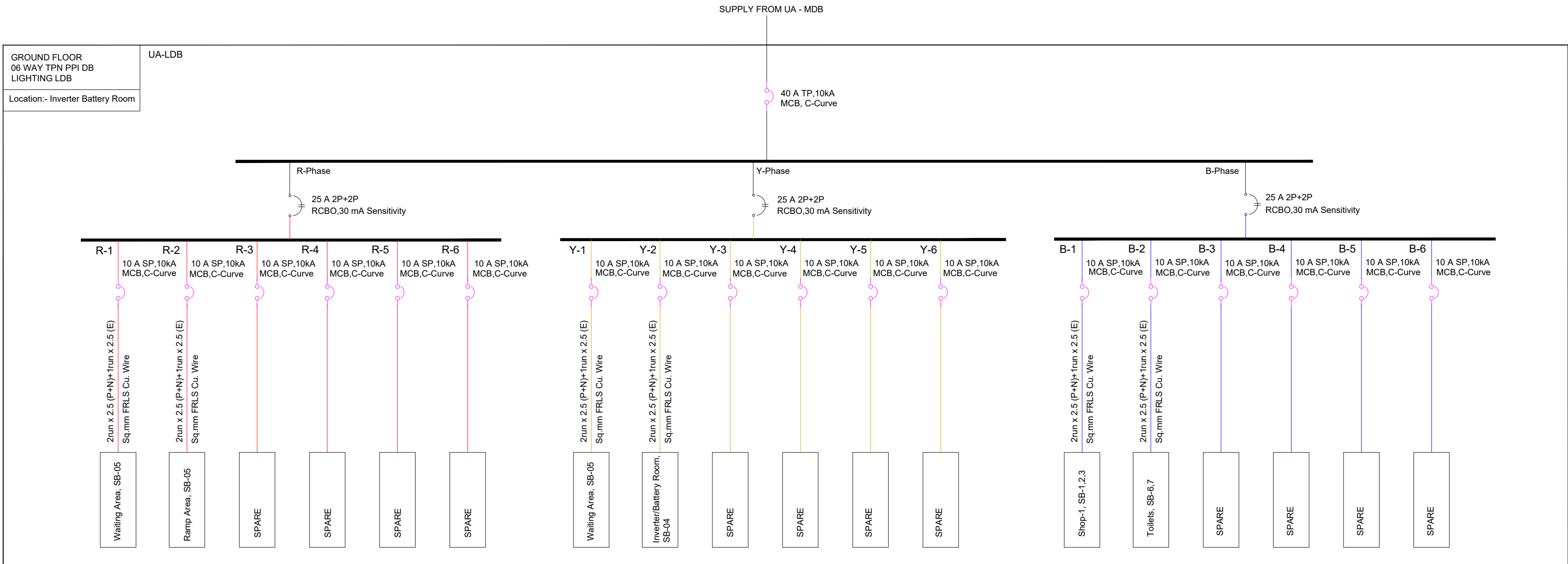
ASSIGNMENT

Preparation of DPR along with Engineering Design,
Drawings, Tender Documents for Construction of Modular
Terminal at Ferry Services of NW-2 and NW-16 in Assam

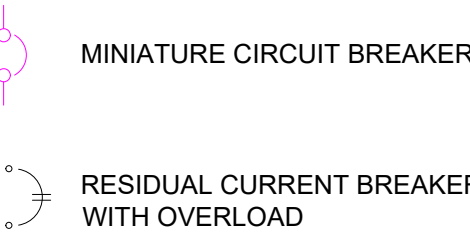
TITLE

CENTER CLUSTER
(UMANANDA TEMPLE GHAT)
MAIN SINGLE LINE DIAGRAM

DRAWN	SSM	CHECKED	BAP	APPROVED	RVC
DATE	FEB 2023	SCALE	AS SHOWN	REF.	-
	@A1				
DRAWING No.	DI1530-RHD-ZZ-UA-DR-E-2278	SUITABILITY	A3	REVISION	P01

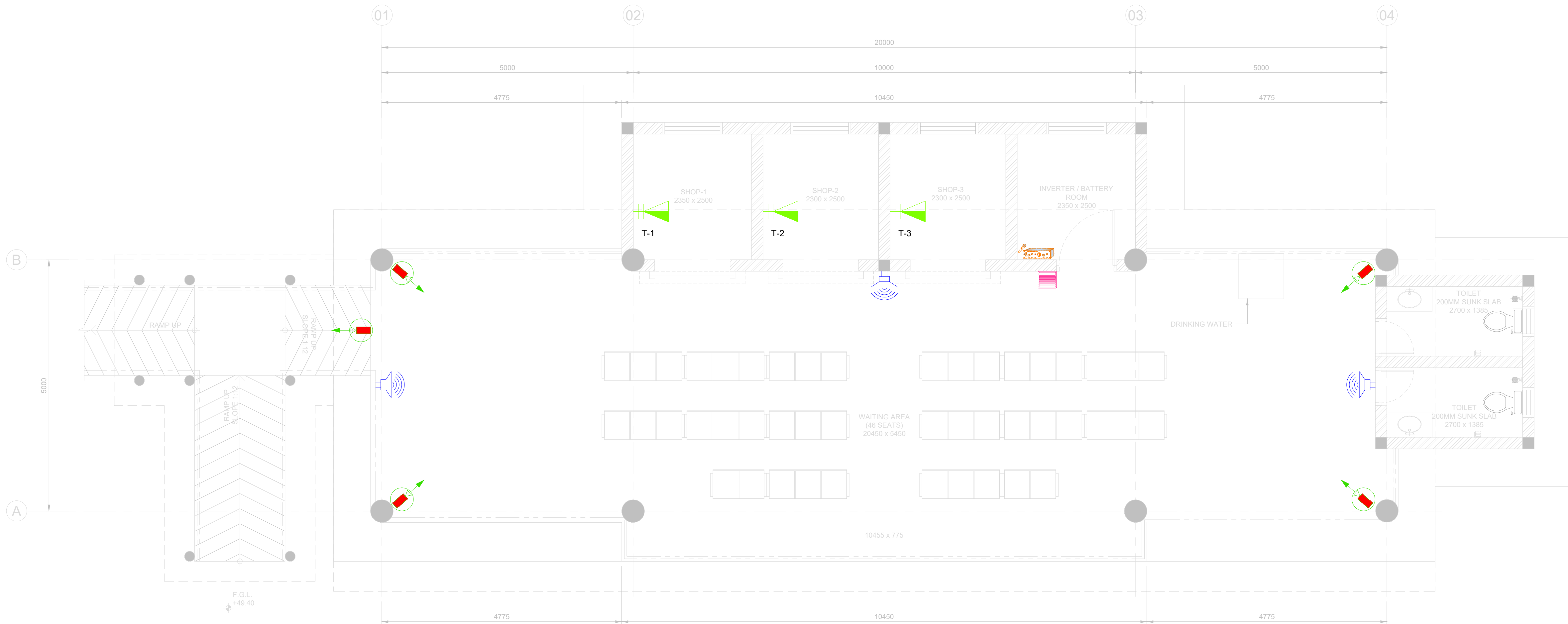


LEGEND:

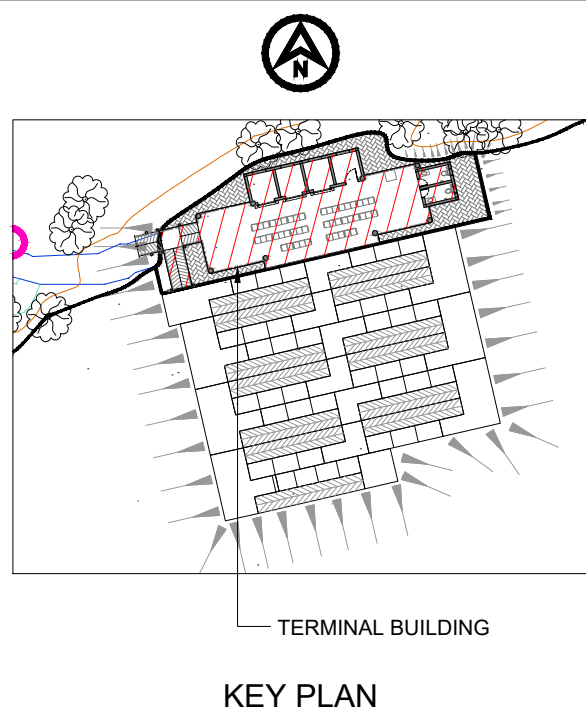


FOR TENDER
NOT FOR
CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	PPP	BAP	RVC
REV	DATE	DESCRIPTION	BY	CHK	APP
REVISIONS					
CLIENT					
 Assam Inland Water Transport Development Society (AIWTDS)					
CONSULTANT					
 HaskoningDHV Consulting Private Limited 502, 505, 5th Floor, Platinum Techno Park, Plot 17 & 18, Sector 50 A, Vashi New Mumbai - 400 703, INDIA Tel: +91 (0) 22 61385000 Email: info.india@hnhv.com www.royalhaskoningdhv.com					
PROJECT					
Assam Inland Water Transport Project (AIWTP)					
ASSIGNMENT					
Preparation of DPR along with Engineering Design, Drawings, Tender Documents for Construction of Modular Terminal at Ferry Services of NW-2 and NW-16 in Assam					
TITLE					
CENTRAL SIDE CLUSTER (UMANANDA TEMPLE GHAT) GROUND FLOOR LIGHTING & POWER SINGLE LINE DIAGRAM					
DRAWN	PPP	CHECKED	BAP	APPROVED	RVC
DATE	FEB 2023	SCALE	@A1	AS SHOWN	REF.
DRAWING No.				SUITABILITY	REVISION
DI1530-RHD-ZZ-UA-DR-E-2279				A3	P01



GROUND FLOOR PLAN
SCALE 1:50



- LEGEND:
- FIXED CAMERA
 - PTZ CAMERA
 - SPEAKER
 - CARD READER
 - POWER AMPLIFIER
 - 1-Port TELEPHONE OUTLET

FOR TENDER
NOT FOR
CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	PPP	BAP	RVC
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



PROJECT

Assam Inland Water Transport Project (AIWTP)

ASSIGNMENT

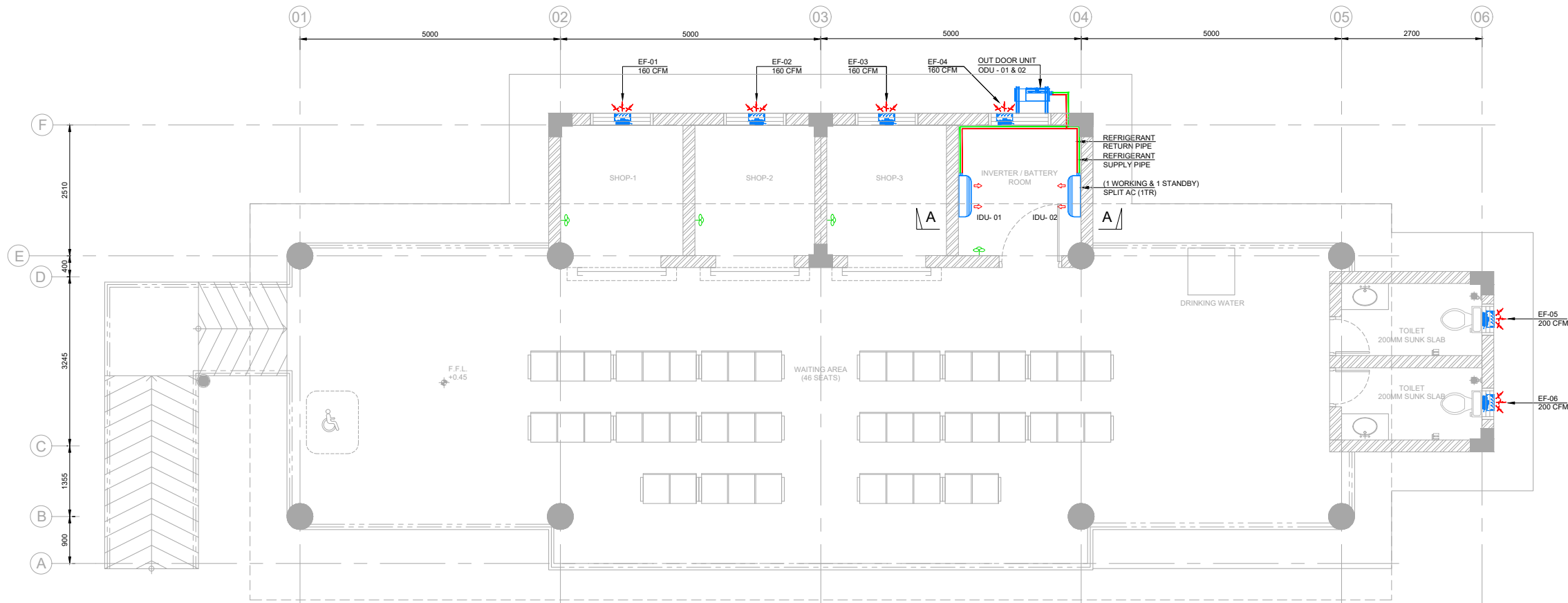
Preparation of DPR along with Engineering Design, Drawings, Tender Documents for Construction of Modular Terminal at Ferry Services of NW-2 and NW-16 in Assam

TITLE

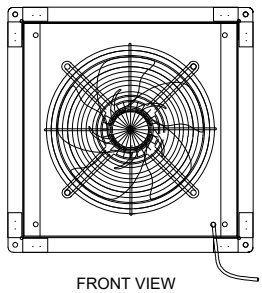
CENTRAL CLUSTER
(UMANANDA TEMPLE GHAT)
SECURITY & COMMS.

DRAWN	SH	CHECKED	BAP	APPROVED	RVC
DATE	FEB 2023	SCALE	AS SHOWN	REF.	

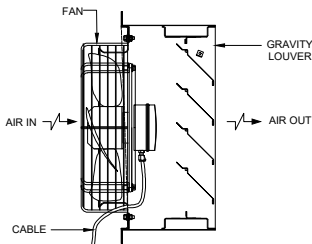
DRAWING No.	SUITABILITY	REVISION
DI1530-RHD-ZZ-UA-DR-N-2280	A3	P01



GROUND FLOOR PLAN
SCALE 1:50

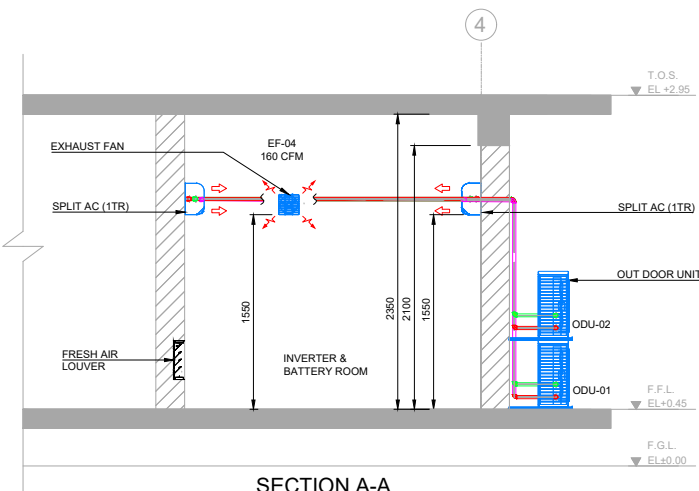


FRONT VIEW



SIDE VIEW

TYPICAL FAN DETAILS
SCALE 1:10



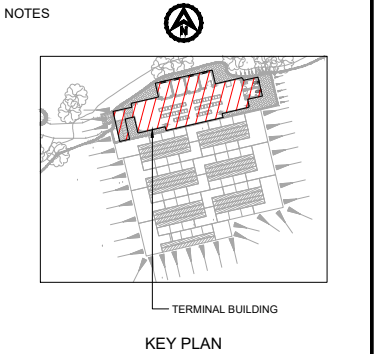
SECTION A-A
SCALE 1:30

ABBREVIATION:

FAD - FRESH AIR DUCT
EAD - EXHAUST AIR DUCT
TED - TOILET EXHAUST DUCT
EF - EXHAUST FAN
FAF - FRESH AIR FAN
IDU - INDOOR UNIT
ODU - OUTDOOR UNIT

LEGEND:

REFRIGERANT RETURN PIPE
REFRIGERANT SUPPLY PIPE
CONDENSATE DRAIN PIPE
SPLIT AC
OUT DOOR UNIT
EXHAUST FAN
CEILING / WALL FAN (TYP.)



- NOTES:
- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS, UNLESS NOTED OTHERWISE.
 - DRAWINGS TO BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL & STRUCTURAL DRAWING & ALSO THE TECHNICAL SPECIFICATION OF MEP.
 - FINISH GROUND LEVEL (F.G.L.) WILL BE AS PER MASTER PLOT PLAN.
 - SHOWN AIR DISTRIBUTION NETWORK / SYSTEM/EQUIPMENT (DUCTING, GRILLS / DIFFUSER, LOCATION OF GRILLS, DUCTING SIZES, FAN SIZES) ARE SUBJECT TO CHANGE AND THE SAME WILL BE VERIFIED DURING PREPARATION OF SHOP DRAWING.
 - ACOUSTIC INSULATION/ SOUND ATTENUATOR SHALL BE PROVIDED TO EQUIPMENT TO REDUCE NOISE LEVEL.
 - EQUIPMENT NOISE LEVEL SHALL BE MAINTAINED AS PER CPCB NORMS.
 - ALL HVAC EQUIPMENT SHALL BE SUITABLE FOR CORROSIVE ATMOSPHERE.
 - DRAIN OF ALL SPLIT AC UNIT SHALL BE CONNECTED TO NEAREST DRAINAGE NETWORK.
 - CEILING/ WALL TYPE FANS SHALL BE PROVIDED TO ALL AIR CONDITIONED AREAS AND NON AIR CONDITIONED AREAS. SHOWN LOCATION OF CEILING / WALL TYPE FANS ARE INDICATIVE. HENCE, LOCATIONS & NOS. OF CEILING / WALL FANS WILL BE VERIFIED AND CHANGED AS PER ACTUAL SITE REQUIREMENT DURING SITE EXECUTION.

FOR TENDER
NOT FOR
CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	MM	SY	JRS
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS					
CLIENT					
Assam Inland Water Transport Development Society (AIWTDS)					

CONSULTANT	HaskoningDHV Consulting Private Limited				
	502-505, 5th Floor, Platinum Techno Park, Plot 17 & 18, Sector 30 A, Vashi, Navi Mumbai - 400 703, INDIA Tel: +91 (0) 22 61395500 Email: info.india@haskoningdhv.com www.royalhaskoningdhv.com				

PROJECT		Assam Inland Water Transport Project (AIWTP)			
ASSIGNMENT		Preparation of DPR along with Engineering Design, Drawings, Tender Documents for Construction of Modular Terminal at Ferry Services of NW-2 and NW-16 in Assam			
TITLE		CENTER CLUSTER UMANANDA TEMPLE GHAT- GROUND FLOOR PLAN - HVAC LAYOUT			

DRAWN	MM	CHECKED	SY	APPROVED	JRS
DATE	FEB 2023	SCALE	@A1	AS SHOWN	REF. 01130/RHD-ZZ-UA-DR-A-221(A3-R)
DRAWING No.	D1530-RHD-ZZ-UA-DR-M-2286	SUITABILITY	A3	REVISION	P01

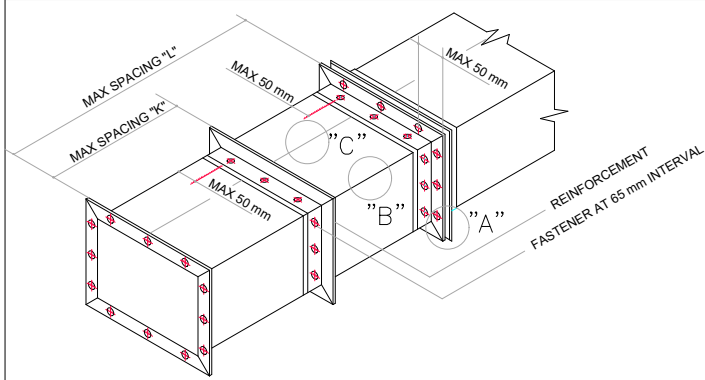
EXHAUST FAN SCHEDULE							
Unit No.	Service Area	Air flow CFM	Static Pressure (mm) Approximate	Quantity (Nos.)	Fan Type	Electrical data V/Ph/Hz	Dh(A) Level
EF-01	SHAOP-1	160	05	1.0	PROPELLER FAN	230/1/50	55
EF-02	SHAOP-2	160	05	1.0	PROPELLER FAN	230/1/50	55
EF-03	SHAOP-3	160	05	1.0	PROPELLER FAN	230/1/50	55
EF-04	BATTERY ROOM	160	05	1.0	PROPELLER FAN	230/1/50	55
EF-05	TOILET	200	05	1.0	PROPELLER FAN	230/1/50	55
EF-06	TOILET	200	05	1.0	PROPELLER FAN	230/1/50	55

SPLIT SYSTEM AIR CONDITION UNIT SCHEDULE											
OUT DOOR UNIT				IN DOOR UNIT							
Unit	Service Area	Electrical data V/Ph/Hz	*Power consume kW. (Approx)	Unit	Quantity (Nos.)	COOLING TONNAGE	Electrical data V/Ph/Hz	*Power consume kW. (Approx)	*Refrigeration Cu.pipe(mm.OD) Liquid/Gas	*Drain Pipe - CO/ID (mm)	Remark
ODU-01	INVERTER /BATTERY ROOM	230/1/50	1.5 kw	IDU-01	02 Nos.	1.0 TR (1W+1S)	230/1/50	0.14	Ø6.35/Ø12.7	20/16	WALL TYPE

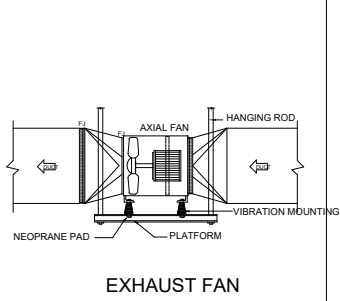
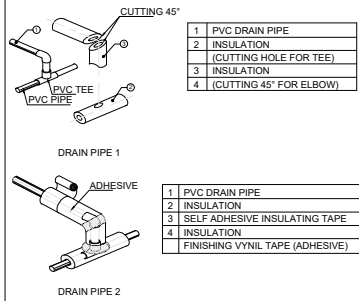
*NOTE : ABOVE MENTIONED EQUIPMENT PARAMETERS LIKE CAPACITY, STATIC PRESSURE ETC. ARE INDICATIVE AND SUBJECT TO CHANGE BASED ON ACTUAL SITE REQUIREMENT AND VENDOR STANDARD DESIGN.

CENTER CLUSTER UMANANDA TEMPLE GHAT GROUND FLOOR - EQUIPMENT LIST

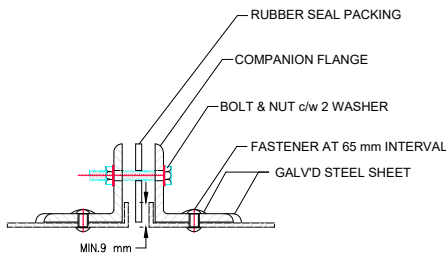
1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS IN METERS .
UNLESS NOTED OTHERWISE.
2. DRAWINGS TO BE READ IN CONJUNCTION WITH RELEVANT
ARCHITECTURAL & STRUCTURAL DRAWING & ALSO THE
TECHNICAL SPECIFICATION OF MEP.
3. QUANTITY, SIZE & LOCATION OF ALL SHOWN EQUIPMENT IS
INDICATIVE & THAT WILL BE SUBJECT TO CHANGE AND THE SAME
WILL BE CHECKED ON SITE BY THE CONTRACTOR.
4. FINAL EQUIPMENT SELECTION TO BE DETERMINED ACCORDING TO
FINAL CALCULATIONS BASED ON SHOP DRAWING DESIGN.
5. ACOUSTIC LOUVERS WILL BE PROVIDED TO REDUCE NOISE LEVEL.
6. ALL ABOVE GROUND CHILLED WATER PIPING , UNDERGROUND
CHILLED WATER PIPING AND ITS ARRANGEMENT SHALL BE AS PER
ISHRAE STANDARDS.
7. HANGER ATTACHMENT TO THE STRUCTURES, UPPER
ATTACHMENT DEVICES, LOWER HANGER ATTACHMENT, RISER
SUPPORT-FROM FLOOR, SUPPORT FROM WALLS, HVAC UNIT
SUSPENSION, TRANSVERSE JOINTS SHALL BE AS PER ISHRAE
STANDARDS.



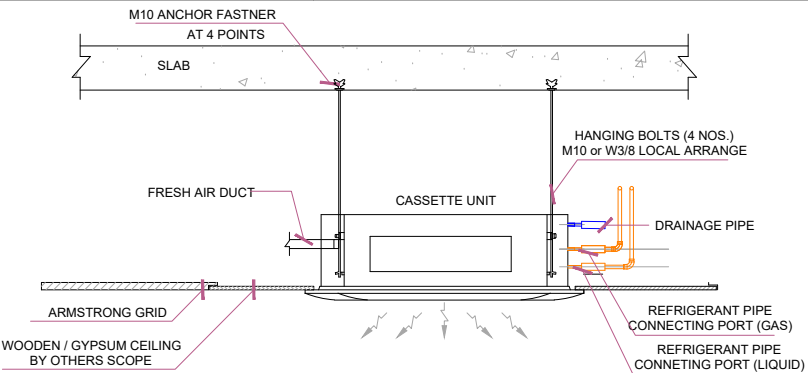
GENERAL FABRICATION RECTANGULAR
DUCT TO BE INSULATED AS PER ISHRAE
STANDARD WHEREVER DUCT OPEN TO ATMOSPHERE.



EXHAUST FAN

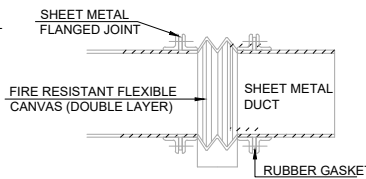


DETAIL A COMPANION FLANGE

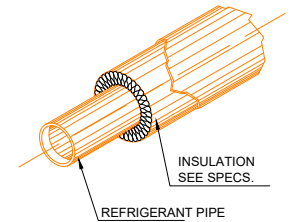


INSULATED PIPE EXTERIOR
WALL PENETRATION

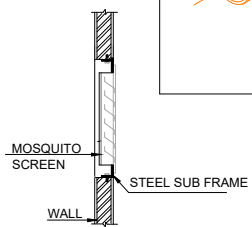
UNINSULATED PIPE EXTERIOR
WALL PENETRATION



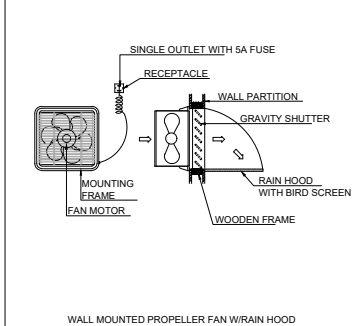
TYPICAL CANVAS CONNECTION



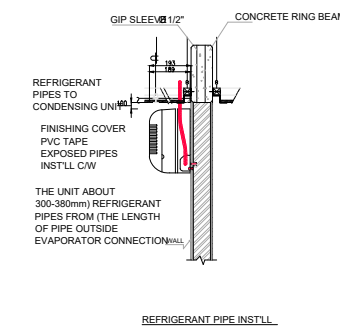
PLAN FRESH AIR
INTAKE LOUVER



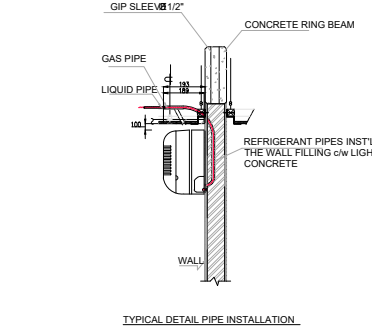
SECTION



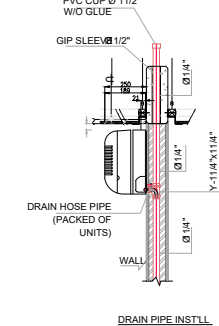
WALL MOUNTED PROPELLER FAN WITH RAIN HOOD



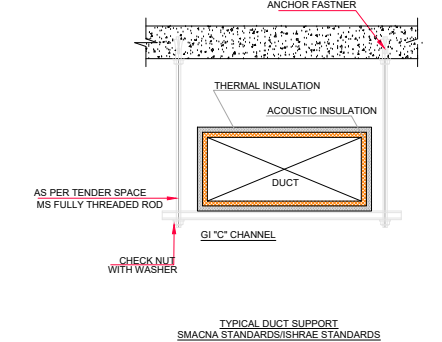
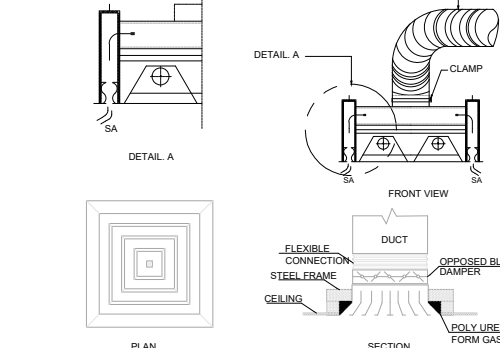
REFRIGERANT PIPE INSTLL



TYPICAL DETAIL PIPE INSTALLATION
AC - UNITS WALL MOUNTED TYPE



DRAIN PIPE INSTLL



FOR TENDER
NOT FOR
CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	MM	SY	JRS
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

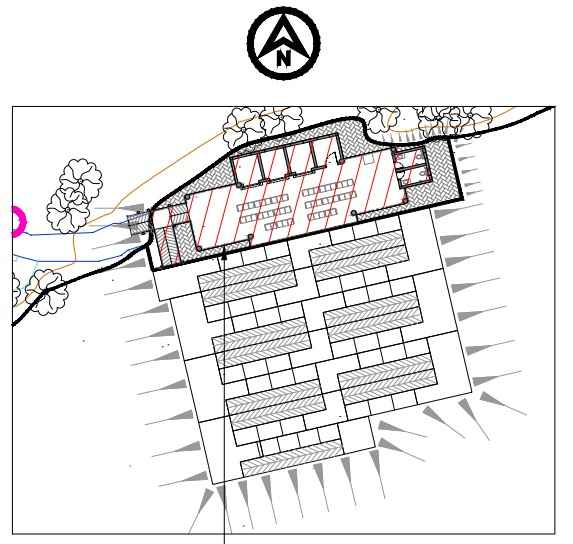
CLIENT
 Assam Inland Water Transport Development Society (AIWTDS)

CONSULTANT
 HaskoningDHV Consulting Private Limited
502-505, 5th Floor, Platinum Techno Park
Plot 17 & 18, Sector 30 A, Vashi
New Mumbai - 400 705, INDIA
Tel: +91 (0) 22 61395000
Email: info.india@rdhv.com
www.royalhaskoningdhv.com

PROJECT
Assam Inland Water Transport Project (AIWTP)
ASSIGNMENT
Preparation of DPR along with Engineering Design,
Drawings, Tender Documents for Construction of Modular
Terminal at Ferry Services of NW-2 and NW-16 in Assam

TITLE
**CENTER CLUSTER
UMANANDA TEMPLE GHAT-
TYPICAL DETAILS - HVAC**

DRAWN	MM	CHECKED	SY	APPROVED	JRS
DATE	FEB. 2023	SCALE	NTS	REF.	-
DRAWING No.	D1530-RHD-ZZ-UA-DR-M-2287	SUITABILITY	A3	REVISION	P01



KEY PLAN

NOTES

1. ALL DIMENSIONS & PIPE SIZES ARE IN MM & LEVELS IN M. UNLESS OTHERWISE STATED.
2. THE DRAWING IS INDICATIVE AND USED AS GUIDELINE ONLY.
3. ORIFICE PLATES OF SUITABLE DESIGN SHALL BE PROVIDED IN THE LANDING VALVES, WHERE NECESSARY, TO LIMIT THE OPERATING PRESSURES

LEGEND:

- FIRE HYDRANT LINE
- PORTABLE FIRE EXTINGUISHER
- EXIT SIGNAGE

REFERENCE DRAWING NO.

DI1530-RHD-ZZ-UA-DR-A-2221-A3-P01 - CENTER CLUSTER
UMANANDA TEMPLE GHAT
FLOOR PLANS

FOR TENDER
NOT FOR
CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	PC	SG	JRS
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT	Assam Inland Water Transport Development Society (AIWTDS)
--------	--

CONSULTANT	HaskoningDHV Consulting Private Limited 502-505, 5th Floor, Platinum Techno Park Plot 17 & 18, Sector 30 A, Vashi New Mumbai - 400 703, INDIA Tel: +91 (0) 22 61395000 Email: info.india@hnhv.com www.royalhaskoningdhv.com
------------	---

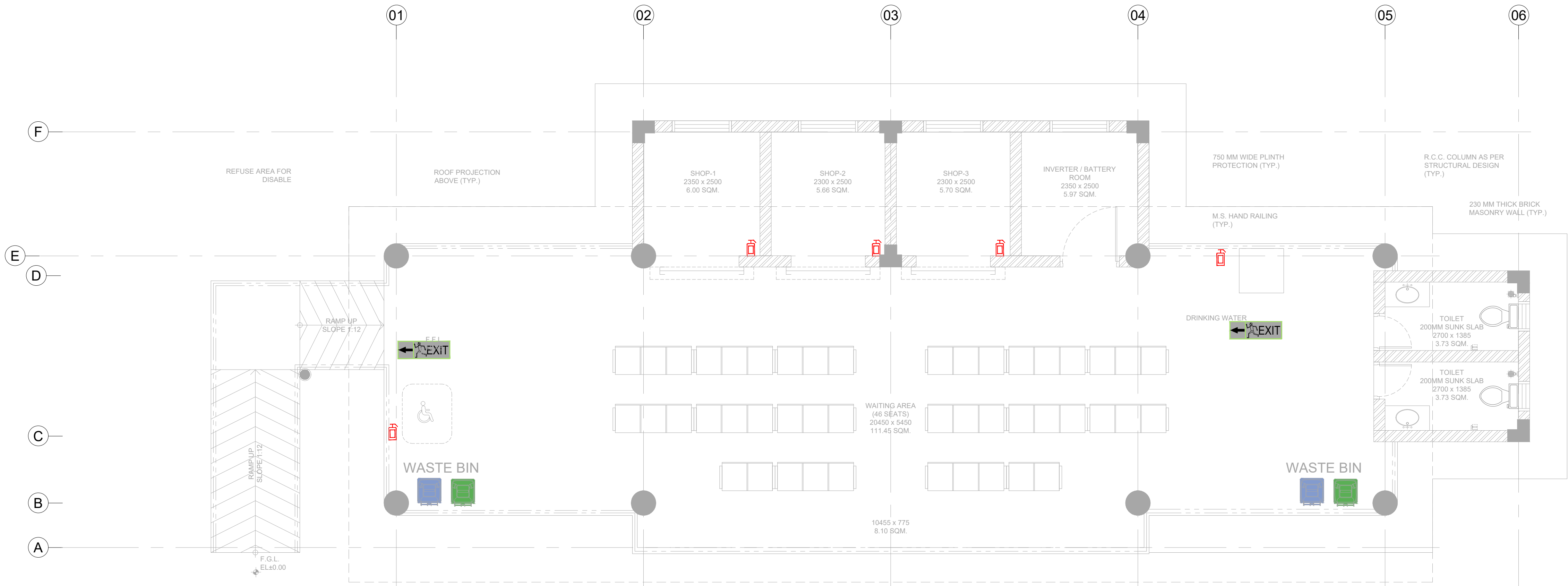
PROJECT	Assam Inland Water Transport Project (AIWTP)
---------	--

ASSIGNMENT	Preparation of DPR along with Engineering Design, Drawings, Tender Documents for Construction of Modular Terminal at Ferry Services of NW-2 and NW-16 in Assam
------------	--

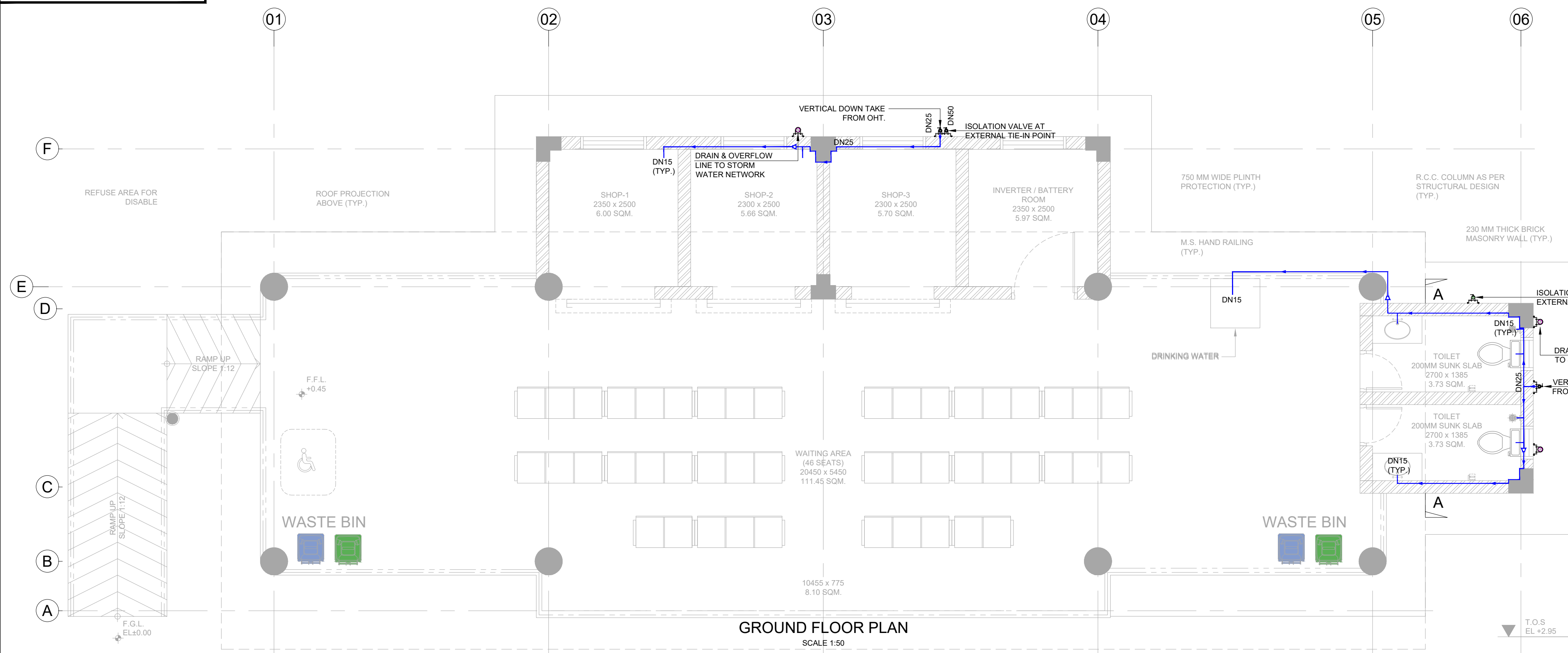
TITLE	CENTRAL CLUSTER UMANANDA TEMPLE GHAT - FLOOR PLANS - FIRE FIGHTING LAYOUT
-------	--

DRAWN	PC	CHECKED	SG	APPROVED	JRS
DATE	FEB. 2023	SCALE	AS SHOWN	REF	

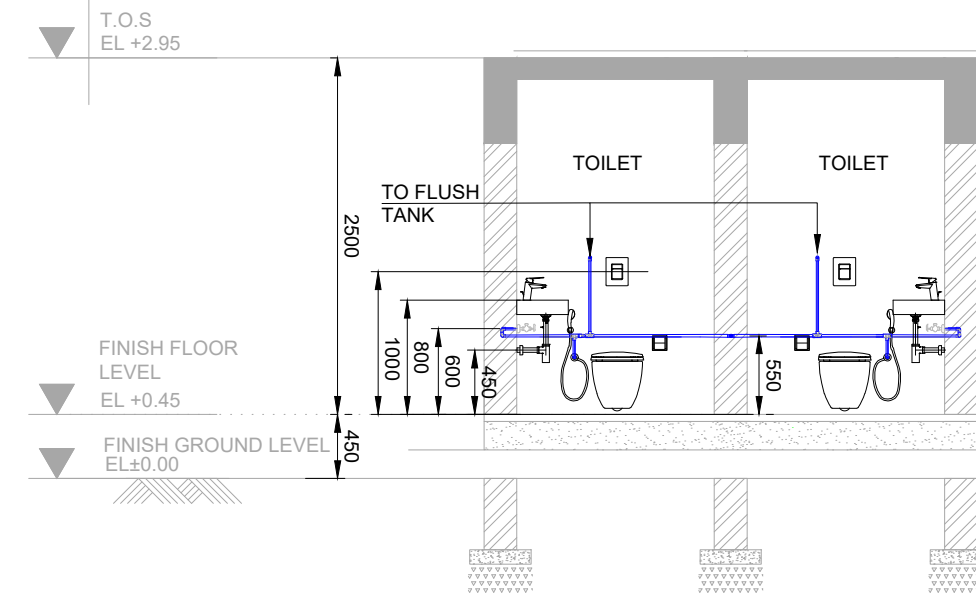
DRAWING No.	SUITABILITY	REVISION
DI1530 -RHD-ZZ-UA-DR-M-2291	A3	P01



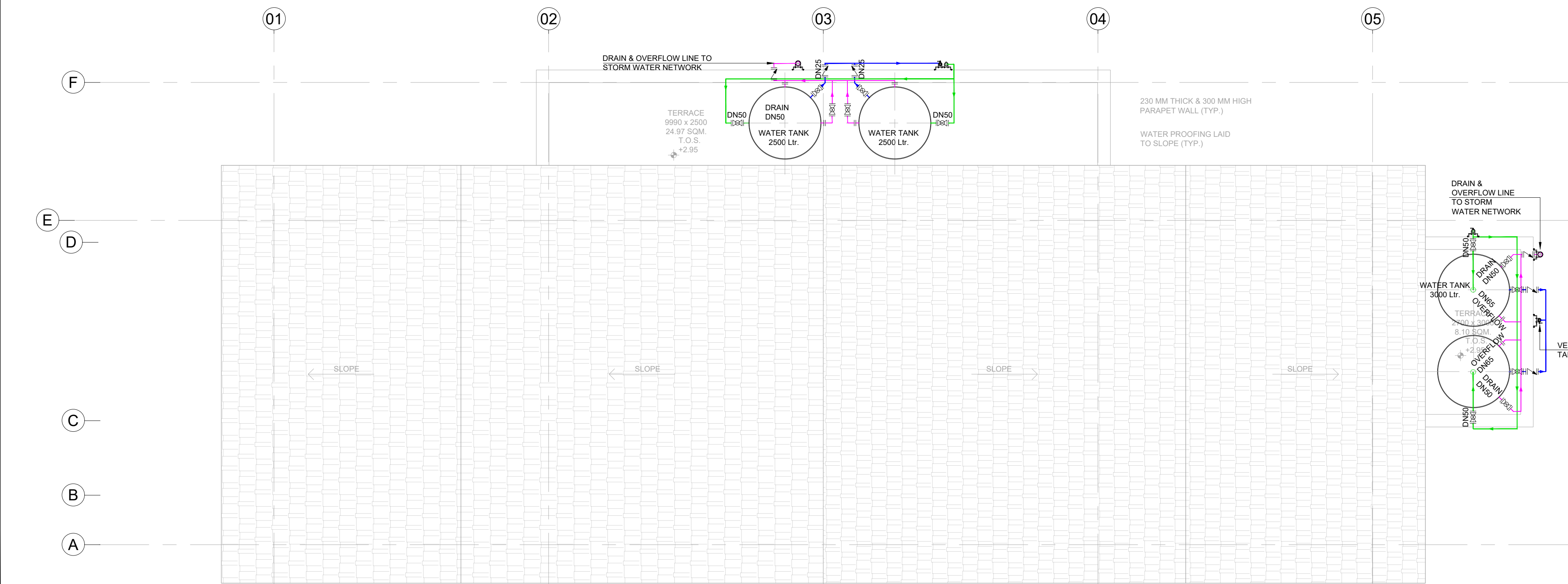
GROUND FLOOR PLAN
SCALE 1:50



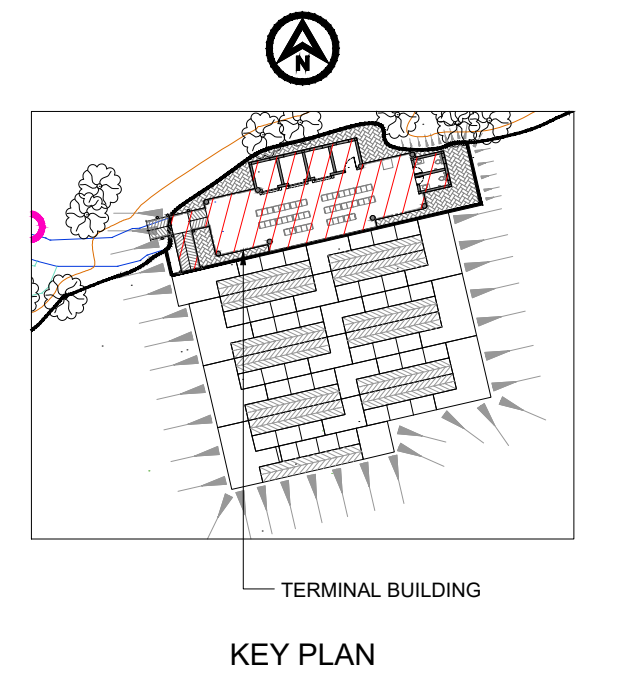
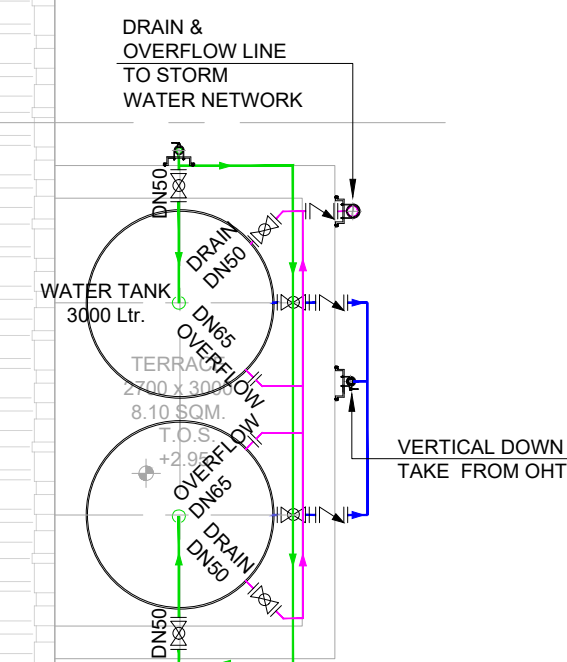
GROUND FLOOR PLAN
SCALE 1:50



SECTION A-A
SCALE 1:50



ROOF PLAN
SCALE 1:50



KEY PLAN

NOTES

1. ALL DIMENSIONS & PIPE SIZES ARE IN MM & LEVELS IN M. UNLESS OTHERWISE STATED.
2. ISOLATION VALVE CHAMBER DETAILS ARE PROVIDED IN TYPICAL DETAILS FOR DRAINAGE & WATER.
3. ALL INTERNAL PIPE WORK SHALL BE CPVC MATERIAL.
4. ALL LOW POINT AND HIGH POINT BE PROVIDED WITH A DN25 DRAIN AND VENT.
5. OVERHEAD TANK TO BE PLACED ON FOUNDATION OR PEDESTAL.
6. MINOR MODIFICATION IN PIPE ROUTING, PIPE SUPPORT & ORIENTATION OF NOZZLE SHALL BE DONE TO SUIT SITE CONDITION.

LEGEND:

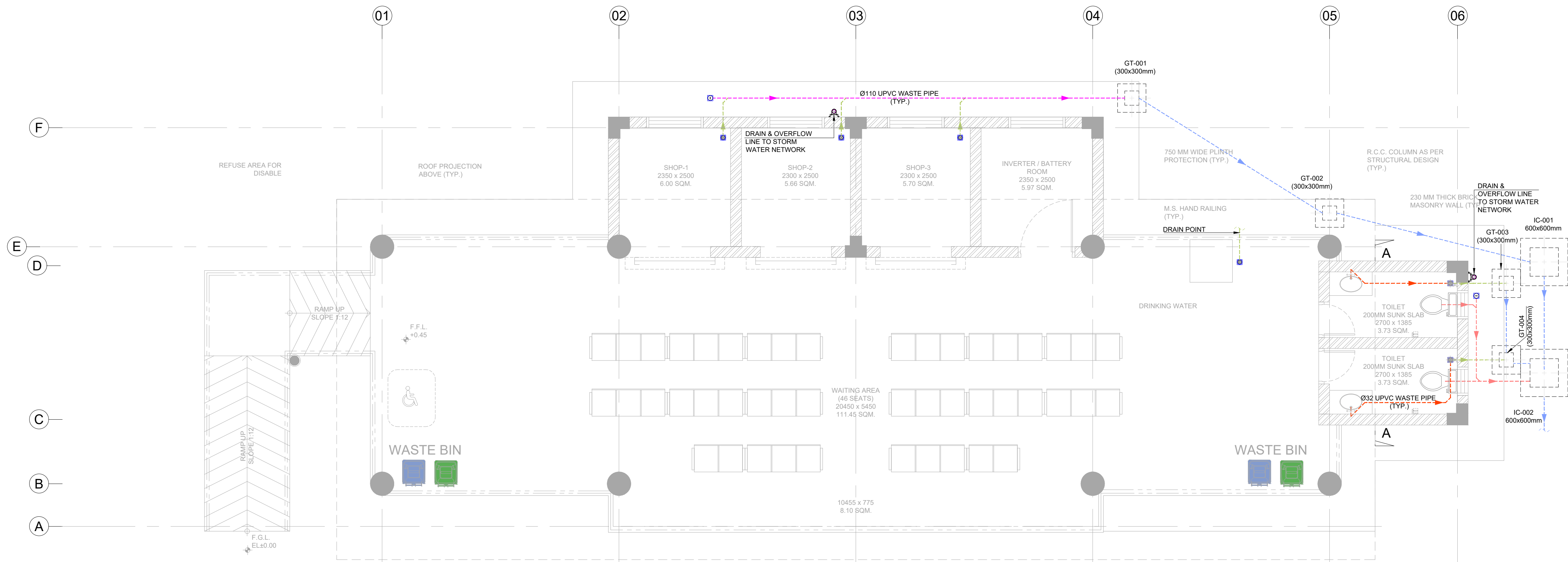
- WATER SUPPLY LINE
- INLET WATER SUPPLY LINE (EXTERNAL TO TANK)
- DRAIN / OVERFLOW LINE
- [Ø8] BALL VALVE
- ▭ REDUCER

REFERENCE DRAWING NO.

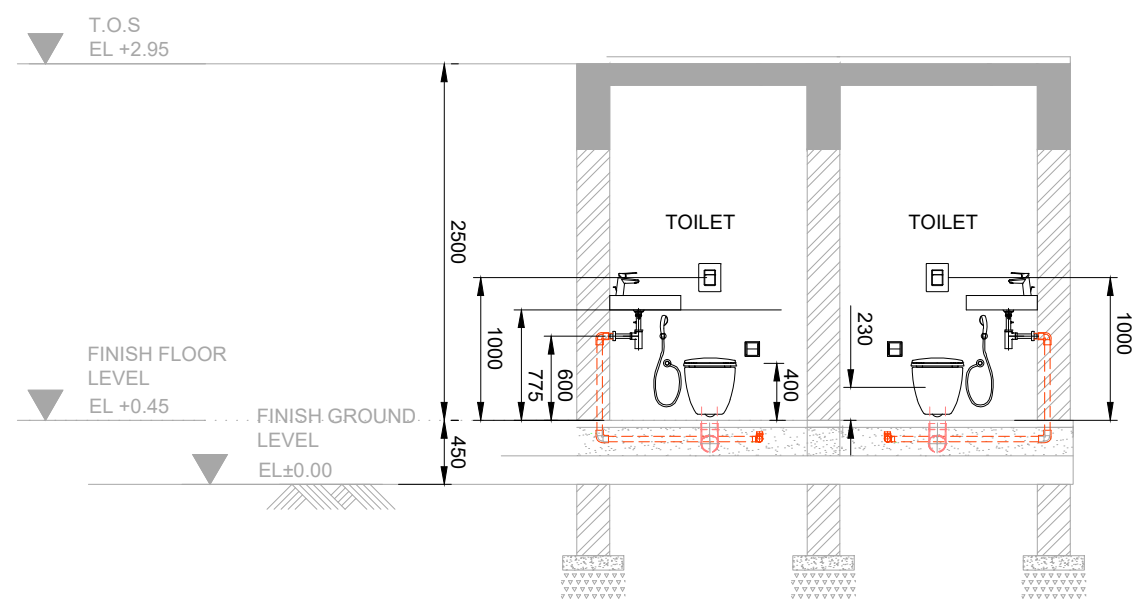
DI1530-RHD-ZZ-UA-DR-A-2221-A3-P01 - CENTER CLUSTER UMANANDA TEMPLE GHAT FLOOR PLANS

FOR TENDER
NOT FOR CONSTRUCTION

P01	15/02/2023	ISSUED FOR TENDER	PC	SG	JRS
REV	DATE	DESCRIPTION	BY	CHK	APP
REVISIONS					
CLIENT					
Assam Inland Water Transport Development Society (AIWTDS)					
CONSULTANT					
HaskoningDHV Consulting Private Limited 502-505, 5th Floor, Platinum Techno Park Plot 17 & 18, Sector 30 A, Vashi New Mumbai - 400 703, INDIA Tel: +91 (0) 22 61395000 Email: info.india@haskoningdhv.com www.royalhaskoningdhv.com					
PROJECT					
Assam Inland Water Transport Project (AIWTP)					
ASSIGNMENT					
Preparation of DPR along with Engineering Design, Drawings, Tender Documents for Construction of Modular Terminal at Ferry Services of NW-2 and NW-16 in Assam					
TITLE					
CENTRAL CLUSTER UMANANDA TEMPLE GHAT - FLOOR PLANS - WATER SUPPLY LAYOUT					
DRAWN	PC	CHECKED	SG	APPROVED	JRS
DATE	FEB. 2023	SCALE	@A1	AS SHOWN	REF
DRAWING No.	DI1530 -RHD-ZZ-UA-DR-M-2292	SUITABILITY	A3	REVISION	P01



GROUND FLOOR PLAN
SCALE 1:50

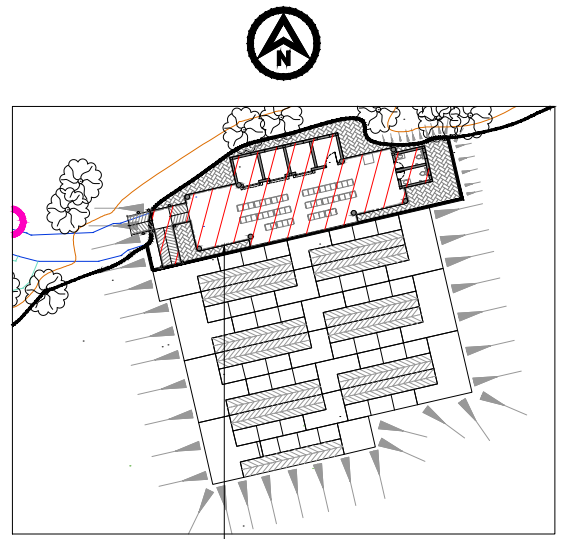


SECTION A-A
SCALE 1:50

SEWAGE LINE CHAMBERS SCHEDULE

NAME	SIZE (IN MM)
GT-001	300 x 300
GT-002	300 x 300
GT-003	300 x 300
GT-004	300 x 300
IC-001	600 x 600
IC-002	600 x 600

NOTE: INVERT LEVELS ARE CALCULATED FROM F.G.L. 0.00



KEY PLAN

NOTES

1. ALL DIMENSIONS & PIPE SIZES ARE IN MM & LEVELS IN M. UNLESS OTHERWISE STATED.
2. THE DRAWING IS INDICATIVE AND USED AS GUIDELINE ONLY.
3. VENT PIPE SHALL BE ROUTED IN CEILING LEVEL AND SHALL BE RAISED ABOVE FLOOR LEVEL AS PER SITE CONDITIONS.
4. VENT COWL IS PROVIDED ABOVE THE TERRACE LEVEL ON TOP OF THE VERTICAL STACKS.
5. MINOR MODIFICATION IN PIPE ROUTING, PIPE SUPPORT & ORIENTATION OF NOZZLE SHALL BE DONE TO SUIT SITE CONDITION.

LEGEND:

---	Ø160 UPVC WASTE PIPE
---	Ø110 UPVC WASTE PIPE
---	Ø75 UPVC WASTE PIPE
---	Ø50 UPVC WASTE PIPE
---	Ø32 UPVC WASTE PIPE
---	Ø50 UPVC SOIL PIPE
---	Ø110 UPVC SOIL PIPE
---	Ø75 UPVC VENT PIPE
---	DRAIN / OVERFLOW LINE
FT	FLOOR TRAP
UT	URINAL TRAP
CO	CLEAN OUT
IC	INSPECTION CHAMBER
GT	GULLY TRAP

REFERENCE DRAWING NO.

- DI1530-RHD-ZZ-UA-DR-A-2221-A3-P01 - CENTER CLUSTER UMANANDA TEMPLE GHAT FLOOR PLANS
- DI1530-RHD-ZZ-UA-DR-M-2251-A3-P01- LAYOUT PLAN OF SEWER NETWORK UMANANDA

FOR TENDER

**NOT FOR
CONSTRUCTION**

P01	15/02/2023	ISSUED FOR TENDER	PC	SG	JRS
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT	Assam Inland Water Transport Development Society (AIWTDS)
--------	---

CONSULTANT	HaskoningDHV Consulting Private Limited 502-505, 5th Floor, Platinum Techno Park Plot 17 & 18, Sector 30 A, Vashi New Mumbai - 400 705, INDIA Tel: +91 (0) 22 61395000 Email: info.india@haskoningdhv.com www.royalhaskoningdhv.com
CONSULTANT	Royal HaskoningDHV Enhancing Society Together

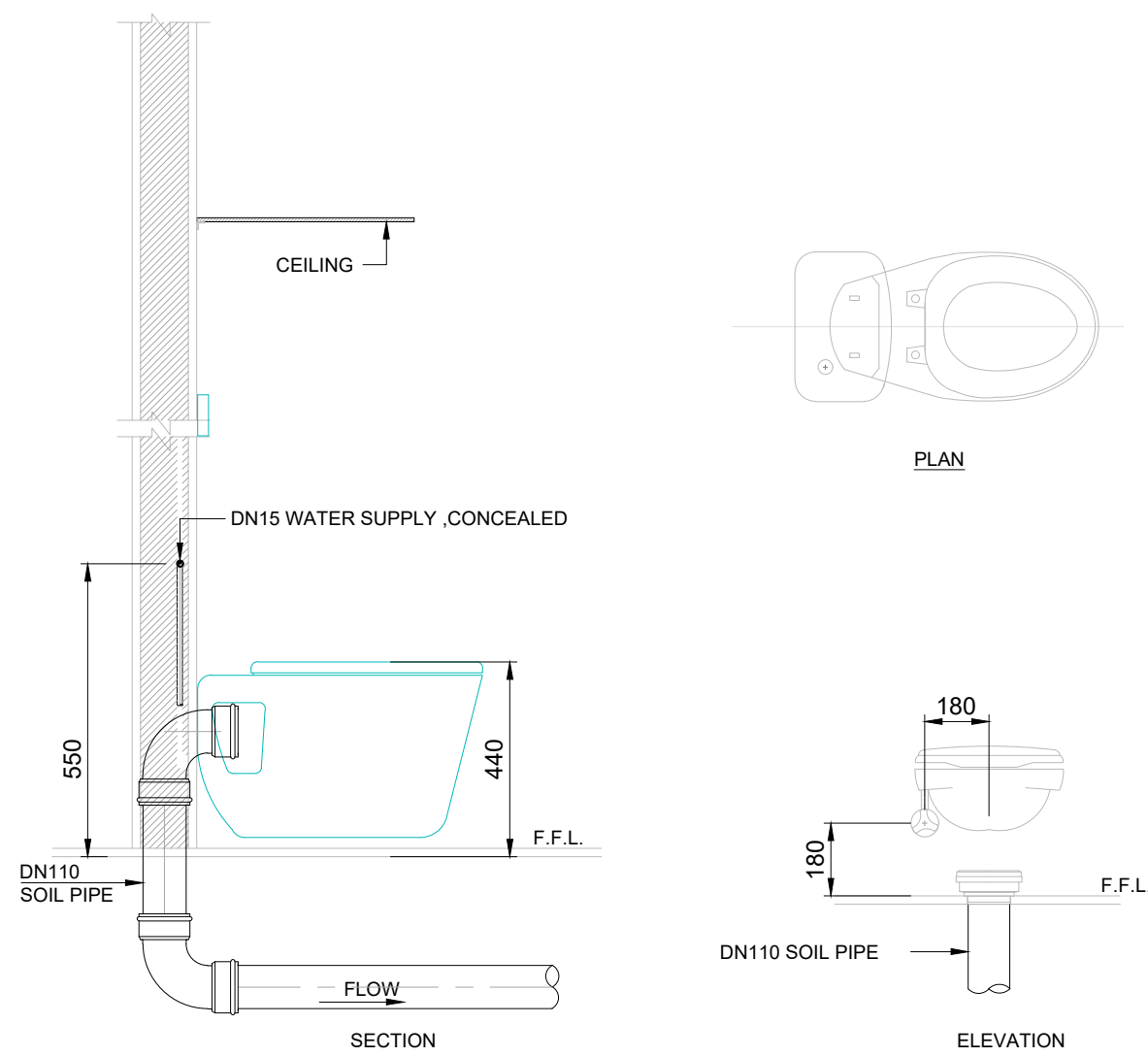
PROJECT	Assam Inland Water Transport Project (AIWTP)
---------	--

ASSIGNMENT	Preparation of DPR along with Engineering Design, Drawings, Tender Documents for Construction of Modular Terminal at Ferry Services of NW-2 and NW-16 in Assam
------------	--

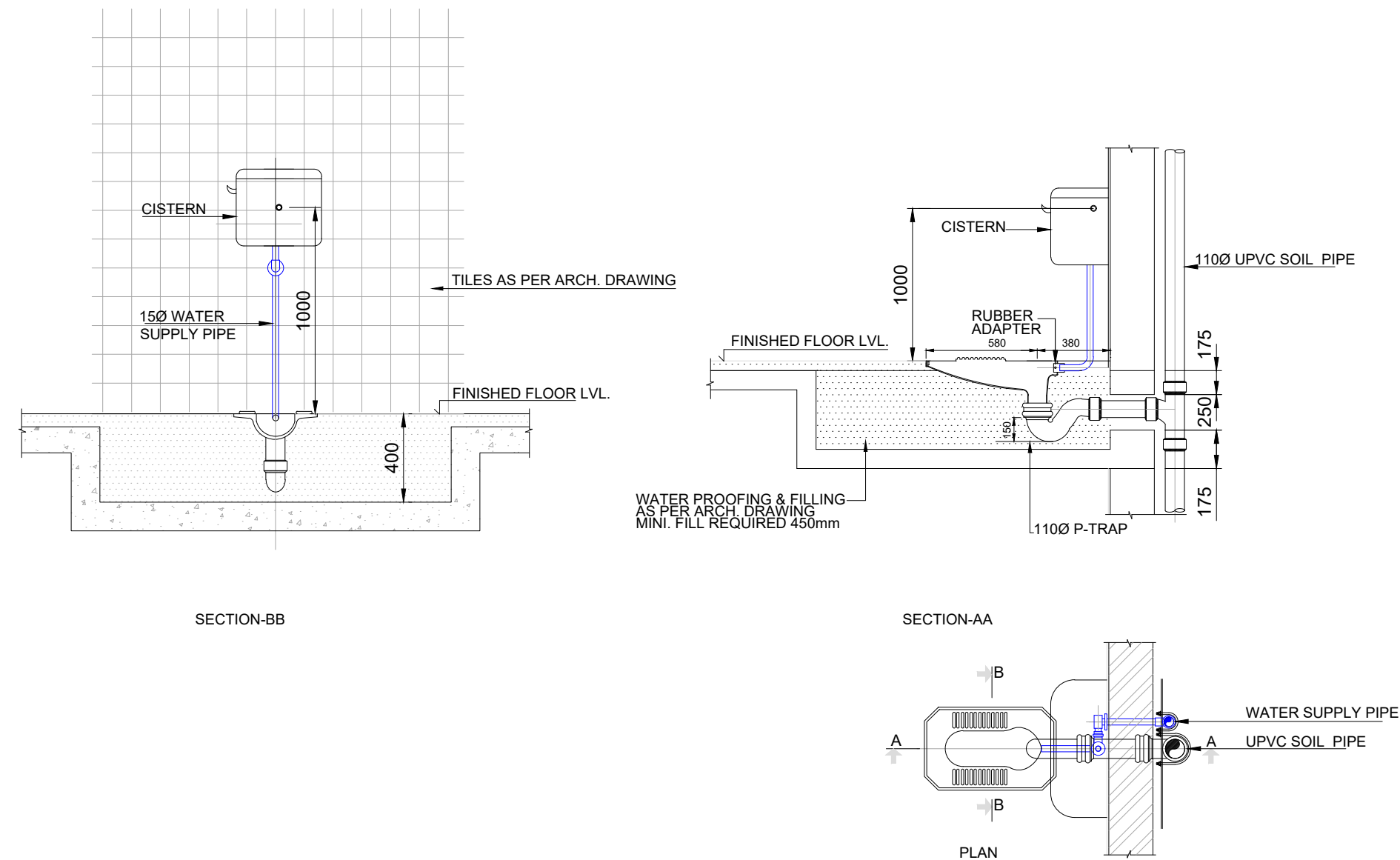
TITLE	CENTRAL CLUSTER UMANANDA TEMPLE GHAT - FLOOR PLANS - SEWAGE SYSTEM LAYOUT
-------	--

DRAWN	PC	CHECKED	SG	APPROVED	JRS
DATE	FEB. 2023	SCALE	@A1	AS SHOWN	REF

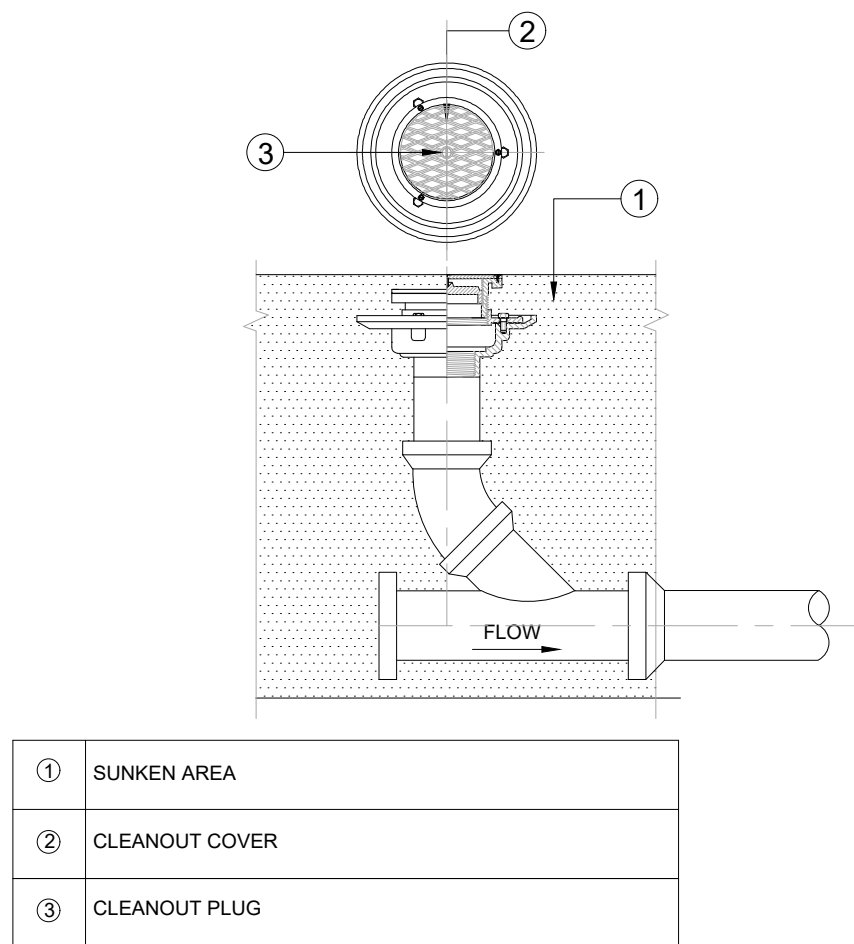
DRAWING No.	D1530 -RHD-ZZ-UA-DR-M-2293	SUITABILITY	A3	REVISION	P01
-------------	----------------------------	-------------	----	----------	-----



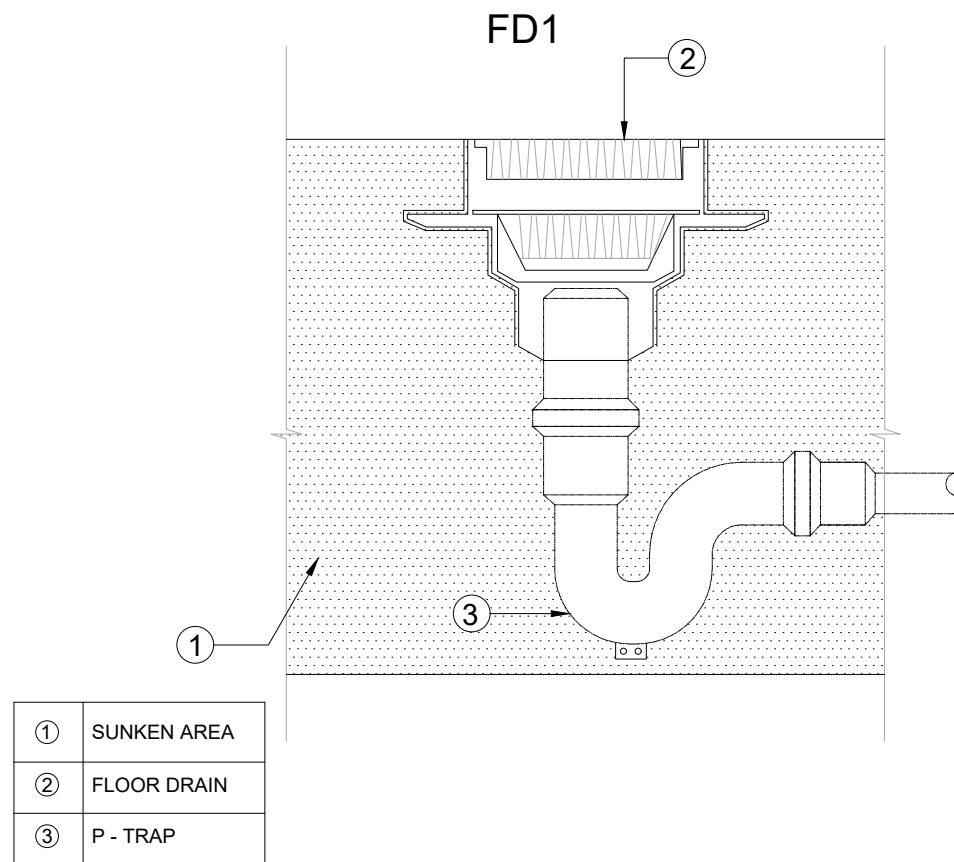
WATER SUPPLY / DRAIN FOR WATER CLOSET



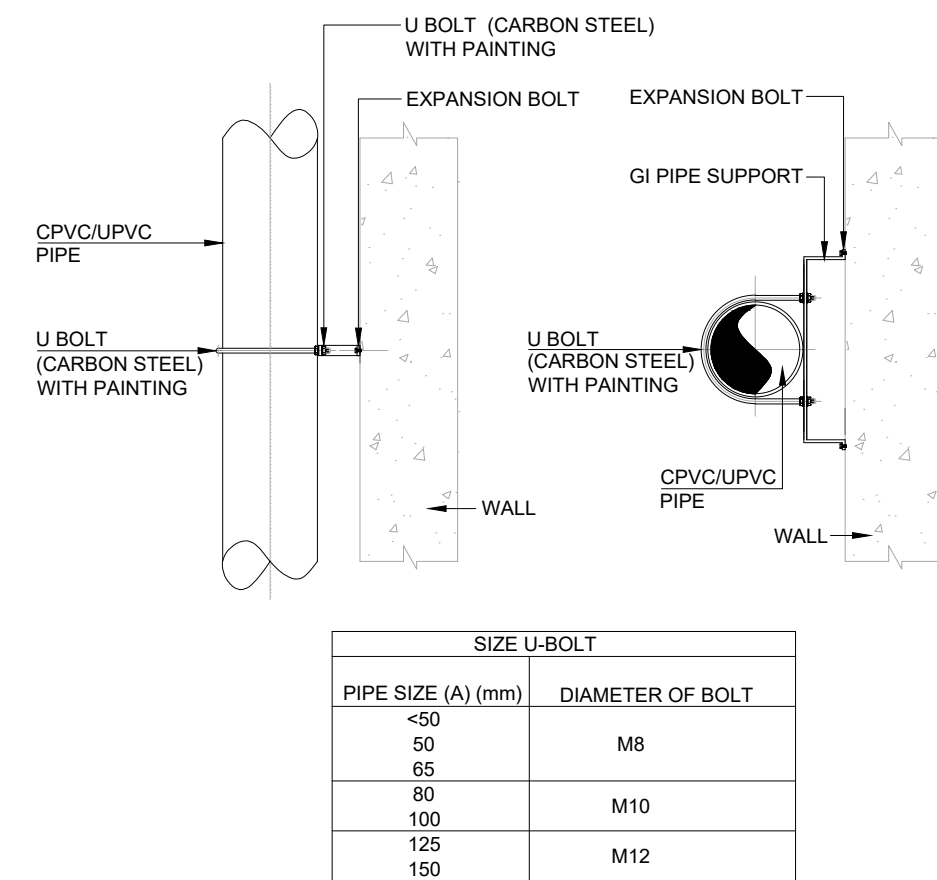
INDIAN WATER CLOSET WITH FLUSH VALVE



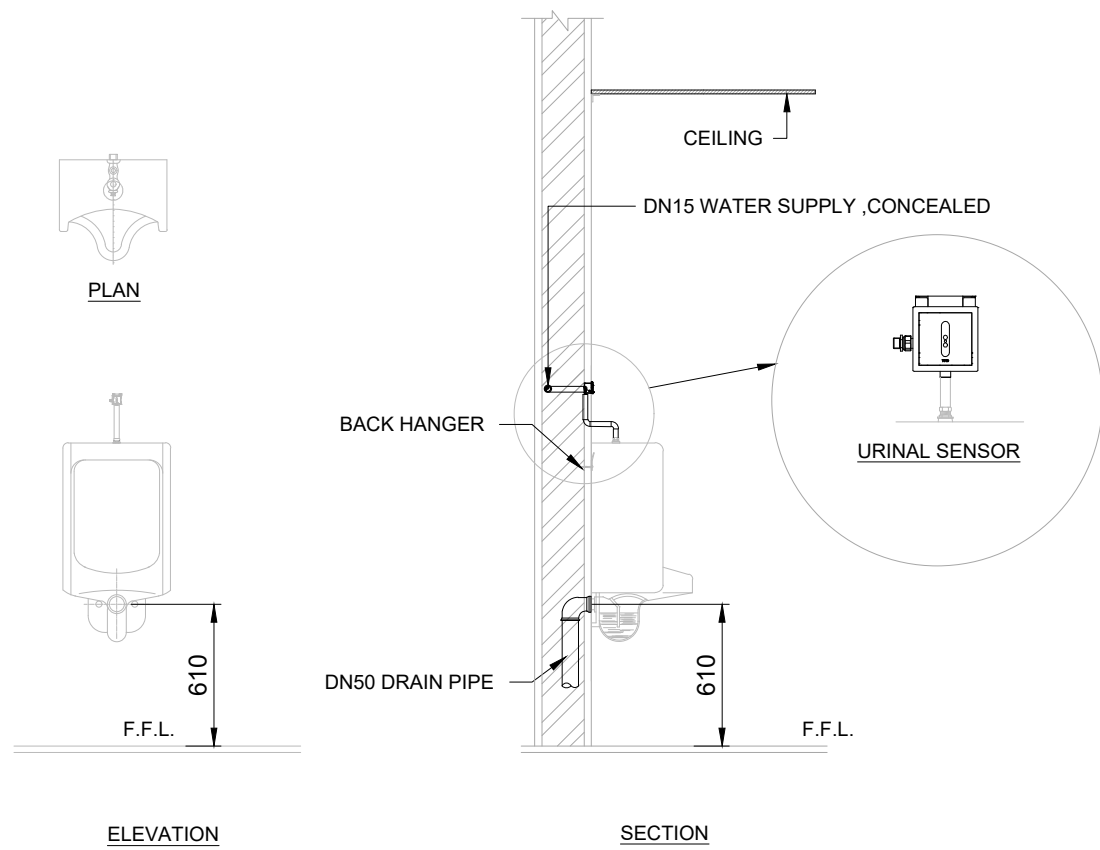
DETAIL FLOOR CLEAN OUT



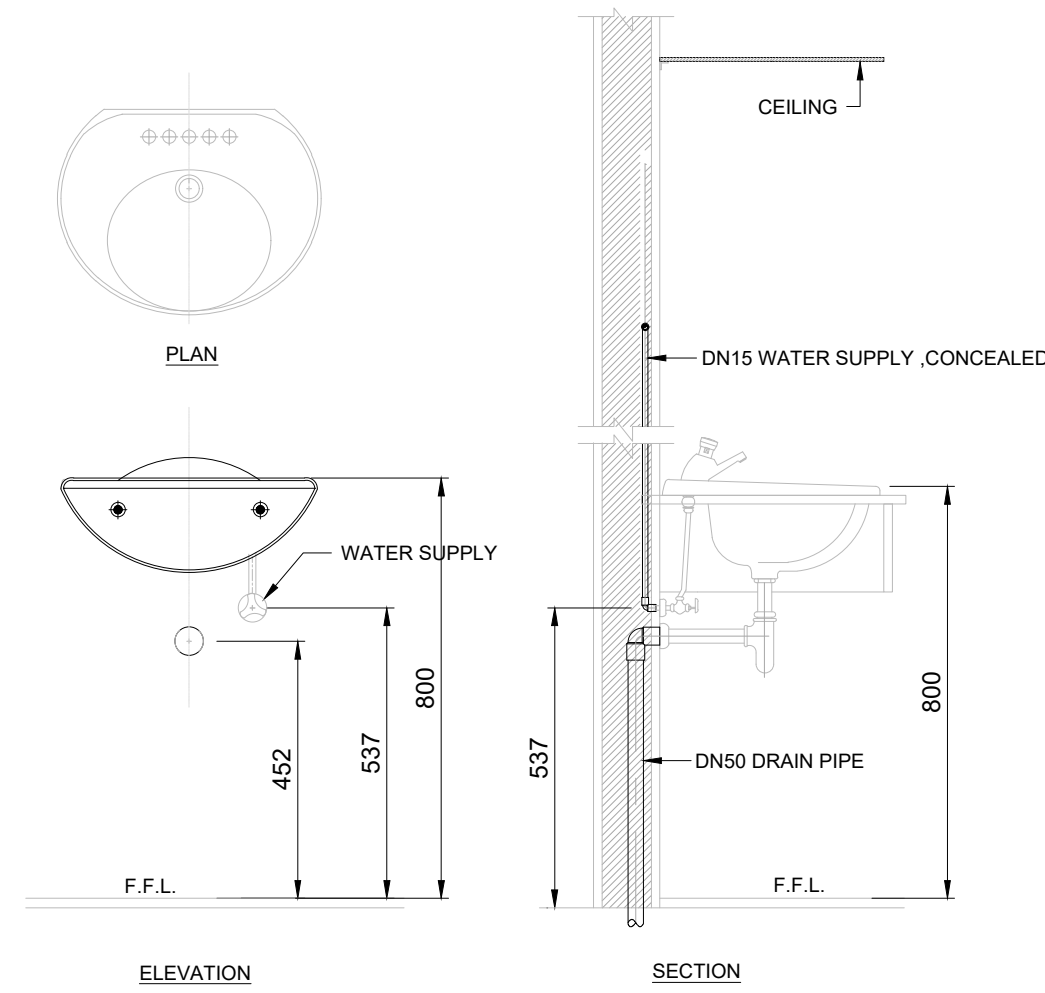
DETAIL FLOOR DRAIN (FD1) / SHOWER TRAY



TYPICAL INSTALLATION OF VERTICAL PIPE



WATER SUPPLY/DRAIN FOR WALL URINAL



WATER SUPPLY/DRAIN FOR WASH BASIN

NOTES

1. THE FIXTURE DETAILS ARE INDICATIVE AND SHALL BE CONSIDERED AS PER TECHNICAL SPECIFICATIONS.

FOR TENDER

**NOT FOR
CONSTRUCTION**

P01	15/02/2023	ISSUED FOR TENDER	PC	SG	JRS
REV	DATE	DESCRIPTION	BY	CHK	APP

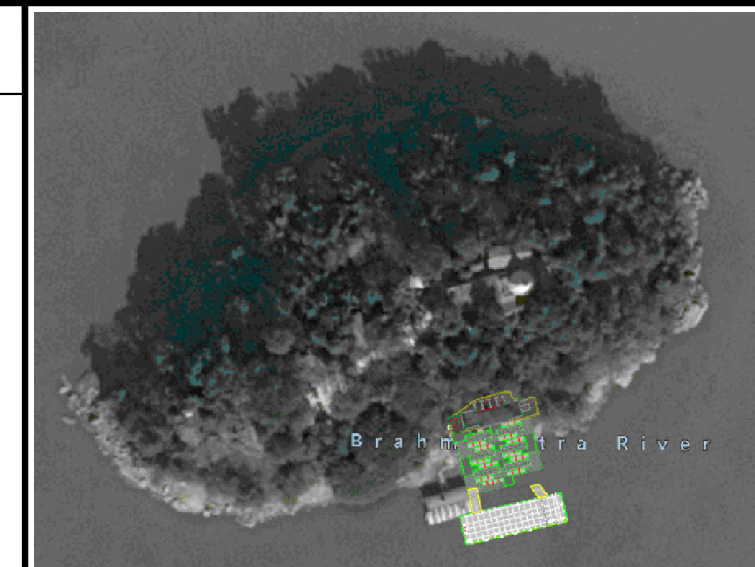
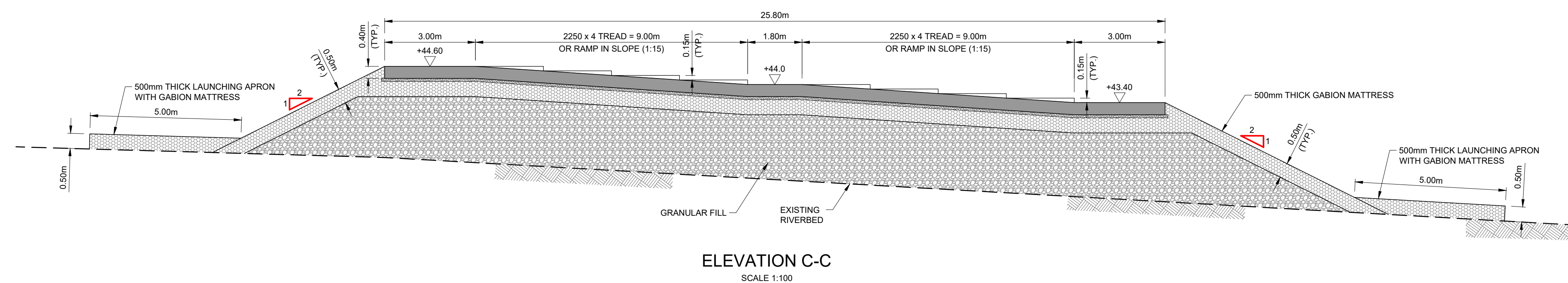
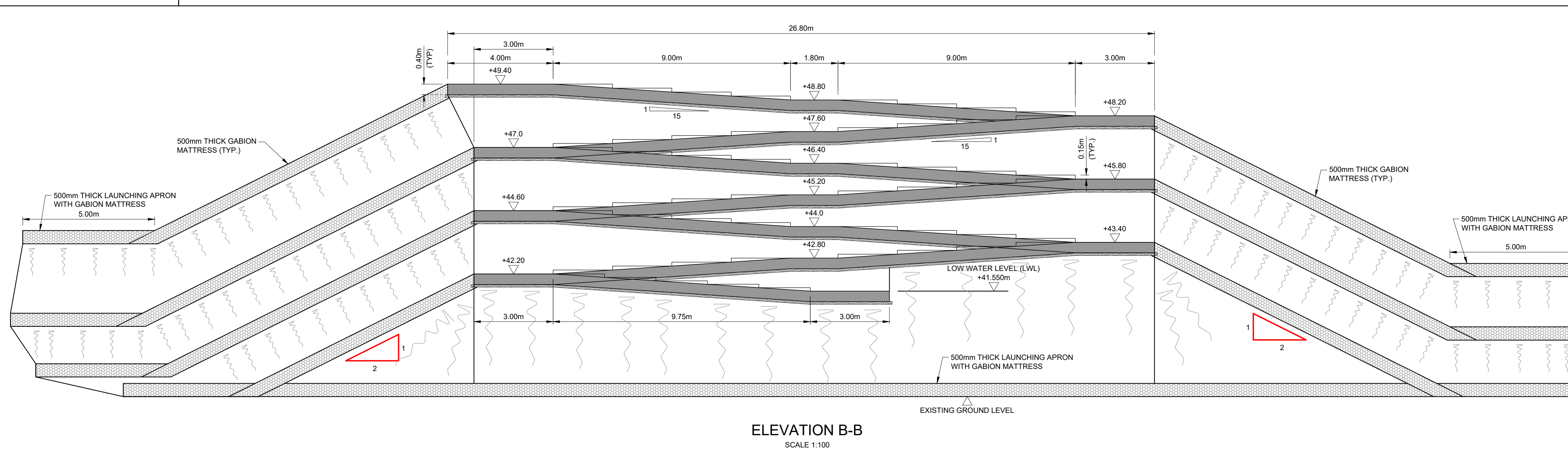
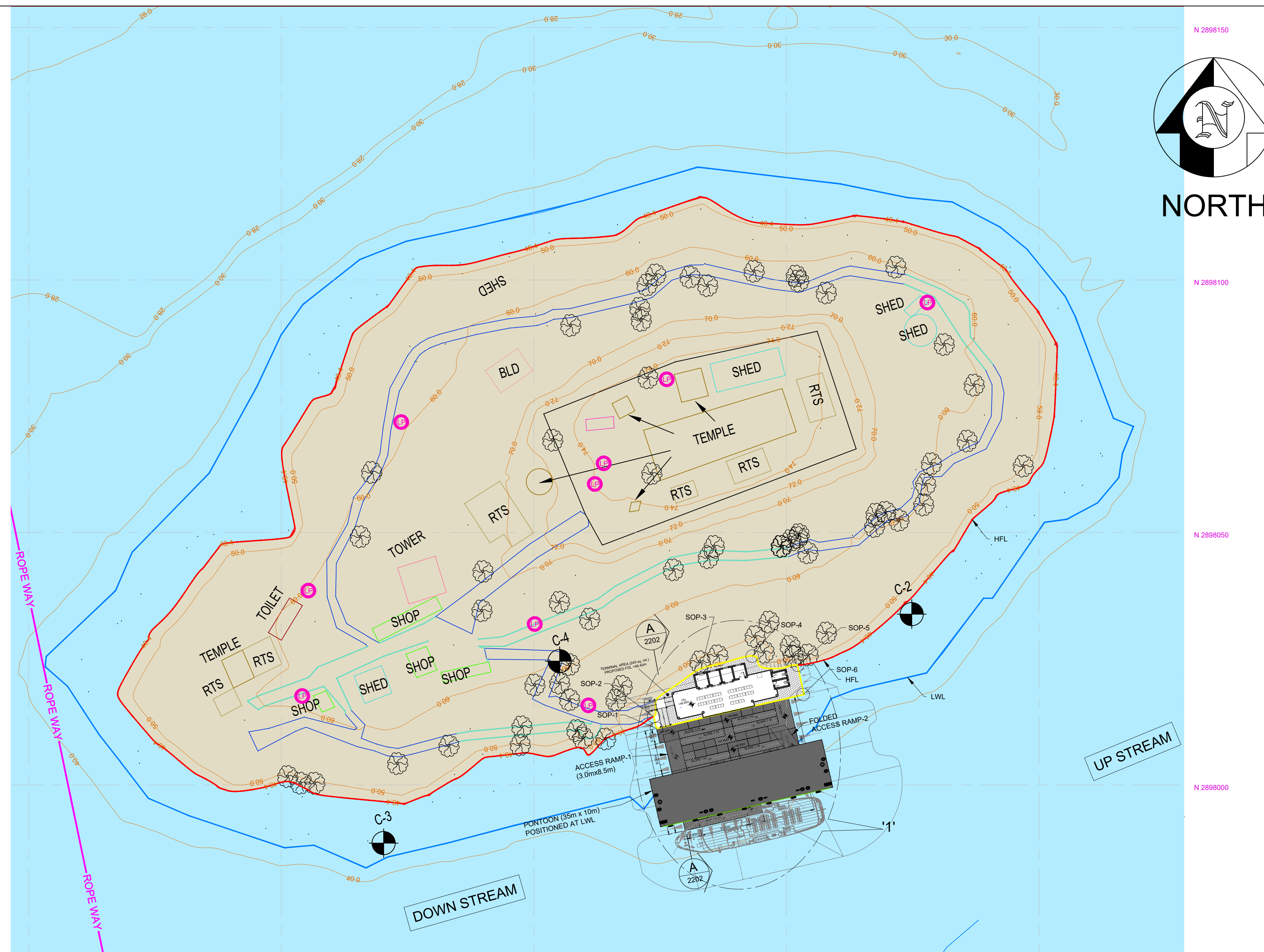
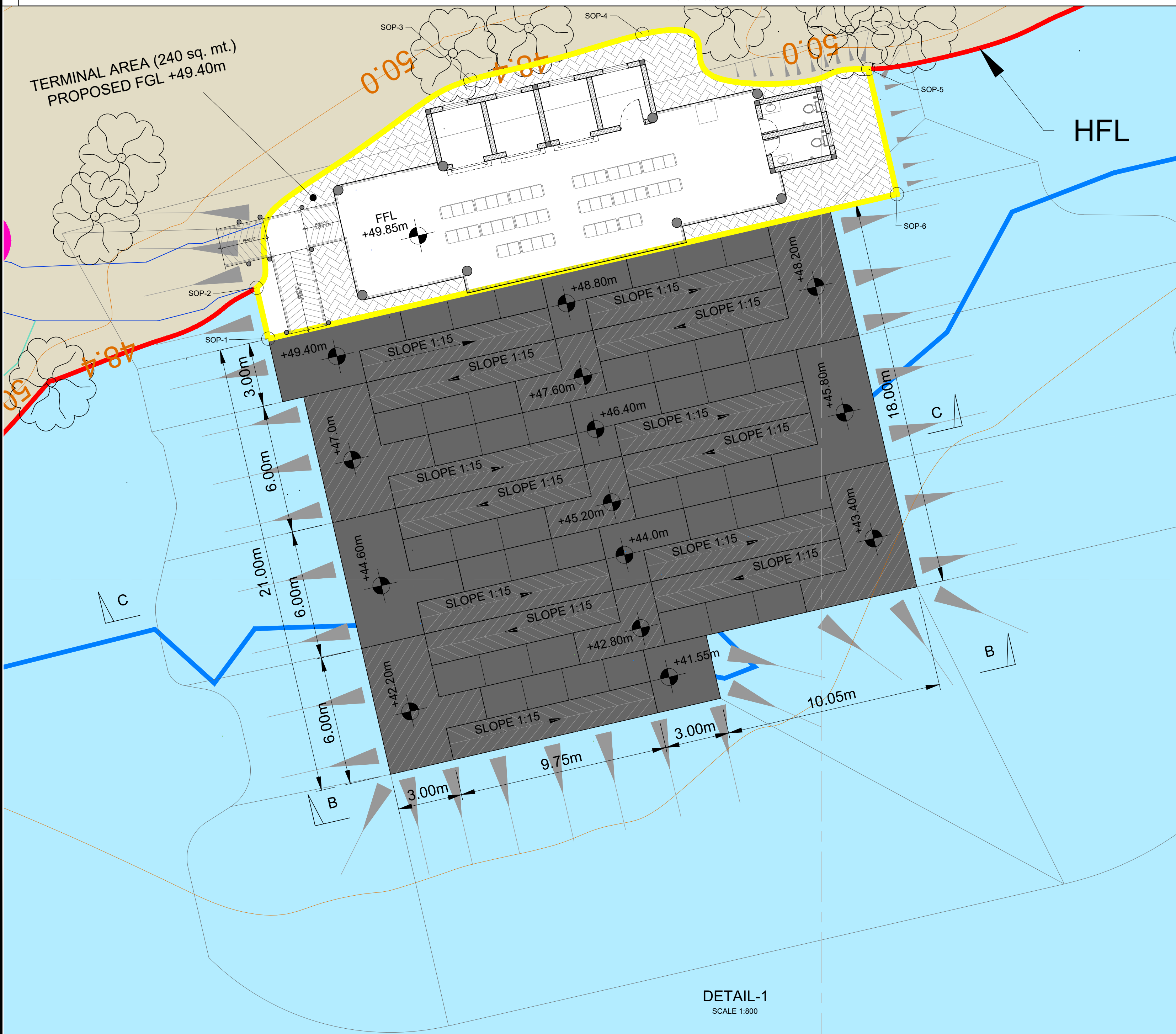
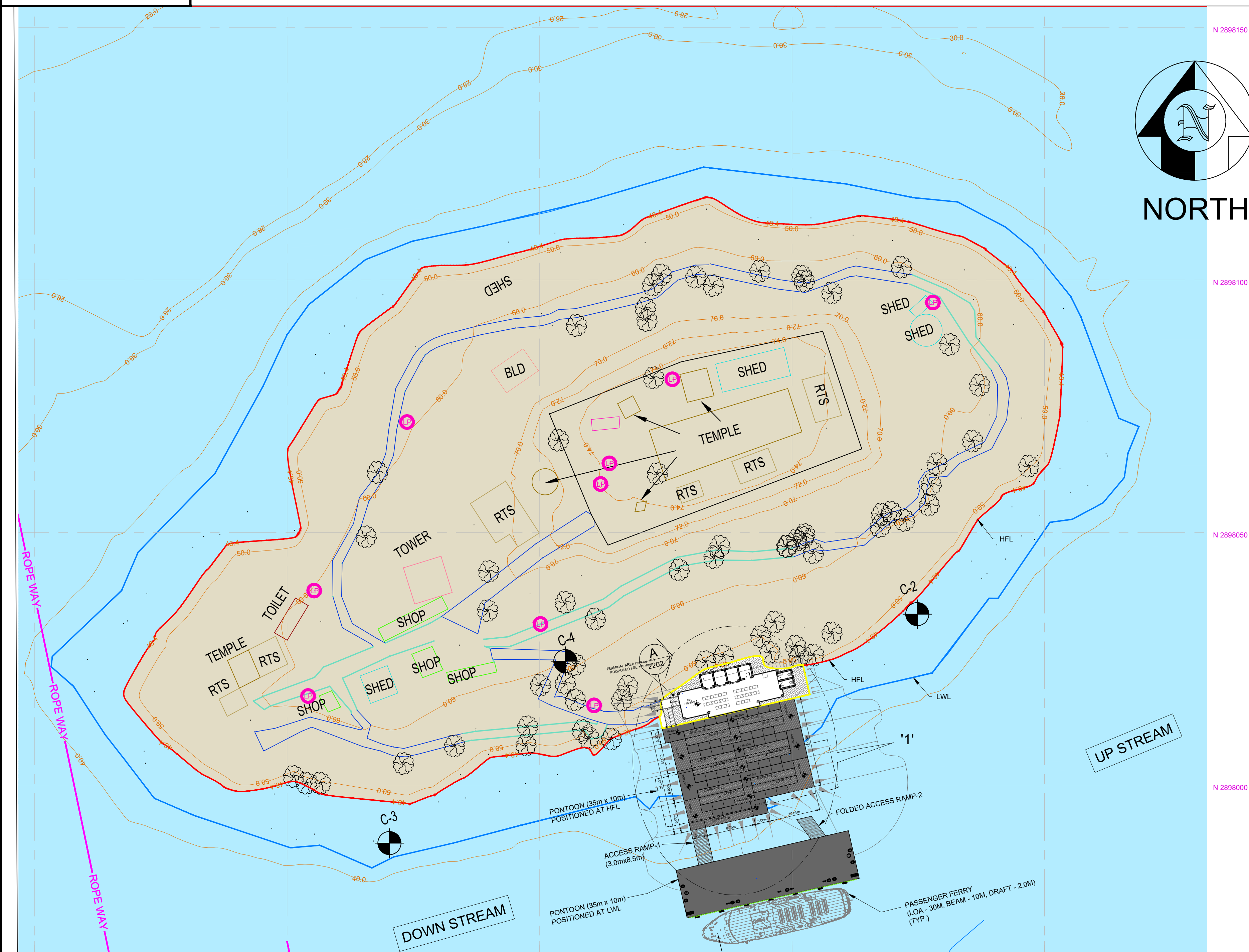
REVISIONS

CLIENT	Assam Inland Water Transport Development Society (AIWTDS)
--------	---

CONSULTANT	HaskoningDHV Consulting Private Limited 502-505, 5th Floor, Platinum Techno Park Plot 17 & 18, Sector 30 A, Vashi New Mumbai - 400 703, INDIA Tel: +91 (0) 22 61395000 Email: info.india@haskoningdhv.com www.royalhaskoningdhv.com
PROJECT	Assam Inland Water Transport Project (AIWTP)
ASSIGNMENT	Preparation of DPR along with Engineering Design, Drawings, Tender Documents for Construction of Modular Terminal at Ferry Services of NW-2 and NW-16 in Assam
TITLE	CENTRAL CLUSTER UMANANDA TEMPLE GHAT -TYPICAL DETAILS FOR DRAINAGE & WATER

DRAWN	PC	CHECKED	SG	APPROVED	JRS
DATE	FEB. 2023	SCALE	AS SHOWN	REF	

DRAWING No.	D1530 -RHD-ZZ-UA-DR-M-2294	SUITABILITY	A3	REVISION	P01
-------------	----------------------------	-------------	----	----------	-----



- NOTES**
- ALL DIMENSIONS ARE IN METERS.
 - ALL LEVELS ARE IN METERS RELATIVE TO MEAN SEA LEVEL (MSL), UNLESS NOTED OTHERWISE.
 - DRAWINGS ARE NOT TO BE SCALED. WRITTEN DIMENSIONS SHOULD BE FOLLOWED AND VERIFIED WITH THE DETAILS.
 - ANY DISCREPANCIES FOUND IN DRAWINGS ARE TO BE REPORTED TO THE ENGINEER.
 - REFERENCE ELEVATION AND HFL(48.40) WAS OBTAINED FROM CWO OFFICE.
 - WATER LEVEL DURING HYDROGRAPHIC SURVEY WAS 41.550m AT UMANANDA TEMPLE GHAT LOCATION.
 - REFERENCE PILLAR CO-ORDINATES & LEVELS AT UMANANDA TEMPLE GHAT LOCATION.
- | REFERENCE POINT | EASTING (m) | NORTHING (m) | LEVEL (m) |
|-----------------|-------------|--------------|-----------|
| C-2 | 374674.803 | 2898033.808 | 46.393 |
| C-3 | 374570.276 | 2897988.503 | 43.256 |
| C-3 | 374605.113 | 2898024.527 | 60.754 |

LEGEND

SL.NO.	DESCRIPTION	SYMBOL
1.	ELECTRIC POST / LIGHT POST	
2.	HUT / SEMI PUCCA BUILDING	
3.	TREE / REFERENCE POINT	
4.	SPOT ELEVATION / GATE	
5.	CONTOUR	
6.	WATER EDGE (ASSUMED LWL)	
7.	HIGH FLOOD LEVEL	
8.	CANAL	
9.	PLAN LEVEL	

- LEGEND :**
- HFL - HIGH FLOOD LEVEL
 - LWL - LOW WATER LEVEL
 - FGL - FINISHED GROUND LEVEL
 - RIVER WATER AREA
 - LAND AREA
 - SLOPE FOR PHYSICALLY CHALLENGED PEOPLE

- REFERENCE DRAWINGS:**
- D11530-RHD-ZZ-UA-DR-C-2202 CROSS SECTION
 - D11530-RHD-ZZ-UA-DR-C-2216 PONTON GENERAL ARRANGEMENT

SETTING-OUT POINT CO-ORDINATES

SOPs	EASTING (m)	NORTHING (m)
SOP-1	374624.2715	2898011.2106
SOP-2	374623.7243	2898013.5766
SOP-3	374633.6648	2898023.2448
SOP-4	374641.6698	2898025.3674
SOP-5	374652.1679	2898023.7503
SOP-6	374653.5057	2898017.9312

FOR TENDER

NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION	BY	CHK.	APP.
------	------	-------------	----	------	------

CLIENT: Assam Inland Water Transport Development Society (AIWTDs)

CONSULTANT: HaskoningDHV Consulting Private Limited

PROJECT: Assam Inland Water Transport Project (AIWTP)

ASSIGNMENT: Preparation of DPR along with Engineering Design, Drawings, Tender Documents for Construction of Modular Terminal at Ferry Services of NW-2 and NW-16 in Assam

TITLE: CENTER CLUSTER UMANANDA TEMPLE GHAT OVERALL LAYOUT

DRAWN	SNJ	CHECKED	SVK	APPROVED	AK
DATE	FEB 2023	SCALE	AS SHOWN	REF.	
DRAWING No.	D11530-RHD-ZZ-UA-DR-C-2201	SUITABILITY	REVISION		
	A3	P01			



- | | | |
|----|----------------------------|--------------------------------|
| 1. | DI1530-RHD-ZZ-UA-DR-C-2201 | OVERALL LAYOUT |
| 2. | DI1530-RHD-ZZ-UA-DR-C-2216 | PONTOON
GENERAL ARRANGEMENT |

FOR TENDER

**NOT FOR
CONSTRUCTION**

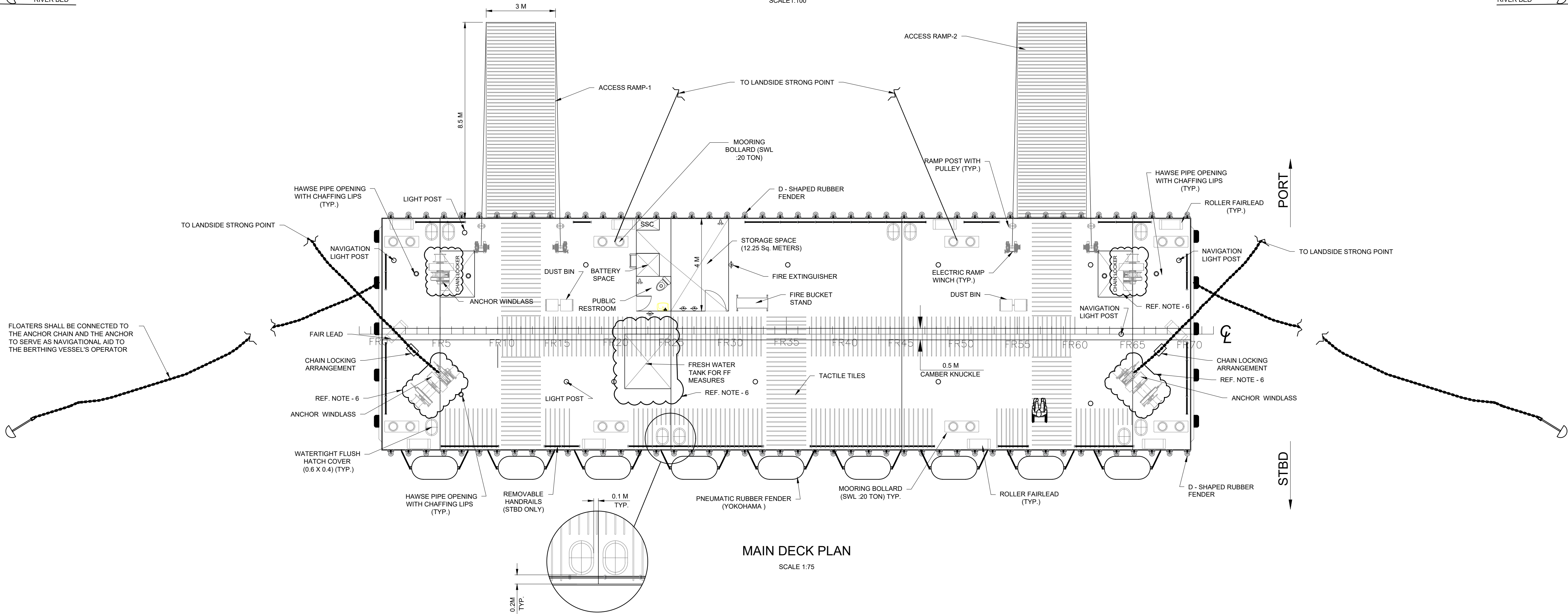
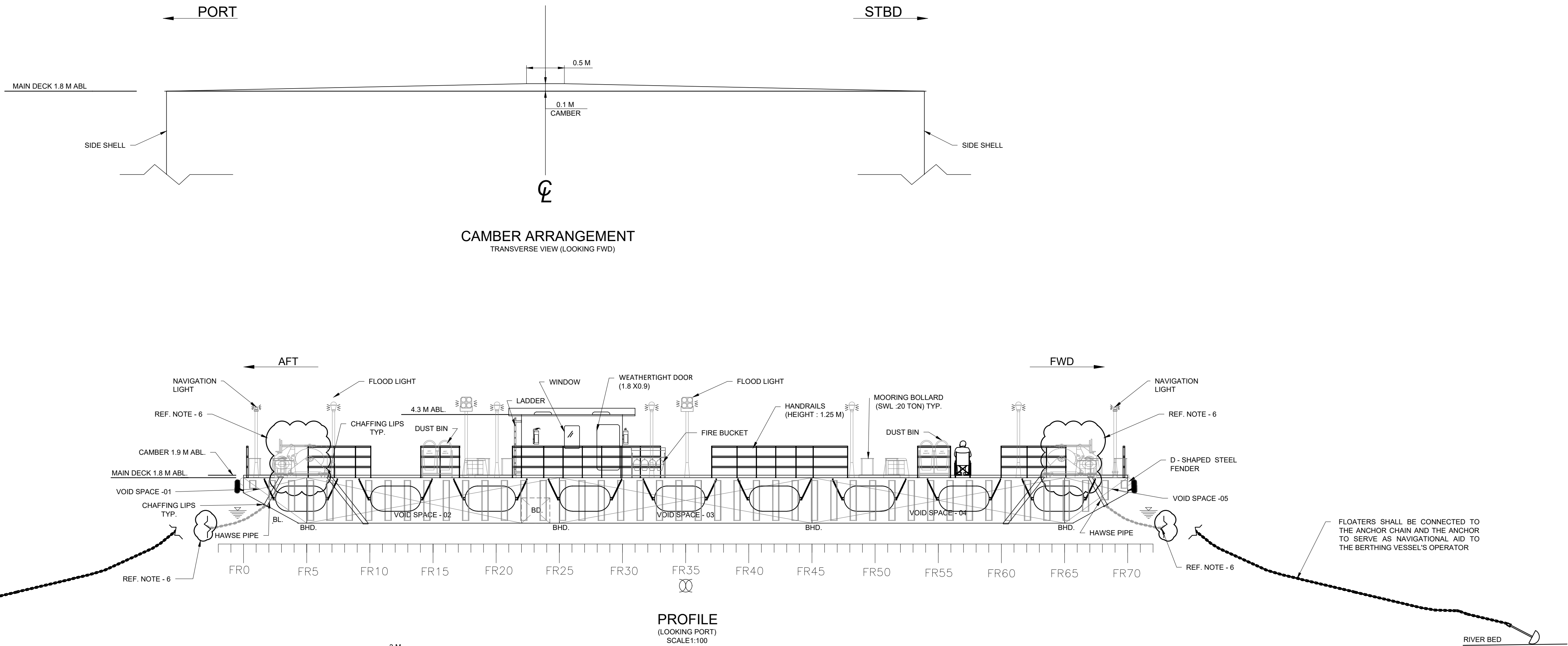
REVISIONS

Preparation of DPR along with Engineering Design, Drawings, Tender Documents for Construction of Modular Terminal at Ferry Services of NW-2 and NW-16 in Assam

UMANANDA TEMPLE GHAT
CROSS SECTIONS

DRAWING No.	SUITABILITY	REVISION
DI1530-RHD-ZZ-UA-DR-C-2202	A3	P01

DO NOT SCALE



NOTES:

- ALL DIMENSIONS ARE IN METERS.
- ALL LEVELS ARE IN METERS RELATIVE TO MEAN SEA LEVEL (MSL), UNLESS NOTED OTHERWISE.
- ANCHOR & MOORING SYSTEM: ANCHORS AND MOORING BOLLARDS DEPICTED ON THE MAIN DECK ARE BASED ON THE INLAND WATERWAY RULES IN IRS CLASS.
- THE MAIN DECK SHALL BE COATED WITH ANTI-SKID PAINT.
- STRUCTURAL REINFORCEMENTS AND INSERT PLATES OF ENHANCED THICKNESS ARE ENVISAGED TO BE PROVIDED LOCALLY IN THE WAY OF RAMP ENGAGEMENT, DECK MACHINERIES & FITTINGS, ANCHOR STRONG POINTS, THE AREAS PRONE TO RUBBING AND IMPACT BY BERTHING VESSELS, INTERFACE AREAS WHERE THE PONTOON WILL BE IN CONTACT WITH THE SHORE INFRASTRUCTURE FACILITIES, ETC
- THIS GENERAL ARRANGEMENT HAS TO BE READ IN CONJUNCTION WITH THE TECHNICAL SPECIFICATION.
- DRAWING ARE NOT TO BE SCALED. WRITTEN DIMENSIONS SHOULD BE FOLLOWED AND VERIFIED WITH THE DETAILS .
- ANY DISCREPANCIES FOUND IN DRAWING ARE TO BE REPORTED TO THE ENGINEER.
- STRONG POINT WILL BE MOORED TO HARD STRUCTURES APPROPRIATELY.

MAIN PARTICULARS	
LENGTH (L)	45 M
BREADTH (B) MLD.	12 M
DEPTH (D) MLD.	1.8 M
DRAFT (T) MAX.	~0.81 M
FRAME SPACING	0.5 M
DECK LOAD RATING	100 KN/M ²

LEGEND :

B.L	: BASE LINE
A.B.L	: ABOVE BASE LINE
TYP.	: TYPICAL
C.L	: CENTER LINE
BHD.	: BULKHEAD
STBD	: STARBOARD
FR	: FRAME
FWD	: FORWARD

REFERENCE DRAWINGS:

- DI1530-RHD-ZZ-UA-DR-C-2201 OVERALL LAYOUT
- DI1530-RHD-ZZ-UA-DR-C-2202 LONGITUDINAL SECTION
- DI1530-RHD-ZZ-UA-DR-C-2203 CROSS SECTION PROPOSED TERMINAL BUILDING FGL
- DI1530-RHZ-ZZ-UA-DR-C-2210 LAND AREA REQUIREMENT
- DI1530-RHD-ZZ-UA-DR-C-2212 STEEL LINK SPAN GENERAL ARRANGEMENT
- DI1530-RHD-ZZ-UA-DR-C-2217 PONTOON MID SECTION

FOR TENDER
NOT FOR
CONSTRUCTION

P01	18/02/2023	ISSUED FOR TENDER	TSM	JAK	AK
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



Assam Inland Water Transport
Development Society (AIWTDS)

CONSULTANT



HaskoningDHV Consulting Private Limited
22C-22D, 2nd Floor, Platinum Techno Park,
Plot 17 & 18, Sector 30 A, Vashi
Navi Mumbai - 400 703, INDIA
Tel: +91 (0) 22 61385000
Email: info.india@rhdhv.com
www.royalhaskoningdhv.com

DESIGN PARTNER



CONCEPTIA®
NAVAL ARCHITECTURE & MARINE ENGINEERING DIV.
#22, 2nd Floor, 100 Feet Ring Road, 6th Block, 3rd Phase
BSK 3rd Stage, Bengaluru - 560085, Karnataka, India
Email: info@conceptia.in
Website: www.conceptia.in

PROJECT

Assam Inland Water Transport Project (AIWTP)

ASSIGNMENT

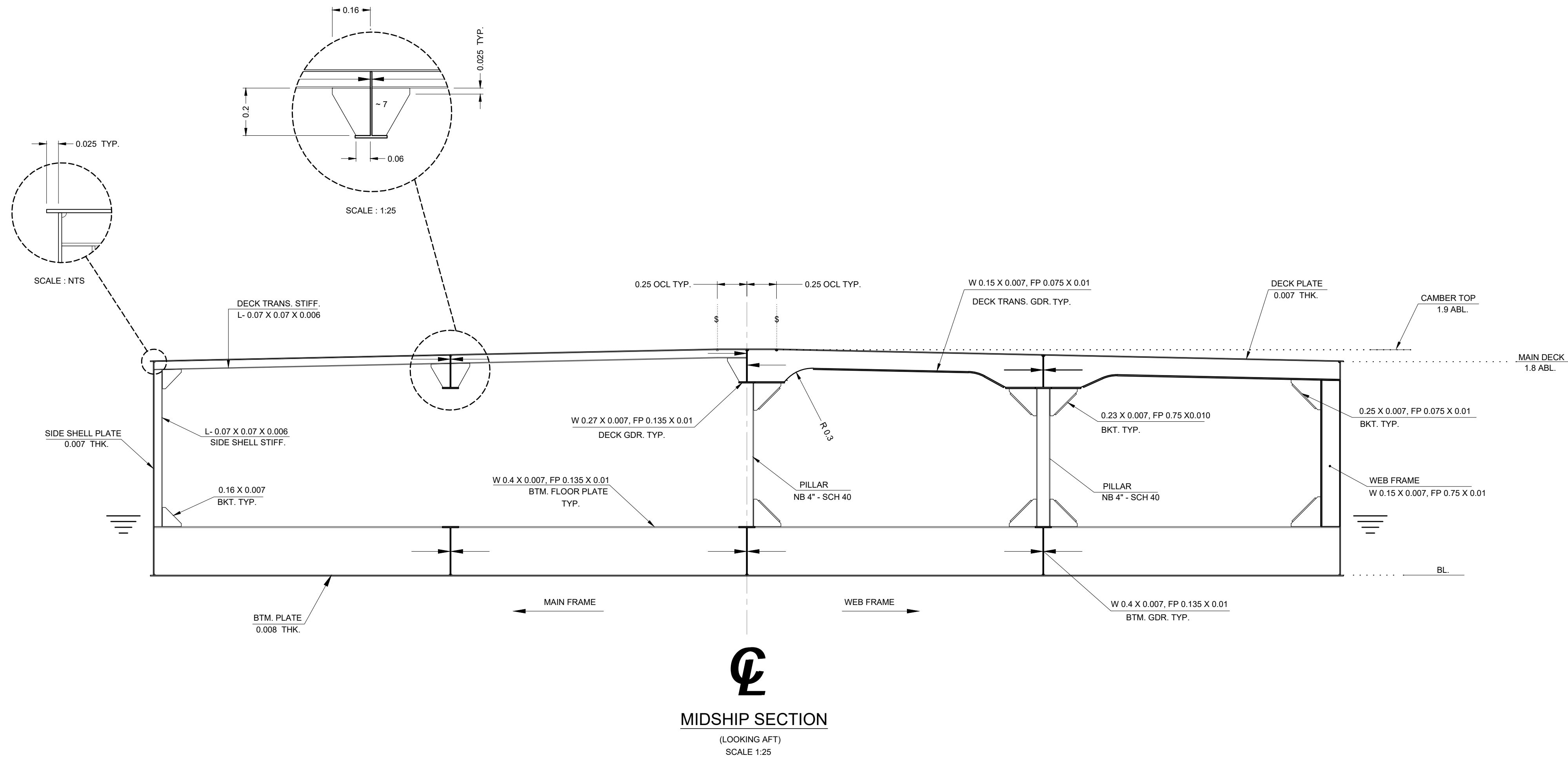
Preparation of DPR along with Engineering Design,
Drawings, Tender Documents for Construction of Modular
Terminal at Ferry Services of NW-2 and NW-16 in Assam

TITLE

CENTER CLUSTER
UMANANDA TEMPLE GHAT
PONTOON
GENERAL ARRANGEMENT
(35m x 10m)

DRAWN	RVA	CHECKED	SVK	APPROVED	AK
DATE	FEB 2023	SCALE	@A1	REF.	-

DRAWING No.	DI1530-RHD-ZZ-UA-DR-C-2216	SUITABILITY	A3	REVISION	P01
-------------	----------------------------	-------------	----	----------	-----



- NOTES:
- ALL DIMENSIONS ARE IN METERS.
 - SCANTLING IS BASED ON IRS RULES (RULES AND REGULATION FOR THE CONSTRUCTION AND CLASSIFICATION OF INLAND WATERWAYS VESSELS).
 - ALL THE SHARP EDGES ARE TO BE GROUND SMOOTH & ROUNDED OFF.
 - ALL WELDING SCALLOPS ARE 0.02 M.
 - MATERIAL OF CONSTRUCTION : MILD STEEL WITH YIELD STRESS OF 235 MPA AND TENSILE STRENGTH OF 400 - 490 MPA.

MAIN PARTICULARS	
LENGTH (L)	35 M
BREADTH (B) MLD.	10 M
DEPTH (D) MLD.	1.8 M
DRAFT (T) MAX.	~0.66 M
FRAME SPACING	0.5 M
DECK LOAD RATING	100 kN/M ²

- LEGEND :
- B.L. : BASE LINE
TYP. : TYPICAL
THK. : THICKNESS
BKT. : BRACKET
GDR. : GIRDER
BTM. : BOTTOM
STIFF. : STIFFENER
FWD. : FORWARD
NTS. : NOT TO SCALE
OCL. : OFF CENTER LINE

REFERENCE DRAWINGS:

- DI1530-RHD-ZZ-UA-DR-C-2201 OVERALL LAYOUT
- DI1530-RHD-ZZ-UA-DR-C-2202 CROSS SECTION
- DI1530-RHD-ZZ-UA-DR-C-2216 PONTOON GENERAL ARRANGEMENT

FOR TENDER
NOT FOR
CONSTRUCTION

P01	18/02/2023	ISSUED FOR TENDER	RVA	JAK	AK
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



Assam Inland Water Transport
Development Society (AIWTDS)

CONSULTANT

HaskoningDHV Consulting Private Limited
22/2, 2nd Floor, 100 Feet Ring Road, 6th Block, 3rd Phase
BSK 3rd Stage, Bengaluru - 560085, Karnataka, India
Tel: +91 (0) 22 61385000
Email: info.india@haskoningdhv.com
www.royalhaskoningdhv.com

Royal HaskoningDHV
Enhancing Society Together

DESIGN PARTNER



NAVAL ARCHITECTURE & MARINE ENGINEERING DIV.
#22, 2nd Floor, 100 Feet Ring Road, 6th Block, 3rd Phase
BSK 3rd Stage, Bengaluru - 560085, Karnataka, India
Email: info@conceptia.in
Website: www.conceptia.in

PROJECT

Assam Inland Water Transport Project (AIWTP)

ASSIGNMENT

Preparation of DPR along with Engineering Design,
Drawings, Tender Documents for Construction of Modular
Terminal at Ferry Services of NW-2 and NW-16 in Assam

TITLE

CENTER CLUSTER
UMANANDA TEMPLE GHAT
PONTOON MID SECTION
(35m x 10m)

DRAWN	RVA	CHECKED	SVK	APPROVED	AK
DATE	FEB 2023	SCALE	@A1	REF.	-

DRAWING No.	DI1530-RHD-ZZ-UA-DR-C-1517	SUITABILITY	A3	REVISION	P01
-------------	----------------------------	-------------	----	----------	-----