

PROPOSED DESIGN
OF
GGPS WAJJAN TAXILA
RAWALPINDI



PLANNERS CONSULTANTS ENGINEERS (PCE)
97-K Industrial Estate, Hayatabad Peshawar Pakistan
Ph: 0092-91-5816017, 5891661-4, Fax: 5891845
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LIST OF DRAWINGS

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CLIENT:



CONSULTANTS:
PLANNERS CONSULTANTS ENGINEERS (PCE)

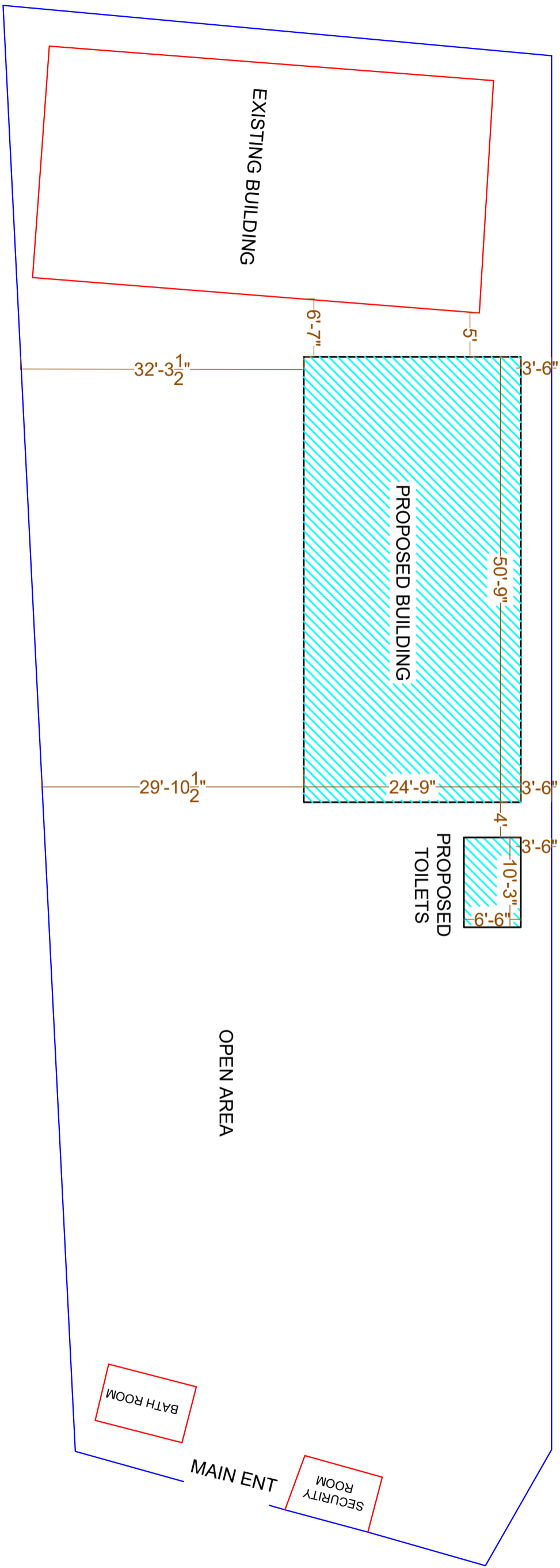
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SCHOOL NAME

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 RAWALPINDI

Date of Revision	Prepared By	ARCHITECT
	Designed By	MARWAT KHAN ORAKZAI (S.Arch. Licet. Khas)
	Checked By	(M.Arch. Licet. Lahore)
	Approved By	

PROJECT:		
PREPARATION OF DESIGN, DRAWINGS & BOQS FOR CONSTRUCTION/ REHABILITATION OF SITES		
TITLE: LIST OF DRAWINGS		
DATE	SCALE	DRG.NO.
SEP 2023		A-00



SITE PLAN

CLIENT:



CONSULTANTS:

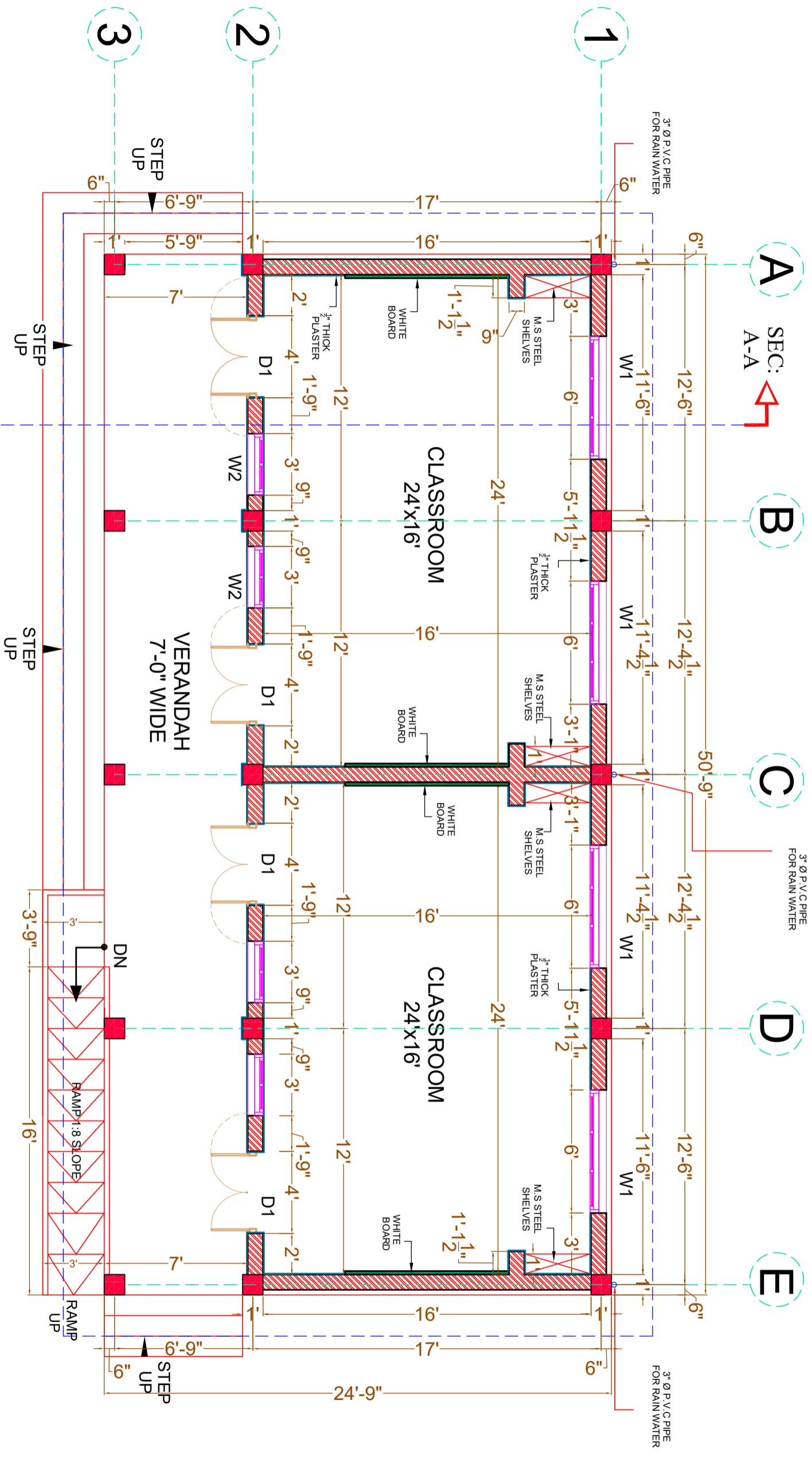


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	Designed By	MARWAT KHAN OKARZAI (B.Arch, P.C.E.T. Karachi) (A.Arch, (P.E.T. Lahore)	PREPARATION OF DESIGN, DRAWINGS & BOOK FOR CONSTRUCTION/REHABILITATION OF SITES
	Checked By		TITLE:
	Approved By		SITE PLAN
			DATE
			SEP 2023
			SCALE
			DRG. NO.
			A-01



SEC: A-A
 SEC: B-B
 SEC: C-C
 SEC: D-D
 SEC: E-E

GROUND FLOOR PLAN

CLIENT:



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 FOR CONSTRUCTION/REHABILITATION OF SITES

TITLE:

GROUND FLOOR PLAN

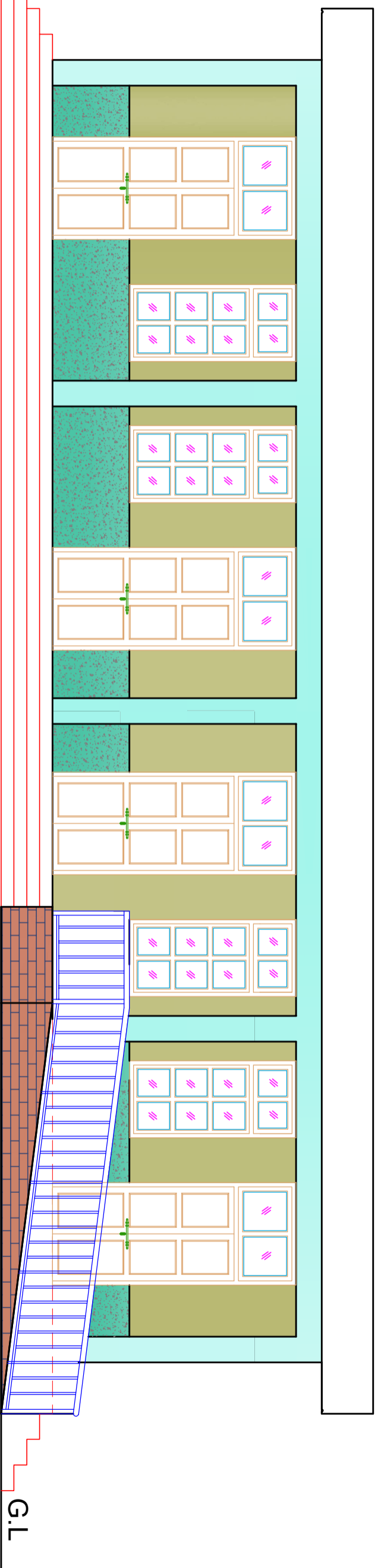
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SEP 2023

SCALE

DRG. NO.

A-02



FRONT ELEVATION

CLIENT:

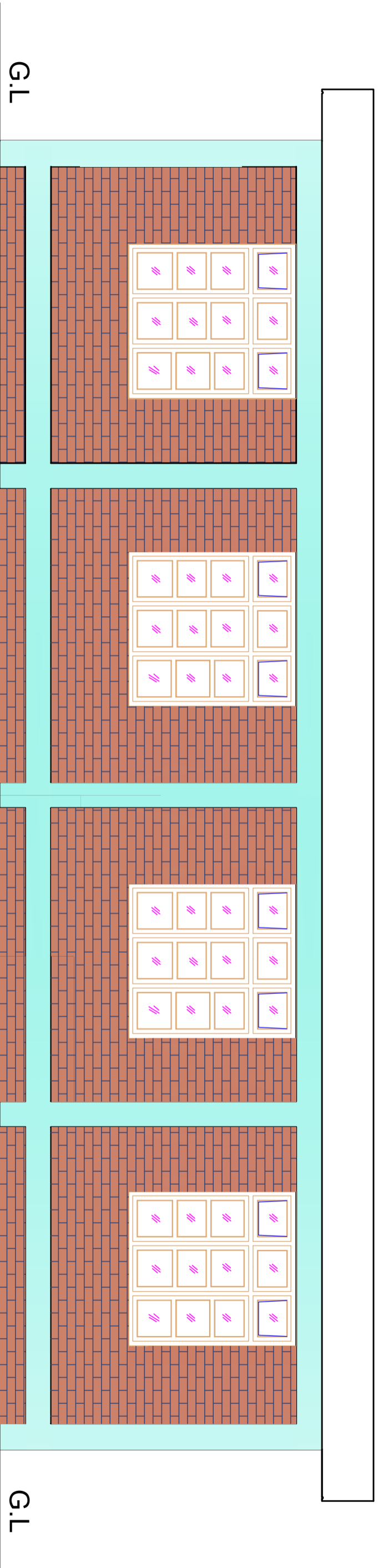


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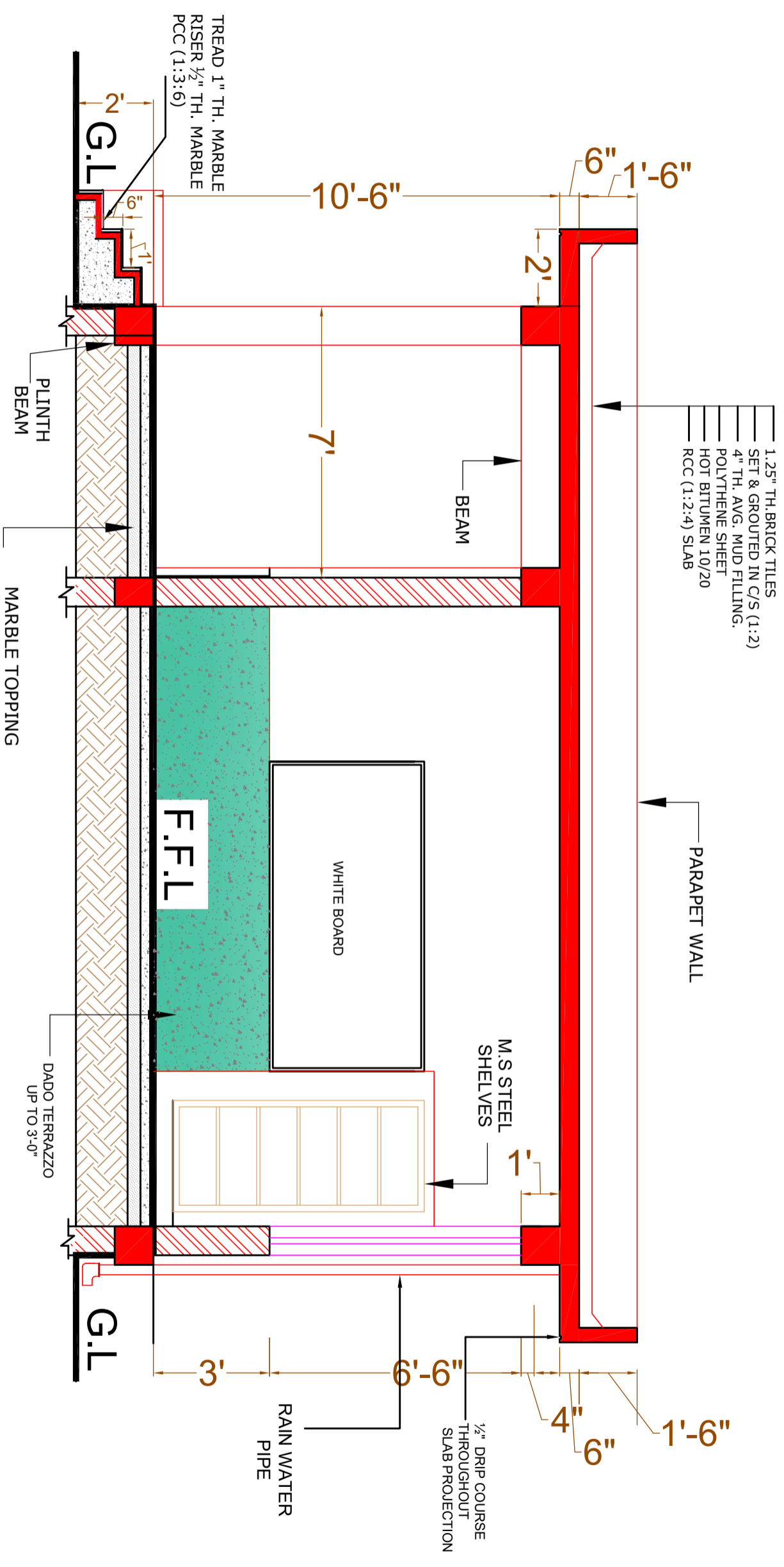
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	Designed By	MARWAT KHAN ORAKZAI (B.Arch, D.C.E.T Karachi) (M.Arch, UET, Lahore)	PREPARATION OF DESIGN, DRAWINGS & BOOKS FOR CONSTRUCTION/REHABILITATION OF SITES
	Checked By		FRONT ELEVATION
	Approved By		DATE: <i>SEP 2023</i> SCALE: DRG. NO. A-03



REAR ELEVATION

CLIENT: 											
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; padding: 2px;">Date of Revision</td> <td style="width: 70%;"></td> </tr> <tr> <td style="padding: 2px;">Prepared By</td> <td style="padding: 2px;">FARID KHAN KHAN HADDER</td> </tr> <tr> <td style="padding: 2px;">Designed By</td> <td style="padding: 2px;">ARCHITECT MARWAT KHAN ORAKZAI (B.Arch, D.C.E.T Karachi) (M.Arch, UET, Lahore)</td> </tr> <tr> <td style="padding: 2px;">Checked By</td> <td></td> </tr> <tr> <td style="padding: 2px;">Approved By</td> <td></td> </tr> </table>	Date of Revision		Prepared By	FARID KHAN KHAN HADDER	Designed By	ARCHITECT MARWAT KHAN ORAKZAI (B.Arch, D.C.E.T Karachi) (M.Arch, UET, Lahore)	Checked By		Approved By		PROJECT: PREPARATION OF DESIGN, DRAWINGS & BOOKS FOR CONSTRUCTION/REHABILITATION OF SITES TITLE: REAR ELEVATION DATE <i>SEP 2023</i> SCALE DRG.NO. A-04
Date of Revision											
Prepared By	FARID KHAN KHAN HADDER										
Designed By	ARCHITECT MARWAT KHAN ORAKZAI (B.Arch, D.C.E.T Karachi) (M.Arch, UET, Lahore)										
Checked By											
Approved By											



SECTION AT A-A

CLIENT:



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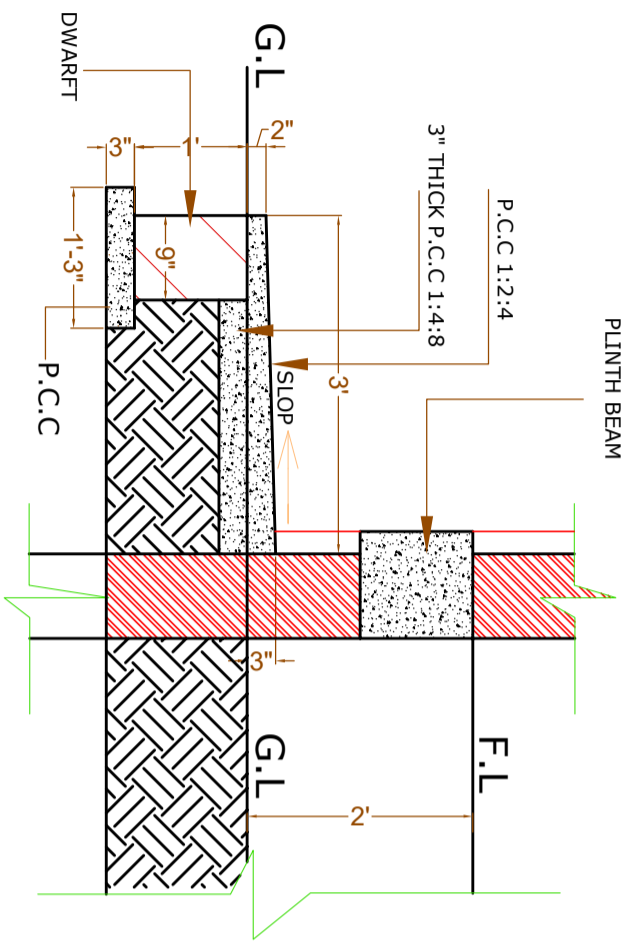
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Date of Revision	Prepared By	PAINT KHAN KIRAN YASIN
	Designed By	ARCHITECT MARWATIYAN ORAKZAI (B.Archd. CET Karachi) (M.Arch. UET Lahore)
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	Approved By	

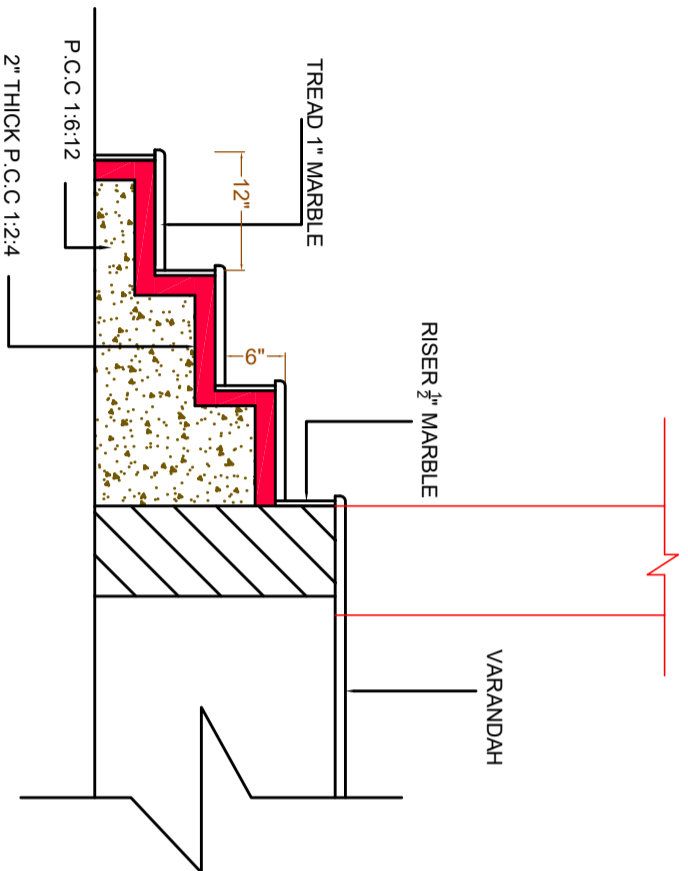
PROJECT:

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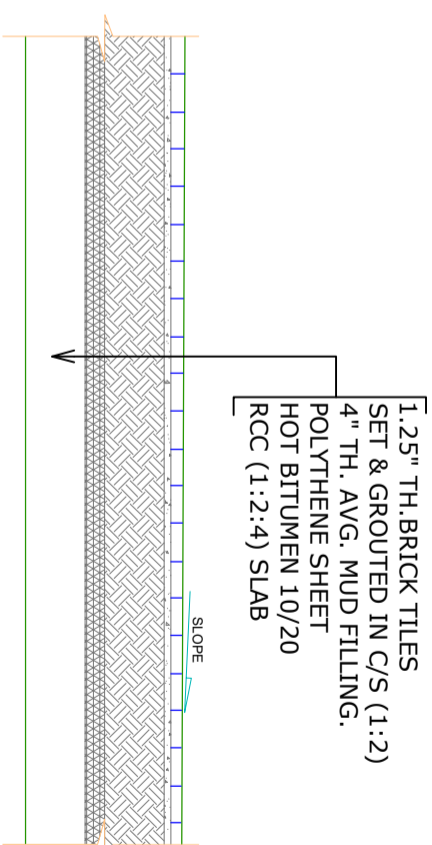
TITLE:	SECTION AT A-A
DATE	SEP 2023
SCALE	
DRG. NO.	A-05



PLINTH PROTECTION

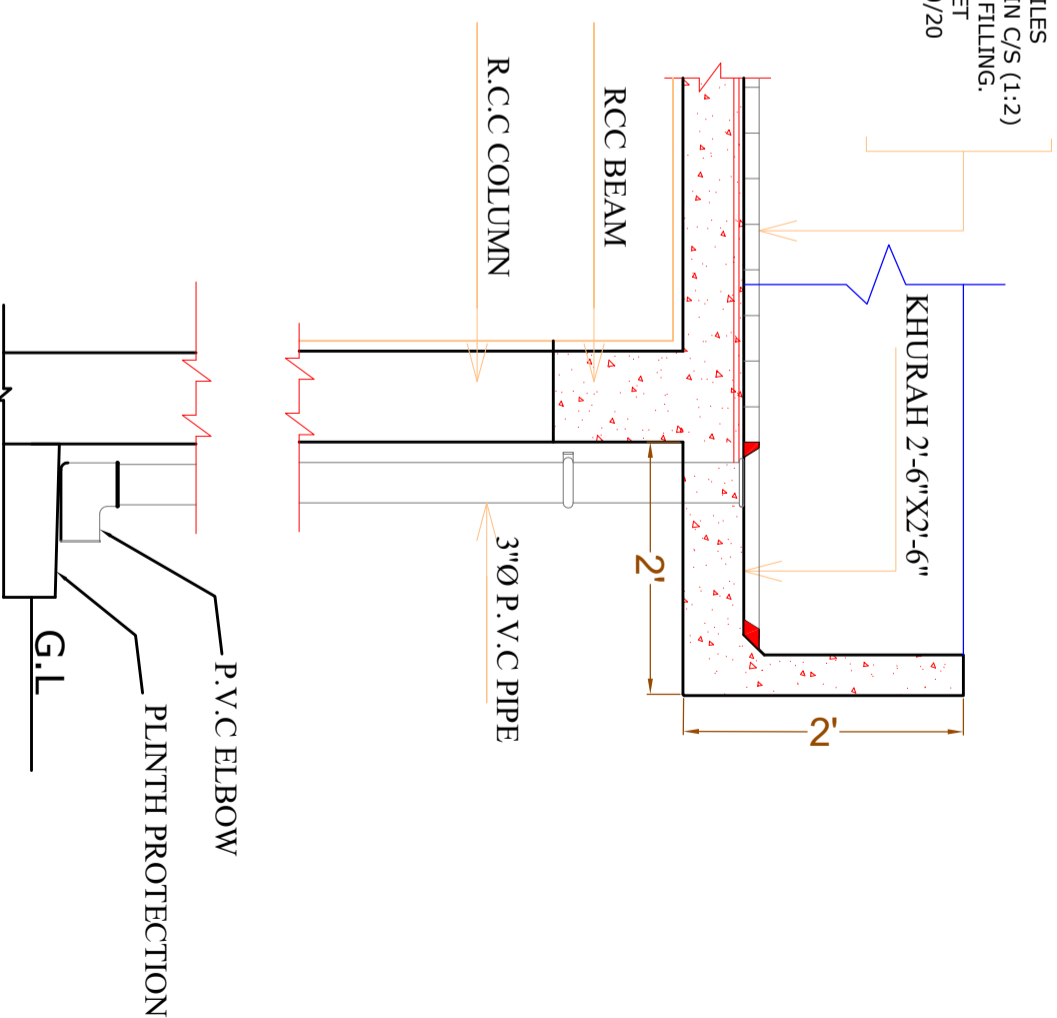


VERANDAH STEPS DETAILS



ROOF TREATMENT


1.25" TH. BRICK TILES
SET & GROUTED IN C/S (1:2)
4" TH. AVG. MUD FILLING.
POLYTHENE SHEET
HOT BITUMEN 10/20
RCC (1:2:4) SLAB



RAIN WATER PIPE DETAIL

CLIENT:

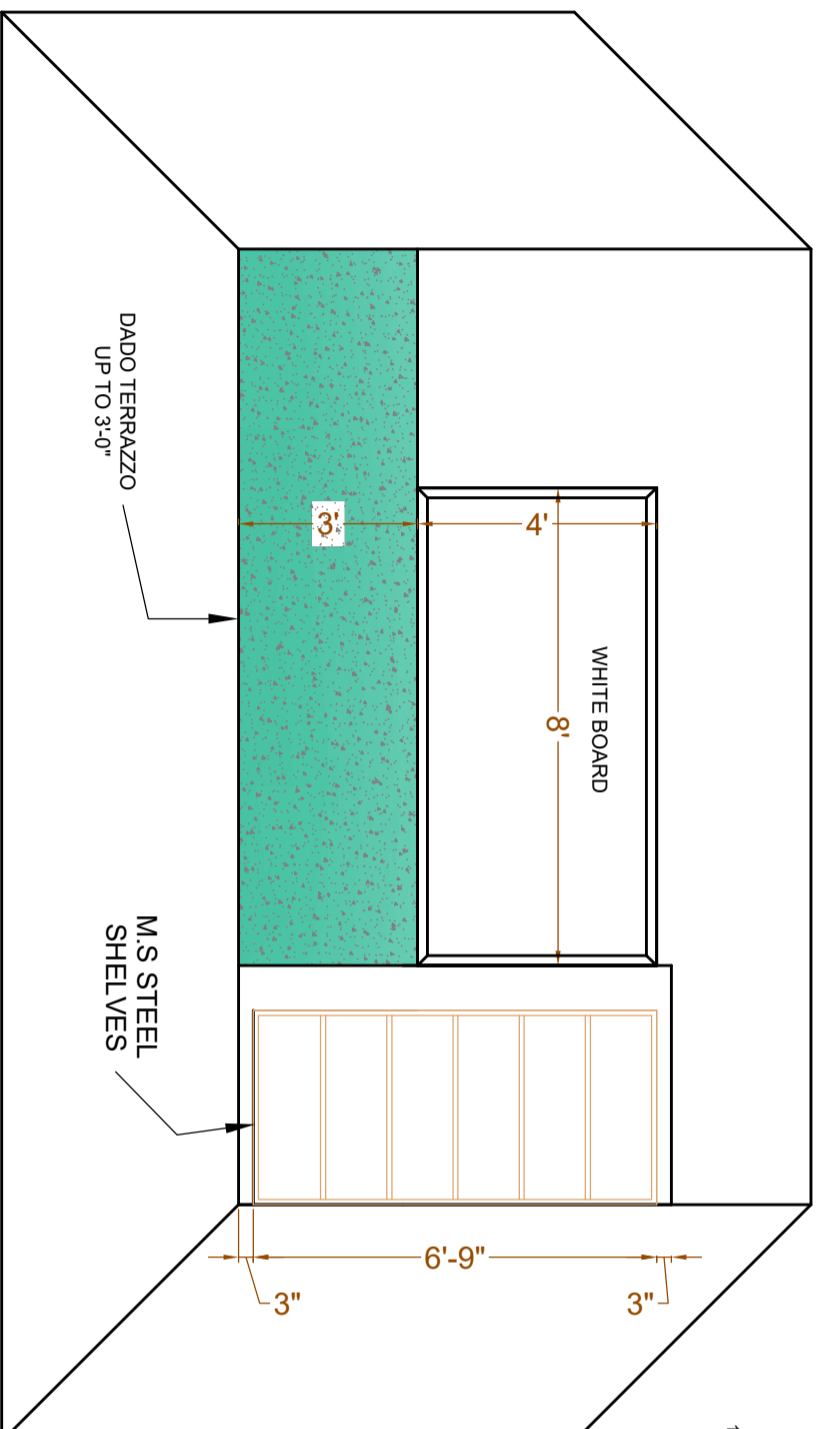
The UN Refugee Agency

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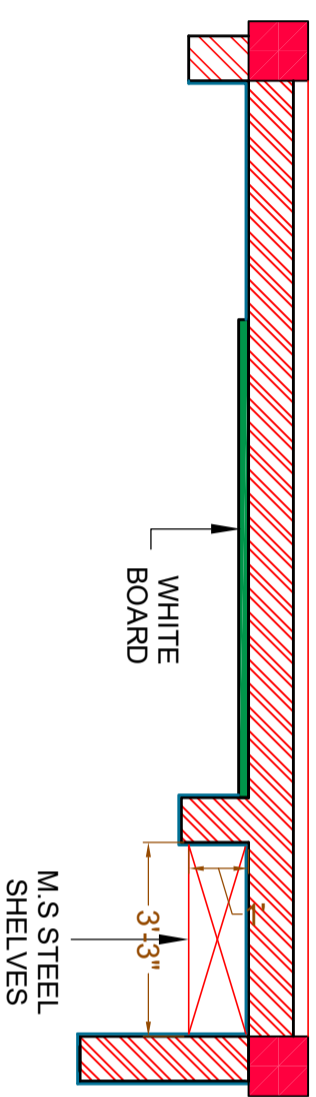
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	Approved By	

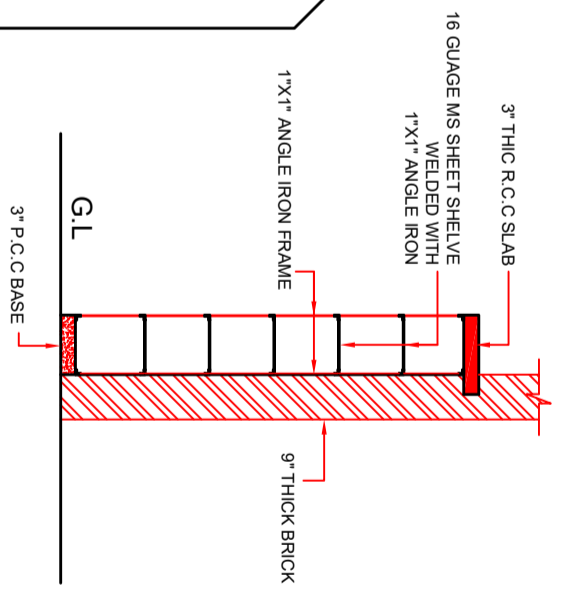
PROJECT:	DATE	SCALE	DRG. NO.
PREPARATION OF DESIGN, DRAWINGS & ROOF FOR CONSTRUCTION/REHABILITATION OF SITES	SEP 2023		A-06
TITLE:			
PLINTH PROTECTION, RAIN WATER PIPE, AND ROOF TREATMENT DETAILS			



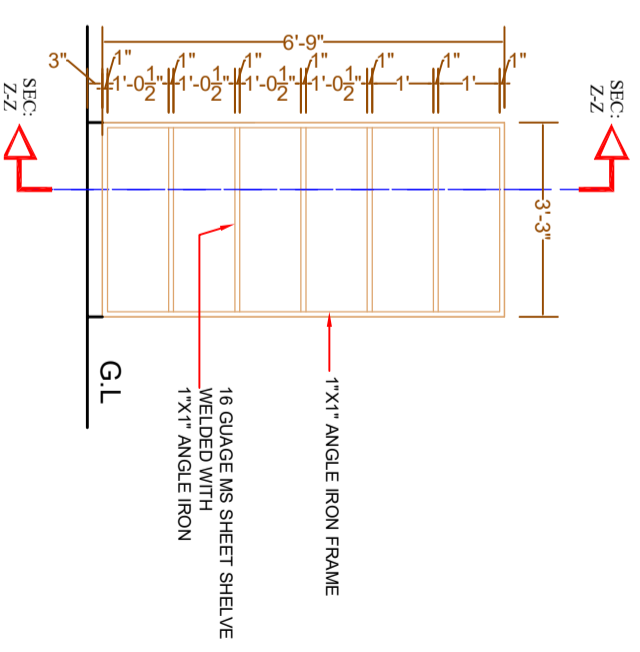
ELEVATION OF WHITE BOARD & CUPBOARD



PLAN OF WHITE BOARD & M.S STEEL SHELVES



SHELVES SECTION AT Z-Z



SHELVES ELEVATION

CLIENT:



CONSULTANTS:



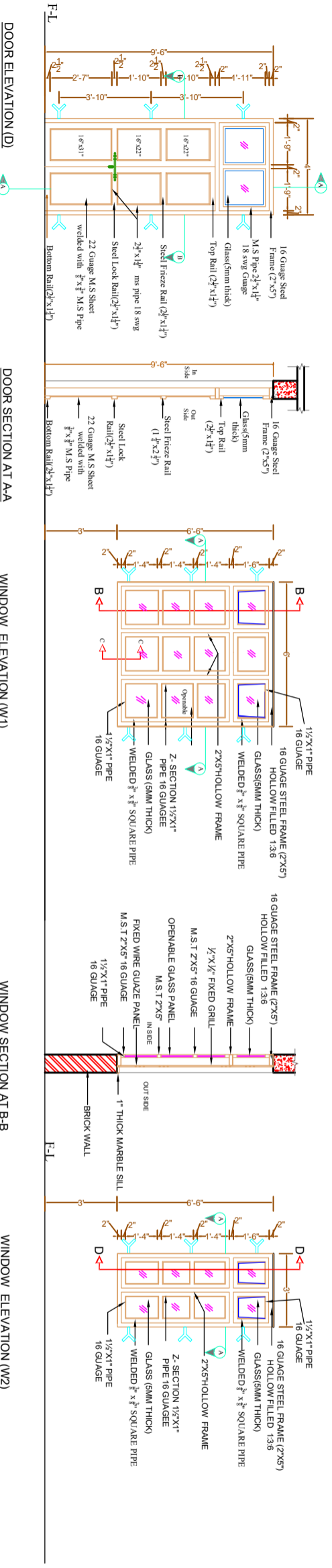
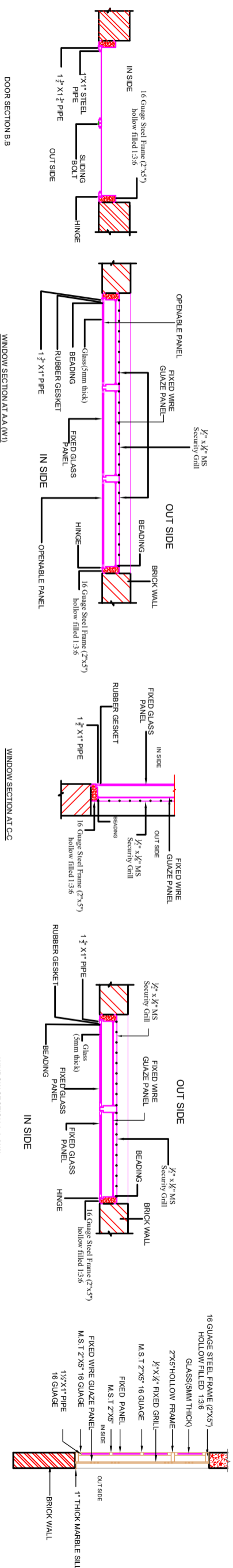
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	DESIGNED BY	ARCHITECT	PREPARATION OF DESIGN, DRAWINGS & BOOKS FOR CONSTRUCTION/ REHABILITATION OF SITES
	CHECKED BY	ARCHITECT	TITLE:
	APPROVED BY	ARCHITECT	PLAN OF WHITE BOARD & M.S STEEL SHELVES
			DATE: SEP 2023
			SCALE
			DRG.NO. A-07

SCHEDULE OF OPENING			
TYPE	SIZE	S-LEVEL	DESCRIPTION
D1	4'-0" X 9'-6"	0'-0"	STEEL
W1	6'-0" X 6'-6"	3'-0"	STEEL
W2	3'-0" X 6'-6"	3'-0"	STEEL



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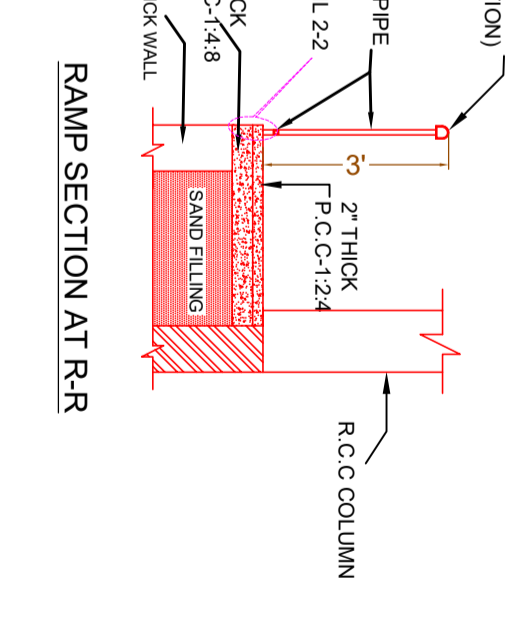
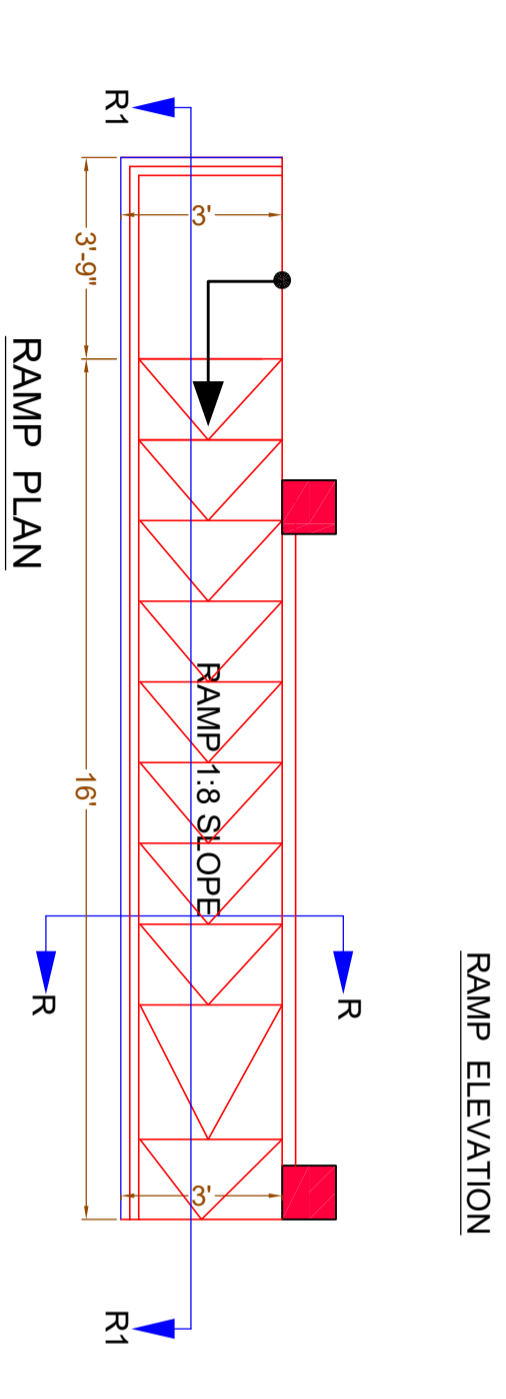
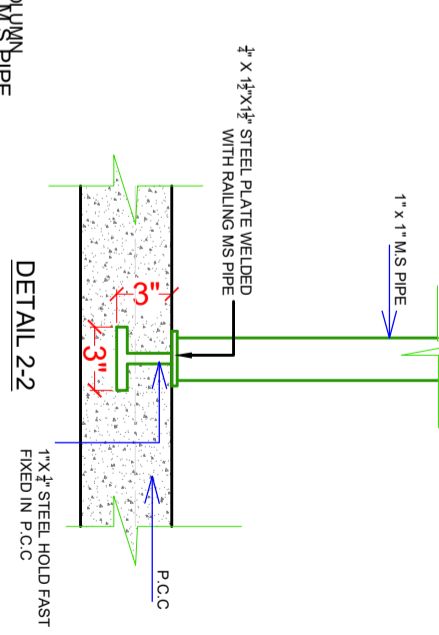
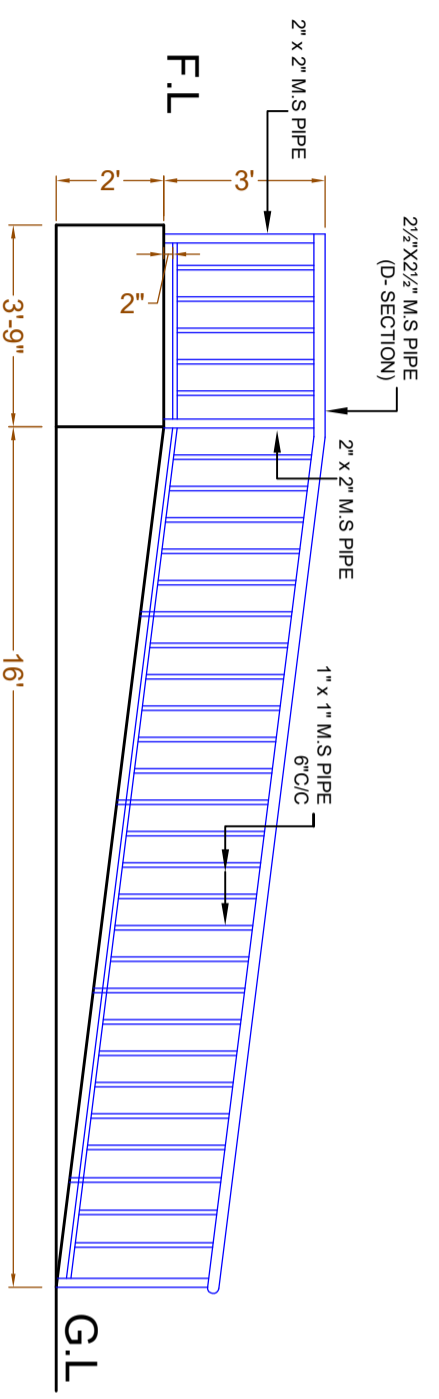
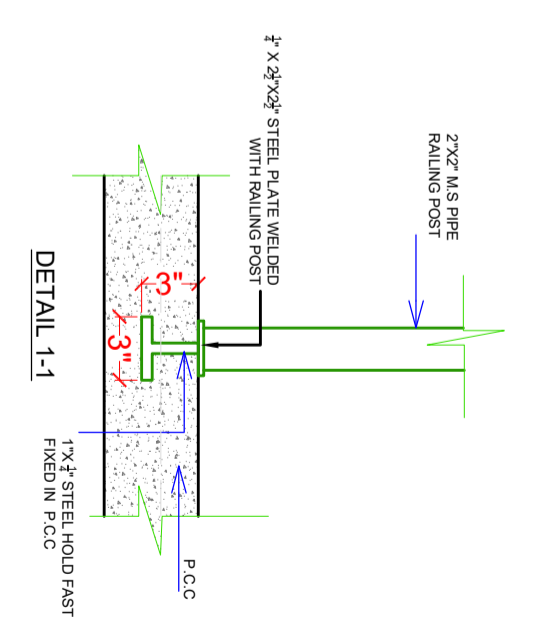
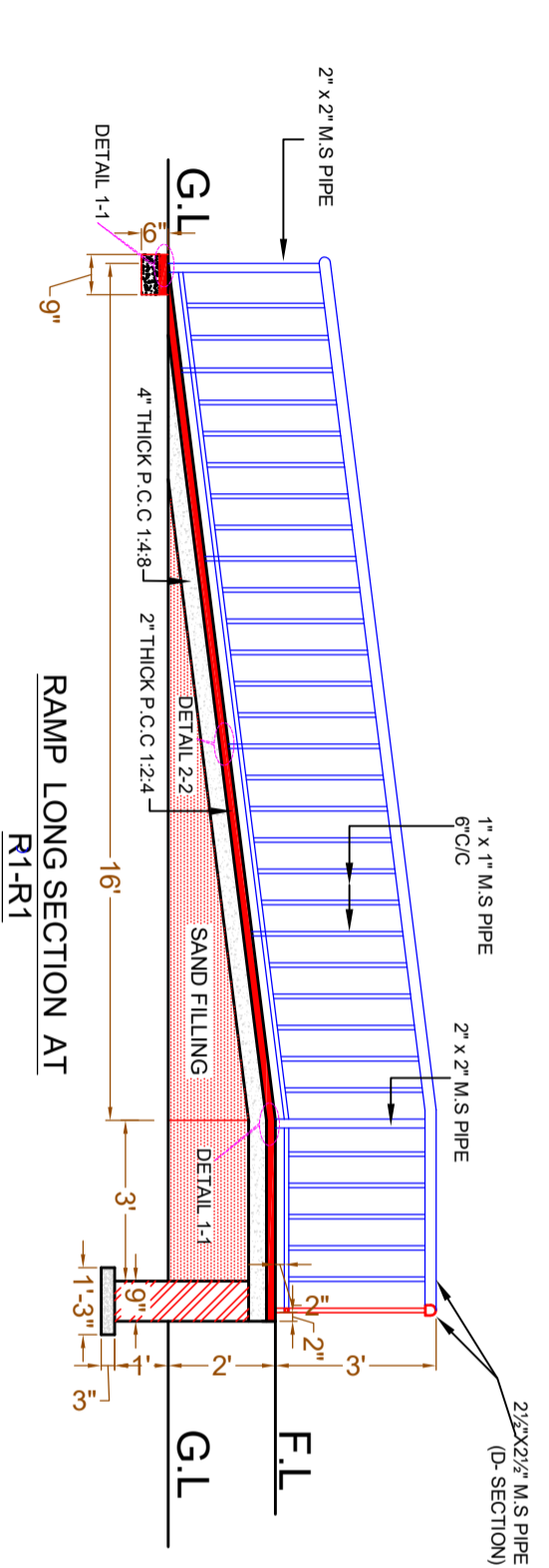
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Date of Revision	Prepared By	ARCHITECT
	FARID KHAN KHAN HADIR	
	Designed By	MARWAT KHAN ORAKZAI (D.Architect, Peshawar)
	Checked By	(M.Architect, Peshawar)
	Approved By	

PROJECT:
 PREPARATION OF DESIGN, DRAWINGS & BOOKS
 FOR CONSTRUCTION/REHABILITATION OF SITES

TITLE:
 DOOR WINDOW DETAILS

DATE	SCALE	DRG.NO.
SEP 2023		A-08



CLIENT:



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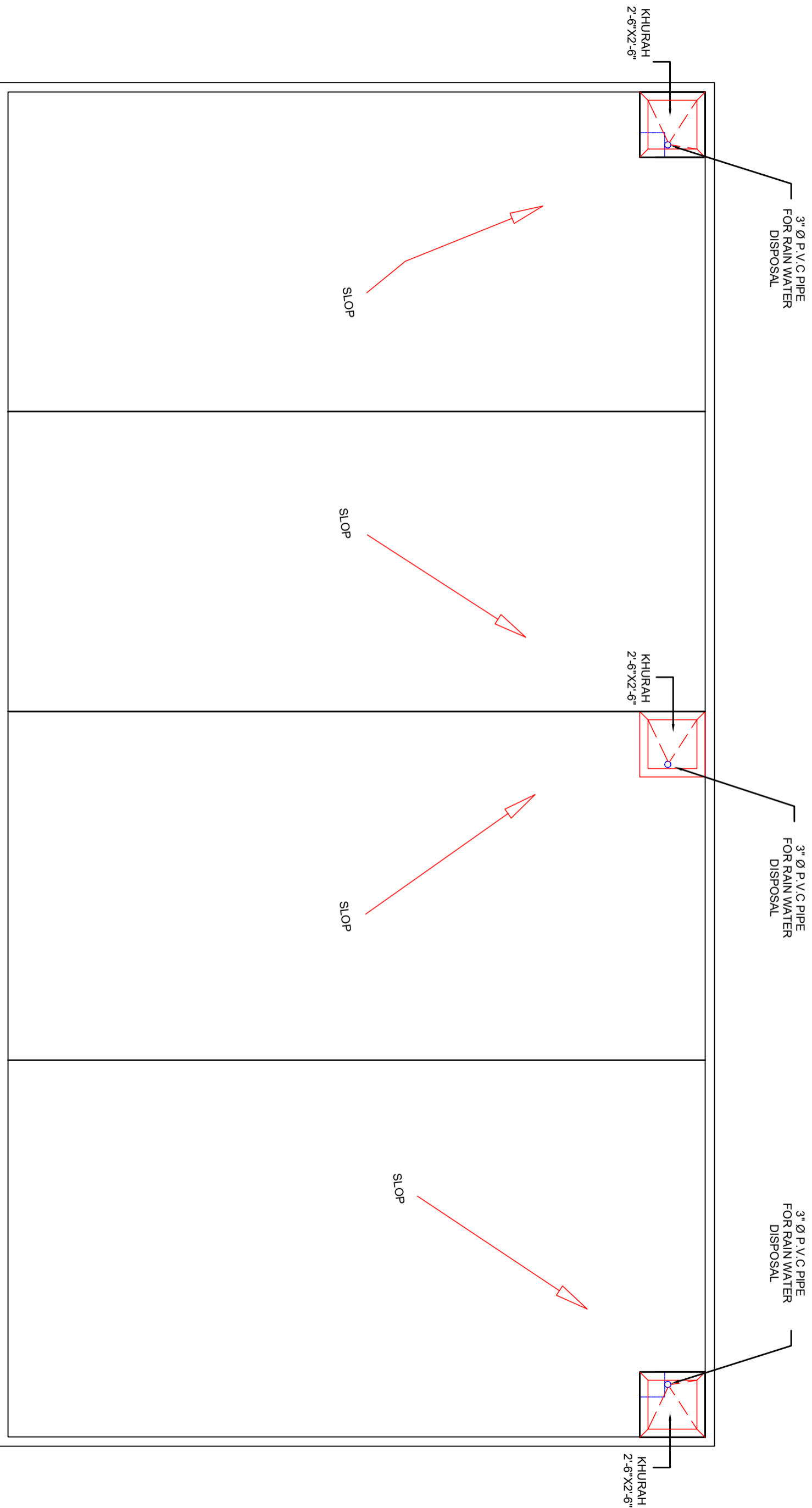
Date of Revision	Prepared By	FARID KHAN KHAN HAMID
	Designed By	ARCHITECT MARWAT KHAN ORAKZAI (B. Arch. DCE, F. Karachi) (M. Arch. UET, Lahore)
	Checked By	
	Approved By	

PROJECT:
 PREPARATION OF DESIGN, DRAWINGS & BOOKS
 FOR CONSTRUCTION/REHABILITATION OF SITES

TITLE:
 RAMP DETAILS

DATE: SEP 2023

SCALE: DRG.NO. A-09



TOP ROOF PLAN

CLIENT:



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	Approved By	

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SEP 2023		A-10

**STRUCTURE DRAWING
OF
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RAWWALPINDI**

1. GENERAL

1. READ ALL DRAWINGS IN CONJUNCTION WITH ARCHITECTURAL, GEOTECHNICAL, PLUMBING, MECHANICAL, ELECTRICAL & ANY OTHER RELEVANT DRAWINGS.
2. NOTES GIVEN IN THIS DRAWING ARE APPLICABLE TO ALL DRAWINGS UNLESS MENTIONED OTHERWISE. NOTES WRITTEN ON A DRAWING, SHALL BE APPLICABLE TO THAT PARTICULAR DRAWING ONLY UNLESS OTHERWISE CROSS-REFERRED.
3. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE SPECIFICATIONS OF THE CONTRACT DOCUMENTS, IN ABSENCE OF ANY SPECIFICATIONS, ALL MATERIALS & WORKMANSHIP SHALL CONFORM TO RELEVANT ACI/BRITISH CODES AND SHALL BE SUBJECTED TO APPROVAL OF THE ENGINEER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE STRUCTURES DURING CONSTRUCTION. HE SHALL ALSO VERIFY ALL DIMENSIONS AND LEVELS BEFORE EXECUTION OF WORK. ANY DISCREPANCY, ERROR OR OMISSION, IF FOUND SHALL BE BROUGHT TO THE NOTICE OF THE ENGINEER FOR CORRECTION AND APPROVAL.
5. THE CONTRACTOR SHALL CO-ORDINATE WITH VARIOUS SERVICES DRAWINGS FOR SIZES & LOCATION OF ALL STRUCTURAL MEMBERS, FLOORS, WALLS, OPENINGS, FLOOR FINISHES, PIPES ETC.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EXECUTION OF DEWATERING SYSTEM WHERE SO REQUIRED DURING CONSTRUCTION.
7. ALL DIMENSIONS & LEVELS ARE IN FEET & INCHES.
8. DO NOT SCALE THE DRAWINGS, DIMENSIONS, GIVEN ON THE DRAWING, SHALL GOVERN.
9. ALL FABRICATION, PAINTING, ERECTION AND QUALITY CONTROL IS TO BE DONE IN ACCORDANCE WITH THE LATEST APPLICABLE ACI/BRITISH SPECIFICATIONS.
10. BACKFILLING AROUND FOUNDATIONS AND WALLS SHALL BE WELL COMPACTED LAYERS NOT EXCEEDING 6 INCHES IN THICKNESS.
11. IT IS STRONGLY RECOMMENDED TO RECONFIRM THE SITE PLAN BEFORE START OF EXECUTION AT SITE. THE SITE SHOULD BE EXAMINED FOR CLEARANCE WITH RESPECT TO LOCAL/SEISMIC HAZARDS.
12. THE CONTRACTOR SHALL INFORM THE ENGINEER ABOUT ANTICIPATED CONSTRUCTION LOADS IN THE STRUCTURE AND OBTAIN ENGINEER'S APPROVAL THEREOF BEFORE COMMENCING THE WORK.
13. THE CONTRACTOR SHALL VERIFY LAYOUT, CONFIGURATION, ALL DIMENSIONS AND LEVELS PERTAINING TO EXISTING WORKS BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL ADOPT ADEQUATE AND APPROPRIATE MEASURES SO AS NOT TO DAMAGE THE EXISTING WORKS.
14. THE CONTRACTOR SHALL EXERCISE UTMOST CARE AND PRECAUTION DURING THE WORKS, AGAINST ANY MISHAPS OR ACCIDENTS, FOR WHICH THE CONTRACTOR SHALL BE WHOLLY AND SOLELY RESPONSIBLE. THE CONTRACTOR SHALL INDEMNIFY THE OWNER AGAINST ANY ACCIDENTS AND ANY LOSSES THEREFROM AND SHALL REPAIR AND RECTIFY THEM AT HIS OWN COST AND TIME.
15. ANY DEPARTURES/DEVIATIONS DESIRED FROM THE DESIGN OR SPECIFICATIONS, OR SOLUTIONS TO ANY PROBLEMS ENCOUNTERED, SHALL BE GOT APPROVED FROM THE ENGINEER PRIOR TO IMPLEMENTATION. UNAPPROVED DEPARTURES/DEVIATIONS MAY LEAD TO REJECTION/REPLACEMENT OF THE ENTIRE WORK AT THE CONTRACTOR'S COST.
16. THE CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS AND BAR BENDING SCHEDULES. THE ENGINEER'S APPROVAL SHALL NOT RELIEVE THE APPROVAL BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE ACCURACY OF SHOP DRAWINGS AND BAR BENDING SCHEDULES. FOR ENGINEERS APPROVAL AND OBTAIN HIS CONTRACTOR FROM HIS RESPONSIBILITY.
17. The allowable bearing capacity of soil should be 1st.

2. SHORING AND BRACING

1. SHORE & BRACE ALL PARTS OF THE STRUCTURE DURING CONSTRUCTION, TO THE EXTENT NECESSARY TO ENSURE COMPLETE SAFETY, STRENGTH & SERVICEABILITY OF ALL STRUCTURAL ELEMENTS UNDER ALL CONDITIONS OF LOADS WHICH MAY OCCUR DURING CONSTRUCTION. SUCH SHORING & BRACING IS THE CONTRACTOR'S SOLE RESPONSIBILITY AND IS NOT SHOWN ON STRUCTURAL DRAWINGS OR SPECIFIED IN THE PROJECT.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY AND STABILITY OF THE SLOPES AND SHALL PROVIDE SHORING AND BRACING DURING EXCAVATION AND CONSTRUCTION, WHEREVER AND WHENEVER REQUIRED.
3. SEQUENCE OF REMOVAL OF FORMWORK SHALL BE APPROVED BY THE ENGINEER.
4. AT LEAST ONE LOWER FLOOR SHALL REMAIN PROPPED UNTILL THE UPPER FLOOR IS CAST AND CURED.

3. REINFORCED CONCRETE

1. STRUCTURAL DESIGN IS BASED ON THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE OF AMERICAN CONCRETE INSTITUTE (ACI 318).
2. ALL STRUCTURAL CONCRETE SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE (ACI) REQUIREMENTS.
3. CONCRETE MIX TO BE DESIGNED ON THE BASIS OF ACI 211 OR EQUIVALENT. TRIAL STRENGTH RESULTS TO BE SUBMITTED BY THE CONTRACTOR FOR REVIEW AND APPROVAL BEFORE CONCRETING.
4. NO CONCRETING SHALL BE CARRIED OUT UNTIL PERMISSION IS GIVEN IN WRITING OR APPROVED BY STRUCTURE ENGINEER.
5. ALL CONCRETE SHALL BE TESTED IN ACCORDANCE WITH ASTM STANDARDS C31, C39, C143 & AS WRITTEN IN SPECIFICATIONS AND THE MINIMUM CYLINDER CRUSHING STRENGTH OF CONCRETE AT 28 DAYS SHALL BE AS FOLLOWS. TESTING OF CLASS D & E CONCRETE SHALL BE PERFORMED IF SO SHAHEED CHAWK EXACT, NEAR ALFALAH FURNITURE LOWER DIRECTED BY THE ENGINEER.

CLASS	MIN. CYLINDER CRUSHING STRENGTH AT 28 DAYS (psi).
A	4000
B	3000
C	2400
D	1200
E	800

6. CLASS OF CONCRETE FOR DIFFERENT COMPONENTS OF THE STRUCTURE SHALL BE AS FOLLOWS UNLESS NOTED OTHER WISE:

COMPONENT	CONCRETE CLASS
COLUMNS	CLASS 'A'
SLABS, BEAMS, FOUNDATION	CLASS 'B'
RCC WALLS	CLASS 'D'
PCC STEPS,	CLASS 'E'
LEAN / BLINDING CONCRETE	CLASS 'E'

7. ORDINARY PORTLAND CEMENT SHALL BE USED FOR ALL CONCRETE WORKS.
8. AN INTEGRAL WATER PROOFING AGENT SHALL BE USED IN CONCRETE THAT IS CONSTANTLY OR INTERMITTENTLY IN CONTACT WITH WATER AS PER MANUFACTURER'S RECOMMENDATIONS (GENCON GENPRUF RMC OR PENETRON ADMIX OR EQUIVALENT).
9. ALL DETAILING SHALL BE DONE AS PER ACI STANDARDS ACI-315, ACI-318 & ACI-350R.

STRUCTURAL ELEMENT	COVER (INCHES)
FOOTINGS	2"
BEAMS	1 1/2"
COLUMNS	1 1/2"
SLABS	3/4"

4. REINFORCING STEEL

1. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM-A615 GRADE 60 HAVING A MINIMUM YIELD STRENGTH OF 60,000 PSI. FOR STIRRUPS, TIES AND #3 BARS USE ASTM A615, GRADE 60 HAVING MINIMUM YIELD STRENGTH OF 60,000 PSI.
2. THE ACTUAL YIELD STRENGTH BASED ON MILL TESTS DOES NOT EXCEED THE SPECIFIED STRENGTH BY MORE THAN 18,000 PSI (RETESTS SHALL NOT EXCEED THIS VALUE BY MORE THAN AN ADDITIONAL 3000 PSI)
3. THE RATIO OF THE ACTUAL ULTIMATE TENSILE STRENGTH TO THE L-GREATER CLEAR SPAN, db-DIAMETER OF BAR-d-EFFECTIVE DEPTH THE FIRST HOOP SHALL BE LOCATED NOT MORE THAN 2" FROM THE FACE OF THE SUPPORTING MEMBER.

7. ALL REINFORCING STEEL SHALL BE ACCURATELY LOCATED IN THE FORMS AND HELD FIRMLY IN PLACE BEFORE & DURING THE PLACEMENT OF CONCRETE, BY MEANS OF WIRE AND SUPPORTS ADEQUATE TO PREVENT DISPLACEMENT DURING THE COURSE OF CONSTRUCTION.
8. LINTELS ARE EXTENDED AT 9 (INCHES) FROM BOTH SIDES OF OPENING.
9. PROVIDE 135° HOOK IN ADJACENT STIRRUPS ON ALTERNATE SIDES.

5. CONCRETE CONSTRUCTION

1. ALL STRUCTURAL SURFACES, AGAINST WHICH EARTH IS TO BE FILLED, SHALL BE COATED WITH TWO COATS OF HOT BITUMEN OF 10/20 GRADE AT THE RATE OF 0.2 lbs/ft /coat.
2. PROVIDE POLYTHENE SHEET OVER TWO COATS OF HOT BITUMEN AT TOP OF PLINTH BEAM/DPC FOR EXTERIOR WALLS.
3. BEFORE CASTING OF ANY STRUCTURAL MEMBER, THE CONTRACTOR SHALL ENSURE THAT ALL EMBEDDED ITEMS FOR ELECTRICAL, MECHANICAL, HVAC, PLUMBING, STRUCTURAL STEEL AND OTHER WORKS ARE PROPERLY LOCATED AND FIRMLY SECURED IN PLACE.
4. DURING CONSTRUCTION, STACKING OF CONSTRUCTION MATERIALS, BLOCKS, etc. SHOULD BE AVOIDED ON SLAB PANELS.

6. BRICK WORK

1. ALL BRICK WORK SHALL CONFORM TO SPECIFICATIONS GIVEN IN THE CONTRACT DOCUMENT.
2. ALL BRICK SHALL BE SOUND, HARD, WELL BURNT AND OF UNIFORM SIZE COLOUR AND TEXTURE. DIMENSIONAL VARIATION IN SIZES SHALL NOT EXCEED 1/8". BRICKS SHOULD BE IN ACCORDANCE WITH SPECIFICATIONS AND SHOULD CONFORM TO ASTM C62.
3. ALL BRICK WORK SHALL BE ERECTED PLUMB AND TRUE TO LINE AND LEVEL. THE MAXIMUM VARIATION IN ANY STOREY HEIGHT OR ANY LENGTH OF WALL SHALL BE 1/8" IN 10'-0".
4. MORTAR USED IN MASONRY CONSTRUCTION SHALL HAVE AN ULTIMATE COMPRESSIVE STRENGTH OF NOT LESS THAN 12 MPa (1800Psi) AND SHALL CONFORM TO ASTM C270.
5. COMPRESSIVE STRENGTH OF BRICK MASONRY AVERAGE OF 5 UNITS AT 28 DAYS SHALL NOT BE LESS THAN AS SPECIFIED IN SPECIFICATION AND SHALL CONFORM TO RELEVANT ASTM STANDARD.
6. ALL DESIGN, DETAILING, MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH RELEVANT ACI, ASTM, AND UBC CODES AND STANDARDS.
7. BRICK SHALL BE LAID "FROG" UPWARD WITH MORTAR JOINT AND IN ENGLISH FLEMISH BOND OR AS SHAHEED CHAWK EXACT, NEAR ALFALAH FURNITURE LOWER DIRECTED BY THE ENGINEER.
8. BRICKS SHOULD BE SOAKED WITH WATER PROPERLY BEFORE USE.
9. VERTICAL JOINTS SHOULD BE STAGGERED.
10. ALL MASONRY WALLS SHALL BE ANCHORED TO STRUCTURAL FRAME WORK AS INDICATED ON THE DRAWINGS

CLIENT:



UNHCR
The UN Refugee Agency

CONSULTANTS:



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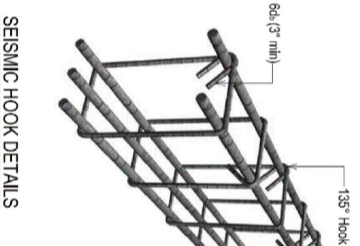
SCHOOL NAME

GGPS WAJUAN TAXILA
RAWALPINDI

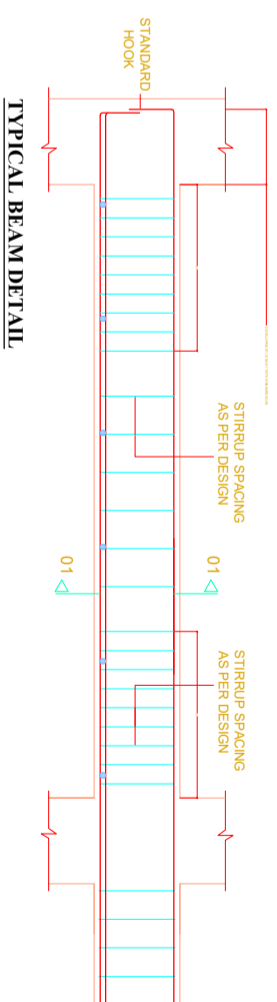
Date of Revision	Prepared By	PROJECT:
	ENG. KHAN KHAN KHAN ENGINEER	PREPARATION OF DESIGN, DRAWINGS & BOOKS FOR CONSTRUCTION/REHABILITATION OF SITES
	Checked By	TITLE:
	Approved By	GENERAL NOTES
		DATE: SEP 2023
		SCALE
		DRG. NO. S-01

7. CONSTRUCTION JOINTS

1. JOINTS, NOT SHOWN ON THE DRAWING, SHALL BE SO MADE AND LOCATED AS TO LEAST IMPAIR THE STRENGTH OF THE STRUCTURE AND SHALL NEED PRIOR APPROVAL OF THE ENGINEER. THEY SHALL BE LOCATED NEAR THE MIDDLE OF THE SPANS OF SLAB & BEAMS. JOINTS IN WALLS & COLUMNS SHALL BE AT THE UNDER-SIDE OF FLOORS, SLABS OR BEAMS AND AT THE TOP OF FOOTINGS OR FLOOR SLABS.
2. JOINTS SHALL BE PERPENDICULAR TO MAIN REINFORCEMENT. ALL REINFORCING STEEL SHALL BE CONTINUED ACROSS THE JOINTS.
3. JOINTS IN BASE SLAB & WALLS AND ROOF SLAB, IN ADDITION TO THOSE SHOWN ON THE DRAWINGS SHALL BE BORNE BY THE CONTRACTOR. BEAMS & BRACKETS SHALL BE PLACED AT THE SAME TIME AS SLABS.



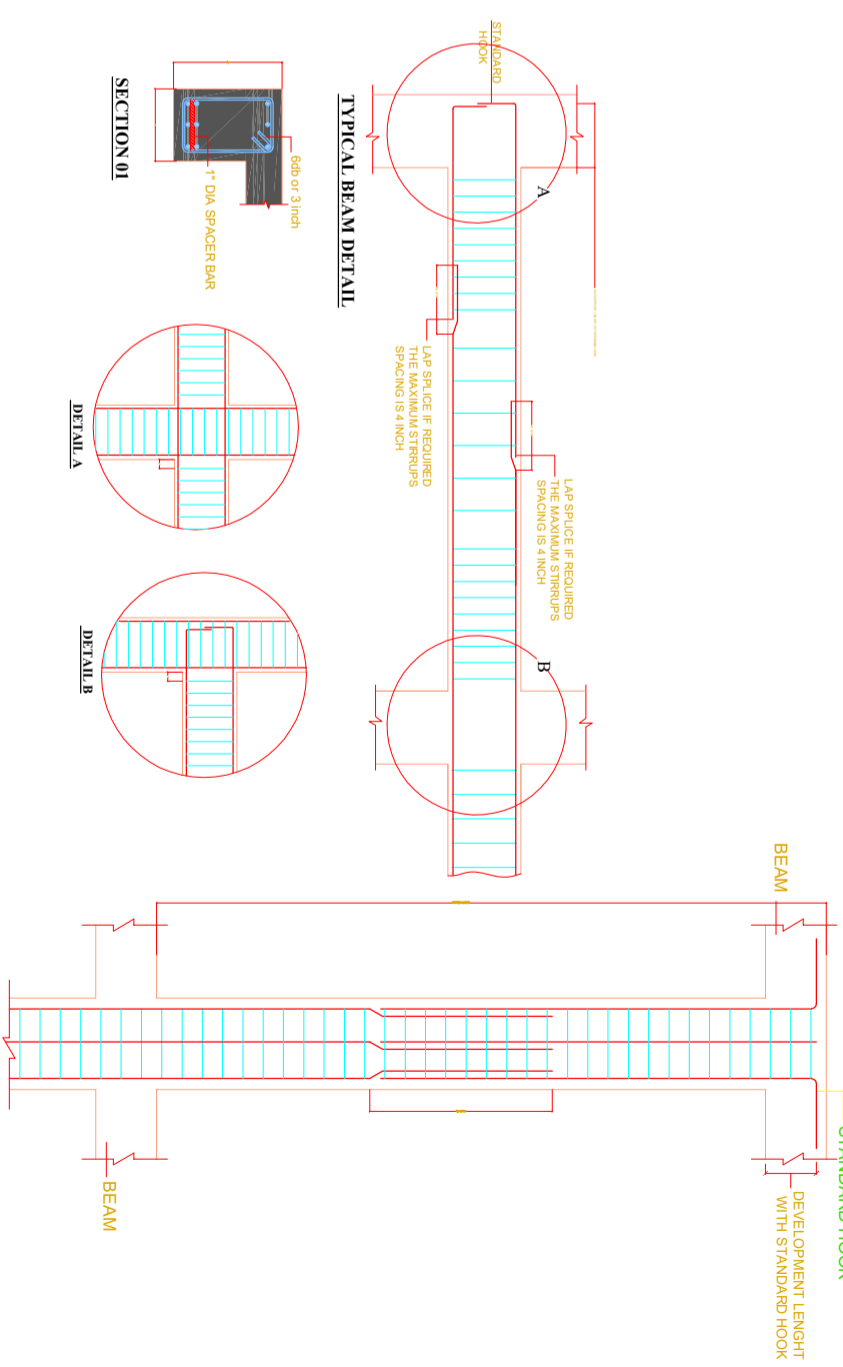
SEISMIC HOOK DETAILS



TYPICAL BEAM DETAIL

DEVELOPMENT LENGTH IN TENSION (ACI 21.5.4.1)		SPLICE LENGTH (ACI 21.3.2.4, Class B Splice)			
BAR DIA	DEVELOPMENT LENGTH (INCHES) $f_c' = 4,000 \text{ psi}$ $f_y = 60,000 \text{ psi}$	BAR DIA	MINIMUM SPLICE LAP LENGTH (INCHES) $f_c' = 3,000 \text{ psi}$ $f_y = 40,000 \text{ psi}$		
	STRAIGHT BARS		WITH STANDARD HOOK	TENSION	COMPRESSION
3/8"	18	3/8"	15	-	-
1/2"	24	1/2"	20	9	9
3/4"	30	3/4"	30	15	15
1"	48	1"	48	18	18

DEVELOPMENT LENGTH IN TENSION (ACI 21.5.4.1)		SPLICE LENGTH (ACI 21.3.2.4, Class B Splice)			
BAR DIA	DEVELOPMENT LENGTH (INCHES) $f_c' = 3,000 \text{ psi}$ $f_y = 60,000 \text{ psi}$	BAR DIA	MINIMUM SPLICE LAP LENGTH (INCHES) $f_c' = 3,000 \text{ psi}$ $f_y = 60,000 \text{ psi}$		
	STRAIGHT BARS		WITH STANDARD HOOK	SLAB	BEAM / COLUMN
1/2"	22	1/2"	25	35	35
5/8"	30	5/8"	-	44	44
3/4"	34	3/4"	-	55	55
1"	55	1"	-	70	70



TYPICAL COLUMN DETAIL

CLIENT:



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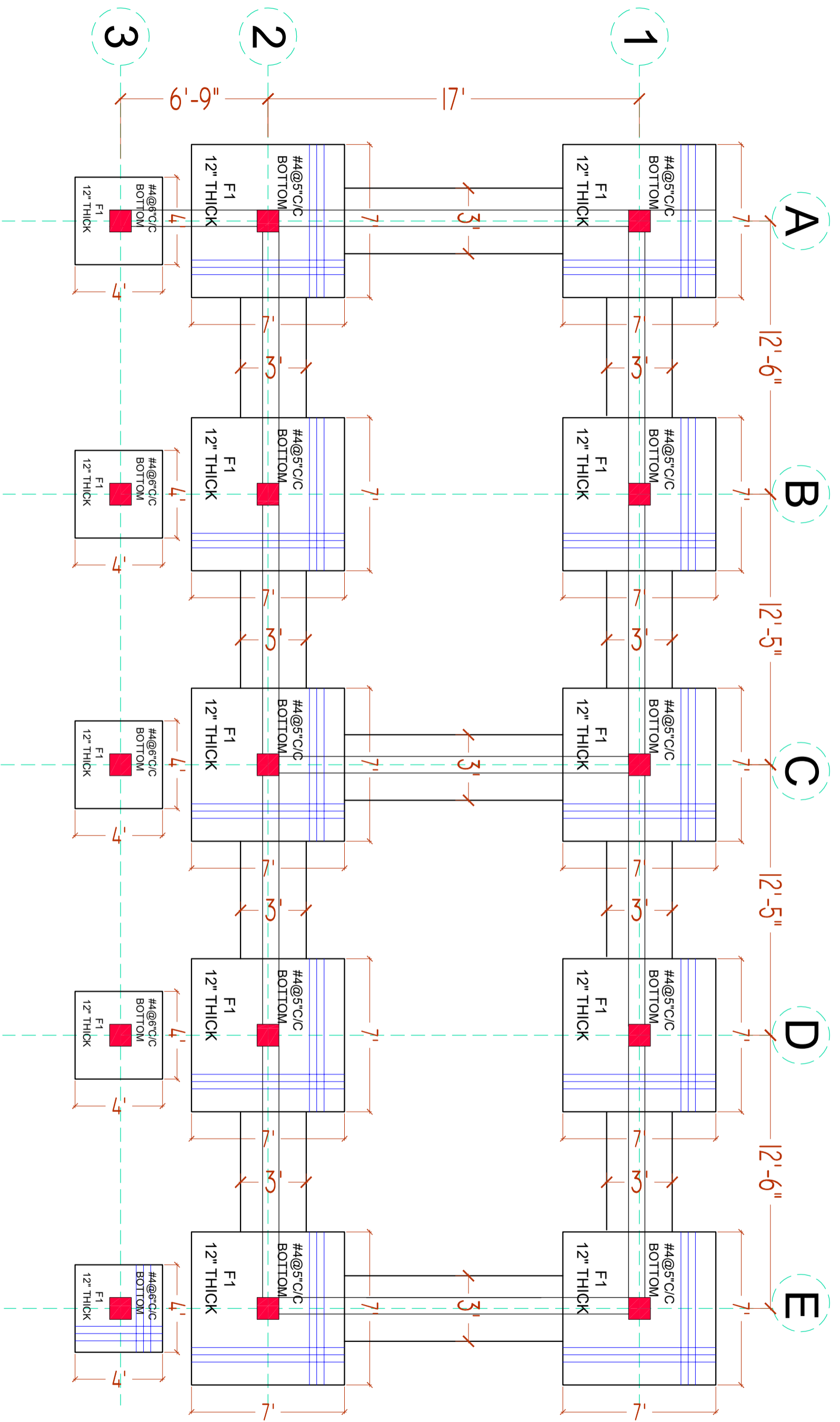
SCHOOL NAME

GGPS WAJUAN TAXILA
 RAWALPINDI

Date of Revision	Prepared By	DATE
	Designed By	
	Checked By	
	Approved By	

PROJECT:	TITLE:	DATE	SCALE	DRG. NO.
PREPARATION OF DESIGN DRAWINGS & BOOKS FOR CONSTRUCTION/REHABILITATION OF SITES	GENERAL NOTES	SEP 2023		S-02

Prepared By: ENGR. HANIFA KHAN KHANJANJAN
 Structure Engineer
 Checked By: ENGR. HUMZA AHMAD



FOUNDATION PLAN

CLIENT:



CONSULTANTS:

PLANNERS CONSULTANTS ENGINEERS (PCE)

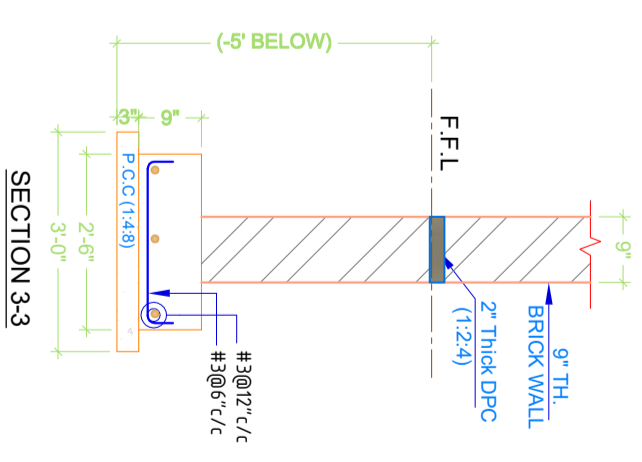
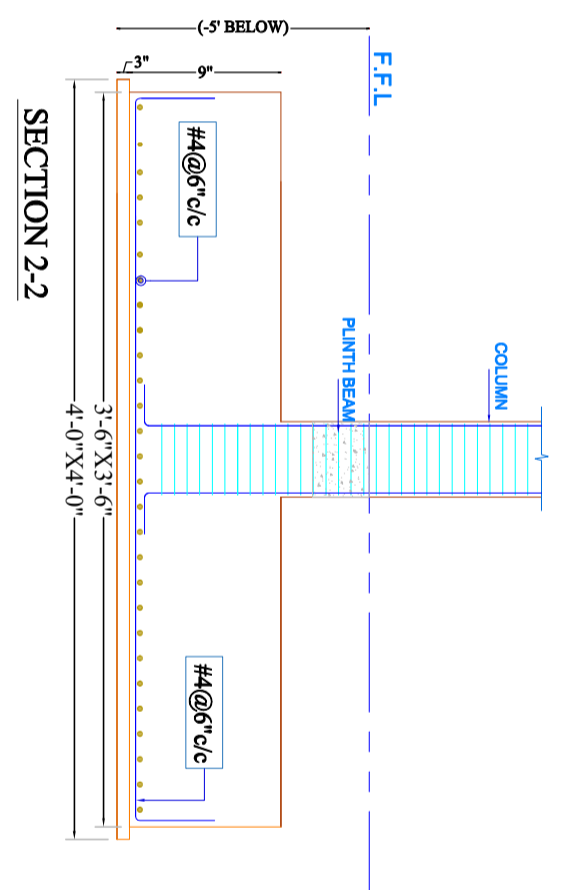
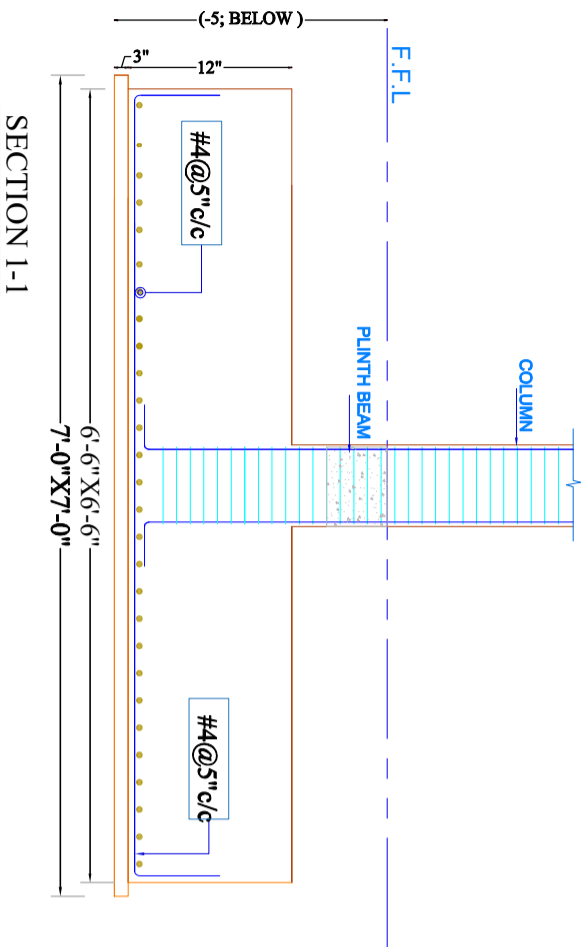
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	Approved By	

PROJECT:	DATE	SCALE	DRG.NO.
PREPARATION OF DESIGN, DRAWINGS & BOQS FOR CONSTRUCTION/ REHABILITATION OF SITES	SEP 2023		S-03
TITLE:			
FOUNDATION PLAN			



CLIENT:

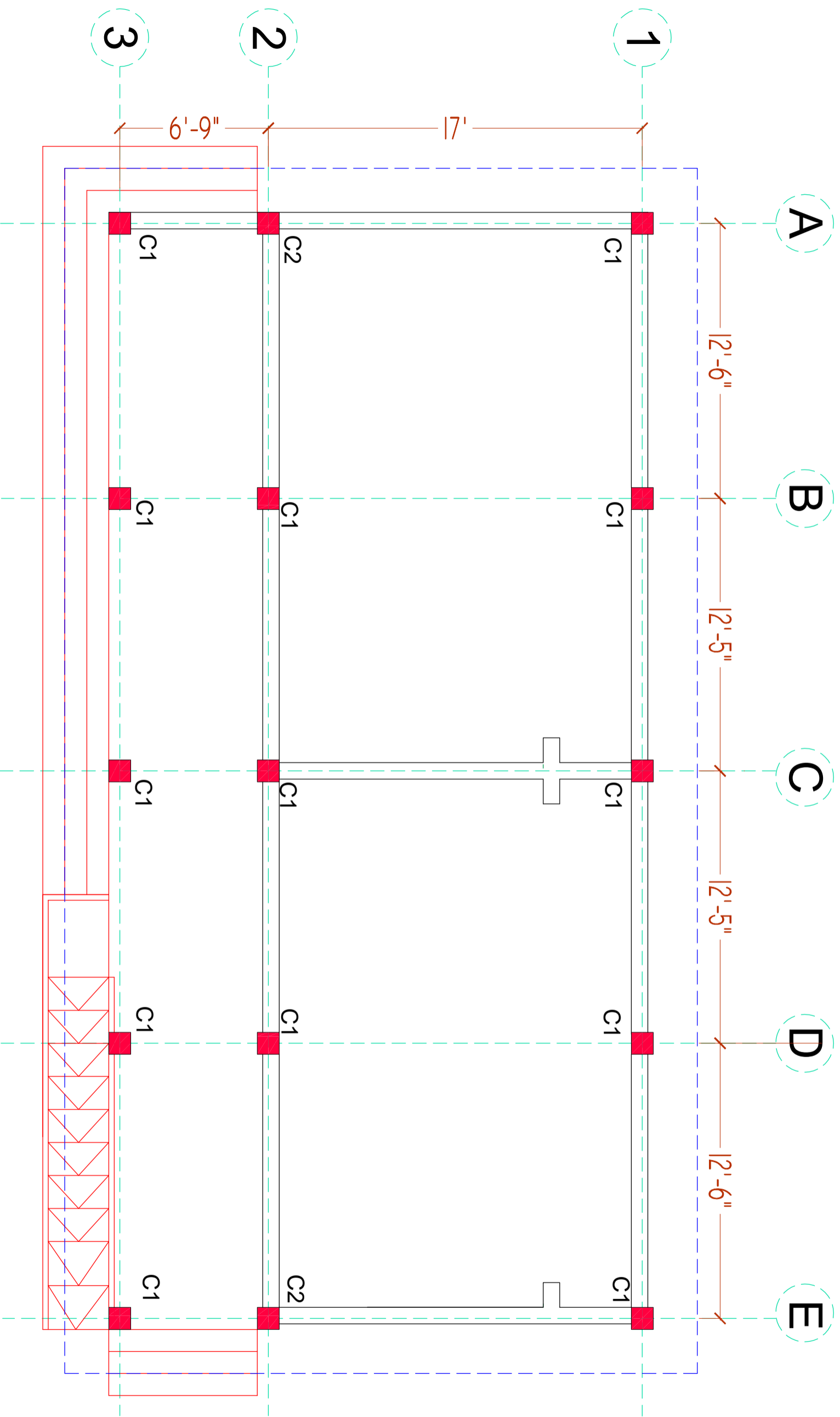


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	Designed By	Engr. HUMZAHMAD	PREPARATION OF DESIGN DRAWINGS & BOOKS FOR CONSTRUCTION/REHABILITATION OF SITES
	Checked By		
	Approved By		
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			DATE: SEP 2023
			SCALE: DRG. NO. S-04



GROUND FLOOR COLUMN LAYOUT PLAN

CLIENT:



The UN Refugee Agency

CONSULTANTS:



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PREPARATION OF DESIGN, DRAWINGS & BOQS
 FOR CONSTRUCTION/REHABILITATION OF SITES

TITLE:

GROUND FLOOR COLUMN LAYOUT PLAN

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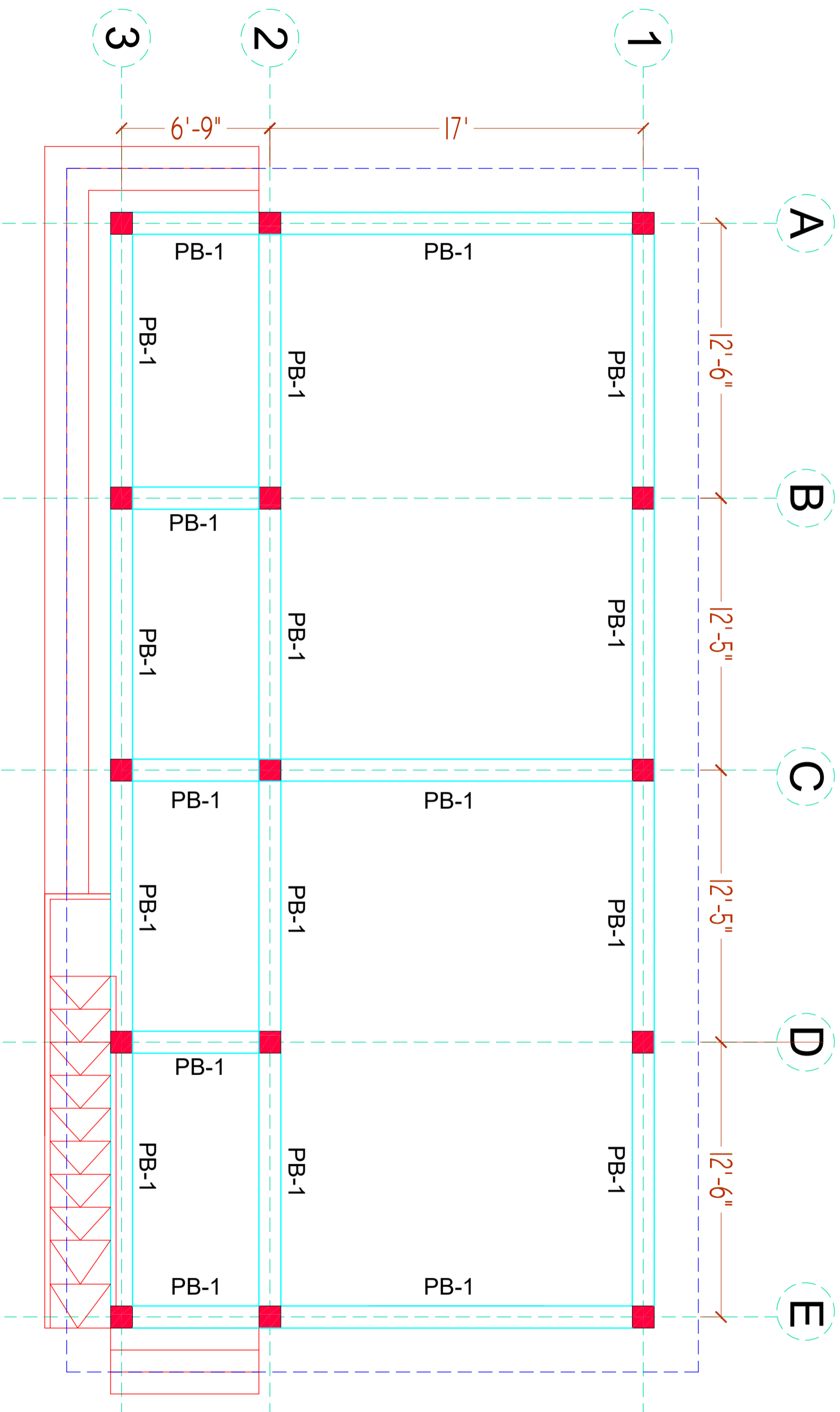
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DATE
 SEP 2023

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S-05



PLINTH BEAM PLAN

CLIENT:



CONSULTANTS:



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 FOR CONSTRUCTION/REHABILITATION OF SITES

TITLE:

PLINTH BEAM PLAN

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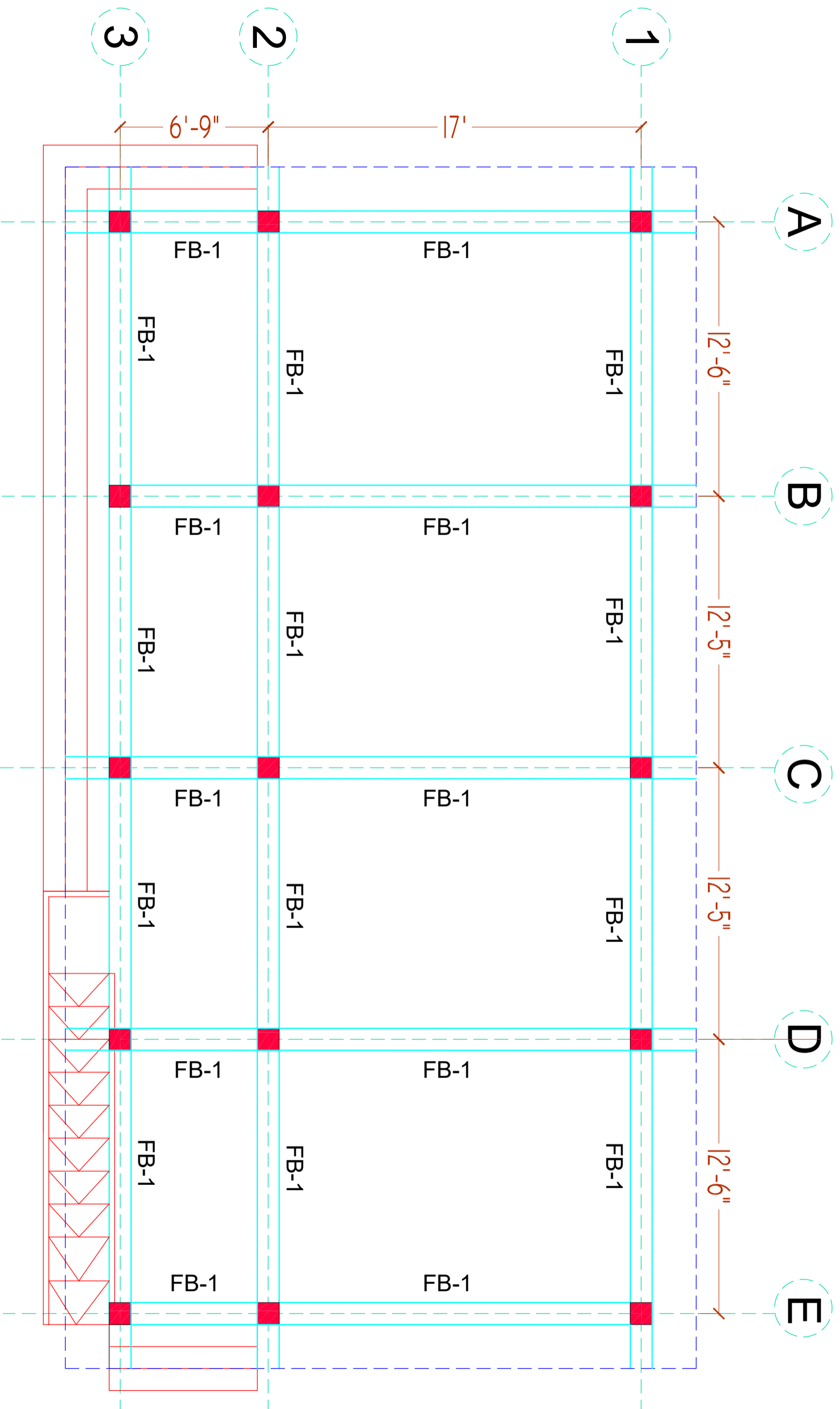
S-06

Approved By

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GROUND FLOOR BEAM PLAN

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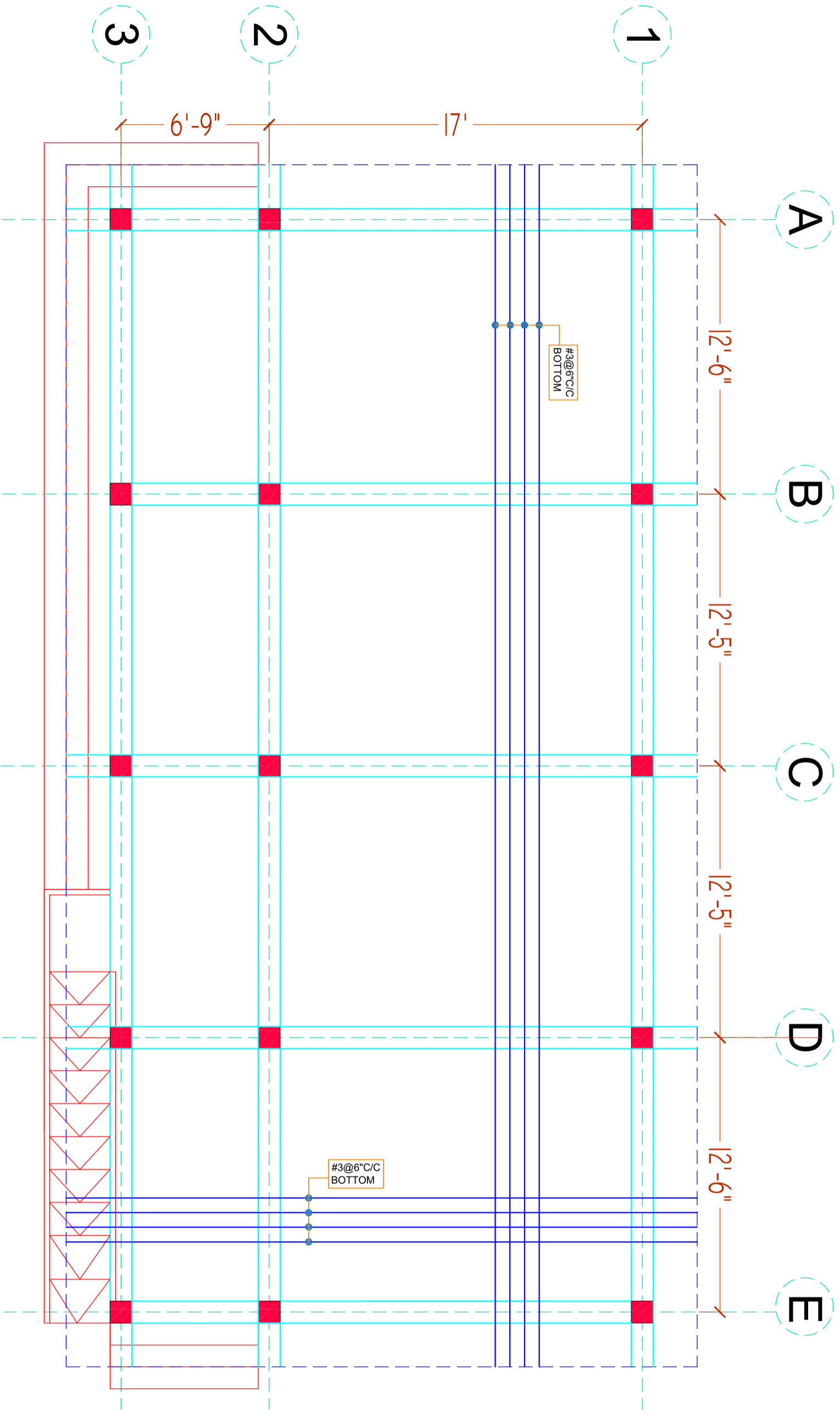
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	Designed By		TITLE:
	Checked By		GROUND FLOOR BEAM PLAN
	Approved By		DATE: SEP 2023
			SCALE
			DRG.NO. S-07



NOTE:
SLAB THICKNESS = 6"

GROUND FLOOR SLAB BOTTOM REINFORCEMENT PLAN

CLIENT:



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PREPARATION OF DESIGN, DRAWINGS & BOOKS
FOR CONSTRUCTION/ REHABILITATION OF SITES

DESIGNED BY

Egr. HUMZA AHMAD

CHECKED BY

APPROVED BY

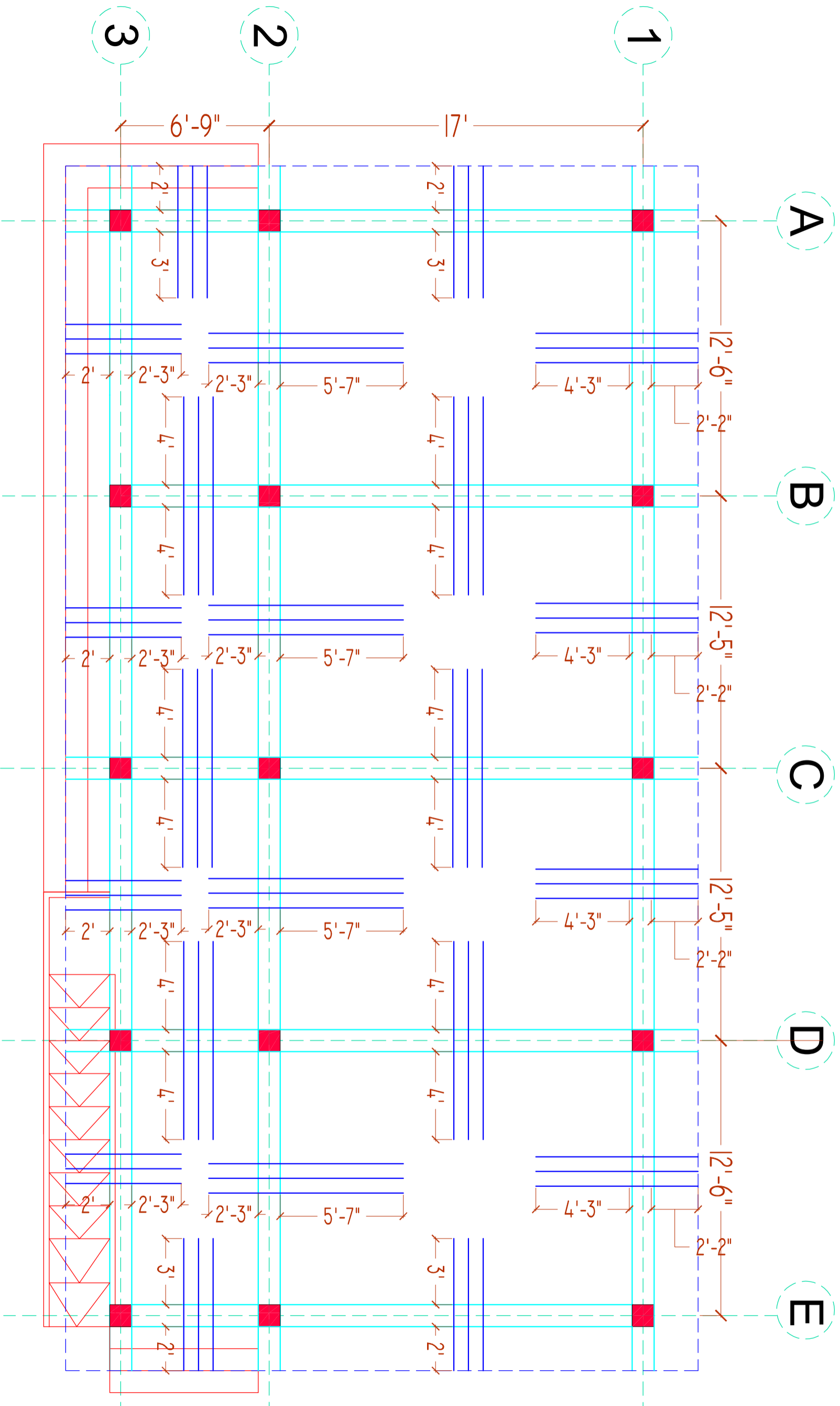
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DRG. NO.

S-08



GROUND FLOOR SLAB TOP REINFORCEMENT PLAN

NOTE:
SLAB THICKNESS = 6"
TOP REINFORCEMENT = #3@6"C/C

CLIENT:



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PROJECT:

PREPARATION OF DESIGN DRAWINGS & BOQS
FOR CONSTRUCTION/REHABILITATION OF SITES

TITLE:

GROUND FLOOR SLAB TOP
REINFORCEMENT PLAN

Designed By

Engr. HUMZA AHMAD

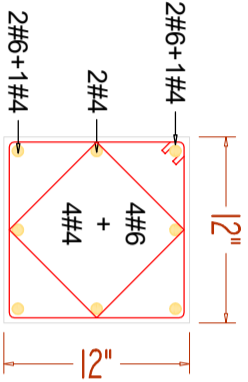
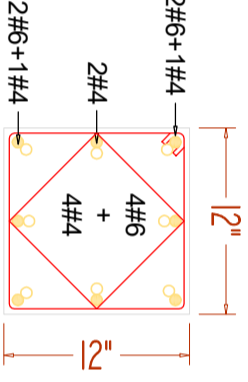
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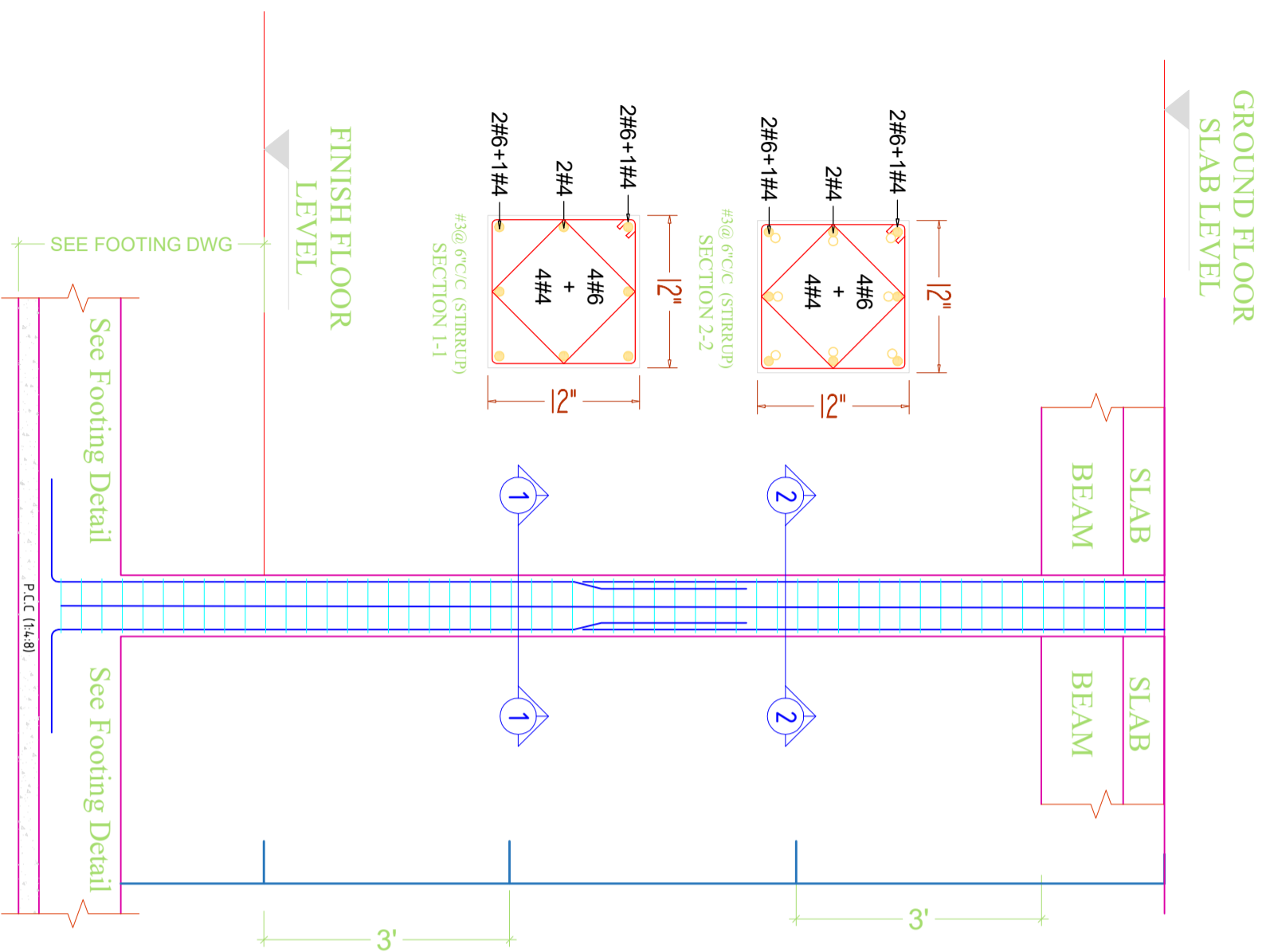
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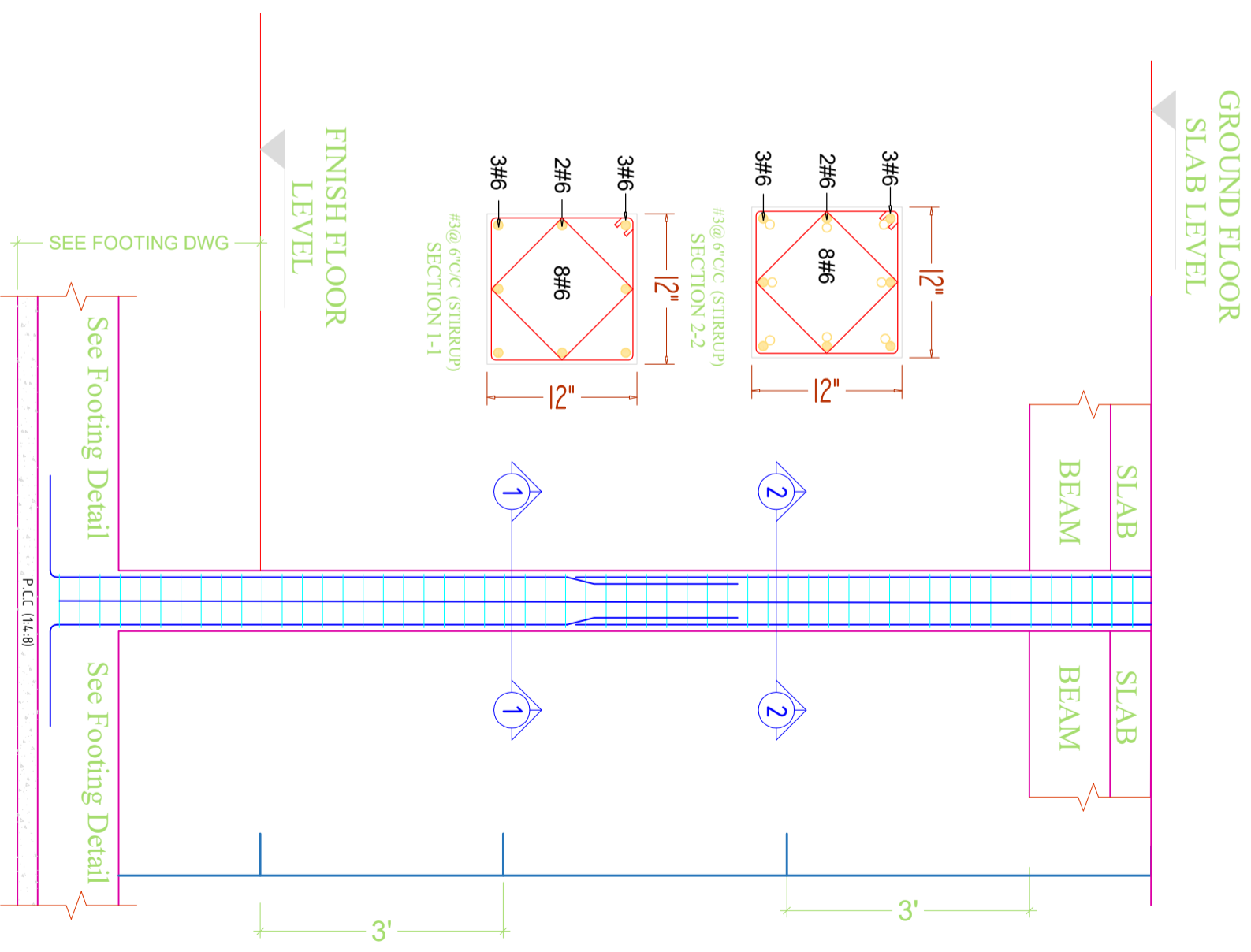
DRG. NO.
S-00

COLUMN TYPES	COLUMN C1	COLUMN C2
GROUND FLOOR		
	T1 # 3 @ 4" C/C	# 3 @ 4" C/C
	T2 # 3 @ 4" C/C	# 3 @ 4" C/C
	T3 # 3 @ 4" C/C	# 3 @ 4" C/C

CLIENT: 		CONSULTANTS: 	
PLANNERS CONSULTANTS ENGINEERS (PCE) 97-K Industrial Estate, Hayatabad Peshawar Pakistan Ph: 0092-91-5816017, 5891661-4, Fax: 5891845 E-Mail: pce.pesh@yahoo.com		SCHOOL NAME GGPS WAJUAN TAXILA RAWALPINDI	
PROJECT: PREPARATION OF DESIGN DRAWINGS & BOOK FOR CONSTRUCTION/REHABILITATION OF SITES	DATE: SEP 2023	SCALE:	DRG. NO.: S-10
Prepared By: FARID KHAN KHAN HADIR STRUCTURE ENGINEER	Designed By: Engr. HUNZA AHMAD	Checked By:	Approved By:



COLUMN LONG SECTION C1



COLUMN LONG SECTION C2

CLIENT:



The UN Refugee Agency

CONSULTANTS:



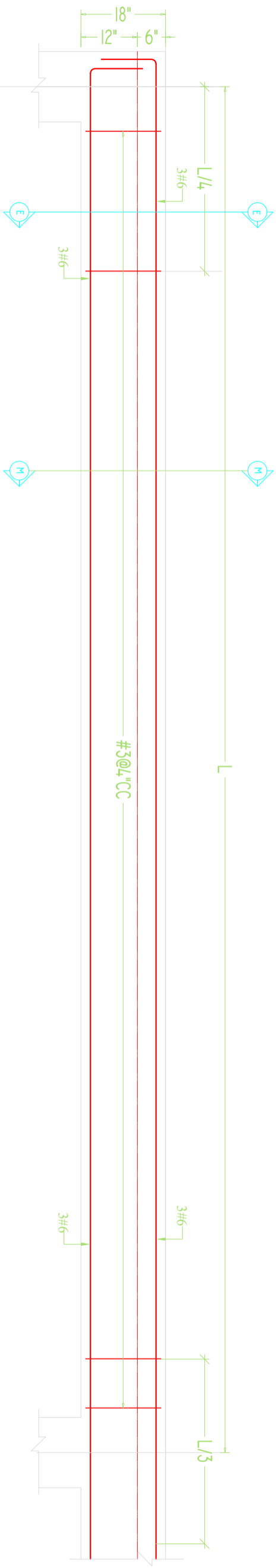
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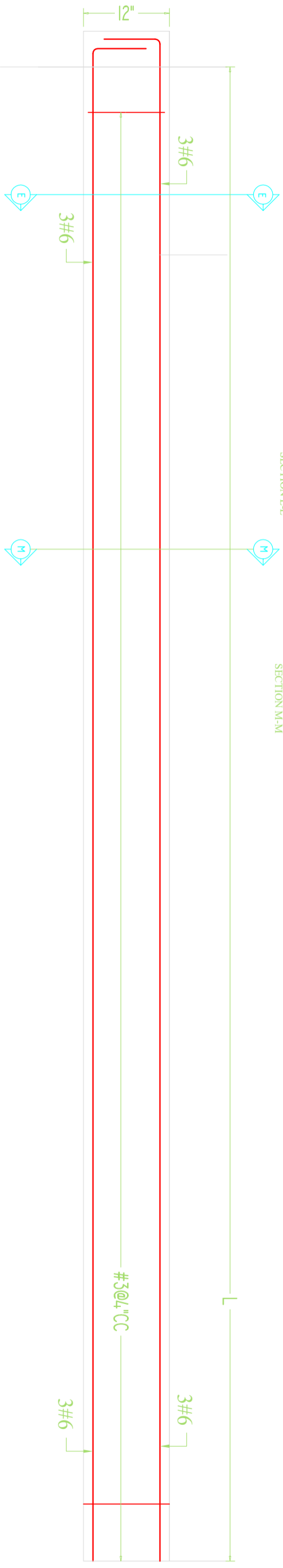
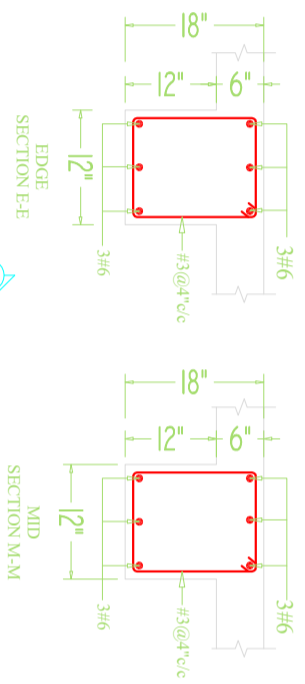
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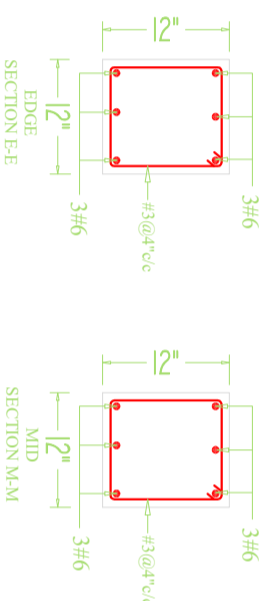
Date of Revision	Prepared By	FAHAD KHAN KHAJANJHAR STRUCTURE ENGINEER	PROJECT:
	Designed By	Engr. HUMZA AHMAD	PREPARATION OF DESIGN, DRAWINGS & BOQS FOR CONSTRUCTION/ REHABILITATION OF SITES
	Checked By		TITLE: COLUMN DETAIL
	Approved By		DATE: SEP 2023
			SCALE: DRG.NO: S-11



TYPICAL ELEVATION OF FB-1



TYPICAL ELEVATION OF PB-1



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	Designed By		

PROJECT:

PREPARATION OF DESIGN, DRAWINGS & BOQS
 FOR CONSTRUCTION/ REHABILITATION OF SITES

DATE	SCALE	DRG. NO.
SEP 2023		S-12

TITLE: BEAM DETAIL

Prepared By: FARID KHAN
 KIAN KHAN
 STRUCTURE ENGINEER
 Egr: HUNZA AHMAD

ELECTRIFICATION DRAWINGS
OF
GGPS WAJJAN TAXILA
RAWALPINDI

ELECTRICAL DRAWINGS		
1	GENERAL NOTES	E-01
2	APPROVED MANUFACTURE LIST	E-02
3	LEGEND	E-03
4	GROUND FLOOR PLAN	E-04
5	GROUND FLOOR DIMENSION PLAN	E-05
6	SECTION	E-06
7	EARTHING DETAIL PLAN	E-07
8	MAIN DISTRIBUTION BOARD	E-08
9	LOAD CALCULATION	E-09

CLIENT:



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Date of Revision

Prepared By

FARID KHAN
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 ELECTRICAL ENGINEER

PROJECT:

PREPARATION OF DESIGN, DRAWINGS & BOQS
 FOR CONSTRUCTION/REHABILITATION OF SITES

TITLE:

LIST OF DRAWINGS

Designed By

Engr. HAMMAD AHMAD

Checked By

Approved By

DATE
 SEP 2023

SCALE

DRG.NO.

E-00

ELECTRICAL SYSTEMS

FOLLOWING NOTES SHALL IN GENERAL APPLY TO ALL ELECTRICAL DRAWINGS. THE INSTRUCTIONS IN THESE NOTES SHALL BE FOLLOWED UNLESS STATED OTHERWISE.

1. THESE NOTES SHALL BE APPLICABLE TO THE ENTIRE ELECTRICAL WORKS THE SITE CONDITIONS NECESSITATE ALTERATION OR DEVIATION OF THE DIRECTIONS OF THE ENGINEER SHALL BE OBSERVED AS FINAL INSTRUCTIONS.
2. DIMENSIONS / MEASUREMENTS IS GIVEN IN LAYOUT AND DETAILED DRAWINGS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALCULATE THE ACTUAL DIMENSIONS ACCORDING TO STRUCTURAL AND ARCHITECTURAL DRAWINGS.
3. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITH ALL RELEVANT DETAILS TO THE ENGINEER FOR APPROVAL ACCORDING TO THE GENERAL CONDITION OF CONTRACT WELL IN TIME BEFORE COMMENCEMENT OF THAT WORK.
4. PROPER CO-ORDINATION OF ELECTRICAL WORKS WITH OTHER SERVICES SHALL BE CARRIED OUT AT SITE.
5. ALL NON CURRENT CARRYING PARTS i.e OUTER CASINGS OF EQUIPMENT SUCH AS H.T & I.T PANELS DISTRIBUTION BOARDS, CABLE TRAYS, AUXILIARY CONSTRUCTION FOR EQUIPMENT ETC. SHALL BE CONNECTED TO THE GROUND-EARTHING SYSTEM AT REQUIRED NUMBER OF POINTS WITH SPECIFIED SIZES OF CONDUCTORS. WATER PIPES ALONG ELECTRICAL LINE SHALL BE BONDED TO THE EARTHING SYSTEM WITH TO 10MMsq SINGLE CORE COPPER CONDUCTOR PVC CABLE.
6. ELECTRICAL POINTS FOR EQUIPMENT SHALL BE INSTALLED IN CO-ORDINATION WITH THE RELEVANT DRAWINGS OF OTHER SERVICES SUCH AS COMMUNICATION SYSTEMS, HVAC, PLUMBING ETC. THE LOCATION ON ELECTRICAL DRAWINGS IS ONLY INDICATIVE.
7. ARRANGEMENT OF ELECTRICAL EQUIPMENTS ON ELECTRICAL DRAWINGS ARE TENTATIVE EXACT ARRANGEMENT OF EQUIPMENT SHALL BE MADE IN VIEW OF ITS PHYSICAL DIMENSIONS AND EASY OF MAINTENANCE.
8. LOAD ON ALL PHASES SHALL BE MAXIMUM BALANCED AT THE TIME OF COMMISSIONING STAGE. IT IS RESPONSIBILITY OF CONTRACTOR.
9. CONDUIT RUN UNDER FLOOR SHALL HAVE A MINIMUM COVER OF TWO INCHES FROM TOP TO CONDUIT TO FINISH FLOOR LEVEL.
10. ALL WIRING SHOULD BE CARRYOUT ACCORDING TO THE PHASES RED, YELLOW, BLUE CABLE COLOUR ARE AS PER PHASE DISTRIBUTION IN BUILDING.
11. RUN GREEN OR WHITE SINGLE CORE PVC INSULATED COPPER CONDUCTOR CABLE OF SPECIFIED SIZE AS PROTECTIVE EARTH CONDUCTOR (LCC) ALL ALONG LIGHT AND POWER WIRING WHEREVER THE SIZE IS NOT SPECIFIED THE FOLLOWING OR ILLERIA SHELL BE OBSERVED TO DETERMINE MINIMUM CROSS SECTIONAL AREA OF EARTH CONTINUITY CONDUCTOR (ECC) IN RELATION TO THE AREA OFFICE PHASE CONDUCTORS RUN SEPARATE ECC FOR EACH CIRCUIT.
 - ECC 2 PHASE CONDUCTOR OF SAME SIZE FOR UPTO AND INCLUDING 16 MMSQ CABLES
 - FOR CABLES OF 50 MM SQ AND ABOVE SIZES IS HALF SIZE OF PHASE CONDUCTOR
 - MINIMUM SIZE ECC IS 70MM SQ.
12. ALL WIRING FOR CONTROLS SHALL BE CARRIED OUT WITH 1 CORE FLEXIBLE PVC CABLES OF SPECIFIED VOLTAGE GRADE AND SIZES.
13. THE MAXIMUM CAPACITY OF PVC CONDUITS FOR SMALL TONCOUS DRAWING OF PVC INSULATED CABLES SHALL BE DETERMINED AS PER BS 4607. THE FOLLOWING TABLE SHALL BE USED TO DETERMINE THE MAXIMUM NUMBER OF CABLES

NUMBER OF CABLE IN (CONDUIT)	SIZE OF CABLE		
NEW STANDER SIZE MM sq	25 MM (1")	20 MM (3/4")	15 MM (3/8")
1.5 MM sq	13	8	5
2.5 MM sq	10	6	4
4 MM sq	7	4	3
6 MM sq	5	3	2
10 MM sq	3	2	1

14. NORMAL & EMERGENCY CIRCUITS SHALL BE RUN IN SEPARATE CONDUITS.
15. THE WIRING SHELL BE CONTINUOUS LOOPING-IN TYPE AND NO JOINT IN WIRES SHELL BE ALLOWED.
16. THE WIRING SYSTEM SHELL BE CARRIED OUT ONLY AFTER THE CONDUIT SYSTEM IS COMPLETELY INSTALLED AND ALL OUTLET BOXES ETC. ARE FIXED IN POSITION.
17. MOUNTING HEIGHTS OF ELECTRICAL FITTINGS WHEN MEASURED FROM FINISHED FLOOR LEVEL (ECC) TO THE BOTTOM OF FITTINGS SHELL BE AS UNDER UNLESS OTHER WISE SHOWN OR INSTRUCTED
 - > SWITCH BOAD 48 INCHES
 - > EXHAUST FAN REF TO ARCH DRAWING
 - > DISTRIBUTION BOARD 56 INCHES
 - > CONTROL PANEL 48 INCHES
 - > ON/OFF PUSH BUTTON STATION 48 INCHES
 - > DIMMER CONTROL UNIT 48 INCHES
 - > LIGHT CONTROL SWITCH (ONE WAY/TWO WAY) 48 INCHES
 - > 5 AMP SOCKET OUTLETS IN GENERAL AREAS 12 INCHES
 - > 15 AMP SOCKET OUTLETS IN GENERAL AREAS 12 INCHES
 - > 20 AMP SOCKET OUTLETS IN GENERAL AREAS 12 INCHES
 - > 16 AMP SOCKET OUTLETS IN KITCHEN (ABOVE COUNTER) 10 INCHES
 - > 16 AMP TP SPIN INDUSTRIAL SOCKET OUTLETS IN LABS 12 INCHES
 - > CEILING FAN ON SLAB 90 INCHES
 - > WALL BRACKET FAN

11. RUN GREEN OR WHITE SINGLE CORE PVC INSULATED COPPER CONDUCTOR CABLE OF SPECIFIED SIZE AS PROTECTIVE EARTH CONDUCTOR (LCC) ALL ALONG LIGHT AND POWER WIRING WHEREVER THE SIZE IS NOT SPECIFIED THE FOLLOWING OR ILLERIA SHELL BE OBSERVED TO DETERMINE MINIMUM CROSS SECTIONAL AREA OF EARTH CONTINUITY CONDUCTOR (ECC) IN RELATION TO THE AREA OFFICE PHASE CONDUCTORS RUN SEPARATE ECC FOR EACH CIRCUIT.
 - ECC 2 PHASE CONDUCTOR OF SAME SIZE FOR UPTO AND INCLUDING 16 MMSQ CABLES
 - FOR CABLES OF 50 MM SQ AND ABOVE SIZES IS HALF SIZE OF PHASE CONDUCTOR
 - MINIMUM SIZE ECC IS 70MM SQ.
12. ALL WIRING FOR CONTROLS SHALL BE CARRIED OUT WITH 1 CORE FLEXIBLE PVC CABLES OF SPECIFIED VOLTAGE GRADE AND SIZES.
13. THE MAXIMUM CAPACITY OF PVC CONDUITS FOR SMALL TONCOUS DRAWING OF PVC INSULATED CABLES SHALL BE DETERMINED AS PER BS 4607. THE FOLLOWING TABLE SHALL BE USED TO DETERMINE THE MAXIMUM NUMBER OF CABLES

CLIENT:



CONSULTANTS:

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SCHOOL NAME

GGPS WAJJAN TAXILA
RAWALPINDI

Date of Revision	Prepared By	Checked By	Approved By
	Farid Khan KAMRAN KHIDER	Engr. HAMMAD AHMAD	
	Designed By		
	Checked By		
	Approved By		

PROJECT:	DATE	SCALE	DRG. NO.
PREPARATION OF DESIGN, DRAWINGS & BOQS FOR CONSTRUCTION/REHABILITATION OF SITES	SEP 2023		E-01
TITLE:			
GENERAL NOTES			

APPROVED MANUFACTURE LIST

S NO.	ITEM OR ACCESSORIES	BRAND
01	WIRING CABLE	PAKISTAN,NEW AGE,FAST, GM, COPPERGAT CABLE
02	POWER CABLE	PAKISTAN,NEW AGE,FAST, GM, COPPERGAT CABLE
03	LIGHT FIXTURES	PHILIPS,PIERLITE,CLIPSAL, OSAKA, FAST LIGHT
04	CEILING FAN	PAK, GFC, ROYAL, LAHORE FAN
05	PVC CONDUIT	POLO,BETA,POPULAR, GM, ADAMJEE
06	SWITCHES	PPL
07	LT SWITCHGEAR	SCHNEIDER, ABB, PEL,ELECTRECH
08	MOULDED CASE CIRCUIT BREAKER	SCHNEIDER, CHINT, LS, ABB
9	MINIATURE CIRCUIT BREAKER	SCHNEIDER, CHINT, LS, ABB

CLIENT:



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SCHOOL NAME

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Date of Revision	Prepared By	ELECTRICAL ENGINEER:
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	Checked By	
	Approved By	

PROJECT:		
PREPARATION OF DESIGN DRAWINGS & BOQS FOR CONSTRUCTION/REHABILITATION OF SITES		
TITLE:	APPROVED MANUFACTURE LIST	
DATE	SCALE	DRG.NO.
SEP 2023		E-02

SYMBOL	DESCRIPTION	INSTALLATION HEIGHT
	SURFACE MOUNTED DOWN LIGHT WITH 17 WATT ENERGY SAVER	CEILING MOUNTED
	TMS 136	SLAB MOUNTED
	56" SWEEP CEILING FAN	SLAB MOUNTED
	SWITCH BOARD	56" FROM FFL
	DISTRIBUTION UNIT	60" FROM FFL
	EXHAUST FAN POINT	

CLIENT:



CONSULTANTS:



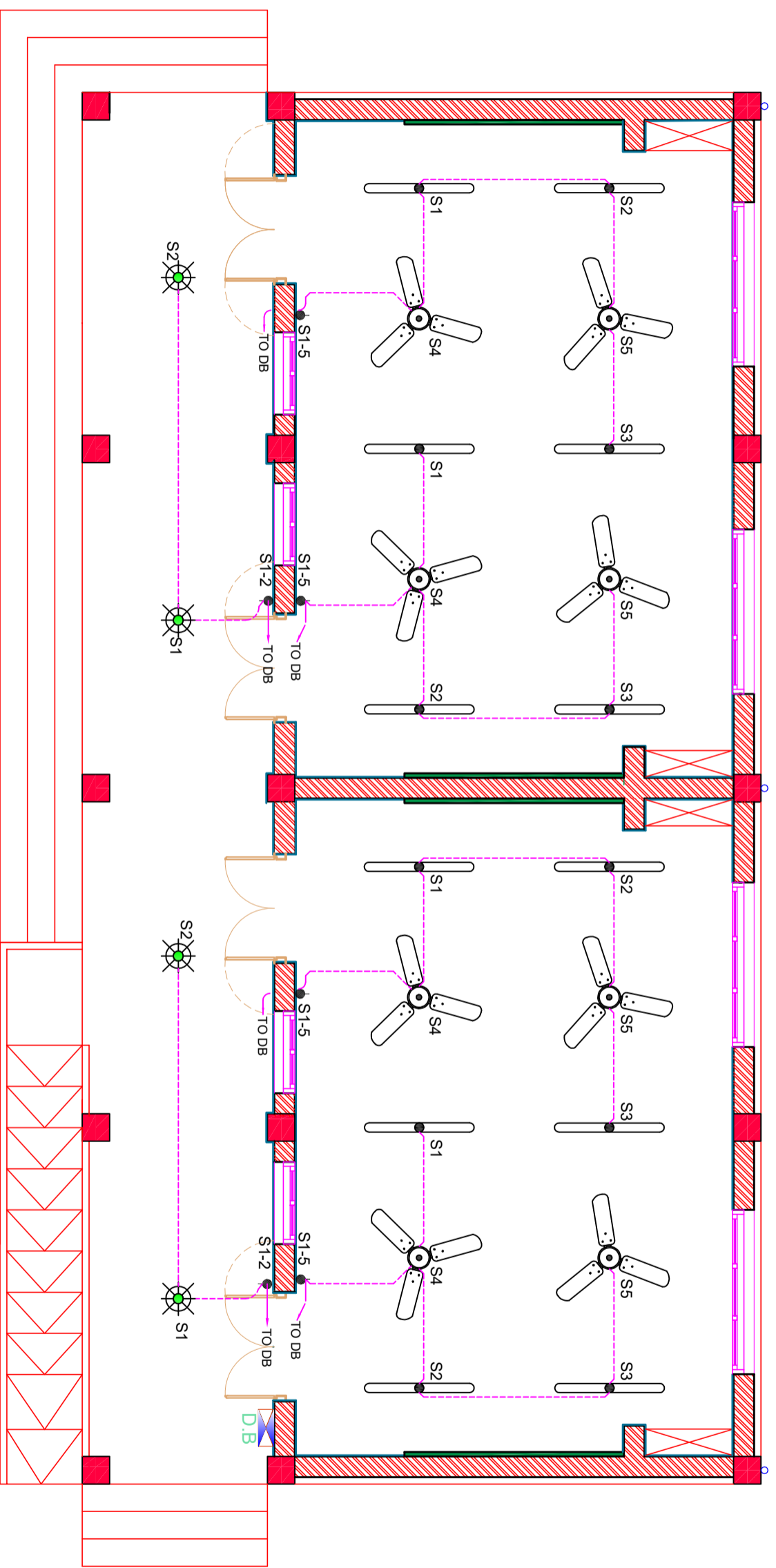
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Date of Revision	Prepared By	FAKID KHAN KHAN HAIDER ELECTRICAL ENGINEER :	PROJECT:
	Designed By	Engr. HAMMAD AHMAD	PREPARATION OF DESIGN, DRAWINGS & BOOKS FOR CONSTRUCTION/REHABILITATION OF SITES
	Checked By		TITLE: LEGEND
	Approved By		DATE: SEP 2023
			SCALE
			DRG.NO. E-03



GROUND FLOOR PLAN

CLIENT:



CONSULTANTS:



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Date of Revision

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FAHAD YUNUS
 KHAJANJANER
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PROJECT:

PREPARATION OF DESIGN, DRAWINGS & BOOKS
 FOR CONSTRUCTION/REHABILITATION OF SITES

Designed By

Engr. HAMMAD AHMAD

TITLE:

GROUND FLOOR PLAN

Checked By

Approved By

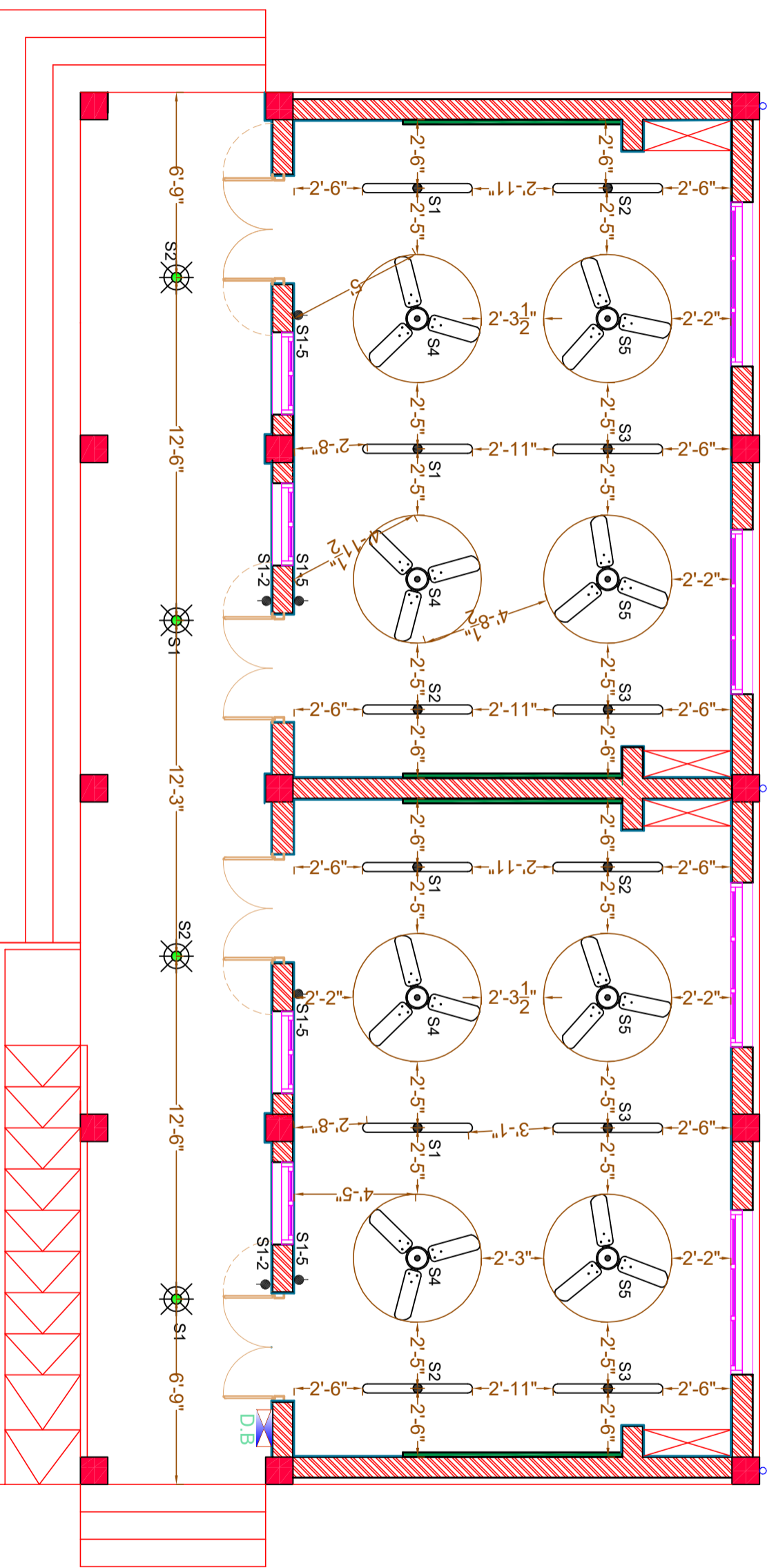
DATE

SEP 2023

SCALE

DRG.NO.

E-04



GROUND FLOOR DIMENSION PLAN

CLIENT:



CONSULTANTS:



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	RAMIN KHAN KILAN IJDIR ELECTRICAL ENGINEER	Engr. HAMMAD AHMAD	
	Designed By	Checked By	Approved By

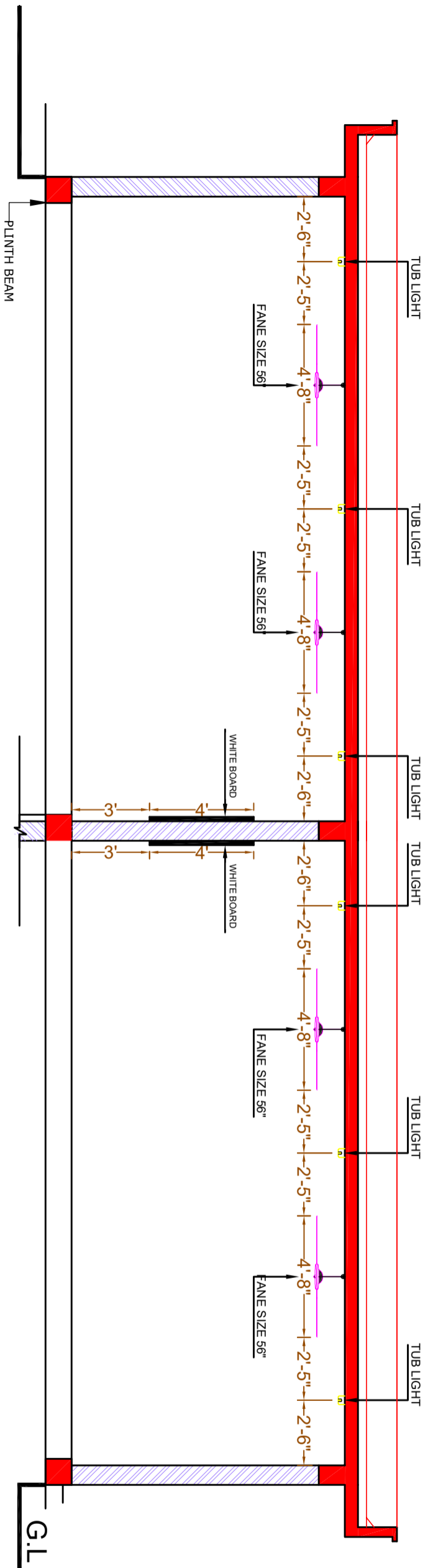
PROJECT:

PREPARATION OF DESIGN, DRAWINGS & BOQS
 FOR CONSTRUCTION/REHABILITATION OF SITES

TITLE:

GROUND FLOOR DIMENSION PLAN

DATE	SCALE	DRG. NO.
SEP 2023		E-05



SECTION

CLIENT:



CONSULTANTS:

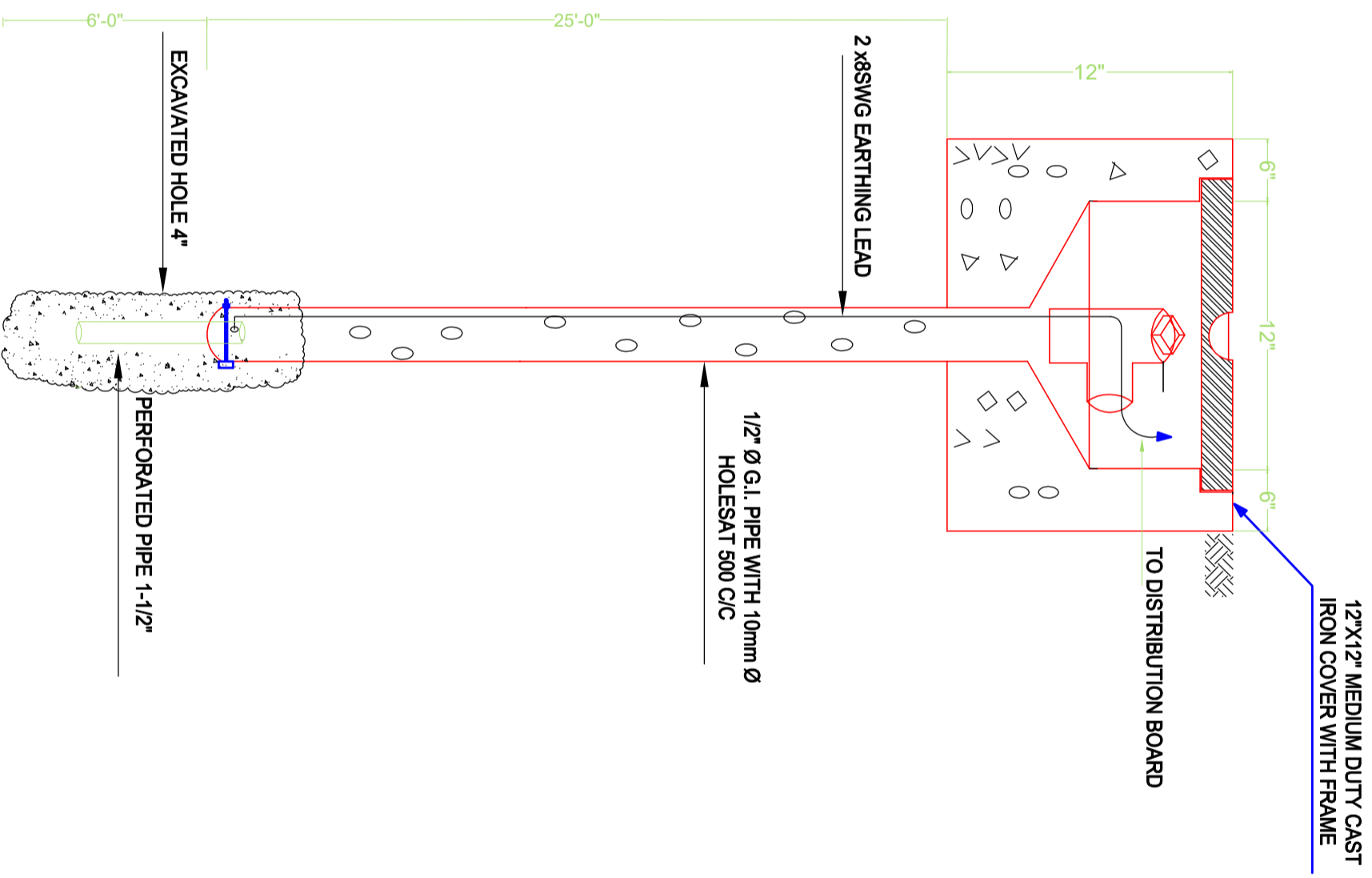


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SCHOOL NAME

GGPS WAJJAN TAXILA
 RAWALPINDI

Date of Revision	Prepared By	ELECTRICAL ENGINEER:	PROJECT:
	Designed By	Egr. HAMMAD AHMAD	PREPARATION OF DESIGN, DRA WINGS & BOQS FOR CONSTRUCTION/REHABILITATION OF SITES
	Checked By		TITLE:
	Approved By		SECTION
			DATE: <i>SEP 2023</i>
			SCALE
			DRG. NO. E-06



CLIENT:



CONSULTANTS:
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SCHOOL NAME

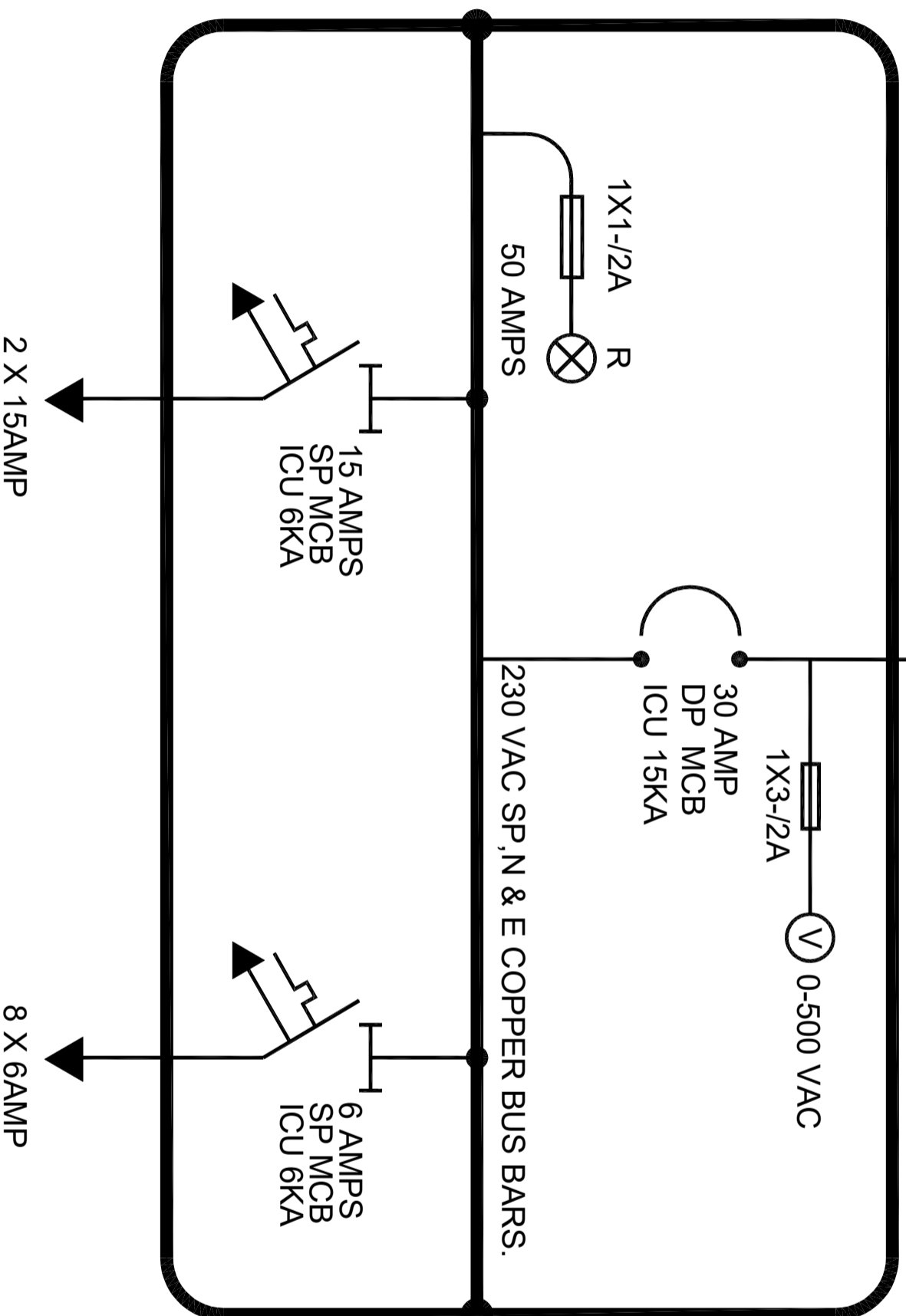
GGPS WAJUAN TAXILA
 RAWALPINDI

Date of Revision	Prepared By	FARID KILAN KILAN KHAN	PROJECT: PREPARATION OF DESIGN, DRAWINGS & BOOKS FOR CONSTRUCTION/ REHABILITATION OF SITES
	Designed By	Engr. HAMMAD AHMAD	
	Checked By		
	Approved By		TITLE: EARTHING DETAIL PLAN
			DATE: SEP 2023
			SCALE
			DRG.NO. E-07

DISTRIBUTION BOARD

INCOMING FROM MAIN
DISTRIBUTION BOARD
2 X 7/0.044" SINGLE CORE
1X7/0.044" SINGLE CORE AS EARTH

16 SWG SHEET STEEL POWDER
PAINTED RECESSED IN WALL.



CLIENT:



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SCHOOL NAME

GGPS WALJAN TAXILA
RAWALPINDI

Date of Revision

Prepared By

FARID KHAN
KHAN TAJIR
ELECTRICAL ENGINEER

PROJECT:

PREPARATION OF DESIGN, DRAWINGS & BOQS
FOR CONSTRUCTION/REHABILITATION OF SITES

TITLE:

MAIN DISTRIBUTION BOARD

Designed By

Engr. HAMMAD AHMAD

Checked By

Approved By

DATE

SEP 2023



SCALE

DRG.NO.

E-08

LOAD CALCULATION

LOAD (W)	768
PEAK DEMAND LOAD (W)	768
25% FUTURE LOAD PROVISION (W)	960
TOTAL LOAD (W)	1067
CABLE SIZE (MM sq)	1.5

CLIENT:  The UN Refugee Agency	CONSULTANTS:  PLANNERS CONSULTANTS ENGINEERS (PCE) 97-K Industrial Estate, Hayatabad Peshawar Pakistan Ph: 0092-91-5816017, 5891661-4, Fax: 5891845 E-Mail: pce.pesh@yahoo.com	SCHOOL NAME GGPS WAJUAN TAXILA RAWALPINDI	<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 20%;">Date of Revision</th><th style="width: 20%;">Prepared By</th><th style="width: 20%;">Checked By</th><th style="width: 20%;">Approved By</th></tr></thead><tbody><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></tbody></table>	Date of Revision	Prepared By	Checked By	Approved By												
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PROJECT: PREPARATION OF DESIGN, DRAWINGS & BOOKS FOR CONSTRUCTION/REHABILITATION OF SITES		<table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 30%;">TITLE: LOAD CALCULATION</td><td style="width: 30%;">SCALE</td><td style="width: 30%;">DRG.NO.</td><td style="width: 10%;">E-09</td></tr><tr><td>DATE</td><td>SEP 2023</td><td> </td><td> </td></tr></table>		TITLE: LOAD CALCULATION	SCALE	DRG.NO.	E-09	DATE	SEP 2023										
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DATE	SEP 2023																		

PROPOSED DESIGN
OF
REHAB WORKS
AT
GGPS WAJJAN TAXILA
RAWWALPINDI



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LIST OF DRAWINGS

ARCHITECTURAL DRAWINGS			PLUMBING DRAWINGS		
SR.NO	DESCRIPTION	DRG. NO.	SR.NO	DESCRIPTION	DRG. NO.
1	GROUND FLOOR PLAN	A-01	14	GENERAL NOTES	P-01
2	FRONT ELEVATION	A-02	15	GROUND FLOOR PLUMBING PLAN	P-02
3	SECTION AT B-B	A-03	16	SEPTIC TANK PLAN	P-03
4	SCHEDULE OF OPENING	A-04	WATER SUPPLY DRAWINGS		
5	VENTILATOR, PROJECTION , DRIP COURSE & RAILING DETAILS	A-05	17	LEGEND	WS-01
STRUCTURAL DRAWINGS			18	GROUND FLOOR WATER SUPPLY PLAN	WS-02
6	GENERAL NOTES	S-01	ELECTRICAL DRAWINGS		
7	GENERAL NOTES	S-02	19	GENERAL NOTES	E-01
8	FOUNDATION PLAN	S-03	20	APPROVED MANUFACTURE LIST	E-02
9	FOUNDATION SECTION DETAIL	S-04	21	LEGEND	E-03
10	GROUND FLOOR LINTEL BEAM PLAN	S-05	22	GROUND FLOOR PLAN	E-04
11	GROUND FLOOR SLAB BOTTOM REINFORCEMENT PLAN	S-06	23	GROUND FLOOR DIMENSION PLAN	E-05
12	GROUND FLOOR SLAB TOP REINFORCEMENT PLAN	S-07			
13	LINTEL BEAM DETAIL	S-08			

CLIENT:



CONSULTANTS:
PLANNERS CONSULTANTS ENGINEERS (PCE)

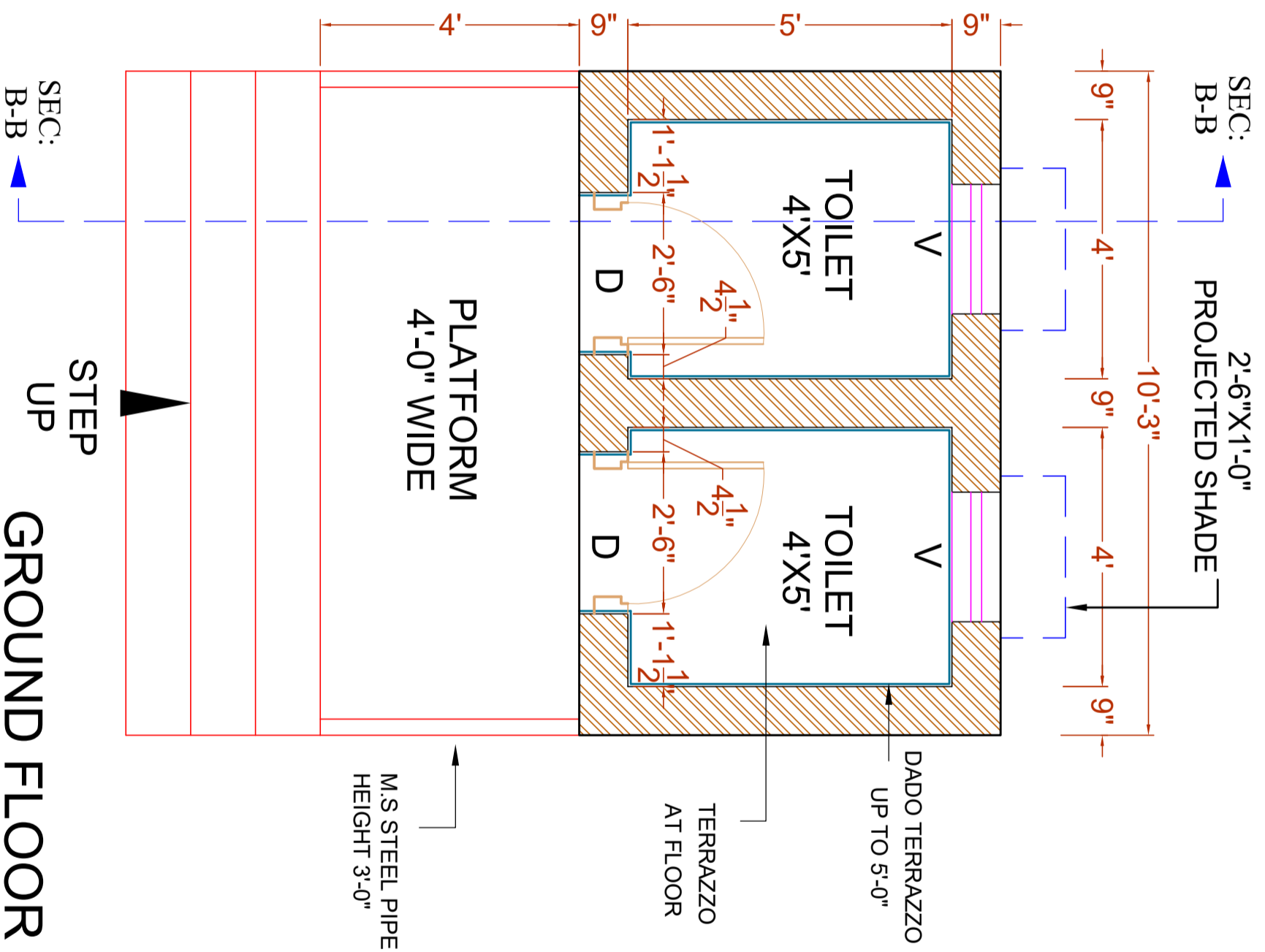
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SCHOOL NAME

REHAB WORKS OF
 GGPS WAJJAN TAXILA
 RAWALPINDI

Date of Revision	Prepared By	Checked By	Approved By
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PROJECT:			
PREPARATION OF DESIGN DRAWINGS & BOQS FOR CONSTRUCTION/REHABILITATION OF SITES			
TITLE:		LIST OF DRAWINGS	
DATE	SCALE	DRG.NO.	A-00
SEP 2023			



GROUND FLOOR PLAN

CLIENT:



The UN Refugee Agency



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REHAB WORKS OF GGPS WAJUAN TAXILA RAWALPINDI

Date of Revision	Prepared By	ARCHITECT
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	Checked By	(M. Arch. UET Lahore)
	Approved By	

PROJECT:

PREPARATION OF DESIGN, DRAWINGS & BOQS FOR CONSTRUCTION/REHABILITATION OF SITES

TITLE: GROUND FLOOR PLAN

DATE: SEP 2023

SCALE

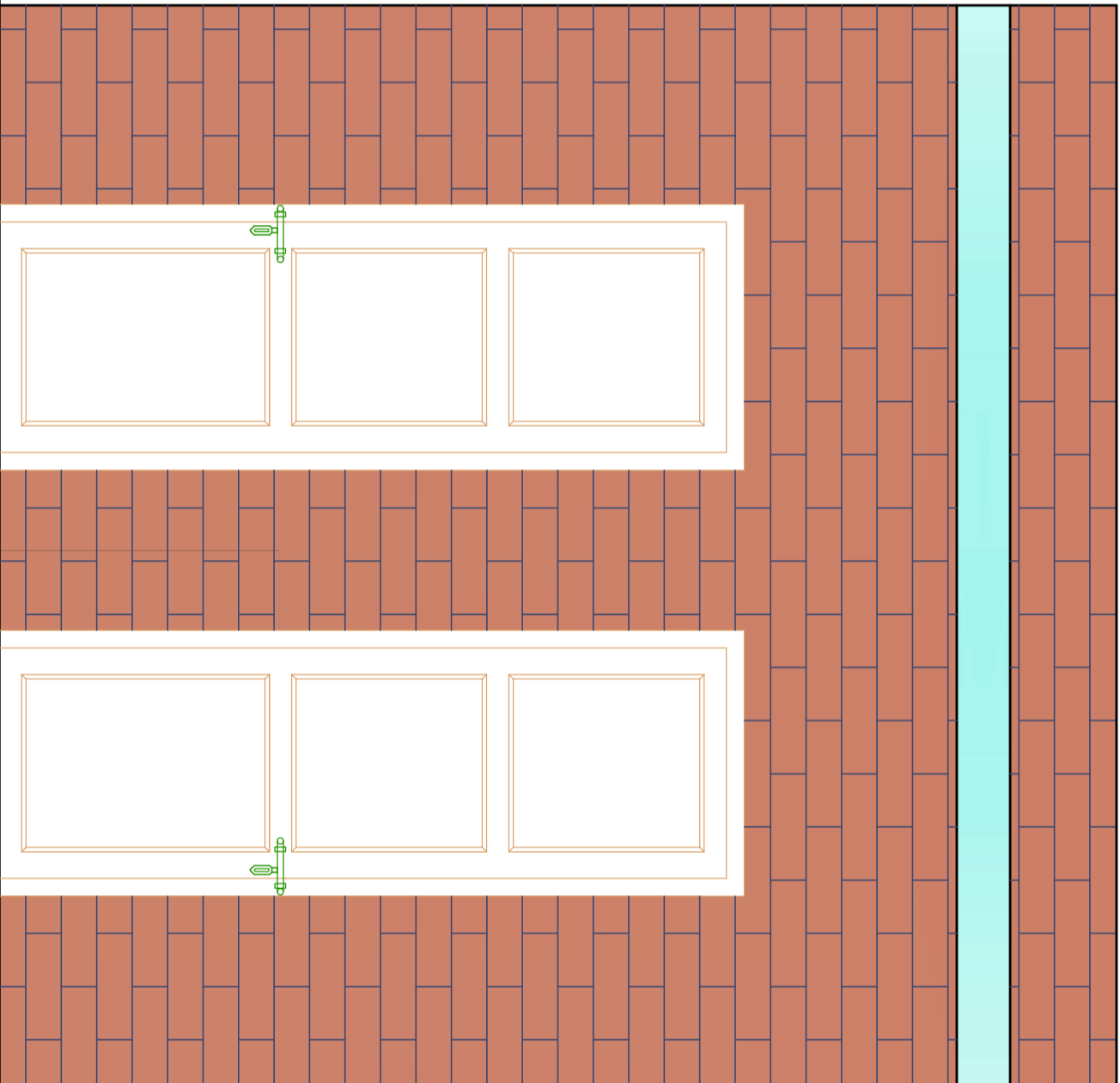
DRG. NO. A-01

F.L

F.L

G.F

G.F



FRONT ELEVATION

CLIENT:



UNHCR
The UN Refugee Agency

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SCHOOL NAME

REHAB WORKS OF
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	Approved By	

PROJECT:		
PREPARATION OF DESIGN DRAWINGS & BOOKS FOR CONSTRUCTION/REHABILITATION OF SITES		
TITLE: FRONT ELEVATION		
DATE	SCALE	DRG. NO.
SEP 2023		A-02

SCHEDULE OF OPENING

TYPE	SIZE	S-LEVEL	DESCRIPTION
D	2'-6" X 7'-0"	0"-0"	STEEL
V	2'-0" X 1'-6"	5'-6"	STEEL

CLIENT:



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Date of Revision

Prepared By

FARID KHAN
KIANI/HANIDER

PROJECT:

PREPARATION OF DESIGN, DRAWINGS & BOOKS
FOR CONSTRUCTION/REHABILITATION OF SITES

TITLE:

SCHEDULE OF OPENING

Designed By

MARWAT KHAN ORAKZAI
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(M.Arch (UR) Lahore)

Checked By

Approved By

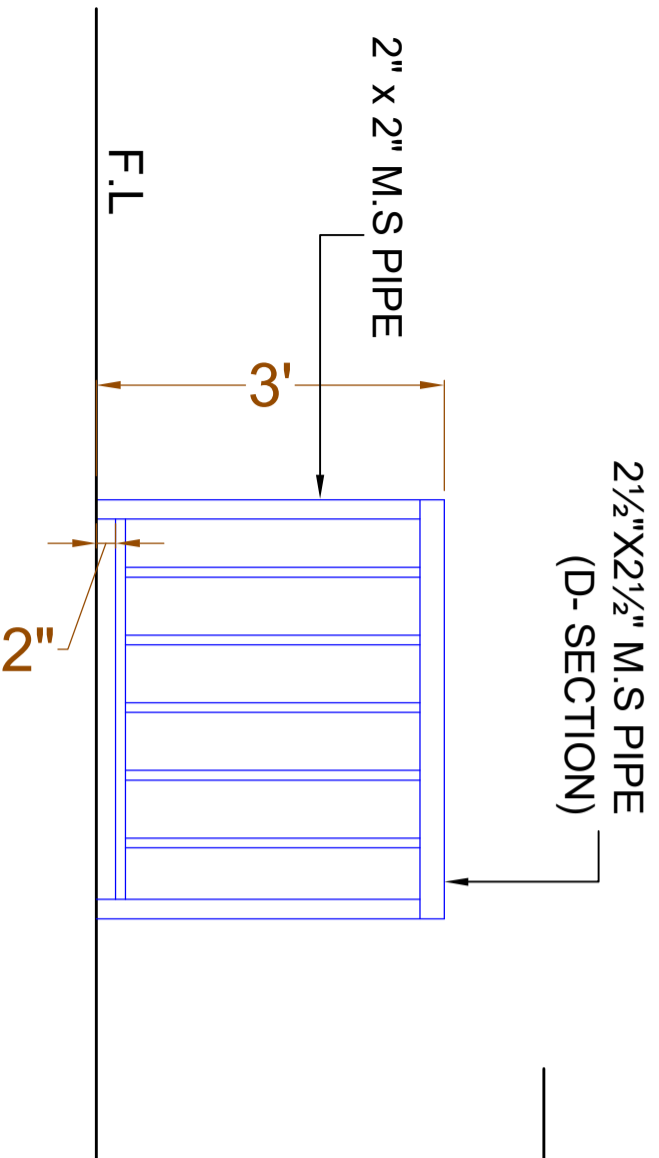
DATE

SEP 2023

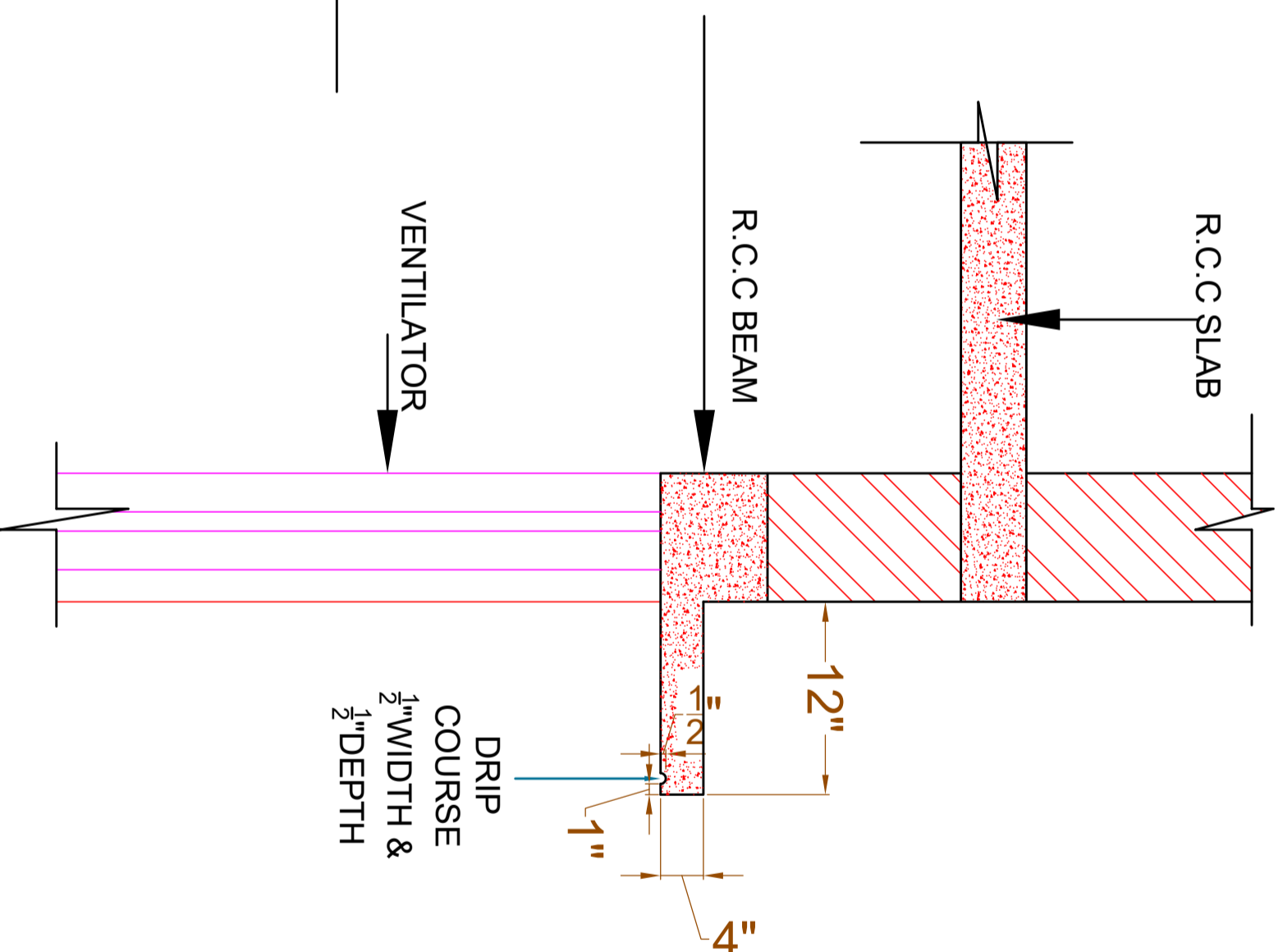
SCALE

DRG. NO.

A-04



RAILING DETAILS



**VENTILATOR
PROJECTION &
DRIP COURSE DETAIL**

CLIENT:



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	Checked By	
	Approved By	

PROJECT:		
PREPARATION OF DESIGN, DRAWINGS & BOOKS FOR CONSTRUCTION/REHABILITATION OF SITES		
TITLE:	VENTILATOR, PROJECTION, DRIP COURSE AND RAILING DETAILS	
DATE	SCALE	DRG. NO.
SEP 2023		A-05

**STRUCTURE DRAWING
OF
REHAB WORKS AT
GGPS WAJJAN TAXILA
RAWALPINDI**

1. GENERAL

1. READ ALL DRAWINGS IN CONJUNCTION WITH ARCHITECTURAL, GEOTECHNICAL, PLUMBING, MECHANICAL, ELECTRICAL & ANY OTHER RELEVANT DRAWINGS.
2. NOTES GIVEN IN THIS DRAWING ARE APPLICABLE TO ALL DRAWINGS UNLESS MENTIONED OTHERWISE. NOTES WRITTEN ON A DRAWING, SHALL BE APPLICABLE TO THAT PARTICULAR DRAWING ONLY UNLESS OTHERWISE CROSS-REFERRED.
3. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE SPECIFICATIONS OF THE CONTRACT DOCUMENTS. IN ABSENCE OF ANY SPECIFICATIONS, ALL MATERIALS & WORKMANSHIP SHALL CONFORM TO RELEVANT ACI/BRITISH CODES AND SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE STRUCTURES DURING CONSTRUCTION. HE SHALL ALSO VERIFY ALL DIMENSIONS AND LEVELS BEFORE EXECUTION OF WORK. ANY DISCREPANCY, ERROR OR OMISSION, IF FOUND, SHALL BE BROUGHT TO THE NOTICE OF THE ENGINEER FOR CORRECTION AND APPROVAL.
5. THE CONTRACTOR SHALL CO-ORDINATE WITH VARIOUS SERVICES DRAWINGS FOR SIZES & LOCATION OF ALL STRUCTURAL MEMBERS, FLOORS, WALLS, OPENINGS, FLOOR FINISHES, PIPES ETC.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EXECUTION OF DEWATERING SYSTEM WHERE SO REQUIRED DURING CONSTRUCTION.
7. ALL DIMENSIONS & LEVELS ARE IN FEET & INCHES.
8. DO NOT SCALE THE DRAWINGS. DIMENSIONS, GIVEN ON THE DRAWING, SHALL GOVERN.
9. ALL FABRICATION, PAINTING, ERECTION AND QUALITY CONTROL IS TO BE DONE IN ACCORDANCE WITH THE LATEST APPLICABLE ACI/BRITISH SPECIFICATIONS.
10. BACKFILLING AROUND FOUNDATIONS AND WALLS SHALL BE WELL COMPACTED LAYERS NOT EXCEEDING 6 INCHES IN THICKNESS.
11. IT IS STRONGLY RECOMMENDED TO RECONFIRM THE SITE PLAN BEFORE START OF EXECUTION AT SITE. THE SITE SHOULD BE EXAMINED FOR CLEARANCE WITH RESPECT TO LOCAL SEISMIC HAZARDS.
12. THE CONTRACTOR SHALL INFORM THE ENGINEER ABOUT ANTICIPATED CONSTRUCTION LOADS IN THE STRUCTURE AND OBTAIN ENGINEER'S APPROVAL THEREOF BEFORE COMMENCING THE WORK.
13. THE CONTRACTOR SHALL VERIFY LAYOUT, CONFIGURATION, ALL DIMENSIONS AND LEVELS PERTAINING TO EXISTING WORKS BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL ADOPT ADEQUATE AND APPROPRIATE MEASURES SO AS NOT TO DAMAGE THE EXISTING WORKS.
14. THE CONTRACTOR SHALL EXERCISE UTMOST CARE AND PRECAUTION DURING THE WORKS, AGAINST ANY MISHAPS OR ACCIDENTS. FOR WHICH THE CONTRACTOR SHALL BE WHOLLY AND SOLELY RESPONSIBLE. THE CONTRACTOR SHALL INDEMNIFY THE OWNER AGAINST ANY ACCIDENTS AND ANY LOSSES THEREFROM AND SHALL REPAIR AND RECTIFY THEM AT HIS OWN COST AND TIME.
15. ANY DEPARTURES/DEVIATIONS DESIRED FROM THE DESIGN OR SPECIFICATIONS, OR SOLUTIONS TO ANY PROBLEMS ENCOUNTERED, SHALL BE GOT APPROVED FROM THE ENGINEER PRIOR TO IMPLEMENTATION. UNAPPROVED DEPARTURES/DEVIATIONS MAY LEAD TO REJECTION/REPLACEMENT OF THE ENTIRE WORK AT THE CONTRACTOR'S COST.
16. THE CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS AND BAR BENDING SCHEDULES. THE ENGINEER'S APPROVAL SHALL NOT RELIEVE THE APPROVAL BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE ACCURACY OF SHOP DRAWINGS AND BAR BENDING SCHEDULES. FOR ENGINEER'S APPROVAL AND OBTAIN HIS CONTRACTOR FROM HIS RESPONSIBILITY.
17. The allowable bearing capacity of soil should be 1stf.

2. SHORING AND BRACING

1. SHORE & BRACE ALL PARTS OF THE STRUCTURE DURING CONSTRUCTION, TO THE EXTENT NECESSARY TO ENSURE COMPLETE SAFETY, STRENGTH & SERVICEABILITY OF ALL STRUCTURAL ELEMENTS UNDER ALL CONDITIONS OF LOADS WHICH MAY OCCUR DURING CONSTRUCTION. SUCH SHORING & BRACING IS THE CONTRACTOR'S SOLE RESPONSIBILITY AND IS NOT SHOWN ON STRUCTURAL DRAWINGS OR SPECIFIED IN THE PROJECT.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY AND STABILITY OF THE SLOPES AND SHALL PROVIDE SHORING AND BRACING DURING EXCAVATION AND CONSTRUCTION, WHEREVER AND WHENEVER REQUIRED.
3. SEQUENCE OF REMOVAL OF FORMWORK SHALL BE APPROVED BY THE ENGINEER.
4. AT LEAST ONE LOWER FLOOR SHALL REMAIN PROPPED UNTILL THE UPPER FLOOR IS CAST AND CURED.

3. REINFORCED CONCRETE

1. STRUCTURAL DESIGN IS BASED ON THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE OF AMERICAN CONCRETE INSTITUTE (ACI 318).
2. ALL STRUCTURAL CONCRETE SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE (ACI) REQUIREMENTS.
3. CONCRETE MIX TO BE DESIGNED ON THE BASIS OF ACI 211 OR EQUIVALENT. TRIAL STRENGTH RESULTS TO BE SUBMITTED BY THE CONTRACTOR FOR REVIEW AND APPROVAL BEFORE CONCRETING.
4. NO CONCRETING SHALL BE CARRIED OUT UNTIL PERMISSION IS GIVEN IN WRITING OR APPROVED BY STRUCTURE ENGINEER.
5. ALL CONCRETE SHALL BE TESTED IN ACCORDANCE WITH ASTM STANDARDS C31, C39, C119 & AS WRITTEN IN SPECIFICATIONS AND THE MINIMUM CYLINDER CRUSHING STRENGTH OF CONCRETE AT 28 DAYS SHALL BE AS FOLLOWS. TESTING OF CLASS D & E CONCRETE SHALL BE PERFORMED IF SO SHAHEED CHAWK EXACT. NEAR ALFALAH FURNITURE LOWER DIRECTED BY THE ENGINEER.

CLASS	MIN. CYLINDER CRUSHING STRENGTH AT 28 DAYS (psi).
A	4000
B	3000
C	2400
D	1200
E	800

6. CLASS OF CONCRETE FOR DIFFERENT COMPONENTS OF THE STRUCTURE SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE:

COMPONENT	CONCRETE CLASS
COLUMNS	CLASS 'A'
SLABS, BEAMS, FOUNDATION	CLASS 'B'
RCC WALLS	CLASS 'D'
PCC STEPS,	CLASS 'E'
LEAN / BLINDING CONCRETE	CLASS 'E'

7. ORDINARY PORTLAND CEMENT SHALL BE USED FOR ALL CONCRETE WORKS.
8. AN INTEGRAL WATER PROOFING AGENT SHALL BE USED IN CONCRETE THAT IS CONSTANTLY OR INTERMITTENTLY IN CONTACT WITH WATER AS PER MANUFACTURERS' RECOMMENDATIONS (GENCON GEMPRUF RMC OR PENETRON ADMIX OR EQUIVALENT).
9. ALL DETAILING SHALL BE DONE AS PER ACI STANDARDS ACI-315, ACI-318 & ACI-350R.

STRUCTURAL ELEMENT	COVER (INCHES)
FOOTINGS	2"
BEAMS	1 1/2"
COLUMNS	1 1/2"
SLABS	3/4"
WALLS	3/4"

4. REINFORCING STEEL

1. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM-A615 GRADE 60 HAVING A MINIMUM YIELD STRENGTH OF 60,000 PSI. FOR STIRRUPS, TIES AND #3 BARS USE ASTM A615, GRADE 60 HAVING MINIMUM YIELD STRENGTH OF 60,000 PSI.
 2. THE ACTUAL YIELD STRENGTH BASED ON MILL TESTS DOES NOT EXCEED THE SPECIFIED STRENGTH BY MORE THAN 18,000 PSI (RETETS SHALL NOT EXCEED THIS VALUE BY MORE THAN AN ADDITIONAL 3000 PSI)
 3. THE RATIO OF THE ACTUAL ULTIMATE TENSILE STRENGTH TO THE ACTUAL TENSILE YIELD STRENGTH IS NOT LESS THAN 1.25
- L-GREATER CLEAR SPAN, db-DIAMETER OF BAR-D-EFFECTIVE DEPTH
- THE FIRST HOOP SHALL BE LOCATED NOT MORE THAN 2" FROM THE FACE OF THE SUPPORTING MEMBER.
- WHERE:

7. ALL REINFORCING STEEL SHALL BE ACCURATELY LOCATED IN THE FORMS AND HELD FIRMLY IN PLACE BEFORE & DURING THE PLACEMENT OF CONCRETE. BY MEANS OF WIRE AND SUPPORTS ADEQUATE TO PREVENT DISPLACEMENT DURING THE COURSE OF CONSTRUCTION.
8. UNTELS ARE EXTENDED AT 9 (INCHES) FROM BOTH SIDES OF OPENING.
9. PROVIDE 135° HOOK IN ADJACENT STIRRUPS ON ALTERNATE SIDES.

5. CONCRETE CONSTRUCTION

1. ALL STRUCTURAL SURFACES, AGAINST WHICH EARTH IS TO BE FILLED, SHALL BE COATED WITH TWO COATS OF HOT BITUMEN OF 10/20 GRADE AT THE RATE OF 0.2 lbs/ft²/coat.
2. PROVIDE POLYTHENE SHEET OVER TWO COATS OF HOT BITUMEN AT TOP OF PLINTH BEAM/IDPC FOR EXTERIOR WALLS.
3. BEFORE CASTING OF ANY STRUCTURAL MEMBER, THE CONTRACTOR SHALL ENSURE THAT ALL EMBEDDED ITEMS FOR ELECTRICAL, MECHANICAL, HVAC, PLUMBING, STRUCTURAL STEEL AND OTHER WORKS ARE PROPERLY LOCATED AND FIRMLY SECURED IN PLACE.
4. DURING CONSTRUCTION, STACKING OF CONSTRUCTION MATERIALS, BLOCKS, etc. SHOULD BE AVOIDED ON SLAB PANELS.

6. BRICK WORK

1. ALL BRICK WORK SHALL CONFORM TO SPECIFICATIONS GIVEN IN THE CONTRACT DOCUMENT.
2. ALL BRICK SHALL BE SOUND, HARD, WELL BURNT AND OF UNIFORM SIZE, COLOUR AND TEXTURE. DIMENSIONAL VARIATION IN SIZES SHALL NOT EXCEED 1/8". BRICKS SHOULD BE IN ACCORDANCE WITH SPECIFICATIONS AND SHOULD CONFORM TO ASTM C62.
3. ALL BRICK WORK SHALL BE ERECTED PLUMB AND TRUE TO LINE AND LEVEL. THE MAXIMUM VARIATION IN ANY STOREY HEIGHT OR ANY LENGTH OF WALL SHALL BE 7/8" IN 10'-0".
4. MORTAR USED IN MASONRY CONSTRUCTION SHALL HAVE AN ULTIMATE COMPRESSIVE STRENGTH OF NOT LESS THAN 12 MPa (1800PSI) AND SHALL CONFORM TO ASTM C270.
5. COMPRESSIVE STRENGTH OF BRICK MASONRY AVERAGE OF 5 UNITS AT 28 DAYS SHALL NOT BE LESS THAN AS SPECIFIED IN SPECIFICATION AND SHALL CONFORM TO RELEVANT ASTM STANDARD.
6. ALL DESIGN, DETAILING, MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH RELEVANT ACI, ASTM, AND UBC CODES AND STANDARDS.
7. BRICK SHALL BE LAID "FROG" UPWARD WITH MORTAR JOINT AND IN ENGLISH FLEMISH BOND OR AS SHAHEED CHAWK EXACT. NEAR ALFALAH FURNITURE LOWER DIRECTED BY THE ENGINEER.
8. BRICKS SHOULD BE SOAKED WITH WATER PROPERLY BEFORE USE.
9. VERTICAL JOINTS SHOULD BE STAGGERED.
10. ALL MASONRY WALLS SHALL BE ANCHORED TO STRUCTURAL FRAME WORK AS INDICATED ON THE DRAWINGS

CLIENT:



CONSULTANTS:



PLANNERS CONSULTANTS ENGINEERS (PCE)
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SCHOOL NAME

REHAB WORKS AT
GGPS WAJIAN TAXILA
RAWALPINDI

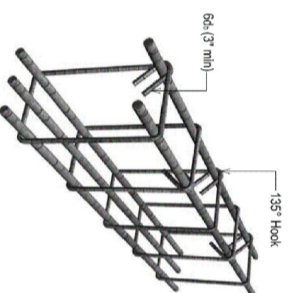
Date of Revision	Prepared By	DATE	SCALE	DRG. NO.
	Engr. HUMZA AHMAD	SEP 2023		S-01
	Checked By			
	Approved By			

PROJECT:
PREPARATION OF DESIGN DRAWINGS & BOOKS FOR CONSTRUCTION/REHABILITATION OF SITES

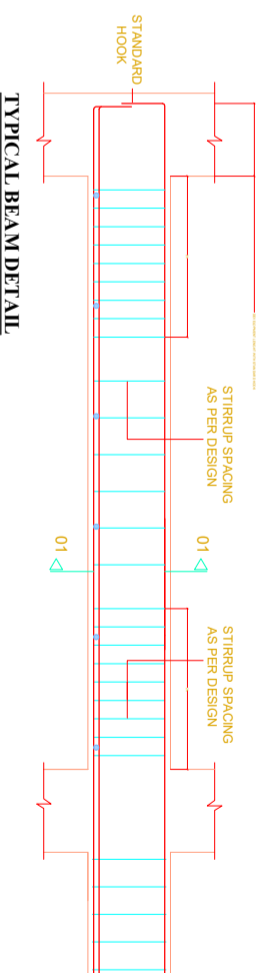
TITLE:
GENERAL NOTES

7. CONSTRUCTION JOINTS

1. JOINTS, NOT SHOWN ON THE DRAWING, SHALL BE SO MADE AND LOCATED AS TO LEAST IMPAIR THE STRENGTH OF THE STRUCTURE AND SHALL NEED PRIOR APPROVAL OF THE ENGINEER. THEY SHALL BE LOCATED NEAR THE MIDDLE OF THE SPANS OF SLAB & BEAMS. JOINTS IN WALLS & COLUMNS SHALL BE AT THE UNDER-SIDE OF FLOORS, SLABS OR BEAMS AND AT THE TOP OF FOOTINGS OR FLOOR SLABS.
2. JOINTS SHALL BE PERPENDICULAR TO MAIN REINFORCEMENT. ALL REINFORCING STEEL SHALL BE CONTINUED ACROSS THE JOINTS.
3. JOINTS IN BASE SLAB & WALLS AND ROOF SLAB, IN ADDITION TO THOSE SHOWN ON THE DRAWINGS SHALL BE BORNE BY THE CONTRACTOR. BEAMS & BRACKETS SHALL BE PLACED AT THE SAME TIME AS SLABS.

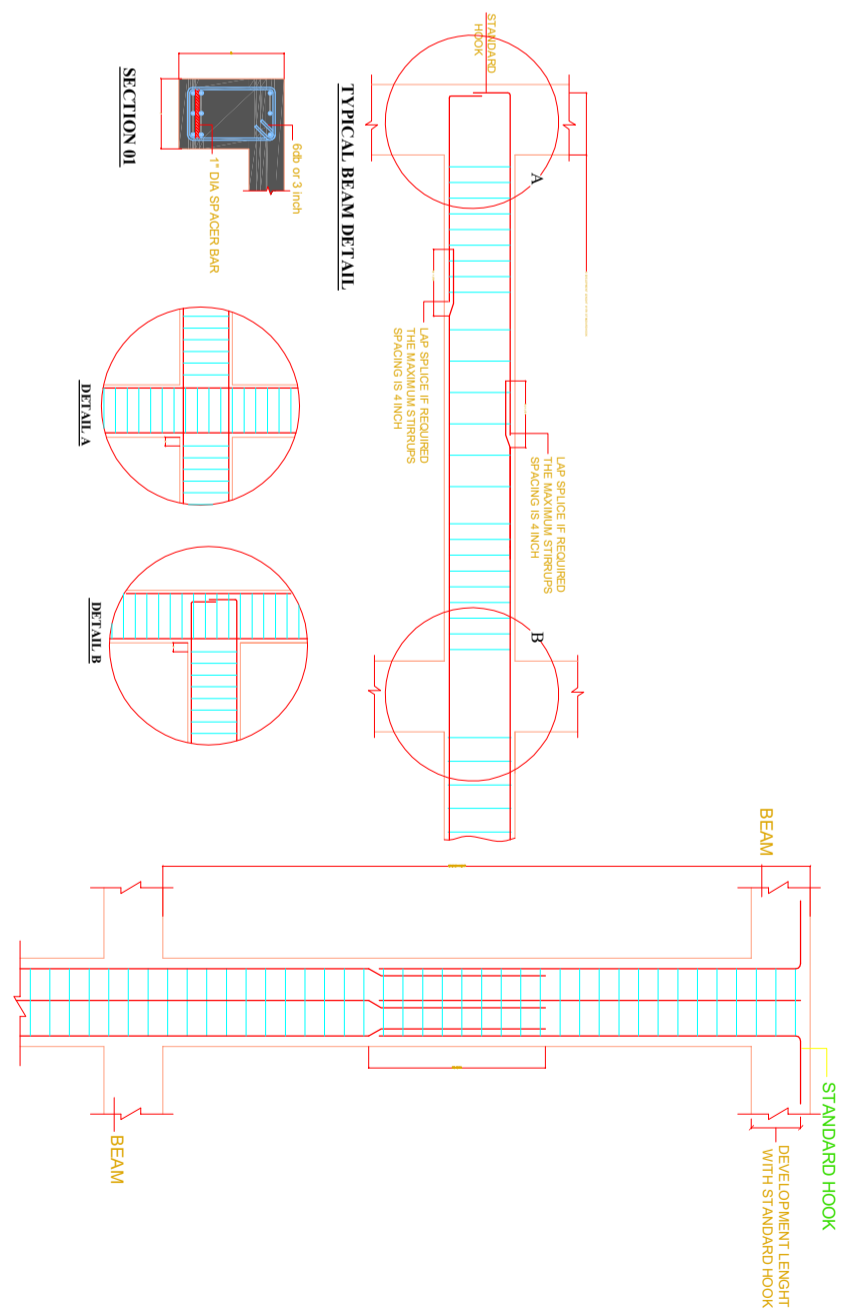


SEISMIC HOOK DETAILS



DEVELOPMENT LENGTH IN TENSION (ACI 21.5.4.1)		SPICE LENGTH (ACI 21.3.2.4, Class B Splice)		
BAR DIA	DEVELOPMENT LENGTH (INCHES) $f_c' = 4,000$ psi $f_y = 60,000$ psi	BAR DIA	MINIMUM SPICE LAP LENGTH (INCHES) $f_c' = 3,000$ psi $f_y = 40,000$ psi	
	STRAIGHT BARS WITH STANDARD HOOK		TENSION	COMPRESSION
3/8"	18	3/8"	15	-
1/2"	24	1/2"	20	9
3/4"	30	3/4"	30	15
1"	48	1"	48	18

DEVELOPMENT LENGTH IN TENSION (ACI 21.5.4.1)		SPICE LENGTH (ACI 21.3.2.4, Class B Splice)		
BAR DIA	DEVELOPMENT LENGTH (INCHES) $f_c' = 3,000$ psi $f_y = 60,000$ psi	BAR DIA	MINIMUM SPICE LAP LENGTH (INCHES) $f_c' = 3,000$ psi $f_y = 60,000$ psi	
	STRAIGHT BARS WITH STANDARD HOOK		SLAB	BEAM / COLUMN
1/2"	22	1/2"	25	35
5/8"	30	5/8"	-	44
3/4"	34	3/4"	-	55
1"	55	1"	-	70



CLIENT:



CONSULTANTS:



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SCHOOL NAME

REHAB WORKS AT
 GGPS WALJAN TAXILA
 RAWALPINDI

Date of Revision

Prepared By

FARUK KHAN
 KIYAN HANJIR
 STRUCTURE ENGINEER

PROJECT:
 PREPARATION OF DESIGN, DRAWINGS & BOOKS
 FOR CONSTRUCTION/REHABILITATION OF SITES

TITLE:
 GENERAL NOTES

Designed By
 Checked By
 Approved By

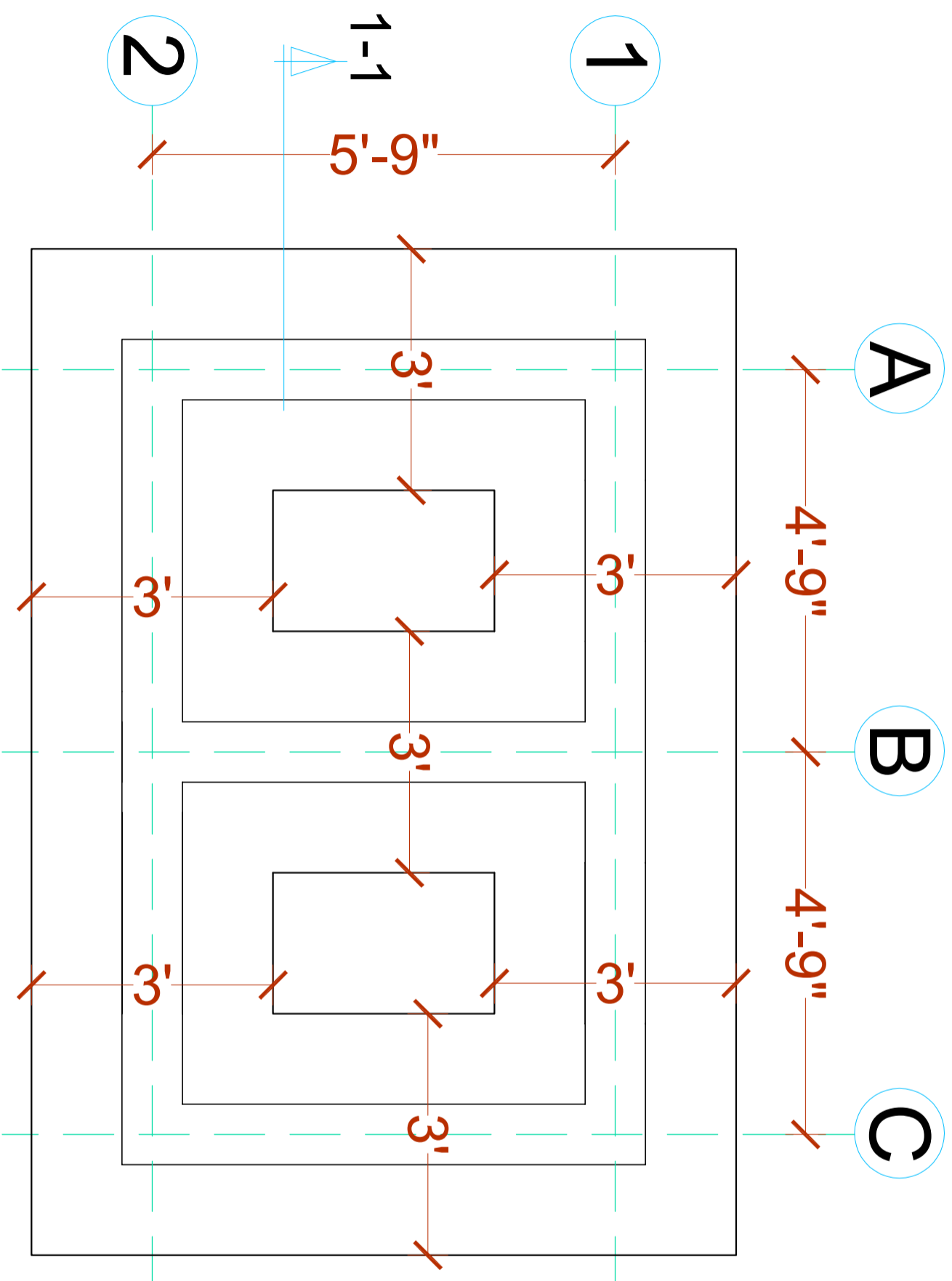
Eng. HUMZA AHMAD

DATE
 SEP 2023



SCALE

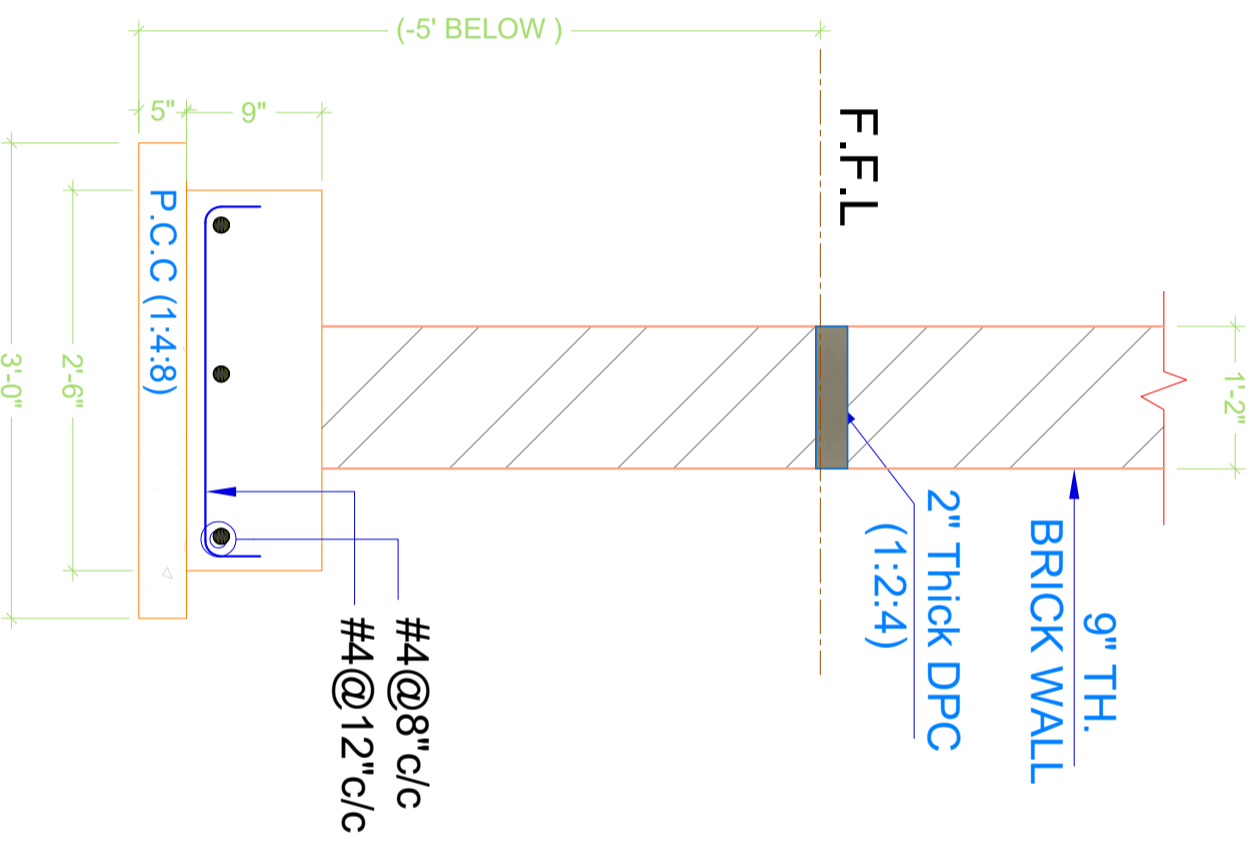
DRG. NO.

S-02



FOUNDATION PLAN

<p>CLIENT:</p>  <p>The UN Refugee Agency</p>	<p>CONSULTANTS:</p>  <p>PLANNERS CONSULTANTS ENGINEERS (PCE) 97-K Industrial Estate, Hayatabad Peshawar Pakistan Ph: 0092-91-5816017, 5891661-4, Fax: 5891845 E-Mail: pce.pesh@yahoo.com</p>	<p>SCHOOL NAME</p> <p>REHAB WORKS AT GGPS WAJUAN TAXILA RAWALPINDI</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Date of Revision</td> <td style="width: 25%;">Prepared By</td> <td style="width: 25%;">HAND KIAN KIAN IAN DER STRUCTURE ENGINEER:</td> <td style="width: 25%;">PROJECT:</td> </tr> <tr> <td></td> <td>Designed By</td> <td>Egr. HUMZA AHMAD</td> <td>PREPARATION OF DESIGN, DRAWINGS & BOOKS FOR CONSTRUCTION/ REHABILITATION OF SITES</td> </tr> <tr> <td></td> <td>Checked By</td> <td></td> <td>TITLE: FOUNDATION PLAN</td> </tr> <tr> <td></td> <td>Approved By</td> <td></td> <td>DATE: <i>SEP 2023</i></td> </tr> <tr> <td></td> <td></td> <td></td> <td>SCALE</td> </tr> <tr> <td></td> <td></td> <td></td> <td>DRG. NO. S-03</td> </tr> </table>	Date of Revision	Prepared By	HAND KIAN KIAN IAN DER STRUCTURE ENGINEER:	PROJECT:		Designed By	Egr. HUMZA AHMAD	PREPARATION OF DESIGN, DRAWINGS & BOOKS FOR CONSTRUCTION/ REHABILITATION OF SITES		Checked By		TITLE: FOUNDATION PLAN		Approved By		DATE: <i>SEP 2023</i>				SCALE				DRG. NO. S-03
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	Checked By		TITLE: FOUNDATION PLAN																								
	Approved By		DATE: <i>SEP 2023</i>																								
			SCALE																								
			DRG. NO. S-03																								



SECTION 1-1

CLIENT:



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SCHOOL NAME

REHAB WORKS AT
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 RAWALPINDI

Date of Revision	Prepared By	Checked By	Approved By
	FARID KIAN KIAN HAIDER STRUCTURE ENGINEER	Engr. HAJIZA AHMAD	
	Designed By	Checked By	Approved By

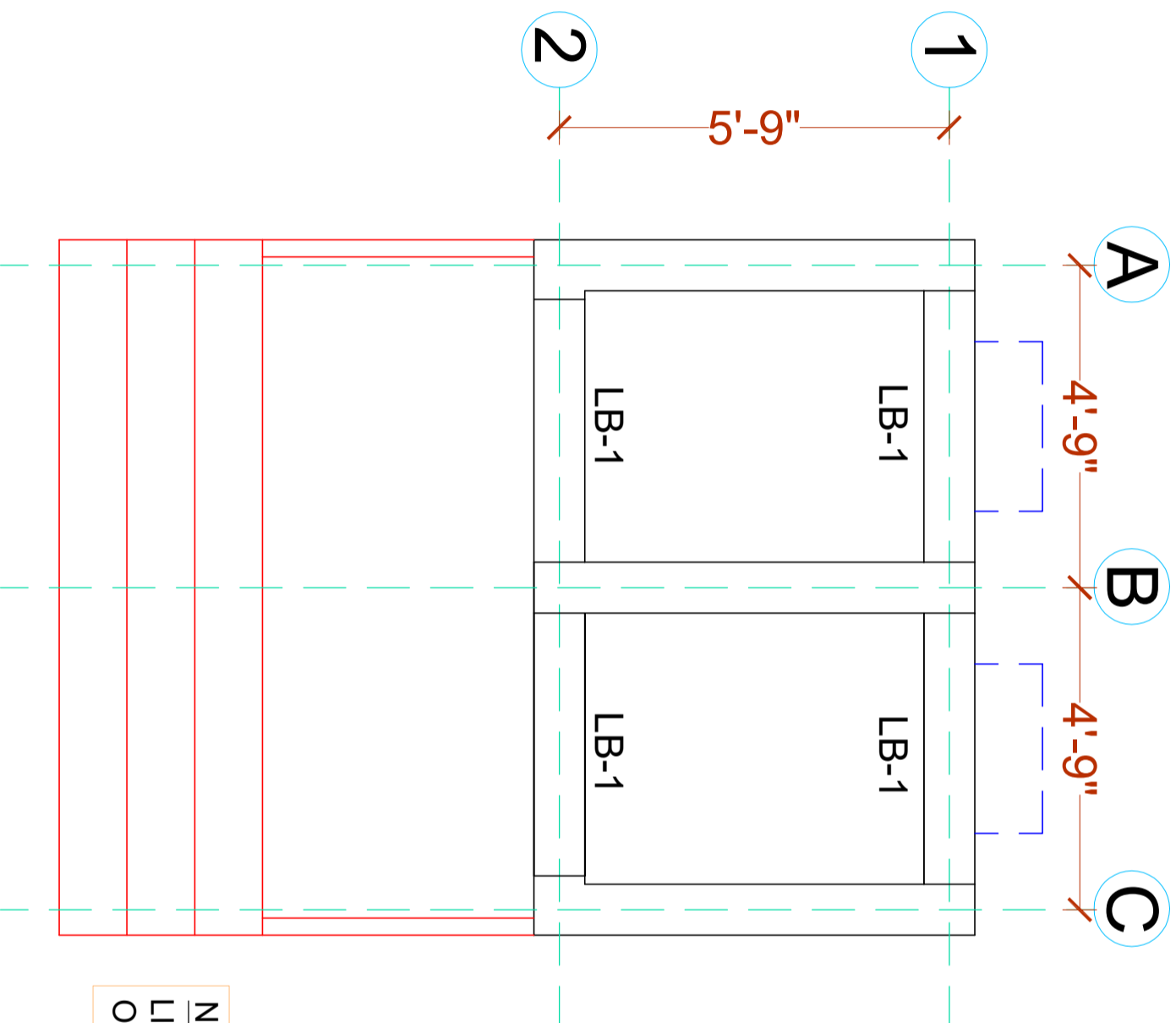
PROJECT:

PREPARATION OF DESIGN DRAWINGS & BOOKS
 FOR CONSTRUCTION/REHABILITATION OF SITES

TITLE:

FOUNDATION SECTION DETAIL

DATE	SCALE	DRG.NO.
SEP 2023		S-04



NOTE
 LINTEL BEAM WILL BE EXTEND
 ON BOTH SIDE UP TO 1'

GROUND FLOOR LINTEL BEAM PLAN

CLIENT:



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Prepared By

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 STRUCTURE ENGINEER

Designed By

Engr. HUMZA AHMAD

Checked By

Approved By

PROJECT:

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TITLE:

GROUND FLOOR LINTEL BEAM PLAN

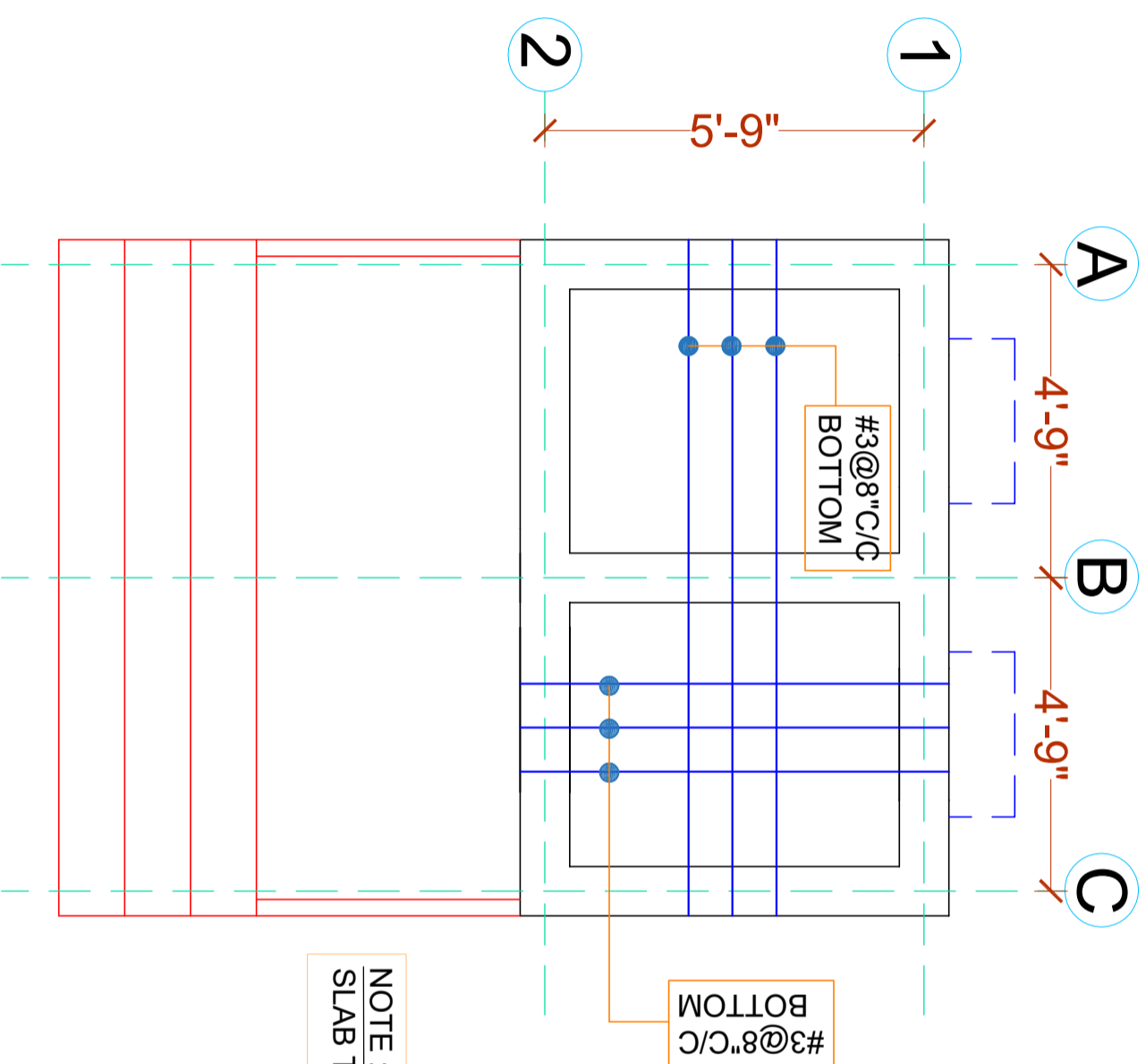
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SEP 2023

SCALE



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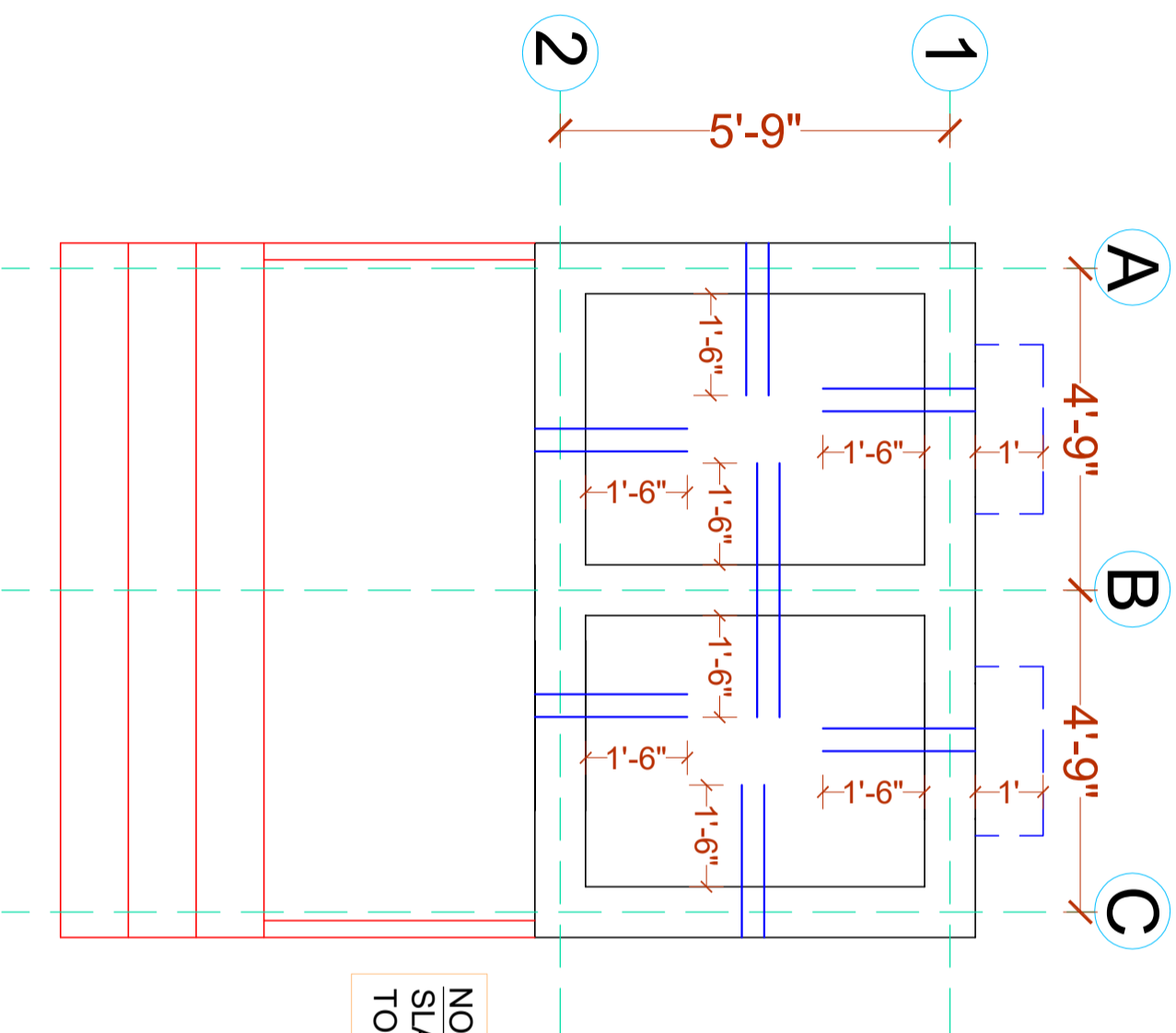
S-05



NOTE :
SLAB THICKNESS = 5"



GROUND FLOOR SLAB BOTTOM REINFORCEMENT PLAN

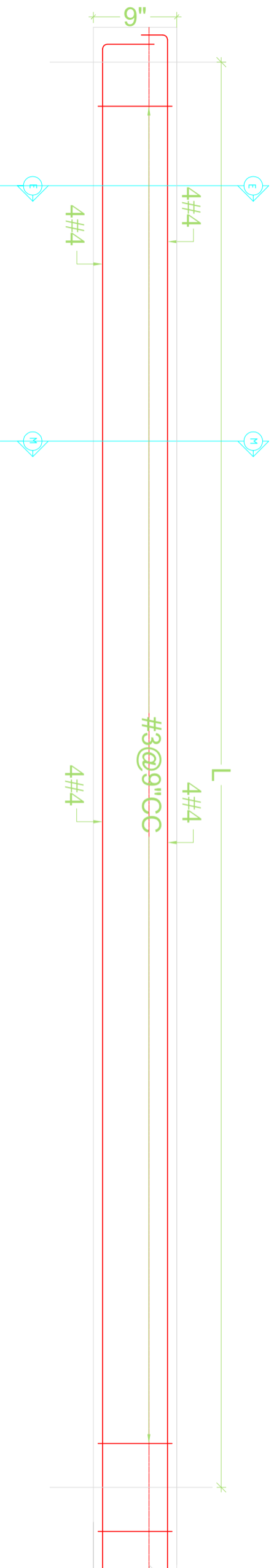
CLIENT:  UNHCR The UN Refugee Agency	CONSULTANTS:  PLANNERS CONSULTANTS ENGINEERS (PCE) 97-K Industrial Estate, Hayatabad Peshawar Pakistan Ph : 0092-91-5816017, 5891661-4, Fax: 5891845 E-Mail: pce.pesh@yahoo.com	SCHOOL NAME REHAB WORKS AT GGPS WAJJAN TAXILA RAWALPINDI	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Date of Revision</td> <td style="width: 25%;">Prepared By</td> <td style="width: 25%;">ENGINEER</td> <td style="width: 25%;">PROJECT:</td> </tr> <tr> <td></td> <td></td> <td>FAHAD KHAN KIANNI HAIDER STRUCTURE ENGINEER</td> <td>PREPARATION OF DESIGN, DRAWINGS & BOQS FOR CONSTRUCTION/ REHABILITATION OF SITES</td> </tr> <tr> <td></td> <td>Designed By</td> <td>Engr. HUMZA AHMAD</td> <td>TITLE:</td> </tr> <tr> <td></td> <td>Checked By</td> <td></td> <td>GROUND FLOOR SLAB BOTTOM REINFORCEMENT PLAN</td> </tr> <tr> <td></td> <td>Approved By</td> <td></td> <td>DATE: SEP 2023</td> </tr> <tr> <td></td> <td></td> <td></td> <td>SCALE</td> </tr> <tr> <td></td> <td></td> <td></td> <td>DRG. NO. S-06</td> </tr> </table>	Date of Revision	Prepared By	ENGINEER	PROJECT:			FAHAD KHAN KIANNI HAIDER STRUCTURE ENGINEER	PREPARATION OF DESIGN, DRAWINGS & BOQS FOR CONSTRUCTION/ REHABILITATION OF SITES		Designed By	Engr. HUMZA AHMAD	TITLE:		Checked By		GROUND FLOOR SLAB BOTTOM REINFORCEMENT PLAN		Approved By		DATE: SEP 2023				SCALE				DRG. NO. S-06
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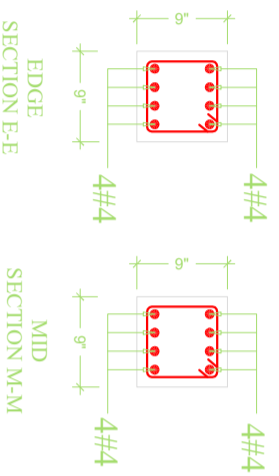
NOTE :
 SLAB THICKNESS = 5"
 TOP REINFORCEMENT = #4@8"C/C

GROUND FLOOR SLAB TOP REINFORCEMENT PLAN

CLIENT:  The UN Refugee Agency	CONSULTANTS:  PLANNERS CONSULTANTS ENGINEERS (PCE) 97-K Industrial Estate, Hayatabad Peshawar Pakistan Ph: 0092-91-5816017, 5891661-4, Fax: 5891845 E-Mail: pce.pesh@yahoo.com	SCHOOL NAME REHAB WORKS AT GGPS WALIJAN TAXILA RAWALPINDI	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Date of Revision</td> <td style="width: 25%;">Prepared By</td> <td style="width: 25%;">FAHAD KHAN KIANI STRUCTURE ENGINEER</td> <td style="width: 25%;">PROJECT:</td> </tr> <tr> <td></td> <td>Designed By</td> <td>Engr. HUMZA AHMAD</td> <td>PREPARATION OF DESIGN, DRAWINGS & BOOKS FOR CONSTRUCTION/ REHABILITATION OF SITES</td> </tr> <tr> <td></td> <td>Checked By</td> <td></td> <td>TITLE:</td> </tr> <tr> <td></td> <td>Approved By</td> <td></td> <td>GROUND FLOOR SLAB TOP REINFORCEMENT PLAN</td> </tr> <tr> <td></td> <td></td> <td></td> <td>DATE: SFP 2023</td> </tr> <tr> <td></td> <td></td> <td></td> <td>SCALE:</td> </tr> <tr> <td></td> <td></td> <td></td> <td>DRG. NO. S-07</td> </tr> </table>	Date of Revision	Prepared By	FAHAD KHAN KIANI STRUCTURE ENGINEER	PROJECT:		Designed By	Engr. HUMZA AHMAD	PREPARATION OF DESIGN, DRAWINGS & BOOKS FOR CONSTRUCTION/ REHABILITATION OF SITES		Checked By		TITLE:		Approved By		GROUND FLOOR SLAB TOP REINFORCEMENT PLAN				DATE: SFP 2023				SCALE:				DRG. NO. S-07
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TYPICAL ELEVATION OF LB-1



CLIENT:



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SCHOOL NAME

REHAB WORKS AT
 GGPS WAJJAN TAXILA
 RAWALPINDI

Date of Revision	Prepared By	FAYD KHAN KIANI/ILDR
	Designed By	Engr. HUMZA AHMAD
	Checked By	
	Approved By	

PROJECT:	
PREPARATION OF DESIGN DRAWINGS & BOQS FOR CONSTRUCTION/REHABILITATION OF SITES	
TITLE:	UNTEL BEAM DETAIL
DATE	SEP 2023
SCALE	
DRG.NO.	S-08

PLUMBING DRAWING



















GENERAL NOTES

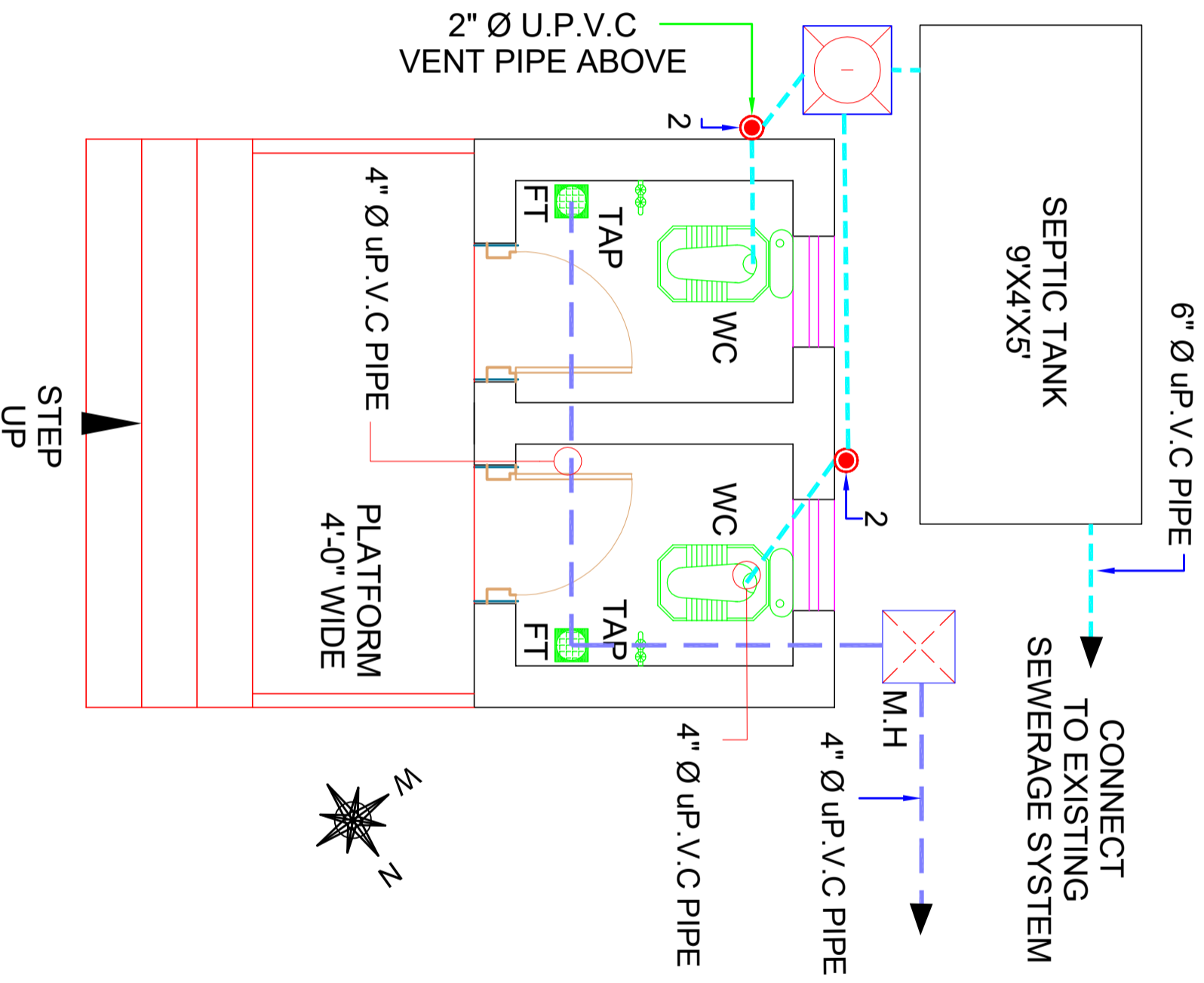
ALL UNDER GROUND SEWAGE PIPES SHALL HAVE A MINIMUM SLOPE OF 1%.
 ISOLATING VALVES SHALL BE PROVIDED TO SEPARATE THE INDIVIDUAL TOILETS, GATE VALVES SHALL BE PROVIDED TO/ FROM WATER HEATERS
 EXACT LOCATION OF WATER PIPE WORK SHALL BE DETERMINED ON SITE.
 PROVIDE ISOLATING VALVE ON ALL MAIN AND BRANCH LINES FOR MAINTENANCE.
 IN PLUMBING WATER SUPPLY SYSTEM THE PIPE DIAMETER INDICATED ARE NET FLOW AREAS (i.e. INTERNAL DIAMETERS) AND THE CONTRACTOR SHALL USE ADEQUATE PIPES SIZE, SPECIALLY WHEN USING PLASTIC PIPES TO ACCOUNT FOR PIPE WALL THICKNESS.
 CONTRACTOR TO PROVIDE OVERFLOW, TEST PIPE, WARNING LEVEL AND DRAIN CONNECTION.

FOR COLD WATER SUPPLY PPR PN-20 PIPES SHALL BE USED.
 ALL EXPOSED COLD AND HOT WATER PIPING SHALL BE PPR.
 ALL HOT WATER PIPES SHALL BE PPR PN-20.
 ALL HOT WATER PIPES SHALL BE INSULATED.
 PPR PIPE INTERNAL CLEAR DIA.
 ALL SUI GAS PIPE SHALL BE G.I PIPE BEST QUALITY

LEGEND FOR PLUMBING	
1	MAIN HOLE
2	2" Ø u.p.v.c VENT PIPE ABOVE

LEGEND	
	CW COLD WATER SUPPLY & MAKEUP WATER
	HW HOT WATER SUPPLY
	WMH WASTE WATER MANHOLE
	SMH SOIL WATER MANHOLE
	HWG HOT WATER GEYSER
	W.C WATER CLOSET (ENGLISH)
	W.C WATER CLOSET (INDIAN)
	W.B WASH BASIN
	F.T FLOW TRAP
	T.R TOWEL RAIL (ROD)
	SH SHOWER
	TAP
	OHWT OVER HEAD WATER TANK
	UGWT UNDER GROUND WATER TANK

CLIENT:		CONSULTANTS:		SCHOOL NAME		DATE		SCALE		DRG.NO.							
 The UN Refugee Agency		 PLANNERS CONSULTANTS ENGINEERS (PCE) 97-K Industrial Estate, Hayatabad Peshawar Pakistan Ph: 0092-91-5816017, 5891661-4, Fax: 5891845 E-Mail: pce.pesh@yahoo.com		REHAB WORKS OF GGPS WAJJAN TAXILA RAWALPINDI		Prepared By Designed By Checked By Approved By		FARDHIAN KHAN HANIKER ARCHITECT MAWRAT KHAN ORAKZAI (B. Arch. D.C.E.T. Karachi) (M. Arch. UET Lahore)		PROJECT: PREPARATION OF DESIGN, DRAWINGS & BOOKS FOR CONSTRUCTION/REHABILITATION OF SITES TITLE: GENERAL NOTES		DATE SEP 2023		SCALE		DRG.NO. P-01	



GROUND FLOOR PLUMBING PLAN

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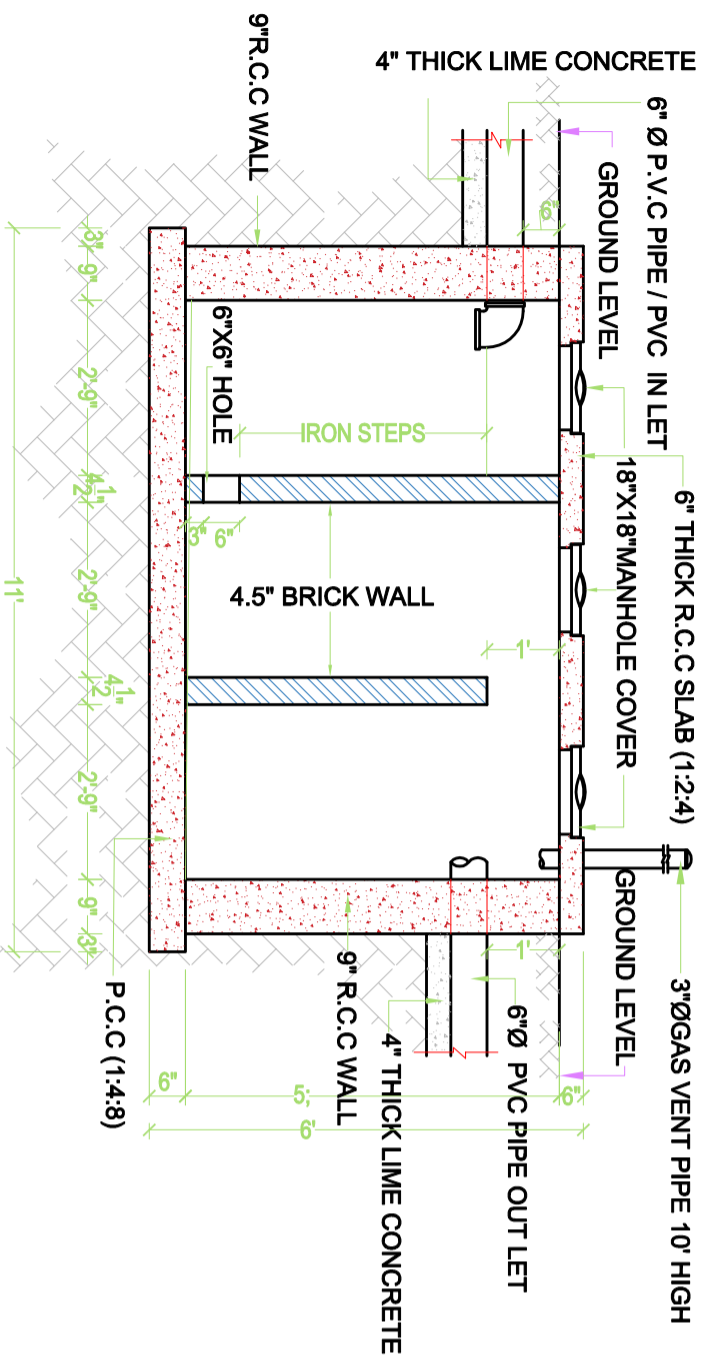
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SCHOOL NAME

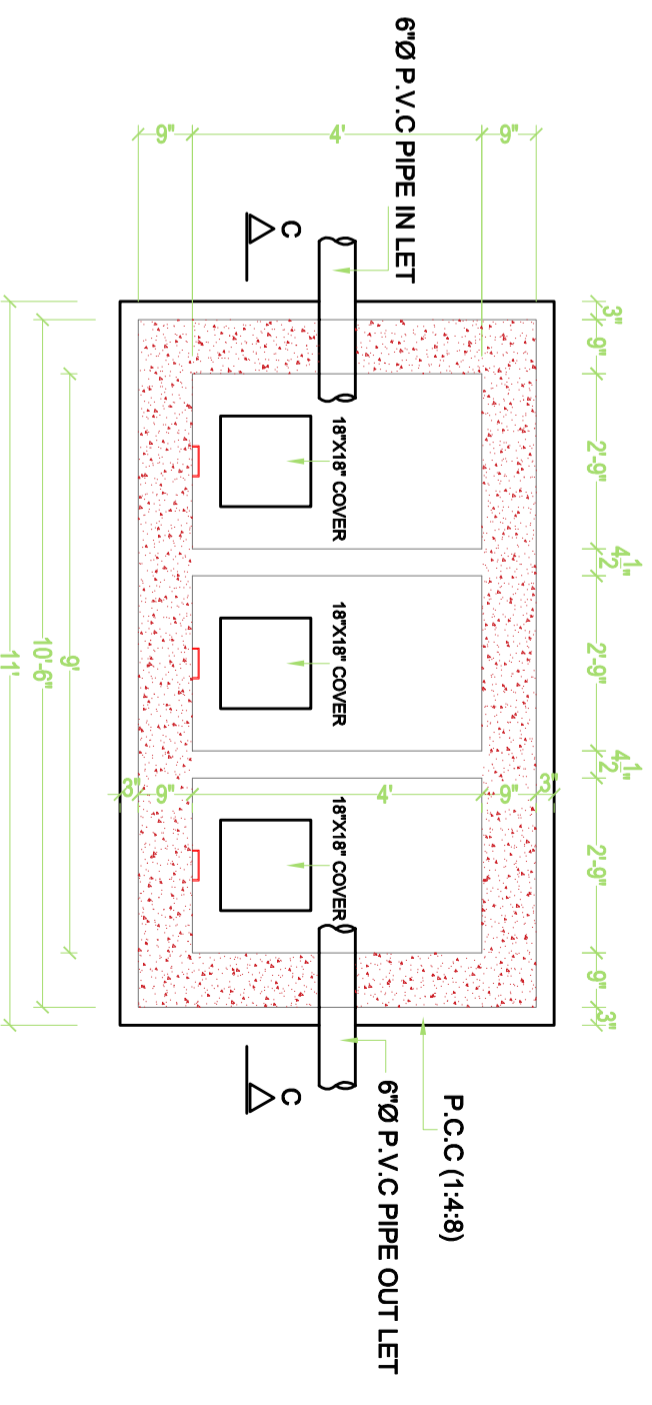
REHAB WORKS OF
 GGPS WALJAN TAXILA
 RAWALPINDI

Date of Revision	Prepared By	ARCHITECT
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	Checked By	
	Approved By	

PROJECT:		
PREPARATION OF DESIGN, DRAWINGS & BOOKS FOR CONSTRUCTION/REHABILITATION OF SITES		
TITLE: GROUND FLOOR PLUMBING PLAN		
DATE	SCALE	DRG. NO.
SEP 2023		P-02



SEPTIC TANK SECTION



SEPTIC TANK PLAN

CLIENT:



CONSULTANTS:
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 97-K Industrial Estate, Hayatabad Peshawar Pakistan
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SCHOOL NAME

REHAB WORKS OF
 GGPS WAJJAN TAXILA
 RAWALPINDI

Date of Revision	Prepared By	ARCHITECT
	FAHIM KHAN KHAN HADIR	
	Designed By	MARVAT KHAN QAKAZAI (M.Arch, ILET, Lahore)
	Checked By	
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PROJECT:

PREPARATION OF DESIGN, DRAWINGS & BOQS
 FOR CONSTRUCTION/REHABILITATION OF SITES

TITLE:

SEPTIC TANK PLAN











DATE
SEP 2023

SCALE

DRG.NO.

P-08

**WATER SUPPLY
DRAWING**

LEGEND	
	CW COLD WATER SUPPLY & MAKEUP WATER
	HW HOT WATER SUPPLY
	WMH WASTE WATER MANHOLE
	SMH SOIL WATER MANHOLE
	HWG HOT WATER GEYSER
	W.C WATER CLOSET (ENGLISH)
	W.C WATER CLOSET (INDIAN)
	W.B WASH BASIN
	F.T FLOW TRAP
	T.R TOWEL RAIL (ROD)
	SH SHOWER
	TAP
	OHWT OVER HEAD WATER TANK
	UGWT UNDER GROUND WATER TANK

CLIENT:



The UN Refugee Agency



PLANNERS CONSULTANTS ENGINEERS (PCE)

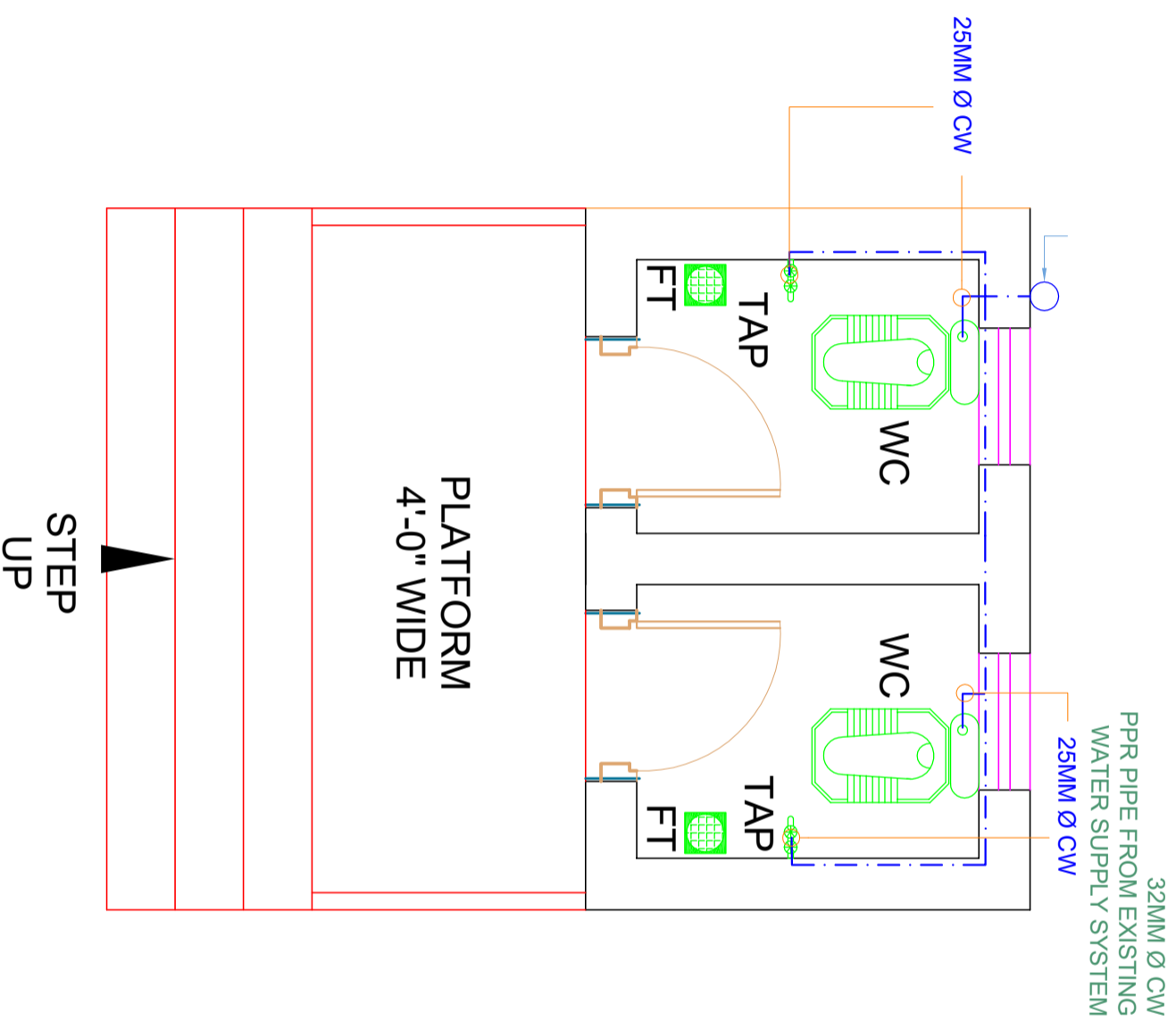
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CONSULTANTS:

SCHOOL NAME

REHAB WORKS OF
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 RAWALPINDI

Date of Revision	Prepared By	ARCHITECT	PROJECT:
	Designed By	MARKWAT KHAN OKARZAI (B.Arch, D.C.E.T Karachi) (M.Arch, UET, Lahore)	PREPARATION OF DESIGN, DRAWINGS & BOQS FOR CONSTRUCTION/REHABILITATION OF SITES
	Checked By		
	Approved By		
DATE	SCALE	DRG.NO.	
SEP 2023		WS-01	LEGEND



GROUND FLOOR WATER SUPPLY PLAN

CLIENT:



CONSULTANTS:



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SCHOOL NAME

REHAB WORKS OF
GGPS WAJUAN TAXILA
RAWALPINDI

Date of Revision

Prepared By

ARCHITECT

PROJECT:

PREPARATION OF DESIGN DRAWINGS & BOOKS
FOR CONSTRUCTION/REHABILITATION OF SITES

TITLE:

GROUND FLOOR WATER SUPPLY PLAN

Designed By

MARKWAT KHAN ORAKZAI
(B.Arch/DCET Karachi)
(MANAGER/ETL Lahore)

DATE

SEP 2023

Checked By

Approved By

SCALE

DRG.NO.

WS-02

**ELECTRIFICATION DRAWINGS
OF
REHAB WORKS
AT
GGPS WAJJAN TAXILA
RAWALPINDI**

ELECTRICAL DRAWINGS		
1	GENERAL NOTES	E-01
2	APPROVED MANUFACTURE LIST	E-02
3	LEGEND	E-03
4	GROUND FLOOR PLAN	E-04
5	GROUND FLOOR DIMENSION PLAN	E-05

CLIENT:



The UN Refugee Agency

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SCHOOL NAME

REHAB WORKS OF
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RAWALPINDI

Date of Revision

Prepared By

FARID KHAN
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ELECTRICAL ENGINEER

Designed By

Engr. HAMMAD AHMAD

Checked By

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PROJECT:

PREPARATION OF DESIGN, DRAWINGS & BOQS
FOR CONSTRUCTION/ REHABILITATION OF SITES

TITLE:

LIST OF DRAWINGS

DATE
SEP 2023

SCALE

DRG.NO.

E-00

ELECTRICAL SYSTEMS

FOLLOWING NOTES SHALL IN GENERAL APPLY TO ALL ELECTRICAL DRAWINGS. THE INSTRUCTIONS IN THESE NOTES SHALL BE FOLLOWED UNLESS STATED OTHERWISE.

1. THESE NOTES SHALL BE APPLICABLE TO THE ENTIRE ELECTRICAL WORKS THE SITE CONDITIONS NECESSITARY ALTERATION OR DEVIATION OF THE DIRECTIONS OF THE ENGINEER SHALL BE OBSERVED AS FINAL INSTRUCTIONS.
2. DIMENSIONS / MLASURMENTS IS GIVEN IN LAYOUT AND DETAILED DRAWINGS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALCULATE THE ACTUAL DIMENSIONS ACCORDING TO STRUCTURAL AND ARCHITECTURAL DRAWINGS.
3. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITH ALL RELEVANT DETAILS TO THE ENGINEER FOR APPROVAL ACCORDING TO THE GENERAL CONDITION OF CONTRACT WELL IN TIME BEFORE COMMENCEMENT OF THAT WORK.
4. PROPER CO-ORDINATION OF ELECTRICAL WORKS WITH OTHER SERVICES SHALL BE CARRIED OUT AT SITE.
5. ALL NON CURRENT CARRYING PARTS, I.e OUTER CASINGS OF EQUIPMENT SUCH AS H.T & IT PANELS DISTRIBUTION BOARDS, CABLE TRAYS, AUXILIARY CONSTRUCTION FOR EQUIPMENT ETC. SHALL BE CONNECTED TO THE GROUND-EARTHING SYSTEM AT REQUIRED NUMBER OF POINTS WITH SPECIFIED SIZES OF CONDUCTORS WATER PIPES ALONG ELECTRICAL LINE SHALL BE BONDED TO THE EARTHING SYSTEM WITH TO 10MMsq SINGLE CORE COPPER CONDUCTOR PVC CABLE.
6. ELECTRICAL POINTS FOR EQUIPMENT SHALL BE INSTALLED IN CO-ORDINATION WITH THE RELEVANT DRAWINGS OF OTHER SERVICES, SUCH AS COMMUNICATION SYSTEMS, HVAC, PLUMBING ETC. THE LOCATION ON ELECTRICAL DRAWINGS IS ONLY INDICATIVE.
7. ARRANGEMENT OF ELECTRICAL EQUIPMENTS ON ELECTRICAL DRAWINGS ARE TENTATIVE EXACT ARRANGEMENT OF EQUIPMENT SHALL BE VADE IN VIEW OF ITS PHYSICAL DIMENTIONS AND EASY OF MAINTENANCE.
8. LOAD ON ALL PHASES SHALL BE MAXIMUM BALANCED AT THE TIME OF COMMISSIONING STAGE. IT IS RESPONSIBILITY OF CONTRACTOR.
9. CONDUIT RUN UNDER FLOOR SHALL HAVE A MINIMUM COVER OF TWO INCHES FROM TOP TO CONDUIT TO FINISH FLOOR LEVEL.
10. ALL WIRING SHOULD BE CARRYOUT ACCORDING TO THE PHASES RED, YELLOW, BLUE CABLE COLOUR ARE AS PER PHASE DISTRIBUTION IN BUILDING.
11. RUN GREEN OR WHITE SINGLE CORE PVC INSULATED COPPER CONDUCTOR CABLE OF SPECIFIED SIZE AS PROTECTIVE EARTH CONDUCTOR (LCC) ALL ALONG LIGHT AND POWER WIRING WHEREVER THE SIZE IS NOT SPECIFIED THE FOLLOWING ORILERIA SHELL BE OBSERVED TO DETERMINE MINIMUM CROSS SECTIONAL AREA OF EARTH CONTINUITY CONDUCTOR (ECC) IN RELATION TO THE AREA OFFICE PHASE CONDUCTORS RUN SEPARATE ECC FOR EACH CIRCUIT.
 - ECC 2 PHASE CONDUCTOR OF SAVE SIZE FOR UPTO AND INCLUDING 16 MMSQ CABLES
 - FOR CABLES OF 50 MM SQ AND ABOVE SIZES IS HALF SIZE OF PHASE CONDUCTOR
 - MINIMUM SIZE ECC IS 70MM SQ.
12. ALL WIRING FOR CONTROLS SHELL BE CARRIED OUT WITH 1 CORE FLEXIBLE PVC CABLES OF SPECIFIED VOLTAGE GRADE AND SIZES.
13. THE MAXIMUM CAPACITY OF PVC CONDUITS FOR SIMAL TONCOUS DRAWING OF PVC INSULATED CABLES SHALL BE DETERMINED AS PIN BS 4607. THE FOLLOWING TABLE SHALL BE USED TO DETERMINE THE MAXIMUM NUMBER OF CABLES

NUMBER OF CABLE IN (CONDUIT)	SIZE OF CABLE		
NEW STANDER SIZE MM sq	25 MM (1")	20 MM (3/4")	15 MM (3/8")
1.5 MM sq	13	8	5
2.5 MM sq	10	6	4
4 MM sq	7	4	3
6 MM sq	5	3	2
10 MM sq	3	2	1

14. NORMAL & EMERGENCY CIRCUITS SHALL BE RUN IN SEPARATE CONDUITS.
15. THE WIRING SHELL BE CONTINUOUS LOOPING-IN TYPE AND NO JOINT IN WIRES SHELL BE ALLOWED.
16. THE WIRING SYSTEM SHELL BE CARRIED OUT ONLY AFTER THE CONDUIT SYSTEM IS COMPLETELY INSTALLED AND ALL OUTLET BOXES, ETC. ARE FIXED IN POSITION.
17. MOUNTING HEIGHTS OF ELECTRICAL FITTINGS WHEN MEASURED FROM FINISHED FLOOR LEVEL (ECC) TO THE BOTTOM OF FITTINGS SHELL BE AS UNDER UNLESS OTHER WISE SHOWN OR INSTRUCTED
 - > SWITCH BOAD 48 INCHES
 - > EXHAUST FAN REF TO ARCH DRAWING
 - > DISTRIBUTION BOARD 56 INCHES
 - > CONTROL PANEL 48 INCHES
 - > ON/OFF PUSH BUTTON STATION 48 INCHES
 - > DIMMER CONTROL UNIT 48 INCHES
 - > LIGHT CONTROL SWITCH (ONE WAY/TWO WAY) 48 INCHES
 - > 5 AMP SOCKET OUTLETS IN GENERAL AREAS 12 INCHES
 - > 15 AMP SOCKET OUTLETS IN GENERAL AREAS 12 INCHES
 - > 20 AMP SOCKET OUTLETS IN GENERAL AREAS 12 INCHES
 - > 16 AMP SOCKET OUTLETS IN KITCHEN (ABOVE COUNTER) 10 INCHES
 - > 16 AMP TP SPIN INDUSTRIAL SOCKET OUTLETS IN LABS 12 INCHES
 - > CEILING FAN ON SLAB 12 INCHES
 - > WALL BRACKET FAN 90 INCHES

11. RUN GREEN OR WHITE SINGLE CORE PVC INSULATED COPPER CONDUCTOR CABLE OF SPECIFIED SIZE AS PROTECTIVE EARTH CONDUCTOR (LCC) ALL ALONG LIGHT AND POWER WIRING WHEREVER THE SIZE IS NOT SPECIFIED THE FOLLOWING ORILERIA SHELL BE OBSERVED TO DETERMINE MINIMUM CROSS SECTIONAL AREA OF EARTH CONTINUITY CONDUCTOR (ECC) IN RELATION TO THE AREA OFFICE PHASE CONDUCTORS RUN SEPARATE ECC FOR EACH CIRCUIT.
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CLIENT:



CONSULTANTS:



PLANNERS CONSULTANTS ENGINEERS (PCE)

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SCHOOL NAME

REHAB WORKS OF
GGPS WAJUAN TAXILA
RAWALPINDI

Date of Revision

Prepared By

Designed By

Checked By

Approved By

FARAZ KHAN
KHAJANLIDER
ELECTRICAL ENGINEER

Engr. HAMMAD AHMAD

PROJECT:

PREPARATION OF DESIGN, DRAWINGS & BOOKS
FOR CONSTRUCTION/REHABILITATION OF SITES

TITLE:

GENERAL NOTES

DATE

SEP 2023



SCALE





DRG. NO.

E-01

APPROVED MANUFACTURE LIST

S NO.	ITEM OR ACCESSORIES	BRAND
01	WIRING CABLE	PAKISTAN,NEW AGE,FAST, GM, COPPERGAT CABLE
02	POWER CABLE	PAKISTAN,NEW AGE,FAST, GM, COPPERGAT CABLE
03	LIGHT FIXTURES	PHILIPS,PIERLITE,CLIPSAL, OSAKA, FAST LIGHT
04	CEILING FAN	PAK, GFC, ROYAL, LAHORE FAN
05	PVC CONDUIT	POLO,BETA,POPULAR, GM, ADAMJEE
06	SWITCHES	PPL
07	LT SWITCHGEAR	SCHNEIDER, ABB, PEL,ELECTRECH
08	MOULDED CASE CIRCUIT BREAKER	SCHNEIDER, CHINT, LS, ABB
9	MINIATURE CIRCUIT BREAKER	SCHNEIDER, CHINT, LS, ABB

CLIENT: 		CONSULTANTS: 	
PLANNERS CONSULTANTS ENGINEERS (PCE) 97-K Industrial Estate, Hayatabad Peshawar Pakistan Ph: 0092-91-5816017, 5891661-4, Fax: 5891845 E-Mail: pce.pesh@yahoo.com		SCHOOL NAME REHAB WORKS OF GGPS WAJUAN TAXILA RAWALPINDI	
PROJECT: PREPARATION OF DESIGN, DRAWINGS & BOOKS FOR CONSTRUCTION/REHABILITATION OF SITES		DATE: SEP 2023	
TITLE: APPROVED MANUFACTURE LIST		SCALE:	
DRG.NO:		E-02	

SYMBOL	DESCRIPTION	INSTALLATION HEIGHT
	SURFACE MOUNTED DOWN LIGHT WITH 17 WATT ENERGY SAVER	CEILING MOUNTED
	TMS 136	SLAB MOUNTED
	56" SWEEP CEILING FAN	SLAB MOUNTED
	SWITCH BOARD	56" FROM FFL
	DISTRIBUTION UNIT	60" FROM FFL
	EXHAUST FAN POINT	

CLIENT:



CONSULTANTS:



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SCHOOL NAME

REHAB WORKS OF
GGPS WALLAJAN TAXILA
RAWALPINDI

Date of Revision

Prepared By

FAYAD KHAN
KHAJAN KHAN
ELECTRICAL ENGINEER

PROJECT:

PREPARATION OF DESIGN DRAWINGS & BOOKS
FOR CONSTRUCTION/REHABILITATION OF SITES

TITLE:

LEGEND

Designed By

Engr. HAMMAD AHMAD

DATE

SEP 2023

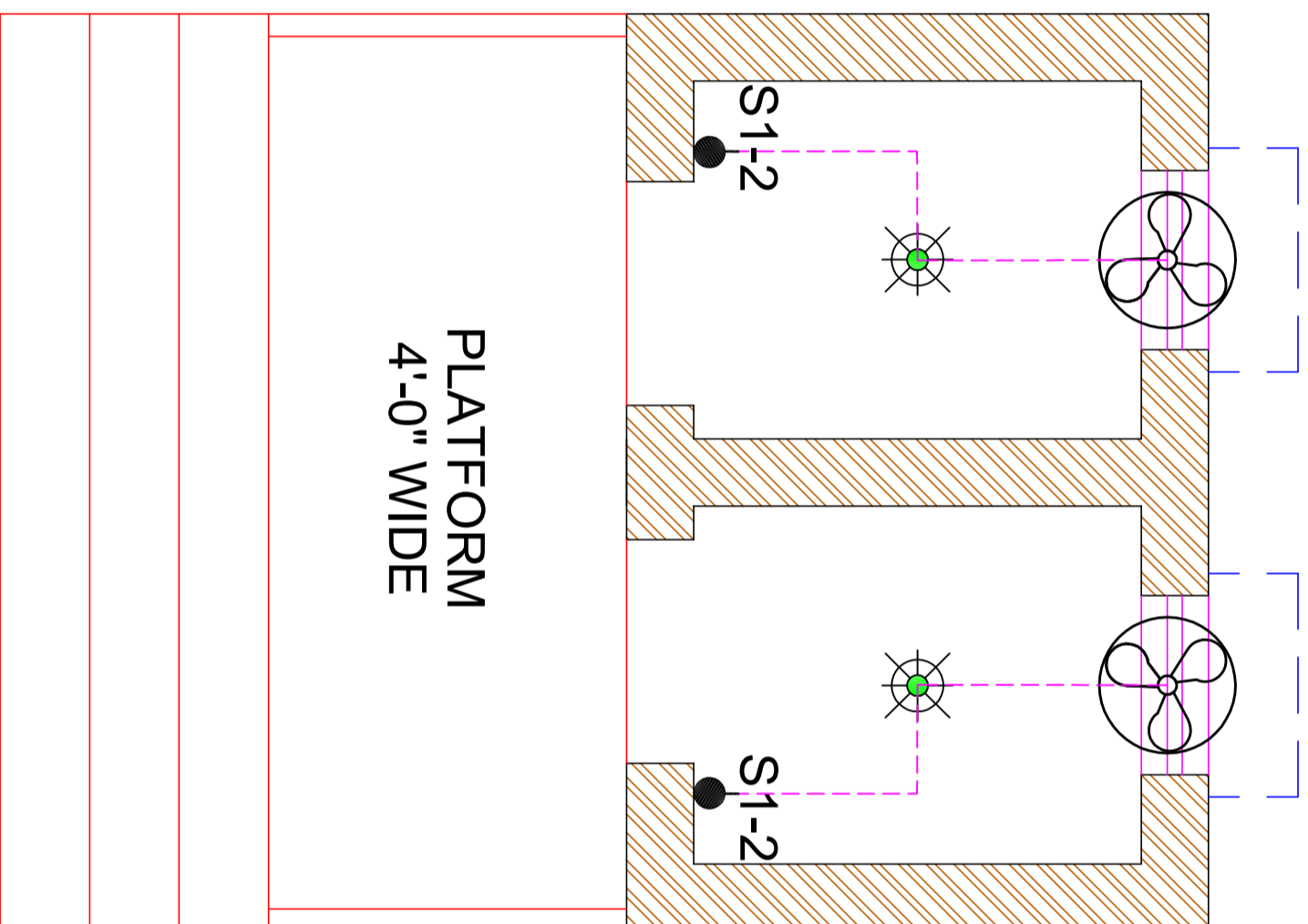
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SCALE

DRG. NO.

Approved By

E-03



GROUND FLOOR PLAN

CLIENT:



PLANNERS CONSULTANTS ENGINEERS (PCE)

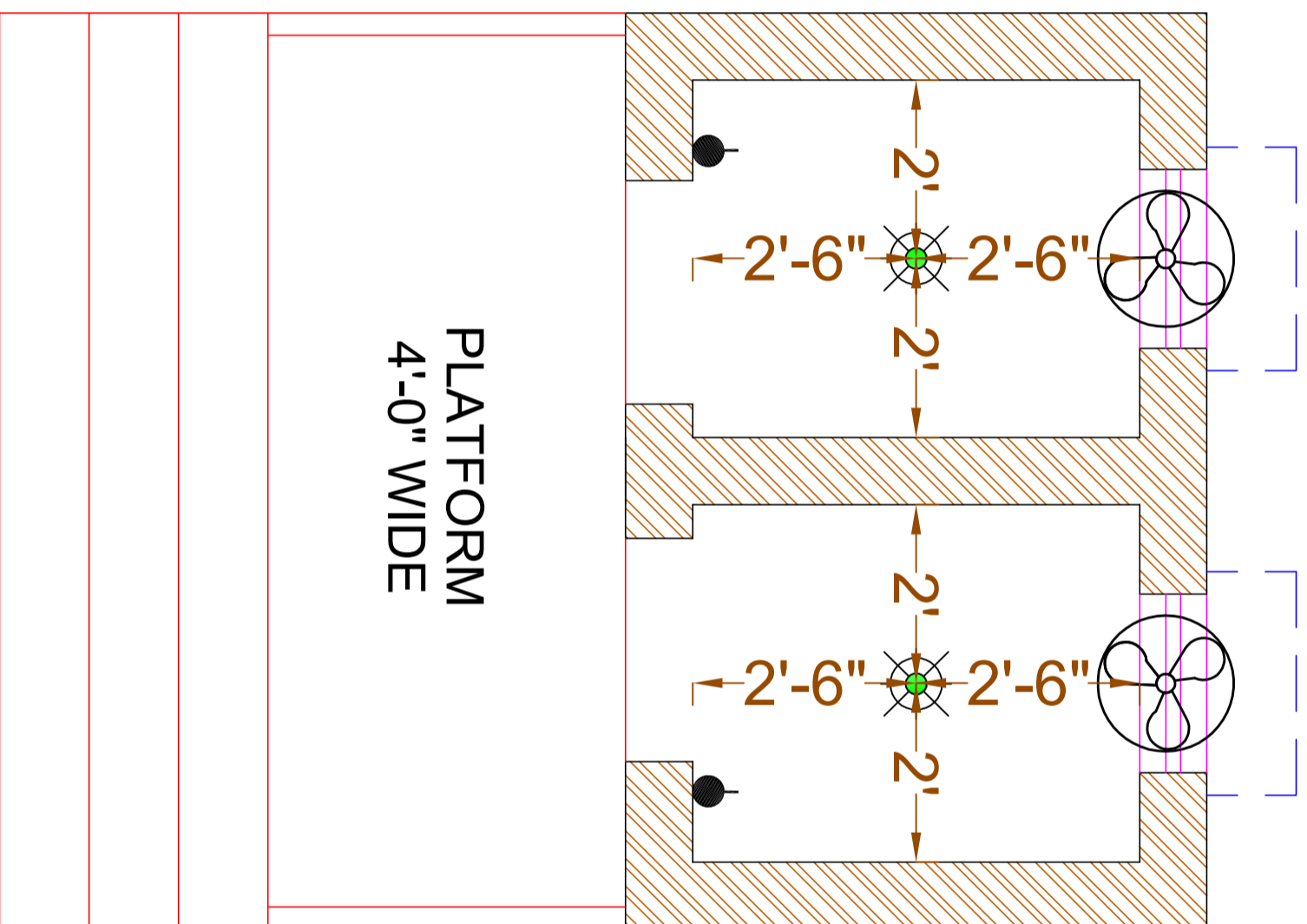
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CONSULTANTS:

SCHOOL NAME

REHAB WORKS OF
 GGPS WAJUAN TAXILA
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Date of Revision	Prepared By	FAHAD KHAN KHAAN HAIDER ELECTRICAL ENGINEER	PROJECT:
	Designed By	Engr. HAMMAD AHMAD	PREPARATION OF DESIGN, DRAWINGS & BOOKS FOR CONSTRUCTION/REHABILITATION OF SITES
	Checked By		TITLE: GROUND FLOOR PLAN
	Approved By		DATE: <i>SEP 2023</i> SCALE: DRG.NO. E-04



PLATFORM
4'-0" WIDE

GROUND FLOOR PLAN

CLIENT:



CONSULTANTS:
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SCHOOL NAME

REHAB WORKS OF
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Date of Revision	Prepared By	FARID KHAN KHAN HAIDER ELECTRICAL ENGINEER	PROJECT:
	Designed By	Engr. HAMMAD AHMAD	PREPARATION OF DESIGN DRAWINGS & BOOKS FOR CONSTRUCTION/REHABILITATION OF SITES
	Checked By		
	Approved By		
			TITLE: GROUND FLOOR DIMENSION PLAN
			DATE: <i>SEP 2023</i>
			SCALE
			DRG.NO. E-05