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DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

TUBEWELL & OHR DETAILS

BLOCK-A

CONSTRUCTION DRAWINGS

AUGUST , 2026

CLIENT:

ETIHAD TOWN PHASE - III

CONSULTANT:

ASIAN CONSULTING ENGINEERS PVT.(LTD)
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LIST OF DRAWINGS

LIST OF DRAWINGS
WATER SUPPLY OHR & TW BLOCK A

Page. Nr.	Description	Drg.Nr.	Page. Nr.	Description	Drg.Nr.
	TUBEWELL		26	Plinth Beam Layout Plan & Details	ETL-PH-III- WS-S-03
1	Tube Well Plan & Secion	ET-PH-III-TW-01	27	Slab At Level (+) 13'-0", (+) 24'-0" & Beams Details	ETL-PH-III- WS-S-04
2	Tube Well Plan & Secion B	ET-PH-III-TW-02	28	Slab At Level (+) 35'-0" & Beams Details	ETL-PH-III- WS-S-05
3	Tube Well Structure Details	ET-PH-III-TW-03	29	Plan At Level (+) 46'-0", (+) 57'-0" & (+)68'-0" & Beam Details	ETL-PH-III- WS-S-06
4	Foundation Details	ET-PH-III-TW-04	30	Slab At Level (+) 79'-0" & Beam Details	ETL-PH-III- WS-S-07
5	Ground & Roof Floor Drainage System Lauout	ET-PH-III-TW-05	31	Slab At Level (+) 90'-9" & Beam Details	ETL-PH-III- WS-S-08
6	Ground & Roof Floor Water Supply System Lauout	ET-PH-III-TW-06	32	Stair Structural Detail	ETL-PH-III- WS-S-09
7	Electrification Plan	ET-PH-III-TW-07		**HVAC**	
8	Earthing Detail & Sld	ET-PH-III-TW-08	33	Legend And Notes	ETL-PH-III-WS-AC-01
	OVERHEAD RESERVIOR		34	Ground ,1St To 2Nd Floor Hvac System Lauout	ETL-PH-III-WS-AC-02
9	Location & Site Plan	ETL-PH-III-WS-C-01		**PLUMBING**	
10	Ground, 1St & 2Nd Floor Plan	ETL-PH-III-WS-C-02	35	Legend And Notes Plumbing	ETL-PH-III-WS-PL-01
11	3Rd & 4Th Floor Plan	ETL-PH-III-WS-C-03	36	Ground ,1St To 2Nd Floor Drainage System Lauout	ETL-PH-III-WS-PL-02
12	O.H.W.Tank & Roof Plan	ETL-PH-III-WS-C-04	37	Ground ,1St To 2Nd Floor Water Supply System Lauout	ETL-PH-III-WS-PL-03
13	Front & Right Side Elevation	ETL-PH-III-WS-C-05	38	Piping Layout Plan O.H.Water Tank	ETL-PH-III-WS-PL-04
14	Left & Rear Side Elevation	ETL-PH-III-WS-C-06	39	Roof Floor Drainage System Lauout	ETL-PH-III-WS-PL-05
15	Section A-A Detail- 1	ETL-PH-III-WS-C-07	40	Miscellaneous Details	ETL-PH-III-WS-PL-06
16	Stair Details	ETL-PH-III-WS-C-08	41	Manhole Type-A,B Sluice Valve Chamber & Gully Trap	ETL-PH-III-WS-PL-07
17	Doors Windows Elevation & Schedule	ETL-PH-III-WS-C-09		**ELECTRICAL**	
18	Flooring Pattern Ground Floor & 1St To 2Nd Floor	ETL-PH-III-WS-C-10	42	Electrical Legend & Earthing Detail	ETL-PH-III-WS-E-01
19	Flooring Pattern 4Th & 5Th Floor Plan	ETL-PH-III-WS-C-11	43	Co-Ordination Layout Ground,1St & 2Nd Floor Plan	ETL-PH-III-WS-E-02
20	Flooring Pattern O.H.W.Tank & Tank Roof Plan	ETL-PH-III-WS-C-12	44	Lighting Layout Ground 1St & 2Nd Floor Plan	ETL-PH-III-WS-E-03
21	Ceiling Layout Ground & 1St To 2Nd Floor	ETL-PH-III-WS-C-13	45	Power Layout Ground,1St & 2Nd Floor Plan	ETL-PH-III-WS-E-04
	REINFORCEMENT		46	A/C Layout,Ground,1St & 2Nd Floor Plan	ETL-PH-III-WS-E-05
22	General Notes-I	ETL-PH-III- WS-GN-01	47	Fire Alarm Layout Ground 1St & 2Nd Floor Plan	ETL-PH-III-WS-E-06
23	General Notes-II	ETL-PH-III- WS-GN-02	48	Lighting Layout Roof Plan	ETL-PH-III-WS-E-07
24	Foundation Layout Plan	ETL-PH-III- WS-S-01	49	Lightning Arrester Layout Plan	ETL-PH-III-WS-E-08
25	Foundation Sectional Detail	ETL-PH-III- WS-S-02	50	Detail Of:- Distribution Boards	ETL-PH-III-WS-E-09

PACKAGE:

TITLE.
WATER SUPPLY SYSTEM
LIST OF DRAWINGS

SHEET SIZE : A2 | SCALE :

ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	28-07-2009	CONSTRUCTION DRAWINGS	BAHRAM	ENGR. SAIF	ENGR. ABDUL MAJID
02	30-07-2009	CONSTRUCTION DRAWINGS	BAHRAM	ENGR. SAIF	ENGR. ABDUL MAJID
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04					
05					
06					
07					

DRAWING Nº: ET-PH-III-WS-LOD-00 | SHEET | REV 01

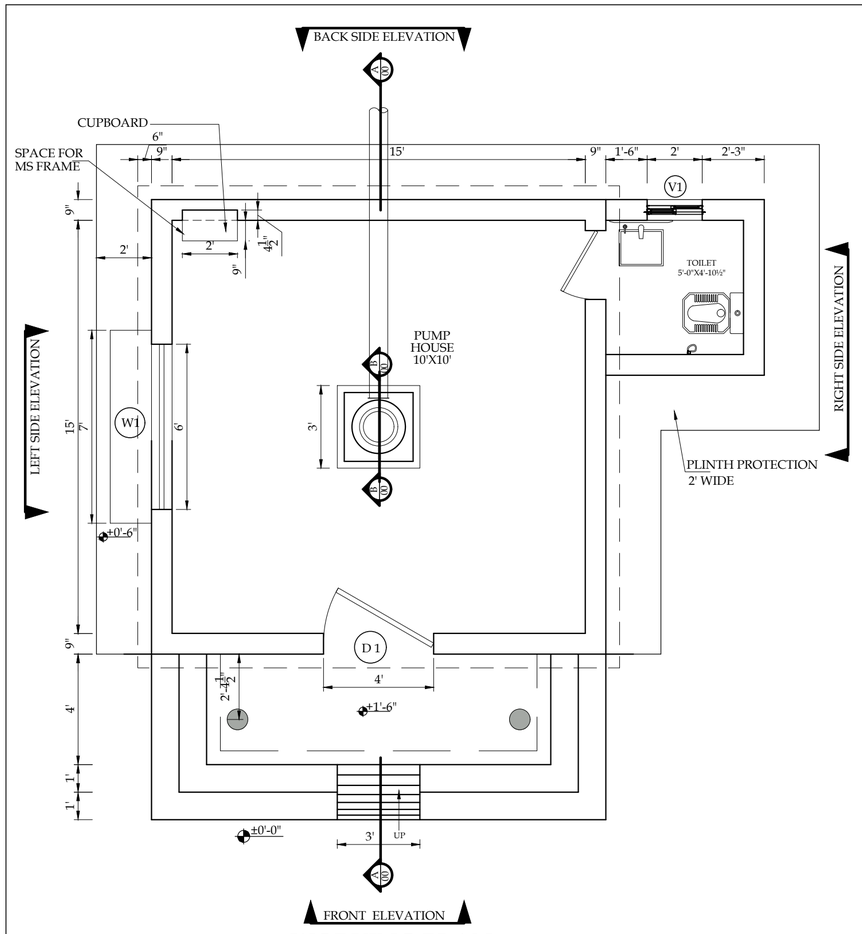
PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

CLIENT:
ETIHAD TOWN PHASE - III

CONSULTANT:
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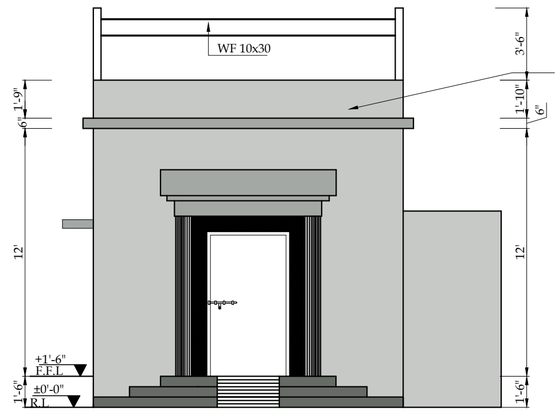
ET3 LOD SEC A

TUBE WELL

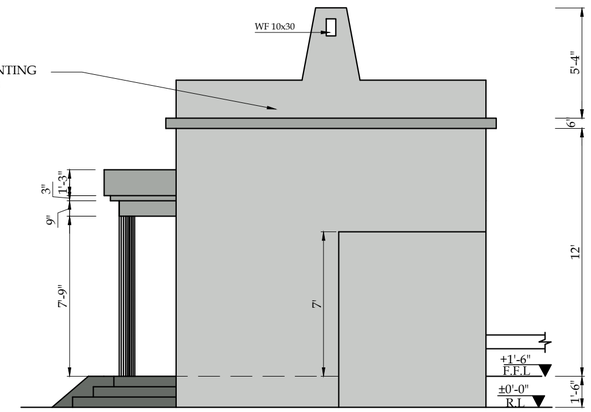


WORKING PLAN

SCALE:- 1/4" = 1'-0"

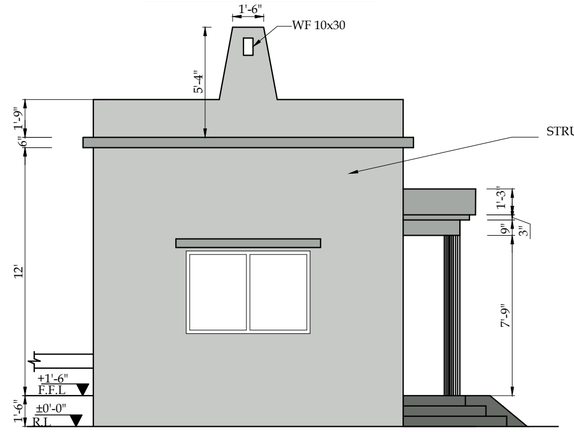


FRONT ELEVATION



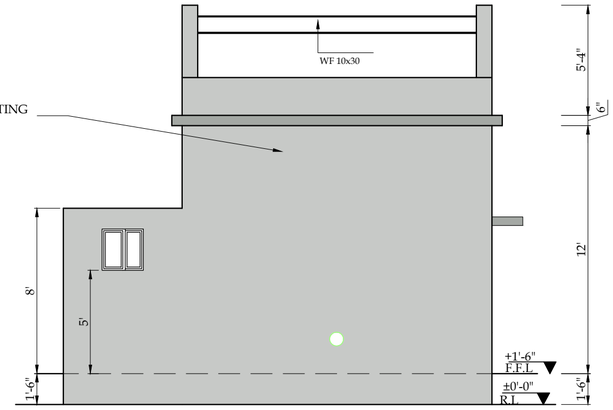
RIGHT SIDE ELEVATION

SCALE:- 3/16" = 1'-0"



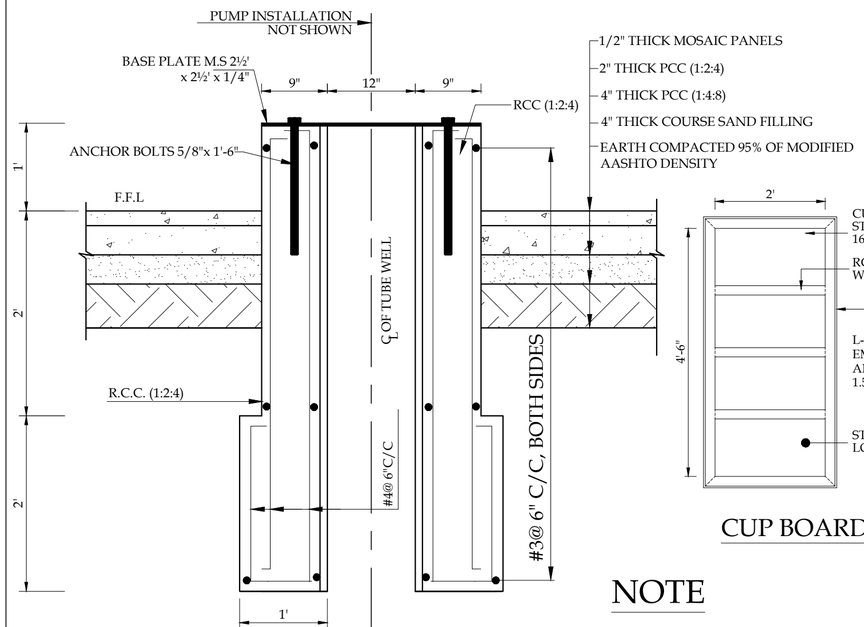
LEFT SIDE ELEVATION

SCALE:- 3/16" = 1'-0"



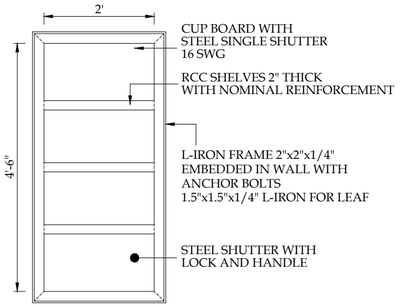
BACK SIDE ELEVATION

SCALE:- 3/16" = 1'-0"

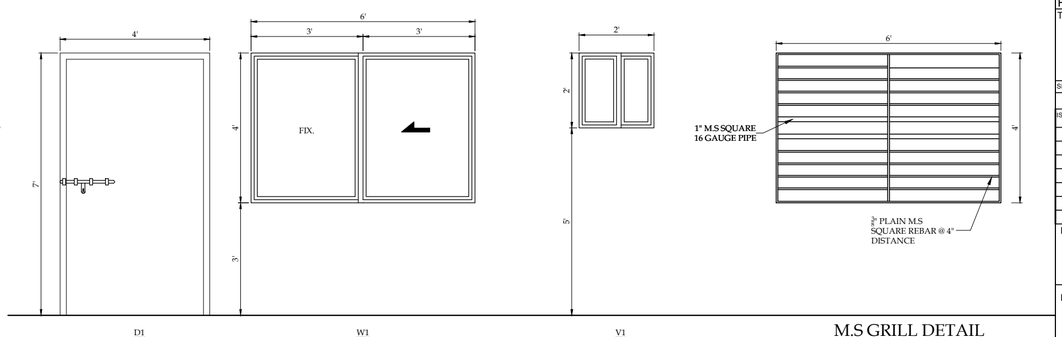


SECTION B-B

SCALE: 1" = 2'



CUP BOARD DETAIL



M.S GRILL DETAIL

NOTE

1. TUBE WELL DESIGN IS TENTATIVE. ACTUAL CONSTRUCTION/INSTALLATION SHALL CONFORM TO SITE SITUATION AND AS PER INSTRUCTIONS OF THE PROJECT MANAGER.
2. PLINTH OF CHAMBER TO BE DECIDED IN CONSULTATION WITH THE PROJECT MANAGER.

DOOR & WINDOW SCHEDULE

Sr No.	TYPE	SIZE	SILL	QTY.	DESCRIPTION
1	D1	4'-0"x 7'-0"	0'-0"	01	16 GAUGE M.S. DOOR
2	W1	6'-0"x 4'-0"	3'-0"	01	M.S. WINDOW (16SWG) OF TUBULAR PIPE 1.5"X1.5" (40X40 mm) WITH 5mm GLASS PANNELS WITH M.S. GRILL
3	V1	2'-0"x 2'-0"	5'-0"	01	

PACKAGE: BLOCK A

TITLE.
WATER SUPPLY SYSTEM
TUBEWELL
PLAN, NOTES & ELEVATIONS

SHEET SIZE : A2 | SCALE :

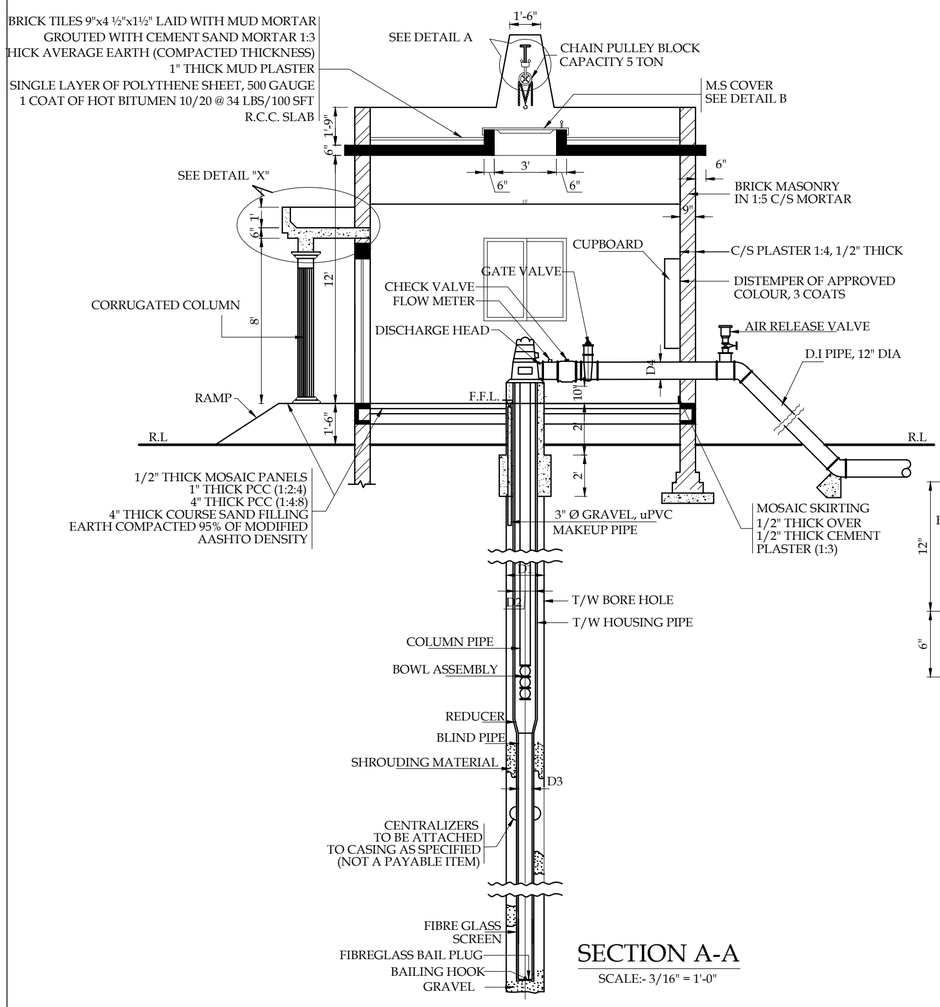
ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	BAHRAM	ENGR. ABDULLAH	ENGR. ABDUL MAJID
02					
03					
04					
05					
06					
07					

DRAWING N°: ETL_PHIII-WS-TW-01 | SHEET | REV 00

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

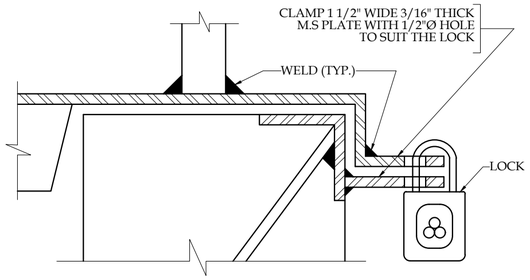
CLIENT: ETIHAD TOWN PHASE - III

CONSULTANT:
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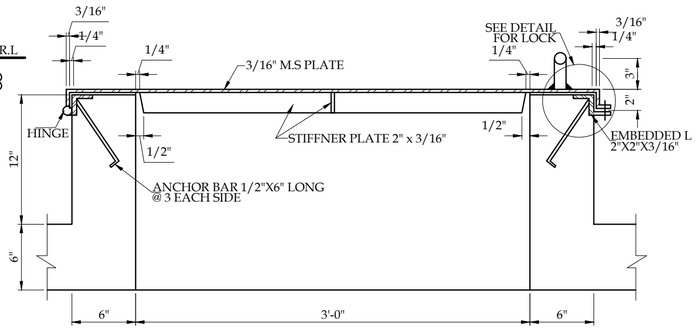
SECTION A-A

SCALE:- 3/16" = 1'-0"



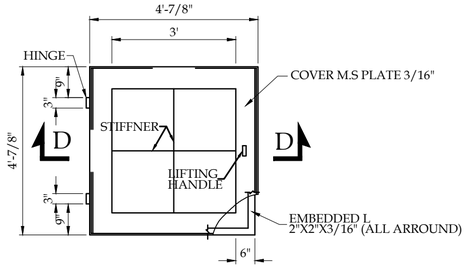
DETAIL FOR LOCK

SCALE:- 3/8" = 1'-0"



SECTION D-D

SCALE:- 3/8" = 1'-0"



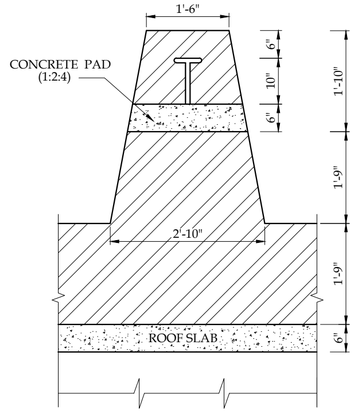
DETAIL "B"

SCALE:- 3/8" = 1'-0"

DESCRIPTION	SIZE
TUBEWELL CAPACITY	3.50 CUSEC
D1	24"
D2	20"
D3	10"
D4	12"
SETTING DEPTH	65'
STRAINER LENGTH	270'
BAIL PLUG	10'
BORE DEPTH	350'±

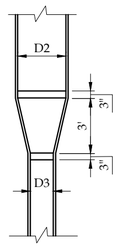
NOTE:

1. TOTAL LENGTH OF STRAINER AS PER DESIGN WILL BE PLACED AT DEPTHS OF APPROPRIATE STRATA PHYSICALLY TAPPED AND ASCERTAINED DURING BORING AND TO BE CONFIRMED BY LOGGING OF BOREHOLE AND VERIFIED BY THE ENGINEER-IN-CHARGE.
2. THE DEPTH OF BORING AS PER DESIGN IS GIVEN IN THE DRAWINGS BUT FURTHER BORING BELOW THE PROPOSED LENGTH OF PUMP HOUSING PIPE WILL BE STOPPED WHEN COMMUTATION DEPTH OF PROSPECTIVE STRATA AT DIFFERENT DEPTH IS MET TO ACCOMMODATE THE DESIGN LENGTH OF STRAINER AND THE CONTRACTOR WILL BE PAID ACCORDINGLY.
3. THE CONTRACTOR WILL PROVIDED THE FOLLOWING DATA / REPORT AFTER DEVELOPMENT AND TESTING OF THE TUBE WELL DULY SIGNED BY HIM.
   (i) DEPTH OF STATIC GROUND WATER TABLE.
   (ii) SAFE RECOMMENDED YIELD OF THE TUBE WELL.
   (iii) DRAW DOWN AT THE RECOMMENDED SAFE YIELD.
   (iv) WATER QUALITY TESTING IS NECESSARY TO BE CONDUCTED FOR WATER QUALITY PARAMETERS. AVAILABILITY OF POTABLE WATER NEEDS TO BE VERIFIED TO FINALIZE THE SOURCE BEFORE TUBE-WELL CONSTRUCTION AND COMISSIONING.



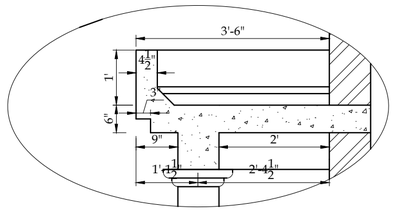
SIDE ELEVATION OF GIRDER LIFT WALL
DETAIL A

SCALE:- 1/2" = 1'-0"



REDUCER DETAIL

SCALE:- 1/4" = 1'-0"



DETAIL "X"

SCALE:- 1/2" = 1'-0"

SCHEDULE OF PUMPS

S.No.	DESCRIPTION	SPECIFICATIONS
1	TYPE	DEEP WELL TURBINE
2	PUMP MANUFACTURER	K.S.B or E.Q. APPROVED
3	CAPACITY	3.50 CUSEC
4	PUMPING HEAD	170'
5	MOTOR MANUFACTURER	SIEMENS or E.Q. APPROVED
6	MOTOR H.P	AS PER PUMP MANUFACTURER
7	SPEED	1450 RPM
8	SETTING DEPTH	65'

PACKAGE: BLOCK A

TITLE.
WATER SUPPLY SYSTEM
TUBEWELL
SECTION & TUBEWELL DETAIL 'B'

SHEET SIZE : A2 | SCALE :

ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	BAHRAM	ENGR. ABDULLAH	ENGR. ABDUL MAJID
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03					
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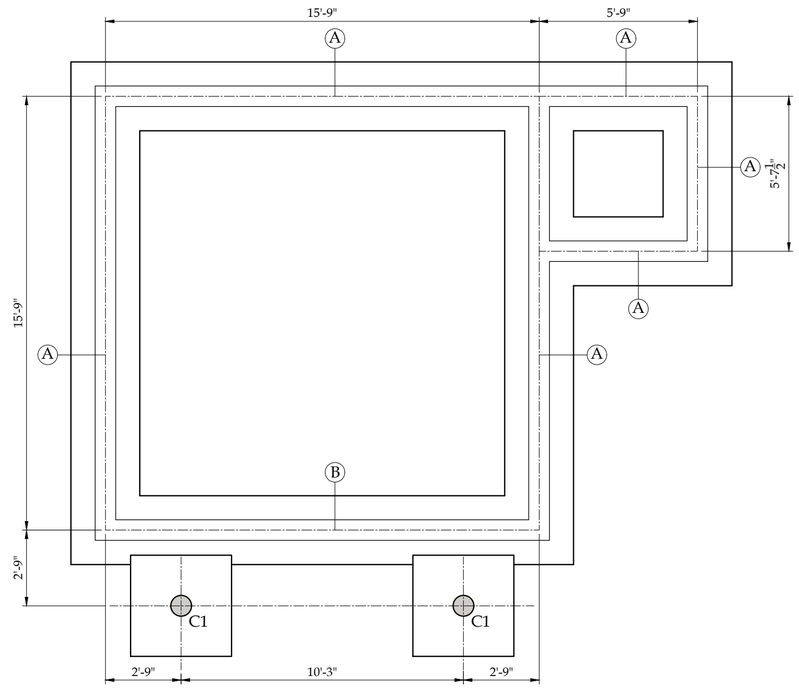
DRAWING N°: ETL_PHIII-WS-TW-02 | SHEET | REV 00

PROJECT: -
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

CLIENT: ETIHAD TOWN PHASE - III

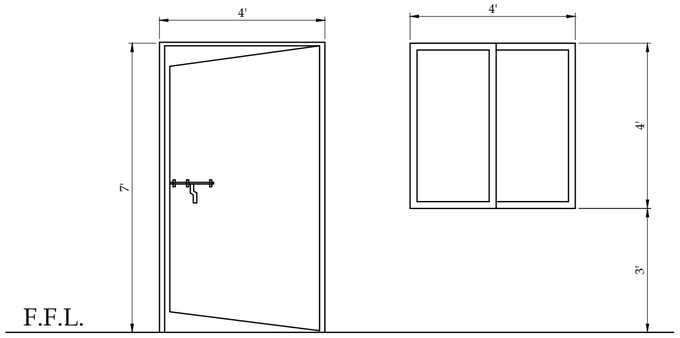
CONSULTANT:
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ETL_PHIII-WS-TW-02



EXCAVATION PLAN

SCALE:- 1/4" = 1'-0"

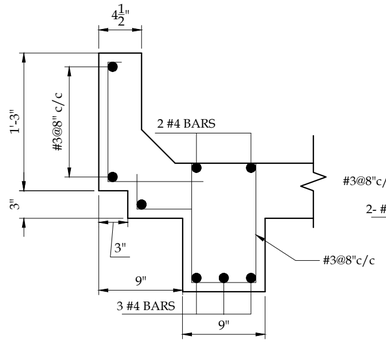


D-1
M.S. SHEET DOOR

SCALE:- 3/8" = 1'-0"

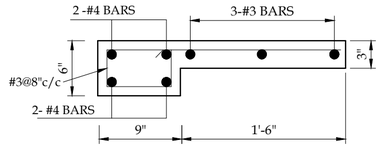
W-1
M.S WINDOW

SCALE:- 3/8" = 1'-0"



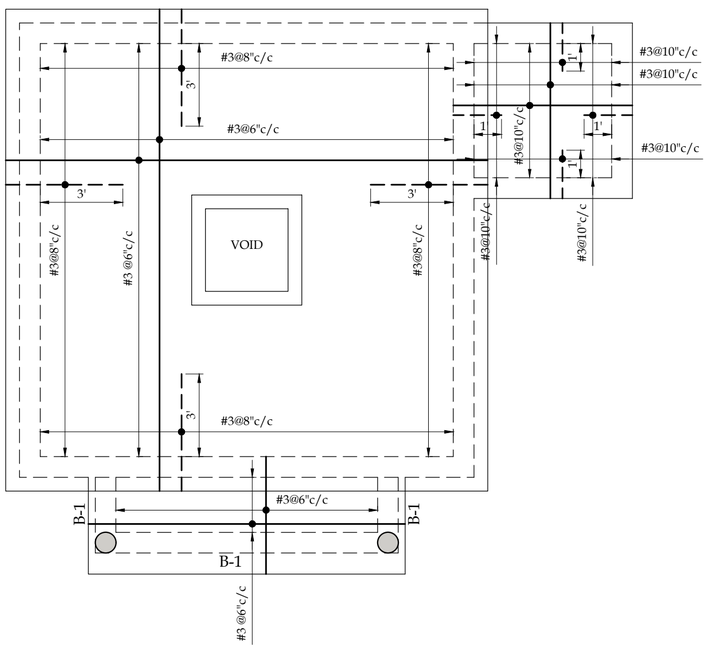
BEAM B-1

SCALE:- 1" = 1'-0"



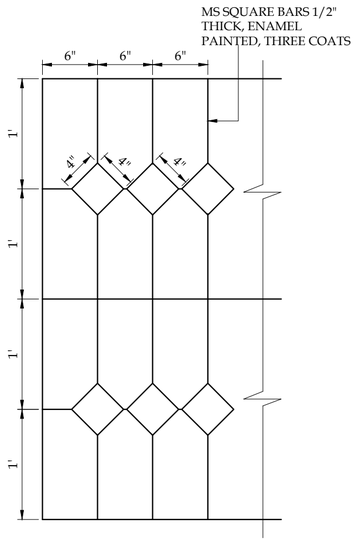
LINTEL & SHADE DETAIL

SCALE:- 1" = 1'-0"



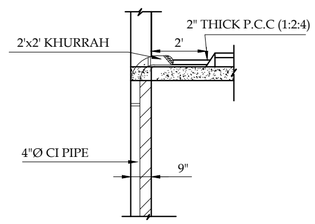
EXCAVATION PLAN

(SLAB THICKNESS = 6")

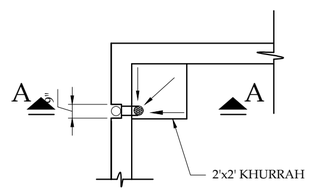


MS GRILL
(FOR WINDOWS)

SCALE:- 1" = 1'-0"

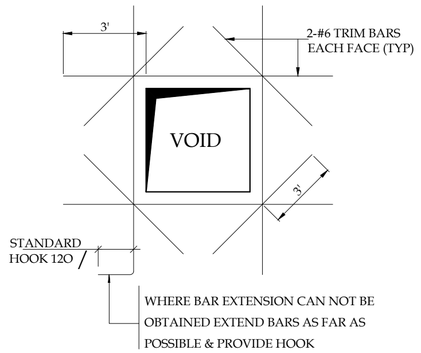


SECTION AA



ROOF KHURRAH PLAN

SCALE:- 1/4" = 1'-0"



TYPICAL DETAIL FOR VOIDS

SCALE:- 1/10" = 1'-0"

NOTES

1. USE PORTLAND CEMENT WITH 28 DAYS CUBE STRENGTH OF 3,000 PSI.
2. USE DEFORMED STEEL REINFORCEMENTS BARS WITH MAXIMUM YIELD STRENGTH OF 40,000 PSI AS PER ASTM SPECIFICATIONS.
3. CLEAR COVER TO REINFORCING BARS
   SLAB = 3/4"
   BEAM = 1-1/2"
   COLUMN = 1-1/2"
   FOUNDATION = 3"

PACKAGE: BLOCK A

TITLE:
WATER SUPPLY SYSTEM
TUBEWELL
DOORS, WINDOWS DETAILS, EXCAVATION, ROOF DRAINAGE PLAN & REINFORCEMENT DETAILS

SHEET SIZE :	SCALE :
A2	

ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	BAHRAM	ENGR. ABDULLAH	ENGR. ABDUL MAJID
02					
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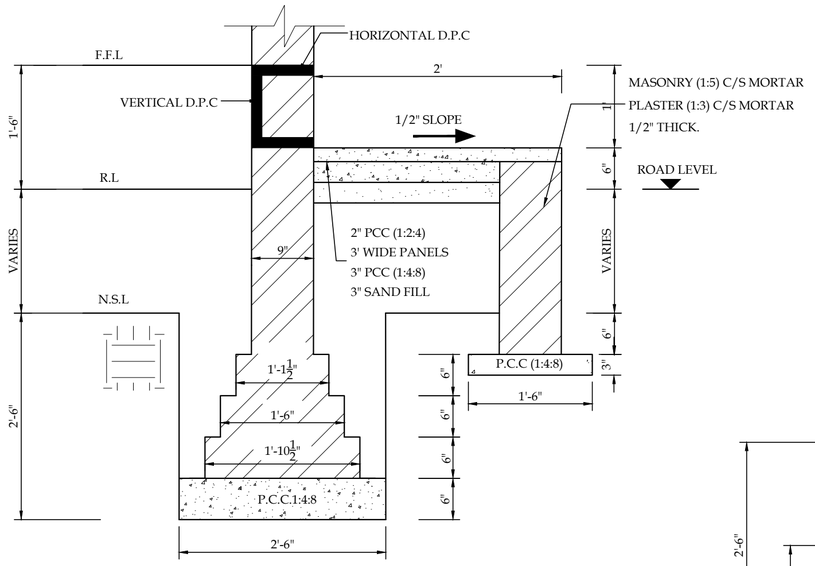
DRAWING Nº:	SHEET	REV
ETL-PHIII-WS-TW-03		00

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

CLIENT:
ETIHAD TOWN PHASE - III

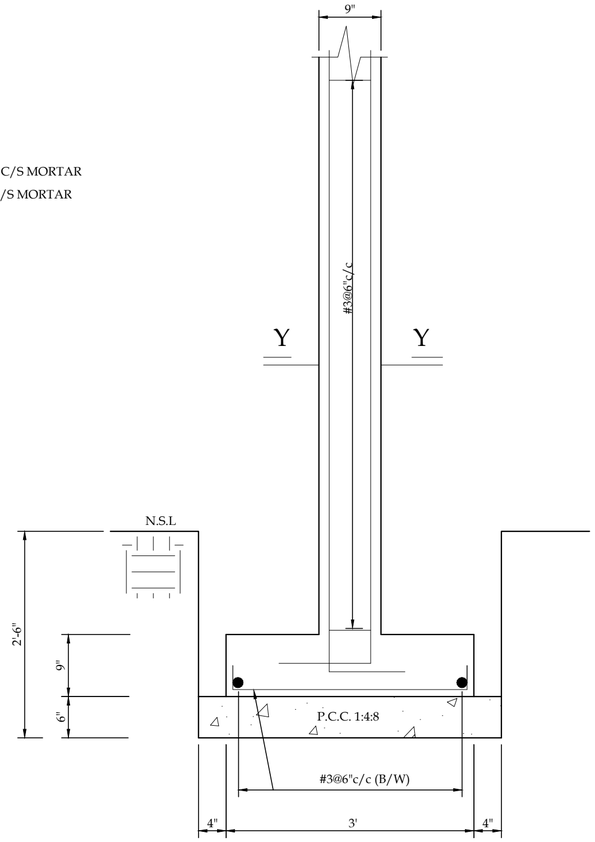
CONSULTANT:
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ETL_PHIII-WS-TW-03



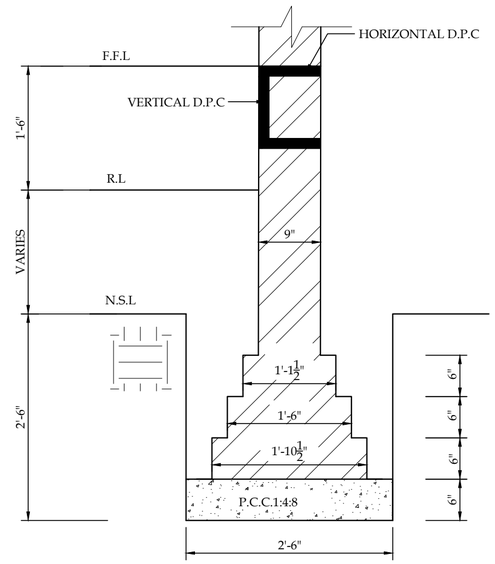
TYPE A

SCALE:- 3/4" = 1'-0"



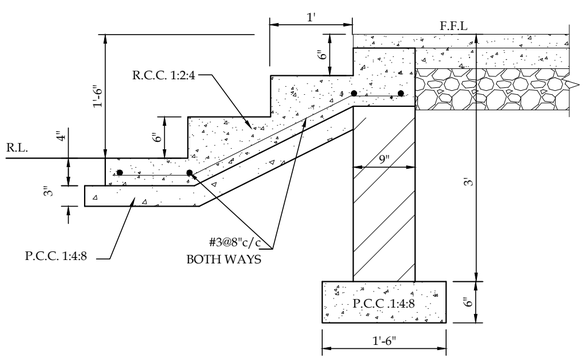
SECTION Z-Z

SCALE:- 3/4" = 1'-0"



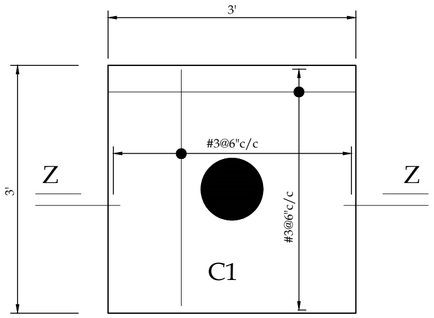
TYPE B

SCALE:- 3/4" = 1'-0"



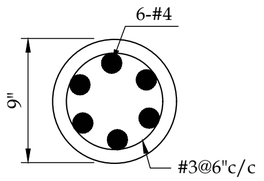
SECTION X-X

SCALE:- 3/4" = 1'-0"



FOOTING PLAN
COLUMN C-1

SCALE:- 3/4" = 1'-0"



COLUMN
SECTION Y-Y

SCALE:- 1" = 1'-0"

NOTES:

1. BRICK MASONRY
   - i. SUB STRUCTURE 1:6 CEMENT SAND MORTAR
   - ii. SUPER STRUCTURE 1:5 CEMENT SAND MORTAR
2. HORIZONTAL D.P.C.
   - i. 2" P.C.C. (1:2:4)
   - ii. HOT BITUMEN 1 COATS 10/20 @ 20 Lbs/100 Sft & ONE LAYER OF POLYTHENE SHEET, GAUGE 500
3. VERTICAL D.P.C.
   - i. 3/4" THICK VERTICAL D.P.C. 1:3 CEMENT SAND MORTAR WITH HOT BITUMEN 1 COAT 10/20 @ 20 Lbs/100 Sft & ONE LAYER OF POLYTHENE SHEET, GAUGE 500

PACKAGE: BLOCK A

TITLE.
WATER SUPPLY SYSTEM
TUBEWELL
FOUNDATION DETAILS

SHEET SIZE : A2 | SCALE :

ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	BAHRAM	ENGR. ABDULLAH	ENGR. ABDUL MAJID
02					
03					
04					
05					
06					
07					

DRAWING N°: ETL_PHIII-WS-TW-04 | SHEET | REV 00

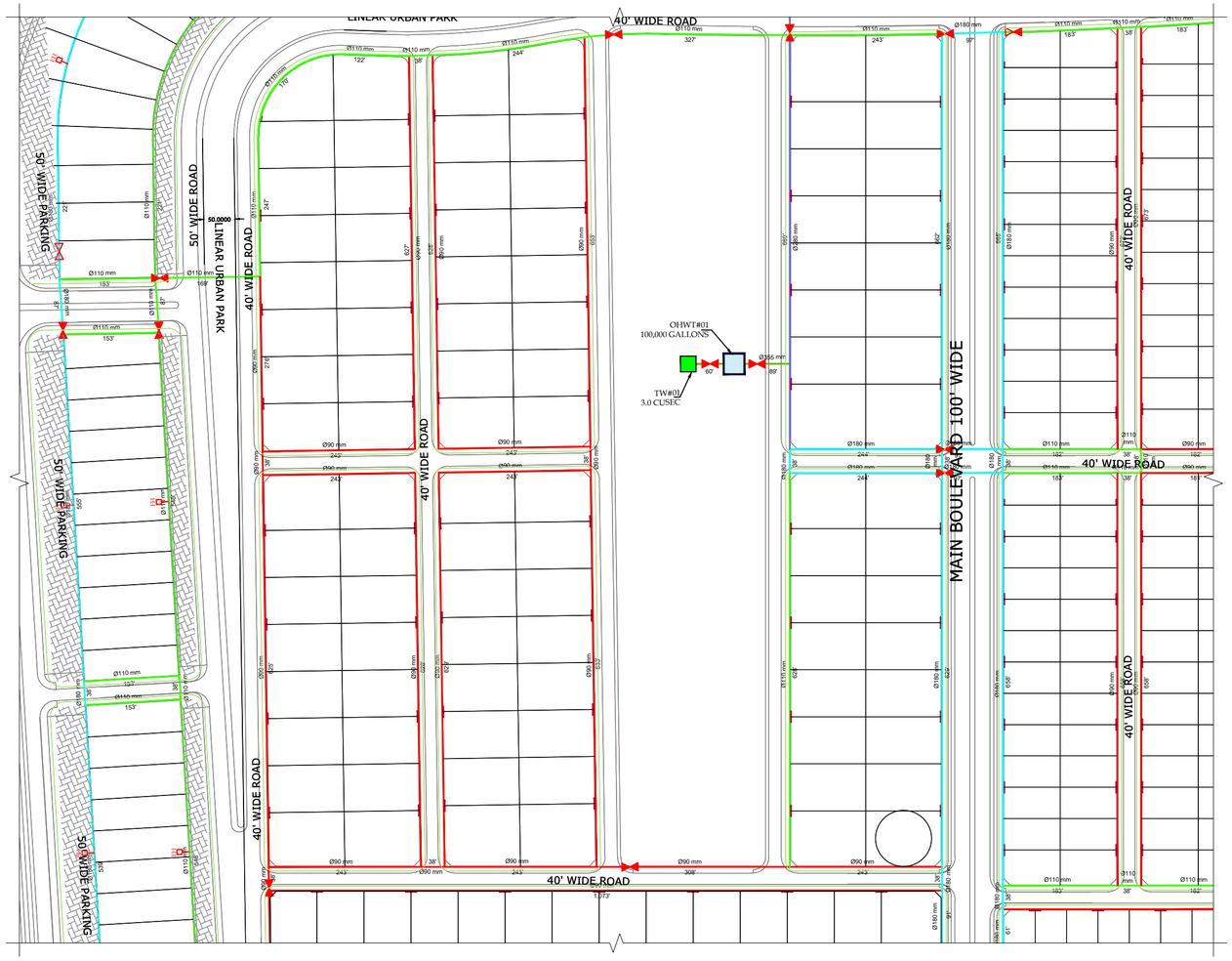
PROJECT: -
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

CLIENT: ETIHAD TOWN PHASE - III

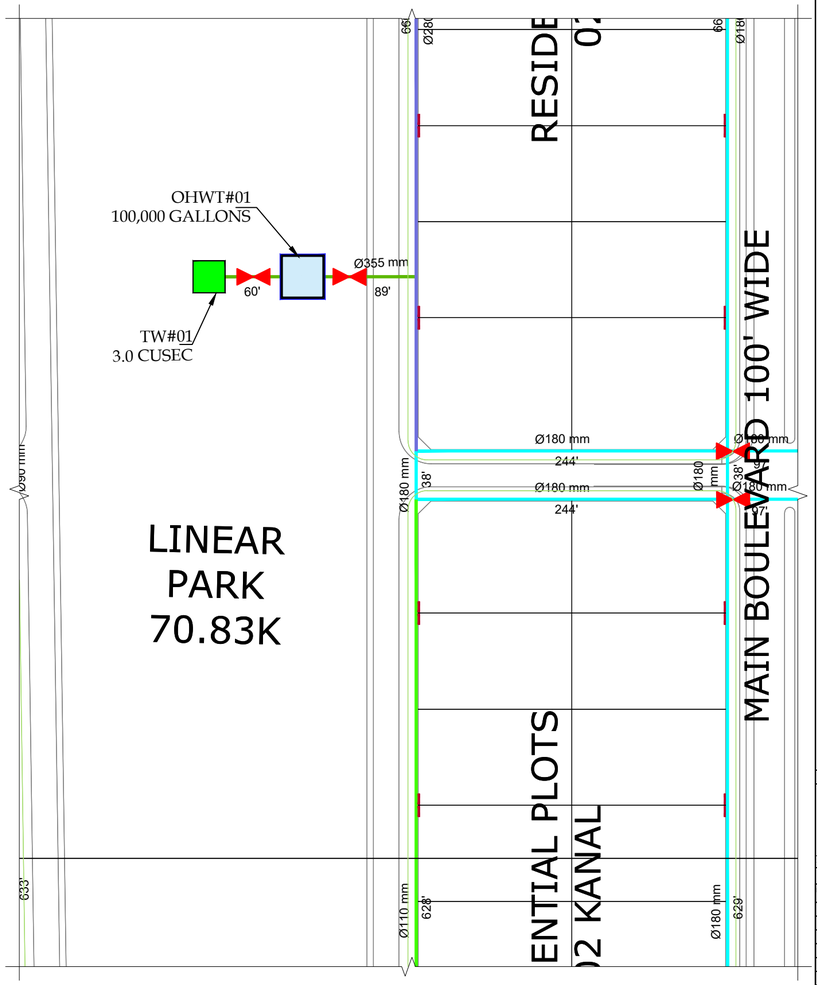
CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
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ETL_PHIII-WS-TW-04

OVER HEAD WATER TANK



LOCATION PLAN



SITE PLAN

PACKAGE: BLOCK-A

TITLE: WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
LOCATION & SITE PLAN

SHEET SIZE : A2 | SCALE :

ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIR	AR. ALI WAZIR
02	11-08-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIR	AR. ALI WAZIR
03					
04					
05					
06					
07					

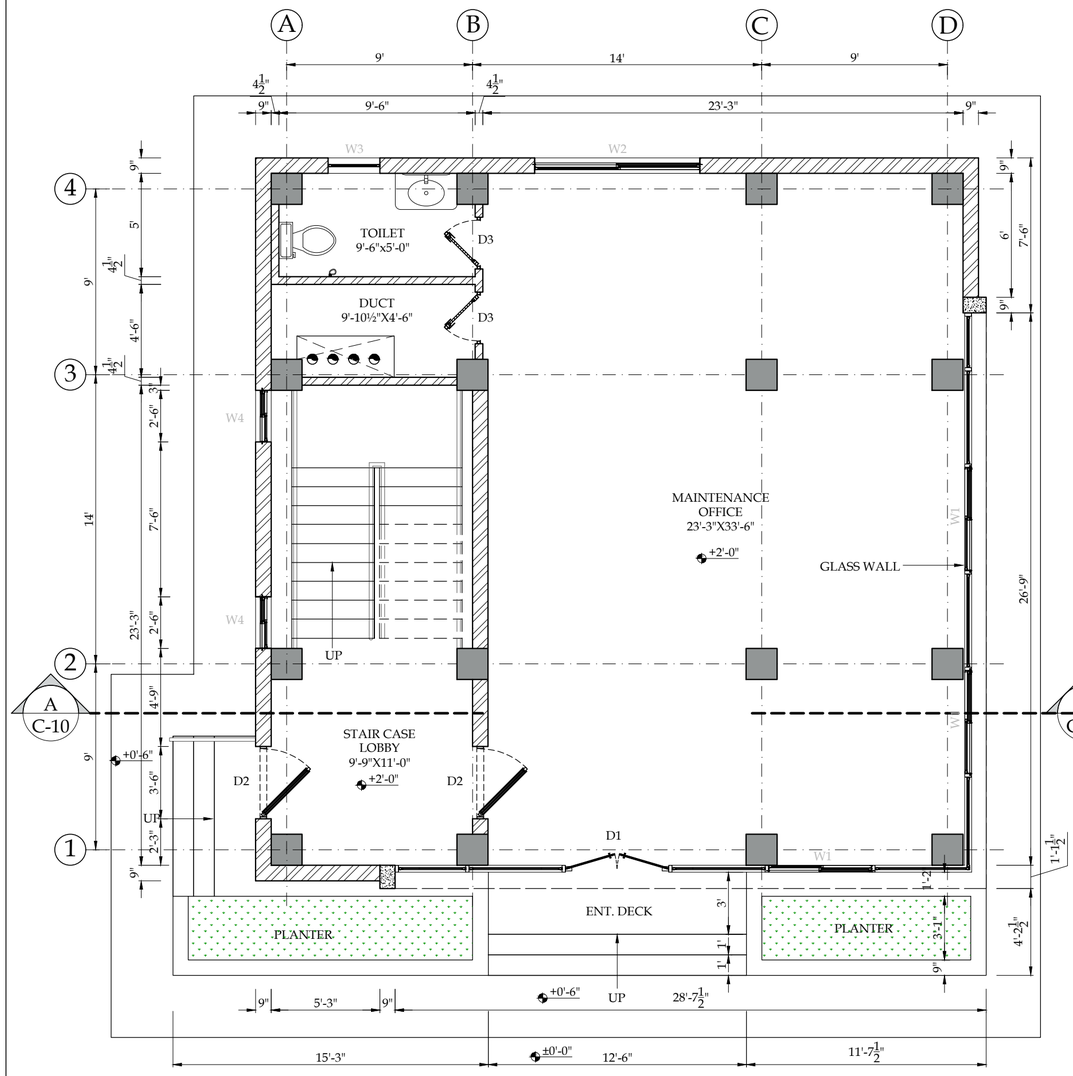
DRAWING N°: ETL-PH-III-WS-C-01 | SHEET | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT
ETIHAD TOWN (PHASE-III), LAHORE

CLIENT:
ETIHAD TOWN PHASE - III

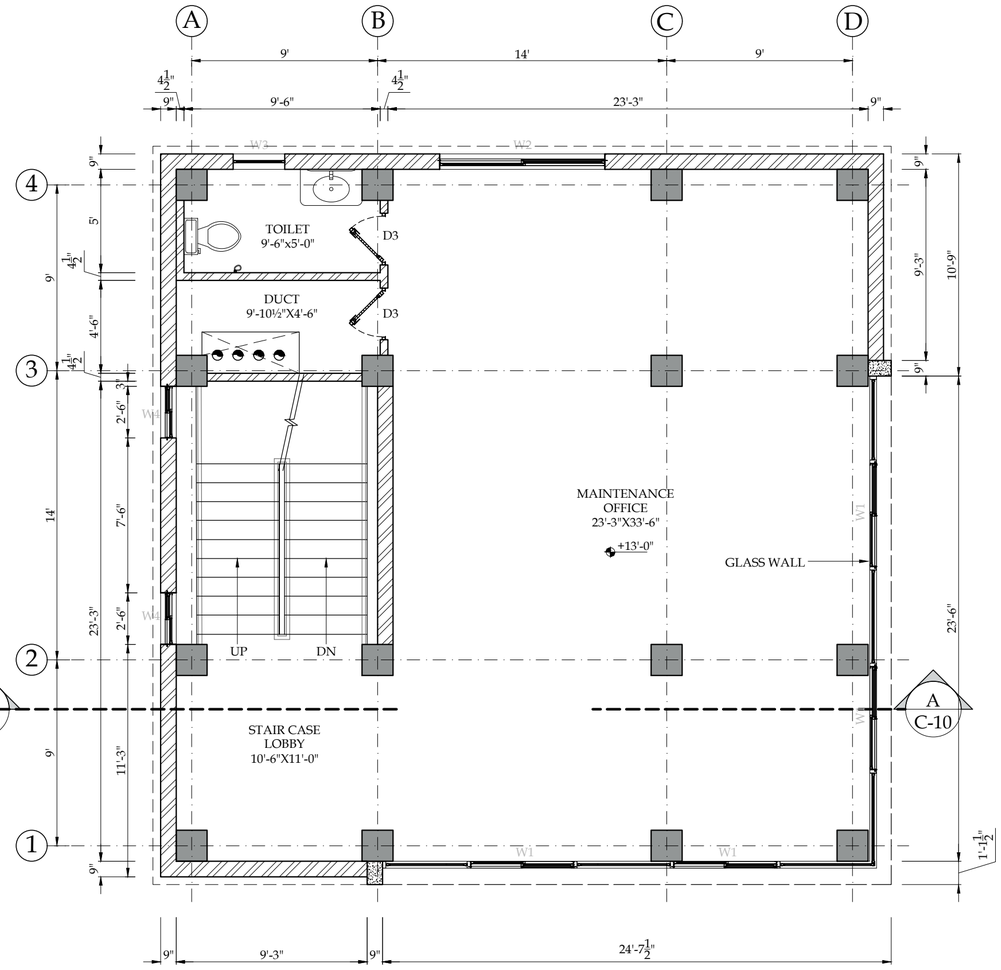
CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com

ETL-PH-III-WS-C-01



GROUND FLOOR PLAN

SCALE:- 3/16" = 1'-0"



1ST TO 2ND FLOOR PLAN

SCALE:- 3/16" = 1'-0"

ETL-PH-III-WS-C-02

PACKAGE: BLOCK-A

TITLE: WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
GROUND, 1ST & 2ND FLOOR PLAN

SHEET SIZE : A2 | SCALE : 3/16" = 1'-0"

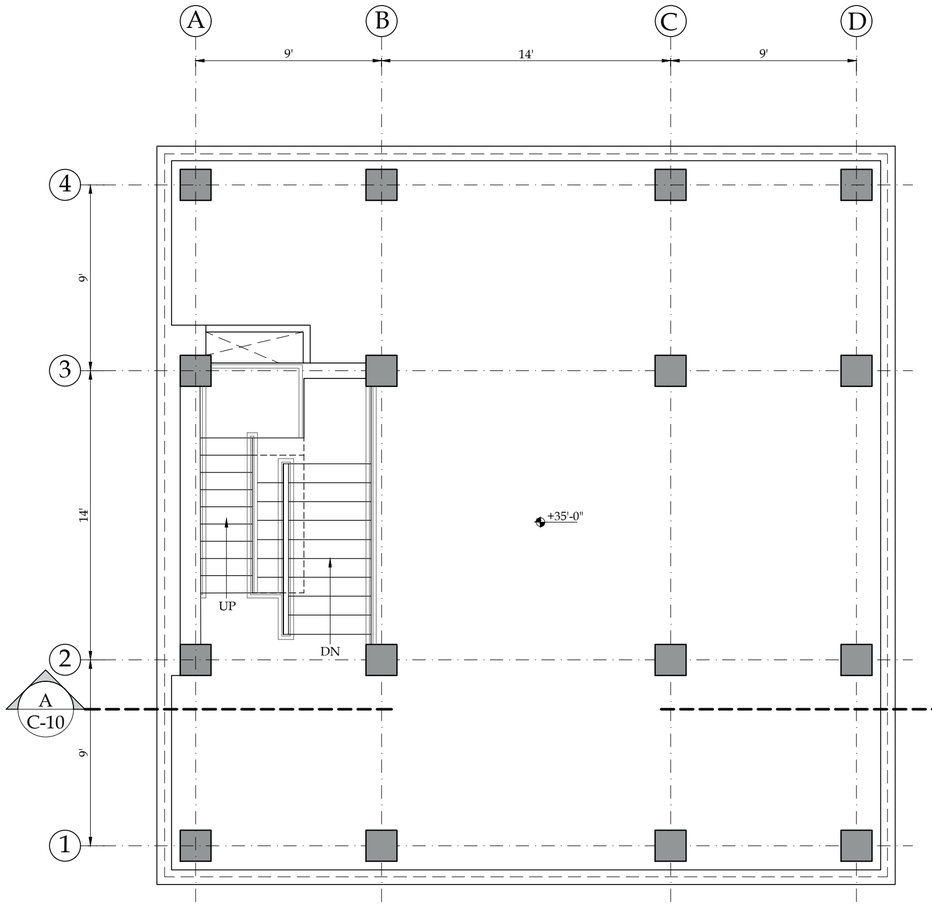
ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIRI	AR. ALI WAZIRI
02	11-08-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIRI	AR. ALI WAZIRI
03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III-WS-C-02 | SHEET | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT
ETIHAD TOWN (PHASE-III), LAHORE

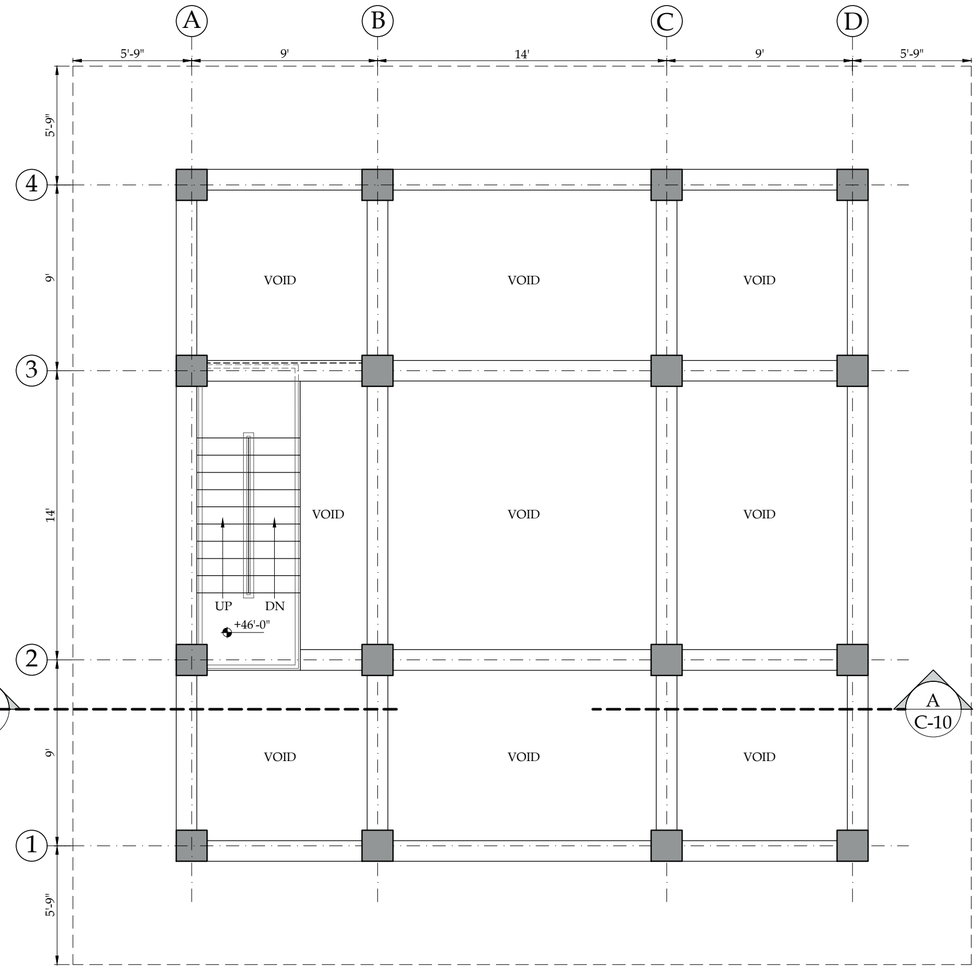
CLIENT: ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
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FAx: +92 42 35450916 WEB: www.asiancon.com



3rd FLOOR PLAN

SCALE:- 3/16" = 1'-0"



PLAN AT LEVELS +46'-0"

SCALE:- 3/16" = 1'-0"

PACKAGE: BLOCK-A

TITLE. WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
3RD & 4TH FLOOR PLAN

SHEET SIZE :	SCALE : 3/16" = 1'-0"
A2	

ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIRI	AR. ALI WAZIRI
02	11-08-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIRI	AR. ALI WAZIRI
03					
04					
05					
06					
07					

DRAWING N°:	SHEET	REV
ETL-PH-III-WS-C-03		01

PROJECT:

DEVELOPMENT OF INFRASTRUCTURE AT
ETIHAD TOWN (PHASE-III), LAHORE

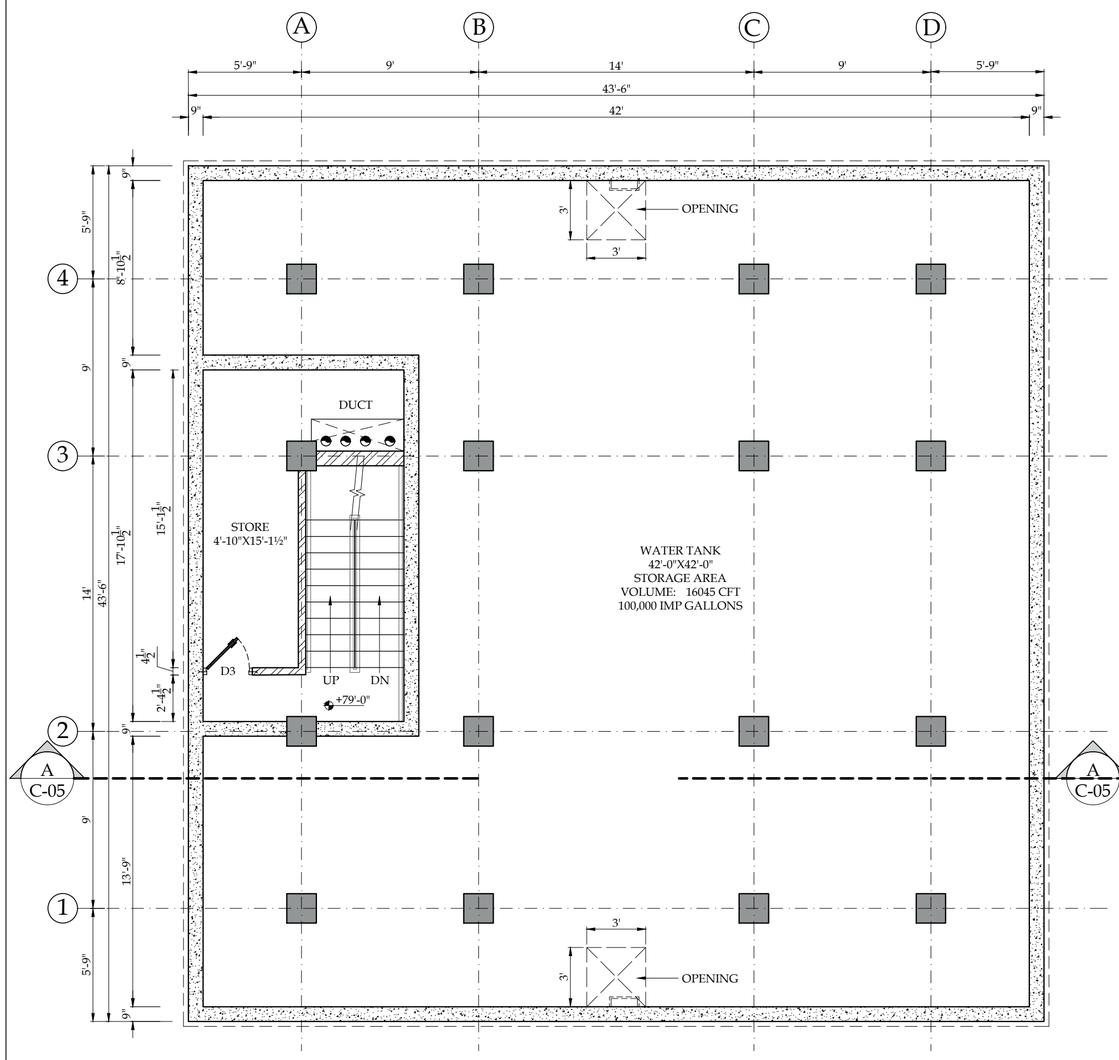
CLIENT:

ETIHAD TOWN PHASE - III

CONSULTANT:

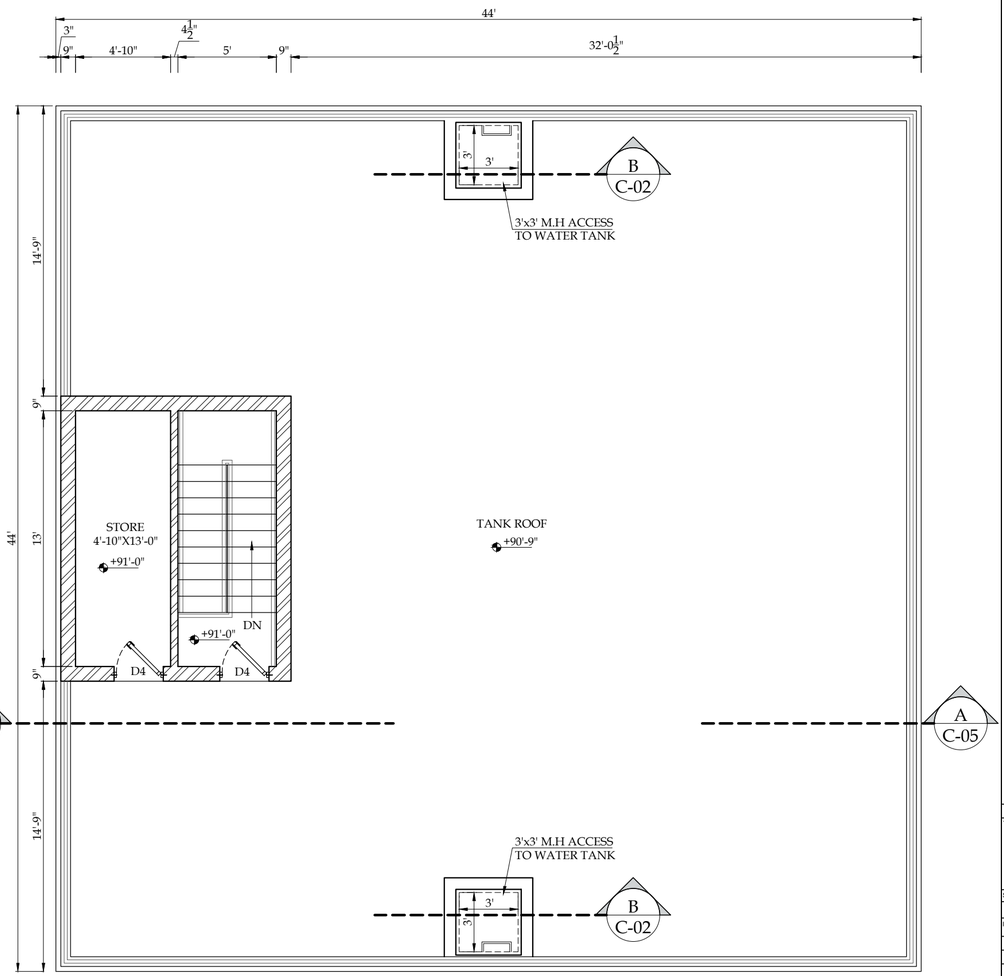
ASIAN CONSULTING ENGINEERS PVT (LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com

ETL-PH-III-WS-C-03



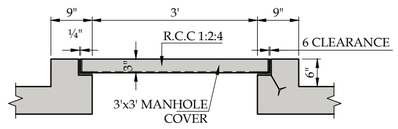
O.H.W.TANK PLAN

SCALE:- 3/16" = 1'-0"



TANK ROOF

SCALE:- 3/16" = 1'-0"



SECTION B-B

SCALE:- 1/2" = 1'-0"

PACKAGE:	BLOCK-A

TITLE.
WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
O.H.W.TANK & ROOF PLAN

SHEET SIZE :	SCALE :
A2	

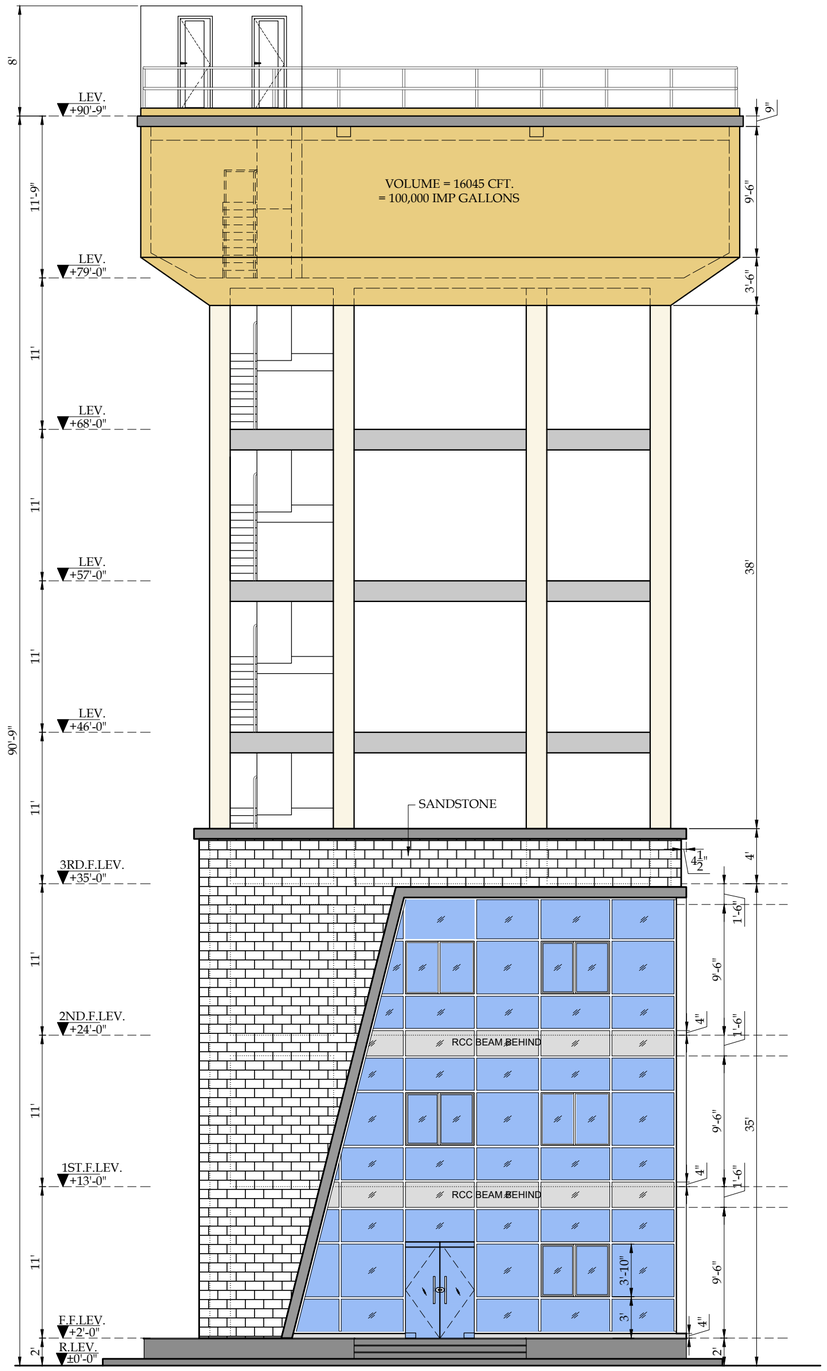
ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIRI	AR. ALI WAZIRI
02	11-08-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIRI	AR. ALI WAZIRI
03					
04					
05					
06					
07					

DRAWING N°:	SHEET	REV
ETL-PH-III-WS-C-04		01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT
ETIHAD TOWN (PHASE-III), LAHORE

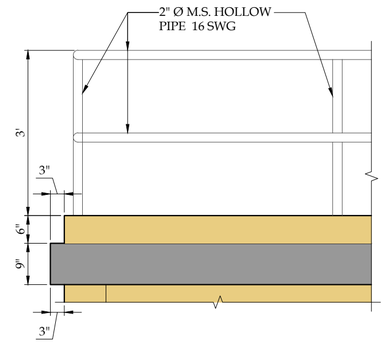
CLIENT:
ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com



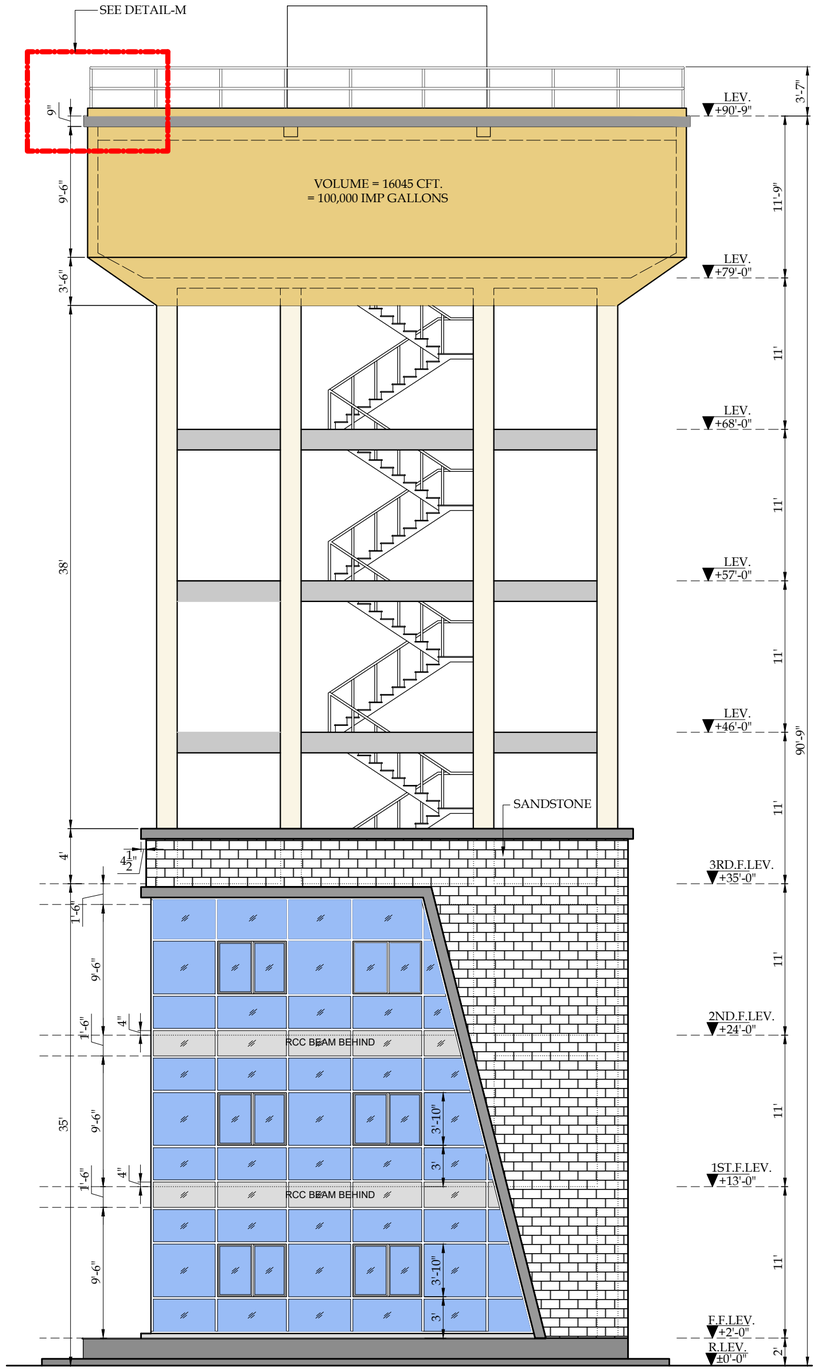
FRONT ELEVATION

SCALE:- 1/8" = 1'-0"



DETAIL- M

SCALE:- 1/2" = 1'-0"



RIGHT SIDE ELEVATION

SCALE:- 1/8" = 1'-0"

PACKAGE: BLOCK-A

TITLE:
WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
FRONT & RIGHT SIDE ELEVATION

SHEET SIZE :	SCALE :
A2	

ISSUE N°.	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	FAISAL	AIR ALI WAZIRI	AIR ALI WAZIRI
02	11-08-2026	CONSTRUCTION DRAWINGS	FAISAL	AIR ALI WAZIRI	AIR ALI WAZIRI
03					
04					
05					
06					
07					

DRAWING Nº:
ETL-PH-III-WS-C-05

SHEET

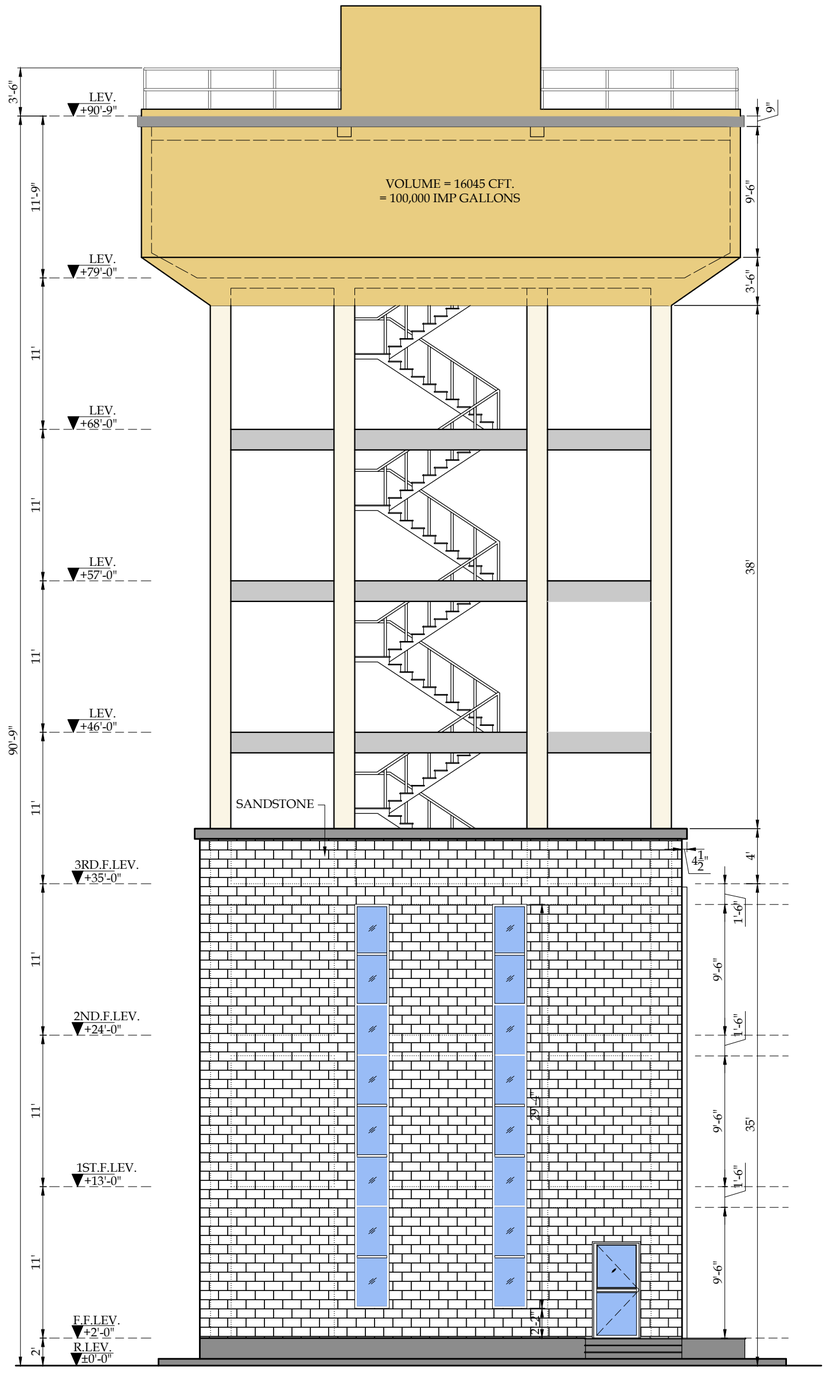
REV
01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT
ETIHAD TOWN (PHASE-III), LAHORE

CLIENT:
ETIHAD TOWN PHASE - III

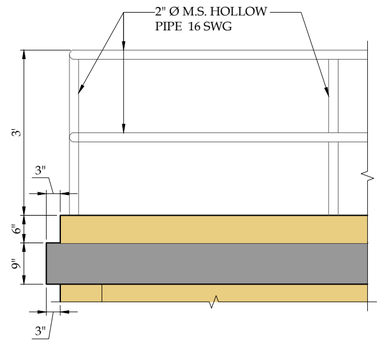
CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
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ETL-PH-III-WS-C-05



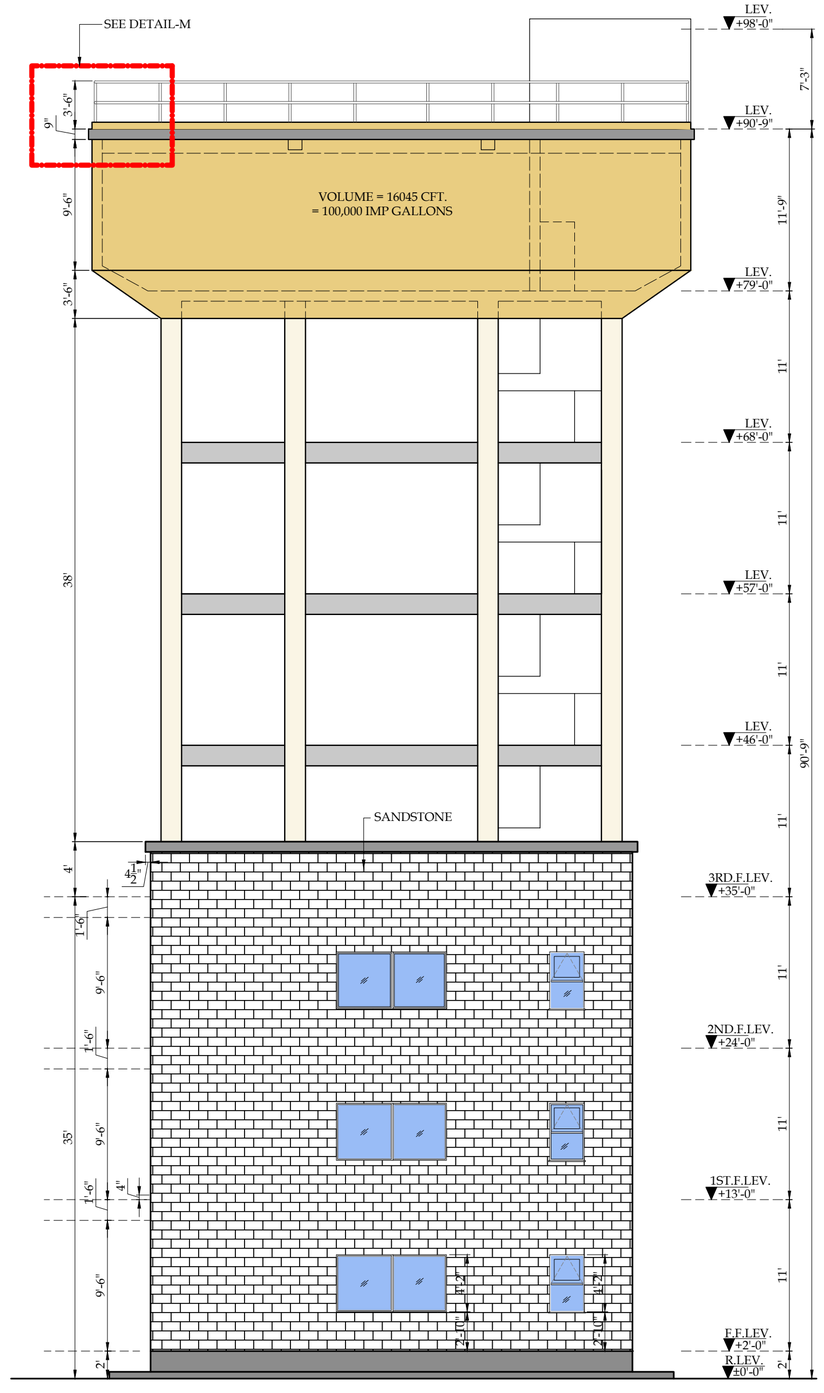
LEFT SIDE ELEVATION

SCALE:- 1/8" = 1'-0"



DETAIL- M

SCALE:- 1/2" = 1'-0"



REAR ELEVATION

SCALE:- 1/8" = 1'-0"

PACKAGE: BLOCK-A

TITLE:
WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
LEFT & REAR SIDE ELEVATION

SHEET SIZE :			SCALE :		
A2					
ISSUE N°.	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIRI	AR. ALI WAZIRI
02	11-08-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIRI	AR. ALI WAZIRI
03					
04					
05					
06					
07					

DRAWING N°:
ETL-PH-III-WS-C-06

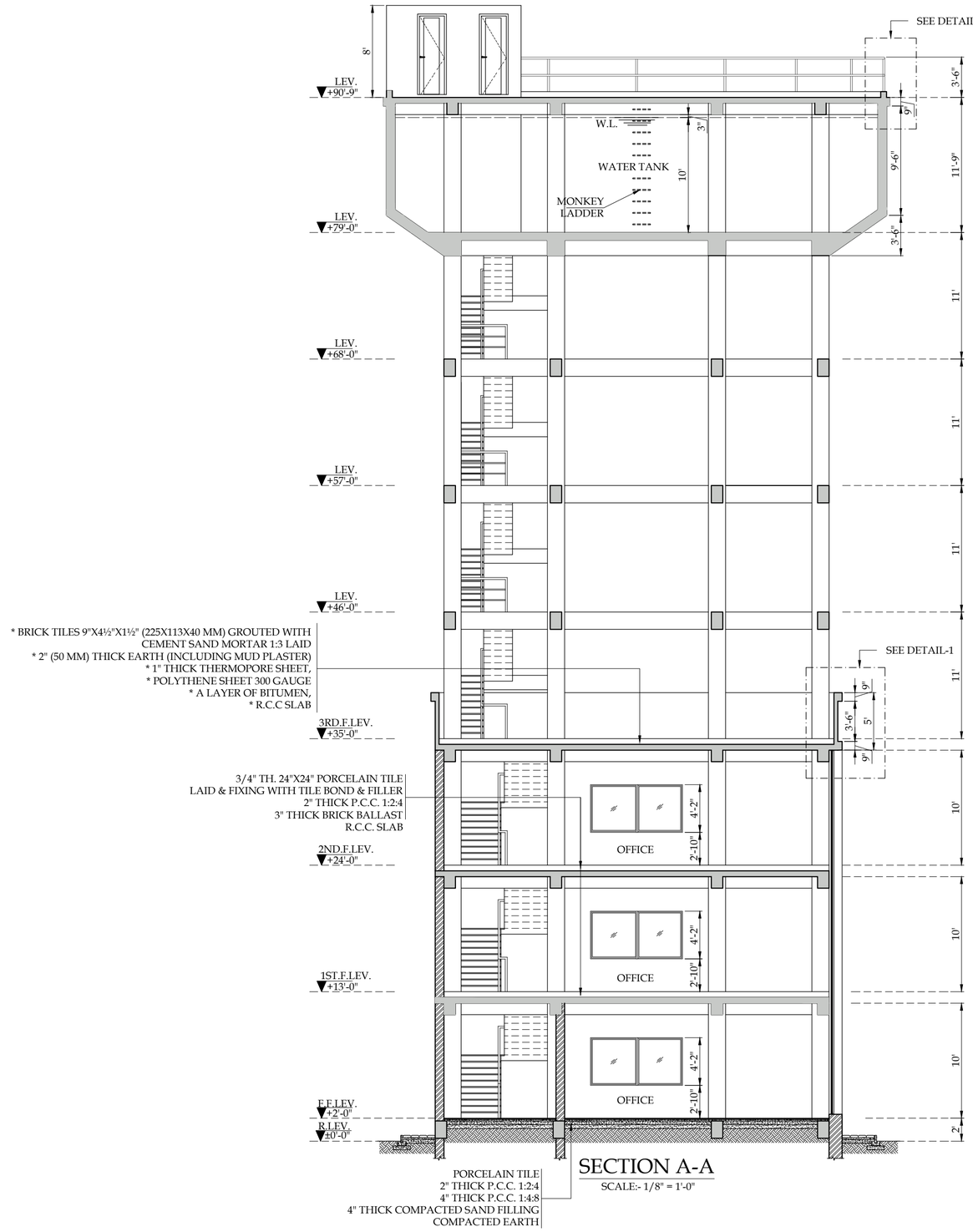
SHEET

REV
01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT
ETIHAD TOWN (PHASE-III), LAHORE

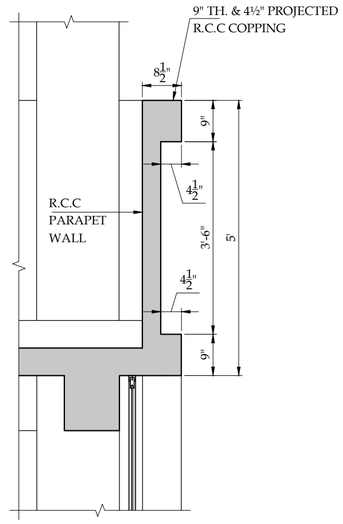
CLIENT:
ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com



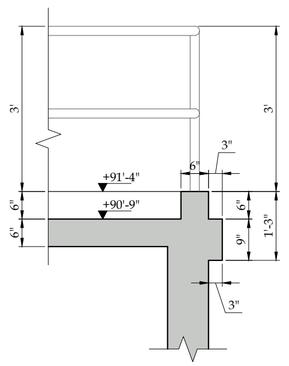
SECTION A-A

SCALE:- 1/8" = 1'-0"



DETAIL-1

SCALE:- 1/2" = 1'-0"



DETAIL-2

SCALE:- 1/2" = 1'-0"

PACKAGE: BLOCK-A

TITLE: WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
SECTION A-A DETAIL- 1

SHEET SIZE :	SCALE :
A2	

ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIR	AR. ALI WAZIR
02	11-08-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIR	AR. ALI WAZIR
03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III-WS-C-07

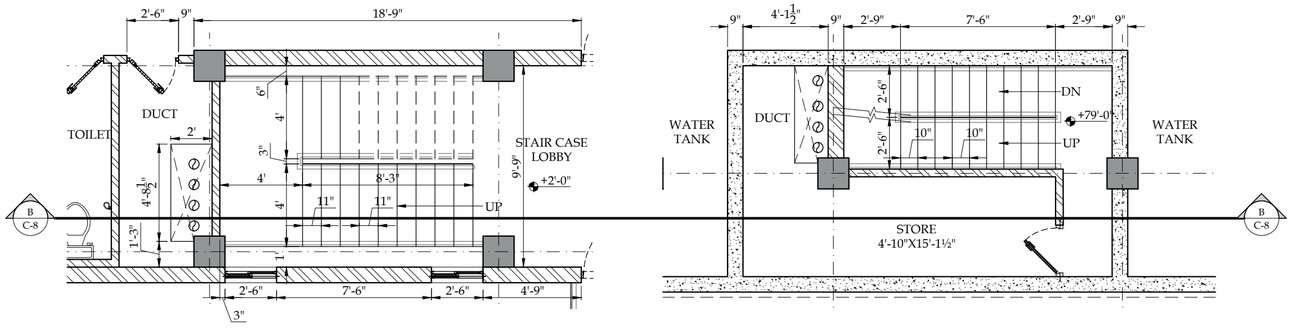
SHEET

REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

CLIENT:
ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
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TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com

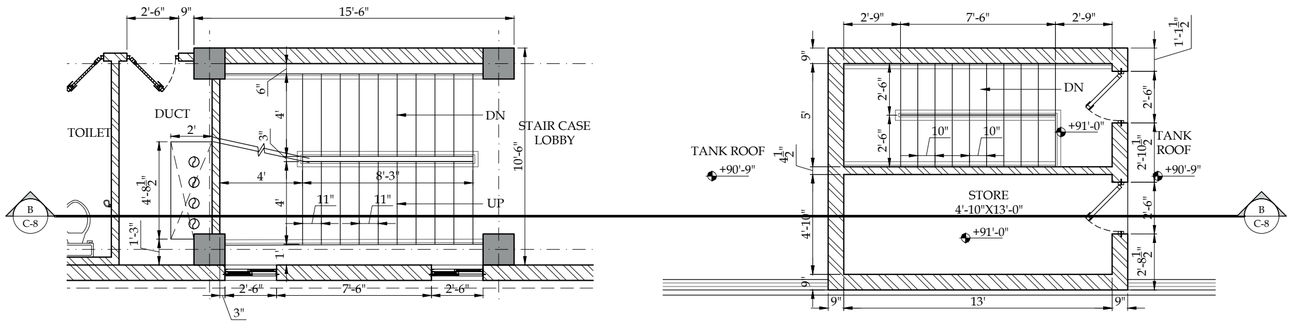


GROUND FLOOR PLAN

SCALE:- 3/16" = 1'-0"

O.H.W.T PLAN

SCALE:- 3/16" = 1'-0"

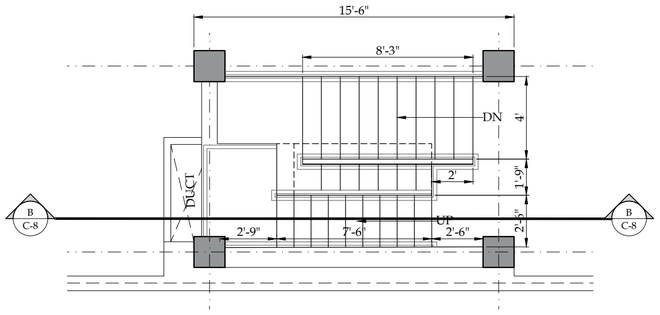


TYPICAL 1st & 2nd FLOOR PLAN

SCALE:- 3/16" = 1'-0"

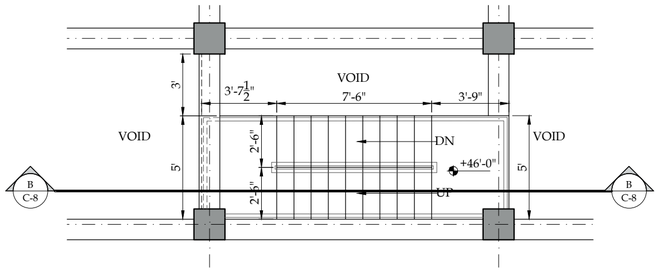
TANK ROOF PLAN

SCALE:- 3/16" = 1'-0"



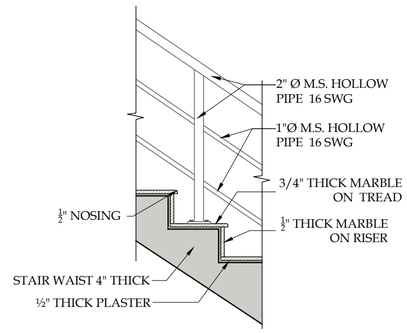
3rd FLOOR PLAN

SCALE:- 3/16" = 1'-0"



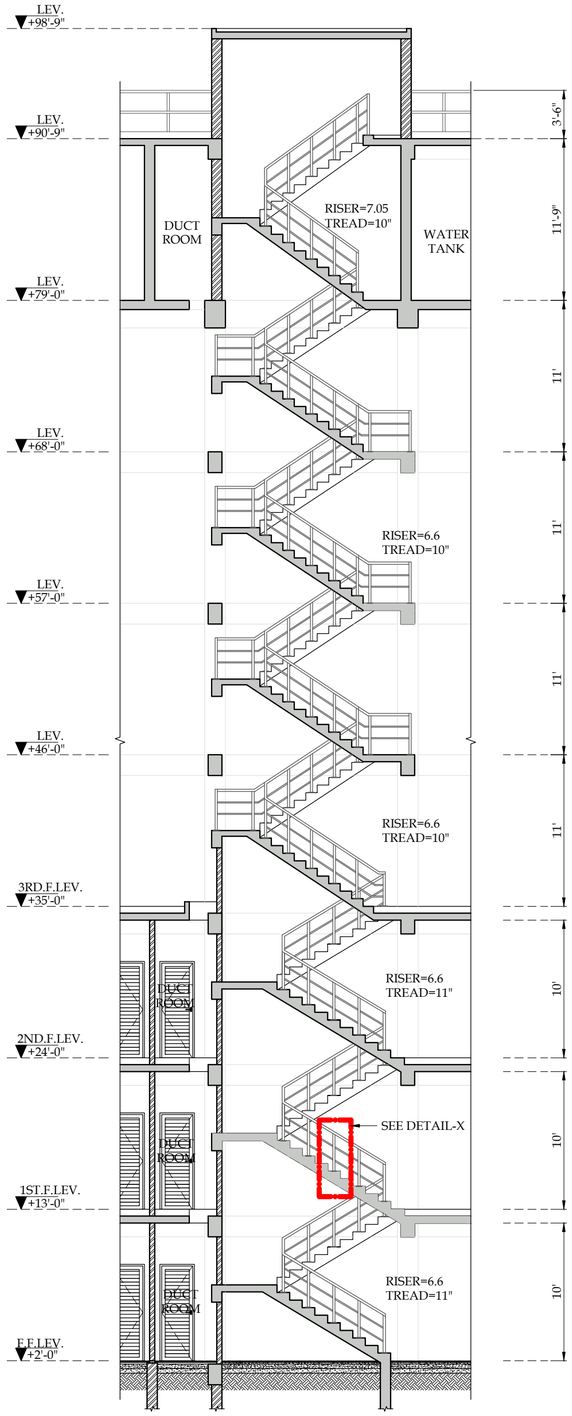
PLAN AT LEVELS +46'-0"

SCALE:- 3/16" = 1'-0"



DETAIL-X

SCALE:- 1/2" = 1'-0"



SECTION B-B

SCALE:- 1/8" = 1'-0"

PACKAGE: BLOCK-A

TITLE.
WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
STAIR DETAIL

SHEET SIZE :	SCALE :
A2	

ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIR	AR. ALI WAZIR
02	11-08-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIR	AR. ALI WAZIR
03					
04					
05					
06					
07					

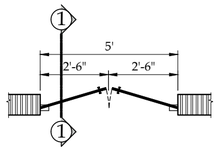
DRAWING N°: ETL-PH-III-WS-C-08 | SHEET | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

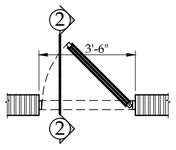
CLIENT:

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com

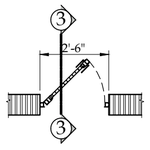
ETL-PH-III-WS-C-08



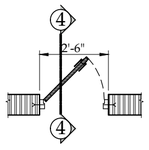
D1 PLAN



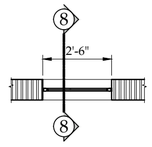
D2 PLAN



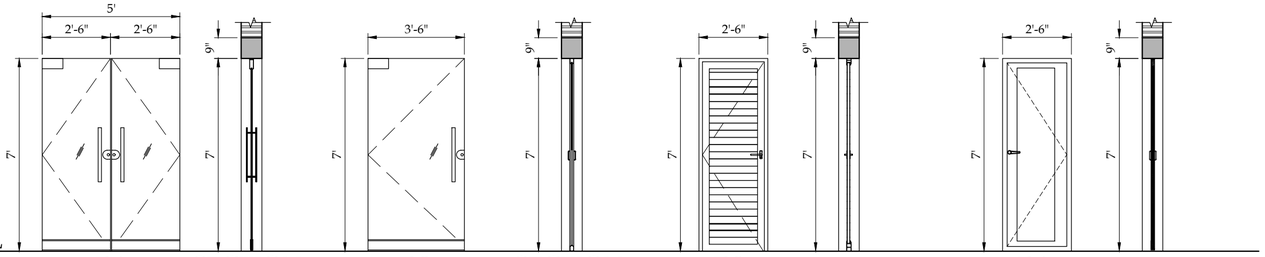
D3 PLAN



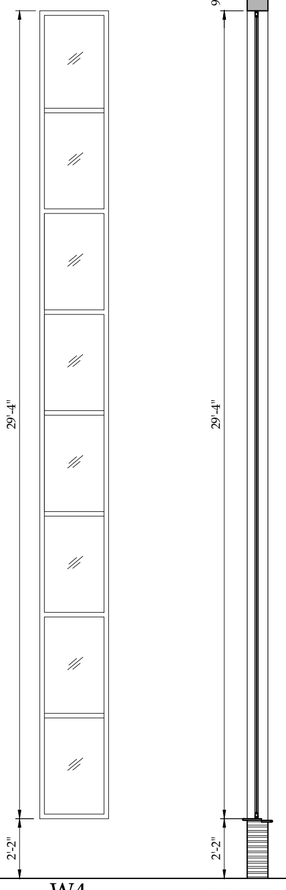
D4 PLAN



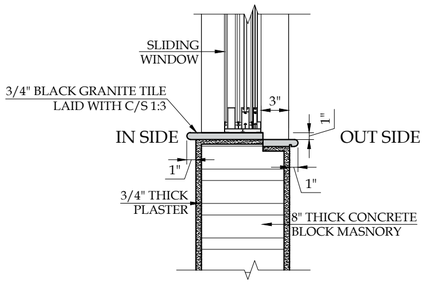
W4 PLAN



D1 ELEVATION | SECTION 1-1 | D2 ELEVATION | SECTION 2-2 | D3 ELEVATION | SECTION 3-3 | D4 ELEVATION | SECTION 4-4

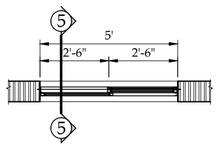


W4 ELEVATION | SECTION 8-8

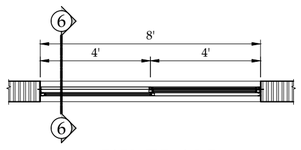


TYPICAL SLIDING WINDOW SILL DETAIL

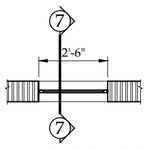
SCALE:- 1" = 1'-0"



W1 PLAN



W2 PLAN



W1 PLAN

W1 ELEVATION | SECTION 5-5 | W2 ELEVATION | SECTION 6-6 | W3 ELEVATION | SECTION 7-7

DOORS SCHEDULE

Sr No.	TYPE	SIZE	SILL	QTY.	DESCRIPTION
1	D1	5'-0"x7'-0"	0'-0"	01	GLASS DOOR WITH ALUMINUM FRAME
2	D2	3'-6"x7'-0"	0'-0"	01	GLASS DOOR WITH ALUMINIUM FRAME
3	D3	2'-6"x7'-0"	0'-0"	07	uPVC DOOR
4	D4	2'-6"x7'-0"	0'-0"	01	M.S DOOR

WINDOWS SCHEDULE

Sr No.	TYPE	SIZE	SILL	QTY.	DESCRIPTION
1	W1	5'-0"x3'-10"	3'-0"	11	1.6 mm TH. ALUMINUM SINGLE GLAZED WITH 5mm TH.GLASS SLIDING WINDOW
2	W2	8'-0"x4'-2"	2'-10"	3	1.6 mm TH. ALUMINUM SINGLE GLAZED WITH 5mm TH.GLASS SLIDING WINDOW
3	W3	2'-6"x4'-2"	2'-10"	3	1.6 mm TH. ALUMINUM SINGLE GLAZED WITH 5mm TH.GLASS OPENABLE WINDOW
4	W4	2'-6"x29'-4"	2'-2"	2	1.6 mm TH. ALUMINUM SINGLE GLAZED WITH 5mm TH.GLASS FIXED WINDOW

PACKAGE: BLOCK-A

TITLE: WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
DOORS WINDOWS
ELEVATION & SCHEDULE

SHEET SIZE : A2 | SCALE :

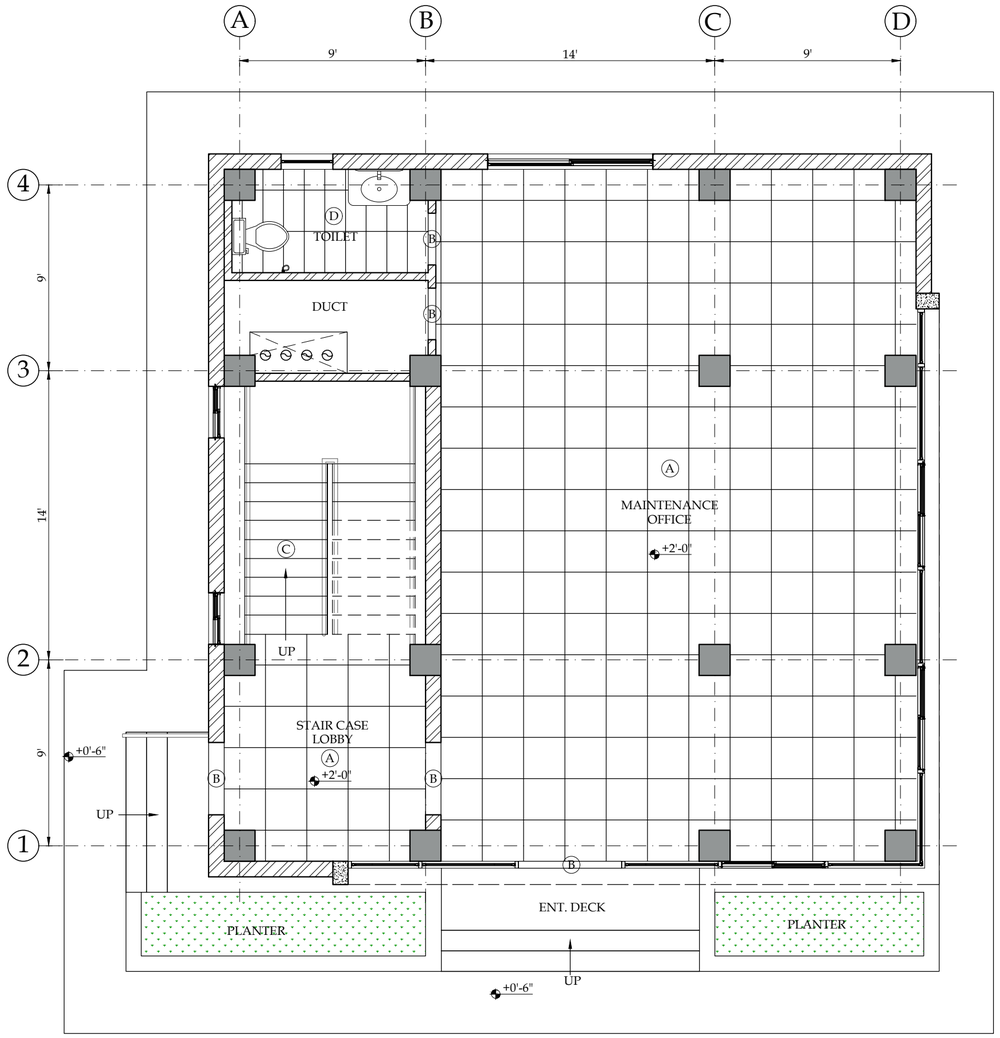
ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIRI	AR. ALI WAZIRI
02	11-08-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIRI	AR. ALI WAZIRI
03					
04					
05					
06					
07					

DRAWING Nº: ETL-PH-III-WS-C-09 | SHEET | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

CLIENT: ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
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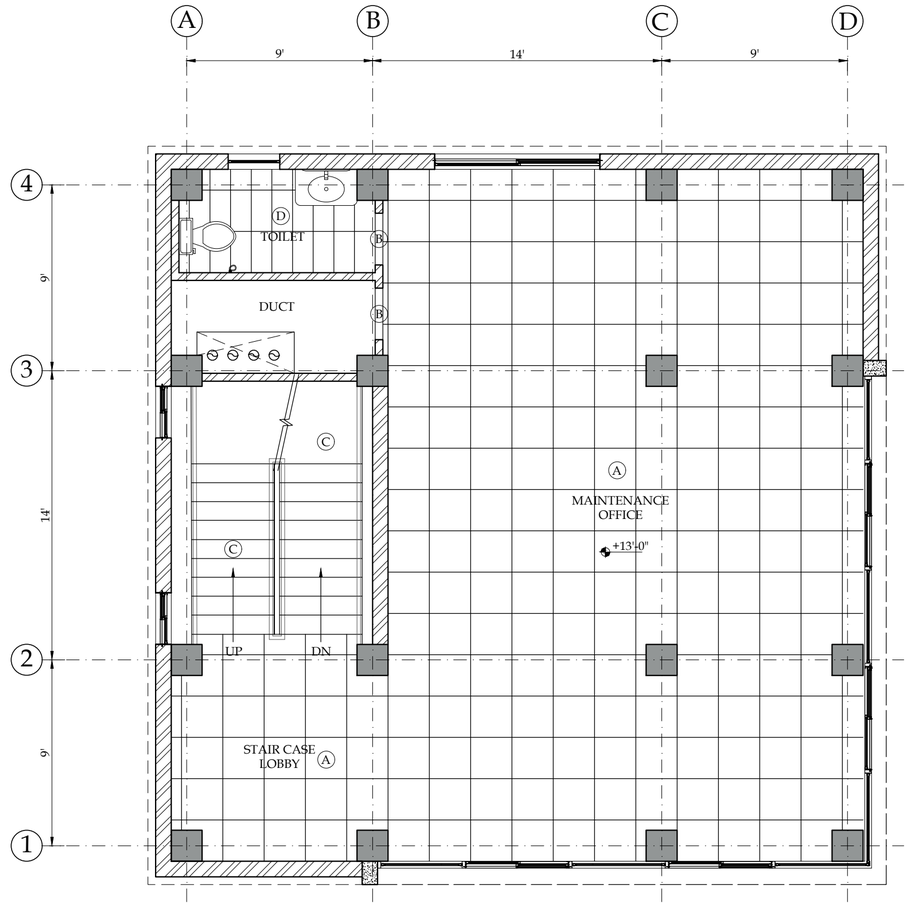


LEGEND

- (A) 24"x24" PORCELAIN TILE
- (B) GRANITE OF APPROVED COLOR
- (C) SALT n PAPER GRANITE SLAB ON TREAD & RISER
- (D) 24"x12" PORCELAIN MATT FINISH TILE
- (E) TERRAZZO

FLOORING PATTERN GROUND FLOOR PLAN

SCALE:- 3/16" = 1'-0"



FLOORING PATTERN 1st TO 2nd FLOOR PLAN

SCALE:- 3/16" = 1'-0"

PACKAGE: BLOCK-A

TITLE:
WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
FLOORING PATTERN GROUND FLOOR & 1st TO 2nd FLOOR

SHEET SIZE : A2 | SCALE : 3/16" = 1'-0"

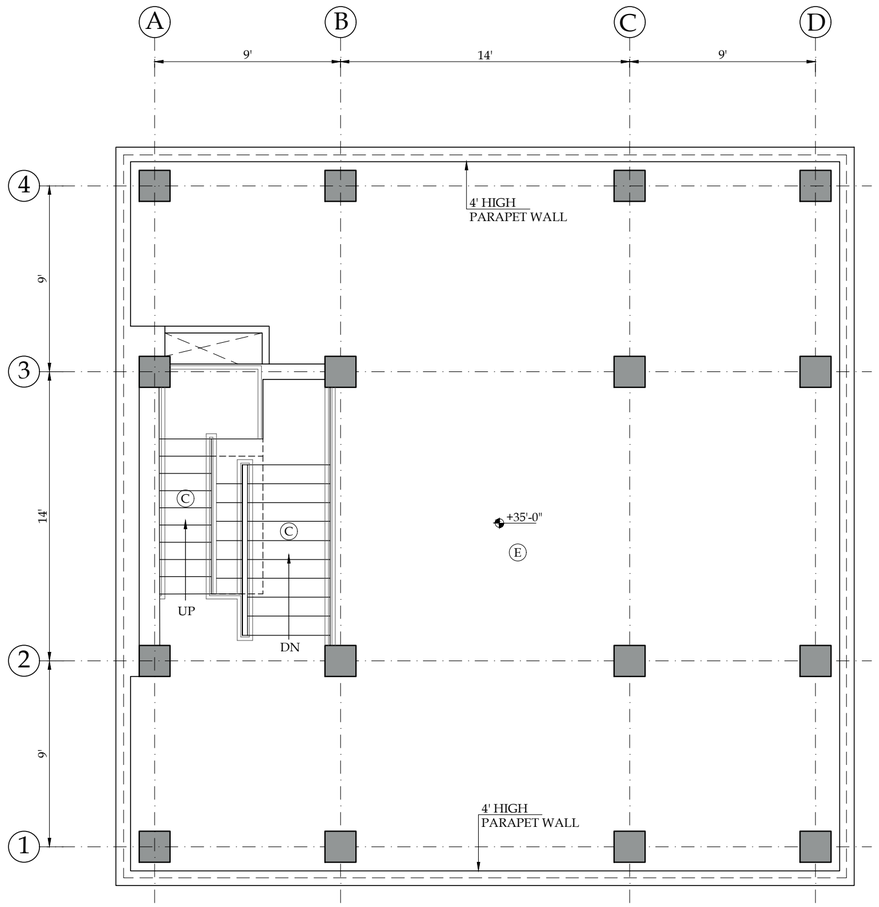
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02	11-08-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIR	AR. ALI WAZIR
03					
04					
05					
06					
07					

DRAWING Nº: ETL-PH-III-WS-C-10 | SHEET | REV 01

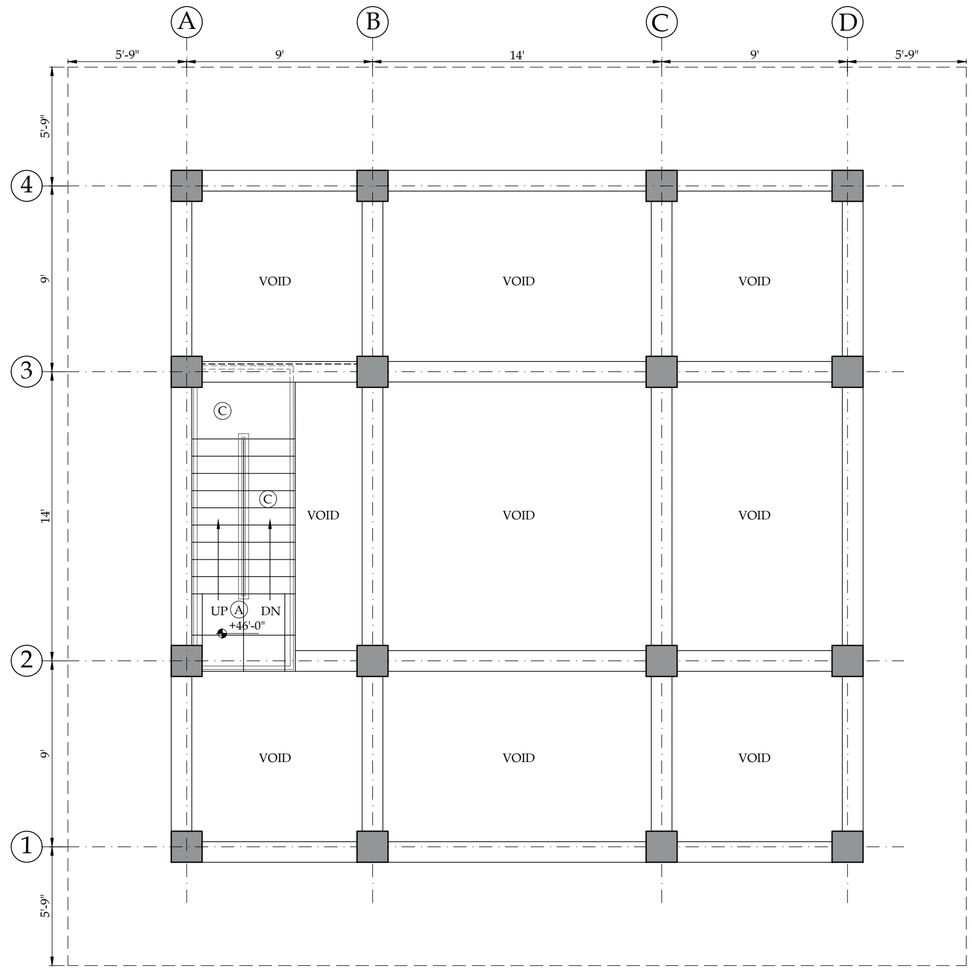
PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

CLIENT:
ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
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FLOORING PATTERN
3rd FLOOR PLAN
SCALE:- 3/16" = 1'-0"



FLOORING PATTERN AT
LEVELS +56'-6"
SCALE:- 3/16" = 1'-0"

LEGEND

- (A) 24"x24" PORCELAIN TILE
- (B) GRANITE OF APPROVED COLOR
- (C) SALT n PAPER GRANITE SLAB ON TREAD & RISER
- (D) 24"x12" PORCELAIN MATT FINISH TILE
- (E) TERRAZZO

PACKAGE: BLOCK-A

TITLE.
WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
FLOORING PATTERN 4th
& 5th FLOOR PLAN

SHEET SIZE : A2 | SCALE : 3/16" = 1'-0"

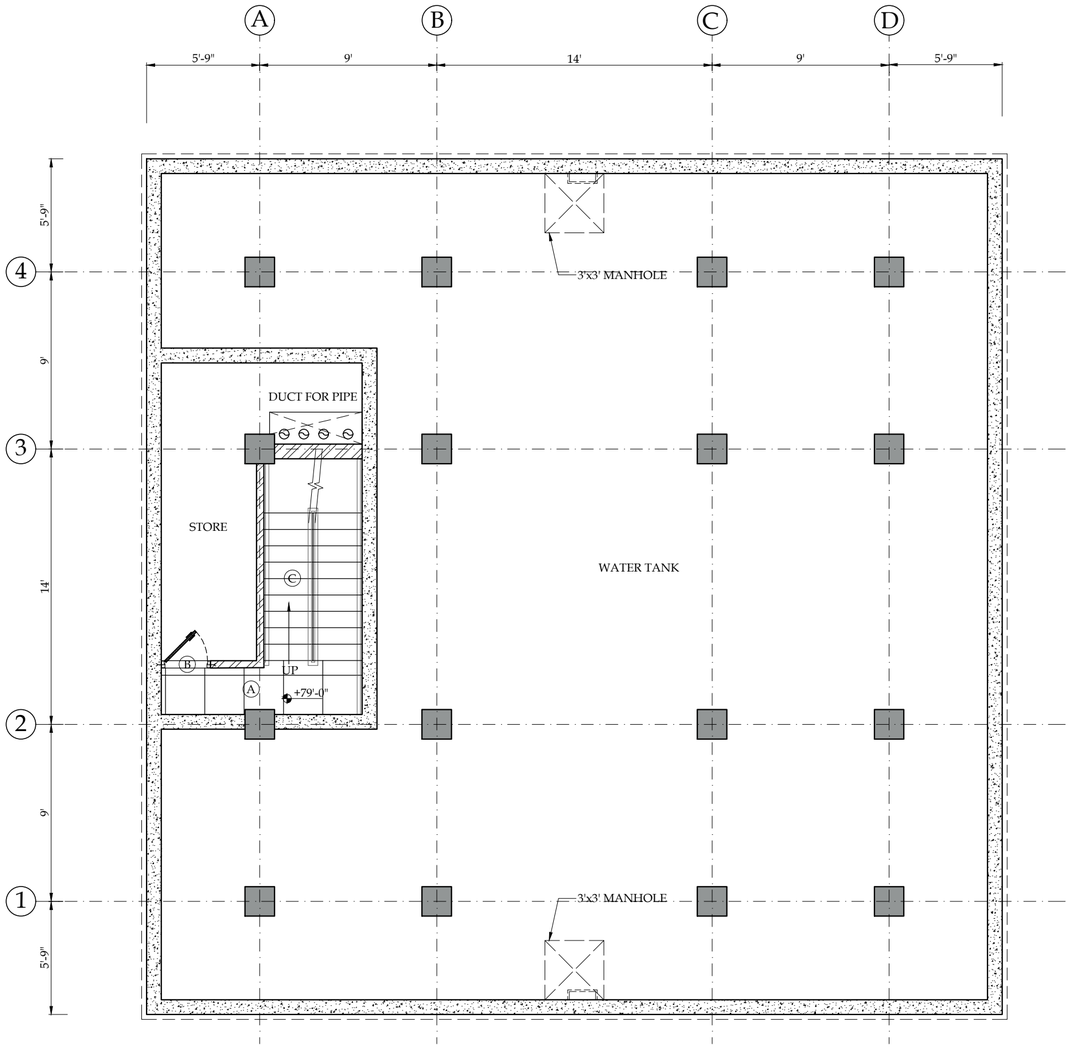
ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIR	AR. ALI WAZIR
02	11-08-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIR	AR. ALI WAZIR
03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III-WS-C-11 | SHEET | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT
ETIHAD TOWN (PHASE-III), LAHORE

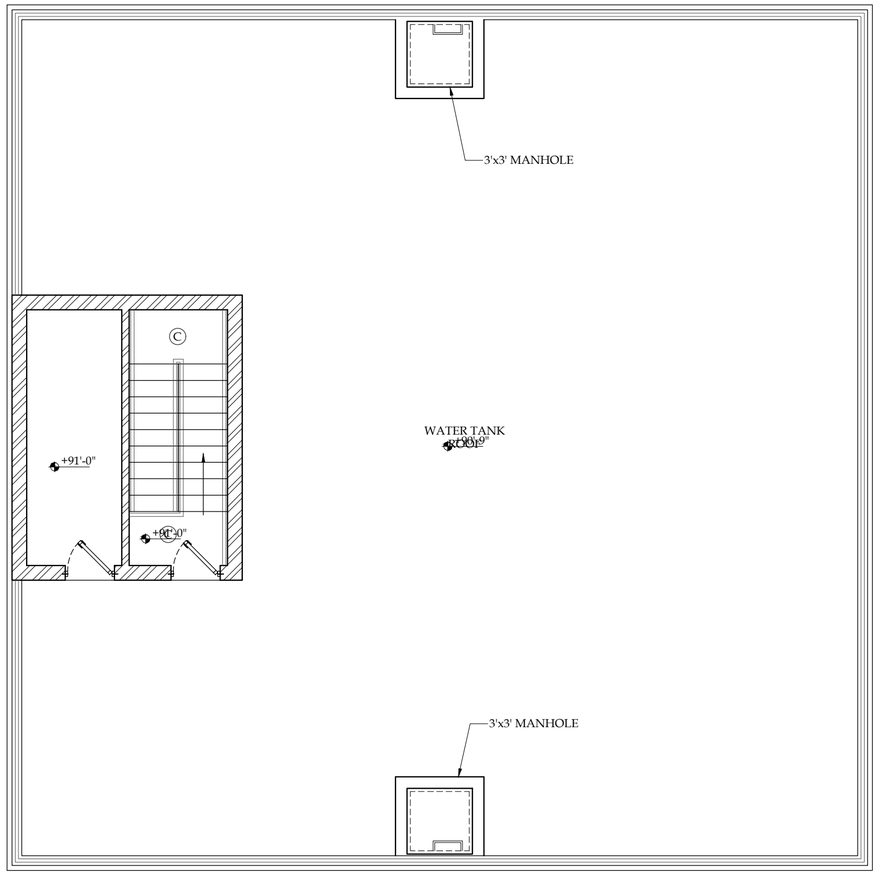
CLIENT:
ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT (LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
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FLOORING PATTERN AT LEVELS +79'-0"

SCALE:- 3/16" = 1'-0"



FLOORING PATTERN AT LEVELS +90'-9"

SCALE:- 3/16" = 1'-0"

LEGEND

- (A) 24"x24" PORCELAIN TILE
- (B) GRANITE OF APPROVED COLOR
- (C) SALT n PAPER GRANITE SLAB ON TREAD & RISER
- (D) 24"x12" PORCELAIN MATT FINISH TILE
- (E) TERRAZZO

PACKAGE: BLOCK-A

TITLE.
WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
FLOORING PATTERN
O.H.W.TANK & TANK ROOF PLAN

SHEET SIZE : A2 | SCALE :

ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIR	AR. ALI WAZIR
02	11-08-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIR	AR. ALI WAZIR
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04					
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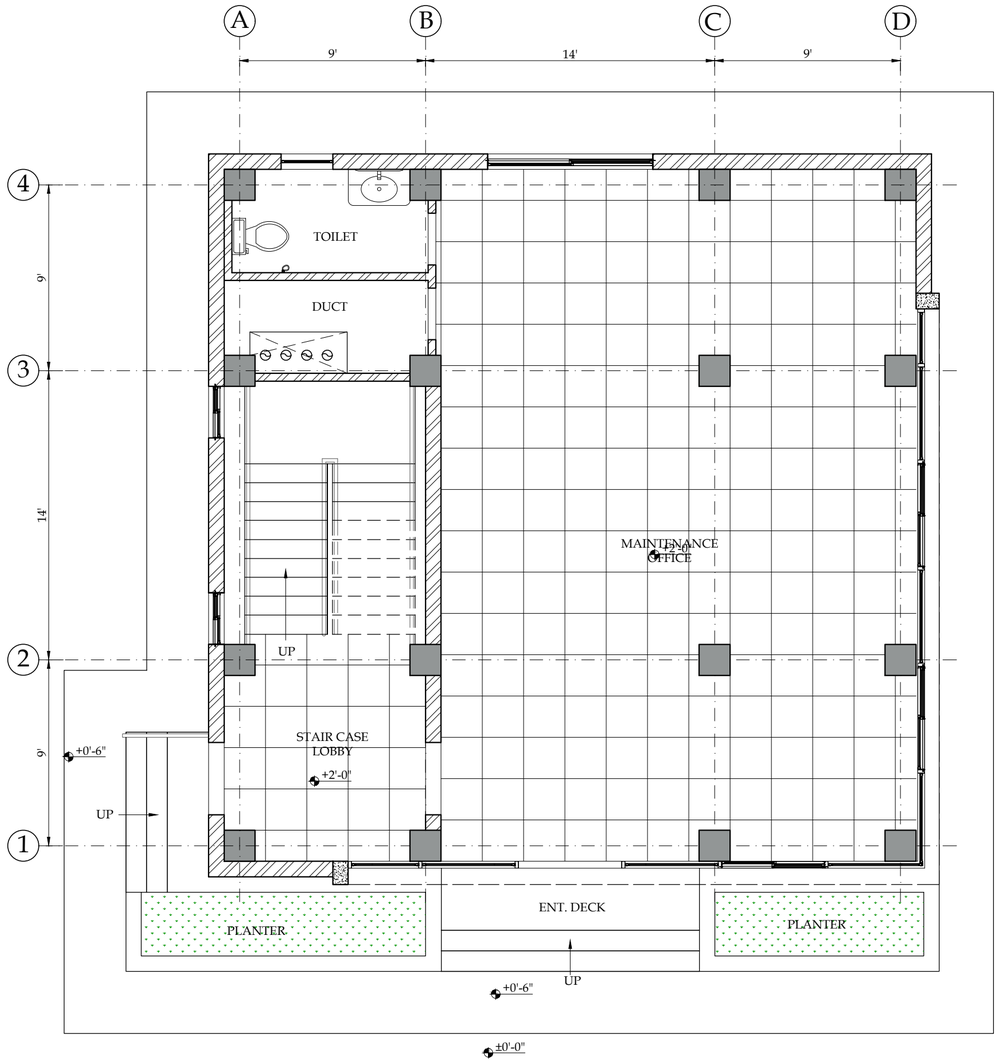
DRAWING Nº: ETL-PH-III-WS-C-12 | SHEET | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

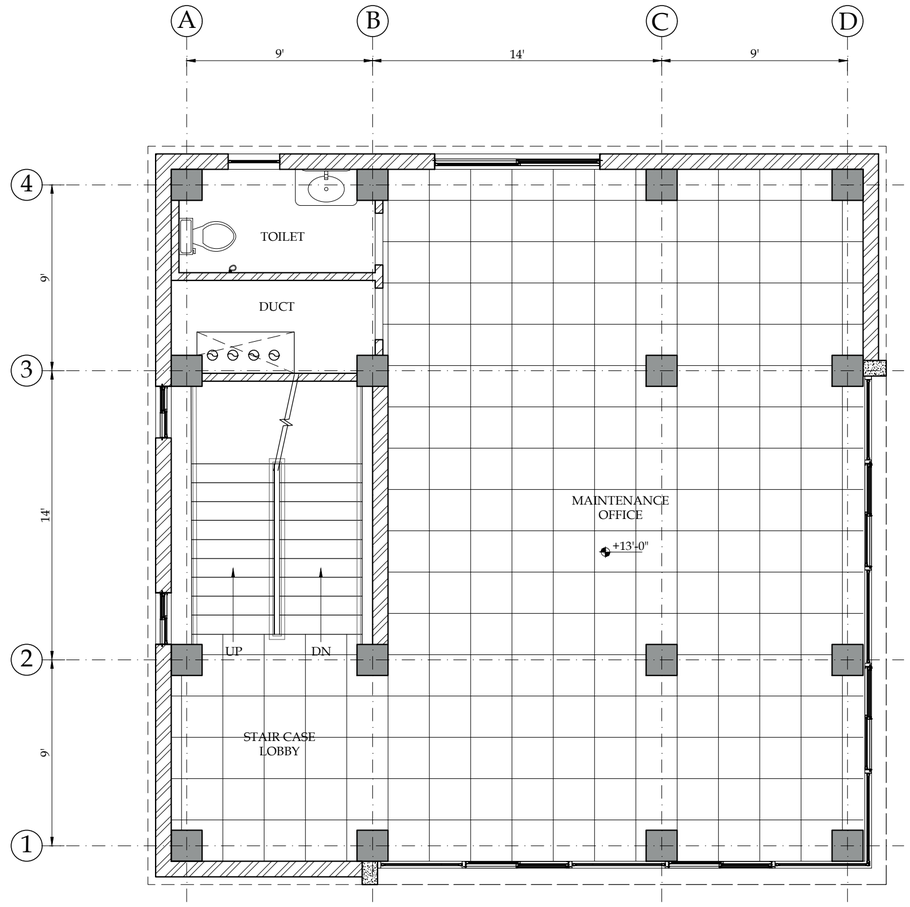
CLIENT:
ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
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TELEPHONE: +92 42 35450914-5 +92 32-142-71101
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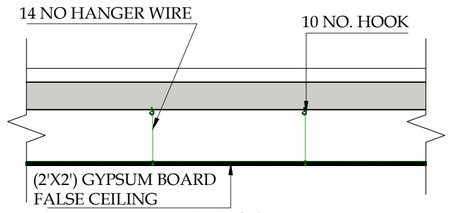
ETL-PH-III-WS-C-12



CEILING LAYOUT
GROUND FLOOR PLAN
SCALE:- 3/16" = 1'-0"



CEILING LAYOUT
1st TO 2nd FLOOR PLAN
SCALE:- 3/16" = 1'-0"



TYPICAL
CEILING SECTION
SCALE:- 1/2" = 1'-0"

PACKAGE: BLOCK-A

TITLE.
WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
CEILING LAYOUT
GROUND & 1st TO 2nd FLOOR

SHEET SIZE : A2
SCALE : 3/16" = 1'-0"

ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIR	AR. ALI WAZIR
02	11-08-2026	CONSTRUCTION DRAWINGS	FAISAL	AR. ALI WAZIR	AR. ALI WAZIR
03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III-WS-C-13
SHEET
REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT
ETIHAD TOWN (PHASE-III), LAHORE

CLIENT:
ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
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TELEPHONE: +92 42 35450914-5 +92 32-142-71101
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ETL-PH-III-WS-C-13

REINFORCEMENT

A. GENERAL

1- READ ALL DRAWINGS IN CONJUNCTION WITH ARCHITECTURAL, CIVIL, MECHANICAL, ELECTRICAL & ANY OTHER RELEVANT DRAWING.

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 MATERIAL AND WORKMANSHIP SHALL CONFORM TO CONTRACT SPECIFICATIONS. IN THE ABSENCE OF ANY SPECIFICATIONS , ALL MATERIALS & WORKMANSHIP SHALL CONFORM TO RELEVANT BRITISH/ACI CODES AND SHALL 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 ARCHITECTURAL AND 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.COST DEEMED TO BE INCLUDED IN OTHER COST DEEMED ITEMS.

7- TERMITE CONTROL TREATMENT SHALL BE CARRIED OUT IN ALL BUILDINGS/ STRUCTURES

8- ALL LEVELS AND DIMENSIONS ARE IN FEET & INCHES UNLESS OTHERWISE NOTED.

9- DO NOT SCALE THE DRAWINGS. DIMENSIONS, GIVEN ON THE DRAWING, SHALL GOVERN.

10- ALL FABRICATION, PAINTING, ERECTION AND QUALITY CONTROL IS TO BE DONE IN ACCORDANCE WITH THE LATEST APPLICABLE SPECIFICATIONS/ BRITISH STANDARDS.

11- APPLY TWO COATS OF ConGuard CTE (COAL TAR EPOXY RESIGN INTERNAL SURFACE COATING 0.5 KG PER SQ.M) BY RADIANT CONSTRUCTION TECHNOLOGIES ON INNER SURFACES WHICH ARE IN DIRECT CONTACT WITH WATER.

B. FOUNDATION

1- THE FOUNDATION IS DESIGN USING ASSUMED BEARING CAPACITY OF 1.2 TSF AND THE SAME MUST BE VERIFIED AT SITE THROUGH GEO-TECHNICAL INVESTIGATION BEFORE CONSTRUCTION.

2- BEFORE LAYING OF FOUNDATION ALL EXCAVATED AREA SHOULD BE INSPECTED BY THE ENGINEER FOR COMMENCEMENT OF WORKS.

3- COMPACTED SAND FILL (THE ENGINEER FILL MATERIAL OF A-3 TYPE AS PER AASHTO SOIL CLASSIFICATION) UP TO 95% MODIFIED PROCTOR DENSITY

4- PROVIDING AND LAYING OF DAMP PROOF COURSE OF CEMENT CONCRETE (1:2:4) INCLUDING 2 COATS OF HOT BITUMEN

C. DESIGN & LOADS

1- STRUCTURAL DESIGN IS BASED ON THE BUILDING CODE OF PAKISTAN & AMERICAN CONCRETE INSTITUTE CODE OF REINFORCED CONCRETE (ACI 318-08) AND APPROVED DESIGN CRITERIA

D. REINF. CONCRETE WORKS

1- ALL STRUCTURAL CONCRETE SHALL CONFORM TO AMERICAN STANDARD AS PER FOLLOWING TABLE.

2- WATER CEMENT RATIO SHALL NOT EXCEED 0.50 OR AS INCLUDED IN CONTRACT SPECIFICATIONS.

3- NO CONCRETING SHALL BE CARRIED OUT UNTIL PERMISSION IS GIVEN IN WRITING TO DO SO BY THE ENGINEER.

4- ALL REINFORCEMENT FOR FOUNDATION, COLUMNS, WALLS, BEAMS & SLABS SHALL BE HIGH STRENGTH DEFORMED STEEL GRADE 60 WITH A MINIMUM YIELD STRENGTH OF 60,000 psi, UNLESS OTHERWISE MENTIONED

5- ALL REINFORCEMENT SHOULD BE BENT COLD

6- ALL STRUCTURAL STEEL SHALL CONFORM TO REQUIREMENTS OF AMERICAN STANDARD ASTM 615 OR EQUIVALENT.

REINFORCED CONCRETE (RC) ELEMENT	CONCRETE GRADE DESIGNATION	CYLINDRICAL COMPRESSIVE STRENGTH (Fc') Psi
COLUMNS, LIFT WALL & WATER RETAINING STRUCTURES.	GRADE-A	4000
BEAMS, FOUNDATION & SLABS	GRADE-B	3000
BLINDING CONCRETE	GRADE-C	1500

DD. CAMBER

MEMBER SPAN LENGTH CAMBER INCH	
18 TO 25 FT	1"
MORE THAN 25 FT	1.5"

PROVIDE CAMBER IN FORM WORK BEFORE POURING OF CONCRETE IN BEAMS AND SLABS AT CENTER LOCATION.

E. MISCELLANEOUS WORKS

1- THE CONTRACTOR SHALL SUBMIT CONCRETE POURING SCHEDULE FOR ENGINEER'S APPROVAL. NO CONCRETE SHALL BE PLACED UNTIL WRITTEN PERMISSION IS GIVEN BY THE ENGINEER.

2- DURING CONSTRUCTION, STACKING OF CONSTRUCTION MATERIALS, BLOCKS, etc. SHOULD BE AVOIDED ON SLAB PANELS.

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 IN PLACE.

4- THE CONNECTION OF COLUMN & MASONRY SHALL BE BY G.I. SHEET 4" WIDE, GAUGE 22 EXTENDING 3 FEET FROM FACE OF COLUMN, IN TWO LAYERS, 6 SHEETS ON EACH COLUMN (PER STOREY), 3 ON EITHER SIDE

5- IN 4" THICK WALLS, A REINFORCEMENT OF 1" WIDE 18 GAUGE HOOP IRON SHALL BE PLACED IN COURSES NOT MORE THAN 12" APART AND CONTINUED FOR 9" INTO THE MAIN WALL ON WHICH THE PARTITION WALL ABUTS. IF THE PARTITION WALL EXCEEDS 20' IN LENGTH OR 15' HEIGHT, THE HOOP IRON SHALL BE INTRODUCED AT COURSES NOT MORE THAN 6" APART.

6- CLEAR COVER TO REINFORCEMENT SHALL BE: (inches)

STRUCTURAL ELEMENT	COVER (INCHES)
BASE SLAB / RAFT: a) BOTTOM SIDE b) TOP SIDE c) SIDES	 2 2 3
BEAMS	1½
COLUMNS	1½
12" THICK FLOOR SLABS, POTABLE WATER TANK BASE & ROOF SLABS: a) BOTTOM SIDE b) TOP SIDE	 3/4 3/4
ROOF SLAB: a) BOTTOM SIDE b) TOP SIDE	 3/4 1
EXTERNAL WALLS: a) OUTER FACE b) INNER FACE NOTE: CLEAR COVER IN PORTION OF EXTERNAL WALLS FORMING INTERNAL PART OF DUCTS WILL REMAIN SAME AS FOR EXTERNAL WALL.	 2 1
ALL INTERNAL WALLS: (3'-0" THICK, 18"-THICK,12"-THICK, 6"-THICK): a) OUTER FACE b) INNER FACE	 3/4 3/4

7- ALL REINF. STEEL SHALL BE ACCURATELY LOCATED IN THE FORMS AND HELD FIRMLY IN PLACE BEFORE & DURING THE PLACING OF CONCRETE, BY MEANS OF WIRE AND SUPPORTS ADEQUATE TO PREVENT DISPLACEMENT DURING THE COURSE OF CONSTRUCTION.

F. 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. JOINT 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 JOINTS.

3- JOINTS IN THE 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.

G. ELECTRICAL & COMMUNICATION SYSTEMS

1- CONDUITS, FOR ELECTRICAL WORKS, SHALL BE PLACED WITHIN THE REINFORCED CONCRETE. THEY SHALL BE PLACED WITHIN THE MIDDLE THIRD OF THE SECTION IN BEAMS & SLABS AND WITHIN THE MIDDLE HALF OF THE THICKNESS. SPACING BETWEEN PARALLEL CONDUITS SHALL NOT BE LESS THAN 6 INCHES.

2- THE CONTRACTOR WILL PREPARE SHOP DRAWINGS FOR ALL THE ELECTRICAL & COMMUNICATION SYSTEMS FOR THE PROJECT MANAGER APPROVED BEFORE EXECUTION OF WORK.

3- SAMPLES / TECHNICAL DATA FOR ALL THE ITEMS WILL BE SUBMITTED & APPROVED BY THE PROJECT ENGINEER BEFORE PROCUREMENT.

4- THE WORK WILL BE CARRIED OUT THROUGH APPROVED ELECTRICAL CONTRACTOR HAVING A VALID ELECTRICAL LICENCE OF THE AREA.

5- CONTRACTOR WILL PROVIDE TEST REPORT DULY VERIFIED FROM THE ELECTRICAL INSPECTOR OF THE AREA.

6- THE CONTRACTOR WILL USE MATERIALS OF APPROVED MAKE & VENDORS / MANUFACTURERS.

H. SHORING & BRACING

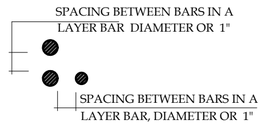
1- SHORE & BRACE ALL PARTS OF THE BUILDING DURING CONSTRUCTION, TO THE EXTENT NECESSARY TO ENSURE COMPLETE SAFETY, STRENGTH & SERVICEABILITY OF ALL STRUCTURAL ELEMENTS UNDER ALL CONDITIONS OF LOADS WHICH MAY OCCUR DURING CONSTRUCTION. SUCH SHORING & BRACING IS THE CONTRACTOR'S SOLE RESPONSIBILITY AND IS NOT SHOWN ON STRUCTURAL DRAWINGS OR SPECIFIED IN THE PROJECT.

I. WATER RETAINING STRUCTURES

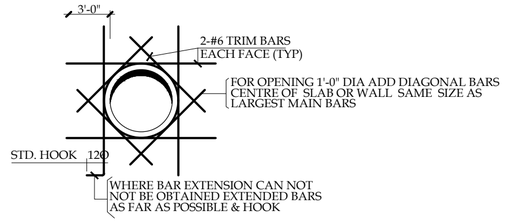
1- WATER PROOFING ADMIXTURE OF APPROVED BRAND/TYPE WILL BE ADDED TO CEMENT CONCRETE OF WATER TANK, THE COST DEEMED TO BE INCLUDED IN THE RESPECTIVE ITEM OF CEMENT CONCRETE. THE PERFORMANCE OF TANK WITH RESPECT TO LEAKAGE WILL BE THE RESPONSIBILITY OF THE CONTRACTOR; ADDITIONAL PROTECTION IF SO REQUIRED TO MAKE IT WATER PROOF WILL BE APPLIED SUBJECTED TO ENGINEER APPROVAL. NO ADDITIONAL COST OF THIS TREATMENT IF SO REQUIRED WILL BE PAYABLE.



VERTICAL BAR SPACING

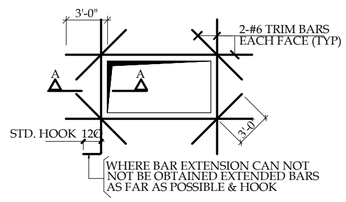


BAR SPACING IN BEAM



REINFORCEMENT AROUND SLEEVE IN SLAB & WALLS (TYP)

(NOTE: FOLLOW ABOVE REINFORCEMENT PATTERN ONLY IF NOT SPECIFICALLY SHOWN ON RESPECTIVE DESIGN / REINF. DETAIL DRAWINGS)

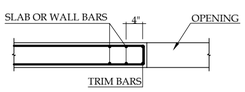


REINFORCEMENT DETAIL AT OPENING IN SLAB & WALLS (TYP)

(NOTE: FOLLOW ABOVE REINFORCEMENT PATTERN ONLY IF NOT SPECIFICALLY SHOWN ON RESPECTIVE DESIGN / REINF. DETAIL DRAWINGS)

NOTES

- FOR OPENING WITH MAXIMUM DIMENSION OVER 5'-0" REFER TO OTHER DETAILS.
- USE THIS DETAILS IF NOT SHOWN IN DESIGN DRAWINGS



SECTION A-A

PACKAGE: BLOCK-A

TITLE: WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
GENERAL NOTES-I

SHEET SIZE : A2 | SCALE : -

ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III- WS-GN-01 | SHEET 01 OF 02 | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

CLIENT: ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com

LAP LENGTH (INCHES)FOR GRADE 60, UNCOATED,OTHER THAN TOP BARS

BAR NO.	F'C (NORMAL WEIGHT CONCRETE) , PSI	
	3000	4000
3	21	18
4	27	24
5	36	30
6	42	36
7	63	54
8	72	63

LAP LENGTH INCHES)FOR GRADE 60, UNCOATED TOP BARS

BAR NO.	F'C (NORMAL WEIGHT CONCRETE) , PSI	
	3000	4000
3	27	24
4	39	33
5	48	42
6	54	48
7	81	72
8	93	81

DEVELOPMENT LENGTH (INCHES) IN TENSION OF TOP BARS

BAR NO.	F'C (NORMAL WEIGHT CONCRETE) , PSI	
	3000	4000
3	21	18
4	30	24
5	36	33
6	42	36
7	63	54
8	72	63

DEVELOPMENT LENGTH (INCHES) IN TENSION OF BOTTOM BARS

BAR NO.	F'C (NORMAL WEIGHT CONCRETE) , PSI	
	3000	4000
3	18	15
4	21	18
5	27	24
6	33	30
7	48	42
8	54	48

DEVELOPMENT LENGTH ldh (INCHES) OF STANDARD HOOKS FOR UNCOATED GRADE 60 BARS*

BAR NO.	F'C (NORMAL WEIGHT CONCRETE) , PSI					
	3000	4000	5000	6000	8000	10,000
3	8.2	7.1	6.4	5.8	5.0	4.5
4	11.0	9.5	8.5	7.7	6.7	6.0
5	13.7	11.9	10.6	9.7	8.4	7.5
6	16.4	14.2	12.7	11.6	10.1	9.0
7	19.2	16.6	14.8	13.6	11.7	10.5
8	21.9	19.0	17.0	15.5	13.4	12.0
9	24.7	21.4	19.1	17.5	15.1	13.5
10	27.8	24.1	21.6	19.7	17.0	15.2
11	30.9	26.8	23.9	21.8	18.9	16.9
14	37.1	32.1	28.7	26.2	22.7	20.3
18	49.5	42.8	38.3	35.0	30.3	27.1

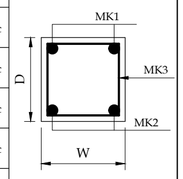
EQUIVALENT DIAMETERS OF BUNDLED BARS, IN.

BAR NO	BAR DIAMETER	2-BAR BUNDLE	3-BAR BUNDLE	4-BAR BUNDLE
6	0.750	1.06	1.30	1.50
7	0.875	1.24	1.51	1.75
8	1.000	1.42	1.74	2.01
9	1.128	1.60	1.95	2.26
10	1.270	1.80	2.20	2.54
11	1.410	1.99	2.44	2.82
14	1.693	2.39	2.93	3.39

POSSIBLE REINFORCING BAR BUNDLING SCHEMES

SCHEDULE OF LINTEL BEAMS

SPAN	W	D	MK-1	MK-2	MK-3
UP TO 3'-0"	WIDTH OF WALL	6"	2-#4	2-#4	3#8" c/c
3'-6" TO 5'-0"	WIDTH OF WALL	9"	2-#4	2-#6	3#7" c/c
5'-6" TO 7'-0"	WIDTH OF WALL	12"	2-#4	2-#6	3#6" c/c
7'-6" TO 9'-0"	WIDTH OF WALL	12"	2-#4	2-#6 + 1-#4	3#6" c/c
9'-6" TO 12'-0"	WIDTH OF WALL	15"	2-#4	3-#6	3#5" c/c

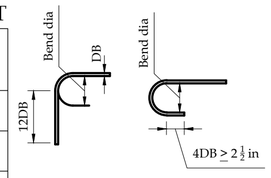


NOTE:-

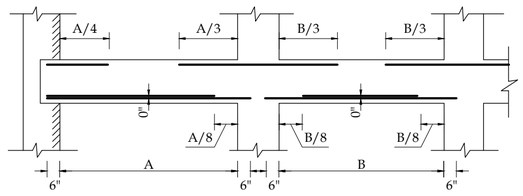
WHEN SPAN DIFFERENCE TO LOWER SIDE IS EXCESSIVE INTERPOLATE DEPTH USING SAME STEEL

STANDARD HOOKS FOR PRIMARY REINFORCEMENT

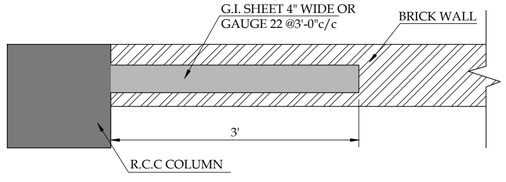
BAR SIZE, NO.	MIN.FINISHED BEND DIA. (a)
3 THROUGH 8	$6D_B$
9, 10, 11	$8D_B$
14 and 18	$10D_B$



(a) MEASURED ON INSIDE OF BAR

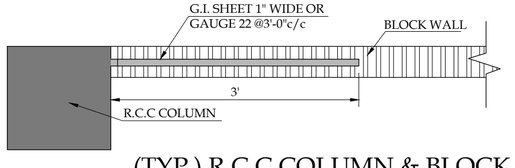


CURTAILMENT DETAIL FOR BEAM AND SLAB



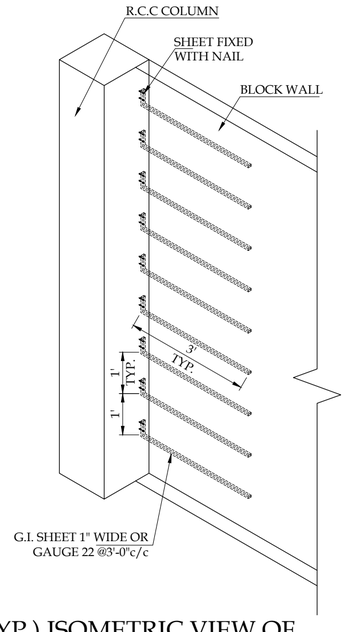
(TYP.) R.C.C COLUMN & BRICK WALL 9" THICK CONNECTION DETAIL

SCALE:- 3/4" = 1'-0"



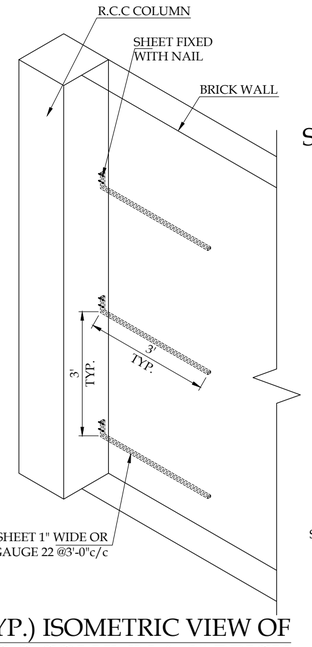
(TYP.) R.C.C COLUMN & BLOCK WALL 4" THICK CONNECTION DETAIL

SCALE:- 3/4" = 1'-0"



(TYP.) ISOMETRIC VIEW OF R.C.C COLUMN & 4" BLOCK WALL CONNECTION DETAIL

SCALE:- 3/8" = 1'-0"

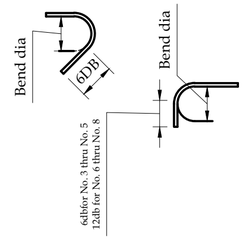


(TYP.) ISOMETRIC VIEW OF R.C.C COLUMN & 9" BRICK WALL CONNECTION DETAIL

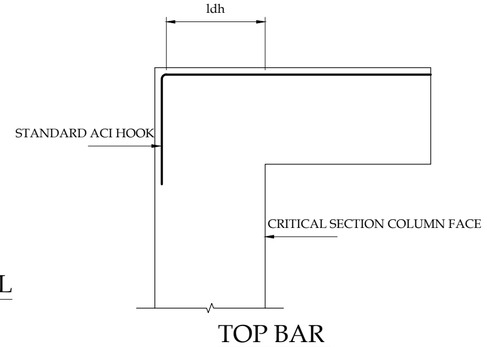
SCALE:- 3/8" = 1'-0"

STANDARD HOOKS FOR STIRRUPS AND TIE REINFORCEMENT

BAR SIZE, NO.	MIN. FINISHED BEND DIA. (B)
3 THROUGH 5	$4D_B$
6 THROUGH 8	$6D_B$



(b) MEASURED ON INSIDE OF BAR



TOP BAR DEVELOPMENT SECTION

PACKAGE: BLOCK-A

TITLE: WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
GENERAL NOTES-II

SHEET SIZE :	SCALE :
A2	-

ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	KNOR HASNAIN	FKSR FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	KNOR HASNAIN	FKSR FARHAN
03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III- WS-GN-02

SHEET 02 OF 02

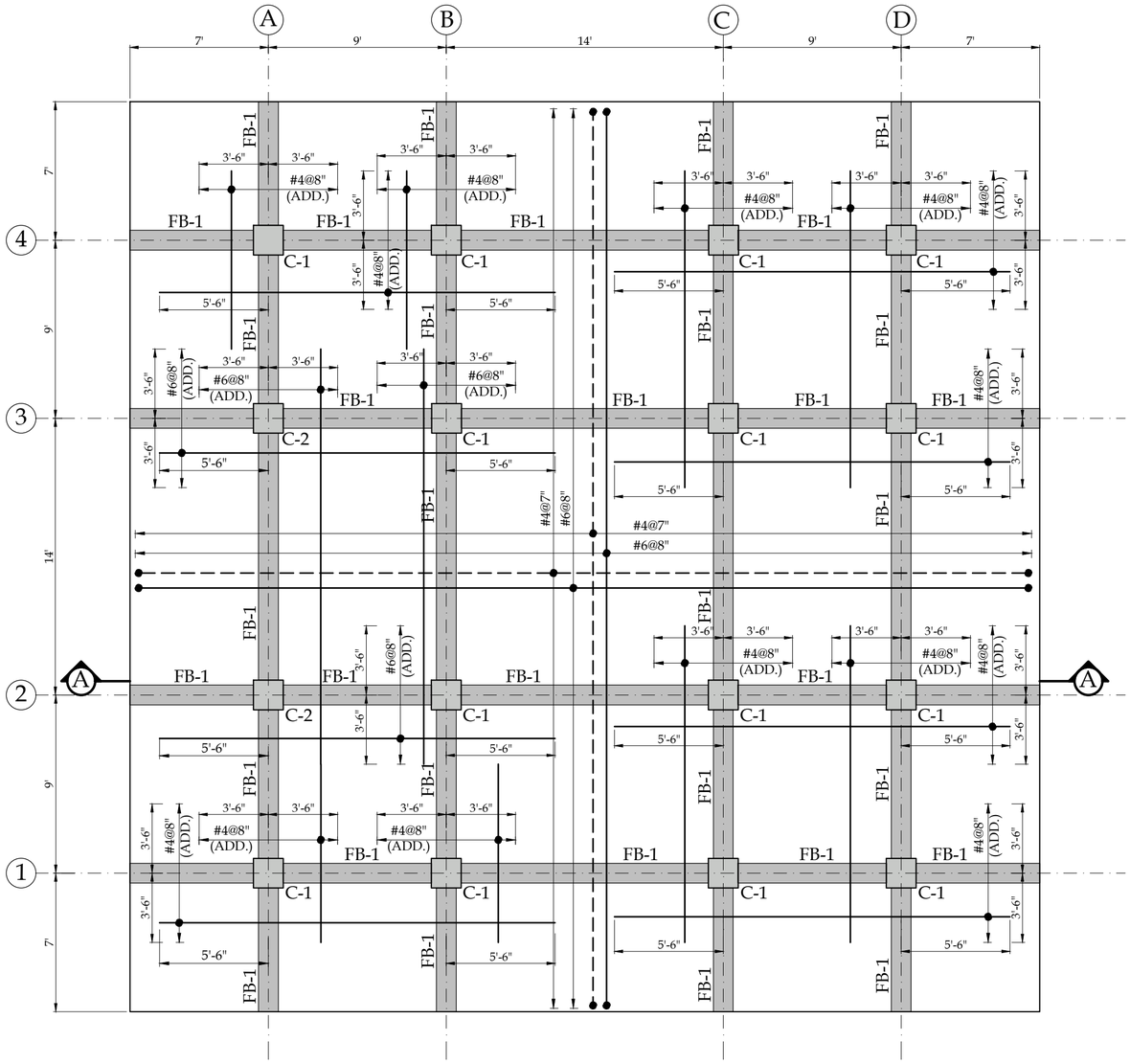
REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

CLIENT:
ETIHAD TOWN PHASE - III

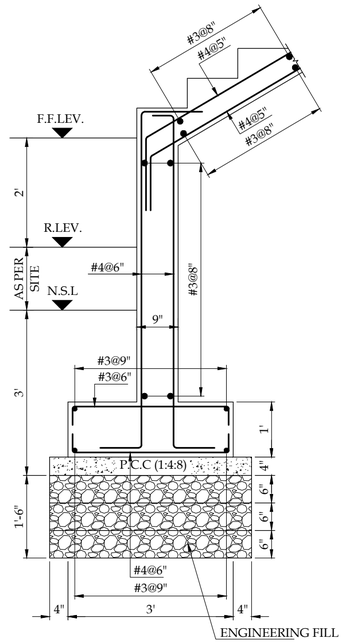
CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com

ETL-PH-III- WS-GN-02



FOUNDATION LAYOUT PLAN
RAFT=27" THICK

SCALE:- 3/16" = 1'-0"



STAIR DOWEL DETAIL

SCALE:- 1/2" = 1'-0"

PACKAGE: BLOCK-A

TITLE: WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
FOUNDATION LAYOUT PLAN

SHEET SIZE : A2 | SCALE :

ISSUE N°.	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
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04					
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07					

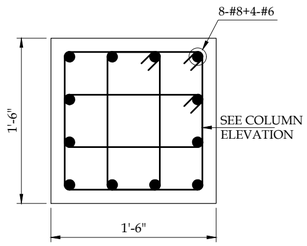
DRAWING N°: ETL-PH-III- WS-S-01 | SHEET | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

CLIENT: ETIHAD TOWN PHASE - III

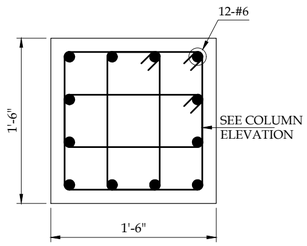
CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com

ETL-PH-III- WS-S-01



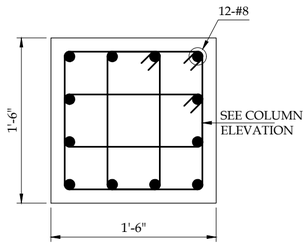
COLUMN C-1

FOUNDATION TO EL (+13'-0")
SCALE:- 1" = 1'-0"



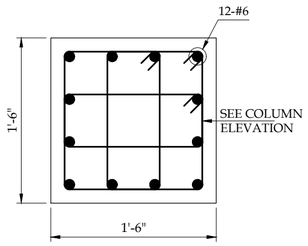
COLUMN C-1

FROM EL (+13'-0") TO EL (+90'-9")
SCALE:- 1" = 1'-0"



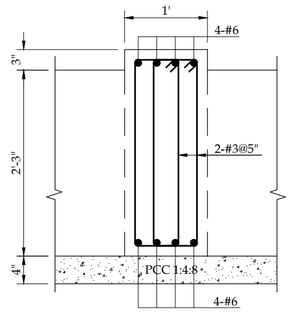
COLUMN C-2

FOUNDATION TO EL (+13'-0")
SCALE:- 1" = 1'-0"



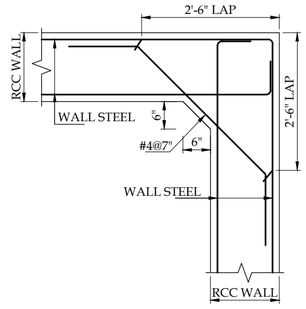
COLUMN C-2

FROM EL (+13'-0") TO EL (+90'-9")
SCALE:- 1" = 1'-0"



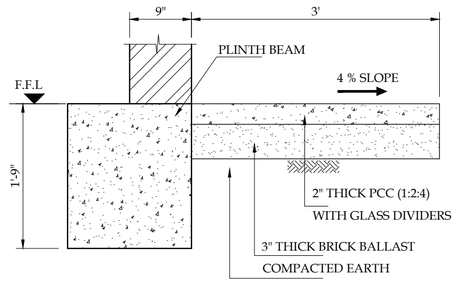
FOOTING BEAM FB-1

SCALE:- 3/4" = 1'-0"



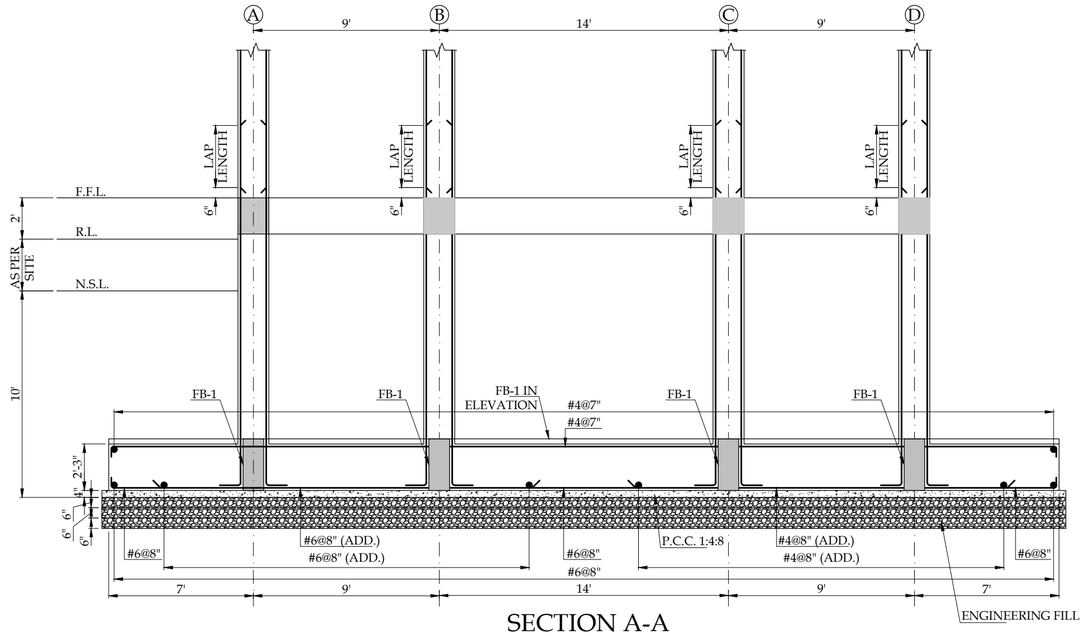
TYP. RCC WALL FOR L-SHAPED REIN. DETAIL

SCALE:- 1/2" = 1'-0"



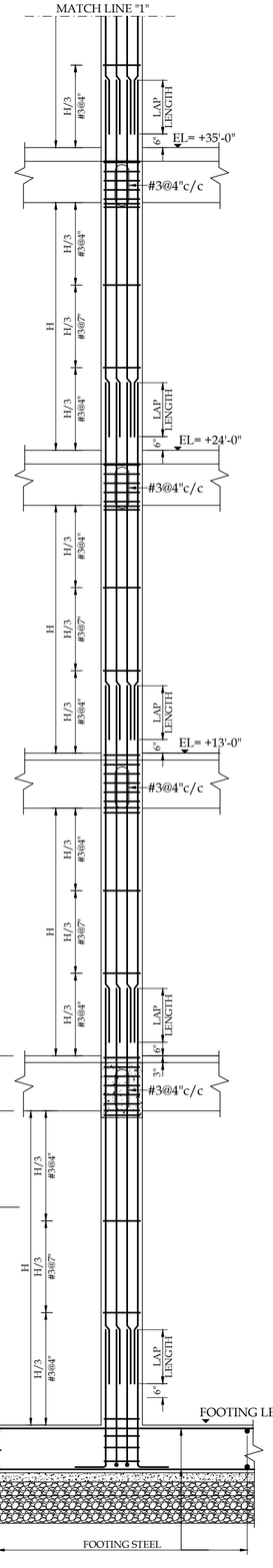
PLINTH PROTECTION DETAIL

SCALE:- 3/4" = 1'-0"



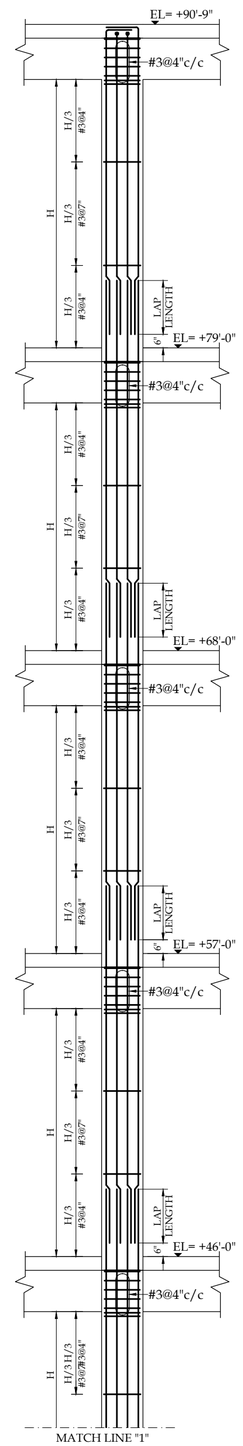
SECTION A-A

SCALE:- 3/16" = 1'-0"



(TYPICAL) COLUMN ELEVATION

SCALE:- 1/4" = 1'-0"



(TYPICAL) COLUMN ELEVATION

SCALE:- 1/4" = 1'-0"

PACKAGE: BLOCK-A

TITLE.
WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
FOUNDATION SECTIONAL DETAILS

SHEET SIZE :	SCALE :
A2	

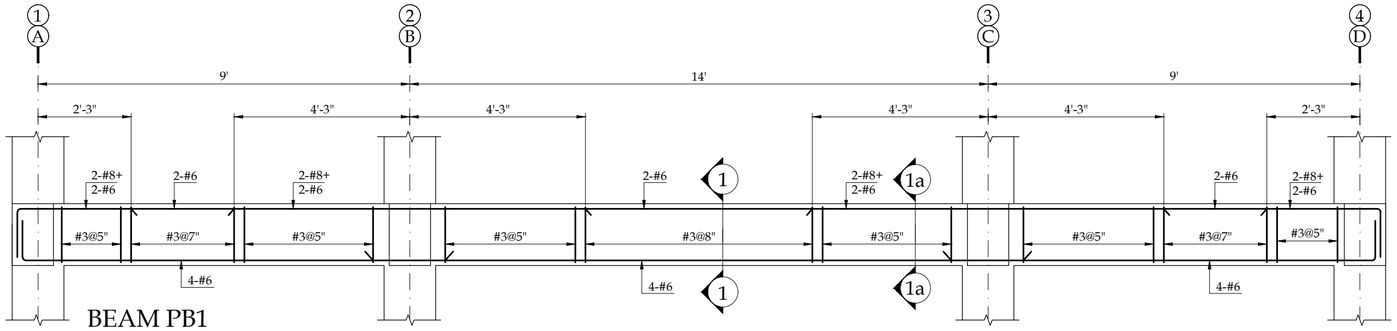
ISSUE N°.	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III- WS-S-02 | SHEET | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

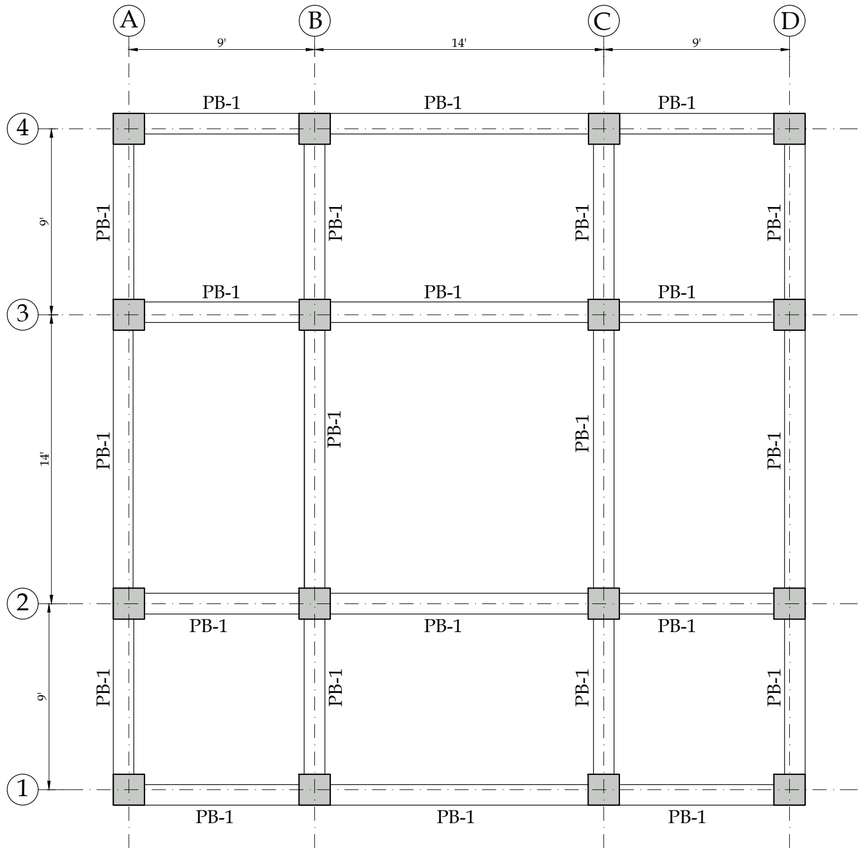
CLIENT:

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com



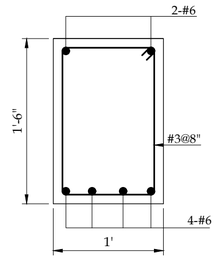
BEAM PB1

SCALE:- 3/8" = 1'-0"



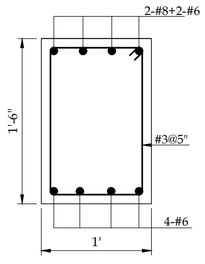
PLINTH BEAM LAYOUT PLAN

SCALE:- 3/16" = 1'-0"



SECTION 1-1

SCALE:- 1" = 1'-0"



SECTION 1a-1a

SCALE:- 1" = 1'-0"

PACKAGE: BLOCK-A

TITLE: WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
PLINTH BEAM LAYOUT PLAN & DETAILS

SHEET SIZE : A2 | SCALE :

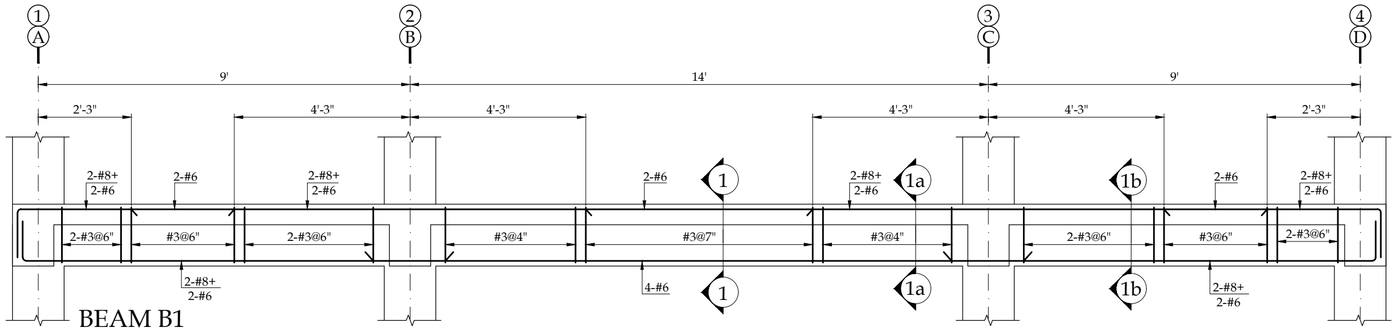
ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III- WS-S-03 | SHEET | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT
ETIHAD TOWN (PHASE-III), LAHORE

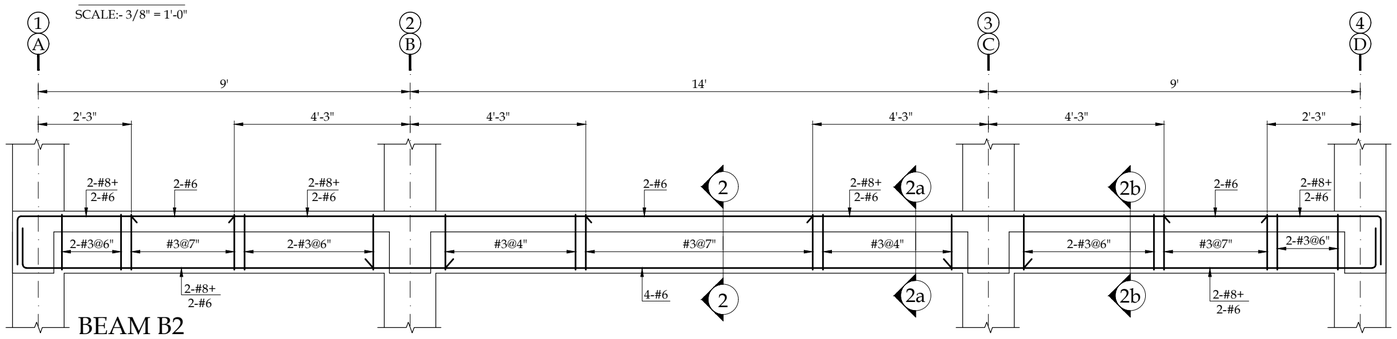
CLIENT: ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
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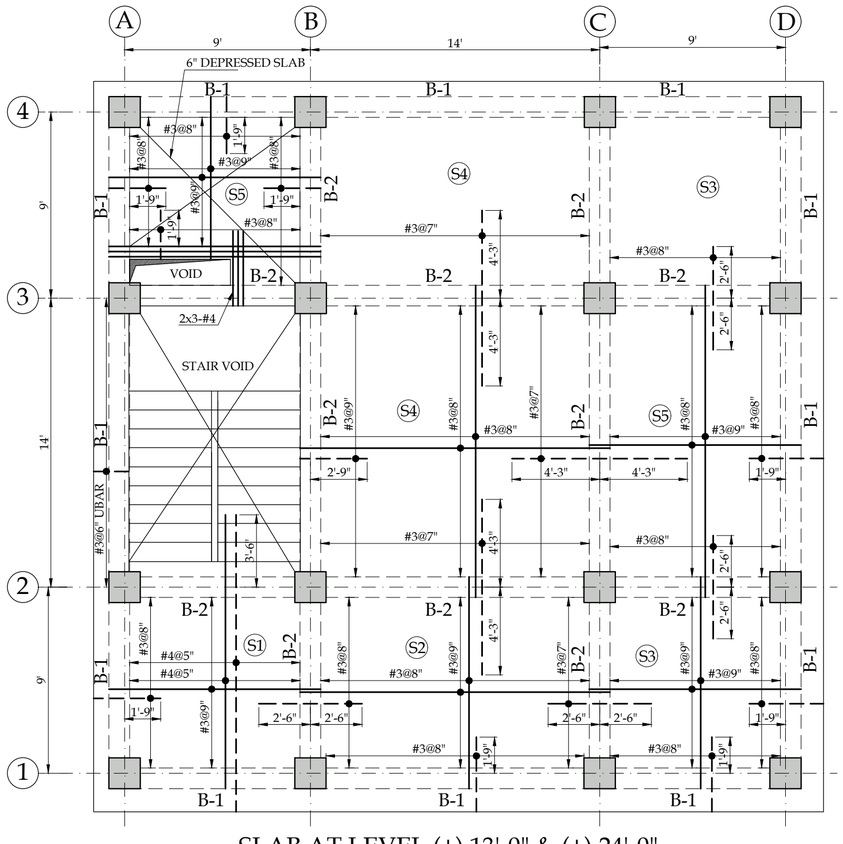
BEAM B1

SCALE:- 3/8" = 1'-0"



BEAM B2

SCALE:- 3/8" = 1'-0"

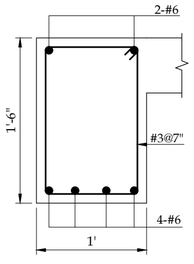


SLAB AT LEVEL (+) 13'-0" & (+) 24'-0"

SCALE:- 3/16" = 1'-0"

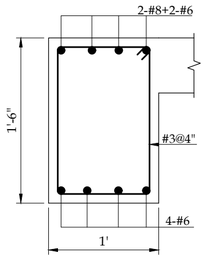
NOTE:

1. THICKNESS OF ALL SLABS IS 6" UNLESS OTHERWISE NOTED.
2. DISTRIBUTION TOP BARS #3@12"c/c.



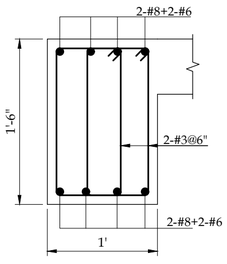
SECTION 1-1

SCALE:- 1" = 1'-0"



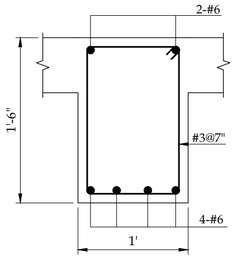
SECTION 1a-1a

SCALE:- 1" = 1'-0"



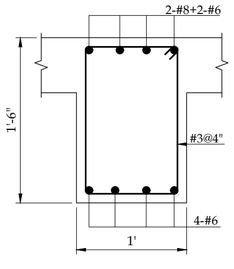
SECTION 1b-1b

SCALE:- 1" = 1'-0"



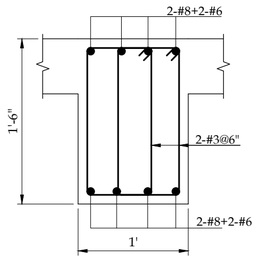
SECTION 2-2

SCALE:- 1" = 1'-0"



SECTION 2a-2a

SCALE:- 1" = 1'-0"



SECTION 2b-2b

SCALE:- 1" = 1'-0"

PACKAGE: BLOCK-A

TITLE: WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
SLAB AT LEVEL (+) 13'-0", (+) 24'-0"
& BEAMS DETAILS

SHEET SIZE :	SCALE :
A2	

ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
03					
04					
05					
06					
07					

DRAWING N°:

ETL-PH-III- WS-S-04

SHEET

REV 01

PROJECT:

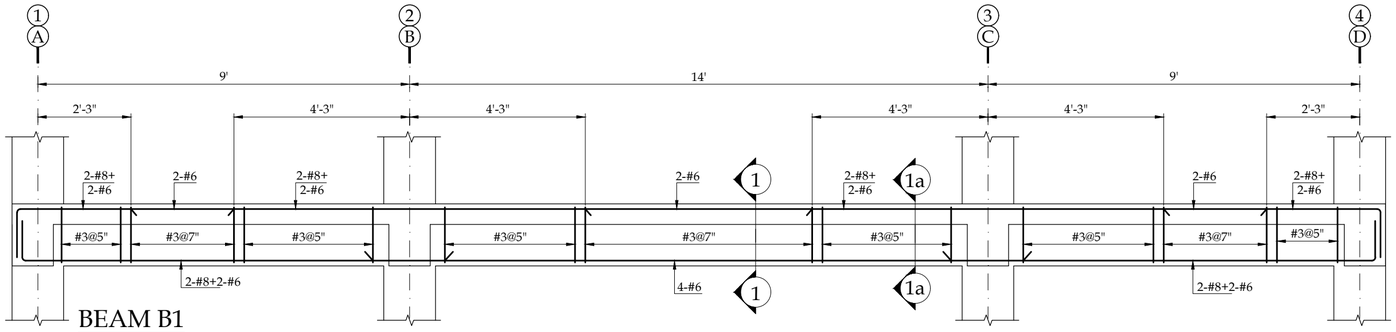
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

CLIENT:

ETIHAD TOWN PHASE - III

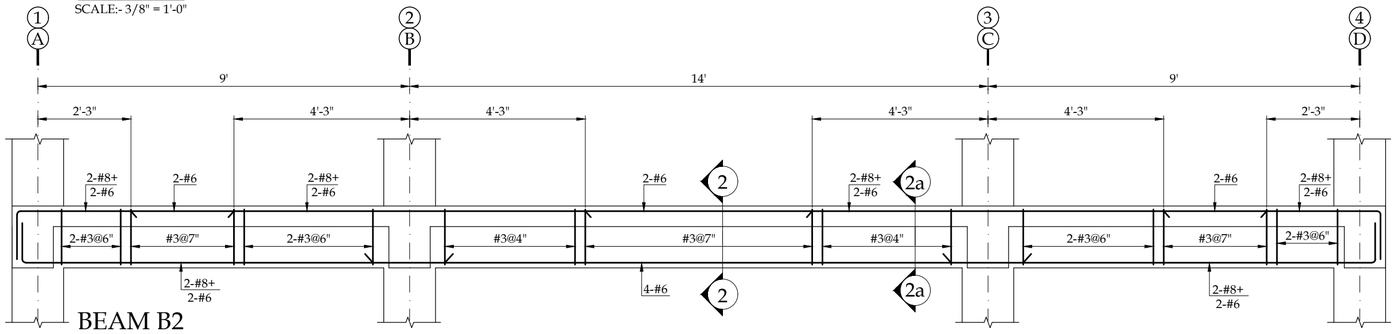
CONSULTANT:

ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAX: +92 42 35450916 WEB: www.asiancon.com



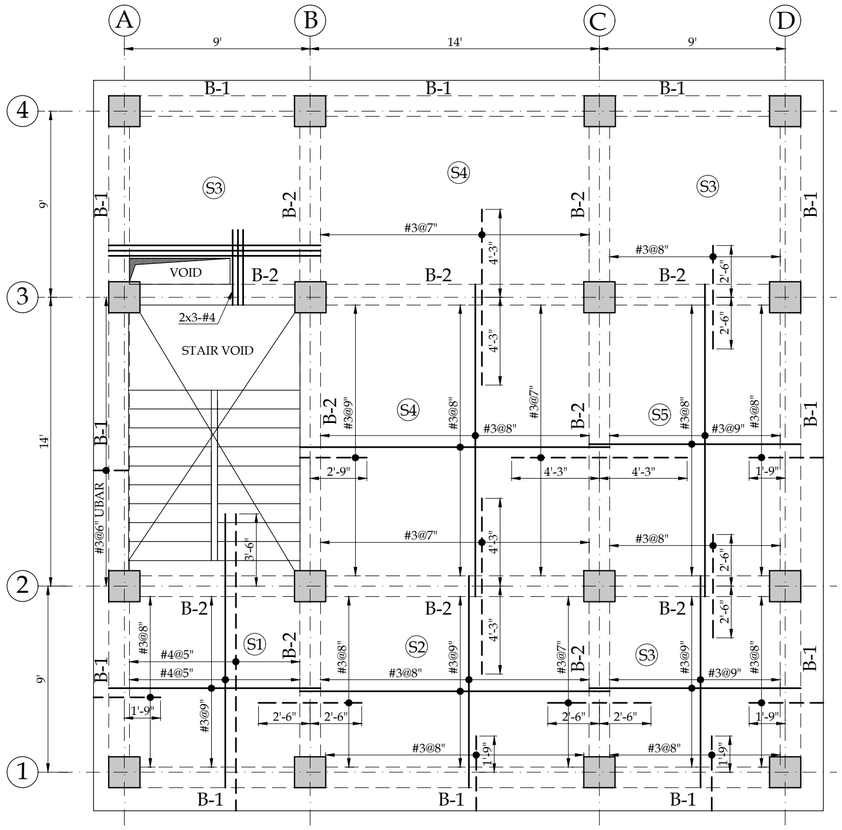
BEAM B1

SCALE:- 3/8" = 1'-0"



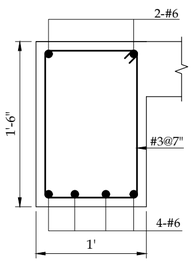
BEAM B2

SCALE:- 3/8" = 1'-0"



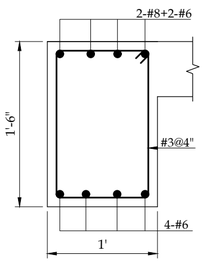
SLAB AT LEVEL (+) 35'-0"

SCALE:- 3/16" = 1'-0"



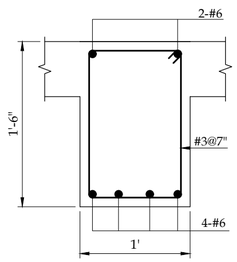
SECTION 1-1

SCALE:- 1" = 1'-0"



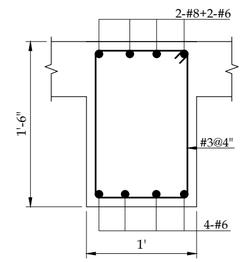
SECTION 1a-1a

SCALE:- 1" = 1'-0"



SECTION 2-2

SCALE:- 1" = 1'-0"



SECTION 2a-2a

SCALE:- 1" = 1'-0"

NOTE:

1. THICKNESS OF ALL SLABS IS 6" UNLESS OTHERWISE NOTED.
2. DISTRIBUTION TOP BARS #3@12"c/c.

PACKAGE: BLOCK-A

TITLE: WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
SLAB AT LEVEL (+) 35'-0" & BEAMS DETAILS

SHEET SIZE : A2 | SCALE :

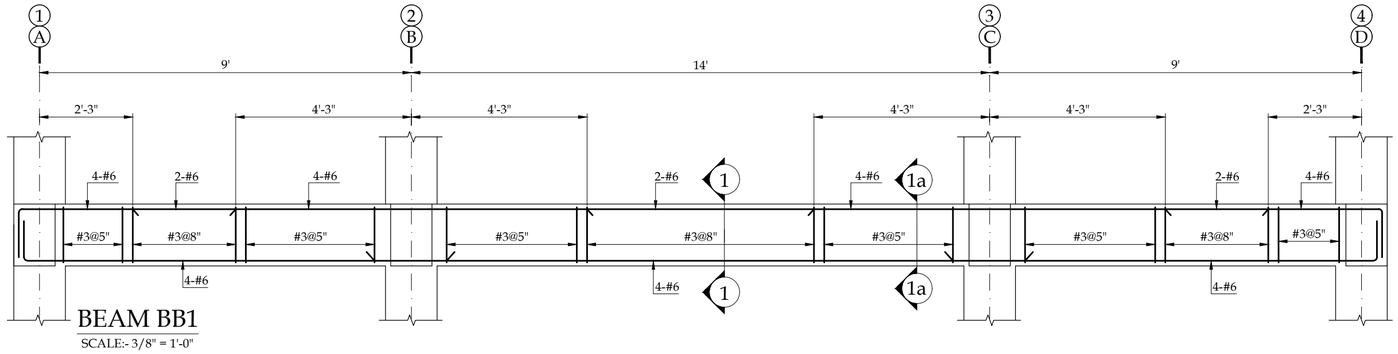
ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III- WS-S-05 | SHEET | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

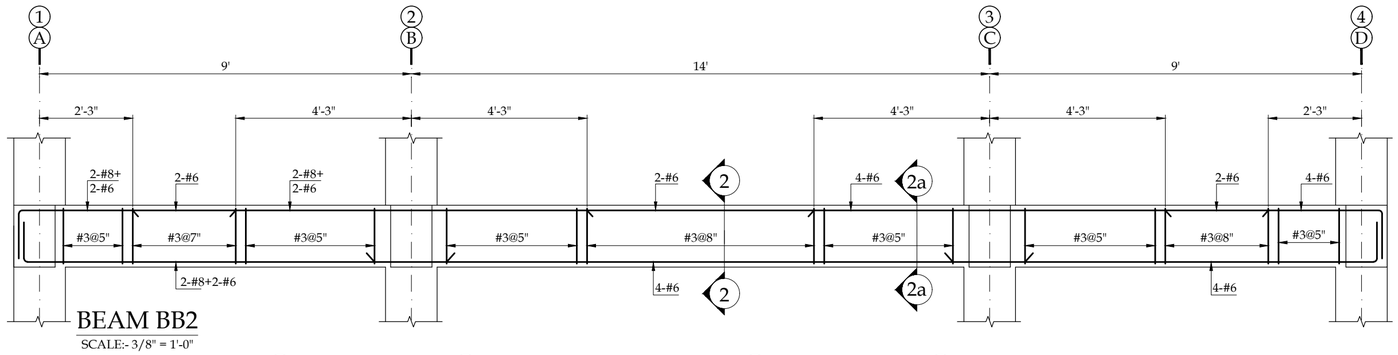
CLIENT:
ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com



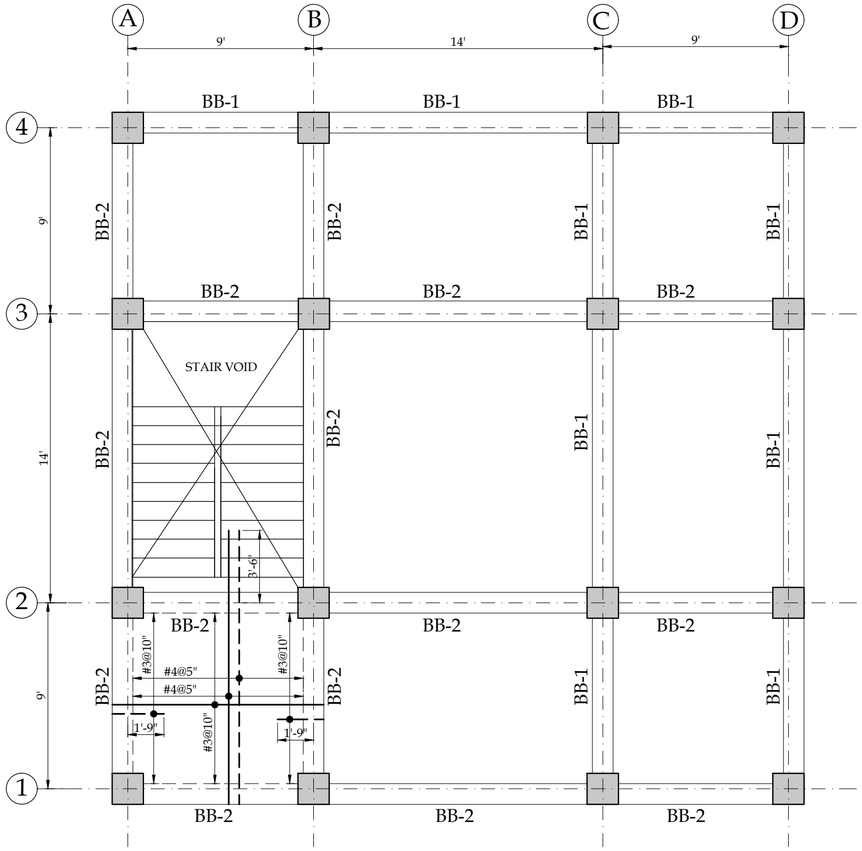
BEAM BB1

SCALE:- 3/8" = 1'-0"



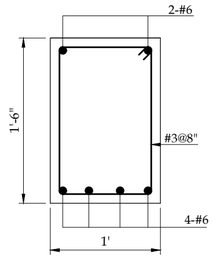
BEAM BB2

SCALE:- 3/8" = 1'-0"



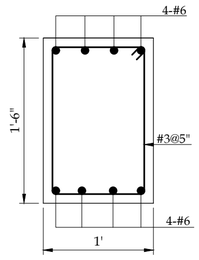
PLAN AT LEVEL (+) 46'-0", (+) 57'-0" & (+)68'-0"

SCALE:- 3/16" = 1'-0"



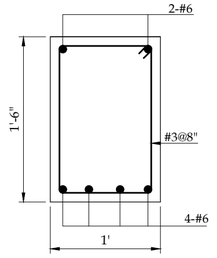
SECTION 1-1

SCALE:- 1" = 1'-0"



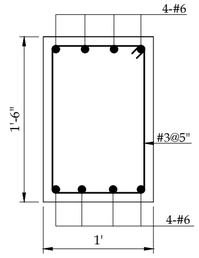
SECTION 1a-1a

SCALE:- 1" = 1'-0"



SECTION 2-2

SCALE:- 1" = 1'-0"



SECTION 2a-2a

SCALE:- 1" = 1'-0"

NOTE:

1. THICKNESS OF ALL SLABS IS 6" UNLESS OTHERWISE NOTED.
2. DISTRIBUTION TOP BARS #3@12"c/c.

PACKAGE: BLOCK-A

TITLE: WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
PLAN AT LEVEL (+) 46'-0", (+) 57'-0" & (+)68'-0" & BEAM DETAILS

SHEET SIZE : A2 | SCALE :

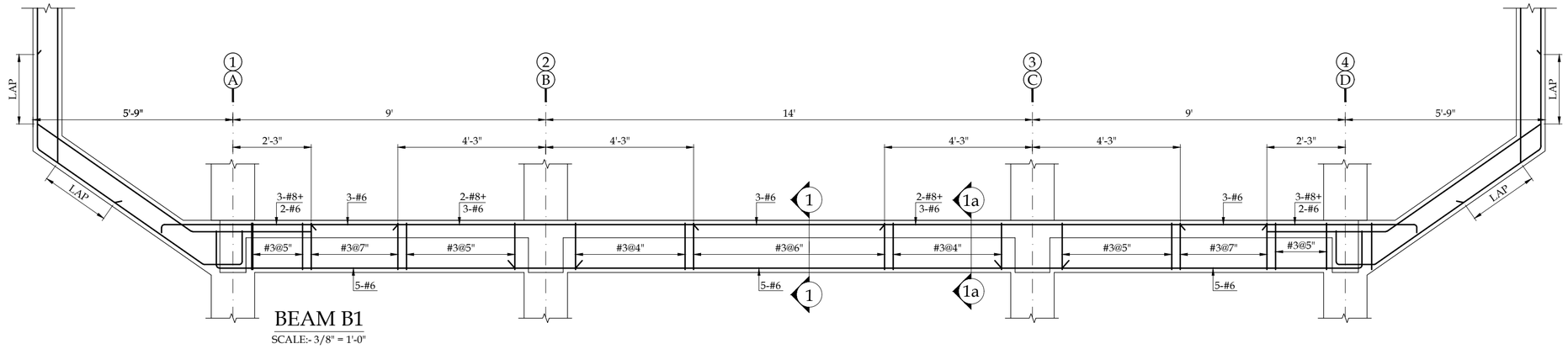
ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III- WS-S-06 | SHEET | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

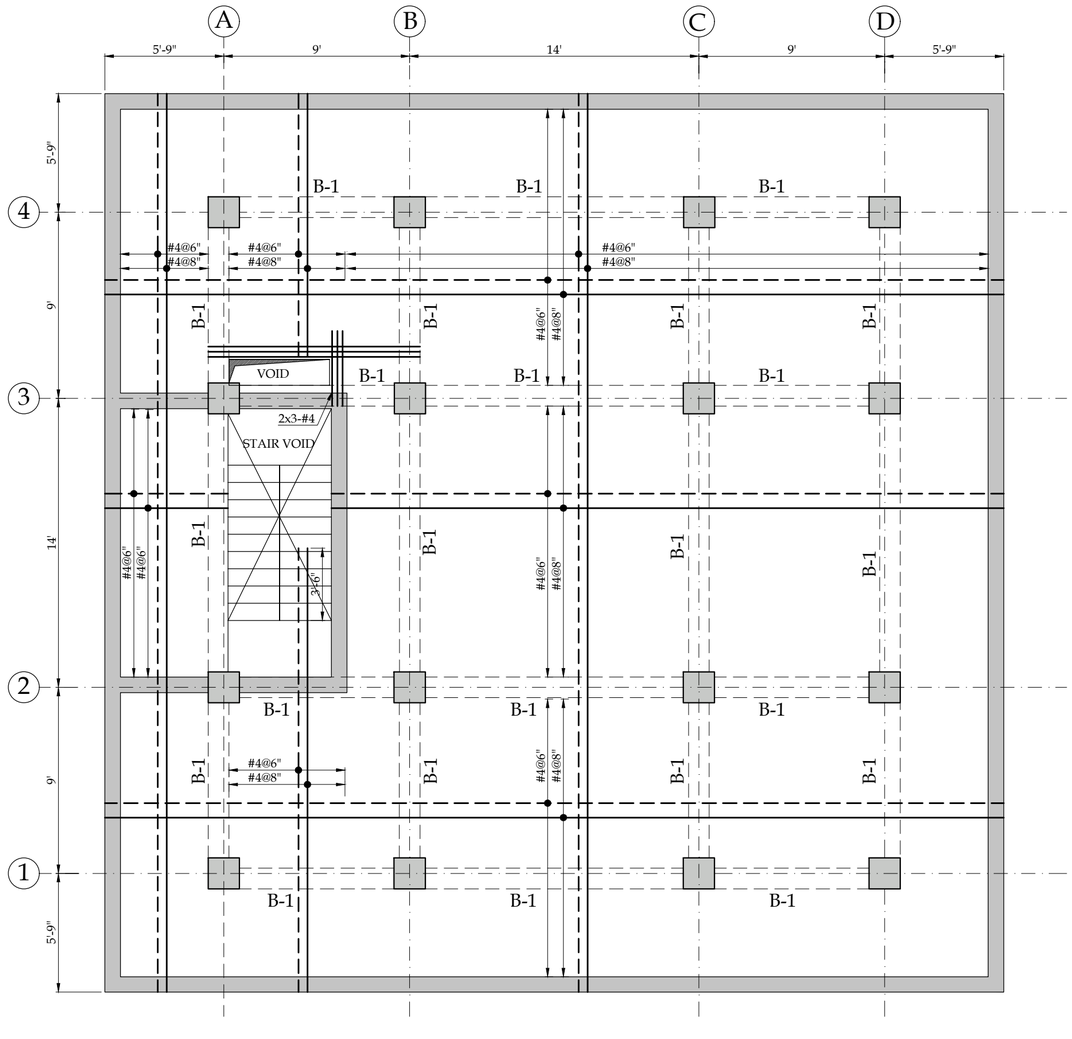
CLIENT: ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 3545091-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com



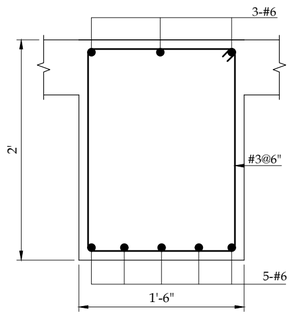
BEAM B1

SCALE:- 3/8" = 1'-0"



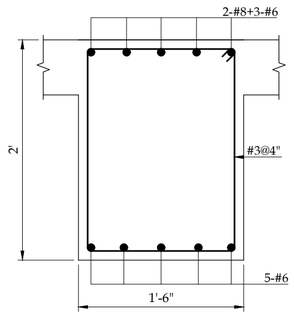
SLAB AT LEVEL (+) 79'-0"

SCALE:- 3/16" = 1'-0"



SECTION 1-1

SCALE:- 1" = 1'-0"



SECTION 1a-1a

SCALE:- 1" = 1'-0"

NOTE:

1. THICKNESS OF ALL SLABS IS 12" UNLESS OTHERWISE NOTED.
2. DISTRIBUTION TOP BARS #3@12"c/c.

PACKAGE: BLOCK-A

TITLE: WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
SLAB AT LEVEL (+) 79'-0"
& BEAM DETAILS

SHEET SIZE :	SCALE :
A2	

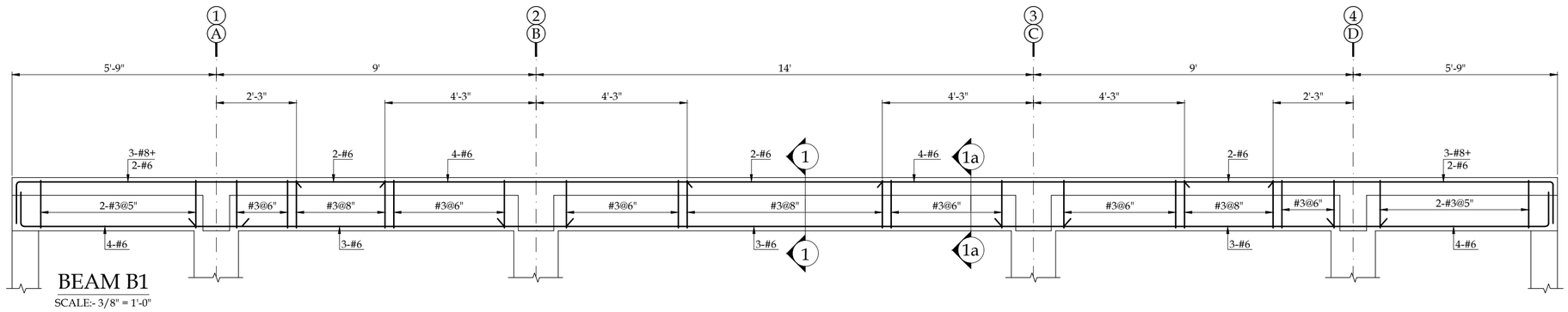
ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III- WS-S-07 | SHEET | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT
ETIHAD TOWN (PHASE-III), LAHORE

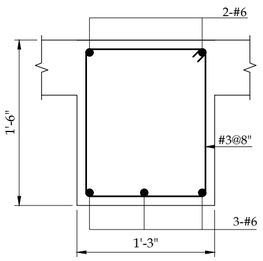
CLIENT: ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com



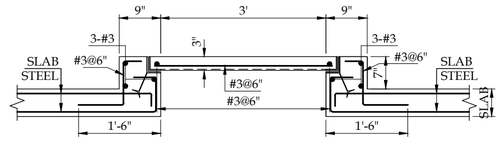
BEAM B1

SCALE:- 3/8" = 1'-0"



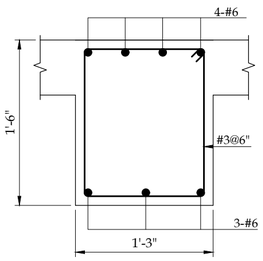
SECTION 1-1

SCALE:- 1" = 1'-0"



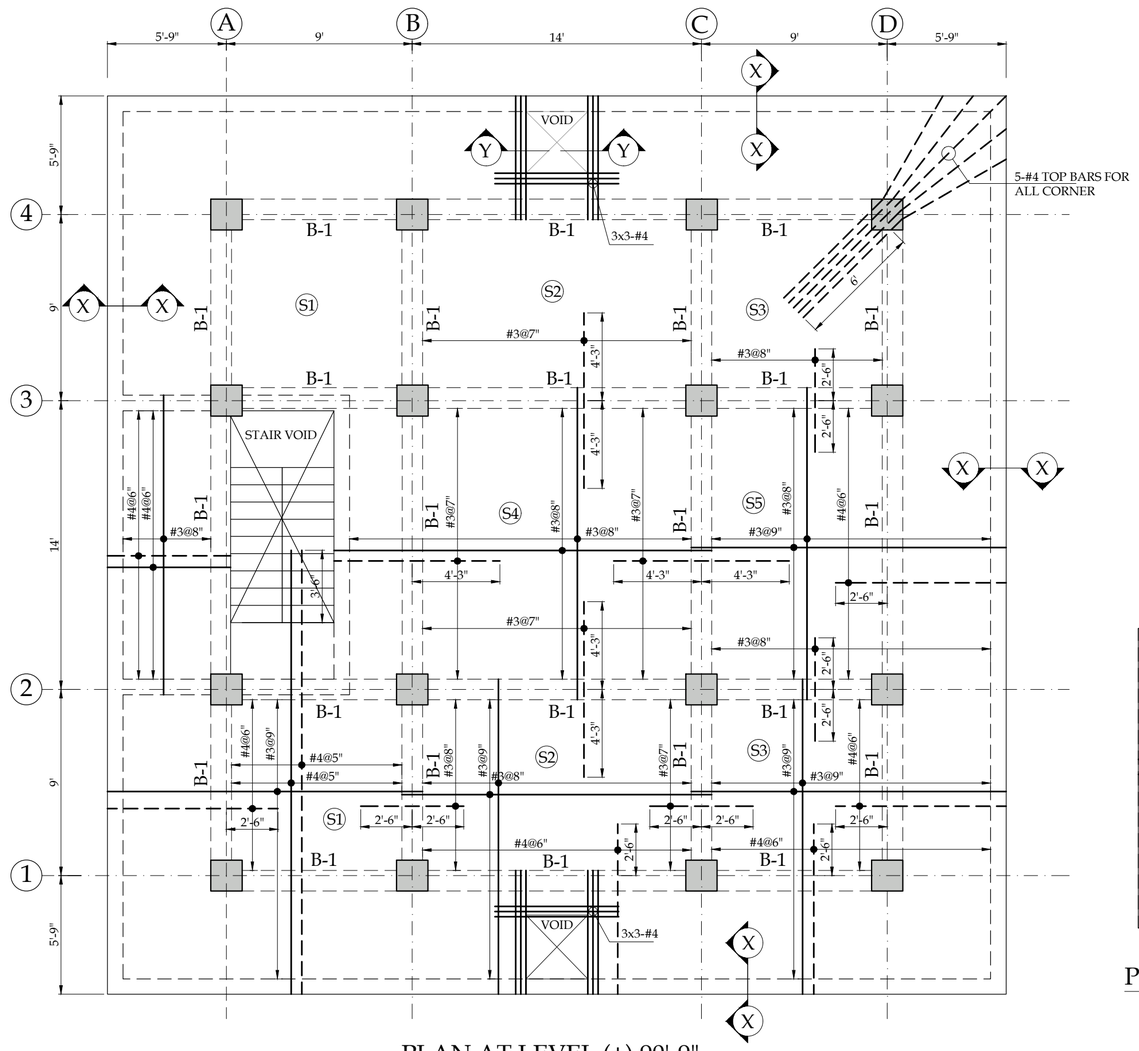
SECTION Y-Y

SCALE:- 1/2" = 1'-0"



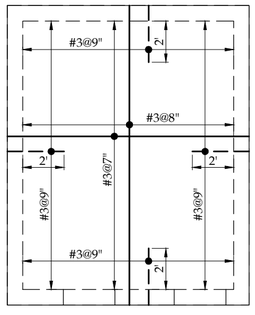
SECTION 1a-1a

SCALE:- 1" = 1'-0"



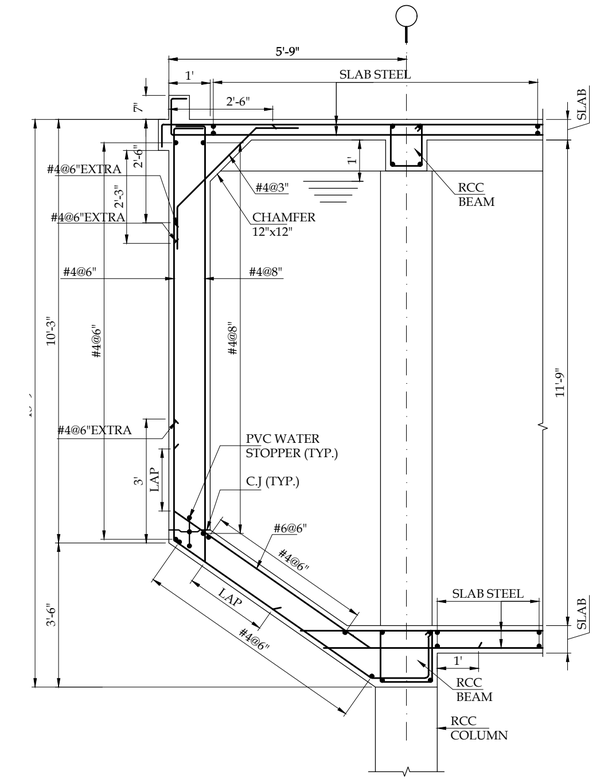
PLAN AT LEVEL (+) 90'-9"

SCALE:- 3/16" = 1'-0"



PLAN AT LEVEL (+) 98'-6"

SCALE:- 3/16" = 1'-0"



SECTION X-X

SCALE:- 3/8" = 1'-0"

NOTE:

1. THICKNESS OF ALL SLABS IS 6" UNLESS OTHERWISE NOTED.
2. DISTRIBUTION TOP BARS #3@12"c/c.

PACKAGE: BLOCK-A

TITLE: WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
SLAB AT LEVEL (+) 90'-9"
& BEAM DETAILS

SHEET SIZE : A2 | SCALE :

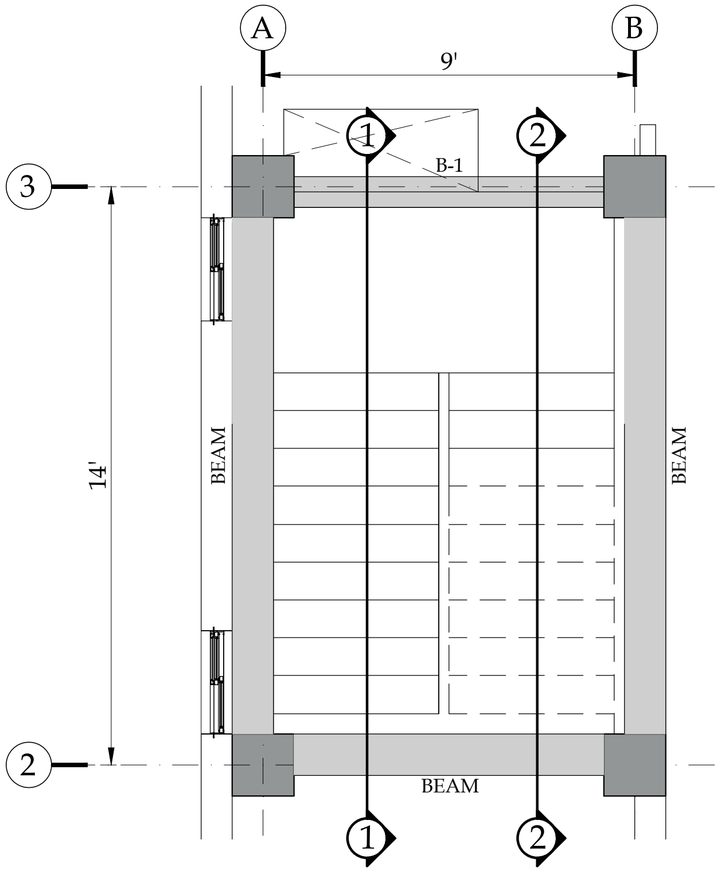
ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
03					
04					
05					
06					
07					

DRAWING Nº: ETL-PH-III- WS-S-08 | SHEET | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT
ETIHAD TOWN (PHASE-III), LAHORE

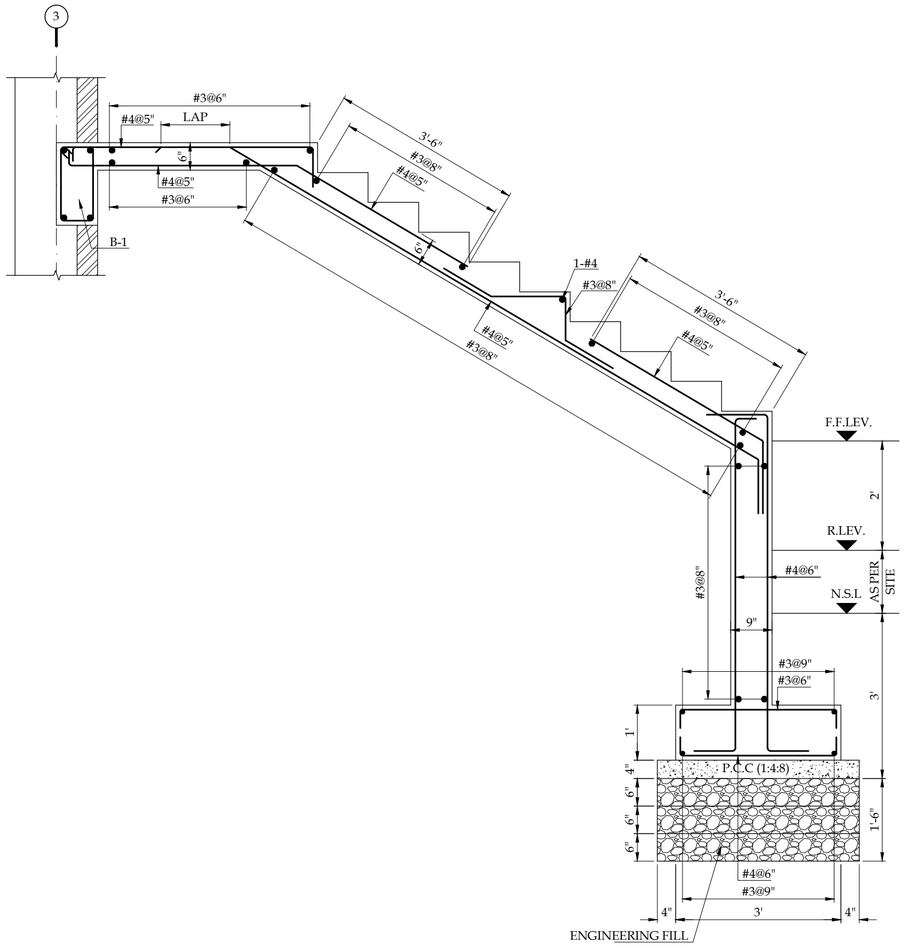
CLIENT: ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com



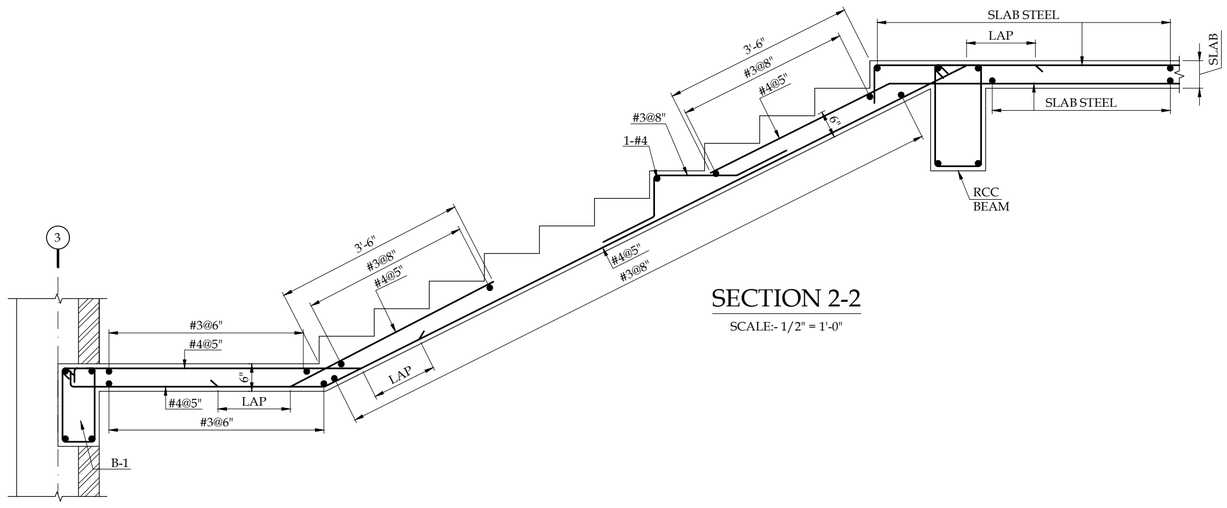
PART PLAN STAIR

SCALE:- 3/8" = 1'-0"



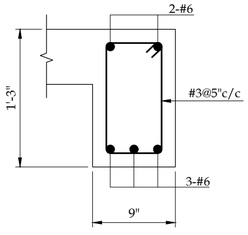
SECTION 1-1

SCALE:- 1/2" = 1'-0"



SECTION 2-2

SCALE:- 1/2" = 1'-0"



BEAM B-1

SCALE:- 1" = 1'-0"

PACKAGE:	BLOCK-A
TITLE.	WATER SUPPLY SYSTEM OHR OF CAPACITY 100,000 GALLONS STAIR STRUCTURAL DETAIL

SHEET SIZE :	SCALE :
A2	

ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
03					
04					
05					
06					
07					

DRAWING Nº:	SHEET	REV
ETL-PH-III- WS-S-09		01

PROJECT:

DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

CLIENT:

ETIHAD TOWN PHASE - III

CONSULTANT:

ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com

HVAC

A. GENERAL

1- READ ALL DRAWINGS IN CONJUNCTION WITH ARCHITECTURAL, CIVIL, MECHANICAL, ELECTRICAL & ANY OTHER RELEVANT DRAWING.

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 MATERIAL AND WORKMANSHIP SHALL CONFORM TO CONTRACT SPECIFICATIONS. IN THE ABSENCE OF ANY SPECIFICATIONS , ALL MATERIALS & WORKMANSHIP SHALL CONFORM TO RELEVANT BRITISH/ACI CODES AND SHALL 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 ARCHITECTURAL AND 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.COST DEEMED TO BE INCLUDED IN OTHER COST DEEMED ITEMS.

7- TERMITE CONTROL TREATMENT SHALL BE CARRIED OUT IN ALL BUILDINGS/ STRUCTURES

8- ALL LEVELS AND DIMENSIONS ARE IN FEET & INCHES UNLESS OTHERWISE NOTED.

9- DO NOT SCALE THE DRAWINGS. DIMENSIONS, GIVEN ON THE DRAWING, SHALL GOVERN.

10- ALL FABRICATION, PAINTING, ERECTION AND QUALITY CONTROL IS TO BE DONE IN ACCORDANCE WITH THE LATEST APPLICABLE SPECIFICATIONS/ BRITISH STANDARDS.

11- APPLY TWO COATS OF ConGuard CTE (COAL TAR EPOXY RESIGN INTERNAL SURFACE COATING 0.5 KG PER SQ.M) BY RADIANT CONSTRUCTION TECHNOLOGIES ON INNER SURFACES WHICH ARE IN DIRECT CONTACT WITH WATER.

B. FOUNDATION

1- THE FOUNDATION IS DESIGN USINGBEARING CAPACITY OF 1.2 TSF, AS REPORTED IN GEO-TECHNICAL INVESTIGATION REPORT

2- BEFORE LAYING OF FOUNDATION ALL EXCAVATED AREA SHOULD BE INSPECTED BY THE ENGINEER FOR COMMENCEMENT OF WORKS.

3- COMPACTED SAND FILL (THE ENGINEER FILL MATERIAL OF A-3 TYPE AS PER AASHTO SOIL CLASSIFICATION) UP TO 95% MODIFIED PROCTOR DENSITY

4- PROVIDING AND LAYING OF DAMP PROOF COURSE OF CEMENT CONCRETE (1:2:4) INCLUDING 2 COATS OF HOT BITUMEN

C. DESIGN & LOADS

1- STRUCTURAL DESIGN IS BASED ON THE BUILDING CODE OF PAKISTAN & AMERICAN CONCRETE INSTITUTE CODE OF REINFORCED CONCRETE (ACI 318-08) AND APPROVED DESIGN CRITERIA

D. REINF. CONCRETE WORKS

1- ALL STRUCTURAL CONCRETE SHALL CONFORM TO AMERICAN STANDARD AS PER FOLLOWING TABLE.

2- WATER CEMENT RATIO SHALL NOT EXCEED 0.50 OR AS INCLUDED IN CONTRACT SPECIFICATIONS.

3- NO CONCRETING SHALL BE CARRIED OUT UNTIL PERMISSION IS GIVEN IN WRITING TO DO SO BY THE ENGINEER.

4- ALL REINFORCEMENT FOR FOUNDATION, COLUMNS, WALLS, BEAMS & SLABS SHALL BE HIGH STRENGTH DEFORMED STEEL GRADE 60 WITH A MINIMUM YIELD STRENGTH OF 60,000 psi, UNLESS OTHERWISE MENTIONED

5- ALL REINFORCEMENT SHOULD BE BENT COLD

6- ALL STRUCTURAL STEEL SHALL CONFORM TO REQUIREMENTS OF AMERICAN STANDARD ASTM 615 OR EQUIVALENT.

REINFORCED CONCRETE (RC) ELEMENT	CONCRETE GRADE DESIGNATION	CYLINDRICAL COMPRESSIVE STRENGTH (Fc') Psi
COLUMNS, LIFT WALL & WATER RETAINING STRUCTURES.	GRADE-A	4000
BEAMS, FOUNDATION & SLABS	GRADE-B	3000
BLINDING CONCRETE	GRADE-C	1500

DD. CAMBER

MEMBER SPAN LENGTH CAMBER INCH	
18 TO 25 FT	1"
MORE THAN 25 FT	1.5"

PROVIDE CAMBER IN FORM WORK BEFORE POURING OF CONCRETE IN BEAMS AND SLABS AT CENTER LOCATION.

E. MISCELLANEOUS WORKS

1- THE CONTRACTOR SHALL SUBMIT CONCRETE POURING SCHEDULE FOR ENGINEER'S APPROVAL. NO CONCRETE SHALL BE PLACED UNTIL WRITTEN PERMISSION IS GIVEN BY THE ENGINEER.

2- DURING CONSTRUCTION, STACKING OF CONSTRUCTION MATERIALS, BLOCKS, etc. SHOULD BE AVOIDED ON SLAB PANELS.

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 IN PLACE.

4- THE CONNECTION OF COLUMN & MASONRY SHALL BE BY G.I. SHEET 4" WIDE, GAUGE 22 EXTENDING 3 FEET FROM FACE OF COLUMN, IN TWO LAYERS, 6 SHEETS ON EACH COLUMN (PER STOREY), 3 ON EITHER SIDE

5- IN 4" THICK WALLS, A REINFORCEMENT OF 1" WIDE 18 GAUGE HOOP IRON SHALL BE PLACED IN COURSES NOT MORE THAN 12" APART AND CONTINUED FOR 9" INTO THE MAIN WALL ON WHICH THE PARTITION WALL ABUTS. IF THE PARTITION WALL EXCEEDS 20' IN LENGTH OR 15' HEIGHT, THE HOOP IRON SHALL BE INTRODUCED AT COURSES NOT MORE THAN 6" APART.

6- CLEAR COVER TO REINFORCEMENT SHALL BE: (inches)

STRUCTURAL ELEMENT	COVER (INCHES)
BASE SLAB / RAFT: a) BOTTOM SIDE b) TOP SIDE c) SIDES	 2 2 3
BEAMS	1½
COLUMNS	1½
12" THICK FLOOR SLABS, POTABLE WATER TANK BASE & ROOF SLABS: a) BOTTOM SIDE b) TOP SIDE	 3/4 3/4
ROOF SLAB: a) BOTTOM SIDE b) TOP SIDE	 3/4 1
EXTERNAL WALLS: a) OUTER FACE b) INNER FACE NOTE: CLEAR COVER IN PORTION OF EXTERNAL WALLS FORMING INTERNAL PART OF DUCTS WILL REMAIN SAME AS FOR EXTERNAL WALL.	 2 1
ALL INTERNAL WALLS: (3'-0" THICK, 18"-THICK,12"-THICK, 6"-THICK): a) OUTER FACE b) INNER FACE	 3/4 3/4

7- ALL REINF. STEEL SHALL BE ACCURATELY LOCATED IN THE FORMS AND HELD FIRMLY IN PLACE BEFORE & DURING THE PLACING OF CONCRETE, BY MEANS OF WIRE AND SUPPORTS ADEQUATE TO PREVENT DISPLACEMENT DURING THE COURSE OF CONSTRUCTION.

F. 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. JOINT 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 JOINTS.

3- JOINTS IN THE 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.

G. ELECTRICAL & COMMUNICATION SYSTEMS

1- CONDUITS, FOR ELECTRICAL WORKS, SHALL BE PLACED WITHIN THE REINFORCED CONCRETE. THEY SHALL BE PLACED WITHIN THE MIDDLE THIRD OF THE SECTION IN BEAMS & SLABS AND WITHIN THE MIDDLE HALF OF THE THICKNESS. SPACING BETWEEN PARALLEL CONDUITS SHALL NOT BE LESS THAN 6 INCHES.

2- THE CONTRACTOR WILL PREPARE SHOP DRAWINGS FOR ALL THE ELECTRICAL & COMMUNICATION SYSTEMS FOR THE PROJECT MANAGER APPROVED BEFORE EXECUTION OF WORK.

3- SAMPLES / TECHNICAL DATA FOR ALL THE ITEMS WILL BE SUBMITTED & APPROVED BY THE PROJECT ENGINEER BEFORE PROCUREMENT.

4- THE WORK WILL BE CARRIED OUT THROUGH APPROVED ELECTRICAL CONTRACTOR HAVING A VALID ELECTRICAL LICENCE OF THE AREA.

5- CONTRACTOR WILL PROVIDE TEST REPORT DULY VERIFIED FROM THE ELECTRICAL INSPECTOR OF THE AREA.

6- THE CONTRACTOR WILL USE MATERIALS OF APPROVED MAKE & VENDORS / MANUFACTURERS.

H. SHORING & BRACING

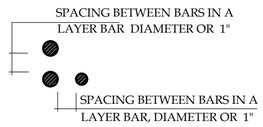
1- SHORE & BRACE ALL PARTS OF THE BUILDING DURING CONSTRUCTION, TO THE EXTENT NECESSARY TO ENSURE COMPLETE SAFETY, STRENGTH & SERVICEABILITY OF ALL STRUCTURAL ELEMENTS UNDER ALL CONDITIONS OF LOADS WHICH MAY OCCUR DURING CONSTRUCTION. SUCH SHORING & BRACING IS THE CONTRACTOR'S SOLE RESPONSIBILITY AND IS NOT SHOWN ON STRUCTURAL DRAWINGS OR SPECIFIED IN THE PROJECT.

I. WATER RETAINING STRUCTURES

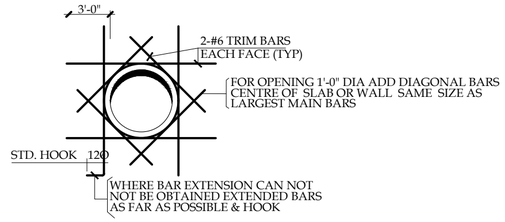
1- WATER PROOFING ADMIXTURE OF APPROVED BRAND/TYPE WILL BE ADDED TO CEMENT CONCRETE OF WATER TANK, THE COST DEEMED TO BE INCLUDED IN THE RESPECTIVE ITEM OF CEMENT CONCRETE. THE PERFORMANCE OF TANK WITH RESPECT TO LEAKAGE WILL BE THE RESPONSIBILITY OF THE CONTRACTOR; ADDITIONAL PROTECTION IF SO REQUIRED TO MAKE IT WATER PROOF WILL BE APPLIED SUBJECTED TO ENGINEER APPROVAL. NO ADDITIONAL COST OF THIS TREATMENT IF SO REQUIRED WILL BE PAYABLE.



VERTICAL BAR SPACING

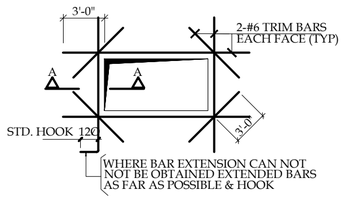


BAR SPACING IN BEAM



REINFORCEMENT AROUND SLEEVE IN SLAB & WALLS (TYP)

(NOTE: FOLLOW ABOVE REINFORCEMENT PATTERN ONLY IF NOT SPECIFICALLY SHOWN ON RESPECTIVE DESIGN / REINF. DETAIL DRAWINGS)

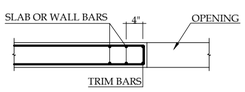


REINFORCEMENT DETAIL AT OPENING IN SLAB & WALLS (TYP)

(NOTE: FOLLOW ABOVE REINFORCEMENT PATTERN ONLY IF NOT SPECIFICALLY SHOWN ON RESPECTIVE DESIGN / REINF. DETAIL DRAWINGS)

NOTES

- FOR OPENING WITH MAXIMUM DIMENSION OVER 5'-0" REFER TO OTHER DETAILS.
- USE THIS DETAILS IF NOT SHOWN IN DESIGN DRAWINGS



SECTION A-A

PACKAGE: BLOCK-A

TITLE: WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
GENERAL NOTES-I

SHEET SIZE : A2 | SCALE : -

ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III- WS-GN-01 | SHEET 01 OF 02 | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

CLIENT: ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
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FAx: +92 42 35450916 WEB: www.asiancon.com

LAP LENGTH (INCHES)FOR GRADE 60, UNCOATED,OTHER THAN TOP BARS

BAR NO.	F'C (NORMAL WEIGHT CONCRETE) , PSI	
	3000	4000
3	21	18
4	27	24
5	36	30
6	42	36
7	63	54
8	72	63

LAP LENGTH INCHES)FOR GRADE 60, UNCOATED TOP BARS

BAR NO.	F'C (NORMAL WEIGHT CONCRETE) , PSI	
	3000	4000
3	27	24
4	39	33
5	48	42
6	54	48
7	81	72
8	93	81

DEVELOPMENT LENGTH (INCHES) IN TENSION OF TOP BARS

BAR NO.	F'C (NORMAL WEIGHT CONCRETE) , PSI	
	3000	4000
3	21	18
4	30	24
5	36	33
6	42	36
7	63	54
8	72	63

DEVELOPMENT LENGTH (INCHES) IN TENSION OF BOTTOM BARS

BAR NO.	F'C (NORMAL WEIGHT CONCRETE) , PSI	
	3000	4000
3	18	15
4	21	18
5	27	24
6	33	30
7	48	42
8	54	48

DEVELOPMENT LENGTH ldh (INCHES) OF STANDARD HOOKS FOR UNCOATED GRADE 60 BARS*

BAR NO.	F'C (NORMAL WEIGHT CONCRETE) , PSI					
	3000	4000	5000	6000	8000	10,000
3	8.2	7.1	6.4	5.8	5.0	4.5
4	11.0	9.5	8.5	7.7	6.7	6.0
5	13.7	11.9	10.6	9.7	8.4	7.5
6	16.4	14.2	12.7	11.6	10.1	9.0
7	19.2	16.6	14.8	13.6	11.7	10.5
8	21.9	19.0	17.0	15.5	13.4	12.0
9	24.7	21.4	19.1	17.5	15.1	13.5
10	27.8	24.1	21.6	19.7	17.0	15.2
11	30.9	26.8	23.9	21.8	18.9	16.9
14	37.1	32.1	28.7	26.2	22.7	20.3
18	49.5	42.8	38.3	35.0	30.3	27.1

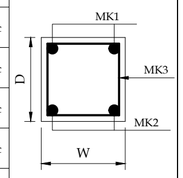
EQUIVALENT DIAMETERS OF BUNDLED BARS, IN.

BAR NO	BAR DIAMETER	2-BAR BUNDLE	3-BAR BUNDLE	4-BAR BUNDLE
6	0.750	1.06	1.30	1.50
7	0.875	1.24	1.51	1.75
8	1.000	1.42	1.74	2.01
9	1.128	1.60	1.95	2.26
10	1.270	1.80	2.20	2.54
11	1.410	1.99	2.44	2.82
14	1.693	2.39	2.93	3.39

POSSIBLE REINFORCING BAR BUNDLING SCHEMES

SCHEDULE OF LINTEL BEAMS

SPAN	W	D	MK-1	MK-2	MK-3
UP TO 3'-0"	WIDTH OF WALL	6"	2-#4	2-#4	3#8" c/c
3'-6" TO 5'-0"	WIDTH OF WALL	9"	2-#4	2-#6	3#7" c/c
5'-6" TO 7'-0"	WIDTH OF WALL	12"	2-#4	2-#6	3#6" c/c
7'-6" TO 9'-0"	WIDTH OF WALL	12"	2-#4	2-#6 + 1-#4	3#6" c/c
9'-6" TO 12'-0"	WIDTH OF WALL	15"	2-#4	3-#6	3#5" c/c

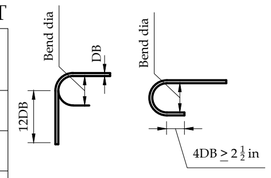


NOTE:-

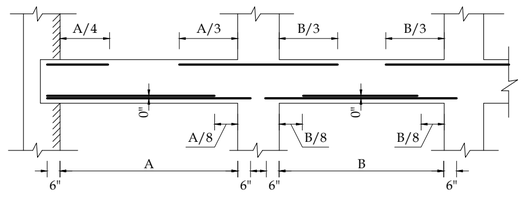
WHEN SPAN DIFFERENCE TO LOWER SIDE IS EXCESSIVE INTERPOLATE DEPTH USING SAME STEEL

STANDARD HOOKS FOR PRIMARY REINFORCEMENT

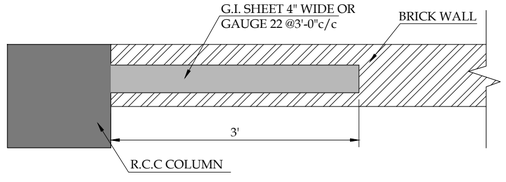
BAR SIZE, NO.	MIN.FINISHED BEND DIA. (a)
3 THROUGH 8	$6D_B$
9, 10, 11	$8D_B$
14 and 18	$10D_B$



(a) MEASURED ON INSIDE OF BAR

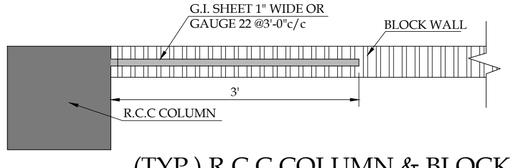


CURTAILMENT DETAIL FOR BEAM AND SLAB



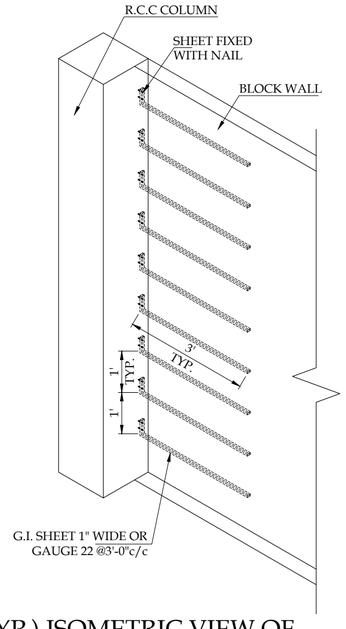
(TYP.) R.C.C COLUMN & BRICK WALL 9" THICK CONNECTION DETAIL

SCALE:- 3/4" = 1'-0"



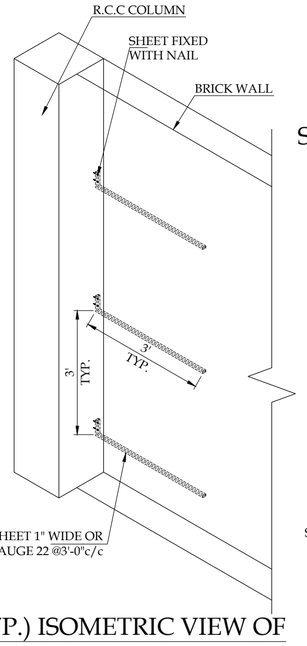
(TYP.) R.C.C COLUMN & BLOCK WALL 4" THICK CONNECTION DETAIL

SCALE:- 3/4" = 1'-0"



(TYP.) ISOMETRIC VIEW OF R.C.C COLUMN & 4" BLOCK WALL CONNECTION DETAIL

SCALE:- 3/8" = 1'-0"

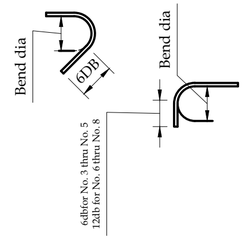


(TYP.) ISOMETRIC VIEW OF R.C.C COLUMN & 9" BRICK WALL CONNECTION DETAIL

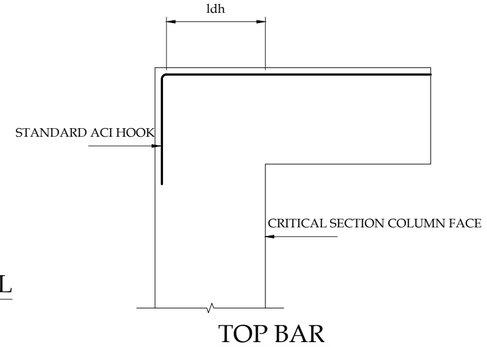
SCALE:- 3/8" = 1'-0"

STANDARD HOOKS FOR STIRRUPS AND TIE REINFORCEMENT

BAR SIZE, NO.	MIN. FINISHED BEND DIA. (B)
3 THROUGH 5	$4D_B$
6 THROUGH 8	$6D_B$



(b) MEASURED ON INSIDE OF BAR



TOP BAR DEVELOPMENT SECTION

PACKAGE: BLOCK-A

TITLE: WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
GENERAL NOTES-II

SHEET SIZE : A2 | SCALE : -

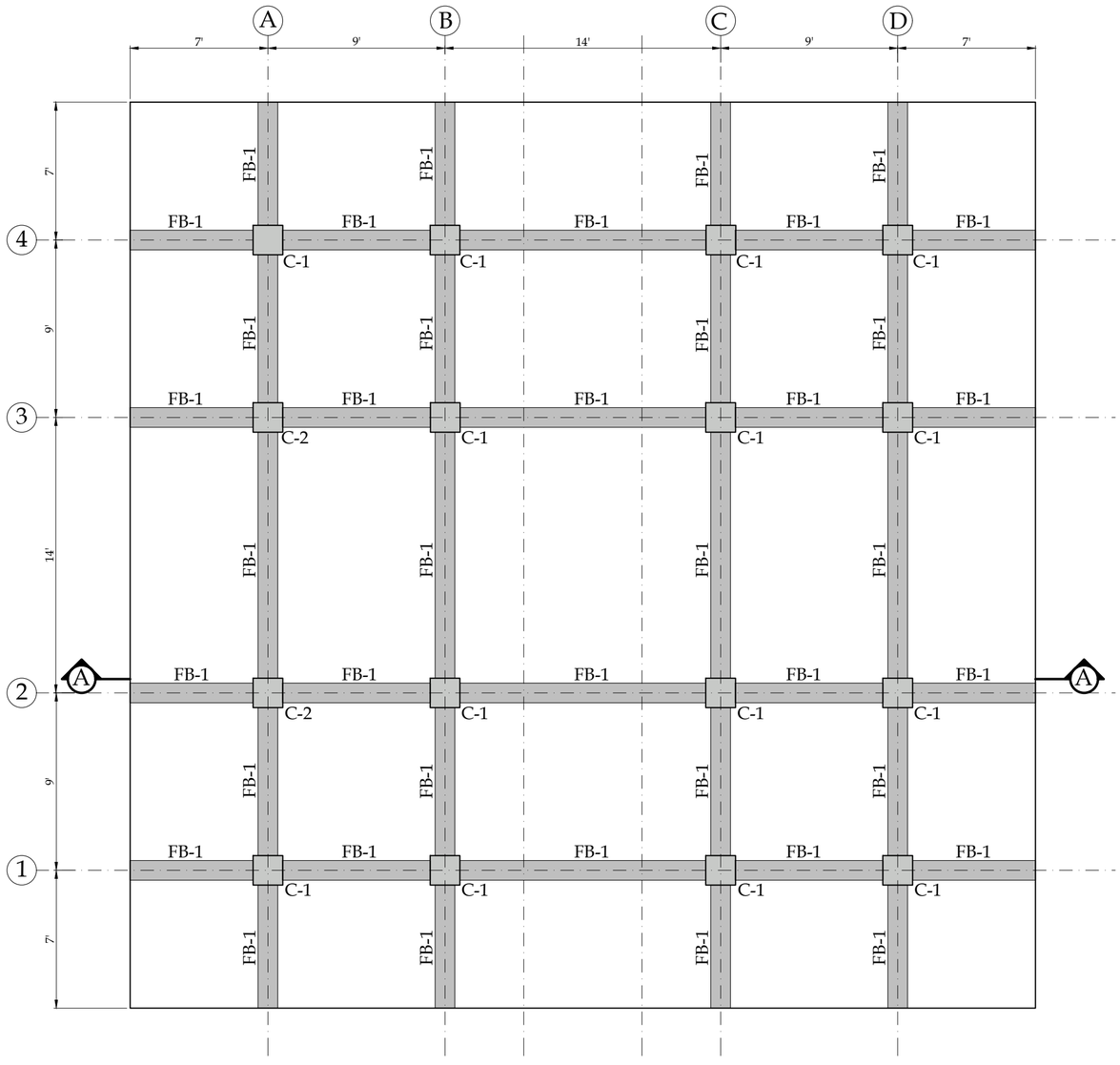
ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III- WS-GN-02 | SHEET 02 OF 02 | REV 01

PROJECT: DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

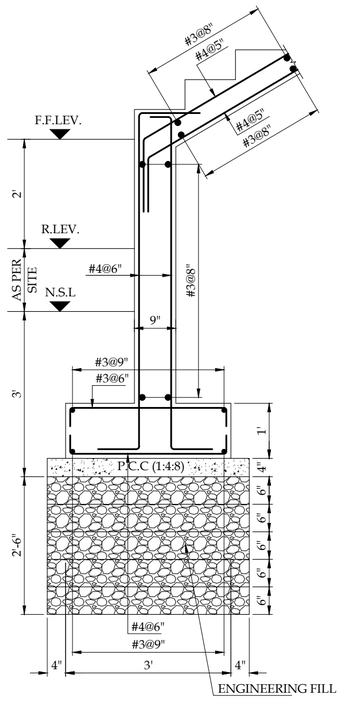
CLIENT: ETIHAD TOWN PHASE - III

CONSULTANT: ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com



FOUNDATION LAYOUT PLAN
RAFT=18" THICK

SCALE:- 3/16" = 1'-0"



STAIR DOWEL DETAIL

SCALE:- 1/2" = 1'-0"

PACKAGE: BLOCK-A

TITLE. WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS

FOUNDATION LAYOUT PLAN

SHEET SIZE : A2 | SCALE :

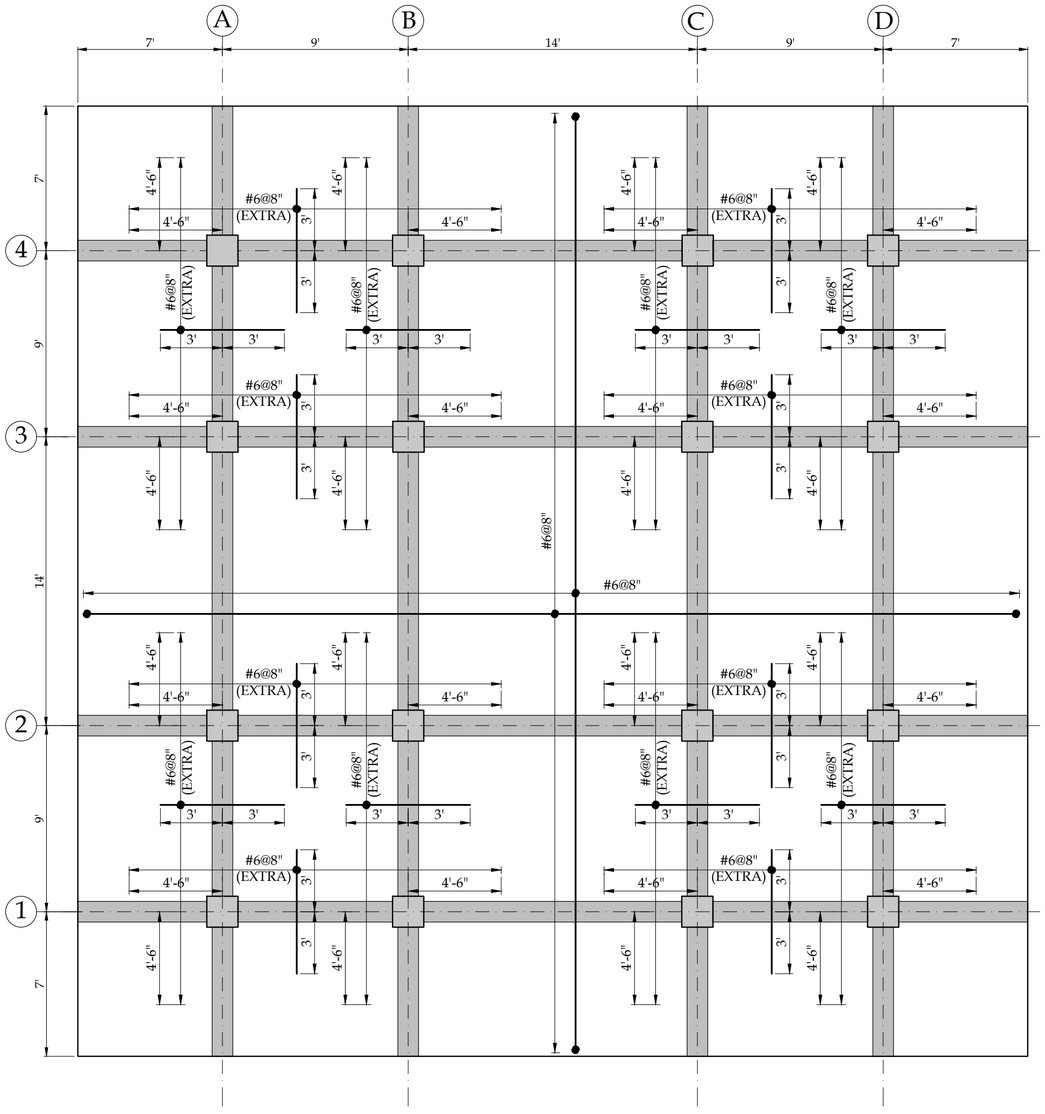
ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
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03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III- WS-S-01 | SHEET | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT
ETIHAD TOWN (PHASE-III), LAHORE

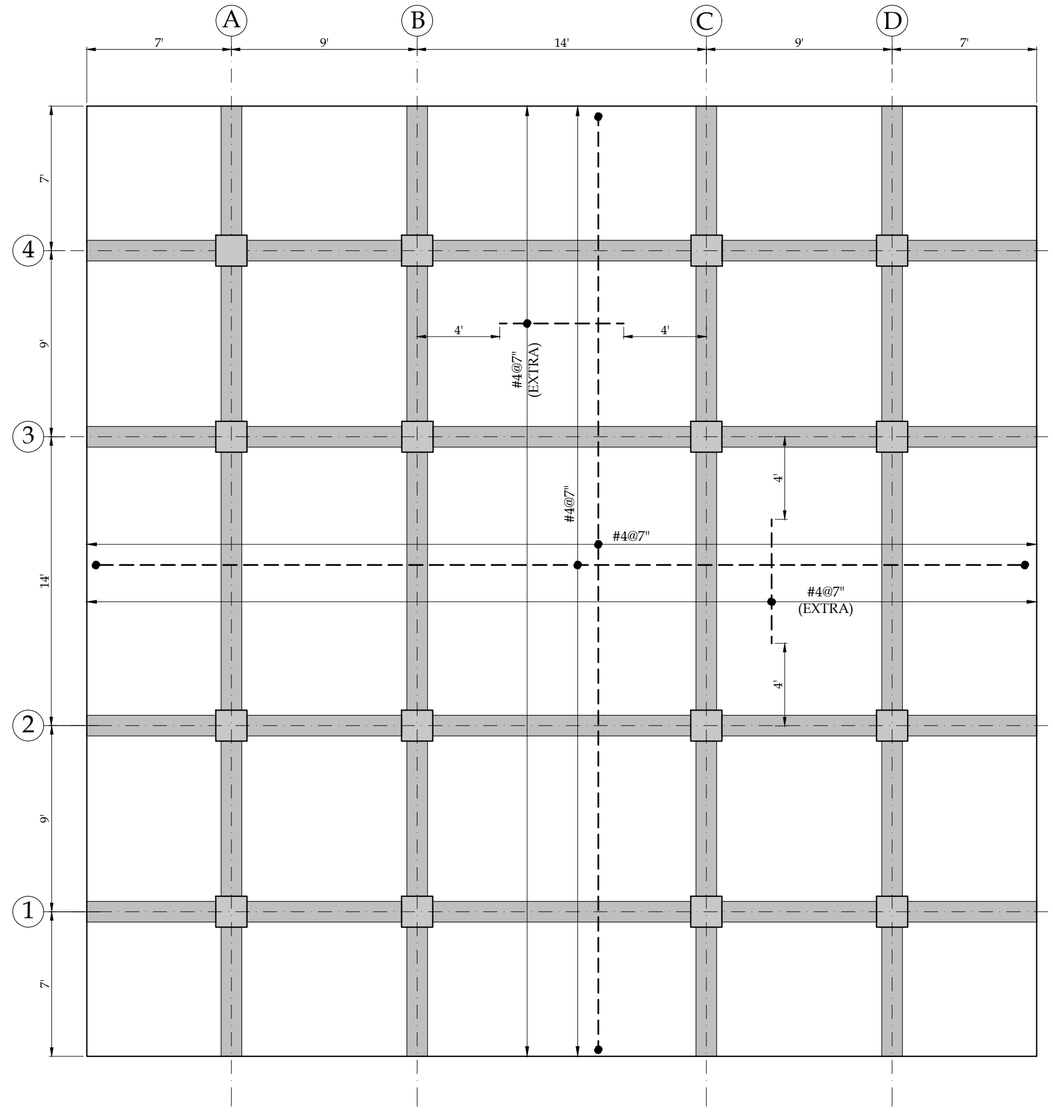
CLIENT: ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
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FOUNDATION LAYOUT PLAN
BOTTOM REINFORCEMENT PLAN

SCALE:- 3/16" = 1'-0"



FOUNDATION LAYOUT PLAN
TOP REINFORCEMENT PLAN

SCALE:- 3/16" = 1'-0"

PACKAGE: BLOCK-A

TITLE:
WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
FOUNDATION LAYOUT PLAN
BOTTOM & TOP REINFORCEMENT PLAN

SHEET SIZE : A2 | SCALE :

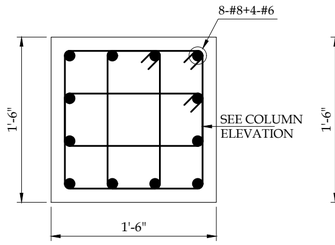
ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
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03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III- WS-S-01a | SHEET | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT
ETIHAD TOWN (PHASE-III), LAHORE

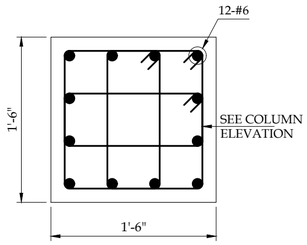
CLIENT:
ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com



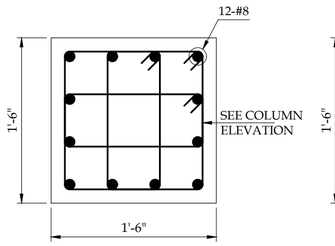
COLUMN C-1

FOUNDATION TO EL (+13'-0")
SCALE:- 1" = 1'-0"



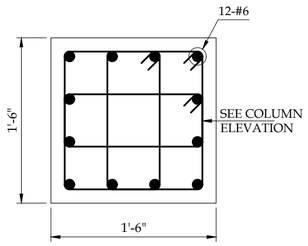
COLUMN C-1

FROM EL (+13'-0") TO EL (+90'-9")
SCALE:- 1" = 1'-0"



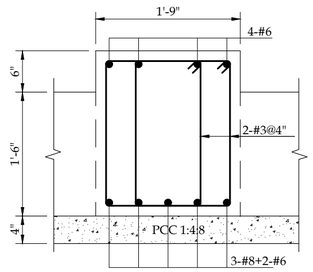
COLUMN C-2

FOUNDATION TO EL (+13'-0")
SCALE:- 1" = 1'-0"

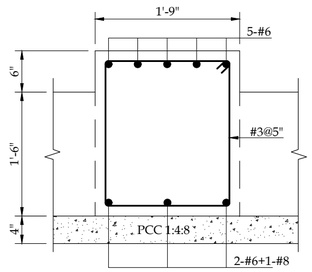


COLUMN C-2

FROM EL (+13'-0") TO EL (+90'-9")
SCALE:- 1" = 1'-0"



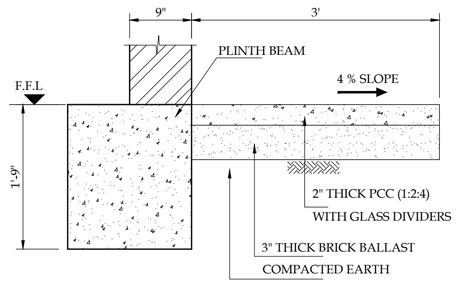
END SEC. CON.



MID SEC.

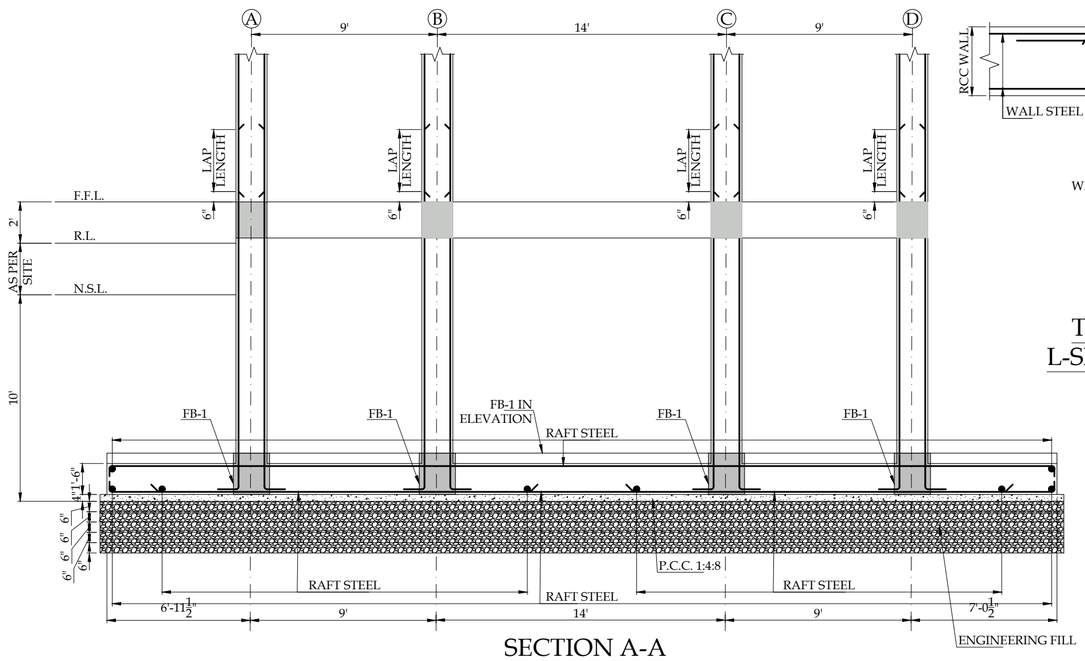
FOOTING BEAM FB-1

SCALE:- 3/4" = 1'-0"



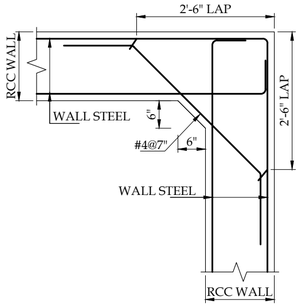
PLINTH PROTECTION DETAIL

SCALE:- 3/4" = 1'-0"



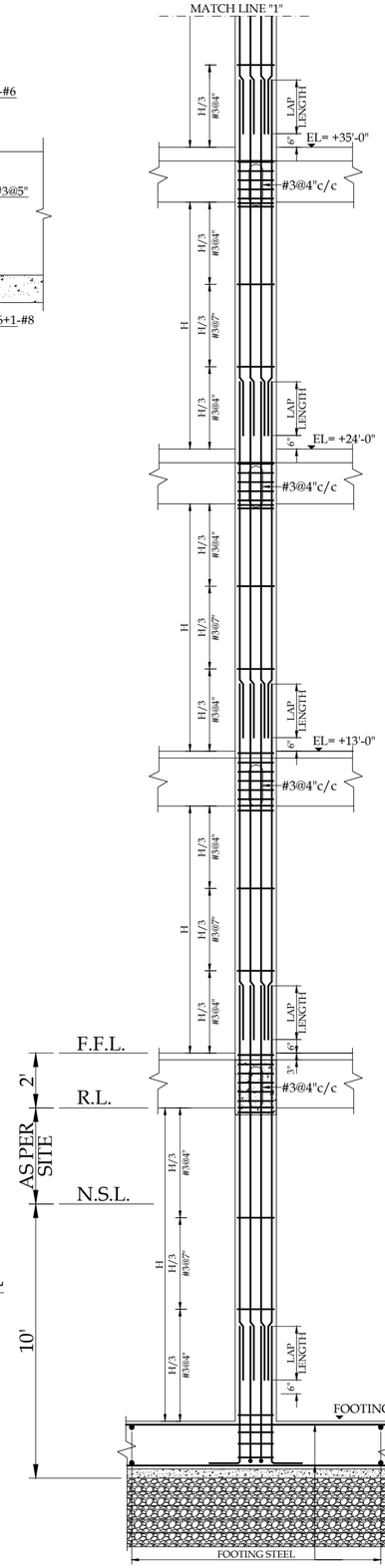
SECTION A-A

SCALE:- 3/16" = 1'-0"



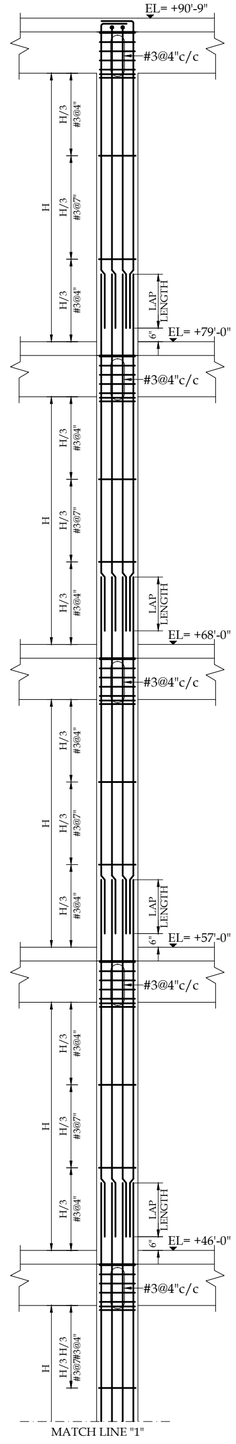
TYP. RCC WALL FOR L-SHAPED REIN. DETAIL

SCALE:- 1/2" = 1'-0"



(TYPICAL) COLUMN ELEVATION

SCALE:- 1/4" = 1'-0"



(TYPICAL) COLUMN ELEVATION

SCALE:- 1/4" = 1'-0"

ETL-PH-III- WS-S-02

PACKAGE: BLOCK-A

TITLE.
WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
FOUNDATION SECTIONAL DETAILS

SHEET SIZE :	SCALE :
A2	

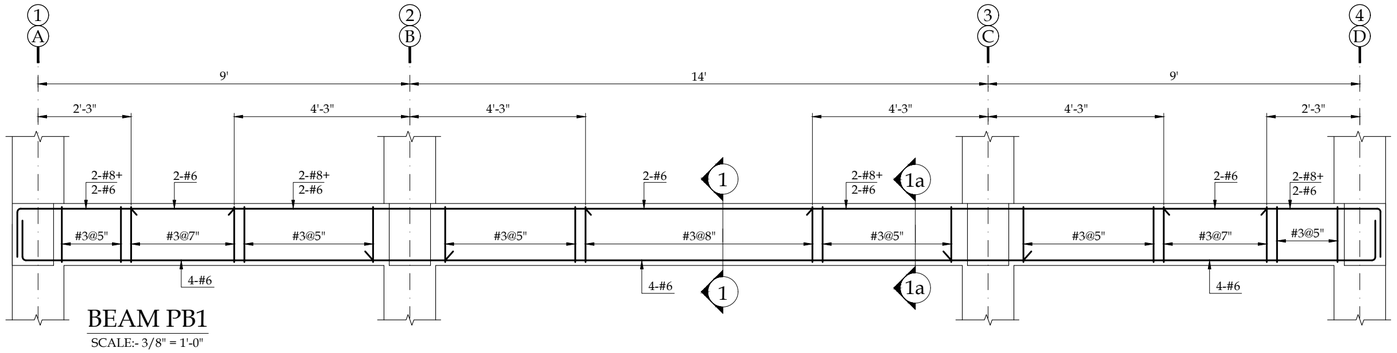
ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III- WS-S-02 | SHEET | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

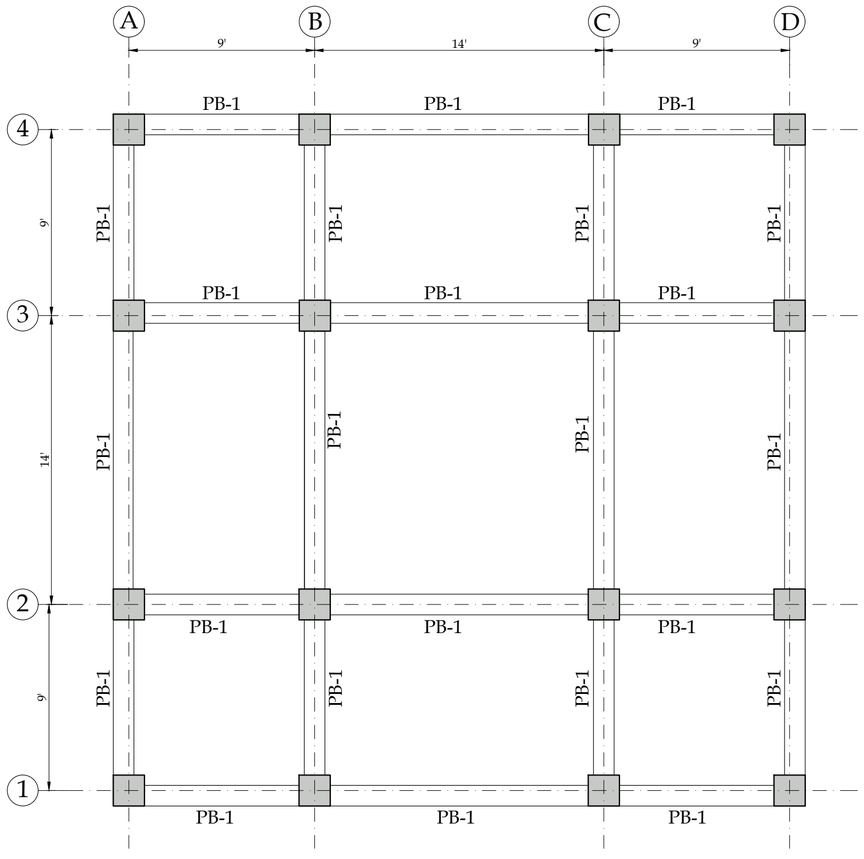
CLIENT:
ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com



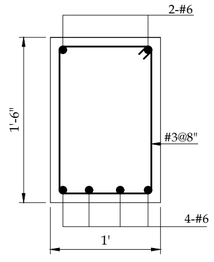
BEAM PB1

SCALE:- 3/8" = 1'-0"



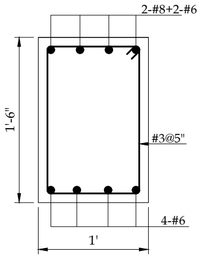
PLINTH BEAM LAYOUT PLAN

SCALE:- 3/16" = 1'-0"



SECTION 1-1

SCALE:- 1" = 1'-0"



SECTION 1a-1a

SCALE:- 1" = 1'-0"

PACKAGE: BLOCK-A

TITLE.
WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
PLINTH BEAM LAYOUT PLAN & DETAILS

SHEET SIZE :	SCALE :
A2	

ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III- WS-S-03

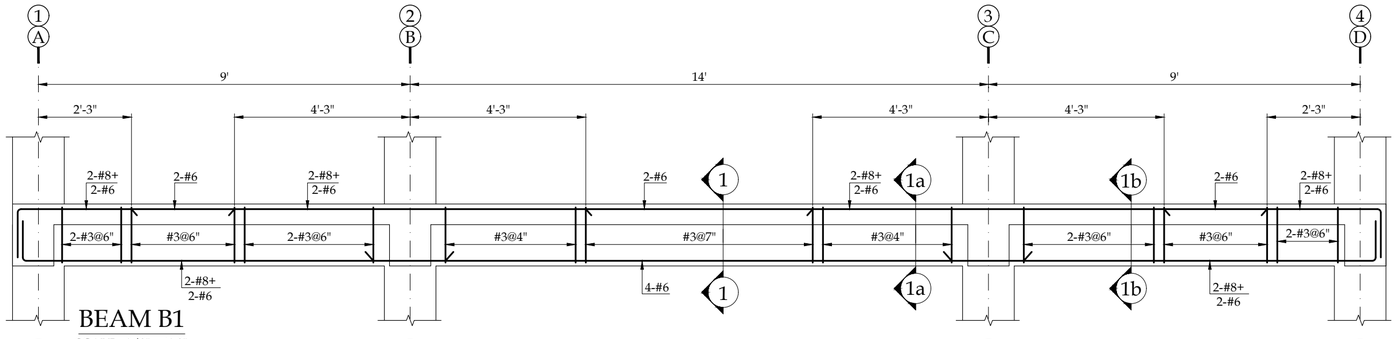
SHEET

REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

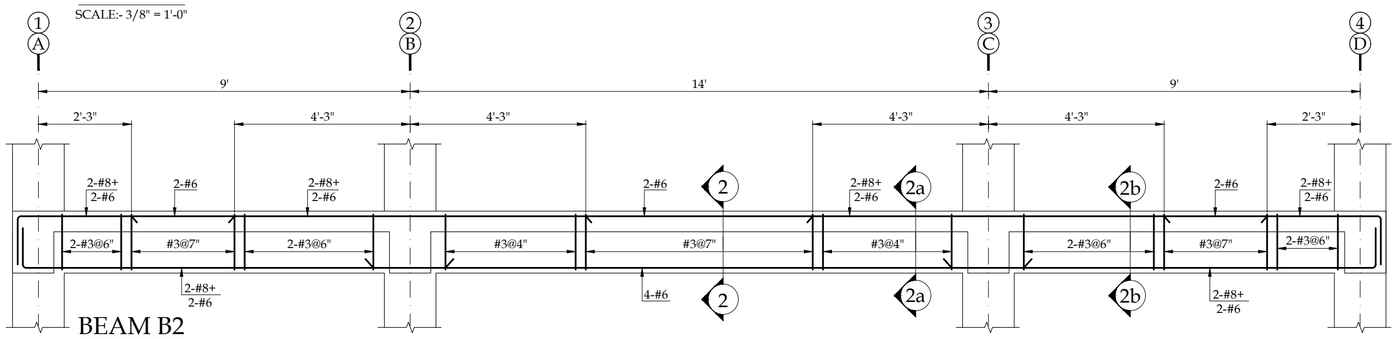
CLIENT:
ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com



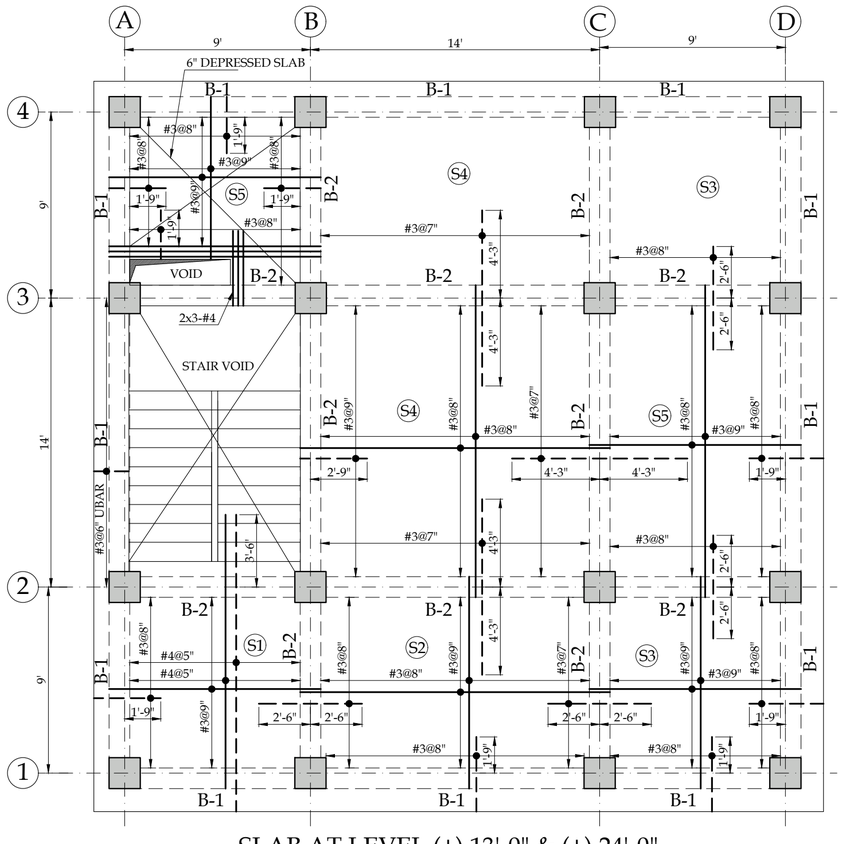
BEAM B1

SCALE:- 3/8" = 1'-0"



BEAM B2

SCALE:- 3/8" = 1'-0"

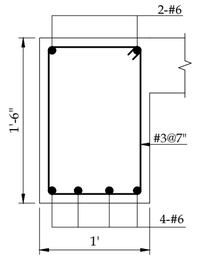


SLAB AT LEVEL (+) 13'-0" & (+) 24'-0"

SCALE:- 3/16" = 1'-0"

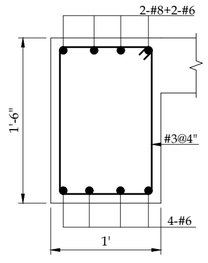
NOTE:

1. THICKNESS OF ALL SLABS IS 6" UNLESS OTHERWISE NOTED.
2. DISTRIBUTION TOP BARS #3@12"c/c.



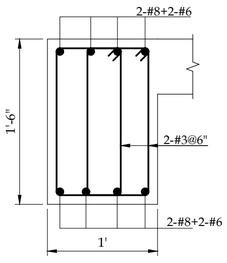
SECTION 1-1

SCALE:- 1" = 1'-0"



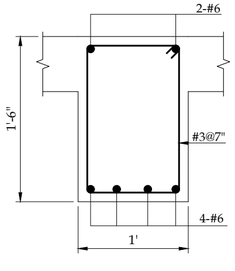
SECTION 1a-1a

SCALE:- 1" = 1'-0"



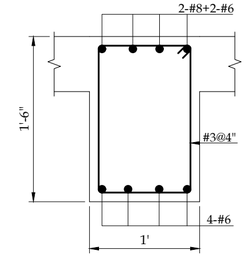
SECTION 1b-1b

SCALE:- 1" = 1'-0"



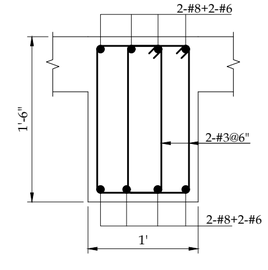
SECTION 2-2

SCALE:- 1" = 1'-0"



SECTION 2a-2a

SCALE:- 1" = 1'-0"



SECTION 2b-2b

SCALE:- 1" = 1'-0"

PACKAGE: BLOCK-A

TITLE: WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
SLAB AT LEVEL (+) 13'-0", (+) 24'-0"
& BEAMS DETAILS

SHEET SIZE :	SCALE :
A2	

ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III- WS-S-04

SHEET

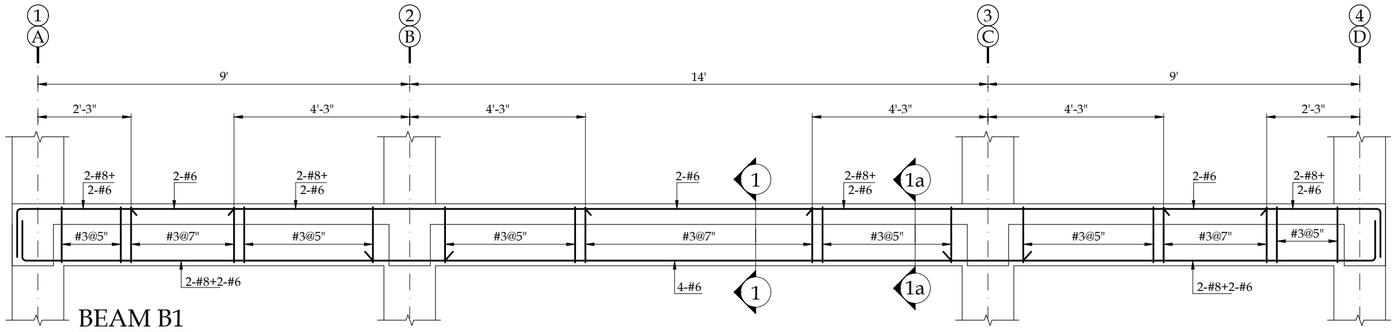
REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT
ETIHAD TOWN (PHASE-III), LAHORE

CLIENT:

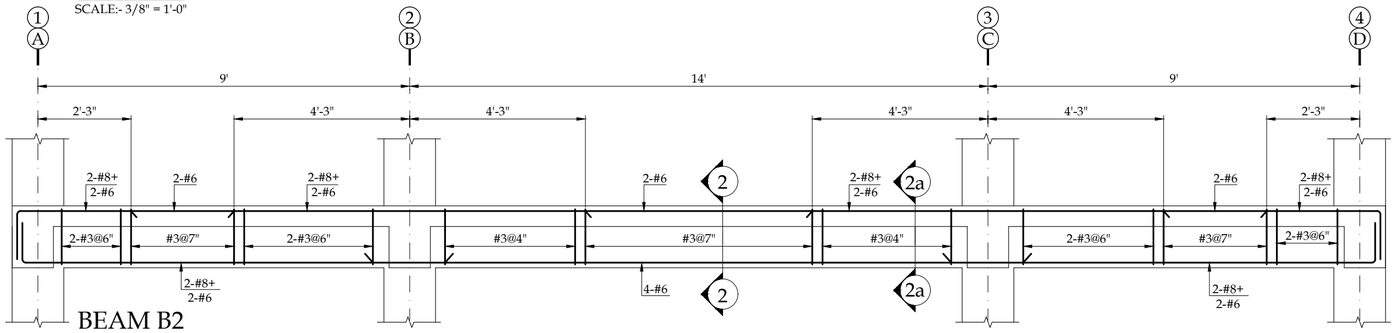
CONSULTANT:

ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
Fax: +92 42 35450916 WEB. www.asiancon.com



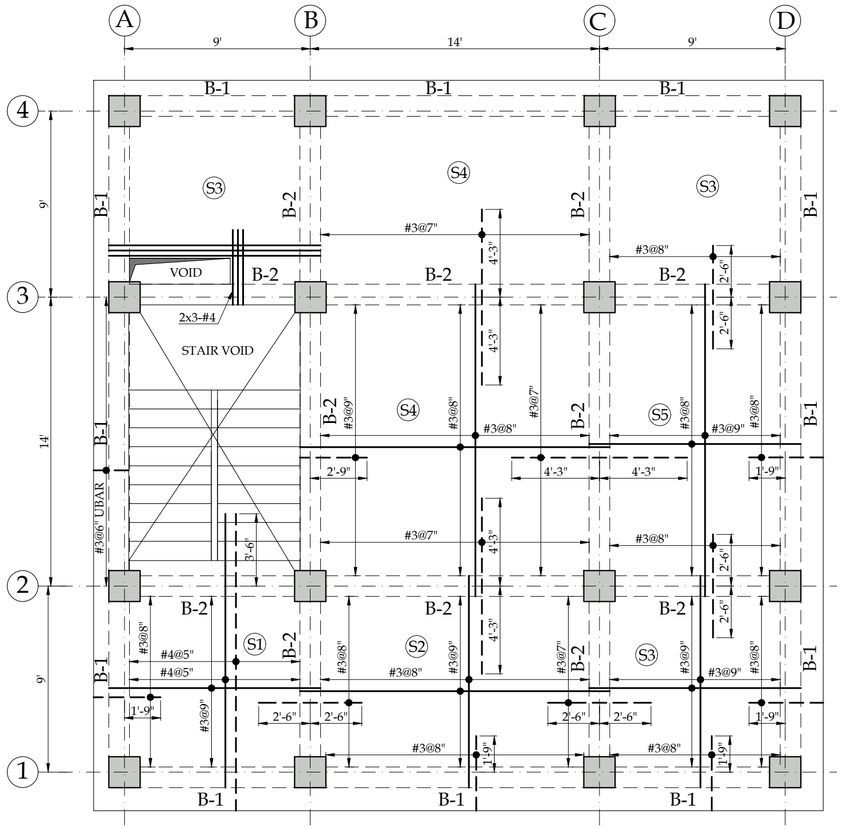
BEAM B1

SCALE:- 3/8" = 1'-0"



BEAM B2

SCALE:- 3/8" = 1'-0"

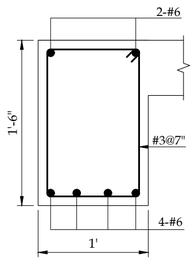


SLAB AT LEVEL (+) 35'-0"

SCALE:- 3/16" = 1'-0"

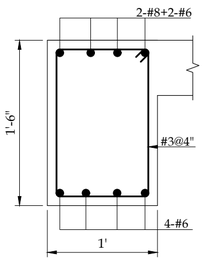
NOTE:

1. THICKNESS OF ALL SLABS IS 6" UNLESS OTHERWISE NOTED.
2. DISTRIBUTION TOP BARS #3@12"c/c.



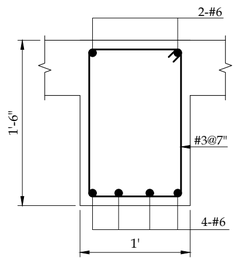
SECTION 1-1

SCALE:- 1" = 1'-0"



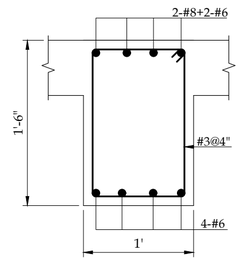
SECTION 1a-1a

SCALE:- 1" = 1'-0"



SECTION 2-2

SCALE:- 1" = 1'-0"



SECTION 2a-2a

SCALE:- 1" = 1'-0"

PACKAGE: BLOCK-A

TITLE. WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
SLAB AT LEVEL (+) 35'-0" & BEAMS
DETAILS

SHEET SIZE :			SCALE :		
A2					
ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III- WS-S-05

SHEET

REV 01

PROJECT:

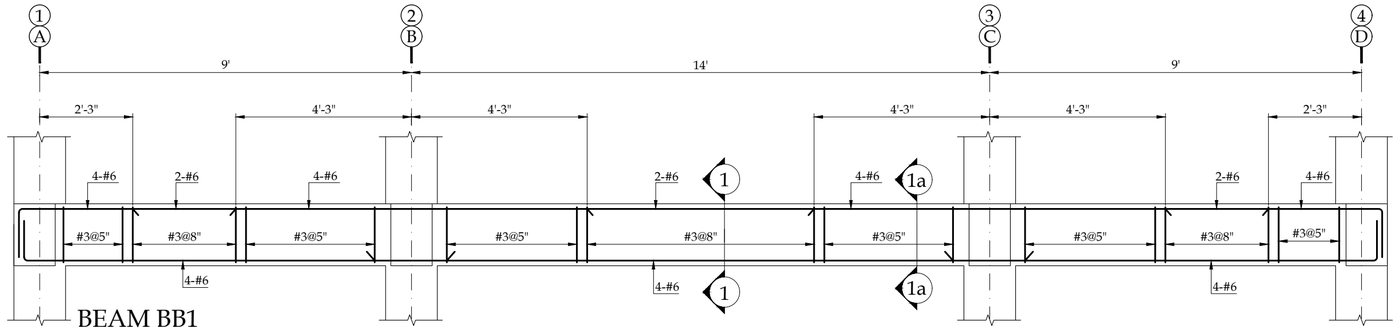
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

CLIENT:

ETIHAD TOWN PHASE - III

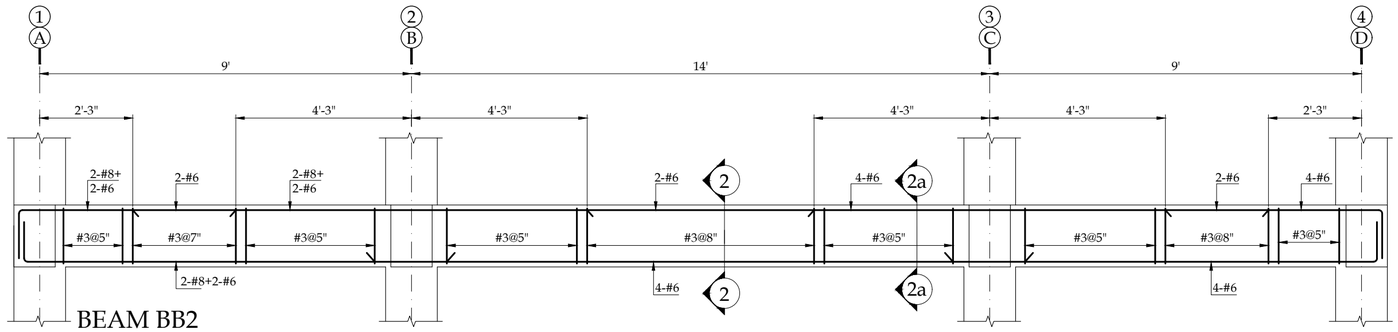
CONSULTANT:

ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com



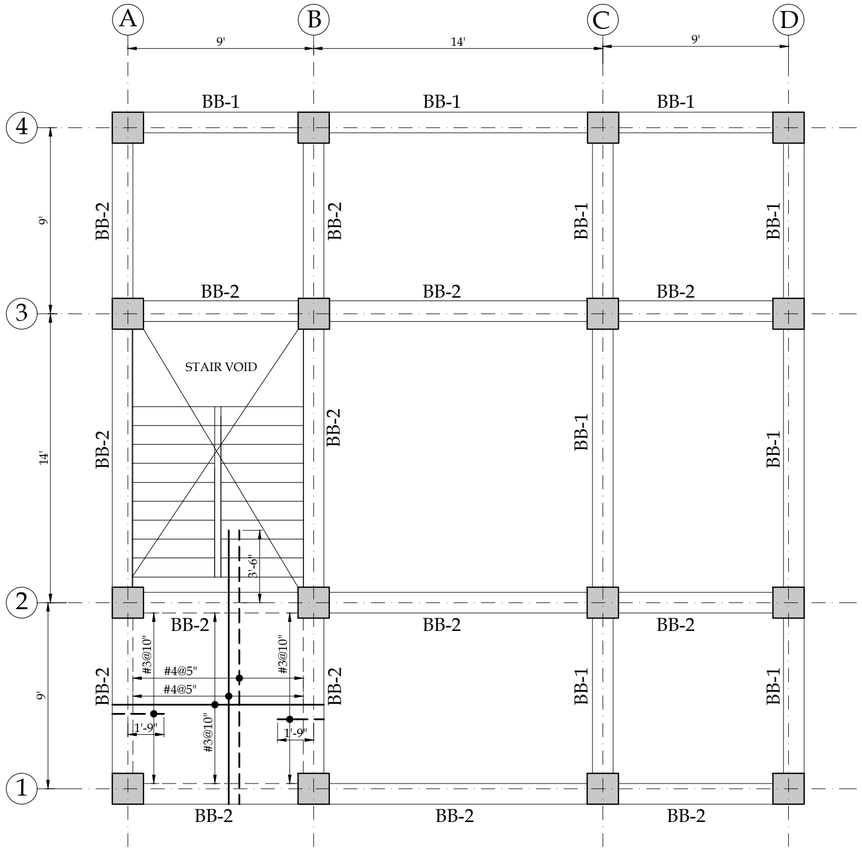
BEAM BB1

SCALE:- 3/8" = 1'-0"



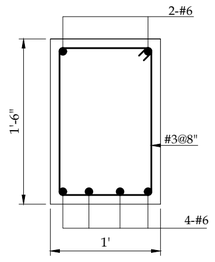
BEAM BB2

SCALE:- 3/8" = 1'-0"



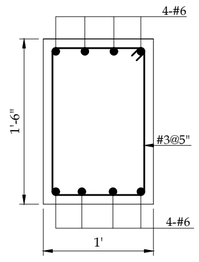
PLAN AT LEVEL (+) 46'-0", (+) 57'-0" & (+)68'-0"

SCALE:- 3/16" = 1'-0"



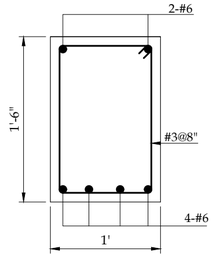
SECTION 1-1

SCALE:- 1" = 1'-0"



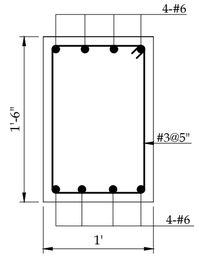
SECTION 1a-1a

SCALE:- 1" = 1'-0"



SECTION 2-2

SCALE:- 1" = 1'-0"



SECTION 2a-2a

SCALE:- 1" = 1'-0"

NOTE:

1. THICKNESS OF ALL SLABS IS 6" UNLESS OTHERWISE NOTED.
2. DISTRIBUTION TOP BARS #3@12"c/c.

PACKAGE: BLOCK-A

TITLE: WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
PLAN AT LEVEL (+) 46'-0", (+) 57'-0" & (+)68'-0" & BEAM DETAILS

SHEET SIZE : A2 | SCALE :

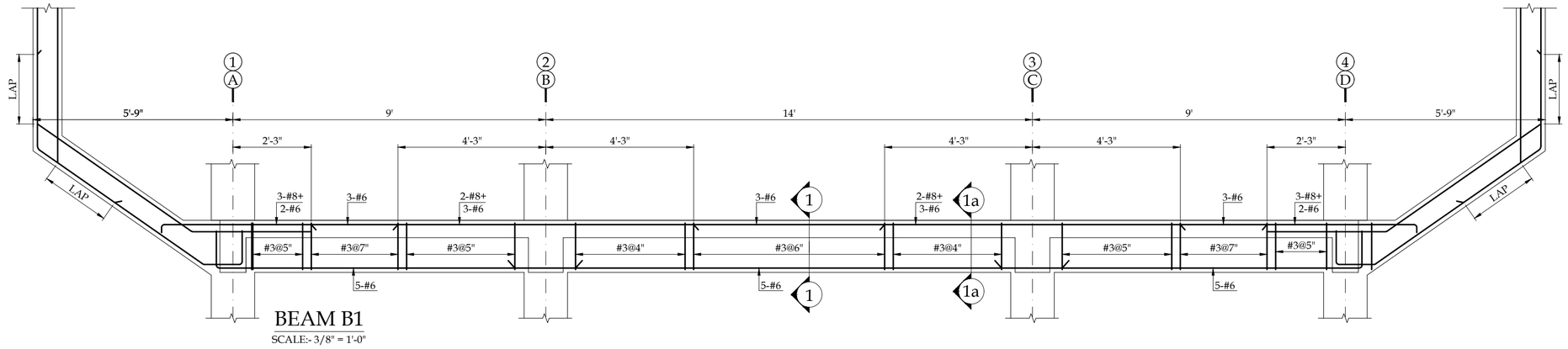
ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III- WS-S-06 | SHEET | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

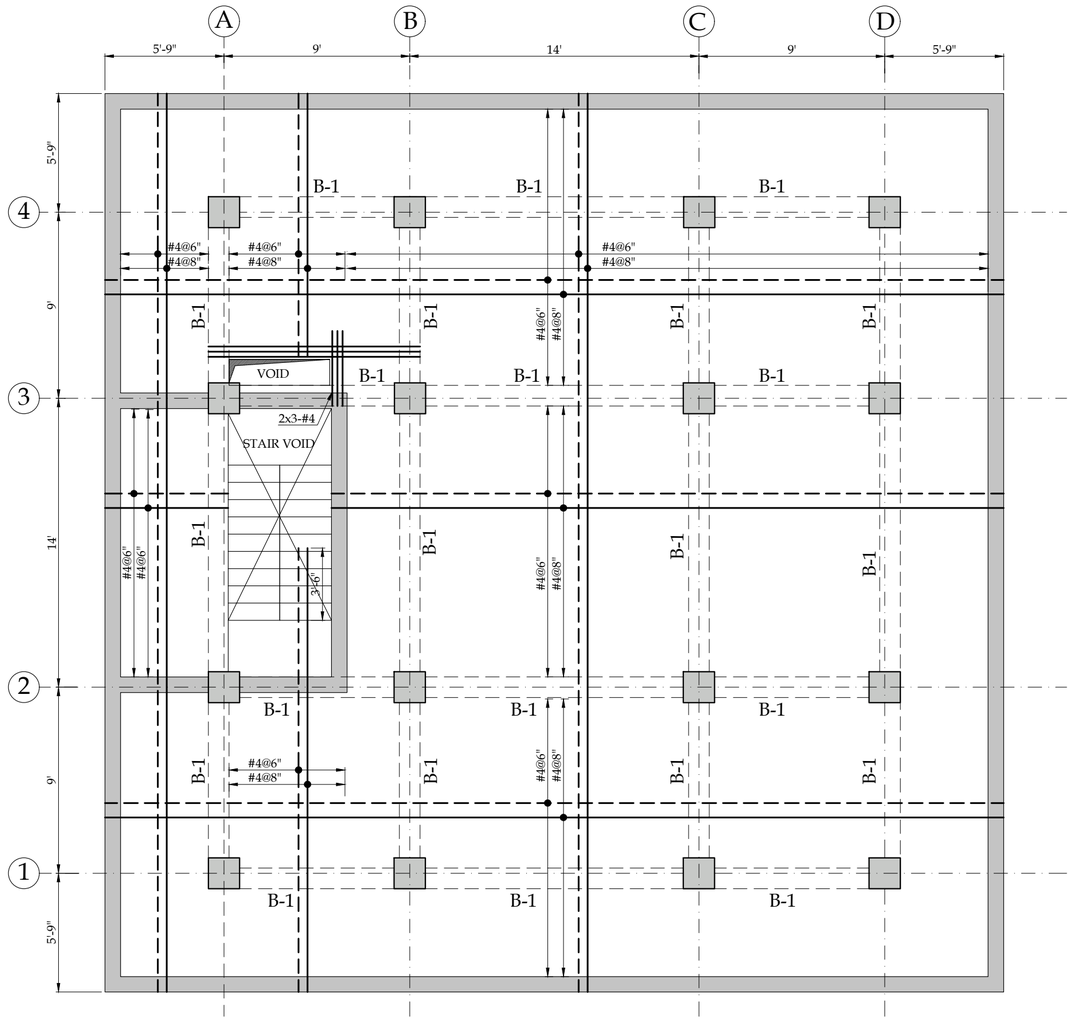
CLIENT: ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 3545914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com



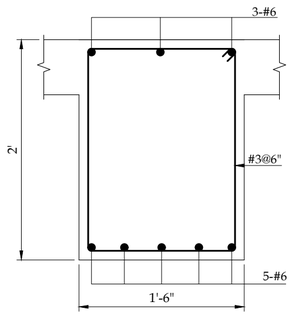
BEAM B1

SCALE:- 3/8" = 1'-0"



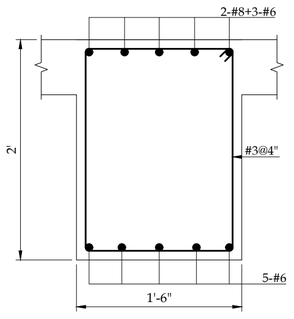
SLAB AT LEVEL (+) 79'-0"

SCALE:- 3/16" = 1'-0"



SECTION 1-1

SCALE:- 1" = 1'-0"



SECTION 1a-1a

SCALE:- 1" = 1'-0"

NOTE:

1. THICKNESS OF ALL SLABS IS 12" UNLESS OTHERWISE NOTED.
2. DISTRIBUTION TOP BARS #3@12"c/c.

PACKAGE: BLOCK-A

TITLE: WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
SLAB AT LEVEL (+) 79'-0"
& BEAM DETAILS

SHEET SIZE :	SCALE :
A2	

ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
03					
04					
05					
06					
07					

DRAWING N°: ETL-PH-III- WS-S-07

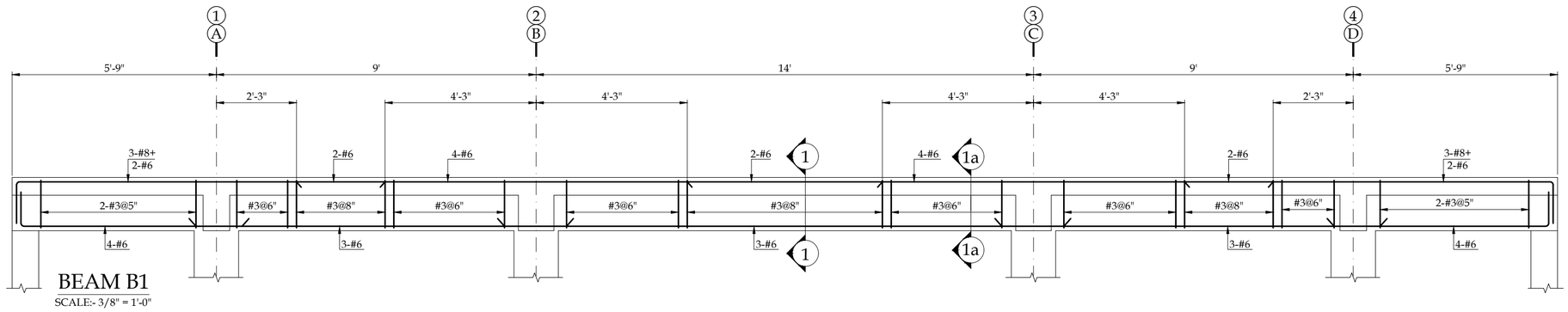
SHEET

REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT
ETIHAD TOWN (PHASE-III), LAHORE

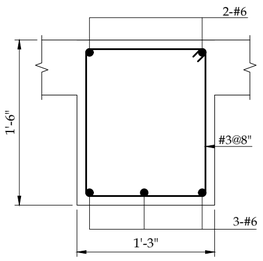
CLIENT:
ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com



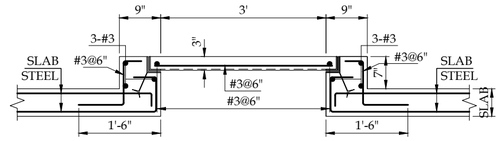
BEAM B1

SCALE:- 3/8" = 1'-0"



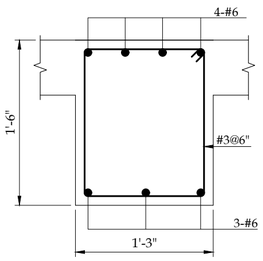
SECTION 1-1

SCALE:- 1" = 1'-0"



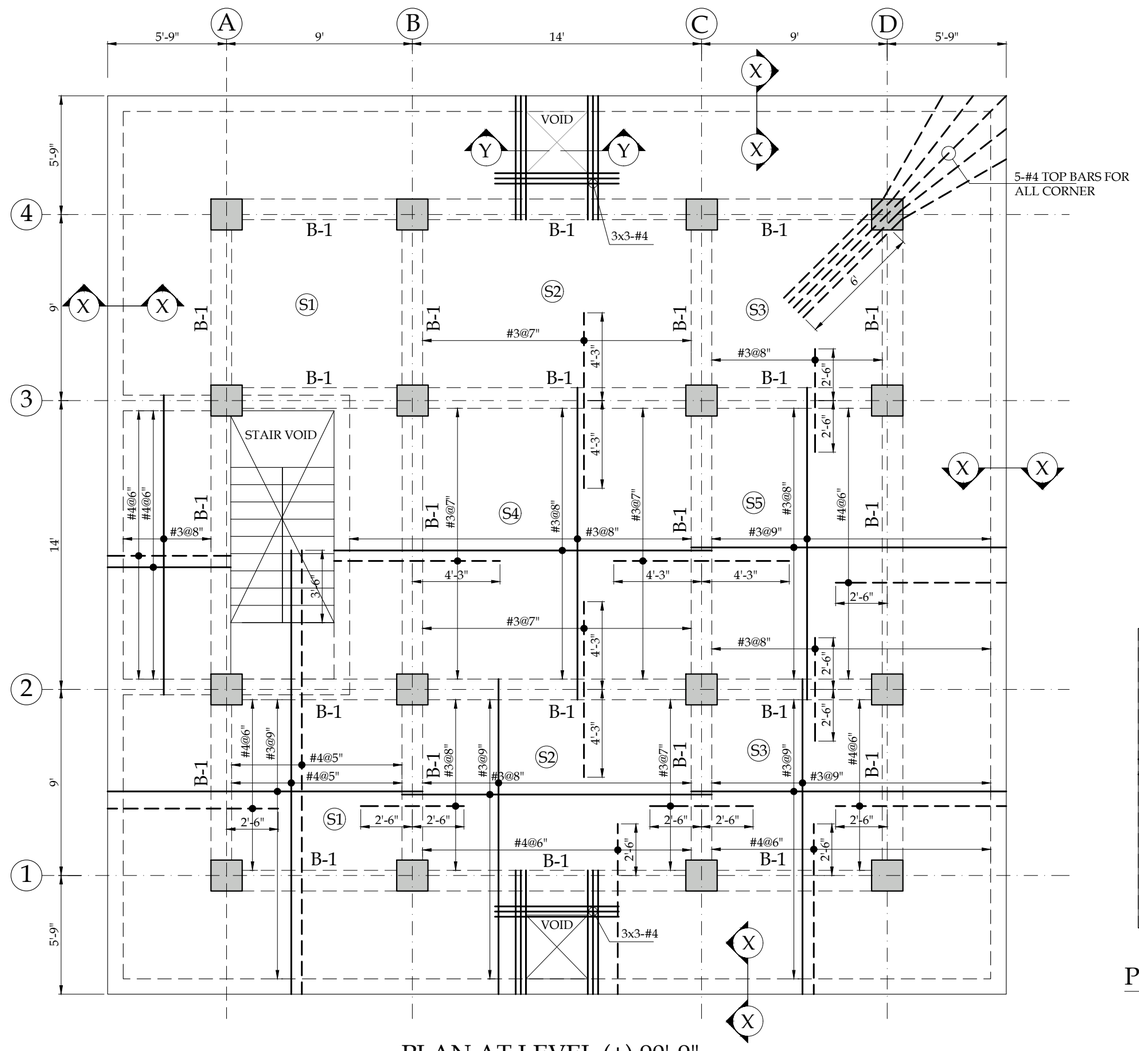
SECTION Y-Y

SCALE:- 1/2" = 1'-0"



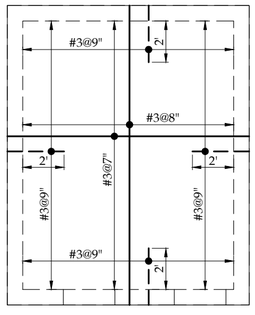
SECTION 1a-1a

SCALE:- 1" = 1'-0"



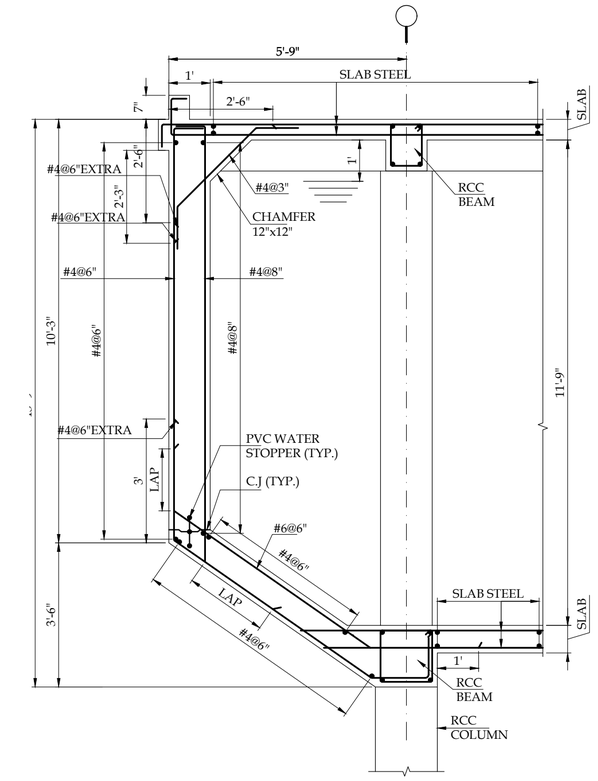
PLAN AT LEVEL (+) 90'-9"

SCALE:- 3/16" = 1'-0"



PLAN AT LEVEL (+) 98'-6"

SCALE:- 3/16" = 1'-0"



SECTION X-X

SCALE:- 3/8" = 1'-0"

NOTE:

1. THICKNESS OF ALL SLABS IS 6" UNLESS OTHERWISE NOTED.
2. DISTRIBUTION TOP BARS #3@12"c/c.

PACKAGE: BLOCK-A

TITLE: WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
SLAB AT LEVEL (+) 90'-9"
& BEAM DETAILS

SHEET SIZE : A2 | SCALE :

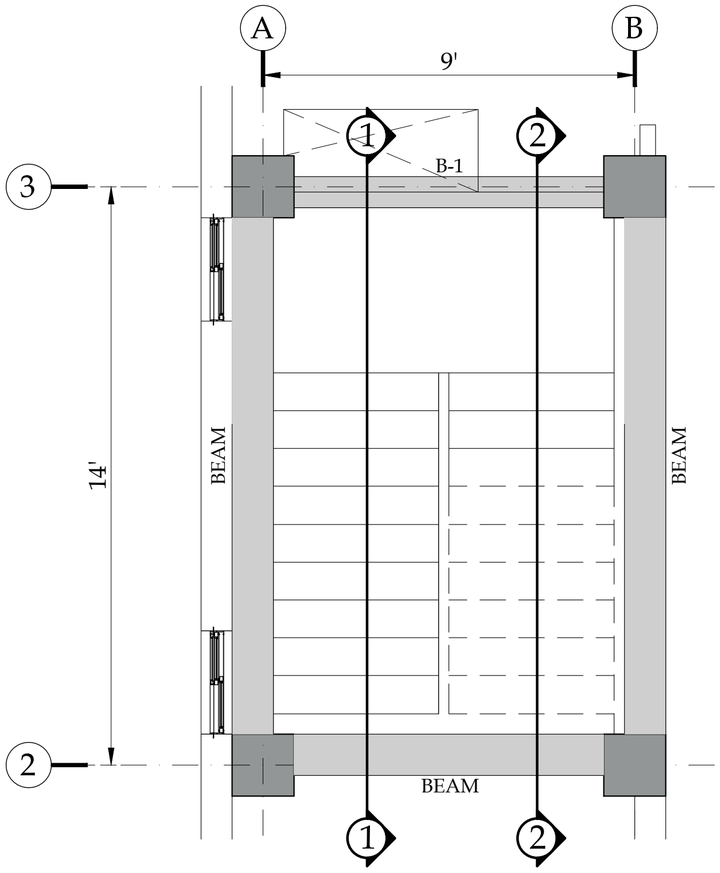
ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
03					
04					
05					
06					
07					

DRAWING Nº: ETL-PH-III- WS-S-08 | SHEET | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT
ETIHAD TOWN (PHASE-III), LAHORE

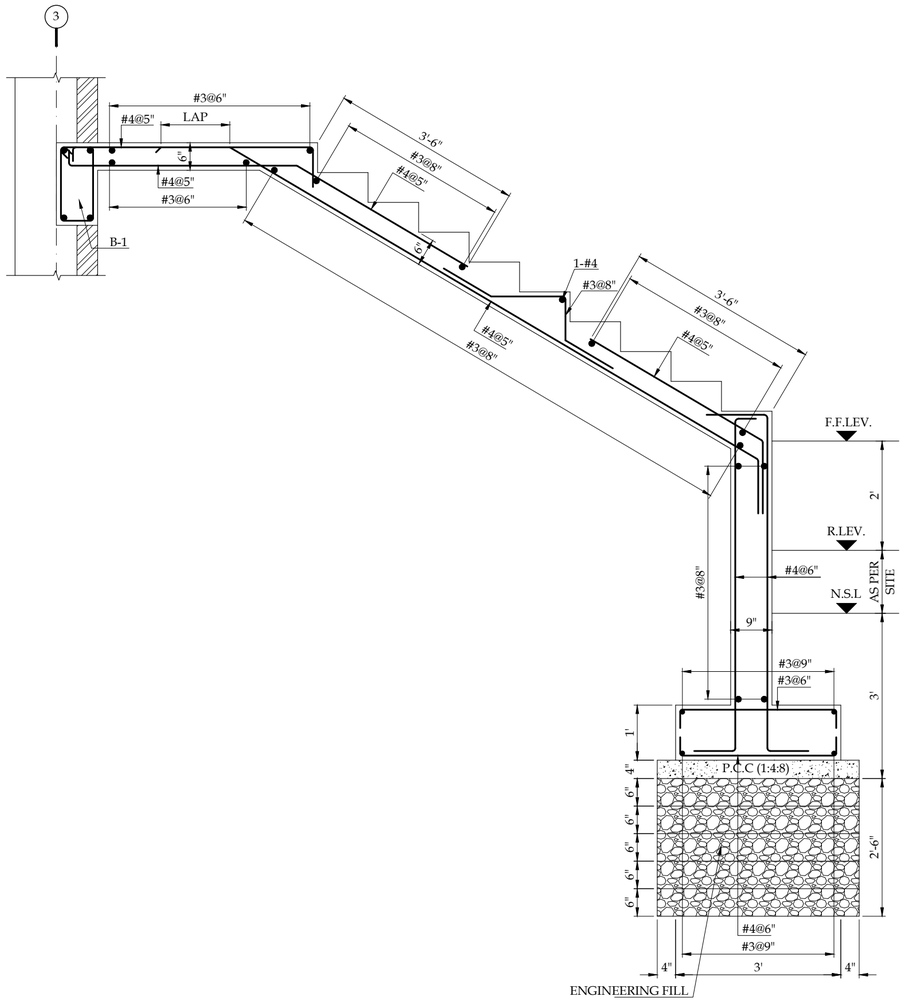
CLIENT:

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
C-3 JHELUM BLOCK, GREEN FORT-II, LAHORE, PAKISTAN
TELEPHONE: +92 42 35450914-5 +92 32-142-71101
FAx: +92 42 35450916 WEB: www.asiancon.com



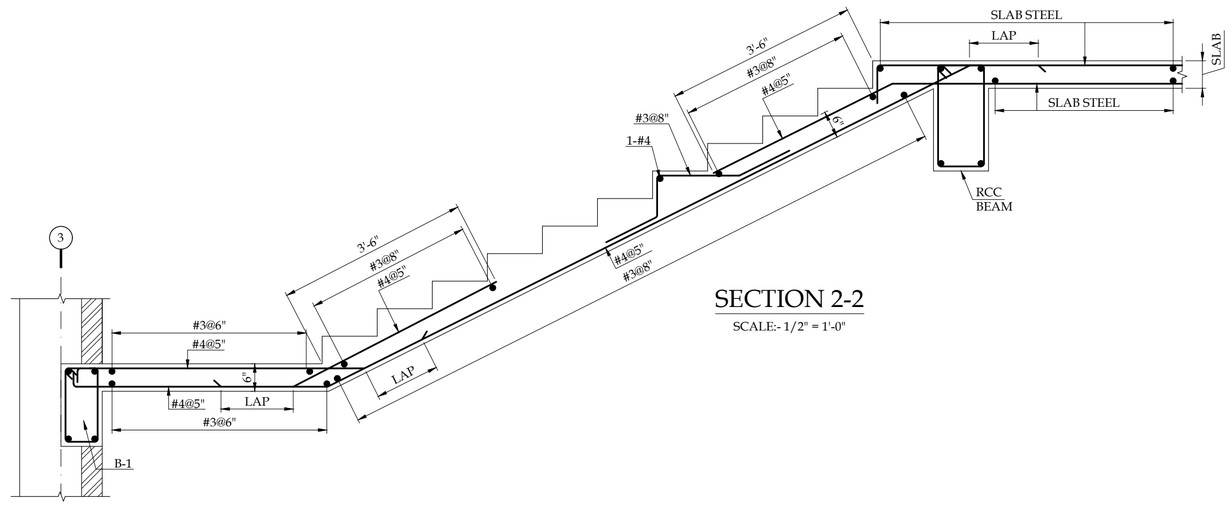
PART PLAN STAIR

SCALE:- 3/8" = 1'-0"



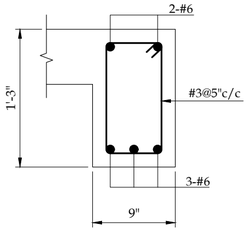
SECTION 1-1

SCALE:- 1/2" = 1'-0"



SECTION 2-2

SCALE:- 1/2" = 1'-0"



BEAM B-1

SCALE:- 1" = 1'-0"

PACKAGE: BLOCK-A

TITLE.
WATER SUPPLY SYSTEM
OHR OF CAPACITY 100,000 GALLONS
STAIR STRUCTURAL DETAIL

SHEET SIZE : A2 | SCALE :

ISSUE N°	DATE	DESCRIPTION	DRAWN	DESIGNED	APPROVED
01	02-06-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
02	11-08-2026	CONSTRUCTION DRAWINGS	M.ALI	ENGR. HASNAIN	ENGR. FARHAN
03					
04					
05					
06					
07					

DRAWING Nº: ETL-PH-III- WS-S-09 | SHEET | REV 01

PROJECT:
DEVELOPMENT OF INFRASTRUCTURE AT ETIHAD TOWN (PHASE-III), LAHORE

CLIENT:
ETIHAD TOWN PHASE - III

CONSULTANT:
ASIAN CONSULTING ENGINEERS PVT.(LTD)
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