SICHN, KARACHI

Sindh Institute of Child Health and Neonatology (SICHN)
Government of Sindh

Bidding Documents

For

National Competitive Bidding

Pakistan

REPAIR AND RENOVATION OF CHILDREN HOSPITAL NORTH KARACHI

SICHN, KARACHI

TABLE OF CONTENTS

CONTENTS

INVITATION FOR BIDS

NOTICE INVITING TENDER 1

INSTRUCTION TO BIDDERS

Description

A. General

IB.1 Scope of Bid 2
IB.2 Source of Funds 2
IB.3 Eligible Bidders 2
IB.4 One Bid Per Bidder 3
IB.5 Cost of Bidding 3
IB.6 Site Visit 3

B. Bidding Documents

IB.7 Contents of Bidding Documents 3
IB.8 Clarification of Bidding Documents 4
IB.9 Amendment of Bidding Documents 4

C. Preparation of Bids

IB.10. Language of Bid 4
IB.11 Documents Accompanying the Bid 5
IB.12 Bid Prices 6
IB.13 Currencies of Bid and Payment 7
IB.14 Bid Validity 7
IB.15 Bid Security 7
IB.16 Alternate Proposals by Bidder 8
IB.17 Pre-Bid Meeting 8
IB.18 Format and Signing of Bid 8

D. Submission of Bids

IB.19 Sealing and Marking of Bids 9
IB.20 Deadline for Submission of Bids 10
IB.21 Late Bids 10
IB.22 Modification, Substitution and Withdrawal of Bids 10

E. Bid Opening and Evaluation

IB.23 Bid Opening 11
IB.24 Process to be Confidential 11
IB.25 Clarification of Bids 11
IB.26 Examination of Bids and Determination of Responsiveness 11
IB.27 Correction of Errors 13

SICHN, KARACHI

IB.28 Evaluation and Comparison of Bids 13

F. Award of Contract

IB.29 Award 14
IB.30 Employer's Right to Accept any Bid and to Reject any or all Bids 15
IB.31 Notification of Award 15
IB.32 Performance Security 16
IB.33 Signing of Contract Agreement 16
IB.34 General Performance of the Bidders 16
IB.35 Integrity Pact 16
IB.36 Instructions Not Part of Contract 17
IB.37 Arbitration 17

BIDDING DATA BD1-BD2-BD3

FORM OF BID AND APPENDICES TO BID

FORM OF BID

Appendix-A to Bid : Special Stipulations 21
Appendix-B to Bid : Foreign Currency Requirements 22

Appendix-C to Bid : Price Adjustment (Under Clause 13.8) 23

Appendix-D to Bid : Bill of Quantities 25

Appendix-E to Bid : Proposed Construction Schedule 43

Appendix-F to Bid : Method of Performing the Work 44
Appendix-G to Bid : List of Major Equipment – Related Items 45
Appendix-H to Bid : Construction Camp and Housing Facilities 47
Appendix-I to Bid : List of Subcontractors 48
Appendix-J to Bid : Estimated Progress Payments 49
Appendix-K to Bid: Organization Chart of the Supervisory Staff and Labour 50
Appendix-L to Bid : Integrity Pact 51

SICHN, KARACHI

FORMS

BID SECURITY	52
PERFORMANCE SECURITY	54
CONTRACT AGREEMENT	56
MOBILIZATION ADVANCE GUARANTEE/BOND	58
INDENTURE BOND FOR SECURED ADVANCE	60
PART-I: GENERAL CONDITIONS OF CONTRACT	64
PART-II: SPECIAL / PARTICULAR CONDITIONS OF CONTRACT	71
SPECIFICATIONS	78
DRAWINGS	79

SICHN, KARACHI

NIT No: SICHN/GOS/Works/R.R/N.K/26-27 **Dated 19-11-2026**

NOTICE INVITING TENDER

The Sindh Institute of Child Health and Neonatology (SICHN), Government of Sindh Karachi now invites e-bids through E-Pak Acquisition and Disposable System (EPADS) for the following works for fiscal year **2026-27** are invited from the interested contractors / firms/ parties meeting the eligibility criteria / registered with Pakistan Engineering Council (PEC) in relevant category having valid renewal certificate 2026, limit of the category of following work for which they wish to participate valid CNIC, NTN certificate & professional tax challan, SRB as follows:

DETAILS OF WORK

Sr. No.	Name of work	PEC Category	Fixed Bid Security	Time allowed for completion	Code Specialization
1.	Repair And Renovation of Children Hospital North Karachi	C-3	**7.43 M**	06- Months	**CE09, CE10, CE11(i,vii, ix), EE11(vi), EE04, BC04, ME01**

1. Eligibility Criteria:

i) Valid Registration with Pakistan Engineering Council (PEC) for the year 2026.

ii) Valid Electrical License Karachi Region including Electrical wireman and Supervisor must be mentioned on certificate.

iii) The firm should have specialized codes mentioned above.

iv) Successful execution of Repair & Renovation Works of for at least two (02) hospitals completed within the last five (5) years. The Performance Certificate must be attached

v) Turnover not less than the bid cost for the last three financial years with Audit Report from ICAP Certified Audit Firm and provide UDIN of the audited firm. (ICAP UDIN Verification Portal)

vi) The contractor must have following Personnel Capabilities:
At least 01 Civil Engineers having B.E (Civil) degree having minimum experience 10 years
At least 01 Electrical Engineer having B.E (Electrical) degree having minimum experience 10 years

vii) Financial Statement (Summary) and income tax return for the last 03 years

viii) The bid security in the form of Pay Order or Deposit at Call or Demand Draft issued by a scheduled bank in Pakistan

ix) Undertaking on Stamp Paper of Rs. 200/- duly notarized (If the company is not blacklisted)

x) Registration with Income Tax (FBR), Sindh Revenue Board (SRB) and copy of valid CNIC of proprietor(s) of the firm. The firm must be in active tax payers list at the time of Bid Submission.

xi) Each page of the Bid Document & profile must be paginated, signed & stamped by Bidder.

2. Method of Procurement (Single Stage–Two Envelope)

3. The Bids prepared in accordance with the instructions in the bidding documents must be submitted on EPADS and purchased by interested bidders on the submission of written application, to payment of Rs.5000/ Tender nonrefundable Fee that have to be deposited in Sindh Institute of Child Health and Neonatology (SICHN) Sindh Bank Account and Bank Paid Deposit Slip submit at First Floor, Plot no. 354 & 356 JM, Near People's Secretariat Chowrangi, Jamshed Quarters Karachi between 0900 to 1500 hours except Sunday, Saturday and Holidays from date of publication up to **08-12-2026 up to 10:00 a.m**. A complete set of bidding document containing detailed terms and conditions, can be viewed / downloaded from https://portalsindh.eprocure.gov.pk/#/.

4. The Bids must be submitted on EPADS on or before **Date of Opening up to 10:30 a.m.** and must be accompanied by a bid security of Three (3%) of estimated value of the Procurement in favor of Sindh Institute of Child Health and Neonatology (SICHN) must reach before the deadline for the

SICHN, KARACHI

submission of e-bids, which will be opened on the same day **08-12-2026 at 11: 00 a.m** First Floor, Plot no. 354 & 356 JM, Near People's Secretariat Chowrangi, Jamshed Quarters Karachi.

5. The Validity Period of Bid is 90 days

6. In case Government declared / announce public holiday on the date of opening of Tender, the Tenders will be submitted / opened on the next working day.

7. The proposal shall be submitted through E-tendering portal under Technical and Financial/Commercial options on E-pad with all the supporting documentary evidence by or before the closing date and time.

8. In the first instance, technical Proposal shall be opened on the E tender portal, and then the "Financial Proposal" shall be retained unopened.

9. During the technical evaluation, no amendments to Technical Proposal shall be permitted.

10. After the evaluation and approval of the technical proposals, the financial/commercial (on E-tender portal) shall be opened for technically responsive firms, publicly at a time, date and venue announced and communicated, within the proposed validity period.

11. The financial proposals found technically non-responsive shall be rejected.

12. Financial Proposal shall be evaluated based on procuring agency evaluation criteria as provided in the bidding document on E-pad portal.

13. The lowest evaluated bidder shall be awarded the contract.

14. Bidders are required to offer most competitive lowest price of their quoted items as no negotiations on quoted price are allowed under the rules.

15. Procurement Committee reserves the Right to accept or reject any or all Bids prior to award of contract as per SPPRA Rules, 2010 (amended 2019).

16. In case of any difficulty prospective bidders may contact EPADS helpline 051-111-137-237 during working days/hours

EXECUTIVE DIRECTOR
(SICHN), GOVERNMENT OF SINDH

SICHN, KARACHI

EVALUATION CRITERIA

NOTE

Financial proposal must be submitted on company letter head duly signed and stamped. Bidder is required to type their offer in figure and as well as in words of the total amount else the offer would be rejected.

EVALUATION / QUALIFICATION

1.1 The procuring agency reserves the right to evaluate and compare the bids on itemized basis OR on the basis of a group of similar nature goods OR goods compatible with each other.
1.2 The following merit point system for weighing evaluation factors/criteria will be applied for technical proposals.
1.3 Bidders achieving minimum **70 marks** will be considered only for further process. Documentary evidence must be attached in support of each parameter.
1.4 **Any Bid not meeting the mandatory requirements of evaluation criteria will be disqualified / rejected straight away and will not be considered for further evaluation.**

S#	PARAMETERS / SUB-PARAMETERS	Total Marks
1	**Valid registration with PEC in category C-3**	**10**
1.1	C2 & above	10
1.2	C3	5
2	**List of Completed Projects in last 5 years (Repair & Renovation work in Hospital Buildings with civil, plumbing and electrification works**	**20**
2.1	5 marks for each project worth 80% of the Estimated Cost, Maximum 3 projects in different hospitals)	15
2.2	2.5 marks for each project Worth 50 % of the Estimated Cost, Maximum 2 Different projects)	5
3	**List of Projects in hand/ongoing (Repair & Renovation works in Hospital sector with civil, plumbing and electrification works**	**15**
3.1	5 marks for each project worth 80% of the Estimated Cost in different hospitals)	10
3.2	2.5 marks for each project Worth 50 % of the Estimated Cost, Maximum 2 in different hospitals)	5

SICHN, KARACHI

SICHN, KARACHI

4	**Bio data of Engineering and Technical staff working with the firm along with attested CVs, PEC Card & Degree Certifications showing Engineers employment with the firm along with same reflected in PEC License.**	**20**
4.1	Civil Engineer – B.E. Civil Engineering with minimum 10 years' experience	5
4.2	Mechanical Engineer – B.E Mechanical Engineering with minimum 10 years' experience	5
4.3	Electrical Engineer – BE Electrical Engineering with minimum 10 years' experience	4
4.4	Electric Wireman & Electric Supervisor	3
4.5	Supervisor (B.Tech/Diploma)	3
5	**Average Annual Turnover (Bidders are required to submit Audited Statements along with Income tax returns for the last Three (03) years must be attached).**	**10**
5.1	250.00 (Million) and above	10
5.2	150.00 (Million) to below 250.00 (Million)	8
5.3	100.00 (Million) to below 150.00 (Million)	6
5.4	50.00 (Million) to below 100.00 (Million)	4
6	**No. of Years in Business**	**10**
6.1	More than 15 Years of Experience	10
6.2	More than 10 Years of Experience	7
6.3	More than 05 Years of Experience	4
7	**The Bidder shall submit an undertaking on its official company letterhead, duly signed and stamped by its authorized representative. The undertaking shall confirm that the Bidder will fully comply with, and faithfully implement, all provisions, terms, and conditions of the Tender Document, including the Contract Agreement, Bill of Quantities (BOQ), Drawings, Technical Specifications, and the List of Approved Manufacturers. Compliance shall be in both letter and spirit, without any deviation, substitution, or omission, unless approved in advance in writing by the Competent Authority/Engineer in accordance with the Contract.**	**7**
8	**Health, Safety and Environmental Compliance**	**8**
8.1	Submission of Project HSE Plan with Technical Bid	4
8.2	Qualified Safety Engineer (With Certifications)	2
8.3	ISO 45001 / ISO 14001 certification	2
TOTAL MARKS		**100**

Note: Qualifying Marks 70 out of 100.

Proposal Evaluation:

SICHN, KARACHI

SICHN, KARACHI

1. Technically qualified/successful bidder(s) shall be eligible for further process.
2. Bids not accompanied by the Bid Security of required amount and form shall be rejected.
3. Procuring Agency shall not be responsible for any erroneous calculation of taxes and all differences arising out shall be fully borne by the Successful Bidder.
4. For the purpose of comparison of bids quoted in different currencies, price shall be converted into Pakistani Rupees. The rate of exchange shall be the selling rate prevailing seven working days before the date of opening of the bids, as notified by the National Bank of Pakistan (NBP) / State Bank of Pakistan (SBP).

Contract Award	
ITB 29.1	Procuring Agency reserves the right to drop any item and increase or decrease the quantity of goods originally specified in Schedule of Requirements / Technical Specifications without any change in unit price and other terms & conditions.
ITM 32.1	Successful Bidder and the Procuring Agency will sign the Contract Agreement on the stamp paper with stamp duties as per the article 22-A (Contract) of the schedule of Stamp Act 1899. The expenditure involved on the said contract agreement will be borne by the bidder.

SICHN, KARACHI

SICHN, KARACHI

INVITATION
FOR BIDS

SICHN, KARACHI

SICHN, KARACHI

INSTRUCTIONS
TO
BIDDERS

SICHN, KARACHI

SICHN, KARACHI

INSTRUCTIONS TO BIDDERS

(Note: These Instructions to Bidders along with bidding data will not be part of the Contract and will cease to have effect once the contract is signed.)

A. GENERAL

IB.1 Scope of Bid

1.1 Procuring agency as defined in the bidding data hereinafter called "the procuring agency" wishes to receive bids for the construction and completion of works as described in these bidding documents, and summarized in the bidding data hereinafter referred to as the "Works".

1.2 The successful bidder will be expected to complete the works within the time specified in Appendix-A to Bid.

IB.2 Source of Funds

2.1 Procuring agency has received/allocated/] applied for loan/grant/ Federal/ Provincial/Local Government funds from the source(s) indicated in the bidding data in various currencies towards the cost of the project /scheme specified in the bidding data, and it is intended that part of the proceeds of this loan/grant/funds will be applied to eligible payments under the contract for which these bidding documents are issued.

IB.3 Eligible Bidders

3.1 This Invitation for Bids is open to all interested bidders who are eligible under provisions of Sindh Public Procurement Rules as mentioned below and the criteria given in the Notice Inviting Tender (NIT)/ Bidding Document.

Firms and individuals, national or international, may be allowed to bid for any project where international competitive bidding is feasible. Any conditions for participation shall be limited to those that are essential to ensure the bidder's capability to fulfill the contract in question.

(a) Bidders may be excluded if;

(i) as a matter of law or official regulations, commercial relations are prohibited with the bidder's country by the federal government in case of ICB, or

(ii) a firm is blacklisted/ debarred by the procuring agency and the matter has been reported to the Authority, subject to Rule 30 of Sindh Public Procurement Rules 2010.

(b) Government-owned enterprises or institutions may participate only if they can establish that they are;

(i) legally and financially autonomous, and

SICHN, KARACHI

SICHN, KARACHI

(ii) operate under commercial law.

Provided that where government-owned universities or research centers in the country are of a unique and exceptional nature, and their participation is critical to project implementation, they may be allowed to participate; and
Bidders shall include all those contractors who are registered or incorporated in Pakistan, irrespective of the nationality of their owners and professional staff, or

(c) Bidders are:-

(i) pre-qualified with procuring agency for particular project/scheme;

(ii) registered with Pakistan Engineering Council in particular category and discipline,

(iii) registered with relevant tax authorities (income/sales tax, wherever applicable)

IB.4 One Bid per Bidder

4.1 Each bidder shall submit only one bid either by himself, or as a partner in a joint venture. A bidder who submits or participates in more than one bid (other than alternatives pursuant to Clause IB.16) will be disqualified.

IB.5 Cost of Bidding

5.1 The bidders shall bear all costs associated with the preparation and submission of their respective bids, and the procuring agency will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

IB.6 Site Visit

6.1 The bidders are advised to visit and examine the site of works and its surroundings and obtain all information that may be necessary for preparing the bid and entering into a contract for construction of the works. All cost in this respect shall be at the bidder's own expense.

6.2 The bidders and any of their personnel or agents will be granted permission by the procuring agency to enter upon his premises and lands for the purpose of such inspection, but only upon the express condition that the bidders, their personnel and agents, will release and indemnify the procuring agency, his personnel and agents from and against all liability in respect thereof and will be responsible for death or personal injury, loss of or damage to property and any other loss, damage, costs and expenses incurred as a result of such inspection.

B. BIDDING DOCUMENTS

IB.7 Contents of Bidding Documents (SSP RULE 21)

7.1 The bidding documents, in addition to invitation for bids, are those stated below and should be read in conjunction with any addenda issued in accordance with Clause IB.9.

SICHN, KARACHI

SICHN, KARACHI

a. Instructions to Bidders.
b. Bidding Data.
c. General Conditions of Contract, Part-I (GCC).
d. Special Conditions of Contract, Part-II (SCC)
e. Specifications.
f. Form of Bid and Appendices to Bid.
g. Bill of Quantities (Appendix-D to Bid).
h. Form of Bid Security.
i. Form of Contract Agreement.
j. Forms of Performance Security, Mobilization Advance Guarantee, Integrity Pact and Indenture bond for secured advance.
k. Drawings.

7.2 The bidders are expected to examine carefully the contents of all the above documents. Failure to comply with the requirements of bid submission will be at the bidder's own risk. Pursuant to Clause IB.26, bids which are not substantially responsive to the requirements of the BD will be rejected.

IB.8 Clarification of Bidding Documents (SSP RULE 23(1)):

Any interested bidder requiring any clarification(s) in respect of the bidding documents may notify the procuring agency in writing at the procuring agency's address indicated in the Invitation for Bids/NIT. Procuring agency will respond to any request for clarification provided they are received at least five calendar days prior to the date of opening of bid.
Provided that any clarification in response to query by any bidder; shall be communicated to all parties who have obtained bidding documents.

IB.9 Addendum/Modification of Bidding Documents:

9.1 At any time prior to the deadline for submission of bids, the procuring agency may, for any reason, whether at his own initiative or in response to a clarification requested by a interested bidder, modify the bidding documents by issuing addendum.

9.2 Any addendum thus issued shall be part of the bidding documents pursuant to sub¬clauseIB 7.1 hereof and shall be communicated in writing to all bidders. Interested bidders shall acknowledge receipt of each addendum in writing to the procuring agency.

9.3 To afford bidders reasonable time in which to take an addendum into account inpreparing their bids, the procuring agency may extend the deadline for submission of bids in accordance with IB.20.

C. PREPARATION OF BIDS

IB.10 Language of Bid

SICHN, KARACHI

SICHN, KARACHI

10.1 The bid and all correspondence and documents related to the bid exchanged by a bidder and the procuring agency shall be in the language stipulated in the bidding data and Special Conditions of the Contract. Supporting documents and printed literature furnished by the bidders may be in any other language provided the same are accompanied by an accurate translation of the relevant parts in the bid language, in which case, for purposes of evaluation of the bid, the translation in bid language shall prevail.

IB.11 Documents Accompanying the Bid

11.1 Each bidder shall:

(a) submit a written authorization on the letterhead of the bidding firm, authorizing the signatory of the bid to act for and on behalf of the bidder;

(b) update the information indicated and listed in the bidding data and previously submitted with the application for prequalification, and continue to meet the minimum criteria set out in the prequalification documents, which as a minimum, would include the following :

(i) Evidence of access to financial resources along with average annual construction turnover;

(ii) Financial predictions for the current year and the following two years, including the effect of known commitments;

(iii) Work commitments since prequalification;

(iv) Current litigation information; and

(v) Availability of critical equipment.

And

(c) furnish a technical proposal taking into account the various Appendices to Bidspecially the following:

Appendix-E to Bid	Proposed Construction Schedule
Appendix-F to Bid	Method of Performing the Work
Appendix-G to Bid	List of Major Equipment
Appendix-K to Bid	Organization Chart for Supervisory Staff

And other pertinent information such as mobilization programmeetc;

11.2 Bids submitted by a joint venture of two (2) or more firms shall comply with the following requirements:

(a) one of the joint venture partners shall be nominated as being in charge; andthis authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the joint venture partners;

SICHN, KARACHI

SICHN, KARACHI

(b) the bid, and in case of a successful bid, the Form of Contract Agreement shall be signed by the authorized partner so as to be legally binding on all partners;

(c) the partner-in-charge shall always be duly authorized to deal with the procuring agency regarding all matters related with and/or incidental to the execution of works as per the terms and Conditions of Contract and in this regard to incur any and all liabilities, receive instructions, give binding undertakings and receive payments on behalf of the joint venture;

(d) all partners of the joint venture shall at all times and under all circumstances be liable jointly and severally for the execution of the contract in accordance with the contract terms and a statement to this effect shall be included in the authorization mentioned under Sub-Para (a) above as well as in the Form of Bid and in the Form of Contract Agreement (in case of a successful bid);

(e) a copy of the agreement entered into by the joint venture partners shall be submitted with the bid stating the conditions under which it will function, its period of duration, the persons authorized to represent and obligate it and which persons will be directly responsible for due performance of the contract and can give valid receipts on behalf of the joint venture, the proportionate participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning. No amendments / modifications whatsoever in the joint venture agreement shall be agreed to between the joint venture partners without prior written consent of the procuring agency;

(f) submission of an alternative Letter of Intent to execute a Joint Venture Agreement shall be mandatory.

11.3 Bidders shall also submit proposals of work methods and schedule, in sufficient detail to demonstrate the adequacy of the bidders' proposals to meet the technical specifications and the completion time referred to sub- clause IB 1.2 hereof.

IB.12 Bid Prices

12.1 Unless stated otherwise in the bidding documents, the contract shall be for the whole of the works as described in IB 1.1 hereof, based on the unit rates or prices submitted by the bidder or percentage quoted above or below on the rates of Composite Schedule of Rates (CSR), as the case may be.

12.2 The bidders shall fill in rates and prices for all items of the works described in the Bill of Quantities. Items against which no rate or price is entered by a bidder will not be paid for by the procuring agency when executed and shall be deemed to be covered by rates and prices for other items in the Bill of Quantities. In case of Composite Schedule of Rates, if the bidder fails to mention the percentage above or below, it shall be deemed to be at par with the rates of Composite Schedule of Rates.

12.3 The bid price submitted by the contractor shall include all rates and prices includingthe taxes. All duties, taxes and other levies payable by the contractor under the contract, or for any other cause during the currency of the execution of the work or otherwise specified in the contract as on the date seven days prior to the deadline for submission of bids.

SICHN, KARACHI

SICHN, KARACHI

Additional / reduced duties, taxes and levies due to subsequent additions or changes in legislation shall be reimbursed / deducted as per Sub-Clause 13.7 of the General Conditions of Contract Part-I.

12.4 The rates and prices quoted by the bidders are subject to adjustment during the performance of the contract in accordance with the provisions of Clause 13.7of GCC. The bidders shall furnish the prescribed information for the price adjustment formulae in Appendix-C to Bid, and shall submit with their bids such other supporting information as required under the said Clause. Adjustment in prices quoted by bidders shall be allowed as per Sub-Para 4(ii) of Section C of Instructions to bidders and bidding data.

IB.13 Currencies of Bid and Payment

13.1 The unit rates and the prices shall be quoted by the bidder entirely in Pak rupees. A bidder expecting to incur expenditures in other currencies for inputs to the works supplied from outside the procuring agency's country (referred to as the "Foreign Currency Requirements") shall indicate the same in Appendix-B to Bid. The proportion of the bid price (excluding Provisional Sums) needed by him for the payment of such Foreign Currency Requirements either (i) entirely in the currency of the bidder's home country or, (ii) at the bidder's option, entirely in Pak rupees provided always that a bidder expecting to incur expenditures in a currency or currencies other than those stated in (i) and (ii) above for a portion of the foreign currency requirements, and wishing to be paid accordingly, shall indicate the respective portions in the bid.

13.2 The rates of exchange to be used by the bidder for currency conversion shall be the selling rates published and authorized by the State Bank of Pakistan prevailing on the date, 07 (seven) days prior to the deadline for submission of bids. For the purpose of payments, the exchange rates used in bid preparation shall apply for the duration of the contract.

IB.14 Bid Validity

14.1 Bids shall remain valid for the period stipulated in the bidding data from the date of opening of bid specified in clause IB.23.

14.2 In exceptional circumstances, prior to expiry of the original, the procuring agency may request the bidders to extend the period of validity for a specified additional period, which shall not be for more than one third of the original period of bid validity. The request and the responses thereto, shall be made in writing. A bidder may refuse the request without the forfeiture of the bid security. In case, a bidder agreed to the request, shall not be required or permitted to modify the bid, but will be required to extend the validity of the bid security for the period of the extension, and in compliance with Clause IB.15 in all respects.

IB.15 Bid Security

15.1 Each bidder shall furnish, as part of the bid, a bid security in the amount stipulated in the bidding data in Pak Rupees or an equivalent amount in a freely convertible currency.

SICHN, KARACHI

SICHN, KARACHI

15.2 The bid security shall be at the option of the bidder, in the form of deposit at call, Pay order or a bank guarantee issued by a Scheduled Bank in Pakistan or from a foreign bank duly counter guaranteed by a Scheduled Bank in Pakistan in favour of the procuring agency, which should commensurate with the bid validity period. The bank guarantee for bid security shall be acceptable in the manner as provided at Annexure BS-1

15.3 Any bid not accompanied by an acceptable bid security shall be rejected by the procuring agency as non-responsive.

15.4 Bid security shall be released to the unsuccessful bidders once the contract has been signed with the successful bidder or the validity period has expired.

15.5 The bid security of the successful bidder shall be returned when the bidder has furnished the required Performance Security and signed the Contract Agreement.

15.6 The bid security may be forfeited:

(a) if the bidder withdraws his bid except as provided in sub- clause IB 22.1;

(b) if the bidder does not accept the correction of his bid price pursuant to subclause IB 27.2 hereof; or

(c) In the case of successful bidder, if he fails within the specified time limit to:

(i) furnish the required Performance Security; or

(ii) sign the Contract Agreement.

IB.16 Alternate Proposals/Bids

16.1 Each bidder shall submit only one bid either by himself, or as a member of a joint venture, until and unless they have been requested or permitted for alternative bid, then he has to purchase separate bidding documents and alternate bid shall be treated as separate bid.

16.2 Alternate proposals are allowed only for procurement of works where technical complexity is involved and more than one designs or technical solutions are being offered. Two stage two envelope bidding procedure will be appropriate when alternate proposal is required.

16.3 Alternate bid(s) shall contain (a) relevant design calculations; (b) technical specifications; (c) proposed construction methodology; and (d) any other relevant details / conditions, provided that the total sum entered on the Form of Bid shall bethat which represents complete compliance with the bidding documents.

IB.17 Pre-Bid Meeting

17.1 Procuring agency may, on his own motion or at the request of any bidder, hold a pre- bid meeting to clarify issues and to answer any questions on matters related to the bidding documents. The date, time and venue of pre-bid meeting, if convened, shall be communicated to all bidders. All bidders or their authorized representatives shall be invited to attend such a pre-bid meeting at their own expense.

SICHN, KARACHI

SICHN, KARACHI

17.2 The bidders are requested to submit questions, if any, in writing so as to reach the Procuring agency not later than seven (7) days before the proposed pre-bid meeting.

17.3 Minutes of the pre-bid meeting, including the text of the questions raised and the replies given, will be transmitted without delay to all bidders. Any modification of the bidding documents listed in sub- clause IB 7.1 hereof, which may become necessary as a result of the pre-bid meeting shall be made by the procuring agency exclusively through the issue of an Addendum pursuant to Clause IB.9 and not through the minutes of the pre-bid meeting.

17.4 Absence at the pre-bid meeting will not be a cause for disqualification of a bidder.

IB.18 Format and Signing of Bid

18.1 Bidders are particularly directed that the amount entered on the Form of Bid shall be for performing the contract strictly in accordance with the bidding documents.

18.2 All appendices to bid are to be properly completed and signed.

18.3 Alteration is not to be made neither in the form of bid nor in the Appendices thereto except in filling up the blanks as directed. If any such alterations be made or if these instructions be not fully complied with, the bid may be rejected.

18.4 Each bidder shall prepare by filling out the forms without alterations and shall provide an original copy along with photocopies as per the requirement of the procuring agency specified in the bidding data. The original as well as copies of the document shall be clearly marked as "ORIGINAL" and 'COPY", as the case may be. If there is any discrepancy between original and copy (ies) then the original shall prevail.

18.5 The original and all copies of the bid shall be typed or written in indelible ink (in the case of copies, Photostats are also acceptable) and shall be signed by a person(s) duly authorized to sign on behalf of the bidder pursuant to sub- clause IB 11.1(a) hereof. All pages of the bid shall be initialed and stamped by the person(s) signing the bid.

18.6 The bid shall contain no alterations, omissions or additions, except to comply with instructions issued by the procuring agency, or as are necessary to correct errors made by the bidder. Such corrections shall be initialed by the person(s) signing the bid.

18.7 Bidders shall indicate in the space provided in the Form of Bid their full and properpostal addresses at which notices may be legally served on them and to which all correspondence in connection with their bids and the contract is to be sent.

18.8 Bidders should retain a copy of the bidding documents as their file copy.

D. SUBMISSION OF BIDS

IB.19 Sealing and Marking of Bids

SICHN, KARACHI

SICHN, KARACHI

19.1 Each bidder shall submit his bid as under:

(a) ORIGINAL andCOPIES of the bid shall be separately sealed and put inseparate envelopes and marked as such.

(b) The envelopes containing the ORIGINAL and COPIES shall be put in one sealed envelope and addressed as given in sub - clause IB 19.2 hereof.

19.2 The inner and outer envelopes shall:

(a) be addressed to the procuring agency at the address provided in the bidding data;

(b) bear the name and identification number of the contract as defined in the bidding data; and

(c) provide a warning not to open before the time and date for bid opening, as specified in the bidding data.

19.3 In addition to the identification required in sub- clause IB 19.2 hereof, the inner envelope shall indicate the name and postal address of the bidder to enable the bid to be returned unopened in case it is declared "late" pursuant to Clause IB.21

19.4 If the outer envelope is not sealed and marked as above, the procuring agency will assume no responsibility for the misplacement or premature opening of the Bid.

IB.20 Deadline for Submission of Bids

20.1 (a) Bids must be received by the procuring agency at the address specified not later than the time and date stipulated in the bidding data,

(b) Bids with charges payable will not be accepted, nor will arrangements be undertaken to collect the bids from any delivery point other than that specified above. Bidders shall bear all expenses incurred in the preparation and delivery of bids. No claims shall be entertained for refund of such expenses,

(c) Where delivery of a bid is by mail and the bidder wishes to receive an acknowledgment of receipt of such bid, he shall make a request for such acknowledgment in a separate letter attached to but not included in the sealed bid package,

(d) Upon request, acknowledgment of receipt of bids will be provided to those making delivery in person or by messenger.

20.2 The Procuring Agency may, at its discretion, extend the deadline for submission of bids by issuing an amendment in accordance with IB 09. In such case, all rights and obligations of the procuring agency and the bidders shall remain the same as mentioned in the original deadline.

IB.21 Late Bids

SICHN, KARACHI

SICHN, KARACHI

(a) any bid received by the procuring agency after the deadline for submission of bids prescribed in to clause IB 20 shall be returned unopened to such bidder.

(b) delays in the mail, person in transit, or delivery of a bid to the wrong office shall not be accepted as an excuse for failure to deliver a bid at the proper place and time. It shall be the bidder's responsibility to submit the bid in time.

IB.22 Modification, Substitution and Withdrawal of Bids

22.1 Any bidder may modify, substitute or withdraw his bid after bid submission provided that the modification, substitution or written notice of withdrawal is received by the procuring agency prior to the deadline for submission of bids.

22.2 The modification, substitution, or notice for withdrawal of any bid shall be prepared, sealed, marked and delivered in accordance with the provisions of Clause IB.19 with the outer and inner envelopes additionally marked "MODIFICATION", "SUBSTITUTION" or "WITHDRAWAL" as appropriate.

22.3 No bid may be modified by a bidder after the deadline for submission of bids except in accordance with to sub - clauses IB 22.1 and IB 27.2.

22.4 Withdrawal of a bid during the interval between the deadlines for submission of bids and the expiration of the period of bid validity specified in the Form of Bid may result in forfeiture of the bid security in pursuance to clause IB 15.

E. BID OPENING AND EVALUATION.

IB.23 Bid Opening

23.1 Procuring agency will open the bids, including withdrawals, substitution and modifications made pursuant to Clause IB.22, in the presence of bidders' representatives who choose to attend, at the time, date and location stipulated in the bidding data. The bidders or their representatives who are in attendance shall sign an attendance sheet.

23.2 Envelopes marked "MODIFICATION", "SUBSTITUTION" or "WITHDRAWAL" shall be opened and read out first. Bids for which an acceptable notice of withdrawal has been submitted pursuant to clause IB.22 shall not be opened.

23.3 Procuring agency shall read aloud the name of the bidder, total bid price and price of any Alternate Proposal(s), if any, discounts, bid modifications, substitution and withdrawals, the presence or absence of bid security, and such other details as the procuring agency may consider appropriate, and total amount of each bid, and of any alternative bids if they have been requested or permitted, shall be read aloud and recorded when opened.

23.4 Procuring Agency shall prepare minutes of the bid opening, including the information disclosed to those present in accordance with the sub-clause IB.23.3.

IB.24 Process to be Confidential. (SPP Rule 53)

SICHN, KARACHI

SICHN, KARACHI

24.1 Information relating to the examination, clarification, evaluation and comparison of bid and recommendations for the award of a contract shall not be disclosed to bidders or any other person not officially concerned with such process before the announcement of bid evaluation report in accordance with the requirements of Rule 45, which states that Procuring agencies shall announce the results of bid evaluation in the form of a report giving reasons for acceptance or rejection of bids. The report shall be hoisted on website of authority and that of procuring agency if it website exists and intimated to all bidders at least seven (7) days prior to the award of contract The announcement to all bidders will include table(s) comprising read out prices, discounted prices, price adjustments made, final evaluated prices and recommendations against all the bids evaluated. Any effort by a bidder to influence the procuring agency's processing of bids or award decisions may result in the rejection of such bidder's bid. Whereas, any bidder feeling aggrieved, may lodge a written complaint as per Rule 31; however mere fact of lodging a complaint shall not warrant suspension of the procurement process.

IB.25 Clarification of Bid (SPP Rule 43)

25.1 To assist in the examination, evaluation and comparison of bids, the procuring agency may, at its discretion, ask any bidder for clarification of the bid, including breakdowns of unit rates. The request for clarification and the response shall be in writing but no change in the price or substance of the bid shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by the procuring agency in the evaluation of the bids in accordance with clause IB 28.

IB.26 Examination of Bids and Determination of Responsiveness

26.1 Prior to the detailed evaluation of bids, the procuring agency will determine whether the bidder fulfills all codal requirements of eligibility criteria given in the tender notice such as registration with tax authorities, registration with PEC (where applicable), turnover statement, experience statement, and any other condition mentioned in the NIT and bidding document. If the bidder does not fulfill any of these conditions, it shall not be evaluated further.

26.2 Once found to be fulfilling the eligibility criteria, as mentioned in sub- clause 26.1, the bids of eligible bidders will be evaluated for technical responsiveness as per specification and criteria given in the bidding documents. Technical and financial evaluations may be carried out in accordance with single stage-single one envelope, single stage-two envelopes, two stage or two stage-two envelopes bidding procedures, depending on the selection procedure adopted by the procuring agency.

26.3 A bid will be considered technically responsive if it (i) has been properly signed; (ii) is accompanied by the required bid security; and (iii) conforms to all the terms, conditions and specifications of the bidding documents, without material deviation or reservation. A material deviation or reservation is one (i) which affect in any substantial way the scope, quality or performance of the works; (ii) which limits in any substantial way, inconsistent with the bidding documents, the procuring agency's rights or the bidder's obligations under the contract; or (iii) adoption/rectification whereof would affect unfairly the competitive position of other bidders presenting substantially responsive bids.

26.4 If a bid has major deviations to the commercial requirements and technical specifications will be considered technically non responsive. As a general rule, major deviations are those that if accepted, would not fulfill the purposes for which the bid is requested, or would prevent a fair comparison or affect the ranking of the bids that are compliant with the bidding documents.

SICHN, KARACHI

SICHN, KARACHI

(A). Major (material) Deviations include:-

(i) has been not properly signed;
(ii) is not accompanied by the bid security of required amount and manner;
(iii) stipulating price adjustment when fixed price bids were called for;
(iv) failing to respond to specifications;
(v) failing to comply with Mile-stones/Critical dates provided in Bidding Documents;
(vi) sub-contracting contrary to the Conditions of Contract specified in Bidding Documents;
(vii) refusing to bear important responsibilities and liabilities allocated in the Bidding Documents, such as performance guarantees and insurance coverage;
(viii) taking exception to critical provisions such as applicable law, taxes and duties and dispute resolution procedures;
(ix) a material deviation or reservation is one :

(a) which affect in any substantial way the scope, quality or performance of the works;
(b) adoption/rectification whereof would affect unfairly the competitive position of other bidders presenting substantially responsive bids.

(B). Minor Deviations

Bids that offer deviations acceptable to the Procuring Agency and which can be assigned a monetary value may be considered substantially responsive at least as to the issue of fairness. This value would however be added as an adjustment for evaluation purposes only during the detailed evaluation process.

26.5 If a bid is not substantially responsive, it will be rejected by the procuring agency, and may not subsequently be made responsive by correction or withdrawal of the non- conforming deviation or reservation.

IB.27 Correction of Errors before Financial Evaluation

27.1 Bids determined to be substantially responsive will be checked by the procuring agency for any arithmetic errors. Errors will be corrected by the procuring agency as follows:

(a) where there is a discrepancy between the amounts in figures and in words, the amount in words will govern; and

(b) where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern, unless in the opinion of the procuring agency there is an obviously gross misplacement of the decimal point in the unit rate, in which case the line item total as quoted will govern and the unit rate will be corrected.

27.2 The amount stated in the Form of Bid will be adjusted by the procuring agency in accordance with the above procedure for the correction of errors and with the concurrence of the bidders. The amount thus corrected shall be considered as binding upon the bidder. If the bidder does not accept the corrected bid price, his bid will be rejected, and the bid security shall be forfeited in accordance with sub- clause IB 15.6(b) hereof.

SICHN, KARACHI

SICHN, KARACHI

IB.28 Financial Evaluation and Comparison of Bids

28.1 The procuring agency will evaluate and compare only the Bids determined to be substantially responsive in accordance with clause IB 26.

28.2 In evaluating the Bids, the procuring agency will determine for each bid the evaluated bid price by adjusting the bid price as follows:

(a) making any correction for errors pursuant to clause IB 27;

(b) excluding provisional sums (if any), for contingencies in the Summary Bill of Quantities, but including competitively priced Day work; and

(c) making an appropriate adjustment for any other acceptable variation or deviation.

28.3 The estimated effect of the price adjustment provisions of the conditions of contract, applied over the period of execution of the contract, shall not be taken into account in bid evaluation.

28.4 If the bid of the successful bidder is seriously unbalanced in relation to the procuring agency's estimate of the cost of work to be performed under the contract, the procuring agency may require the bidder to produce detailed price analyses for any or all items of the Bill of Quantities to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the procuring agency may require that the amount of the Performance Security set forth in clause IB.32 be increased at the expense of the successful bidder to a level sufficient to protect the procuring agency against financial loss in the event of default of the successful bidder under the contract.

28.5 Bidders may be excluded if involved in "Corrupt and Fraudulent Practices" means either one or any combination of the practices given below SPP Rule2(q);

(i) **"Coercive Practice"** means any impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence the actions of a party to achieve a wrongful gain or to cause a wrongful loss to another party;

(ii) **"Collusive Practice"** means any arrangement between two or more parties to the procurement process or contract execution, designed to achieve with or without the knowledge of the procuring agency to establish prices at artificial, noncompetitive levels for any wrongful gain;

(iii) **"Corrupt Practice"** means the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence the acts of another party for wrongful gain;

(iv) **"Fraudulent Practice"** means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;

SICHN, KARACHI

SICHN, KARACHI

(v) **"Obstructive Practice"** means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract or deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements before investigators in order to materially impede an investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or acts intended to materially impede the exercise of inspection and audit rights provided for under the Rules.

28.6 **Evaluation Report (SPP Rule 45)**

After the completion of evaluation process, as described in clauses IB 27 and IB 28, the procuring agency shall announce the results of bid evaluation in the form of report (available on the website of the authority) giving reasons for acceptance and rejection of bid. The report shall be hoisted on website of the authority and that of procuring agencies if its website exists and intimated to all bidders at least seven (7) days prior to the award of contract.

F. AWARD OF CONTRACT

IB.29 Award (SPP Rule 49)

29.1 Subject to clauses IB 30 and IB 34 and provision of the rule: The procuring agency shall award the contract to the bidder whose bid has been determined to be substantially responsive to the bidding documents, and who has offered the lowest evaluated bid, but not necessarily the lowest submitted price, within the original or extended period of bid validity. Provided that such bidder has been determined to be eligible in accordance with the provisions of clause IB 03 and qualify pursuant to sub- clause IB 29.2.

29.2 Procuring agency, at any stage of the bid evaluation, having credible reasons for or having prima facie evidence of any deficiency(ies) in contractor's capacities, may require the contractor to provide information concerning their professional, technical, financial, legal or managerial competence whether already pre-qualified or not for the said project.Provided, that such qualification shall only be laid down after recording reasons thereof, in writing. They shall form part of the records of that bid evaluation report.

IB.30 Procuring Agency's Right to reject all Bids or Annul/Cancellation the Bidding Process (SPP Rule 25)

Notwithstanding clause IB 29 and provision of the rule: (1) A procuring agency reserves may cancel the bidding process at any time prior to the acceptance of a bid or proposal; (2) The procuring agency shall incur no liability towards bidders solely by virtue of its invoking sub -rule (1); (3) Intimation of the cancellation of bidding process shall be given promptly to all bidders and bid security shall be returned along with such intimation; (4) The procuring agency shall, upon request by any of the bidders, communicate to such bidder, grounds for cancellation of the bidding process, but is not required to justify such grounds.

IB.31 Notification/Publication of the Award of Contract (SPP Rule 25).

SICHN, KARACHI

31.1 Prior to expiry of the period of bid validity, including extension, prescribed by the procuring agency, the procuring agency shall notify the successful bidder in writing ("Letter of Acceptance") that his bid has been accepted. This letter shall mention the sum which the procuring agency will pay to the contractor in consideration of the execution and completion of the works by the contractor as prescribed by the contract (hereinafter and in the conditions of contract called the "Contract Price").

31.2 No negotiation with the bidder having evaluated as lowest responsive or any other bidder shall be permitted, however, procuring agency may hold meetings to clarify any item in the bid evaluation report.

31.3 The notification of award and its acceptance by the bidder will constitute the formation of the contract, binding the procuring agency and the bidder till signing of the formal Contract Agreement.

31.4 Upon furnishing by the successful bidder of a Performance Security and signing of the contract, the procuring agency will promptly notify the name of the successful bidder to all bidders and return their bid securities accordingly.

31.5 Within seven days of the award of contract, procuring agency shall publish on the website of the Authority and on its own website, if such a website exists, the results of the bidding process, identify the bid through procurement identifying numbers, and the following information:

(1) Evaluation Report
(2) Form of Contract and letter of Award;
(3) Bill of Quantities or Schedule of Requirement.

31.6 Debriefing (SPP Rule 51).

(a) A bidder may ask the procuring agency for reasons for non acceptance of his bid and may request for a debriefing meeting and procuring agency shall give him the reasons for such non acceptance, either in writing or by holding a debriefing meeting with such a bidder.

(b) The requesting bidder shall bear all the costs of attending such a debriefing.

IB.32 Performance Security (SPP Rule 39)

32.1 The successful bidder shall furnish to the procuring agency a Performance Security in the form of pay order or demand draft or bank guarantee, and the amount stipulated in the bidding data and the Conditions of Contract within a period of 28 days after the receipt of Letter of Acceptance.

32.2 Failure of the successful bidder to comply with the requirements of Sub-clause IB.32.1 or clauses IB 33 or IB 35 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security.

SICHN, KARACHI

32.3 Validity of performance security shall extend at least ninety days beyond the date of completion of contract, or as mentioned in the bidding data to cover defects liability period or maintenance period subject to final acceptance by the procuring agency.

IB.33 Signing of Contract Agreement (SPP Rule 39)

33.1 Within 14 days from the date of furnishing of acceptable Performance Security under the Conditions of Contract, the procuring agency will send the successful bidder the Contract Agreement in the form provided in the bidding documents, incorporating all agreements between the parties.

33.2 The formal Agreement between the procuring agency and the successful bidder shall be executed within 14 days of the receipt of the Contract Agreement by the successful bidder from the procuring agency.

33.3 A procurement contract shall come into force when the procuring agency requires signscontract, the date on which the signatures of both the procuring agency and the successful bidder are affixed to the written contract. Such affixing of signatures shall take place within the time prescribed in the bidding documents.

Provided that the procuring agency may reduce the maximum time limit for signing of contract, as and when required, and shall be mentioned in the bidding documents.

33.4 Stamp Duty.

The formal Agreement between the Procuring Agency and the successful bidder shall be duly stamped at rate of —% of bid price (updated from time to time) stated in Letter of Acceptance.

IB.34 General Performance of the Bidders

Procuring agency may in case of consistent poor performance of the contractor and his failure to remedy the underperforming contract may take such action as may be deemed appropriate under the circumstances of the case including the rescinding the contract and/or black listing of such contractor and debarring him from participation in future bidding process.

IB.35 Integrity Pact (SPP Rule 89)

The bidder shall sign and stamp the Integrity Pact provided at Appendix-L to the bidding documents for all Provincial/Local Government procurement contracts exceeding Rupees ten million. Failure to provide such Integrity Pact shall make the bidder non-responsive.

IB.36 Instructions not Part of Contract

Bids shall be prepared and submitted in accordance with these Instructions which are provided to assist bidders in preparing their bids, and do not constitute part of the bid or the Contract Documents.

IB.37 Arbitration (SPP Rule 34)

SICHN, KARACHI

SICHN, KARACHI

Any dispute that is not amicably resolved shall be finally settled, unless otherwise specified in the Contract, under the Arbitration Act 1940 updated from time to time and would be held anywhere in the Province of Sindh at the discretion of procuring agency.

SICHN, KARACHI

SICHN, KARACHI

BIDDING
DATA

SICHN, KARACHI

SICHN, KARACHI

NOTES ON BIDDING DATA

This Section is intended to assist the procuring agency in providing the specific information in relation to corresponding clauses in Instructions to Bidders and should be prepared to suit each individual contract.

The procuring agency should provide in the bidding data information and requirements specific to the circumstances of the procuring agency, the processing of the bid, the applicable rules regarding bid price and currency, and the bid evaluation criteria that will apply to the bids. In preparing this section, the following aspects should be checked:

(1) Information that specifies and complements the provisions of section; Instruction to Bidders must be incorporated.

(2) Amendments and/or supplements, if any, to the provisions of Instructions to Bidders, necessitated by the circumstances of each individual contract, can be introduced only in this section since Instructions to Bidders will remain unchanged.

SICHN, KARACHI

SICHN, KARACHI

BIDDING DATA

The information in this section is complementary to, amends or supplements the Provisions in the Instructions to Bidders. Whenever there is conflict, the provisions herein shall take precedence over those in the Instructions to Bidders.

Reference to Instructions to Bidders Clauses	Bidding Data
1.1	**Name and Address of the procuring agency:** Sindh Institute of Child Health and Neonatology (SICHN), Office First Floor, Plot no. 354 & 356 JM, Near People's Secretariat Chowrangi, Jamshed Quarters Karachi, Phone no. +9221-99333101-2-3 and E-mail: info@sichn.com.pk.
1.2	**Name of the Project and Summary of the works:** Electrical and Plumbing work required for Karachi
2.1	**Name of the Borrower/Source of Financing/Funding Agency/Funding Source;** Regular Budget
8.1	**Time limit for clarification:** 5 working days, prior to last date of submission
10.1	**Bid language:** English
12.1	**Bid Price** The contract shall be based on unit rates and percentage basis where ever applicable.
13.1	Bidders to quote in entirely in Pak rupees.
14.1	**Period of Bid Validity:** Period of Bid Validity is 90 days. Extendable if required. Bid validity can be extended in accordance to updated Rule No: 38 of the Sindh Public Procurement Rules, 2010
15.1	**Bid Security:** The Fixed Bid Security is 3.0% as mentioned in NIT
16	**Alternate Proposal / Bids**

SICHN, KARACHI

	Alternate Proposals / Bids are not invited.
18.4	**Number of bid to be completed and returned:** One Original Technical Proposal and One Original Financial Proposal
19.2 and 20.1	**The Bids must be submitted on EPADS on or before Date of Opening up to 10:30 a.m. and must be accompanied by a bid security of Three (3%) of estimated value of the procurement in favor of Sindh Institute of Child Health and Neonatology (SICHN) must reach before the deadline for the submission of e-bids, which will be opened on the same day 08-12-2026 at 11: 00 a.m First Floor, Plot no. 354 & 356 JM, Near People's Secretariat Chowrangi, Jamshed Quarters Karachi**
26.1	**Eligibility Criteria** Prior to the detailed evaluation of bids, the procuring agency will determine whether the bidder fulfills all codal requirement of mandatory criteria and Evaluation criteria given in the tender notice. If the bidder does not fulfill any of this condition, it shall not be evaluated further.
28.1	**Financial Evaluation** Evaluation of bids will be based on Lowest Evaluated Responsible Bidder (LERB) methodology.
32.1	**Standard form and amount of Performance Security acceptable to the procuring agency:** The Performance Security shall be of an amount equal to 10% of the Contract Price stated in the Letter of Acceptance. Such Security shall, be in the form of bank guarantee from any Scheduled Bank in Pakistan and in the format attached with these documents (PS-1).
32.3	**Stamp duty** 0.035%of Awarded Amount will be paid by successful bidder as stamp duty.

SICHN, KARACHI

FORM OF BID

AND
APPENDICES TO BID

SICHN, KARACHI

SICHN, KARACHI

FORM OF BID

Bid Reference No. _____
(Name of Contract/Work)

To:

_____
_____
_____

1. Having examined the bidding documents including Instructions to Bidders, Bidding Data, and Conditions of Contract, Specifications, Drawings and Bill of Quantities and Addenda Nos. _____ for the execution of the above-named work, we/I, the undersigned, offer to execute and complete the work and remedy any defects therein in conformity with the Conditions of Contract, Specifications, Drawings, Bill of Quantities and Addenda for the sum of Rs. _____ (Rupees _____) or such other sum as may be ascertained in accordance with the said conditions.

2. We/I understand that all the Appendices attached hereto form part of this bid.

3. As security for due performance of the undertakings and obligations of this bid, we/I submit herewith a bid security in the amount of Rupees _____ (Rs._____) drawn in your favour or made payable to procuring agency and valid for a period of _____ days beginning from the date, bid is opened.

4. We/I undertake, if our bid is accepted, to commence the works and to complete the whole of the works comprised in the contract within the time stated in Appendix-A to Bid.

5. We/I agree to abide by this bid for the period of _____ days from the date fixed for opening the same and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

6. Unless and until a formal Agreement is prepared and executed, this bid, together with your written acceptance thereof, shall constitute a binding contract between us.

7. We do hereby declare that the bid is made without any collusion, comparison of figures or arrangement with any other bidder for the works.

8. We understand that you are not bound to accept the lowest or any bid you may receive.

9. We undertake, if our/my bid is accepted, to execute the Performance Security referred to in Clause 4.2 of Conditions of Contract for the due performance of the Contract.

10. We confirm, if our bid is accepted, that all partners of the joint venture shall be liable jointly and severally for the execution of the Contract and the composition or the constitutionof the joint venture shall not be altered without the prior consent of the procuring agency. (Please delete this in case of Bid form a single bidder)

SICHN, KARACHI

SICHN, KARACHI

in the capacity of _____ duly authorized to sign Bids for and on behalf of

Dated this _____ day of _____ 20 _____

Signature: _____

_____
(Name of Bidder in Block Capitals)
(Seal)

Address: _____
_____
_____

Witness:

Signature: _____
Name: _____

Address: _____
_____
Occupation; _____

SICHN, KARACHI

SICHN, KARACHI

BA-1
Appendix-A to Bid

SPECIAL STIPULATIONS
Clause
Conditions of Contract

1.	Engineer's Authority to issue Variation in emergency	2.1	**DELETED**
2.	Amount of Performance Security	10.1	10% of the contract Amount stated in the LOI in the form of irrevocable bank guarantee or pay order or demand draft from any scheduled bank of Pakistan.
3.	Time for Furnishing Programme	14.1	Within **14 calendar days** following receipt of the Letter of acceptance
4.	Minimum amount of Third-Party Insurance	23.2	**2% (Two Percent)** of the contract amount per occurrence. No. of occurrences unlimited.
5.	Time for Commencement	41.1	From the date of Issuance of Work Order
6.	Time for Completion	43.1 48.2	**06 months** from the date of issuance of work order
7.	Number of Liquidated Damages	47.1	**0.01%** of the contact value for each day of delay in completion of the Works, subject to a maximum of 10% of Contract Price stated in the Letter of Acceptance.
8.	Defects Liability Period	49.1	**12 months** from the effective date of Taking Over Certificate/ Issuance of Completion Certificate.
9.	Percentage of Retention Money	60.2	**5%** of the amount of Interim/running Payments
10.	Limit of Retention Money	60.2	**5%** of Contract Price to be stated in the letter of acceptance.
11.	Minimum amount of Interim Payment Certificates (Running Bills)	60.2	**40** million
12.	Time of Payment from delivery of Engineer's Interim Payment Certificate to the Employer.	60.10	28 Calendar days for Engineer's Review and maximum 28 days thereafter. (Total **56 Days**)
13.	Mobilization Advance	60.12	**DELETED**

SICHN, KARACHI

SICHN, KARACHI

FOREIGN CURRENCY REQUIREMENTS

1. The bidder may indicate herein below his requirements of foreign currency (if any), with reference to various inputs to the works.

2. Foreign Currency Requirement as percentage of the bid price excluding Provisional Sums %.

3. Table of Exchange Rates

Unit of Currency	Equivalent in Pak. Rupees
Australian Dollar	----------
Euro	----------
Japanese Yen	----------
U.K. Pound	----------
U.S. Dollars	----------
----------	----------
----------	----------

DELETED

SICHN, KARACHI

SICHN, KARACHI

PRICE ADJUSTMENT UNDER CLAUSE 70/13.8 OF CONDITIONS OF CONTRACT

A. Weight ages or coefficients are used for price adjustment.

The source of indices and the weight ages or coefficients for use in the adjustment formula under Clause 13.8 shall be as follows:

(To be filled by the procuring agency)

Cost Element	Description	Unit	Weight ages	Applicable index
1	2	3	4	5
(i)	Fixed Portion		0.350	
(ii)	Local Labor	Per day	0.050	Government of Pakistan (GOP) Federal Bureau of Statistics (FBS) Monthly Statistical Bulletin.
(iii)	Cement - in bags	M.Ton	0.018	Falcon Cement, Karachi.
(iv)	Reinforcing Steel	M.Ton	0.048	Pakistan Steel
(v)	High Speed Diesel (HSD)	Per liter	0.226	Pakistan State Oil
(vi)	Bricks	1000 Nos	0.001	Government of Pakistan (GOP) Federal Bureau of Statistics (FBS) Monthly Statistical Bulletin.
(vii)	Bitumen	M.Ton	0.121	National Refinery Ltd, Karachi
	Total		1.000	

Notes:

1) Indices for "(ii)" to "(vii)" are taken from the Government of Pakistan Federal Bureau of Statistics, Monthly Statistical Bulletin. The base cost indices or prices shall be those applying 15 days prior to the latest day for submission of bids. Current indices or prices shall be those applying 28 days prior to the last day of the billing period.

2) Any fluctuation in the indices or prices of materials other than those given above shall not be subject to adjustment of the Contract Price.

3) Fixed portion shown here is for typical road project, procuring agency to determine the weight age of Fixed Portion considering only those cost elements having cost impact of seven (7) percent or more on his specific project.

DELETED

SICHN, KARACHI

SICHN, KARACHI

B. When Escalation is allowed on the materials only.

Price adjustment on following items shall be allowed:

Cost Element	Description	Base price	Applicable index
1	2	3	4
(i)	Cement - in bags		Government of Pakistan (GOP) Federal Bureau of Statistics (FBS) Monthly Statistical Bulletin. " "
(ii)	Reinforcing Steel		" " "
(iii)	Bricks		" " "
(iv)	Bitumen		" " "
(v)	Wood (Composite item)		
	Total five items.		

DELETED

SICHN, KARACHI

SICHN, KARACHI

Appendix-A to Bid

BILL OF QUANTITIES

A. Preamble

1. The Bill of Quantities shall be read in conjunction with the Conditions of Contract, Specifications and Drawings.

2. The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work executed and measured by the Contractor and verified by the Engineer and valued at the rates and prices entered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix as per the Contract (in case of item not mentioned in Bill of Quantities).

3. The rates and prices entered in the priced Bill of Quantities shall, except insofar as it is otherwise provided under the contract include all costs of contractor's plant, labour, supervision, materials, execution, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the contract. Furthermore all duties, taxes and other levies payable by the contractor under the contract, or for any other cause, as on the date 14 days prior to deadline for submission of Bids in case of ICB/NCB respectively, shall be included in the rates and prices and the total bid price submitted by the bidder.

4. A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of items against which the contractor will have failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities and shall not be paid separately.

5. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities, and where no items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related items of the works.

6. General directions and description of work and materials are not necessarily repeated nor summarised in the Bill of Quantities. References to the relevant sections of the bidding documents shall be made before entering prices against each item in the priced Bill of Quantities.

7. Provisional sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Engineer in accordance with sub-clause 13.5 of Part I, General Conditions of Contract.

SICHN, KARACHI

SICHN, KARACHI

Bill of Quantities of Karachi

CIVIL WORKS					
Sr No.	**D E S C R I P T I O N**	**UNIT**	**QTY**	**RATE (RS.)**	**AMOUNT**
1	**DISMANTLING WORKS**				
	Dismantling and removal of existing structures, fixtures, fittings and equipment, including block masonry, PCC, RCC, terrazzo, marble, granite, floor/dado tiles, plaster, doors, windows, ventilators, partitions, false ceilings, counters, glass, SS plates, roller shutters, AC, electrical and plumbing items, etc. All works shall be carried out with necessary safety precautions to avoid damage and disposed of surplus material as per instructions of client.	**Job**	**1**		**-**
2	**FLOOR POLISH WORKS**				**-**
	Mechanical honing, restoration and polishing of existing floor marble-chip mosaic flooring, including skirting, using professional-grade floor polishing machinery, diamond abrasive pads of progressively finer grits and bonnet buffing pads. The work shall include thorough cleaning, removal of stains, treatment of minor surface imperfections, regrouting of open joints with approved color-matched grout, and application of approved polishing compounds, including (Bellinzoni Super Crystal Powder Marble and ConfiAd Marble or equivalent Polishing Compound), as suitable for the existing flooring, followed by machine buffing to achieve a smooth, uniform and glossy finish. All materials, chemicals, machinery, tools, equipment and skilled labor shall be included in the rate. A trial polishing patch shall be carried out for approval prior to commencement of the work. Existing marble chips, cementitious matrix and floor levels shall be preserved without excessive grinding or damage, complete in all respects as approved by and to the satisfaction of the Engineer/Site In charge. Skirting shall not be measured or paid for separately, and its cost shall be deemed included in the unit rate. Contractor shall submit a detailed methodology of the execution process for the review and approval of client well before commencement of works.	**Sft**	**43,000**		**-**
					-
3	**DEEP CLEANING WORKS**				**-**

SICHN, KARACHI

	Mechanical deep cleaning of existing wall tiles, glass, doors, chairs, windows, SS plates, ventilators and building façade using suitable cleaning machinery, tools and approved cleaning chemical agents. The work includes removal of dust, dirt, stains, grease and accumulated deposits without damaging existing surfaces, including all labor, equipment and accessories, complete in all respects. Contractor shall submit a detailed methodology of the execution process for the review and approval of client well before commencement of works.	**Job**	**1**		-
4	**MASONRY WORK**				
	Providing and laying 4"–6" thick machine-made concrete block masonry, laid in cement-sand mortar (1:4), including scaffolding, curing, cutting, jointing and drilling for wall ties at junctions with RCC columns, beams and walls. Complete in all respects as per approved drawings, specifications and to the satisfaction of the Client.	**Sft.**	**2,500**		-
					-
5	**PLASTER (INTERNAL / EXTERNAL)**				-
	Providing and applying 3/4" thick cement-sand plaster in 1:4 ratio in two coats to all surfaces of walls, columns, beams, ceilings, lintels, recesses and corners, including surface preparation, leveling, finishing, curing and scaffolding at any height. Complete in all respects as per approved drawings and specifications, to the satisfaction of the Client	**Sft.**	**5,000**		-
					-
6	**P.C.C WORKS**				-
	Providing and laying plain cement concrete (PCC) in floor panels in cement, sand and 1:3:6 ratio, using 1½" down-graded crushed stone aggregate and approved local sand, including formwork where required, leveling, compaction, finishing, curing and removal of formwork. Complete in all respects as per approved specifications and as directed by the Client.	**Cft**	**200**		-
					-
7	**R.C.C WORKS**				-
	Providing and laying reinforced cement concrete (RCC) in required panels in 1:2:4 cement, sand and aggregate ratio, using 1½" down-graded crushed stone aggregate and approved local sand, including formwork where required, leveling, compaction, finishing, curing and removal of formwork. Complete in all respects as per approved specifications and as directed by the Client.	**Cft**	**200**		-
					-
8	**STEEL REINFORCEMENT**				

	Providing, cutting, bending, placing and fixing Grade-60 high-yield deformed steel reinforcement bars of approved make , including straightening, cutting to required lengths, bending to specified shapes and dimensions, placing and securing in position as per approved structural drawings and bar bending schedules, including all necessary overlaps, laps, hooks, anchorage, wastage, 16 SWG black annealed mild steel binding wire, precast concrete cover blocks/spacers and M.S. chairs as required to maintain specified concrete cover and reinforcement positioning, complete with all materials, labor, tools, equipment and incidentals in all respects as per approved drawings, specifications and to the satisfaction of the Engineer/Site In charge. (Amreli Steel, Naveena Steel or approved equivalent)	**Kgs**	**2,000**		-
					-
9	**CHEMICAL WATER PROOFING**				-
	Providing and applying premium two-component polymer-modified cementitious roof waterproofing treatment, including thorough surface preparation, removal of dust, loose particles and contaminants, cleaning and dampening of the substrate, filling and sealing of cracks, honeycombs and surface imperfections with approved repair material, and providing cementitious coving at wall-floor junctions. Application shall comprise minimum two coats applied in opposite directions to achieve a minimum total dry film thickness of 2 mm, including compatible primers, waterproofing reinforcement mesh at corners, joints, pipe penetrations and critical junctions wherever required by the manufacturer, proper curing and protection of the applied membrane. The completed treatment shall be subjected to a minimum 48–72 hours ponding test after the specified curing period to ensure water tightness. All materials, chemicals, accessories, skilled labor, tools, equipment and incidentals shall be included, complete in all respects as per manufacturer's specifications, approved drawings and to the satisfaction of the Engineer/Site In charge. (SikaTop-107 Seal PK, Fosroc Brushbond RFX) or approved equivalent	**Sft**	**26,640**		-
10	**TERMITE PROOFING**				

	Providing and applying post-construction anti-termite treatment to existing tiled flooring without removal of tiles, using approved non-repellent termiticide. The treatment shall include drilling 10–12 mm diameter holes through existing grout joints, extending through the floor screed and concrete slab up to the underlying soil, at maximum 300 mm c/c along perimeters and vulnerable locations, with suitable additional injection points as required to establish a continuous chemical barrier. Injection shall be carried out using professional pressure-controlled equipment and suitable injection lances to ensure uniform distribution of the approved chemical solution beneath the flooring, including treatment along wall-floor junctions, door frames, pipe penetrations and other vulnerable locations. All drilled holes shall be properly sealed with matching grout after treatment, including all materials, chemicals, equipment, skilled labor and incidental works, complete as per manufacturer's specifications and approved method statement, to the satisfaction of the Engineer/Site In charge, including a written five (5) year warranty against termite re-infestation. (Brands:- BASF Termidor SC (Fipronil), Premise 200SC (Imidacloprid) or approved equivalent)	**Job**	**1**		-
					-
11	**<u>PORCELAIN TILES ON FLOOR & SKIRTING (24" x 48")</u>**				-
	Providing and laying imported premium-quality full-body porcelain tiles of approved size, thickness, color, shade and finish, from approved brands . The work shall include chipping and hacking of existing flooring, surface preparation and levelling, fixing with approved porcelain-grade tile adhesive, accurate alignment, cutting and edge finishing, and use of 2 mm tile spacers with levelling clips and wedges to maintain uniform joints and prevent lippage. Adequate levelling instruments and equipment, including spirit levels, laser levels and straightedges, shall be used to ensure proper floor levels, uniformity and a drainage slope of 1:100 (1%) towards floor drains in designated wet areas, wherever applicable and as indicated in approved drawings. The work shall also include color-matched joint grouting, cleaning and final finishing, complete in all respects as per approved drawings, specifications, manufacturer's recommendations and instructions of the Client/Engineer. (Brands:- White Horse (Malaysia), RAK Ceramics, NIRO Granite, Marazzi, Atlas Concorde, Florim, Porcelanosa, STILE or approved equivalent				-
a)	**Floor / Dado (24" x 48")**	**Sft**	**500**		-
b)	**4" high Skirting**	**Rft**	**100**		-
12	**<u>PORCELAIN TILES ON FLOOR & SKIRTING (12" x 24")</u>**				-

SICHN, KARACHI

	Providing and laying imported premium-quality full-body porcelain tiles of approved size, thickness, color, shade and finish, from approved brands. The work shall include chipping and hacking of existing flooring, surface preparation and levelling, fixing with approved porcelain-grade tile adhesive, accurate alignment, cutting and edge finishing, and use of 2 mm tile spacers with levelling clips and wedges to maintain uniform joints and prevent lippage. Adequate levelling instruments and equipment, including spirit levels, laser levels and straightedges, shall be used to ensure proper floor levels, uniformity and a drainage slope of 1:100 (1%) towards floor drains in designated wet areas, wherever applicable and as indicated in approved drawings. The work shall also include color-matched joint grouting, cleaning and final finishing, complete in all respects as per approved drawings, specifications, manufacturer's recommendations and instructions of the Client/Engineer. (Brands:- White Horse (Malaysia), RAK Ceramics, NIRO Granite, Marazzi, Atlas Concorde, Florim, Porcelanosa, STILE or approved equivalent				-
a)	**Floor / Dado (12" x 24")**	**Sft**	**20,000**		-
b)	**4" high Skirting**	**Rft**	**200**		-
					-
13	**<u>VINYL WORKS</u>**				-
	Providing and laying minimum 2.0 mm thick homogeneous healthcare-grade PVC vinyl sheet flooring, conductive/static-dissipative type for designated operating theatres and standard non-conductive type for wards, corridors and other clinical areas, as specified in approved drawings. Flooring shall be of premium approved brands having high wear resistance, low residual indentation, slip and chemical/disinfectant resistance, hygienic surface and certified fire performance. The work shall include complete substrate preparation, crack and surface repairs, application of compatible primer, self-levelling compound and PCC wherever required, and full bonding with manufacturer's approved adhesive. All sheet joints shall be accurately butted, grooved and hot-welded with matching PVC welding rods, trimmed flush to provide sealed and impervious joints. Provide minimum 150 mm high integral coved skirting, measured above finished floor level, using compatible rigid PVC cove formers/radius fillets of approximately 25 mm radius, PVC top capping strips, and properly sealed internal/external corners, wall junctions, door frames and pipe penetrations. Rate shall include all flooring, adhesives, primers, repair and levelling materials, welding rods, coving accessories, labor, machinery and wastage complete as per manufacturer's specifications, approved drawings and to the satisfaction of the Engineer/Site In charge. (Brands:- Gerflor, First Floor,Tarkett, Forbo, Polyflor, Fatra or approved equivalent),				-
a)	**Vinyl For Floor**	**Sft.**	**2,000**		-

SICHN, KARACHI

b)	**Vinyl For Dado**	**Sft.**	**3,000**		**-**
14	**EPOXY**				**-**
	Providing and applying minimum 3.0 mm thick seamless, self-levelling, two-component hospital-grade epoxy flooring system, using approved premium products , suitable for operating theatres and critical clinical areas, with high abrasion, chemical, disinfectant and stain resistance, hygienic, non-porous and slip-resistant finish. The work shall include mechanical diamond grinding/shot blasting, industrial vacuum cleaning, substrate moisture assessment, crack and surface repairs using compatible epoxy mortar, application of approved epoxy primer and cementitious self-levelling compound wherever required to achieve a smooth, sound and uniform substrate. The epoxy body coat shall be applied using calibrated notched squeegees/trowels and spiked rollers to achieve minimum 3.0 mm cured system thickness, followed by a compatible protective epoxy/PU topcoat. Provide 150 mm high integral epoxy coved skirting, measured above finished floor level, including rigid PVC cove former or bonded epoxy-mortar radius fillet of 25–50 mm, compatible epoxy coving finish. Existing cracks and movement joints shall be treated with compatible repair materials and flexible sealants, as appropriate. Maintain required floor levels and drainage slopes towards floor drains wherever applicable. Rate shall include all primers, resins, hardeners, repair and levelling compounds, coving formers, capping strips, sealants, topcoat, materials, skilled labor, machinery, testing and incidentals, complete as per manufacturer's specifications, approved drawings and to the satisfaction of the Engineer/Site In charge. (Brands:- Sika (Sika floor), Fosroc (Nito Flor), Flowcrete (Flowshield) or approved equivalent)				**-**
a)	**For Floor**	**Sft.**	**2,000**		**-**
b)	**For Dado**	**Sft.**	**3,000**		**-**
15	**NON SLIP TERRAZO TILE**	**-**			**-**
	Providing and laying ¾" thick, 12" × 12" non-slip terrazzo tiles of approved quality, color and shade, fixed with cement mortar/dry-bond adhesive as approved, including surface preparation, cutting, alignment, joint grouting with approved color and finishing. Tiles shall be subject to approval by the Client. Complete in all respects as per approved drawings, specifications and instructions of the client.	**Sft**	**2,000**		**-**
					-

16	**FALSE CEILING (Gypsum)**				-
	Providing and installing 24" × 24" (600 × 600 mm), minimum 7 mm thick Foiled- backed gypsum false ceiling tiles (Moisture resistant), of approved design, color, texture and finish. The ceiling shall be supported on a heavy-duty galvanized steel T-bar suspension grid, including main runners and cross tees of approved CKM, Solid FUT or equivalent make, with minimum 0.35 mm base metal thickness (BMT), including matching heavy-gauge perimeter wall-angle/edge trim of the same approved make and quality. The suspension system shall include 18 SWG galvanized iron hanger wires, properly secured to the structural slab using minimum 50 mm long approved expansion/Rawl-type anchor bolts of Hilti, Fischer or Rawl plug make, as suitable for the substrate and loading. All screws, fasteners and fixing hardware shall be galvanized/corrosion-resistant, of adequate size and thickness, preferably Adamjee Engineering make. The work shall include all necessary hangers, connectors, clips, supports, fittings, cutting, alignment, levelling and installation accessories, ensuring a rigid, stable and accurately levelled ceiling framework, complete in all respects as per approved drawings, manufacturer's recommendations and to the satisfaction of the Engineer/Site In charge. Brands :- United Gypsum, Arish or other approved equivalent	**Sft**	**16,000**		-
17	**FALSE CEILING**				
	Dismantling and carefully removing the existing false ceiling sheets, cleaning and preparing the reusable sheets for reinstallation, and providing and installing a new heavy-duty galvanized steel T-bar suspension framework, including main runners, cross tees and matching heavy-gauge perimeter wall-angle/edge trims of approved CKM, Solid FUT or equivalent make, with minimum 0.35 mm base metal thickness (BMT). The suspension system shall include 18 SWG galvanized iron hanger wires, properly secured to the structural slab using minimum 50 mm long approved expansion/Rawl-type anchor bolts of Hilti, Fischer or Rawl plug make as suitable for the substrate and loading. Reusable sheets shall be cleaned, inspected and repaired wherever required before reinstallation. Any damaged or unserviceable sheets shall be replaced, subject to prior approval of the Client, with matching 24" × 24" (600 × 600 mm), minimum 7 mm thick, foil-backed, moisture-resistant gypsum ceiling tiles of approved design, color, texture and finish, manufactured by United Gypsum, Arish or approved equivalent. All necessary screws, fasteners, connectors, clips, hangers, supports, fittings, cutting, alignment, levelling and installation accessories shall be included, ensuring a rigid, stable and accurately levelled ceiling system, maintaining the existing ceiling design and layout, complete in all respects as per approved drawings, manufacturer's recommendations and to the satisfaction of the Engineer/Site In charge.	**Sft**	**16,000**		-
18	**CONCEALED GYPSUM BOARD BORDER CEILING WITH PAINT FINISH (4'-0" x 8'-0")**				-

	Providing and fixing ½" (12.5 mm) thick gypsum board border false ceiling using 4' × 8' gypsum boards. The suspension system shall include 18 SWG galvanized iron hanger wires, properly secured to the structural slab using minimum 50 mm long approved expansion/Rawl-type anchor bolts of Hilti, Fischer or Rawl plug make, as suitable for the substrate and loading. Gypsum boards shall be securely fixed using galvanized/corrosion-resistant drywall screws, preferably Adamjee Engineering make, with all board joints treated using approved jointing tape and jointing compound, including corner treatment, joint filling, sanding and surface preparation to achieve a smooth, uniform finish. The completed ceiling shall receive one coat of approved gypsum-compatible primer/sealer followed by minimum two coats of premium-quality emulsion paint of approved color, shade and finish, manufactured by ICI/Dulux, Jotun or approved equivalent. The work shall include all necessary hangers, connectors, supports, fasteners, fittings, cutting, alignment, levelling, joint treatment, primer and paint application, complete in all respects as per approved drawings, manufacturer's recommendations and to the satisfaction of the Engineer/Site In charge. (United Gypsum, Arish or other approved equivalent)	**Sft**	**500**		-
					-
19	**PROTECTIVE FIBRE OR ALUMINUM STRIP ON CORNER / EDGES**				
	Providing, supplying and fixing approved quality fibre or aluminium strip lining/protective beading to all exposed corners and edges of light pelmets and other exposed surfaces, including cutting, mitring, jointing, drilling, fixing with suitable screws/adhesive, finishing and all necessary accessories, complete in all respects as per approved drawings, specifications and directions of the Engineer-in-Charge	**Rft**	**100**		-
			.		
20	**<u>INTERNAL PAINT (Matt Finish)</u>**				-
	Providing and applying four coats of approved matt-finish emulsion paint to internal plastered walls, partitions and structural ceilings, including surface grinding, cleaning, rubbing, sanding, filling, application of primer and necessary surface preparation. All work shall be carried out in accordance with the manufacturer's specifications, approved color selection and instructions of the Consultant, complete in all respects. (ICI, Berger, Jotun or equivalent)	**Sft**	**31,500**		-
21	**<u>EXTERNAL PAINT</u>**				
	Providing and applying a minimum of three coats of approved matt-finish weather-shield enamel paint by roller to surfaces, over one coat of suitable primer, including surface preparation, cleaning, sanding, smooth filling and levelling. Paint color and shade shall be approved by the Client/Architect. Complete in all respects as per approved drawings, specifications and instructions of the client. (ICI, Berger, Jotun or equivalent)	**Sft**	**25,000**		-
	-				-

22	**OIL PAINT**				-
	Providing and applying a minimum of two coats of approved oil paint over one coat of suitable primer to MS grills, railings and other designated surfaces, including cleaning, rust removal, sanding, surface preparation, smooth filling and primer application. Paint color and shade shall be approved by the Client/Architect. Complete in all respects as per approved drawings, specifications and instructions of the client. (ICI, Berger, Jotun or equivalent)	**sft**	**10,000**		-
					-
23	**DECO COLOR PAINT**				-
	Providing and applying approved Deco Color paint to designated surfaces, including surface cleaning, sanding, filling, base preparation and application of suitable primer and paint coats as per the manufacturer's specifications. Color, shade and finish shall be approved by the Client.. Complete in all respects as per approved drawings and instructions of the client. ICI, Berger, Jotun or equivalent)				-
a)	**For Door including Ventilators, Door frame, Beading etc. all both sides**	**Nos**	**300**		-
b)	**For other areas excluding (a)**	**Sft**	**2,000**		-
24	**UPVC DOORS**				-
	Providing, fabricating and installing premium-quality uPVC internal doors for hospital use, using multi-chambered profiles with minimum 60–70 mm profile depth and 2.5 mm wall thickness. Door frames and shutters shall incorporate galvanized steel C-channel reinforcement in shutters and U-channel reinforcement in frames, nominally 30 × 20 mm with minimum 1.5 mm thickness, including additional reinforcement at hinge and lock fixing locations, properly secured within profile chambers. Provide matching uPVC glazing beads (beading pattis), continuous EPDM sealing gaskets, approved glass/infill panels as specified, and properly fusion-welded profile corners. All doors shall include corrosion-resistant adjustable hinges (minimum 3 per shutter), mortise locks, handles, cylinders, keeps and necessary hardware of approved equivalent make, with privacy locks for washroom doors. Include all fabrication, fasteners, installation, alignment, adjustment, sealing and finishing, complete as per approved drawings, manufacturer's recommendations and to the satisfaction of the Engineer/Site In charge. Brands:- Europrofilo, SKYPEN, WINTECH, Deceuninck, Unitherm, Alfapen or approved equivalent make,	**Sft**	**500**		-
25	**SOLID WOOD DOORS**				

SICHN, KARACHI

	Providing, fabricating and installing single/double-leaf, single/double-swing solid deodar (dayyar) wood door shutters, minimum 1½" thick, made from seasoned, sound, premium-quality timber and treated with approved anti-termite preservative. Shutters shall include matching deodar wood lipping and 3" wide decorative beading and including door frame accurately jointed and finished with natural machine polish. Include stainless-steel kick plates and bumper plates, premium-quality locks, handles, tower bolts, locks, stoppers and all necessary door accessories and fasteners. Complete in all respects as per approved drawings, specifications, design and instructions of the Client/Engineer.	**Sft**	**300**		**-**
26	**DOOR FRAMES**				
	Providing, fabricating and fixing door chowkhats/frames made from 16 SWG galvanized iron sheet, accurately formed to the approved profile and dimensions, including welded joints, suitable stiffeners, holdfasts, anchor fasteners and necessary fixing accessories. Include approved bearing-type hinges securely fixed to the frame, with suitable reinforcement at hinge locations. Apply an approved anti-corrosion primer and protective paint finish to all exposed and concealed metal surfaces before installation. Treat adjoining timber packing or other susceptible materials with approved anti-termite preservative where applicable. Complete in all respects as per approved drawings, specifications and instructions of the Client/Engineer.	**Rft**	**50**		**-**
27	**GLASS DOOR**				**-**
	Providing, fabricating and installing 12 mm (½") thick clear tempered glass doors with approved 4" aluminum D-48 section , complete with top and bottom locking systems, gaskets, aluminum channels, handles, bolts, nuts, screws, locks and imported floor spring. Including approved frosted film, all necessary fittings and accessories, complete in all respects as per approved drawings, specifications and instructions of the client. Glass:- Tariq, Ghani or approved equivalent, Aluminum:- Lucky, Pak Cable, prime or equivalent	**Sft**	**200**		**-**
28	**GLASS PARTITIONS**				
	Providing and installing 12 mm thick imported polished tempered glass partitions with 25 mm top and bottom stainless-steel frames in brush finish, including approved aluminum sections and frosted film as per approved design. All panel joints shall be sealed with a minimum 5 mm thick clear silicone sealant by Dow Corning or approved equivalent. Complete in all respects as per approved drawings, specifications and instructions of the client. Glass:- Tariq, Ghani or approved equivalent, Aluminum:- Lucky, Pak Cable, prime or equivalent	**Sft.**	**300**		**-**
					-

SICHN, KARACHI

29	**MDF LOW HEIGHT PARTITION WITH GLASS**				-
	Providing and installing wooden partition framing using 2" × 2" Solignum-treated partal wood, spaced at maximum 16" c/c vertically and 24" c/c horizontally, properly aligned, plumbed and levelled, complete with 12 mm thick clear glass fitted with safety film. Including necessary fixing accessories, surface preparation and water-based matt-finish paint to the wooden frame. Complete in all respects with approved workmanship as per drawings, specifications and instructions of the client.	**Sft.**	**200**		-
					-
30	**CEMENT BOARD CLADDING/PARTITION**				-
	Providing and installing 11 mm thick cement board wall cladding/partition on one/both sides, supported on 3" × 1½" × 20 SWG GI C-channels fixed to the structure/block masonry with Hilti bolts, including 3" × ¾" × 20 SWG GI runners and cross-furring channels at 24" c/c horizontally and vertically. Including 2" thick rockwool insulation (45 kg/m³) wrapped in 1000-micron polythene sheets with sealed joints, complete with all necessary fixings and accessories. Complete in all respects as per approved drawings, specifications and to the satisfaction of the client.	**Sft**	**200**		-
					-
31	**WOODEN HAND RAIL**				-
	Providing and fixing ¾" thick × 12" wide oak wood handrail of approved quality and design, including proper supports, anchoring, termite treatment with Solignum or approved equivalent, sanding and natural wood polish. Complete in all respects as per approved drawings, specifications and instructions of the client. Brands:- Sayerlack, Sirca, ICA or equivalent	**Rft**	**200**		-
					-
32	**WOODEN POLISH**				-
	Providing and applying premium-quality natural wood polish to solid door shutters and wooden surfaces, including thorough surface preparation, sanding with progressively finer abrasives, filling of minor imperfections with matching wood filler, application of compatible sealer and the required coats of clear natural wood polish to achieve a smooth, uniform finish while retaining the natural wood grain. Use approved products applied strictly in accordance with the manufacturer's recommendations. Rate shall include all materials, labor, sanding, application equipment and finishing, complete as per approved sample and to the satisfaction of the Client/Engineer. Brands:- Sayerlack, Sirca, ICA or equivalent	**Sft**	**1,500**		-
					-

33	**LED WALL PANELING**				-
	Providing, fabricating and installing a 6" (152 mm) projecting decorative vertical fluted MDF panel for LED installation, comprising 18 mm thick high-density MDF boards of approved make (Lasani/Century or equivalent), fabricated with uniform vertical flutes of 25 mm face width, 10 mm groove depth and 15 mm clear spacing between adjacent flutes, or as per approved shop drawings and design. The panel shall be supported on a properly aligned framework of 1½" × 1½" partal wood members, thoroughly treated with Solignum anti-termite solution, and secured with suitable concealed heavy-duty screws, Fischer/Hilti wall plugs, brackets and other approved fixing accessories. All exposed surfaces shall be finished with approved oak-finish veneer plywood, properly bonded using Fevicol adhesive or equivalent, including matching edge lipping, sanding, surface preparation and premium-quality PU (Polyurethane) clear wood polish to achieve a uniform natural oak appearance. The scope shall also include necessary backing supports, framing, levelling, alignment, concealed fixing arrangements, LED strip recesses/channels, wiring provisions, cut-outs and all associated hardware and accessories required for a neat and durable installation. Complete in all respects as per approved shop drawings, specifications, approved material samples and instructions of the Client.	**Sft**	**100**		-
					-
34	**ALUMINUM WINDOWS PHARMACY AREA (UP AND DOWN SLIDING)**				-

SICHN, KARACHI

	Providing, fabricating and installing heavy-duty deluxe up-and-down sliding aluminum windows, using 4" (101.6 mm) wide, minimum 2.0 mm thick extruded aluminum sections with factory-applied anodized finish of minimum 15 microns in approved color. Glazing shall comprise 6 mm thick premium-quality clear float glass, free from visual distortions, scratches and bubbles, with polished edges; glass color, tint or acid-etched frosting shall be as per approved samples. The assembly shall include properly sized EPDM glazing gaskets, rubber compression seals, neoprene channels, 5–7 mm high-density nylon pile weather strips with central sealing fins, drainage and weep holes, and weatherproof silicone sealing (Dow / Sika or equivalent). Each window shall be provided with removable fly screens comprising 18 × 16 mesh per inch fiberglass insect mesh (approximately 1.0 mm aperture), fixed in minimum 1.2 mm thick aluminum screen frames with necessary clips and accessories. The sliding mechanism shall incorporate heavy-duty adjustable rollers with corrosion-resistant bearings, smooth-running tracks, suitable spring balance/counterbalance mechanism, heavy-duty locking arrangements, secure sash locks and matching handles. All hardware shall be of reputable make (Roto / Giesse / Kin Long or equivalent), with SS 304 stainless-steel screws, bolts and fasteners, brackets, cleats, connectors, anchors and all necessary fixing accessories. Including frame edge trimming, reinforcement where required, proper alignment, levelling, adjustment, shop protection, transportation, installation, final cleaning and all associated labor and materials. Complete in all respects as per approved shop drawings, specifications, manufacturer's recommendations, approved material samples and instructions of the Client. (Lucky / Pak Aluminum / Prime or equivalent), Ghani Glass , Tariq Glass or equivalent	**Sft.**	**100**		**-**
35	**<u>ALUMINUM WINDOWS / VENTILATOR</u>**				**-**

SICHN, KARACHI

	Providing, fabricating and installing heavy-duty deluxe up-and-down sliding aluminum windows, using 4" (101.6 mm) wide, minimum 2.0 mm thick extruded aluminum sections of approved make , with factory-applied anodized finish of minimum 15 microns in approved color. Glazing shall comprise 6 mm thick premium-quality clear float glass, free from visual distortions, scratches and bubbles, manufactured, with polished edges; glass color, tint or acid-etched frosting shall be as per approved samples. The assembly shall include properly sized EPDM glazing gaskets, rubber compression seals, neoprene channels, 5–7 mm high-density nylon pile weather strips with central sealing fins, drainage and weep holes, and weatherproof silicone sealing (Dow / Sika or equivalent). Each window shall be provided with removable fly screens comprising 18 × 16 mesh per inch fiberglass insect mesh (approximately 1.0 mm aperture), fixed in minimum 1.2 mm thick aluminum screen frames with necessary clips and accessories. The sliding mechanism shall incorporate heavy-duty adjustable rollers with corrosion-resistant bearings, smooth-running tracks, suitable spring balance/counterbalance mechanism, heavy-duty locking arrangements, secure sash locks and matching handles. All hardware shall be of reputable make, with SS 304 stainless-steel screws, bolts and fasteners, brackets, cleats, connectors, anchors and all necessary fixing accessories. Including frame edge trimming, reinforcement where required, proper alignment, levelling, adjustment, shop protection, transportation, installation, final cleaning and all associated labor and materials. Complete in all respects as per approved shop drawings, specifications, manufacturer's recommendations, approved material samples and instructions of the Client. (Lucky / Pak Aluminum / Prime or equivalent) by Ghani Glass / Tariq Glass or equivalent (Roto / Giesse / Kin Long or equivalent)	**Sft.**	**500**		**-**
					-
36	**MARBLE WORKS**				**-**
	Providing and laying ¾" (19 mm) thick, 12" × 12" (305 × 305 mm) premium-quality natural marble tiles, comprising of uniform color, shade and veining, free from cracks, stains and other defects, suitable for straight and curved surfaces as per site requirements. Marble shall be properly selected, cut, shaped and laid in 1:2 cement-sand mortar, maintaining uniform alignment, levels and joints. Including color-matched epoxy/chemical grouting, edge dressing, bull-nosing, carborundum grooves where required, progressive diamond grinding, honing and final machine polishing using premium-quality marble polishing compounds and crystallizers (Tenax / Fila / Akemi / Bellinzoni or equivalent), to achieve a uniform smooth, high-gloss finish. Including suitable marble stain-protection sealer, final rubbing, cleaning, surface protection and all necessary materials, labor, tools and accessories. Complete in all respects as per approved drawings, specifications, physical samples and instructions of the Client. (Afghan Ziarat, Verona marble or approved equivalent,				
a)	**Floor**	**Sft.**	**1,000**		**-**

SICHN, KARACHI

b)	**Skirting**	**Rft**	**50**		**-**
37	**S.S HAND RAILING**				**-**
	Providing, fabricating and fixing 2" (50.8 mm) diameter brushed stainless-steel handrail, manufactured from premium-quality SS 304 stainless-steel pipe of minimum 2.0 mm wall thickness (approximately 14 SWG), with uniform No. 4 satin/brushed finish. The handrail shall be securely supported on SS 304 stainless-steel brackets with minimum 4 mm thick base plates, spaced at maximum 900 mm centers, including suitable support arms, concealed fixing arrangements and all necessary fittings. Fixing shall be carried out using minimum M10 SS 304 mechanical expansion or approved chemical anchors, with minimum 75 mm embedment into sound concrete, subject to substrate conditions and manufacturer's recommendations. Including necessary drilling, cutting, alignment, TIG welding with compatible stainless-steel filler, grinding, polishing, edge finishing, end caps, connectors, bends, MS support studs where required, bolts, nuts, washers and all other accessories. All exposed welds shall be properly dressed and finished to match the original brushed surface, ensuring a uniform, rigid and corrosion-resistant installation. Complete in all respects at any floor level as per approved shop drawings, specifications, manufacturer's recommendations and instructions of the Client.	**Rft**	**50**		**-**
					-
38	**ALUMINUM COMPOSITE PANEL FOR FRONT ELEVATION WALL**				**-**
	Providing, fabricating and installing 4 mm thick aluminum composite panel (ACP) cladding of approved color and finish, including aluminum/MS tube or pipe framing, cutting, grooving, drilling and fixing with suitable screws, nuts, bolts, rivets and other necessary accessories. Including proper alignment, jointing, edge finishing and secure anchoring to the existing structure. Complete in all respects as per approved drawings, specifications and to the satisfaction of the client.	**Sft.**	**2,000**		**-**
					-
39	**R.C.C. PRECAST LINTELS**				**-**

SICHN, KARACHI

SICHN, KARACHI

	Providing, fabricating and installing precast RCC lintels in 1:2:4 cement concrete nominal mix, using OPC cement of approved make (Lucky Cement / Falcon Cement or equivalent), reinforced with Grade 60 deformed steel bars of approved make (Amreli / Agha / Mughal Steel or equivalent), comprising main longitudinal reinforcement, distribution bars and 6–8 mm diameter stirrups at spacing as per approved structural drawings. Reinforcement shall be properly cut, bent, tied and positioned with suitable spacers to maintain a minimum 25 mm concrete cover. Concrete shall be mechanically mixed, properly compacted using mechanical vibrators and cast in rigid, leak-proof formwork, including proper curing for a minimum of 7 days. Lintels shall be lifted, transported and installed carefully, maintaining proper alignment, level and minimum 150 mm bearing at each end, or as specified in structural drawings. Anchorage shall be provided through suitable steel dowel bars embedded during casting and securely connected to adjoining structural members using approved fixing arrangements. Including reinforcement steel, binding wire, spacers, formwork, lifting arrangements, transportation, placing, levelling, anchoring, all necessary materials, labor, tools and equipment. Complete in all respects as per approved structural drawings, specifications and instructions of the Client.	**Cft**	**25**		**-**
					-
40	**WORKSTATIONS**				**-**
	Providing, fabricating and installing HR staff workstation measuring 48" × 24" × 30" high (W × D × H), fabricated from 18 mm thick high-density MDF board of approved make , finished with approved oak-finish veneer plywood and premium-quality PU clear wood polish, including matching 2 mm PVC edge banding on all exposed edges. The workstation shall be supported on a rigid 1½" × 1½" MS square-pipe frame, minimum 16 SWG thickness, treated with anti-rust primer and finished with electrostatic powder coating of 60–80 microns in approved color. Including mobile drawer unit fabricated from 18 mm MDF, comprising multiple drawers with heavy-duty telescopic ball-bearing channels, central locking system and matching handles, along with pull-out keyboard tray fitted with smooth-sliding channels. The scope shall also include cable management grommets, concealed wiring provisions, Hafele / Hettich or equivalent quality hardware, screws, connectors, brackets, fittings and all necessary accessories. All joints shall be properly secured, edges neatly finished and surfaces uniformly polished, ensuring a rigid, stable and durable workstation. Complete in all respects as per approved design, shop drawings, specifications, site requirements and instructions of the Client.	**Nos.**	**6**		**-**
					-
41	**<u>TRIAGE DESK</u>**				**-**

SICHN, KARACHI

	Providing and constructing triage counter measuring 4'-0" wide × 2'-6" deep, comprising 4" thick solid concrete block masonry of minimum 1,000 PSI compressive strength, with external lower surfaces clad in 18–20 mm thick approved Cherry Brown Granite and internal surfaces finished with approved ceramic tiles using suitable tile adhesive and color-matched grout. Countertop and front wall shall be clad with 20 mm thick premium-quality Paradiso / Colombo Granite, factory machine-polished, including bull-nosed edges, polished exposed sides and color-matched epoxy grouting. Countertop shall be supported on 100 mm thick R.C.C. precast slab of Grade 25 concrete, reinforced with 10 mm diameter deformed steel bars at 150 mm c/c both ways, with adequate concrete cover, proper compaction and curing, as per approved structural drawings. Including 12 mm thick clear toughened safety glass partition with polished edges, SS 304 clamps, brackets and supports, transparent neutral-cure silicone sealing and document-exchange opening where required by approved design. Also including mobile drawer unit fabricated from 18 mm thick laminated MDF board, fitted with heavy-duty telescopic ball-bearing channels, central locking system, matching handles and Hafele / Hettich or equivalent hardware. Complete with all necessary cutting, shaping, fixing, reinforcement, supports, accessories, levelling, alignment, finishing, labor and materials, as per approved shop drawings, specifications, physical samples and instructions of the Client. (NU Board / Al Noor or equivalent)	**Nos.**	**6**		**-**
42	**BLOCK MASONRY COUNTER WITH AND MARBLE TOP**				**-**
	Providing and constructing counters of sizes as per approved drawings and design (Width and Height shall be 2'-6" and length shall be as per site) comprising block masonry finished with cement plaster and topped with approved quality marble machine-polished single piece with bull-nosed edges and securely fixed over R.C.C. precast slab. The inner side shall be provided with wooden shutters and drawer units fabricated from 19 mm thick high-density pre-laminated MFC/Lasani board, finished with 2 mm thick matching PVC edge banding, including suitable hinges, handles, locks, drawer channels and all necessary hardware and fittings. The work shall include all necessary supports, bedding, jointing, cutting, edge finishing and accessories, complete in all respects as per approved drawings and as directed by the Client.	**Rft**	**75**		**-**
43	**ALPHABET SIGNAGE**				**-**
	Supply, fabricate and install 3D internally illuminated signage letters, 10" high, made of 1.6 mm thick CRC/MS sheet with 3" deep returns, welded, finished with epoxy primer and automotive-grade paint. Faces shall comprise 6 mm white translucent acrylic with approved 3M/Avery Dennison translucent color vinyl for backlighting. Including LED illumination, wiring, power supply, supports, fasteners, fixing, testing and commissioning, complete in all respects as per approved drawings and specifications.	**Job**	**1**		**-**
44	**LOGO SIGNAGE**				

	Supply, fabricate and install a circular 3D internally illuminated SICHN logo, approximately 2.5–3 ft in diameter, using 6 mm thick white translucent acrylic with approved 3M/Avery Dennison translucent color vinyl, mounted on a suitable MS/ACP backing frame. Including LED lighting, cutting, fabrication, wiring, electrical connections, supports, fasteners and secure fixing. Complete with installation, testing and commissioning in all respects as per approved drawings and specifications	**Nos.**	**2**		-
45	**MEDICAL BED CURTAINS**				-
	Providing, fabricating and installing movable hospital bed privacy curtains using 100% polyester, hospital-grade fabric of 180–220 GSM, treated for antimicrobial properties, colorfastness, easy washing and flame retardancy, with fire-performance certification as per BS 5867 Part 2 Type C or NFPA 701. Fabric shall be of approved make in color and design, including approximately 450 mm high ventilated mesh top section where required. Curtains shall be suspended from heavy-duty ceiling-mounted extruded aluminum U/C-channel tracks of minimum 1.5 mm wall thickness, with anodized or powder-coated finish, smooth-running heavy-duty nylon roller carriers, SS 304 hooks, end stops, connectors and necessary accessories. Tracks shall be securely supported using SS 304 brackets at maximum 600 mm centers, fixed directly to structural concrete ceilings with suitable expansion anchors and SS 304 fasteners, not merely to false-ceiling framework. Including necessary bends, joints, supports, runners, curtain hooks, reinforced stitching, hems, fabric fullness, installation, adjustment and all associated fittings and accessories. Complete in all respects as per approved layout, shop drawings, material samples, manufacturer's recommendations and instructions of the Client. Brands:- (Alkaram / Gul Ahmed or equivalent certified healthcare textile supplier),	**Sft**	**2,000**		-
					-
46	**WINDOWS CURTAINS/BLINDS**				-

	Providing, supplying and installing premium-quality 100% polyester sunscreen roller blinds of approved color, texture and 3% or 5% openness factor, with minimum 250 GSM fabric, providing effective solar control, glare reduction and UV protection. Fabric shall be anti-static, colorfast and easy to maintain, with approved sample and manufacturer's performance specifications. Blinds shall incorporate heavy-duty powder-coated aluminum roller tubes of minimum 1.2 mm wall thickness and 38–45 mm diameter, fitted with industrial-grade clutch mechanism, continuous metal bead operating chain, aluminum bottom rail of minimum 1.2 mm thickness, end caps, heavy-duty mounting brackets and child-safety-compliant chain tensioners. Including accurate site measurements, custom fabrication, secure fixing to window frames, walls or ceilings using suitable anchors and SS 304 fasteners, levelling, alignment, operational adjustment and all necessary fittings and accessories. Complete in all respects as per approved shop drawings, specifications, physical material samples and instructions of the Client. All operating mechanisms and accessories shall be of reputable quality (Somfy / Hunter Douglas or equivalent	**sft**	**3,200**		**-**
47	**WOODEN COUNTERS**				**-**
	Providing, fabricating and installing custom-built counters of sizes as per approved drawings and design (Width and Height shall be 2'-6" and length shall be as per site) comprising block masonry finished with cement plaster and using 19 mm (¾") thick high-density pre-laminated particle board of minimum 650 kg/m³ density, of approved make, finished with approved ultra-gloss, scratch-resistant decorative laminate, including 2 mm thick matching PVC edge banding on all exposed edges, machine-applied using suitable hot-melt adhesive. Countertop shall comprise 25 mm thick single-piece premium-quality natural granite of approved color, pattern and finish, properly cut, shaped, machine-polished and securely fixed with sealed joints and finished exposed edges. Including internal shelves, drawers, partitions, reinforced supports, carcass framing, heavy-duty telescopic ball-bearing drawer channels, soft-close concealed hinges, central locking arrangements, matching handles and Hafele / Hettich / Blum or equivalent quality hardware. All joints and connections shall be properly secured using suitable SS 304 or zinc-coated screws, connectors, brackets and fixing accessories, ensuring rigid, level and durable construction. Complete in all respects as per approved shop drawings, specifications, approved material samples and instructions of the Client. (NU Board / Al Noor or equivalent)	**rft**	**100**		**-**
48	**WALL PAPER**				

SICHN, KARACHI

	Providing and fixing premium-quality imported commercial-grade decorative vinyl wallpaper, minimum 0.35 mm thick and 300 GSM, with non-woven or fabric backing, washable, stain-resistant, colorfast and durable surface finish, in approved design, pattern, texture and color. Approved brands/suppliers shall include Newmor (UK), Mustafa Interior or A.R.M Interior imported collections, or equivalent approved quality. Including thorough surface preparation, removal of dust and loose material, filling of cracks and imperfections, application of suitable wall primer/sealer and levelling compound to achieve a smooth, dry and even surface. Fixing shall be carried out using manufacturer-recommended wallpaper adhesive, such as PUFAS Special / Metylan Special or equivalent, including accurate cutting, pattern matching, vertical alignment, properly closed joints, corner finishing and removal of air bubbles and wrinkles. Include all necessary tools, materials, trimming, wastage and accessories. Complete in all respects as per approved samples, manufacturer's recommendations, specifications and instructions of the Client.	**sft**	**500**		**-**
49	**<u>UPVC PANNELS</u>**				
	Providing and fixing decorative fluted uPVC wall panels, minimum 12 mm thick, manufactured from high-quality rigid virgin uPVC, UV-resistant, moisture-resistant and fire-retardant, with factory-applied decorative laminated finish in approved color, texture and shade. Panels shall have vertical fluted profiles with approximately 25–30 mm wide ribs and 10–12 mm groove depth, or as per approved sample. Approved makes: Anchorwin / Shine PVC Panels / Grace or equivalent. Including surface preparation, levelling and fixing on a GI supporting framework of 25 × 25 mm sections, minimum 1.2 mm thick, spaced at maximum 400 mm centers, or with compatible high-grab adhesive (Sika MaxTack or equivalent) as approved. Also including concealed SS304 screws, wall plugs, clips, matching uPVC joint profiles, internal/external corner trims, edge profiles, end caps and all necessary accessories. All joints shall be properly aligned and neatly finished, ensuring a uniform appearance without visible gaps or warping. Complete in all respects as per approved drawings, specifications, manufacturer's recommendations and instructions of the Client.	**sft**	**500**		**-**
					-
50	**<u>CABINET DOOR SHUTTERS</u>**				**-**

SICHN, KARACHI

	Providing, fabricating and installing cabinet doors/shutters and drawers using 19 mm (¾") thick high-density pre-laminated particle board, minimum 650 kg/m³ density, of approved make (NU Board / Al Noor / Sonitex or equivalent), finished with approved scratch-resistant and stain-resistant decorative laminate. All exposed edges shall be machine-finished with 2 mm thick matching PVC edge banding using hot-melt adhesive. Drawer sides shall be 18–19 mm thick laminated board with 9 mm thick laminated bottoms securely fixed in grooves. Including heavy-duty 45 mm full-extension soft-close telescopic drawer channels, 110° three-dimensional adjustable, clip-on concealed hydraulic soft-close hinges of **Blum / Hettich / Häfele** make or approved equivalent, approved SS304 stainless-steel handles, magnetic catches and furniture-grade locks where required. All joints and connections shall be secured with suitable confirmat screws, dowels, connectors and concealed brackets. Shutters and drawers shall be properly aligned, levelled and smoothly operated, with approved color, texture and finish. Complete in all respects as per approved drawings, specifications and instructions of the Client.	**sft**	**200**		**-**
51	**REPAIR OF WINDOWS/VENTILATORS/DOOR etc.**				**-**
	Repair and maintenance of existing windows, ventilators and doors, including inspection, adjustment, alignment, replacement of damaged glass, rubber gaskets, locks, fly mesh with aluminum frame, hinges, handles and other defective components as required. Including necessary labor, materials, hardware, fittings and accessories to restore proper operation and finish. Complete in all respects as per site requirements and instructions of the Client	**Nos**	**200**		**-**
52	**MOSQUITTO NET**				
	Providing, fabricating and fixing double-layer mosquito net assemblies using high-quality PVC-coated fiberglass mesh, UV-resistant and insect-proof, with minimum 18 × 16 mesh count per inch, securely stretched and fixed on a 2" × 1" seasoned hardwood frame (Partal / Deodar or equivalent), properly kiln-dried and termite-treated. Wooden frames shall be accurately cut, jointed, sanded and finished with approved PU polish or enamel paint. Including SS304 screws, staples, retaining strips, corner brackets, hinges, handles, locking arrangements where required and all necessary fixing accessories. Mesh shall be properly tensioned, with tightly secured joints and edges to prevent gaps or insect entry. Complete in all respects as per site requirements, approved drawings, specifications and instructions of the Client.	**Sft**	**1,500**		**-**
					-
53	**ELEVATION GLASS**				**-**

	Providing, supplying and fixing replacement double-glazed elevation glass units (IGUs), matching the existing façade system in glass thickness, overall unit thickness, color, shade, reflective coating, transparency and finish. Glass shall be of approved quality, toughened or laminated safety glass as per the existing installation, from Ghani Value Glass / Guardian / Saint-Gobain / AGC or equivalent approved make. Including careful removal and disposal of damaged glass, inspection and cleaning of existing aluminum framing, replacement of damaged EPDM gaskets, compatible setting blocks, spacers, pressure plates, cover caps and SS304 fixing accessories. All glazing joints shall be properly sealed using Dow Corning 791 / Sika Sikasil WS-605 S or equivalent approved weatherproof silicone; structural glazing silicone shall be used where required by the existing system. Include proper alignment, levelling, secure fixing, edge protection and complete weatherproofing to prevent water and air leakage. Complete in all respects to match the existing elevation, manufacturer's recommendations and instructions of the Client.	**Sft**	**100**		**-**
					-
54	**REFIXING OF EXISTING CHAIRS**				**-**
	Dismantling and removing existing chairs from their current location and transporting and refixing them at the newly designated location, including necessary labor, handling, shifting, fixing accessories and minor adjustments. Complete in all respects as directed by the Client	**Nos.**	**100**		**-**
55	**SS PLATES**				
	SS Plates 2mm thick Taiwan made 304 grade on doors Providing, cutting and fixing 2 mm thick Taiwan-made, Grade 304 stainless steel (SS) plates on doors, including surface preparation, accurate sizing, edge finishing, polishing and fixing with suitable screws, adhesive or other approved fasteners. Complete in all respects as per approved drawings, site requirements and instructions of the Client	**sft**	**2,000**		**-**
	-				**-**
56	**GRANITE ON STAIRS**				

SICHN, KARACHI

	Providing and laying first-grade premium-quality natural granite stone on staircase treads and risers, minimum 20 mm (¾") thick, of approved variety, color, shade and uniform grain. Granite shall be free from cracks, stains, defects and excessive veins, with factory machine-polished high-gloss finish on exposed surfaces. Tread edges shall be properly shaped with bullnose/eased finish, including 3–4 anti-slip grooves of approximately 3 mm width and depth near the nosing. Fixing shall be carried out on a properly prepared, levelled and fully supported base using 1:3 cement-sand mortar bedding, approximately 20–25 mm thick, or approved high-strength stone adhesive (SikaCeram or equivalent) as suitable for the substrate. Including accurate cutting, shaping, edge polishing, proper alignment, uniform joint spacing, matching-color epoxy grout, cleaning, final polishing and all necessary accessories. Complete in all respects as per approved drawings, specifications, manufacturer's recommendations and instructions of the Client. It also includes the dismanteling and disposal of existing floor finish. Brands:- Black Galaxy / Absolute Black / Steel Grey or equivalent	**Sft**	**3,500**		**-**
57	**PAVERS**				
	Providing, laying and fixing factory-manufactured, machine-pressed, hydraulically compacted high-strength cement concrete pavers of approved colour, shape, pattern and design, having a minimum compressive strength of 5,000 PSI (34.5 MPa), of approved thickness (60 mm/80 mm), manufactured using high-quality cement, graded aggregates and controlled water-cement ratio. The work shall include preparation, dressing and compaction of existing subgrade, providing and laying 50 mm thick compacted bedding sand, spreading and leveling, laying pavers in the approved pattern with uniform joints, cutting and fitting at edges, curves and around manholes, filling joints with clean, dry fine sand, mechanical plate compaction using suitable rubber-padded plate compactor, final sand filling, finishing and all necessary materials, labour, tools, equipment, transportation and incidental charges, complete in all respects as per approved drawings and directions of the Engineer-in-Charge	**Sft**	**500**		**-**
					-
TOTAL AMOUNT OF CIVIL WORKS RS.					**-**

SICHN, KARACHI

SICHN, KARACHI

ELECTRICAL WORKS					
Sr No.	**DESCRIPTION**	**UNIT**	**QTY**	**RATE (Rs.)**	**AMOUNT (Rs.)**
	ELECTRICAL WORKS				
	Supply, installation, testing and commissioning of the following items of work (unless specifically stated otherwise) including all material, labour, tools, plant, accessories, etc., required for proper completion of each item as per specifications. (Section-8001 "General Specifications for Electrical Works" shall be applicable to all relevant BOQ items).				
1	**LOW VOLTAGE D.G. SET**				
	Overhauling, maintenance and synchronization of diesel generators and including supply of manufacturer recommended one year spare parts of 1x500KVA + 1x200KVA diesel generator. Operation philiosophy as directed by the Engineer. The vendor shall be authorized distributor of generator manufacturer. Note: Contractor must visit site and analysis the system before quote against this itmes. One year Operation and maintenane from defect liability shall be contractor scope.	Job	1.00		-
2	**Medium Voltage Switchgear**				
	Overhauling, maintenance of Medium voltage switchgear and including supply of manufacturer recommended spare parts. Overhauling and maitenance vendor shall be Siemens authorized distribuotrs. Note: Contractor must visit site and analysis the system before quote against this itmes. One year Operation and maintenane from defect liability shall be contractor scope.	Job	1.00		-
3	**Automatic Voltage Regulator**				
	Overhauling, maintenance of Automatic Voltage Regulator and including supply of manufacturer recommended spare parts. Overhauling and maitenance vendor shall be Sollatek authorized distributors. Note: Contractor must visit site and analysis the system before quote against this itmes. One year Operation and maintenane from defect liability shall be contractor scope.	Job	1.00		-
4	**L.T. DISTRIBUTION BOARDS and Panels**				
a	Overhauling, maintenance and programming of Synch Panel / ATS including repacement of defective all components of same brand of manufacutring. Ics, rating of circuit breakers shall be the same. Note: Contractor must visit site and analysis the system before quote against this itmes. One year Operation and maintenane from defect liability shall be contractor scope.	Job	1.00		-

SICHN, KARACHI

b	Overhauling and maintenance of LT panels and distribution boards including repacement of defective all components of same brand of manufacutring. Ics, rating of circuit breakers shall be the same. Note: Contractor must visit site and analysis the system before quote against this itmes. One year Operation and maintenane from defect liability shall be contractor scope.	Job	1.00		-
	Supply, Installation, Testing and commissioning of following distribution baords. (Make. Schneider / ABB / Terasaki)				
c	DB-Lighting	Nos.	3.00		-
d	DB-Power	Nos.	3.00		-
e	DB-AC	Nos.	3.00		-
5	**LIGHT FIXTURES**				
	Supply, installation, connecting, testing & commissioning of light fixtures complete with all supports, fixing arrangements and accessories, including supply and installation of 1x3Cx1.5mm² flexible cables 300/500V grade copper cables according to BS 6500 and connectors for connections etc., complete in all respects as per Consultant/Architect instructions and approvals (False-ceiling mounted fixtures shall be compatible with and fit exactly into the false-ceiling, mounting frame to be included in cost) (Make. Philips / Osram / NVC / Sylvania)				
a	Type-01 'Recessed Type Adjustable/Fixed LED Spot (12/15/15 Watts) 4000K/6500K with Built-in Driver	Nos.	35.00		-
b	Type-02 'Recessed Type Fixed LED Downlight (26/30 Watts) 4000K/6500K with Built-in Driver	Nos.	440.00		-
c	Type-03 'Recessed Type Fixed LED Downlight (20/24 Watts) 4000K/6500K with Built-in Driver	Nos.	480.00		-
d	Type-04'Recessed/Surface/Hanging Type Continuous Linear LED Light (30 Watts Per Meter) in different sizes and shapes 4000K with Extruded Aluminum Profile (Anodized), High Impact Acrylic Frosted PMMA Diffuser with Integrated Electronic Driver, Hanging & Fixing Accessories suitable	Nos.	20.00		-
e	Type-05 'LED Flexible Strip light including driver for indoor & outdoor use 4000K/6500K	Rm	110.00		-
f	Type-06 'LED Wall Mounted Picture/Mirror Light 4000K/6500K	Nos.	44.00		-
g	Type-07 'Recessed LED Panel light fixture (600mm x 600mm) with aluminium housing and steel fixation, polystrene optic material cover, IP20 rated, 50,000 burning hours, 4000K/6500K color temperature	Nos.	600.00		-

SICHN, KARACHI

h	Type-08 'Butterfly (Round) type Recessed/surface type emergency light 02 Watts 6500K with minimum 03 hours built-in battery backup including all fixing and hanging accessories (UL/TUV/LPCB Certified)	Nos.	50.00		-
i	Type-09 'Recessed/surface type Exit Sign light Upto 04 Watts 6500K with minimum 03 hours built-in battery backup including all fixing and hanging accessories (UL/TUV/LPCB Certified)	Nos.	30.00		-
j	Type-10 'Ceiling Suspended Insect Killer with 2x10watts lamps Dimensions (440x105x296)	Nos.	40.00		-
k	Type-11 'LED Flood Light min. 100 watt	Nos.	40.00		-
l	Type-12 'LED Solar street lights 120 watts	Nos.	50.00		-
6	**Supply, Installation, tagging, dressing, testing, megerring & commissioning of following sizes 600/1000V grade copper cables as per BS 6346, including appropriate size of PVC/uPVC conduits, RCC pipes and accessories, run in wall, floor, slab, surface, cable tray, trunking, laid direct or underground etc., as per drawings, complete in all respects (Quantities & Cable Sizes Subject to Available Cables & Routes as per Site Conditions)**				
	Meggering / overhauling of already installed LV power cables and dismentling of power cables if required.	Job	1.00		-
7	**POWER CABLES**				
a	4C-150 Sq.mm Cu.pvc/pvc - 600/1000V	Rm	40.00		-
b	1C-35 Sq.mm Cu.pvc/pvc - 600/1000V	Rm	50.00		-
c	1C-25 Sq.mm Cu.pvc/pvc - 600/1000V	Rm	50.00		-
d	1C-16 Sq.mm Cu.pvc/pvc - 600/1000V	Rm	50.00		-
e	1C-10 Sq.mm Cu.pvc/pvc - 600/1000V	Rm	50.00		-
f	1C-6 Sq.mm Cu.pvc/pvc - 600/1000V	Rm	50.00		-
8	**EARTHING CABLES**				
a	1C-120 Sq.mm Y/G - Green as Ecc	Rm	100.00		-
b	1C-70 Sq.mm Y/G - Green as Ecc	Rm	80.00		-
c	1C-50 Sq.mm Y/G - Green as Ecc	Rm	50.00		-
d	1C-35 Sq.mm Y/G - Green as Ecc	Rm	50.00		-
e	1C-25 Sq.mm Y/G - Green as Ecc	Rm	150.00		-

SICHN, KARACHI

SICHN, KARACHI

f	1C-16 Sq.mm Y/G - Green as Ecc	Rm	100.00		-
g	1C-10 Sq.mm Y/G - Green as Ecc	Rm	50.00		-
h	1C-6 Sq.mm Y/G - Green as Ecc	Rm	50.00		-
9	**WIRING**				
a	Wiring of light circuits from distribution board (DB) to point/switch including wiring between switches on the same circuit with 3(1x2.5 sq.mm) single core copper conductor PVC cable complete with appropiate size of pvc conduit concealed/Surface (as per requirement) PVC conduit and all accessories etc., complete in all respects.	Nos.	33.00		-
b	Wiring from light/exhaust fan point to switch with 3 (1x1.5 sq.mm) single core copper conductor PVC cable, complete with appropriate size concealed / Surface PVC conduit including ceiling rose(if required), complete in all respects.	Nos.	520.00		-
c	Same as above item 31-5E but wiring from point to point.	Nos.	1,736.00		-
	Wiring of 16A schuko socket outlet/15A 3 pin switch socket outlet/13/16A international socket outlet/20 A DP switch/universal shaver socket outlet (if required) with following size single core, copper conductor, PVC cable in already laid pvc conduit complete with all respects.				
d	From Distribution Board (DB) to outlet with 3(1x4.0 sq.mm) cable.	Nos.	220.00		-
e	From outlet to outlet with 3(1x4.0 sq.mm) cable.	Nos.	656.00		-
f	Dismentling of Lighting Circuits, Power circuits, PVC conduits, Switch sockets, LED lights, Power cables (LT & HT), distribution board, ELV system and switchgears as directed by employer and the Engineer.	Job	1.00		-
	Supply installation of following sizes of single core cables				
g	1C-2.5 Sq.mm cable Stantard	Rm	600.00		-
h	1C- 4.0 Sq.mm Cu./pvc cable Stantard	Rm	600.00		-
i	3C-1.5 Sq.mm flexible cable	Rm	150.00		-
	Galvanized Cable Tray / Ladder of 14 SWG, M.S. sheet steel with powder coated min. 80 microns of colour thickness, complete in all respect with satisfaction of client / consultant.				
j	150mm x 100mm 16 SWG	Rm	80.00		-
k	250mm x 100mm 16 SWG	Rm	56.00		-
10	**SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF WIRING ACCESSORIES. (Make: Clipsal - Vivace Series / Orange - Akoya Series) White Color**				

SICHN, KARACHI

SICHN, KARACHI

a	1Gang-1Way Switch Socket complete in all respect	No.	33.00		-
b	2Gang-1Way Switch complete in all respect	No.	45.00		-
c	3Gang-1Way Switch complete in all respect	No.	77.00		-
d	4Gang-1Way Switch complete in all respect	No.	93.00		-
e	5/6Gang-1Way Switch complete in all respect	No.	57.00		-
f	Fan dimmer compete in all respects	No.	55.00		-
g	16 Amp, 250 Volt, 2 pin + earth, schuko socket outlet compete in all respects.	No.	322.00		-
h	20 Amps, 250 Volts, DP Switch with Neon Indication complete in all respects.	No.	124.00		-
i	13/16 Amp, 250 Volt, international switch socket outlet complete in all respects	No.	554.00		-
j	15 Amps, 250 volts, 3 pin switch socket outlet complete in all respects.	No.	55.00		-
k	Single Port TV Socket Outlets with IO's, compete in all respects	No.	60.00		-
l	Single Port Face Plate with CAT-6 RJ-45 IO's, complete in all respects	No.	150.00		-
m	Dual Port Face Plate with CAT-6 RJ-45 IO's, Complete in all respects	No.	170.00		-
n	63A 4P Wall Mounted Industrial Sockets & Plugs, Complete in all respects	No.	5.00		-
o	32A 4P Wall Mounted Industrial Sockets & Plugs, Complete in all respects	No.	5.00		-
p	Metal 3x3 back box with earthing terminals	No.	300.00		-
q	Metal 3x6 back box with earthing terminals	No.	250.00		-
r	PVC 3x3 back box	No.	67.00		-
11	**EARTHING**				
	Following sizes of single core PVC insulated copper conductor cable as earth continuity conductor (ECC) installed on surface or in already installed pipes/conduits, cable trays or in trench, etc. complete with all accessories: (Make. Furse / Erico)				
a	Tinned copper Earth connecting point with all accessories.	Job	5.00		-
b	19 mm dia, 3 meter long copper clad steel Rod type earth electrode including 1x70 sq.mm copper conductor PVC cable as earthing lead, clamp with nuts and bolts, R.C.C. inspection chamber with medium duty C.I cover, excavation, backfilling, boring, and all accessories, etc., as shown on the drawings, complete in all respects.				

SICHN, KARACHI

SICHN, KARACHI

c	600 mmx 600 mm x 3 mm tin plated copper Plate type earth electrode including 2x70 sq.mm PVC copper conductor cable as earthing lead, inspection chamber with medium duty C.I cover as shown on drawings, complete in all respect.				
12	**MISCELLANEOUS ITEMS**				
a	56" sweep, single phase, 250V, ceiling fan including fan speed regulators / dimmers, fan hook and all mounting accessories, as required, complete in all respects. Make. Royal fans / Pak fans.	No.	2.00		-
b	48" sweep, single phase, 250V, ceiling fan including fan speed regulators / dimmers, fan hook and all mounting accessories, as required, complete in all respects. Make. Royal fans / Pak fans.	No.	2.00		-
c	18" dia wall bracket louvre fan wall mounted with all accessories, complete in all respects. Make. Royal fans / Pak fans.	No.	5.00		-
d	24"x24" Recessed/Surface Type Ceiling Fans with Remote Color (White/Grey Color) Make. Royal fans / Pak fans.	Nos.	120.00		-
e	12"x12" Recessed Ceiling Exhaust Fan (180 CFM Minimum) with Flexible Pipes, Core Cuttings, End Covers & Vents Make. Royal fans / Pak fans.	Nos.	35.00		-
f	'10" Exhaust Air fans plastic type Make. Royal fans / Pak fans.	Nos.	60.00		-
g	25mm dia PVC Conduit	Rm	400.00		-
h	32mm dia PVC Conduit including accessories	Rm	350.00		-
i	50mm dia PVC Conduit including accessories	Rm	200.00		-
j	25mm dia Flexible Conduit	Rm	600.00		-
k	32mm dia Flexible Conduit	Rm	500.00		-
13	**Addressable Fire Alarm System**				
	Supply, installation, testing and commissioning of Intelligent Addressable Fire Alarm System including all accessories, with Isolator Base after every 18 devices for loop continuation in case of fault in any device, complete in all respects (Make. Gent by Honeywell)				
a	Intelligent Addressable Fire Alarm Control Panel of 1-loop Expendable up to 2 loops having minimum 256 devices per loop with self powered with built-in 12V batteries for 24 Hrs. backup with charging unit in recessed type metal enclosure, programmed, upto 6 intelligent modules, built-in GSM module, self printing function, integration with others/third party systems, complete in all respects.	Nos.	1.00		-

SICHN, KARACHI

SICHN, KARACHI

b	Fire Alarm Repeater Panel along with termination of all Control/Signal cables, panel to have all loops marked in distinguishable colors with individual LED's. Acknowledge and reset function shall be present in repeater panel made with recessed type metal enclosure and suitable for the system, complete in all respects.	Nos.	1.00		-
c	Addressable Heat/Multi/Gas Detectors incorporating a pulsing LED located in labyrinth with in the housing of the detector with back boxes, mounting/fixing accessories, adjustable sensing between 0-90 seconds, built in short circuit isolators on both inputs.	Nos.	213.00		-
d	Addressable Break Glass Type Manual Call Point (MCP) with Polycarbonate Cover, metal back box, built in short circuit isolator and built in microprocessor to ensure a response time of max 1 second, indication LED, flashed after pressing the button to acknowledge the activation and a key operation facility for testing purposes	Nos.	27.00		-
e	Addressable Indoor Loop Powered electronic Sounder with Flasher, metal back box, minimum sound output 100 dB at 1 meter with frequencies for variety of sounds, loop wired and loop signaled, built in short circuit isolator	Nos.	27.00		-
f	Addressable Outdoor Loop Powered electronic Sounder (IP-Rated) with Flasher, metal back box, minimum sound output 100 dB at 1 meter with frequencies for variety of sounds, loop wired and loop signaled, built in short circuit isolator	Nos.	6.00		-
g	Addressable Input/output Module (2 Input/2 Output) with Isolator for integration with Public Address, CCTV, Ventilation, Power & Fire Fighting Systems, including control wiring as per requirements including all accessories	Nos.	5.00		-
h	Wiring for fire alarm system with 1x2Cx1.5mm² PVC/PVC insulated, shielded, 30 minutes fire rated cable including pvc conduit and accessories, complete in all respects (Red Color required on Entire Piping Length & Accessories as per Consultant instructions) (Make. Prysmian)	Rm	1,600.00		-
i	Testing/ Commisioning of complete system including handing over to client personnel and necessary training for understanding of complete system	Job	1.00		-
14	**(VOICE, CCTV, WI-FI, ACCESS CONTROL, CATV & DATA COMMUNICATION SYSTEMS)**				
	Supply, Installation, terminations, testing, fluke testing, proper permanent tagging at both ends and commissioning following items/communication system, different colors for voice and data cables shall be used, including 25mm dia PVC conduits, complete in all respects				

SICHN, KARACHI

SICHN, KARACHI

a	IP-Based CCTV 4 MP Smart Hybrid Light Fixed Bullet Network Camera, high-definition image quality, day/night functionality, infrared (IR) night vision, DWDR/WDR, 3D-DNR, motion detection, H.265/H.265+ video compression, RJ-45 Ethernet interface with PoE support, ONVIF compliant and suitable for integration with proposed NVR and complete CCTV surveillance system. Weatherproof IP67 or better enclosure for outdoor installation. Human Detection, built-in microphone for real-time audio security where applicable, model supporting on-board storage up to 512 GB. Hikvision, Dahua or equivalent approved brand.	Nos	120		-
b	64-Channel Network Video Recorder (NVR), supporting minimum 64 IP cameras, H.265/H.265+/H.264 compression, high-definition recording and playback, HDMI/VGA display output, multiple SATA interfaces for surveillance HDDs, Gigabit Ethernet, ONVIF compatibility, remote monitoring, user management, event/motion recording, playback, backup and full compatibility with supplied CCTV cameras and network system or equivalent approved brand.	Nos	2		-
c	8 TB surveillance-grade SATA hard disk drive designed for continuous 24/7 CCTV/NVR recording operation, suitable for surveillance applications and compatible with proposed NVR or equivalent approved brand.	Nos	4		-
d	48-Port Smart Gigabit Ethernet PoE+ switch with 8 × 10/100/1000 Mbps RJ-45 ports as per tender specification, IEEE 802.3af/802.3at PoE+ support, 250W PoE power, 1U 19-inch rack-mountable steel case, fanless, centralized managed by Cloud or SDN Controller, static routing, 802.1Q VLAN, STP/RSTP/MSTP, IGMP Snooping, QoS, ACL, 802.1X, RADIUS/TACACS+ authentication, LACP, CLI, SNMP, Dual Image, IPv6 and complete mounting accessories or equivalent approved brand.	Nos	3		-
e	TCL, Samsung or other 50-inch LED/LCD display suitable for continuous CCTV monitoring, minimum Full HD resolution, D-port/HDMI input, VGA or equivalent connectivity, suitable brightness and viewing angle for control-room operation, compatible with proposed NVR and complete with standard accessories or equivalent approved brand.	Nos	2		-
f	Installation and Comissioning of CCTV Solution including all accessories as per SICHN Engineer Approval	Job	1		-
g	CAT-6, UTP (un-shielded twisted pair) cables from JB/Rack to each outlet/equipment. (Make. Corning / Schneider / Excel)	Rm	1,200.00		-
h	24-port CAT-6 patch panels loaded/equipped with RJ-45 I/Os for systems with rear cable organizer, cable manager including all labeling and all mounting accessories, complete in all respects	Nos.	6.00		-

SICHN, KARACHI

SICHN, KARACHI

i	42U Floor Standing Rack (Imported) Communication Rack suitable for installation of servers, switches, cctv, sound, security, PABX and others related equipment etc., complete with solid side panels perforated front and back hinged panels as required with accessories, including back boards, frame, vertical and horizontal cable managements, labels, label holders, cable guide, lockable glass doors of sufficient sizes to accommodate patch panels, active networking equipment, built-in automatic fans, 02 Nos. UK/Universal 6xOutlets defending thunder module PDU, minimum 36.5" depth, 24" width, 73.5" height, complete in all respects (Size: 800X1000)	Nos.	2.00		-
j	18U Wall Mounted Rack (Imported) Communication Rack suitable for installation of switches, cctv, sound, security, PABX and others related equipment etc., complete with solid side panels perforated front and back hinged panels as required with accessories, including back boards, frame, vertical and horizontal cable managements, labels, label holders, cable guide, lockable glass doors of sufficient sizes to accommodate patch panels, active networking equipment, built in automatic fans, 01 No. UK/Universal 9xOutlets defending thunder module PDU, complete in all respects (Size: 800X1000)	Nos.	2.00		-
k	1 Meter Long Factory Certified Patch Cords	Nos.	80.00		-
l	2 Meter Long Factory Certified Patch Cords	Nos.	70.00		-
m	3 Meter Long Factory Certified Patch Cords	Nos.	50.00		-
n	Indoor IDF Rack - 1 Wall/Surface mounted 19" indoor IDF rack with lockable door including DC Power Supply - Copper Cat 6 RJ 45 & fiber optic patch panel including patch cords, cable management and cable dressing	Nos	2.00		-
o	Coordinated Shop Drawings, Entire Projects Testing & Commissioning Reports, As-Built Drawings 03 Sets of Hard Copies & Electronic Editable Copies in CDs (Final Bill NOT Entertained without the Asbuilt Drawings, Documents & Testing Reports)	Job	1.00		-
15	**Air Conditioning System**				
	Supply, Installation, testing & commissioning of Split Air Conditioning Units including hanging arrangements of outdoor units(indoor & outdoor units), complete in all respects) Make. Samsung / General / LG / Diaken				
a	1.5TR Inverter Type Wall Mounted Split Air Conditioning Indoor Unit & Outdoor Unit	Nos.	80.00		-
b	Supply, installation, testing and commissioning of manufacturer recommended Refrigerant Copper Pipping, liquid & gas,complete with accessories, expanded rubber foam insulation, tapping and glass wool insulation in all piping lengths, complete in all respect including chiseling and filling works. Make. Mueller USA.	Nos.	80.00		-

SICHN, KARACHI

SICHN, KARACHI

	Supply, installation and testing of following uPVC schedule 40 pipe with expanded rubber foam insulation, with grey tapping in all piping lengths and accessories etc., including cutting and filling of wall, floor and ceiling including hot-dip galvanised hanging accessories (make fischer or Index) etc. for drain pipe, complete in all respects as per consultant instructions				
c	3/4" dia uPVC pipe	Rm	110.00		-
d	1" dia uPVC pipe	Rm	120.00		-
e	1.5" dia upvc pipe	Rm	120.00		-
f	4" dia upvc pipe	Rm	30.00		-
g	Supply, installation of 3" dia UPVC Sleeves, D-Class for refrigerant piping internal, external sides & roof top, along with UPVC fittings such as tees, elbows, unions, reducers, sockets, Teflon tape for jointing, hangers, supports, Complete in all respects	Rm	100.00		-
	Supply, installation, termination, testing & commissioning of following size of copper wires and cables in standard color as per BS 6004 for indoor to outdoor units in 25mm dia PVC conduits with all accessories as per (BS-6099), cutting and filling of wall, floor etc. for drain pipe, complete in all respect, as per consultant instructions and approval				
h	5x1Cx4.0mm² cu/pvc cables	Rft	220.00		-
i	5x1Cx6.0mm² cu/pvc cables	Rft	220.00		-
j	7x1Cx4.0mm² cu/pvc cables	Rft	220.00		-
k	1x5Cx2.5mm² cu/pvc/pvc flexible for control	Rft	220.00		-
l	Supply & installation of supports, MS brackets (1½"x1½"x06mm) link with angle iron, red oxide premier and enamel paint as approved by Architect/Consultant, all fixing hardware to be galvanized, complete in all respects	Nos.	70.00		-
m	Supply & installation of 15"x15" square or 18" dia round diffussers for exhaust system in white powder coating in glass/matt finish as approved by Architect/Consultant, all fixing hardware to be galvanized, complete in all respects	Nos.	12.00		-
n	Supply & installation of 6" dia PVC round pipes with all accessories, felxible pipes, hangers, supports, as approved by Consultant, all fixing hardware to be galvanized, complete in all respects	Rft	50.00		-
o	Supply, installation, testing and commisioning of cabinet type exhaust fans (minimum 500CFM) including all hanging and fixing accessories, duct jointers, sound linears, filters, etc, complete in all respects.	Nos.	10.00		-

SICHN, KARACHI

SICHN, KARACHI

p	Supply, installation, testing and commisioning of ducted type treated fresh air fans, fans (minimum 800CFM) including all GI Ducting (22SWG), insulation, hanging and fixing accessories, duct jointers, sound linears, filters, etc, complete in all respects.	Nos.	10.00		-
q	Final Testings, Gas Balancing of Entire Project, including air measurements, electrical data of equipment, all required reports shall be witnessed by Client Representative, complete in all respects for successful handing and taking over of the Project	Job	1.00		-
16	**Supply, Installation and Testing of following work**				-
a	G.I. Sheet Metal Duct-work complete with hangers, supports, bracing, fixing accessories,Grill (as per client / consultant selection) etc. 20SWG, complete in all respects.	Sq.m	100.00		-
b	Volume Control Dampers (various sizes)	Nos.	30.00		-
c	Flexible connections for connecting HVAC equipments with ductwork.	Lot.	1.00		-
d	Dismentling of Existing grill, ducting, split units etc including equipment (If required) , complete in all respects.	Job	1.00		-
e	Overhauling and maintenance of existing duct etc and perform duct light test, duct leakage test and pressure testing.	Job	1.00		-
17	**AIR HANDLIG UNITS**				
	Overhauling, maintenance of Air handling units and including supply of manufacturer recommended spare parts. Overhauling and maitenance vendor shall be authorized distribuotr of AHU. Note: Contractor must visit site and analysis the system before quote against this itmes. One year Operation and maintenane from defect liability shall be contractor scope.	Job	1.00		-
18	**D I PLANT**				
	Supply and installation of complete laboratory-grade deionization water purification system, comprising raw water pre-filter, activated carbon filter, sediment filter, ion-exchange resin columns (cation and anion), mixed-bed resin unit, high-pressure/booster pump (where required), micron filters, water flow control valves, pressure gauges, conductivity/TDS meter with digital display, water storage tank, UV sterilizer (where required), distribution piping, food-grade/chemical-resistant tubing, fittings and necessary control accessories. The system shall be capable of producing high-purity deionized water suitable for laboratory applications. The scope shall include complete plumbing, electrical wiring, control panel, installation, testing, commissioning and performance demonstration, including all labour, materials and accessories, complete in all respects as per manufacturer's recommendations and Engineer-in-Charge's instructions and approval	Job	8.00		-
19	**RO PLANT**				

SICHN, KARACHI

SICHN, KARACHI

	Reverse Osmosis (RO) Plant – 6,000 LPH: Supply, installation, testing and commissioning of complete 6,000 LPH RO plant, including pre-treatment, pumps, membranes, chemical dosing, post-treatment, controls, piping, fittings and accessories. **Stainless Steel Skid / Supporting Frame:** Supply and installation of heavy-duty fabricated stainless steel skid/frame, including supports, equipment mounting, welding, finishing and accessories. **Fully Automatic Stainless Steel Electrical Control Panel:** Supply, installation and commissioning of automatic SS control panel with controllers, contactors, relays, breakers, overload protection, indicators, switches and complete wiring. Feed Water Pump – Original Italian 8-S, 4 kW: Supply and installation of 100% original imported Italian 8-S feed water pump with 4 kW motor, including mounting, connections and accessories. **High-Pressure Pump – CDLF 10-S, 11.25 kW:** Supply and installation of CDLF 10-S vertical multistage centrifugal pump with 11.25 kW motor, including connections and accessories. **FRP Membrane Pressure Vessels – 400 PSI, 2-in-1:** Supply and installation of 400 PSI FRP membrane pressure vessels in 2-in-1 configuration, including end caps, seals, connectors and fittings. **Sand Filter Vessels – 24" × 72":** Supply and installation of 24" × 72" sand filter vessels, including internal distributors, silica sand, valves, connections and accessories. **Activated Carbon Filter Vessels – 24" × 72":** Supply and installation of 24" × 72" activated carbon filter vessels, including internal distributors, carbon media, valves and accessories. **Refined Silica Sand – 25 KG Bags:** Supply of high-quality graded silica sand suitable for water filtration, packed in 25 kg bags. **Refined Gravel Stones – 25 KG Bags:** Supply of clean, graded filtration gravel for sand filter support media, packed in 25 kg bags. **Coconut Shell Activated Carbon – 25 KG Bags:** Supply of high-quality coconut shell activated carbon for water treatment, packed in 25 kg bags. **RO Membrane – 6,000 LPH, 8" × 40":** Supply and installation of high-performance 8" × 40" RO membrane suitable for 6,000 LPH capacity, including seals and connectors. **Automatic Anti-Scaling Chemical Dosing Pump:** Supply and installation of automatic anti-scalant dosing pump, including dosing tubes, injection fittings and accessories. **Anti-Scaling Chemical Storage Drum – 80 Litres:** Supply of food-grade 80-litre chemical storage drum with lid, outlet connections and fittings.	JOB	1.00		

SICHN, KARACHI

	Automatic Crystalline Minerals Dosing Pump: Supply and installation of automatic mineral dosing pump, including dosing tubes, injection fittings and accessories.**Crystalline Minerals Storage Drum – 80 Litres:** Supply of food-grade 80-litre mineral storage drum with lid, outlet connection and accessories.**Pressure Gauges – 350/150 PSI:** Supply and installation of 350 PSI and 150 PSI pressure gauges, including mounting connections and accessories.**Water Flow Meters – 10/20 GPM:** Supply and installation of 10/20 GPM water flow meters, including connections, fittings and accessories.Imported Food-Grade Schedule 80 Pipes and Fittings: Supply and installation of 100% imported food-grade Schedule 80 pipes, elbows, tees, unions, reducers and necessary fittings.Membrane Flushing / Washing System: Supply and installation of complete membrane flushing system, including washing tank, piping, valves, connections and accessories.Electrical Cables and Complete Wiring: Supply and installation of complete electrical wiring and cables for pumps, motors, control panel and dosing equipment, including glands, lugs and accessories.Electrical Circuit Breakers and Controllers: Supply and installation of suitable circuit breakers and protective controllers, including overload, short-circuit protection and connections.Micron Filter Multi-Cartridge Housing – 40 Inches: Supply and installation of 40-inch multi-cartridge filter housing, including cover, cartridge arrangement, inlet/outlet connections and fittings.**Polypropylene Pleated Filter Cartridge – 3 Micron:** Supply of 3-micron polypropylene pleated filter cartridges suitable for 40-inch filter housing.**High-Pressure Stainless Steel Fittings:** Supply and installation of high-pressure stainless steel connectors, unions, elbows, nipples, adaptors and accessories.				

	High-Pressure Stainless Steel Fittings: Supply and installation of high-pressure stainless steel connectors, unions, elbows, nipples, adaptors and accessories. **Online TDS Display Meter:** Supply and installation of digital online TDS meter with sensor/probe, display unit, electrical connections and accessories. **Stainless Steel Pressure Controlling Globe Valve:** Supply and installation of 100% pure stainless steel globe-type pressure control valve, including operating mechanism and fittings. **Pneumatic Pipes, Bushes and Fittings:** Supply and installation of pneumatic pipes, bushes, connectors, joints and necessary fittings. **Raw Water Filtration Housing – 20 Inches:** Supply and installation of 20-inch raw water filter housing, including cover, filter mounting arrangement and inlet/outlet connections. **Raw Water Filtration Bags – Monofilament / Multifilament:** Supply of monofilament/multifilament filtration bags for removal of suspended solids and particulate impurities. **Crystalline Minerals – 25 Litre Can:** Supply of high-quality crystalline minerals for RO water remineralization, packed in 25-litre cans. **Anti-Scaling Chemical – 5 Litre Can:** Supply of high-quality RO anti-scaling chemical for prevention of membrane scaling, packed in 5-litre cans.				
TOTAL AMOUNT OF ELECTRICAL WORKS					-

SICHN, KARACHI

PLUMBING WORKS

Sr No.	DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
1	**EUROPEAN TYPE WALL HUNG WATER CLOSET**				
	Providing, fixing European type Wall Hung Water Closet with concealed flushing cistern, including all accessories and fittings, waste and traps, including seat and cover, all joints to service and drains plugging and screwing as necessary to the structure with non-shrink grout, complete in all respects	Nos.	51.00		-
2	**WESTERN INDIAN TYPE WATER CLOSET**				
	Providing, fixing Western Indian type Water Closet with concealed flushing cistern, including all accessories and fittings, waste and traps, including seat and cover, all joints to service and drains plugging and screwing as necessary to the structure with non-shrink grout, complete in all respects	Nos.	26.00		-
3	**COUNTER TOP / HALF PEDESTAL WASH BASIN**				
	Providing, fixing Counter Top/Half Pedestal Wash Basin with all accessories such as, basin mixer (Concealed / Basin mounted), tee stop cock with check nuts, CP flexible pipe, waste pipe, waste coupling, bracket set, etc. Complete including bottle trap, silicon sealant, all joint to service and drain, plugging and screwing as necessary to the structure, complete in all respects With Concealed Basin Mixer	Nos.	39.00		-
4	**STAINLESS STEEL SINK**				
	Providing and fixing of best quality stainless steel sink (Make Zilver brand with Sonex pillar tap 2 way with water saving Kit fitting) with CI or WI brackets 150mm (6") built in wall, 40mm(1 1/2") rubber plug & , 40mm (1 1/2") C.P brass waste, 40 mm (1 1/2") dial malleable iron or C.P. brass trap, Bottle trap and unions. Make requisite holes in walls & floor for pipe connections & make good with approved material and conforming to the requirements of drawings, and to the entire satisfaction of the Project consultant.	Nos.	19.00		-
5	**CERAMIC VANITY WASH BASIN**				
	Providing, supplying, fixing, testing and commissioning of counter-top / under-counter ceramic vanity wash basin of approved quality, size, colour and design, including chrome-plated brass waste coupling, bottle trap, basin mixer / pillar cock, flexible connection pipes, angle valves, brackets, supports, sealant and all necessary plumbing fittings and accessories, complete as per approved specifications, drawings, manufacturer's recommendations and instructions of the Engineer-in-Charge, complete in all respects.	Nos.	17.00		-
6	**BOTTLE TRAP FOR WASH BASIN**				
	Providing, supplying, fixing, testing and commissioning of chrome-plated brass bottle trap for wash basin, including all necessary nuts, washers, rubber seals, connectors, wall flange, waste pipe connections and fixing accessories, complete as per approved specifications, drawings, manufacturer's recommendations and instructions of the Engineer-in-Charge, complete in all respects	Nos.	95.00		-
7	**BATHROOM ACCESSORIES**				

SICHN, KARACHI

SICHN, KARACHI

	Providing, supplying, fixing and installing complete set of bathroom accessories of approved quality, including all required screws, brackets, supports, anchors and fixing materials, as per approved specifications, drawings, manufacturer's recommendations and instructions of the Engineer-in-Charge, complete in all respects.				
i	Floor drain	Nos.	167.00		-
ii	Folding Grab Bar Stainless Steel	Nos.	25.00		-
iii	Stainless Steel Soap Dish	Nos.	81.00		-
iv	Muslim shower	Nos.	74.00		-
v	Toilet Paper Holder	Nos.	76.00		-
vi	Double Bibcock	Nos.	74.00		-
vii	Single Bibcock	Nos.	264.00		-
viii	Sanitaiser Dispenser	Nos.	41.00		-
ix	Soap Dispenser	Nos.	81.00		-
8	**WATER GEYSER**				
	Providing, supplying, installing, testing and commissioning of 30-gallon capacity dual-fuel electric and gas water heater (geyser), suitable for operation on both electricity and natural gas / LPG, complete with insulated storage tank, electric heating element, thermostat, gas burner assembly, automatic ignition system, temperature and pressure relief valve,temperature gauge, pressure gauge, drain valve, cold water inlet and hot water outlet connections, safety controls, flue / exhaust arrangement, necessary isolation valves, non-return valve, flexible connection pipes, electrical wiring and all required plumbing and gas connection accessories. The unit shall be of approved make and capacity, including installation, testing, commissioning and all necessary materials, labour, tools and equipment, as per approved specifications, drawings, manufacturer's recommendations and instructions of the Engineer-in-Charge, complete in all respects.	No.	55.00		-
9	**PPRC PIPE COLD & HOT WATER SUPPLY SYSTEM**				
	PPRC Cold Water Piping for the Toilets and Irrigation system. Providing, Fixing, jointing, poly propylene pipe as per DIN 8077 / 8078 (PN 20) including specials fittings as per DIN 16962 (PN 25) such as socket, tees, elbows bends, reducer plug and union etc.), clamps, hanger collars, supports, supported on wall or buried in walls or suspended from roof slab as per specifications including color tagging, providing sleeve in wall, testing @ 150 psi, complete in all respect and as per instructions of site engineer, complete in all respects (Note: All Pipes and Fittings should be from same manufacturer)				
(i)	25mm Ø	Rft.	1,549.18		-
(ii)	32mm Ø	Rft.	1,662.43		-

SICHN, KARACHI

SICHN, KARACHI

(iii)	40mm Ø	Rft.	432.32		-
(iv)	63mm Ø	Rft.	1,164.76		-
10	**GATE/BALL VALVES**				
	Providing, fixing of full way Gate/Ball valves of bronze trim for 125 psi together with all additional material required for a complete installation as described in the specification and as shown on drawings and as approved by the Engineer, complete in all respects				
(ii)	32mm Ø	Nos.	25.00		-
(iii)	40mm Ø	Nos.	22.00		-
(iv)	63mm Ø	Nos.	35.00		-
11	**UPVC PIPES - SOLVENT JOINT TYPE (WASTE & SOIL)**				
	Providing, fixing in position UPVC pipes solvent joint type pipe embedded in floor and wall, including plugs, clamps, hanger collars, supports, specials (bend, tees, Y-tee etc.). Making requisite number of holes in walls and floors where required and making good the same as necessary to the structure with non-shrink grout, labeling and testing to 8'ft water height complete in all respect. (Note: All Pipes and Fittings should be from same manufacturer)				
(i)	2" Ø (waste pipe - Washbasin / Sink to Floor Drain only)	Rft.	217.88		-
(ii)	3" Ø (waste pipe)	Rft.	1,476.78		-
(iii)	4" Ø (soil pipe)	Rft.	1,797.78		-
(iv)	8" Ø (soil pipe Manhole to Manhole)	Rft.	1,020.00		-
12	**UPVC / PVC P-TRAP**				
	Providing, supplying, fixing, testing and commissioning of P-trap for wash basin / sanitary fixture, made of heavy-duty UPVC / PVC material, including all necessary bends, connectors, rubber washers, joints, sealing materials, fixing accessories and connection to the drainage system, complete as per approved specifications, drawings, manufacturer's recommendations and instructions of the Engineer-in-Charge, complete in all respects.	Nos.	193.00		-
13	**CORE-CUTTING**				
	Core-cutting of various diameters as necessary to the pipe/fixtures installation, complete in all respect as per instruction of site engineer, complete in all respects	Job.	25.00		-
14	**GULLY TRAP**				
	Providing, Fixing 225mm x 225mm uPVC Gully Trap with frame and cover including gully trap chambers as per drawing complete in all respect as per instructions of site engineer. 300mm x 300mm manhole chamber, Frame with cover, complete in all respects	Nos.	65.00		-
15	**R.C.C MANHOLE**				

SICHN, KARACHI

	Provide and make manhole depth as per drawing including excavation, 3" thick 1:3:6 lean, R.C.C 6" thick bed in 1:1½ : 3, R.C.C 6" thick wall above bed, 1" thick plaster 1:4 ratio Internal & External sides of wall, Make chamfer in 1:1½ : 3 slop as per drawing, plaster with puddle in 1:4 ratio internally and 8" thick top slab, Plaster with puddle work av depth4'-6" (total 50 Sft inside Plaster). Main Hole cover Filling & fixing 24" x 24" cover C.C Smooth finish with the provision of Conduiting or other embedded items, removing excess material etc. complete in all respect and conforming to the requirements of drawings, and to the entire satisfaction of the Project consultant. (including steel as per drawing)	Nos.	63.00		-
16	**16'x12' PUMP ROOM AND TUBEWELL Supply, installation, testing and commissioning of complete Pump Room and Tubewell, as per drawings A-82 to A-90 and the engineer's direction, including:**	Job	1.00		-
(i)	- Boring of tubewell 750'-0" deep, with casing, strainer pipes, gravel pack, sanitary seal, development and yield / water-quality test.				
(ii)	- Supply, installation and commissioning of submersible pump set with rising main, non-return valve, gate valve, pressure gauge and flow meter, complete with all fittings.				
(iii)	- Pump room: excavation, PCC, RCC footings, columns, beams and roof slab.				
(iv)	- Brick masonry walls, plaster, paint, flooring, door and window / ventilation.				
(v)	- Roof waterproofing and drainage.				
(vi)	- Electrical works: control panel, starter, cables, conduits, lighting and power points, as per electrical layout and SLD.				
(vii)	- Earthing as per earthing details.				
(viii)	- All materials, labour, tools, testing and handing over in working condition.				
	TOTAL AMOUNT OF PLUMBING WORK				-

SICHN, KARACHI

REPAIR AND RENOVATION OF CHILDREN HOSPITAL NORTH KARACHI

SUMMARY

Sr. No	DESCRIPTION	TOTAL AMOUNT (Rs.)
1	CIVIL WORKS	-
2	ELECTRICAL WORK	-
3	PLUMBING WORK	-
GRAND TOTAL		-

1. The Contractors Are Responsible for Visiting the Site and Determining the Existing Condition and State for themselves Before Submitting the Tender.
2. The Contractor shall be responsible for the supply, procurement and delivery of all the material and shifting of the equipment to their respective location, installation, testing, commissioning of the systems in all respects.
3. The quoted cost should include all overheads, profits, income tax and all other Taxes which are applicable, import duty (if any), insurance, packing, unpacking, transportation charges etc.
4. The work at site shall be executed in accordance with the approved shop drawings which will be prepared by the Contractor and submit for the client's approval prior to execution of works.
5. The contractor will provide Operation & Maintenance Instructions to Clients Representatives
6. The Owner reserves the right to delete any item before award of works. The cost of such items shall be reduced
7. Bidder need to submit TDS sheets along with the item samples which will be supplied by them.
8. Financial Proposal will be submitted as per mentioned above format, if any bidder fails to provide on same format with same sequence as specified in BoQ will be considered as rejected.
9. The bidder offering the lowest Grand total Amount in the BoQ summary will be awarded the contract, and evaluation will be based on the Grand total Amount Summary of the BoQ required for Repair and Renovation of Children Hospital North Karachi.
10. In case of any incomplete bids (missing rates), the bid may be considered invalid or as per discretion of client.
11. Bids to be submitted with offer letter on company letterhead by contractor.
12. The contractor shall submit manufacturer, make/model, country of origin, technical datasheets and conformity certificates for materials proposed for incorporation.
13. If a bidder participates in a tender through a Joint Venture, the bid security must be paid from the Joint Venture's account.
14. The Awarded bidder must secure and maintain insurance for all labor involved in the project. In the event of any incidents, the successful bidder will be responsible for all associated expenses, including

SICHN, KARACHI

medical costs and compensation claims. Proof of insurance must be submitted prior to the commencement of work.

15. An amount equivalent to five percent (5%) of the invoice value shall be retained by the Procuring Agency and shall be released to the Contractor/Bidder only upon 100% completion and satisfactory delivery/completion of the work at the respective sites.
16. The Contractor shall be responsible for carrying out all necessary quality assurance and quality control (QA/QC) tests and shall submit duly certified/vetted QA/QC test reports from an independent third-party laboratory for all materials, products, and workmanship, as required by the Client. Such test reports shall be submitted for approval prior to incorporation of materials into the works and, where applicable, after execution of the work at site. All testing, sampling, laboratory charges, transportation, and related costs shall be borne by the Contractor.
17. The Contractor shall be solely responsible for arranging, providing, maintaining, and managing all utilities required for the execution and completion of the Works, including electricity, potable water, construction water, and any other necessary temporary services. The Client shall not be responsible for providing or arranging such utilities. All associated costs, connections, consumption charges, temporary installations, equipment, and maintenance shall be deemed included in the Contractor's rates and shall be borne entirely by the Contractor.
18. The Contractor shall prepare and submit complete As-Built Drawings for all works executed under the Contract, incorporating all actual site conditions, approved modifications, deviations, and changes made during execution. The As-Built Drawings shall be submitted in hard copy and editable CAD format, duly coordinated and updated to reflect the final executed works, at the completion of the Project. The processing and payment of the Final Bill shall be subject to the satisfactory submission, review, and approval of the As-Built Drawings by the Client/Consultant.
19. All bidders shall visit the project site prior to submission of their bids to physically inspect and assess the existing site conditions, scope of work, actual requirements, and associated ground realities, particularly for BOQ items measured in Lump Sum (LS)/Job. The bidder shall be deemed to have fully understood the nature and extent of work. The quoted rates shall be comprehensive and inclusive of all labor, materials, equipment, transportation, installation, and incidental expenses required to complete the respective BOQ items in their entirety, irrespective of actual quantities encountered at site. No additional payment or claim on account of quantity variations, site conditions, or lack of prior assessment shall be entertained.
20. The list of approved Manufacturers attached herewith shall be strictly adhered to and followed in letter and spirit. All materials, products, and equipment incorporated into the works shall be procured from the approved vendors listed therein, unless otherwise approved in writing by the Employer.

SICHN, KARACHI

List of Approved Manufacturers: -

Material / Description	Sources
Aggregate / crush	From approved source
Aluminium composite panel (ACP)	ALUCOBOND®, ALUBOND®, Eurobond
Aluminium doors / windows	Pakistan Cables; Chawla; Prime; Krudson; Lucky
Aluminium window section	Pakistan Cables; Lucky; Khas; Alcop or equivalent
Anchoring / fixing systems	Stronghold; Strong force; Hilti; Fischer
Board / MDF / HDF	Alnoor; Crescent Board, NU Board, or equivalent
Bricks / blocks	Local source; brand/source to be approved by Engineer
Cement	Lucky; Parkland; Thatta
Cement (OPC / SR)	Lucky; Pioneer; Maple Leaf; Fauji; Askari; Power; Cherat; DG Khan
Ceramic sanitary fixtures	ICL; ASIF; PORTA (specified basin/WC models); Karamcera
Ceramic tiles	Shabbir; Master; Time Ceramic; National; equivalent imported
Cold bitumen	National Refinery; Attock Petroleum; PARCO
Composite doors	AVT; Homezone
Concrete pavers	Izhar; Envicrete; Banu Mukhtar; Magnacrete
Construction chemicals	Sika; Fosroc; BASF; Ultra; Fastchem; Vertex; MAPEI; KALON; Mitchell
Deformed MS bar G-60	Amreli; Razzaque; Sarhad; Agha; Mughal or equivalent
Door hardware	Kolf; Sitara Hardware; JB Saeed; IM Hardware (Yale); Alpha; Khas;
Door shutter	Interword; Sterling or approved equivalent
Expansion-joint chemical	Zahabya's; Sikka or approved equivalent
Facing blocks	Envicrete or equivalent; stone tiles; glazed tiles
Fair-faced hollow block	Envicrete; Banu Mukhtar; Izhar or equivalent
Fair-faced solid block	Envicrete; Banu Mukhtar; Izhar or equivalent
Fire extinguisher	NAFFCO
Glass	Pakistan Safety Glass; Ghani; Al-Fattah; Prince, Tariq
Granite	Salim Industries; imported or as approved
Gypsum false ceiling	Elephant; Lodhia (Arish); DFB; United
HDF board	Patex; Sonitex NU Board, Al Noor
Insulation	Diamond (Jumbolon); Pakistan Insulations; Safe Line; Insugreen A6
Interlocking paver & kerb	Envicrete; Banu Mukhtar; Izhar or equivalent
Locks	Imported makes from Japan, Germany, UK, Italy and Mandali
Marble tiles	Boticina; Fancy; Tavera; Chippi or approved equivalent
MDF board	Al-Noor; ZRK; Nuboard
Mosaic tiles	Hyderi; Matrix or equivalent
MS structural pipe & tube	IIL; Steelex; Jamal or equivalent
Ordinary local block	Machine-made; minimum 800 PSI compressive strength
Paint	ICI (Dulux, Paintex); Berger Robbialac; Brighto; Jotun; Diamond;
PEB system roofing	Kirby; Mammut & Mavani; Technofab Engineering

SICHN, KARACHI

Plywood	Patex; Marine plex
Porcelain Tile - Local	National Tiles; Master Tiles
Porcelain tiles - Imported	White Horse (Malaysia), RAK Ceramics, NIRO Granite, Marazzi, Atlas Concorde, Florim, Porcelanosa, STILE or approved equivalent
Powder coating	Jotun or approved equivalent
Pre-engineered steel buildings	Zamil; Mammut; Mabani; Kirby; Banu Mukhtar; Izhar; SACHAL
PVC water stopper	Fosroc; Sika or equivalent
Roof / basement membranes	Polytec (Henkel Polybit); Hygrip; Roof Grip; A.T.S. Synthetic
Sand	Bholari or any other source approved as per mix design
Semi-solid plywood door shutter	Sterling; Osman Bros or equivalent
Stainless-steel railing	Dah Shi (Taiwan) or equivalent
Steel doors / windows	SECCO or approved equivalent
Steel reinforcement	Amreli; FF Steel; AFCO; Ittehad; Ittefaq; Naveena Steel
Termite proofing	Agenda (Termidor); Biflex; Fiprokil; Mirage; Termicure; Ability
Terrazzo tiles	Noor; Al-Muhammad Tiles & Concrete Technologies
Testing laboratories	NED; PCSIR; Karachi Shipyard Engineering; Soil Mate
Textured decorative wall coating	Rockwall; Wall Tec; Rock Shield; Sand Tec; Graffito; Jotun
Tinted glass	Imported (USA / Belgium) or approved equivalent
uPVC doors / windows	Framez; Uniwin; Nasar Steel; U-Tech; Green Door; V-Make; Chawla
Waterproofing	Fosroc (Nitocote CM210; Proofex GP/3000), SikaTop-107 Seal PK
White cement	Kohat; Maple Leaf; Zealpak
Wooden flooring	Sarina; Firstfloor; equivalent

SICHN, KARACHI

S.no.	Material / Description	Sources
1	Insulation	Diamond (Jumbolon); Pakistan Insulations; Safe Line; Insugreen A6 or equivalent
2	Sanitary ware (Indian/European WC, basin, vanity, urinal, cistern)	Porta; Marachi; Master; ICL; Finecera; Karam; Cera; 3 Star or equivalent
3	Bottle trap	Porta; Master; Faisal; Sonex; Asia; Super Asia or equivalent
4	Bath / kitchen fittings	Porta; Master; Faisal; Sonex or approved equivalent
5	PPR-C pipes & fittings	Dadex; Beta; Master; Plasco; Turk Plast; Popular Pipe; Accufit; Minhas; Dura Built; IIL; Builtec; Euro Gulf; YAH Plastic Industry; Pelikan Pipe Industry (Civic) or equivalent
6	uPVC pipes & fittings	Dadex; Shavyl; Galco; Beta; Turk Plast; Jamal; Fast Flow; Plasco; Popular Pipe; Master; Accufit; Dura Built; Builtec; Euro Gulf; YAH Plastic Industry; Newtech; Pelikan (Civic); Prime Star Industries or equivalent
7	RCC pipes	Shalimar; Pakistan Pipes; National Pipe Industry or equivalent
8	GI pipes	International Industries Ltd. (IIL); Master Pipe; Jamal; Victory; Steelex or equivalent
9	CI pipes	C.I. Engineering / Corp; Teepu; Alpine; NPC; CME or equivalent
10	GI fittings	KITZ (Star Corporation); Health Engineering (HE) or equivalent
11	CI fittings & valves	Teepu; Alpine; Sirajia Trading or equivalent
12	CI manhole covers	CME; Teepu; Alpine; Turk Plast or equivalent
13	MS seamless pipe	Huffaz Industries; Jamal; KITZ; Sirajia Trading; Master Pipes; Victory or equivalent
14	PVC water stop	Fosroc; Sika; Decora; Marflex
15	HDPE pipes & fittings	Dadex; Jamal; Plasco; Turk Plast; Beta; Popular Pipe; Accufit; IIL; Dura Built; Builtec; Fast Flow; YAH Plastic Industry; Newtech; Pelikan; Prime Star Industries or equivalent
16	Water tank	Master; Super Tuff; Dura; Accufit; Prime Master
17	Kitchen sink	Porta; Atlas; Asia or equivalent
18	Wires and cables	Pakistan Cables; Fast; AGE; Newage; GM or equivalent
19	Air switch breaker / load-break switches / MCCB / MCB	Terasaki (Japan); Siemens; ABB; MG; Hager; Schneider Electric or equivalent
20	Switches and sockets	Schneider; Philips or equivalent
21	Downlights / batten lights	Sunlight; Pierlite; Future Technology; Orient or equivalent
22	Floodlights	Philips / Signify; Osram; GE; Thorn or equivalent
23	Ceiling / exhaust / bracket fans	Pak; Royal; SK; Super Asia or equivalent
24	Air-conditioning units	Gree/ Kenwood or equivalent
25	Air curtains	Gree/ Kenwood or equivalent
26	PVC conduits and pipes	Popular; Galco; Shavyl; Adamjee; GM; Dadex or equivalent
27	PVC cable trunking	Adamjee; Jeddah or equivalent
28	HDPE pipes	Dadex; Master; Popular or equivalent

SICHN, KARACHI

SICHN, KARACHI

29	PPRC pipes	Dadex; Master; Popular or equivalent
30	Vanity bowl	Porta; Faisal; Sonex or equivalent
31	Squatting WC (Indian type)	Porta D70 or equivalent or equivalent
32	European-type WC	Porta H257 or equivalent
33	Washroom accessories	Master; Faisal; Porta; Sonex or equivalent
34	Electric geyser	Canon; Haier; Super Asia or equivalent
35	Electric wiring	Pakistan Cables; Fast Cable; GM Cable or equivalent
36	Ceiling fan	SK; Royal; Lahore Fan or equivalent
37	Exhaust fan	SK; Royal; Lahore Fan or equivalent
38	Lights	Osaka; Philips or equivalent
39	Cooking range	Orient; Dawlance or equivalent
40	Stainless-steel sink	Master; Sonex or equivalent
41	Inverter air-conditioner	Gree; Haier; Orient or equivalent
42	Refrigerator	PEL; Dawlance; Orient; Haier or equivalent
43	PVC pipe for pump boring	Dadex; Master; Popular or equivalent
44	LED TV	TCL; Samsung; LG (OLED) or equivalent
45	Admixture	Fast Came; Silver Streak (Pvt) Ltd. or approved equivalent
46	RCC pipes	As per technical specifications and Engineer approval
47	ACP sheet	Howsol (Korea); Alupex (UAE) or approved equivalent
48	GI pipe	IIL; Jamal or equivalent
49	PPR pipes & fittings	Kelen (Austria); Marley (UK) or approved equivalent
50	GI pipe specials	HE (China); TG (China) or equivalent
51	Cast-iron spun pipes & fittings	Alpine; Teepu or approved equivalent
52	Asbestos pipe	Dadex or approved equivalent
53	uPVC pipes & fittings	Voda (UK) / Tetra Flow; Marley (UK) or approved equivalent
54	WC / wash-hand basin / vanity bowls	Porta; Forte or approved equivalent
55	Sanitary fittings	Faisal; Master or approved equivalent
56	Light fixtures	Sunlight; Perlite or approved equivalent
57	Cables and wires	Pakistan Cables; Fast Cables or approved equivalent
58	PVC conduit accessories	Dadex; Shavyl or approved equivalent
59	MCCB / MCB	Terasaki (Japan); Siemens; ABB; MG; Hager; Schneider Electric or approved equivalent
60	Fans	Pak Millat; Lahore or approved equivalent
61	Main / sub-main distribution boards and panels	Tecmens; Power Teck or approved equivalent
62	Switches / sockets / back boxes / pull boxes	Bosch; Clipsal or approved equivalent
63	Telephone cables	Pakistan Cables; Fast Cables or approved equivalent
64	Telephone junctions	EES; Techman; Libra; JEJ; Electrech or approved equivalent
65	Generator set	Caterpillar; Perkins; FG Wilson or approved equivalent
66	Coaxial cables	Pakistan Cables; Fast Cables; 2M Kablo or approved equivalent

SICHN, KARACHI

SICHN, KARACHI

67	Ceramic sanitary fixtures	ICL; ASIF; PORTA (specified basin/WC models); Karamcera or approved equivalent
68	GI pipes	IIL; Streelex; Jamal Pipes; Bashir Pipe or approved equivalent
69	GI pipe fittings	HE China; TG China or approved equivalent
70	Cast-iron pipes	CME; TIPPU; Singer or approved equivalent
71	PVC pipes	AGM; Dadex; Beeta; Jeddah Pipes or approved equivalent
72	uPVC pipes	Dadex; AGM; LANSO; Jeddah; Pak Arab or approved equivalent
73	MS structural pipe & tube	IIL; Steelex; Jamal or equivalent
74	PVC water stopper	Fosroc; Sika or equivalent
75	GI pipe	IIL; Jamal or approved equivalent
76	Valves (all types)	SCON; Rehman Engineering Works
77	uPVC pipe (ASTM D1785)	AGM; SWI or approved equivalent
78	Seamless black-steel pipes	Huffaz or approved equivalent
79	Concrete pipe & fittings	Pakistan Pipe; Sindh Pipe or approved equivalent
80	PPR pipe	Vesbo; IIL; Master; SWI or approved equivalent
81	Polyethylene (PE) pipe	IIL; Dadex; Hitech; SWI or approved equivalent
82	uPVC pipe (BS 3505)	Dadex; SWI or approved equivalent
83	Fountain nozzle	PEM or approved equivalent

SICHN, KARACHI

SICHN, KARACHI

BILL OF QUANTITIES (SAMPLE)

B. Work Items. (Road /PHEWork)*

1. The Bill of Quantities contains the following Bills and Items:

Bill No. 1	-	Earthworks
Bill No. 2	-	Hard Crust and Surface Treatment
Bill No. 3	-	Culverts and Bridges
Bill No. 4	-	Subsurface Drains, Pipe Laying and Man holes
Bill No. 5	-	Tube wells, Pump houses and Compound wall
Bill No. 6	-	Miscellaneous Items

Day work Schedule Summary
Bill of Quantities

2. Bidders shall price the Bill of Quantities in Pakistani Rupees only.

**Procuring Agency can add and delete the Items as per its requirement.*

DELETED

SICHN, KARACHI

SICHN, KARACHI

BILL OF QUANTITIES (SAMPLE)*

B. Work Items (Buildings)

1. The Bill of Quantities contains the following Bills and Items:

Bill No. 1	-	Plinth and Foundation.
Bill No. 2	-	Ground floor.
Bill No. 3	-	First and Subsequent Floors.
Bill No. 4	-	Internal Water Supply and Sanitary Fittings.
Bill No. 5	-	Internal Electrification.
Bill No. 6	-	Miscellaneous Items
Bill No. 7	-	External Development

Day work Schedule
Summary Bill of Quantities

2. Bidders shall price the Bill of Quantities in Pakistani Rupees only.

** Procuring Agency can add and delete the Items as per its requirement.*

DELETED

SICHN, KARACHI

SICHN, KARACHI

Appendix-D to Bid

BILL OF QUANTITIES (SAMPLE)

Bill No. 1 Earthworks/Plinth and Foundation

Item	Description	Unit	Quantity	Rate		Amount
				Rupees in figures	Rupees in words	Rupees
1	2	3	4	5		6
101						
102						
103						
104						
105						
106						
Total for Bill No. 1 (Carried forward to Summary Page)						

DELETED

SICHN, KARACHI

SICHN, KARACHI

Appendix-D to Bid

BILL OF QUANTITIES (SAMPLE)

Bill No. 2 Hard Crust and Surface Treatment /Ground Floor.

Item	Description	Unit	Quantity	Rate		Amount
				Rupees in figures	Rupees in words	Rupees
1	2	3	4	5		6
201						
202						
203						
204						
205						
206						
Total for Bill No. 2 (Carried forward to Summary Page)						

DELETED

SICHN, KARACHI

SICHN, KARACHI

Appendix-D to Bid

BILL OF QUANTITIES (SAMPLE)

Bill No. 3 Culverts and Bridges/First and Subsequent Floors

Item	Description	Unit	Quantity	Rate		Amount
				Rupees in figures	Rupees in words	Rupees
1	2	3	4	5		6
301						
302						
303						
304						
305						
306						
Total for Bill No. 3 (Carried forward to Summary Page)						

DELETED

SICHN, KARACHI

SICHN, KARACHI

Appendix-D to Bid

BILL OF QUANTITIES (SAMPLE)

Bill No. 4 Subsurface Drains/ Pipe Laying and Man holes/Internal water Supply and Sanitary Fittings

Item	Description	Unit	Quantity	Rate		Amount
				Rupees in figures	Rupees in words	Rupees
1	2	3	4	5		6
401						
402						
403						
404						
205						
406						
Total for Bill No. 4 (Carried forward to Summary Page)						

DELETED

SICHN, KARACHI

SICHN, KARACHI

BILL OF QUANTITIES (SAMPLE)

Bill No. 5 Tube wells and Pump-houses/Internal Electrification

Item	Description	Unit	Quantity	Rate		Amount
				Rupees in figures	Rupees in words	Rupees
1	2	3	4	5		6
501						
502						
503						
504						
505						
506						
Total for Bill No. 5 Carried forward to Summary Page)						

SICHN, KARACHI

SICHN, KARACHI

BILL OF QUANTITIES (SAMPLE)

Bill No. 6 - Miscellaneous Items

Item	Description	Unit	Quantity	Rate		Amount
				Rupees in figures	Rupees in words	Rupees
1	2	3	4	5		6
601	Mobilization Cost					
602						
603						
604						
605						
606						
Total for Bill No. 6 Carried forward to Summary Page)						

DELETED

SICHN, KARACHI

SICHN, KARACHI

Appendix-D to Bid

BILL OF QUANTITIES (SAMPLE)

Bill No. 7 External Development

Item	Description	Unit	Quantity	Rate		Amount
				Rupees in figures	Rupees in words	Rupees
1	2	3	4	5		6
601	Items of water supply & drainage					
602	Paths & parks					
603	External electrification					
604						
605						
606						
Total for Bill No. 7 Carried forward to Summary Page)						

DELETED

SICHN, KARACHI

SICHN, KARACHI

SICHN, KARACHI

SICHN, KARACHI

BILL OF QUANTITIES

C. Day work Schedule

General

1. Reference is made to Sub-Clause 13.6 of the General Conditions of Contract. Work shall not be executed on a day work basis except by written order of the Engineer. Bidders shall enter basic rates for day work items in the Schedules, which rates shall apply to any quantity of day work ordered by the Engineer. Nominal quantities have been indicated against each item of day work, and the extended total for day work shall be carried forward to the bid price.

Day work Labour

2. In calculating payments due to the contractor for the execution of day work, the actual time of classes of labour directly doing the day work ordered by the Engineer and for which they are competent to perform will be measured excluding meal breaks and rest periods. The time of gangers (charge hands) actually doing work with the gang will also be measured but not the time of foreman or other supervisory personnel.

3. The contractor shall be entitled to payment in respect of the total time that labour is employed on day work, calculated at the basic rates entered by him in the Schedule of day work Rates for labour together with an additional percentage, payment on basic rates representing the contractor's profit, overheads, etc., as described below:

   a) the basic rates for labour shall cover all direct costs to the contractor, including (but not limited to) the amount of wages paid to such labour, transportation time, overtime, subsistence allowances and any sums paid to or on behalf of such labour for social benefits in accordance with Pakistan law. The basic rates will be payable in local currency only; and

   b) the additional percentage payment to be quoted by the bidder and applied to costs incurred under (a) above shall be deemed to cover the contractor's profit, overheads, superintendence, liabilities and insurances and allowances to labour timekeeping and clerical and office work; the use of consumable stores, water, lighting and power; the use and repair of staging's, scaffolding, workshops and stores, portable power tools, manual plant and tools; supervision by the contractor's staff, foremen and other supervisory personnel; and charges incidental to the foregoing.

SICHN, KARACHI

DILLED

SICHN, KARACHI

SICHN, KARACHI

SICHN, KARACHI

SCHEDULE OF DAYWORK RATES

I. Labour

Item No.	Description	Unit	Nominal Quantity	Rate (Rs) in Figure	Rate (Rs) in Words	Extended Amount (Rs.)
1	2	3	4	5	6	7
D101	Ganger	Hr	500			
D102	Labourer	Hr	5,000			
D103	Brick layer	Hr	500			
D104	Mason	Hr	500			
D105	Carpenter	Hr	500			
D106	Steel work Erector	Hr	500			
	etc	Hr	500			
D113	Driver for vehicle up to 10 tons	Hr	1,000			
D114	Operator for excavator, dragline, shovel or crane	Hr	500			
D115	Operator for tractor, (tracked) with dozer blade or ripper	Hr	500			
				Sub Total		
D122	Allow percent of subtotal for Contractor's overhead, profit, etc, in accordance with Paragraph 3(b) of Day work Schedule Total for Day work: Labour : (Carried forward to Day work Summary)					

SCANNED

SICHN, KARACHI

SICHN, KARACHI

Day work Material

4. The contractor shall be entitled to payment in respect of materials used for day work (except for materials for which the cost is included in the percentage addition to labour costs as detailed heretofore), at the basic rates entered by him in the Schedule of Day work Rates for materials together with an additional percentage payment on the basic rates to cover overhead charges and profit, as follows:

   a) the basic rates for materials shall be calculated on the basis of the invoiced price, freight, insurance, handling expenses, damage, losses, etc., and shall provide for delivery to store for stockpiling at the site. The basic rates shall be stated in local currency but payment will be made in the currency or currencies expended upon presentation of supporting documentation;

   b) the additional percentage payment shall be quoted by the bidder and applied to the equivalent local currency payments made under Sub-Para(a) above; and

   c) the cost of hauling materials used on work ordered to be carried out as Day work from the store or stockpile on the site to the place where it is to be use d will be paid in accordance with the terms for Labour and Constructional Plant in this Schedule.

DELETED

SICHN, KARACHI

SICHN, KARACHI

SCHEDULE OF DAYWORK RATES

II. Materials

Item No.	Description	Unit	Nominal Quantity	Rate (Rs) in Figure	Rate (Rs) in Words)	Extended Amount (Rs.)
1	2	3	4	5	6	7
D201	Cement, ordinary Portland or equivalent in bags	M:Ton	200			
D202	Mild Steel reinforcing bar up to 16mm diameter to BS 4449 or equivalent	M:Ton	100			
D203	Fine aggregate for concrete as specified in Clause	Cu: M	1,000			
D204	etc					
D222	Gelignite (Noble Special Gelatine 60 % or equivalent) including caps, fuse, wire and requisite accessories	M:Ton	10			
D223	Sub Total Allow percent of subtotal for Contractor's overhead, profit, etc., in accordance with Paragraph 4(b) of Day work Schedule Total for Day work; Materials (Carried forward to Day work Summary)					

DELETED

SICHN, KARACHI

SICHN, KARACHI

Day work Constructional Plant

5. The contractor shall be entitled to payments in respect of constructional plant already on site and employed on Day work at the basic rental rates entered by him in the Schedule of Day work Rates for constructional plant. The said rates shall be deemed to include complete allowance for depreciation, interest, indemnity and insurance, repairs, maintenance, supplies, fuel, lubricants, and other consumables, and all overhead, profit and administrative costs related to the use of such equipment. The cost of drivers, operators and assistants will be paid for separately as described under the section on Day work Labour.

6. In calculating the payment due to the Contractor for constructional plant employed on Day work, only the actual number of working hours will be eligible for payment, except that where applicable and agreed with the Engineer, the travelling time from the part of the site where the constructional plant was located when ordered by the Engineer to be employed on Day work and the time for return journey thereto shall be included for payment.

7. The basic rental rates for constructional plant employed on Day work shall be stated in Pakistani Rupees.

DELETED

SICHN, KARACHI

SICHN, KARACHI

SCHEDULE OF DAYWORK RATES

III. Constructional Plant

Item No.	Description	Unit	Nominal Quantity	Rate (Rs.) in Figure	Rate Rs.) in Words	Extended Amount (Rs.)
1	2	3	4		5	6
D301	Excavator face shovel or dragline:					
	1. Up-to and including 1 Cu.M.	HR	500			
	2. Over 1 Cu.M to 2 Cu. M.	HR	400			
	3. Over 2 Cu. M	HR	100			
D302	Tractor (tracked) including bull or angle dozer:					
	1. Up-to and including 150 HP	HR	500			
	2. Over 150 to 200 HP	HR	400			
	3. Over 200 to 250 HP	HR	200			
D303	Tractor with ripper:					
	1. Up-to and including 200 HP	HR	400			
	2. Over 200 to 250 HP	HR	200			
D304	----------etc----------					
	Total for day work: Constructional Plant (Carried forward to day work summary)					

DELETED

SICHN, KARACHI

SICHN, KARACHI

DAY WORK

Summary (Day Work)

		Amount (Rs.)
(I)	Total for day work: Labour	
(II)	Total for day work: Materials	
(III)	Total for day work: Constructional Plant	
	Total for day work (Carried forward to summary page of Bill of Quantities)	

DELETED

SICHN, KARACHI

SICHN, KARACHI

Appendix-D to Bid

BILL OF QUANTITIES (SAMPLE)

SUMMARY

		■ Amount (Rs.)
Bill No. 1:	Earthworks/Plinth and Foundation	
Bill No. 2:	Culverts and Bridges/Ground Floor	
Bill No. 3:	Subsurface Drains/Internal Water Supply & Sanitary Fittings	
Bill No 4:	Subsurface Drains/ Pipe Laying and Man holes/Internal water Supply and Sanitary Fittings	
Bill No. 5	Tube wells and Pump-houses/Internal Electrification	
Bill No. 6	Miscellaneous Items	
Bill No. 7	External Development	
	Sub-Total of Bills	
	Day work	
	Bid Price	

Note: All Provisional Sums are to be expended in whole or, in part at the direction and discretion of the Engineer in accordance with Sub-Clauses 52.4 and 58.2 of the General Conditions of Contract Part-I.

DELETED

SICHN, KARACHI

SICHN, KARACHI

Appendix-E to Bid

PROPOSED CONSTRUCTION SCHEDULE

Pursuant to Sub-Clause 8.2 of the General Conditions of Contract, the works shall be completed on or before the date stated in Appendix-A to Bid. The bidder shall provide as Appendix-E to Bid, the Construction Schedule in the bar chart (CPM, PERT or any other to be specified herein) showing the sequence of work items and the period of time during which he proposes to complete each work item in such a manner that his proposed programme for completion of the whole of the works and parts of the works may meet procuring agency's completion targets in days noted below and counted from the date of receipt of Engineer's Notice to Commence (Attach sheets as required for the specified form of Construction Schedule):

Description		Time for Completion
1)	Whole works	_____ days
2)	Part-A	_____days
3)	Part-B	_____days
4)	_____	_____days
5)	_____	_____days

SICHN, KARACHI

SICHN, KARACHI

Appendix-F to Bid

METHOD OF PERFORMING THE WORK

[The bidder is required to submit a narrative outlining the method of performing the work.
The narrative should indicate in detail and include but not be limited to:

1. Organization Chart indicating head office and field office personnel involved in management and supervision, engineering, equipment maintenance and purchasing.

2. Mobilization in Pakistan, the type of facilities including personnel accommodation, office accommodation, provision for maintenance and for storage, communications, security and other services to be used.

3. The method of executing the works, the procedures for installation of equipment and machinery and transportation of equipment and materials to the site.

SICHN, KARACHI

SICHN, KARACHI

Appendix-G to Bid

LIST OF MAJOR EQUIPMENT – RELATED ITEMS

[The bidder will provide on Sheet 2 of this Appendix a list of all major equipment and related items, under separate heading for items owned, to be purchased or to be arranged on lease by him to carry out the works. The information shall include make, type, capacity, and anticipated period of utilization for all equipment which shall be in sufficient detail to demonstrate fully that the equipment will meet all requirements of the Specifications.]

SICHN, KARACHI

SICHN, KARACHI

Appendix-G to Bid

LIST OF MAJOR EQUIPMENT (SAMPLES)

Owned Purchased or Leased	Description of Unit (Make, Model, Year)	Capacity HP Rating	Condition	Present Location or Source	Date of Delivery at Site	Period of Work on Project
1	2	3	4	5	6	7
a. Owned	DELETED					
b. To be Purchased	DELETED					
c. To be arranged on Lease	DELETED					

SICHN, KARACHI

SICHN, KARACHI

Appendix-H to Bid

CONSTRUCTION CAMP AND HOUSING FACILITIES

The Contractor in accordance with Sub Clause 6.6 of the Conditions of Contract shall provide description of his construction camp's facilities and staff housing requirements.

The contractor shall be responsible for pumps, electrical power, water and electrical distribution systems, and sewerage system including all fittings, pipes and other items necessary for servicing the contractor's construction camp.
The bidder shall list or explain his plans for providing these facilities for the service of the contract as follows:

1. Site Preparation (clearing, land preparation, etc.).
2. Provision of Services.

    a) Power (expected power load, etc.).
    b) Water (required amount and system proposed).
    c) Sanitation (sewage disposal system, etc.).

3. Construction of Facilities

    a) Contractor's Office. Workshop and Work Areas (areas required and proposed layout, type of construction of buildings, etc.).
    b) Warehouses and Storage Areas (area required, type of construction and layout).
    c) Housing and Staff Facilities (Plans for housing for proposed staff, layout, type of construction, etc.).

4. Construction Equipment Assembly and Preparation (detailed plans for carrying out this activity).

5. Other Items Proposed (Security services, etc.).

SICHN, KARACHI

SICHN, KARACHI

Appendix-I to Bid

LIST OF SUBCONTRACTORS

I/We intend to subcontract the following parts of the work to subcontractors. In my/our opinion, the subcontractors named hereunder are reliable and competent to perform that part of the work for which each is listed.

Enclosed are documentation outlining experience of subcontractors, the curriculum vitae and experience of their key personnel who will be assigned to the contract, equipment to be supplied by them, size, location and type of contracts carried out in the past.

Part of Works (Give Details)	Subcontractor (With Complete Address)
1	2

SICHN, KARACHI

SICHN, KARACHI

Appendix-J to Bid

ESTIMATED PROGRESS PAYMENTS (SAMPLE)

Bidder's estimate of the value of work which would be executed by him during each of the periods stated below, based on his Programme of the works and the Rates in the Bill of Quantities, expressed in Pakistani Rupees:

Quarter/ Year/ Period	Amounts (in thousands)
1	2
Ist Quarter	
2nd Quarter	
3 rd Quarter	
4th Quarter	
5th Quarter	
6th Quarter	
7th Quarter	
8th Quarter	
Bid Price	

SICHN, KARACHI

SICHN, KARACHI

Appendix-K to Bid

ORGANIZATION CHART
FOR THE
SUPERVISORY STAFF AND LABOUR

(To be filled in by the bidder)

SICHN, KARACHI

SICHN, KARACHI

Appendix-L to Bid

(INTEGRITY PACT)

DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC; PAYABLE BY CONTRACTORS.
(FOR CONTRACTS WORTH RS. 10.00 MILLION OR MORE)

Contract No. _____ Dated _____
Contract Value: _____
Contract Title: _____

---------- [name of Contractor] hereby declares that it has not obtainedor induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Sindh (GOS) or any administrative subdivision or agency thereof or any other entity owned or controlled by it (GOS) through any corrupt business practice.

Without limiting the generality of the foregoing, [name of Contractor] represents and warrants that it has fully declared the brokerage, commission, fees etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from, from Procuring Agency (PA) except that which has been expressly declared pursuant hereto.

[name of Contractor] accepts full responsibility and strict liability that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with PA and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

[name of Contractor] accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other rights and remedies available to PA under any law, contract or other instrument, be voidable at the option of PA.
Notwithstanding any rights and remedies exercised by PA in this regard, [name of Supplier/Contractor/Consultant] agrees to indemnify PA for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to PA in an amount equivalent to ten time the sum of any commission, gratification, bribe, finder's fee or kickback given by [name of Contractor] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from PA.

SICHN, KARACHI

SICHN, KARACHI

[Procuring Agency] [Contractor]

FORMS

BID SECURITY
PERFORMANCE SECURITY
CONTRACT AGREEMENT
MOBILIZATION ADVANCE GUARANTEE INDENTURE
BOND FOR SECURED ADVANCE

SICHN, KARACHI

SICHN, KARACHI

BID SECURITY
(Bank Guarantee)

Security Executed on _____
(Date)

Name of Surety (Bank) with Address: _____
(Scheduled Bank in Pakistan)

Name of Principal (Bidder) with Address _____

_____

Penal Sum of Security Rupees. _____ (Rs.) _____)

Bid Reference No. _____

KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the bid and at the request of the said Principal (Bidder) we, the Surety above named, are held and firmly bound unto _____
(hereinafter called the 'Procuring Agency') in the sum stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Bidder hassubmitted the accompanying bid dated _____ for Bid No. _____ for _____ (Particulars of Bid) to the said Procuring Agency; and

WHEREAS, the Procuring Agency has required as a condition for considering said bid that the bidder furnishes a bid security in the above said sum from a Scheduled Bank in Pakistan or from a foreign bank duly counter-guaranteed by a Scheduled Bank in Pakistan, to the procuring agency, conditioned as under:

1. that the bid security shall remain in force up to and including the date 28 days after the deadline for validity of bids as stated in the Instructions to bidders or as it may be extended by the procuring agency, notice of which extension(s) to the Surety is hereby waived;

2. that the bid security of unsuccessful bidders will be returned by the procuring agency after expiry of its validity or upon signing of the Contract Agreement; and

3. that in the event of failure of the successful bidder to execute the proposed Contract Agreement for such work and furnish the required Performance Security, the entire said sum be paid immediately to the said procuring agency pursuant to Clause 15.6 of the Instruction to bidders for the successful bidder's failure to perform.

NOW THEREFORE, if the successful bidder shall, within the period specified therefore, on the prescribed form presented to him for signature enter into a formal Contract with the said procuring agency in accordance with his bid as accepted and furnish within twenty eight (28) days of his being requested to do so, a Performance Security with good and sufficient surety, as may be required, upon the form prescribed by the said procuring agency for the faithful performance and proper fulfilment of the said Contract or in the event of non-withdrawal of the said bid within the time specified for its validity then this obligation shall be void and of no effect, but otherwise to remain in full force and effect.

SICHN, KARACHI

SICHN, KARACHI

PROVIDED THAT the Surety shall forthwith pay the procuring agency, the said sum upon first written demand of the procuring agency (without cavil or argument) and without requiring the procuring agency to prove or to show grounds or reasons for such demand,notice of which shall be sent by the procuring agency by registered post duly addressed to the Surety at its address given above.

PROVIDED ALSO THAT the procuring agency shall be the sole and final judge for deciding whether the Principal (Bidder) has duly performed his obligations to sign the Contract Agreement and to furnish the requisite Performance Security within the time stated above, or has defaulted in fulfilling said requirements and the Surety shall pay without objection the said sum upon demand from the procuring agency forthwith and without any reference to the Principal (Bidder) or any other person.

IN WITNESS WHEREOF, the above bounden Surety has executed the instrument under its seal on the date indicated above, the name and seal of the Surety being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

SURETY (Bank)

WITNESS:

Signature _____

1. _____

Name _____

_____

Title _____

Corporate Secretary (Seal)

Corporate Guarantor (Seal)

2. _____

_____

Name, Title & Address

SICHN, KARACHI

SICHN, KARACHI

FORM OF PERFORMANCE SECURITY
(Bank Guarantee)

Guarantee No._____
Executed on _____
Expiry date _____

[Letter by the Guarantor to the Procuring Agency]

Name of Guarantor (Bank) with address: _____
(Scheduled Bank in Pakistan)
Name of Principal (Contractor) with address: _____
_____
Penal Sum of Security (express in words and figures) _____
_____
Letter of Acceptance No. _____ Dated _____

KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the bidding documents and above said Letter of Acceptance (hereinafter called the Documents) and at the request of the said Principal we, the Guarantor above named, are held and firmly bound unto the_____ (hereinafter called the procuring agency) in the penal sum of the amount stated above for the payment of which sum well and truly to be made to the said procuring agency, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.
THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal hasacceptedthe procuring agency's above said Letter of Acceptance for _____ _____(Name of Contract) for the _____ _____ (Name of Project).

NOW THEREFORE, if the Principal (Contractor) shall well and truly perform and fulfill all the undertakings, covenants, terms and conditions of the said Documents during the original terms of the said Documents and any extensions thereof that may be granted by the procuring agency, with or without notice to the Guarantor, which notice is, hereby, waived and shall also well and truly perform and fulfill all the undertakings, covenants terms and conditions of the Contract and of any and all modifications of said Documents that may hereafter be made, notice of which modifications to the Guarantor being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue till all requirements of Clause 49, Defects Liability, of Conditions of Contract are fulfilled.

Our total liability under this Guarantee is limited to the sum stated above and it is a condition of any liability attaching to us under this Guarantee that the claim for payment in writing shall be received by us within the validity period of this Guarantee, failing which we shall be discharged of our liability, if any, under this Guarantee.

We, _____ (the Guarantor), waiving all objections anddefenses under the Contract, do hereby irrevocably and independently guarantee to pay to the procuring agency

SICHN, KARACHI

without delay upon the procuring agency's first written demand withoutcavil or arguments and without requiring the procuring agency to prove or to show grounds or reasons for such demand any sum or sums up to the amount stated above, against the procuring agency's written declaration that the Principal has refused or failed to perform the obligations under the Contract which payment will be effected by the Guarantor to Procuring Agency's designated Bank & Account Number.

PROVIDED ALSO THAT the procuring agency shall be the sole and final judge for deciding whether the Principal (Contractor) has duly performed his obligations under the Contract or has defaulted in fulfilling said obligations and the Guarantor shall pay without objection any sum or sums up to the amount stated above upon first written demand from the procuring agency forthwith and without any reference to the Principal or any other person.

IN WITNESS WHEREOF, the above-bounden Guarantor has executed this Instrument under its seal on the date indicated above, the name and corporate seal of the Guarantor being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

_____
Guarantor (Bank)

WITNESS:

Signature _____

1. _____

Name _____

_____

Title _____

Corporate Secretary (Seal)

2. _____

_____

Name, Title & Address

_____

Corporate Guarantor (Seal)

SICHN, KARACHI

FORM OF CONTRACT AGREEMENT

THIS CONTRACT AGREEMENT (hereinafter called the "Agreement") made on the _____ day of _____ (month)20 _____ between _____
(hereafter called the "Procuring Agency") of the one part and_____ (hereafter called the "Contractor") of the otherpart.
WHEREAS the Procuring Agency is desirous that certain works, viz _____ should be executed by the Contractor and has accepted a bid by the Contractor for the execution and completion of such works and the remedying of any defects therein.

NOW this Agreement witnesseth-- as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.

2. The following documents after incorporating addenda, if any, except those parts relating to Instructions to bidders shall be deemed to form and be read and construed as part of this Agreement, viz:

   (a) The Contract Agreement;
   (b) The Letter of Acceptance;
   (c) The completed Form of Bid;
   (d) Special Stipulations (Appendix-A to Bid);
   (e) The Special Conditions of Contract - Part II;
   (f) The General Conditions - Part I;
   (g) The priced Bill of Quantities (Appendix-D to Bid);
   (h) The completed Appendices to Bid (B, C, E to L);
   (i) The Drawings;
   (j) The Specifications.
   (k) _____ (any other)

3. In consideration of the payments to be made by the procuring agency to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the procuring agency to execute and complete the works and remedy defects therein in conformity and in all respects with the provisions of the contract.

4. Procuring agency hereby covenants to pay the contractor, in consideration of the execution and completion of the works as per provisions of the contract, the contract Price or such other sum as may become payable under the provisions of the contract at the times and in the manner prescribed by the contract.

SICHN, KARACHI

SICHN, KARACHI

IN WITNESS WHEREOF the parties hereto have caused this Agreement to be executed on the day, month and year first before written in accordance with their respective laws.

Signature of the Contactor	Signature of Procuring Agency
_____	_____
(Seal)	(Seal)
Signed, Sealed and Delivered in the presence of:	
Witness:	Witness:
_____	_____
(Name, Title and Address)	(Name, Title and Address)

SICHN, KARACHI

SICHN, KARACHI

MG-1

MOBILIZATION ADVANCE GUARANTEE

Bank Guarantee No. _____ Date _____
WHEREAS _____ (hereinafter called the 'Procuring Agency') has entered into aContract for _____
(Particulars of Contract)
With _____ (hereinafter called the "Contractor').

AND WHEREAS, the Procuring Agency has agreed to advance to the Contractor, at theContractor's request, an amount of Rupees _____ (Rs _____)
which amount shall be advanced to the Contractor as per provisions of the Contract.

AND WHEREAS, the Procuring Agency has asked the Contractor to furnish Guarantee to secure the mobilization advance for the performance of his obligations under the said Contract.

AND WHEREAS, _____
(Scheduled Bank in Pakistan)
(hereinafter called the "Guarantor") at the request of the Contractor and in consideration of the procuring agency agreeing to make the above advance to the Contractor, has agreed to furnish the said Guarantee.

NOW, THEREFORE, the Guarantor hereby guarantees that the Contractor shall use the advance for the purpose of above mentioned Contract and if he fails and commits default in fulfilment of any of his obligations for which the advance payment is made, the Guarantor shall be liable to the procuring agency for payment not exceeding the aforementioned amount.

Notice in writing of any default, of which the procuring agency shall be the sole and final judge, on the part of the Contractor, shall be given by the procuring agency to the Guarantor, and on such first written demand, payment shall be made by the Guarantor of all sums then due under this Guarantee without any reference to the Contractor and without any objection.

This Guarantee shall remain in force until the advance is fully adjusted against payments from the Interim Payment Certificates of the Contractor or until _____
whichever is earlier.
(Date)
The Guarantor's liability under this Guarantee shall not in any case exceed the sum of Rupees _____ (Rs _____).

This Guarantee shall remain valid up to the aforesaid date and shall be null and void after the aforesaid date or earlier if the advance made to the Contractor is fully adjusted against payments from Interim Payment Certificates of the Contractor provided that the Guarantor agrees that the aforesaid period of validity shall be deemed to be extended if on the above mentioned date the advance payment is not fully adjusted.

SICHN, KARACHI

SICHN, KARACHI

GURANTOR

1. Signature _____
2. Name _____
3. Title _____

WITNESS

1. _____

_____
Corporate Secretary (Seal)

2. _____ _____
(Name Title & Address) Corporate Guarantor (Seal)

SICHN, KARACHI

SICHN, KARACHI

INDENTURE FOR SECURED ADVANCES.

(For use in cases in which is contract is for finished work and the contractor has entered into an agreement for the execution of a certain specified quantity of work in a given time).

This INDENTURE made the---------- day of the ---------- 20---------- BETWEEN (hereinafter called "the Contractor" which expression shall where the context so admits or implied be deemed to include his heirs, executors, administrators and assigns) of the one part and THE GOVERNOR OF SINDH (hereinafter called "the Government" of the other part).

WHEREAS by an agreement, dated (hereinafter called the said agreement, the contractor has agreed to perform the under-mentioned works (hereinafter referred to as the said work):-

(Here enter (the description of the works). [1]

AND WHEREAS the contractor has applied to the ---------- for an advance to him of Rupees ---------- (Rs----------) on the security of materials absolutely belonging to him and brought by him to the site of the said works the subject of the said agreement for use in the construction of such of the said works as he has undertaken to execute at rates fixed for the finished work (inclusive of the cost of materials and labour and other charge) AND WHEREAS the Government has agreed to advance to the Contractor the sum of Rupees, (Rs.----------) on the security of materials the quantities and other particulars of which are detailed in Part II of Running Account Bill (B). the said works signed by the contractor

Fin R.Form.l7.A

On ---------- and on such covenants and conditions as are hereinafter contained and the Government has reserved to itself the option of marking any further advance or advances on the security of other materials brought by the Contractor to the site of the said works.

NOW THIS INDENTURE WTTNESSETH that in pursuance of the saidagreement and in consideration of the sum of Rupees ---------- (Rs. ----------) on or before the execution of these presents paid to the Contractor by the Government (the receipt whereof the Contractor doth hereby acknowledge) and of such further advances (if any) as may be made to him as aforesaid (all of which advances are hereinafter collectively referred to as the said amount) the Contractor doth hereby assign unto the Government the said materials by way of security for the said amount

And doth hereby covenant and agree with the Government and declare ayfollow :-

1. That the said sum of Rupees ---------- RS. ----------) so advanced by the Government to the Contractor as aforesaid and all or any further sum or sums which may be advanced as aforesaid shall be employed by the contractor in or towards expending the execution of the said works and for no other purpose whatsoever.

2. That the materials detailed in the said Running Account Bill (B) which have been offered to and accepted by (he Government as security for the said amount areabsolutely by the

SICHN, KARACHI

SICHN, KARACHI

Contractors own property free from encumbrances of any kind and the Contractor will not make any application for or receive a further advance on the security of materials which are not absolutely his own property and free from encumbrances of any kind and the contractor hereby agrees, at all times, to indemnify and save harmless the Government against all claims whatsoever to any materials in respect of which an advance has been made to him as aforesaid.

3. That the said materials detailed in the said Running Account Bill (B) and all other materials on the security of which any further advance or advances may hereafter be made as aforesaid (hereinafter called the said materials) shall be used by the Contractor solely in the execution of the said works in accordance with the directions of the Divisional Officer (hereinafter called the Divisional Officer) and in the terms of the said agreement.

4. That the Contractor shall make at his own cost all necessary and adequate arrangement for the proper watch, safe custody and protection against all risks of the said material and that until used in construction as aforesaid the said materials shall remain at jthe site of the said works in the Contractor's custody and at his own risk and on his own responsibility and shall at all times be open to inspection by (he Divisional Officer or any officer authorized by him. In the event of the said materials of any part (hereof being stolen, destroyed or damaged or becoming deteriorated in a greater degree than is due to reasonable use and wear thereof Contractor will forthwith replace the same with other materials of like qualify or repair and make good the same as required by the Divisional Officer and the materials so brought to replace the said materials so repaired and made good shall also be considered as security for the said amount.

5. 'Hurt the said materials shall not on any account be removed from the site of the said works except with the written permission of the Divisional Officer or an officer authorized by him in that behalf

6. That the said amount shall be payable in full when or before the Contractor receives payment, from the Government of the price payable to him for the said works under the terms and provisions of the said agreement PROVIDED THAT if any intermediate payments are made to the contractor on account of work done then on the occasion of each such payment the Government will be at liberty to make a recovery from the Contractors Bill for such payment by deducting there from in the value of the said materials (hen actually used in the construction and in respect of which recovery has not been made previously the value for this purpose being determined in respect of each description of material at (he rates at which the amount of the advances made under these presents were calculated.

7. at if the Contractor shall at any time make any default in the performance or observation in any respect of any of the terms and provisions of the said agreement or of these presents the total amount of the advance or advances that may still be owing to the Government shall immediately on the happening of such default be repayable by the Contractor to the Government together with interest thereon at twelve percent per annum from the date or respective dates of such advance or advances to the date or repayment and with all costs, charges, damages and expenses incurred by the Government in or for the recovery thereof or theenforcement of this security or otherwise by reason of (he default of the Contractor and any moneys so becoming due and payable shall constitute a debt due from the Contractor to the Government and the Contractor hereby covenants and agrees with the Government to repay and the same respectively to it accordingly.

SICHN, KARACHI

SICHN, KARACHI

8. That the Contractor hereby charges all the said materials with the repayment to the Government of the said sum of Rupees ----------Rs. ----------) and any further sum or sums which may be advanced as aforesaid and all costs charges damages and expenses payable under these present PROVIDED ALWAYS and it is hereby agreed and declared that not, withstanding anything in the said agreement and without prejudice to the powers contained therein if and whether the covenant for payment and repayment hereinbefore contained shall become enforceable and the money owing shall not be paid to accordingly.

   Once there with the Government may at any time thereafter adopt all or any of following courses as it may deem best;-

   a. Seize and utilize the said materials or any part thereof in the completion of the said works on behalf of the Contractor in accordance with the provisions in that behalf contained in the said agreement debiting the Contractor with the actual cost of effecting such completion the amount due in respect of advances under these presents and crediting the Contractor with the value of work done as he had carried it out in accordance with the said agreement and at the rates thereby provided. If the balance is against the Contractor he is to pay the same to the Government on demand.
   b. Remove and sell by public auction the seized materials or any part thereof and out of the moneys arising from the sale retain all the sums aforesaid repayable to the Government under these presents and pay over the surplus (if any) to the Contractor.
   c. Deduct all or any part of the moneys owing out of the security deposit or any sum due to the Contractor under the said agreement.

9. That except as is expressly provided by the presents interest on the said advance shall not be payable.

10. That in the event of any conflict between the provisions of these presents and the said agreement the provisions of these presents shall prevail and in the event of any dispute or difference arising over the construction or effect of these presents the settlement of which has not been hereinbefore expressly provided for the same shall be referred to the Superintending Engineer/Executive District Officer/Officer one grade higher to officer signed the agreement Circle whose decision shall be finaland the provisions of the Arbitration Act 1940 for the time being in force so far as they are applicable shall apply to any such reference.

Singed, sealed and delivered by*
In the presence of

SEAL

1st Witness
2nd Witness

Singed, sealed and delivered by*
In the presence of

SEAL

1st Witness
2nd Witness

SICHN, KARACHI

Conditions of Contract

The Conditions of Contract comprise two parts:

(a) Part I - General Conditions of Contract
(b) **Part II - Special Provision of Contract**

These Conditions are the "General Conditions" which form part of the "FIDIC Conditions of Contract for Construction for Building and Engineering Works Designed by the Employer.

Document prepared by the Pakistan Engineering Council (PEC) of 'Standard Form of Bidding Documents (Civil Works) dated June 11, 2007' based on 'FIDIC General Conditions of Contract Part-I (1987 reprinted in 1992 with further amendments)' which is applicable as per the decision taken by Executive Committee of National Economic Council (ECNEC) in a meeting held on 12th November 2007 and Notification No. 8(60)WR/PC/2008 circulated by Planning & Development Commission dated 12th February, 2008.

Copies of the FIDIC Conditions of Contract can be obtained from:

To request such permission please contact:

FIDIC CASE POSTALE, CH-1215 Switzerland;

Tel. +41 22 799 49 00;

Fax; +41 22 799 49 01

E-mail: fidic@fidic.org.

SICHN, KARACHI

SICHN, KARACHI

SPECIAL PROVISIONS

1. THE SITE

Site of Works is the area for construction lying within the line of boundaries and limits shown on the Drawings and any such additional areas adjacent thereto as may be designated by "The Engineer" from time to time for the construction to be performed under the contract and all such areas and additional areas shall be comprised in the site defined in clause 1 Conditions of Contract.

The Employer will give to the contractor, possession of the area designated and defined as "the site" and shown on the drawings as may be required to implement as much of the works when The Engineer' Notice to Commence the Work is given.

2. WORK UNDER THE CONTRACT

The contract comprises the execution and completion of the works, remedying of any defects therein maintenance of utility services and the provisions of all labor, materials equipment plant and everything whether of a temporary or permanent nature required in the such execution, completion, remedying and maintenance so far as the necessity for providing the same is specified or can reasonably be inferred from the Contract.

The carrying out of all work included in the Contract is to be supervised by a sufficient number of qualified representatives of the Contractor and full facilities and assistance are to be afforded by the Contractor for the Engineer or his Representative to check and examine the execution of the work.

The Engineer reserves the right to inspect all parts of the works but may at his discretion waive inspection on certain items. This shall in no way absolve the Contractor from his responsibilities. This particularly applies to the checking of materials, the accurate setting out of foundations, and to the leveling, setting and aligning of the various parts, and to the proper fitting and adjustment of manufactured and finished materials and fixtures in position.

The Contractor shall submit to "The Engineer" in due time for approval and discussion, his proposals and plans as to the method and procedure to be adopted for the temporary and permanent works involved.

Submission of the proposals & plans, methodology and procedure for execution of works and approval thereof by the Engineer shall not relieve the Contractor of his responsibilities and duties under the Contract.

If the Engineer or his Representative find that the work progress is slow in such a way that the works or parts thereof will not be completed in the time specified, then he shall order the Contractor to work overtime or in shifts and the Contractor shall comply. These arrangements will be free of all financial encumbrances and at no additional costs to the Employer.

In the event of night work, the Contractor shall provide sufficient and adequate lighting to the satisfaction of the Engineer or his Representative and shall supply the necessary manpower for satisfactory continuation of the work after normal hours.

SICHN, KARACHI

SICHN, KARACHI

3. CARE AND HANDLING OF WATER

The Contractor shall take all necessary measures to prevent water from the Site causing a nuisance on or, in any neighboring land or property either by causing flooding or by depositing sediment on the surface of the ground or in drains or watercourses. Wherever necessary to prevent this, the Contractor shall construct temporary drainage channels, layer sumps and traps (in addition to those shown on the Contract) discharging into existing drain, ditches or watercourses. The Contractor snail removes over all sediment, which may accumulate on any land or in any drains, ditches or watercourses or in any other property as a result of his operations.

All works including that below sub-soil standing water level shall be carried out in the dry unless specified otherwise. The Contractor's arrangements for controlling the inflow of water into the parts of the excavation being worked and during the placing of concrete and other works therein and for the collection and disposal of water shall be to the Engineer's Approval. Such arrangements may include interalia temporary cofferdams, well-point systems, pumps; drains trenches, flumes and other recognized means. All Costs and charges in dealing with water in any way whatsoever and the effects thereof will be deemed to be included in the Contract Price and in the unit rates or prices of the Contractor for excavations.

Water flowing into excavations shall be carried by trenches, drainage layers or open jointed drains to sumps from which it shall be pumped. Such trenches drains or sands shall generally be clear of the Permanent Works unless approved otherwise by the Engineer. If the Approval of the Engineer for trenches drains or sumps are excavated under or immediately adjacent the Permanent Works, these shall comprise open-jointed pipes with gravel mounds. When no longer required and when approved by the Engineer they shall be filled with a cement /sand grout injected under pressure so as to fill the pipe and all voids completely.

The Contractor shall keep all surfaces upon or against which concrete is to be deposited free from running water and no concrete shall be placed until such surfaces are properly drained. Suitable precautions shall be taken to prevent running water from washing out cement or concrete while it is setting or from injuring the Works in any other way.

Notwithstanding the Approval by the Engineer of the Contractor's methods of dealing with water, the Contractor shall be responsible for and accept all the risks and liabilities of dealing with water from whatever source and of all effects thereof.

4. DRAWINGS

- **Tender Drawings**

  Tender Drawings issued with the Tender Documents called Tender Drawings; show scope of the work to be performed by the contractor. The Drawings are generally in sufficient details so as to be used as a basis for construction and fabrication.

- **Construction Drawings, Supplementary Drawings**

  After award of Contract, the Engineer will issue Construction Drawings to the Contractors.

  The Engineer shall have authority to issue the Contractor, from time to time, such supplementary Drawings and instructions as shall be necessary for the purpose of the proper and adequate execution and completion of the Works and the remedying of any defect therein. The Contractor shall follow these drawings.

SICHN, KARACHI

SICHN, KARACHI

The Contractor shall give notice to the Engineer regarding the part of the Drawings which is in his opinion contains discrepancies or are not clear. The Engineer shall issue necessary clarification or supplementary Drawing in greater details as required to execute the works. These supplementary Drawings shall be reviewed by the Engineer for his determination of adjustment of the Contract Price under Clause 51 and 52 of Conditions of Contract.

- **Definition of Term Drawings**

  The term used in the specifications means the Drawings referred in Clause 5.1 and 5.2 hereof.

- **Checking of Drawings**

  The contractor shall check all drawings carefully as soon as practicable after receipt thereof, and shall promptly notify the Engineer of any errors discovered.

- **Copies of Drawings**

  Drawings will be issued to the contractor as described below.

- **Tender Drawings**

  One (1) set of the Tender Drawings will be issued to the Contractor along with Tender Document. Additional sets will be provided at cost of reproduction upon written request of the contractor.

- **Construction Drawings/ Supplementary Drawings**

  One (1) print of each Construction Drawings/ Supplementary drawings will be issued to the contractor free of charge. Additional sets will be provided at cost of reproduction upon written request of the Contractor.

- **Drawings to be furnished by the Contractor/As-Built Drawings**

  The contractor shall submit to the Engineer for review of such drawings as required under the contract sufficient in advance of the work intended to be executed.

  The contractor shall, at all times, keep on site a separate set of prints on which all significant changes between the work shown on the drawings and the which is actually constructed, shall be noted neatly, accurately and promptly as the work progresses. The Sub-contractor(s) for plumbing, mechanical and electrical shall at all times, keep in site, a separate set of prints of the drawings (showing their parts of the Works) on which all significant changes between the work shown on the Drawings and that which is actually constructed, shall be noted neatly, accurately and promptly as the work progress. Such drawings shall show the exact physical location and configuration of the works as actually installed.

  The contractor shall within fourteen (14) days of issuance Taking-Over Certificate for whole of the Works furnished to the Engineer for his approval two (2) copies of such marked up drawings. One (1) copy of each of the marked-up drawings approved by the engineer shall be

SICHN, KARACHI

returned to the contractor by the Engineer and these shall be used for the preparation of the AS-BULIT Drawings.

The contractor shall furnish to the Engineer Six (6) Complete Sets of all AS-BUILT Drawings as well as AutoCAD soft copy within 30 Days of receipt of drawings stated above, from the Engineer.

5. PHYSICAL AND OTHER DATA AVAILBLE TO CONTRACTOR

Drawings and information pertaining to existing project conditions are furnished for reference.

Neither the Employer nor the Engineer warrants the adequacy or correctness of these. The Contractors are encouraged to visit the project site to assess the existing site conditions.

6. LAYOUT OF WORKS AND SURVEY

The Contractor shall establish benchmarks and / or reference line at the Site in accordance with the instructions of the Engineer. The Contractor shall set out its work from these benchmarks and lines. The Contractor shall supply plant, equipment, materials and labor for checking if required of the survey control by the Engineer. Slope stakes will be set by the Contractor before commencement of excavation and will be re-established as required during progress of work using established bench-marks and reference points.

The Engineer may make checks as the work progress to verify lines and grades established by the Contractor and to determine the conformance of the work as it progresses with the requirements of the Drawings and Specifications. Such checking by the Engineer shall not relieve the Contractor of his responsibility to perform all work in accordance with the Drawings and Specifications and the lines and grades given therein.

Based upon the basic control, the Contractor shall provide his own primary control points, as needed for the Works, and shall preserve and maintain them until otherwise authorized.

The Contractor shall be responsible for maintaining all survey markers/monuments, and property corners. If any markers/monuments are destroyed by the Contractor, the Contractor shall arrange, at his own cost, to retrace and replace them to the entire satisfaction of the Engineer. If a monument cannot be replaced in its original position, the Contractor shall install a witness corner. The Contractor shall complete and file monument reference cards on all monuments as per instructions of the Engineer.

The Contractor shall provide experienced Construction Surveyors with adequate experience in the construction surveys similar in nature as required by this Contract.

Based upon established basic control monuments the Contractor shall establish all lines and grades necessary to control the Works, and shall be responsible for all measurements that may be required for execution of the Works to the tolerance prescribed below.

The Contractor shall perform such surveys and computations as are necessary to determine quantities of work performed or placed during each progress payment period, and shall also perform all surveys necessary for the Engineer to determine final quantities of work in place. The Engineer will determine final quantities based on original ground levels determined by the Contractor and agreed by the Engineer.

SICHN, KARACHI

The Contractor shall notify the Engineer at least 24 hours before performing a quantity survey and, unless specifically waived, quantity surveys shall be performed in the presence of an authorized representative of the Engineer. Degree of accuracy for the survey works shall satisfy the following specified tolerances:

a) Structure points shall be set within 0.01-foot accuracy from point to point, except where tighter tolerances are required.
b) Cross-section points shall be located within 0.10 foot, horizontally and 0.01 foot vertically.
c) Permissible closing error for a levelling line meant for establishing

Temporary Bench Mark (TBMs) shall not exceed 0.045 x √ M foot, where M is in miles. The permissible closing error shall be duly adjusted.

The Contractor shall provide all materials, equipment and labor required for surveying work, including, but not limited to, instruments, stakes, spikes, steel pins, templates, platforms, and tools, and except as required to be incorporated in the work or left in place, all such materials and equipment, shall remain the property of the Contractor. Surveying instruments shall be in perfect working condition and shall be subject to rigid inspection for proper operation at least after every two weeks of use. Defective instruments shall be promptly replaced or repaired and adjusted to the satisfaction of the Engineer.

Survey data shall be recorded in accordance with recognized professional surveying standards. Original field notes, computations, and other surveying data shall be recorded in the Contractor furnished field books. Notes or data not in accordance with standard formats will be rejected. Illegible notes or data, or use of erasures on any page of a field book will be considered sufficient cause for rejection of part or the entire field book. Copied notes or data will not be permitted; therefore, rejection of part or all of a field book may necessitate re-surveying. Corrections by ruling or lining out errors will be satisfactory.

The cost of all materials, equipment, surveyors and labor required for surveys for the Works and quantity surveys required by this clause shall be deemed to be included in the rates and prices of the various items in the Bill of Quantities and no separate measurement and payment in their respect shall be made.

The Contractor shall maintain at the Site the requisite surveying instruments in perfect working conditions to enable the Engineer's Representative to check levels and lines of the work at all times.

7. APPROVAL OF MATERIALS AND EQUIPMENT

- **Quantity of Materials**

  All materials, fixtures, fittings supplies and plant furnished under the contract shall be new and unused, standard first grade quality and of the best workmanship and design. No inferior or low-grade materials, supplies or articles will be either approved or accepted and all work of assembly and construction shall be done in a first class and workmanlike manner. In asking for prices for materials intended for delivery to the site and incorporation in the Works under any portion of these specifications the contractor shall provide the manufacturer or supplier with complete information as may be necessary to secure compliance to this Clause and in every case, he shall quote this Clause in full to each manufacturer or Supplier.

SICHN, KARACHI

SICHN, KARACHI

- **Submission of Samples and Data.**

  As soon as practicable after the award of Contract, the Contractor shall submit for the approval of the Engineer drawings, Catalogues diagrams and other descriptive data for all mechanical, electrical, architectural and such other materials and plant designated by the Engineer, which the contractor proposes for use under this Contract. For certain materials and plant, data may be required to be submitted in accordance with a detail form furnished by the Engineer. Samples of materials (2 Sets) shall be submitted by the Contractor to the Engineer at Contractor's Cost for approval sufficiently in advance of the materials intended to be incorporated in the Works.

- **Testing**

  Testing, except as otherwise specified herein shall be performed by a testing agency at any time as require by the Engineer at no extra cost to the Employer. The Engineer may require all testing to be carried out under his and employer supervision.

  The quality control testing shall be performed by the contractor's competent personnel in accordance with a site testing as approved by the Engineer.

  The contractor shall keep a complete record of all quality tests programme performed on site.

- **Testing Laboratory Certificates.**

  The Engineer may accept a certificate from a commercial testing laboratory, satisfactory to him, certifying that the product has been tested within a period acceptable to the Engineer and that it conforms to the requirements of these Specifications.

- **Inspection**

  All materials and Plant furnished and all work performed under this contract will be subject to inspection by the Engineer at all times and in all states of completion both off-site and on-site. The contractor shall furnish promptly without additional charge, all facilitate, and labor and materials reasonably needed for performing such inspection and testing as may be required by the Engineer.

- **Approved Sample at Site.**

  The contractor shall at all times keep on the site approved samples. All such samples shall be made available to the Engineer as and when required.

- **Site laboratory.**

  The Laboratory shall be equipped with new unused and latest Equipment to perform tests as per Technical Specifications and General Conditions of Contract. Additional equipment/materials shall be supplied by the Contractor as and when required by the Engineer to perform any specified test, at no additional cost to the Employer.

SICHN, KARACHI

SICHN, KARACHI

The laboratory shall also be equipped with new unused furniture, fittings and fixtures. If any equipment, furniture, fitting or fixture becomes unserviceable for any reason what so ever, the Contractor shall promptly replace the same as and when directed by the Engineer.

- **Bar Bending Schedule**

  Bar bending (reinforcement bars) schedule of all structural drawings shall be prepared by the Contractor and submitted in triplicate to the Engineer for approval

- **Submissions**

  Schedule submission at least sixty days before the dates when reviewed submittals will be needed.

  Shop drawings of activities, as deemed necessary by the Engineer, shall be submitted for review and approval by the Engineer as stipulated within the contract terms. Submit Shop Drawings and number of copies of Product Data which the Contractor requires for distribution plus four copies which will be retained by the Engineer.

  Submit three samples unless otherwise specified.

  Accompany submittals with transmittal letter, in duplicate, containing:

  - Data

  - Project title and number

  - Contractor's name and address

  - The number of each Shop Drawing, Product Data and the Sample submitted.

  - Notification of deviations from Contract Documents.

  - Other pertinent data.

- **Re- Submissions Requirements**

  Shop Drawings:

  - Revise initial drawings as required and resubmit as specified for initial submittal.

  - Indicate on drawings any changes which have been made by the Engineer.

  - Product Data and Samples: Submit new data and samples as required for initial submittal.

- The contractor shall be responsible for any approval to be accorded by KW&SC and other related authorities.

SICHN, KARACHI

SICHN, KARACHI

8. CONTRACTOT'S QUALITY ASSURANCE PLAN/ SPECIFICATIONS

- **Specification or as specified**

  Specification or as specified refers to the specifications outlined in these Documents and where no specifications are available for any work or where the same are found not applicable then the relevant applicable ASTM or BSS specifications or equivalent standards shall apply in the same order. Any time for which no specifications are outlined but which are identified in drawings shall be completed accordingly to the standards as per ASTM/BSS these include items that may be added in the future. The Employer/ Employer's representative may supplement such specifications during the progress of work. All materials and processes used for these items shall be subject to standard testing and if found below the pertinent ASTM/BSS standards, shall be removed from the site immediately at the contractor's expense.

- **Standards and codes**

  Wherever reference is made in the specifications to the respective standards codes in accordance to the which goods and materials are to be furnished and work is to be performed or tested, the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly set forth in the contract.

- **Material and process**

  All goods and materials to be incorporated in the works shall be new, unused of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the contract.

- **Equivalent Material, Process etc.**

  Where specific materials, processes etc. are specified and the same are not available other alternative material and processes which ensure an equal or higher quality than those specified will be accepted subject to the Employer prior review and written approval. Differences between the specified and the proposed alternatives must be fully described in writing by the contractor and submitted to the Employer's approval who may give such approval after determining that the alternative proposed ensures equal or higher quality.

- **Approved, Directed, Instructed**

  Approved, directed, instructed means the approval etc. of the Employer unless otherwise stated.

- **Alternatives**

SICHN, KARACHI

SICHN, KARACHI

Where alternative materials process etc., are specified the selection will depend on local conditions and discretion rest with the Employer/ Employer's Representative whose decision shall be final and binding.

- **Catalogues/Standards/Manufacturer's Instructions, etc.**

  Wherever the manufacturer's/supplier's instructions, Manuals, guarantees and ASTM/BSS standards are referred to in the specifications and details of BOQ; all such literature shall be submitted by the contractor to the Employer/ Employer's Representative for due checking, approval and record.

- **Applicability**

  Unless stated or specified else-where to the contrary these General Rules shall apply to all sections of work irrespective of their sequences, location and description.

  Suppliers of local and foreign products and installations specified shall have been regularly engaged in the business of manufacturing, fabricating, installing and / or servicing work required for a period not less than 5 years. In addition, the Engineer may request as appropriate a list of similar installations that describes project, scope and date of completion, complete literature, performance data, and technical data, list of services record within Pakistan and location of service office from which this installation could be maintained.

  For the actual fabrication, installation and testing of the specified work use only thoroughly trained and experienced workmen completely familiar with the items required and with the manufacturers recommended methods of installation. In acceptance or rejection, no allowance will be made for the lack of skill on the part of workmen.

  Use all means necessary to protect materials before, during and after installation and to protect the installed work and materials of all other trades. In the event of damage, immediately make all repairs and replacement necessary for approval and at no additional cost to the Employer.

  Manufacture's standard schematic drawings shall be modified or deleted to indicate only information which is applicable to the project. Such standard information shall be supplemented to provide all additional applicable information.

  Manufacturer's catalogue sheets, brochures, diagrams, schedules, performance charts, illustrations and other standard descriptive literature shall be clearly marked to identify pertinent materials products or models. Dimensions and required clearances shall be indicated. Shop performance characteristics and capacities shall be noted.

  Except as otherwise provided by these Specifications or the Drawings, all materials, equipment and fabrication and testing thereof shall conform to the latest applicable standards and codes referred in the Specifications by use of the abbreviations explained below:

  - ASCE - American Society of Civil Engineers

SICHN, KARACHI

SICHN, KARACHI

- ASA- American Standard Association
- ACI- American Concrete Institute (USA)
- AISI- American Iron and Steel Institute (USA)
- AISC- American Institute of Steel Construction (USA)
- ANSI - American National Standard Institute (USA)
- ASTM - American Society for Testing and Materials (USA)
- AASHTO - American Association of State Highway & Transportation Officials
- AWS - American Welding Society (USA) BS - British Standards (UK)
- CP - Codes of Practice (UK)
- ICAO - International Civil Aviation Organization BSICP - British Standard Institute Code of Practice PS - Pakistan Standards (Pak)
- PCA - Portland Cement Association PSI - Pakistan Standard Institute
- SSPC - Steel Structures Painting Council (USA) UBC - Uniform Building Code (USA)
- USBR - United States Bureau of Reclamation (USA)

If the Contractor, at any time and for any reason, wishes to deviate from the above standards or desires to use material or equipment not covered by the above standards, he shall state the exact nature of the changes, the reason for making the change and shall submit complete specifications of the materials and equipment to the Engineer for approval.

9. CONSTRCUTION SCHEDULE

- **Submittal Date**

The programme of works submitted by the Contractor, in accordance with the contract, in the form of a detailed schedule based on a computerized network analysis covering all construction activities indicating critical activities with critical patch resource scheduling for contractor's equipment material and labor within the period stated in the Appendix A to Tender. All the milestones shall be clearly identified.

- **Requirements**

The detailed submittal shall consist of schedule, network analysis tabulations and narrative descriptions of the proposed construction programme.

Each summary or detailed schedule shall consist of a bar chart and time scaled network. The schedule start and finish times for all activities on the bar charts shall agree with those in the network. All inter-relationships and inter-dependencies between structures shall be clearly indicated on the schedules. The network shall show the order and interdependences of activities planned by the contractor and shall be time – scaled accordingly to calendar dates.

- **Monthly Reports.**

Each month the Contractor shall submit a report consisting of:

- Copies if the bar charts for the current phase with both actual progress and scheduled progress shown.
- Network analysis tabulations reflecting actual start date and finish dates where applicable.

SICHN, KARACHI

SICHN, KARACHI

- A narrative report discussing any significant deviations from the schedule and, if necessary, explaining the steps proposed to be taken to maintain the approved schedule.

10. FACILITIES PROVIDED BY THE EMPLOYER

(Not Used)

11. CONSTRUCTION CAMPS AND COLONIES

Save insofar as the Contract otherwise provides, the Contractor shall provide and maintain such housing accommodation and amenities as he may consider necessary for all his supervisory staff and labor, employed for the purposes of or in connection with the Contract including all fencing, electricity supply, sanitation, cookhouses, fire prevention, water supply and other requirements in connection with such housing accommodation or amenities. On completion of the Contract, these facilities shall be handed over to the Employer or if the Employer so desires, the temporary camps or housing provided by the Contractor shall be removed and the Site reinstated to its original condition, all to the approval of the Engineer.

The Contractor shall erect and maintain at the site in location to be approved by the Engineer 3 Sign Boards 8’ x 6’ for painting the name of Work name of client, name of consultants, name of Contractor and Project Cost on Both sides. The notice board shall comprise of the following; Frame of 3” Dia GI pipe properly painted as per direction of the Engineer. 2 Nos. Posts of 3” Dia GI Pipe 4’ above ground and 4’ below ground embedded in 1:2:4 cc 2’x2’x4’ with proper arrangement of anchorage and brasses. 5 Nos. MS / Polyvinyl sheets 9” wide and 1 No. 12” wide, 8’ long each fixed with the pipe frame with 3” gap between each strip Background painted in white with synthetic enamel paint on both sides. Alphabets of appropriate size as approve by the Engineer in reflective paint.

The Contractor shall make his own arrangements for providing the necessary space for the storage of plant, equipment and materials and for Contractor's temporary office, in and around the site of works, during the currency of the Contract.

12. EQUIPMENT FURNISHED BY THE EMPLOYER

(Not Used)

13. COOPERATION WITH OTHER CONTRACTORS

It shall be the responsibility of the Contractor to keep-up good relations with other Contractors employed on site by the Employer. The Contractor shall cooperate and coordinate his work with that of the other Contractors working at the Site, to whatever extent may be necessary to complete the Project in accordance with the approved programme of the Works and in accordance with the Engineer’s instructions. Should a disagreement or dispute arise between the Contractor and other contractors, the same shall be referred without delay to the Engineer for his decision. Upon such decision, the Contractor shall proceed with the work in accordance therewith. In case the access to the works of other contractors is through the Site area of the Contractor, the Contractor shall coordinate with and permit all reasonable access to other Contractors.

14. SAFETY AND HEALTH

Due precautions shall be taken by the Contractor, and at his own cost, to ensure the safety of his staff and labor at all times throughout the period of the Contract. The Contractor shall further

SICHN, KARACHI

SICHN, KARACHI

ensure that suitable arrangements are made for the prevention of epidemics and for all necessary welfare and hygiene requirements.

15. CONSTRUCTION UTILITIES

The Contractor shall search for, find, locate and protect any wiring, cable, duct, pipework, etc., within or immediately adjoining the site area.

The Contractor shall take full responsibly for safety of existing service lines, utilities and utility structures uncovered or encountered during excavation and construction operations. The Contractor shall take full responsibility for damaging any such service lines, utility/utility structure and any cost and/or expense that arises or issues from any such damage shall be borne directly by himself. Should any damage to any such service occur the Contractor shall forthwith take remedial action, initiate safety precautions, install temporary services and carryout repair all at his own cost and expense and inform the Engineer and notify all relevant authorities.

Existing utilities which are to remain in service for or after the works are to be determined by the Contractor. If any existing service lines, utilities and utility structures which are to remain in service are uncovered or encountered during these operations, they shall be safeguarded, protected from damage, and supported. The Contractor shall preserve, maintain and keep in perfect working conditions, any existing facilities required to be preserved by the Employer/the Engineer.

16. TRAFFIC, ROADS, BRIDGES

(Not Used)

17. ROCK QUARRIES

(Not Used)

18. FLOOD WARNING SYSTEM

No work is to be undertaken when, in the opinion of the Engineer, the weather is so unsuitable that proper protection of the work cannot be ensured.

Additionally, the Contractor shall be deemed to have taken all weather, flood, inundation, seismic, traffic, vibrations conditions, arising from any cause whatsoever, into account when preparing his Tender and he shall not be entitled to extra payment by reason of the occurrence or effect of excessive traffic vibrations, rain fall, floods, temperature or humidity, high winds, earthquakes or an, other heavier flood inundation, seismic or environmental conditions.

Without limiting his liabilities under the Contract, the Contractor shall make suitable arrangements to protect the works, Including temporary Works, and Constructional Plant against the effects of weather flood inundation seismic and traffic vibrations conditions.

No work shall be performed when; in the opinion of the Engineer such work is liable to be injuriously affected by the weather, flood, inundation seismic or traffic vibrations conditions. The Contractor shall not be entitled to extra payment on account of loss alleged to have been sustained directly or indirectly by reason of the Engineers declining to permit such work to start or continue

SICHN, KARACHI

SICHN, KARACHI

or ordering any work damaged by the weather flood inundation seismic or traffic vibrations conditions to be made good or removed and re-executed.

The Contractor shall be responsible for obtaining and acting upon all relevant weather flood inundation and seismic information during the period of the Contract. The Contractor shall promptly supply copies of all-weather flood inundation and seismic forecasts to the Engineer.

19. ENVIRONMENTAL PROTECTION

The Contractor shall exercise care to protect the natural landscape and shall conduct his construction operations so as to prevent any unnecessary destruction, scarring or defacing of the natural surroundings in the vicinity of works. Except where clearing is required for the Permanent works, approved construction roads and the Temporary Works, and for excavation operations, all trees and native vegetation shall be preserved and shall be protected from damage which may be caused by the Contractor's construction operations and equipment. On completion of the works, all work areas shall be smoothed and graded in a manner to confirm to the natural appearance of the landscape. Where unnecessary destruction, scarring, damage or defacing may occur as a result of the Contractor's operations, it shall be repaired, replanted, or otherwise

20. STANDARDS OF COUNTRIES OTHER THAN ORIGION

(Not Used)

21. PROGRESS REPORTS AND PHOTOGRAPHS

During the continuance of the Contract, the Contractor shall submit weekly progress on forms as approved by the Engineer. Such weekly reports shall show the actual progress completed as of date of the report plotted against the schedule as given by the Contractor at the start of work and shall be broken down so as to indicate status of all activities associated with mobilization, design, material procurement, manufacture, surveys work, tests with regard to the agreed contract programme.

The Employer and the Engineer reserve the right to coordinate the schedules of this Contractor and other Contractors working at the Site, and to adjust and/or change any and all such schedules as required during the course of construction in order to achieve a coordinated project in harmony with the Employer's completion date.

Commencing after the first week of construction, and continuing every week until completion, the Contractor shall take and submit photographs to the Engineer's Representative, to show progress of his work and completion of each structure or major feature.

During the period of the Contract, the Contractor shall submit to the Engineer not later than the 8th day of the following month, 5 hard copies and soft editable format each of Monthly Progress Reports covering:

- A Construction Schedule indicating the monthly progress in percentage;
- Description of all work carried out since the last report;
- Description of the work planned for the next 56 days sufficiently detailed to enable the Engineer to determine his programme of inspection and testing;

SICHN, KARACHI

SICHN, KARACHI

- Monthly summary of daily job record;
- Photographs to illustrate progress; and
- Information about problems and difficulties encountered, if any, and proposals to overcome the same.

During the period of the Contract, the Contractor shall keep a daily record of the work progress, which shall be submitted to the Engineer at the end of each day. The daily record shall include particulars of weather conditions, number of men working, deliveries of materials, quantity, location and assignment of Contractor's equipment

As soon as work commences on Site, the Contractor shall provide at least 10 to 12 photographs (along with soft copy) of the works from positions to be selected by the Engineer. Each photographic print shall not be less than 297mm x 210mm and shall bear a printed description, a serial number and the date when taken.

The negatives /soft copy of all photographs shall be held at the Contractor's Site Office, numbered and handed over to the Employer at the completion of the Contract.

22. UNIT PRICE BREAKDOWN

The FPS System of Units shall be used throughout the Project.

23. TRANPORT AND HANDLING OF CARGO

If, notwithstanding Sub-Clause 30.1 any damage occurs to any bridge or road communicating with or on the routes to the Site arising from the transport of materials or Plant, the Contractor shall notify the Engineer with a copy to the Employer, as soon as he becomes aware of such damage or as soon as he receives any claim from the authority entitled to make such claim.

The Employer shall not be liable for any costs, charges or expenses in respect of any damage occurs to any bridge or road arising from the transport of Material or Plant by the Contractor. The Contractor shall keep indemnified the Employer against all such claims. The Contractor shall negotiate the settlement of claim with the authority and pay all sums due in respect of all claims, proceeding, damages, costs, charges and expenses.

The Contractor shall notify the Engineer and Employer about the negotiations, in-respect of settlement of claim. In case of failure in payment of claimed amount by the Contractor, the Employer shall recover the amount of claim from the Contractor by making deduction from any monies due or to become due to the Contractor and shall notify the Contractor accordingly

24. DIRECTED AND REQUIRED

The Contractor shall whenever necessary cover up and protect the works from weather and damage by his own or other workmen performing subsequent operation. The Contractor shall provide all necessary dustsheets, barriers and guard rails and clear away the same at completion.

Upon completion of the works the Contractor shall restore all items covered by the Contract to the satisfaction of the Engineer.

The Contractor shall do regular cleaning and clear away all rubbish and excess materials that may accumulate from time to time on completion and before handing over.

SICHN, KARACHI

SICHN, KARACHI

Upon completion of the works, he shall obliterate all signs of temporary construction facilities such as work areas, structures, foundations of temporary structures, stock piles of excess or waste materials, or any other vestiges of construction, as directed by the Engineer. All buildings shall be cleaned; floors and paving scrubbed and the works and site shall be left in a clean and satisfactory state for immediate use and occupation. Care shall be taken not to use any cleaning materials, which may cause damage to the surface to be cleaned. The Contractor shall also take all necessary precautions to keep the works and site free from vermin during construction and he shall leave the works vermin free on completion. Application of pest control agents shall not commence until the specific product, name, method and extent of application have been submitted to and approved of by the Engineer.

25. COMMUNICATION TO THE ENGINEER

The Engineer shall be notified daily in writing of the nature and location of the Works the Contractor intends to perform the next day so as to enable necessary inspection and measurement to be carried out. The Engineer may, if necessary, direct that longer notice be given of certain operations.

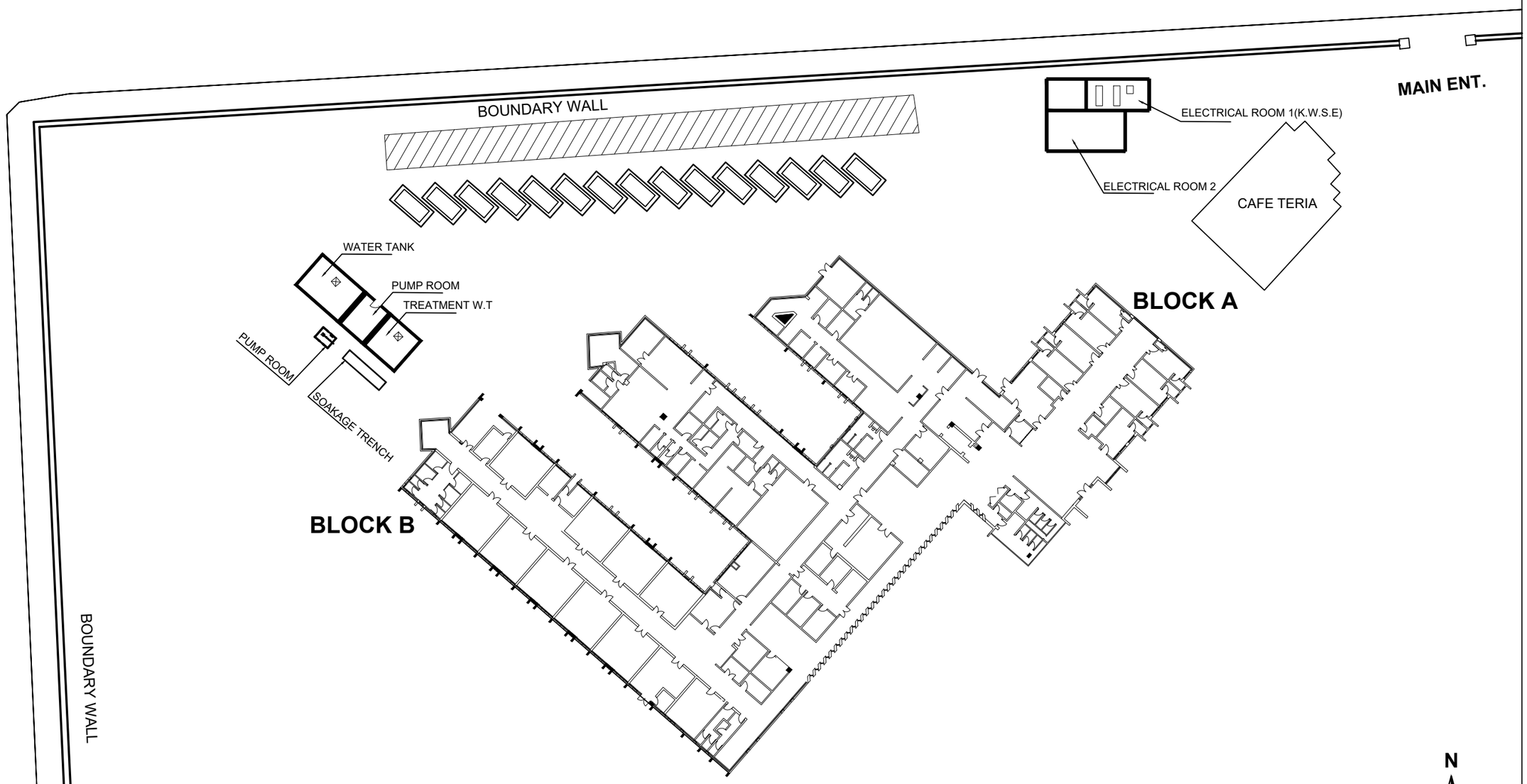
26. ANY OTHER PROVISION

(Not Used)

27. MEASUREMENTS AND PAYMENTS

The measurement of the Works shall be performed on the basis of the Specifications. All work completed under the Contract shall be measured according to the metric system for all items, unless otherwise provided herein or in the Special Provisions. All longitudinal measurements for area or volume will be made horizontally along the road center line, and no deduction will be made for individual fixtures in the pavement having an area of 1 sq. meter or less. All transverse measurements for area or volume of pavement courses will be made horizontally in accordance with the dimensions indicated on the plans, or the dimensions ordered by the Engineer. In computing volume of excavation, embankment and borrow material, the average end area method will be used. Where no items are provided in the Bill of Quantities for work required under the Contract, costs shall be deemed to be distributed among the quoted rates and prices entered for other items of work in the Bill of Quantities. The Works shall be measured net notwithstanding any general or local custom except where otherwise specifically described or prescribed in the Contract.

SICHN, KARACHI



CLIENT	**PROJECT**	**REVISIONS**	**SIGN-OFF**
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	**SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)**	REV / DESCRIPTION / DATE	**DRAWN BY** Zohaib Saleem Abbasi **CHECKED BY** **APPROVED BY**

DRAWING TITLE

SITE PLAN

NEW HOSPITAL BUILDING - BLOCK A & BLOCK B

SCALE 1 : 500 (A3)

DRAWING NO.

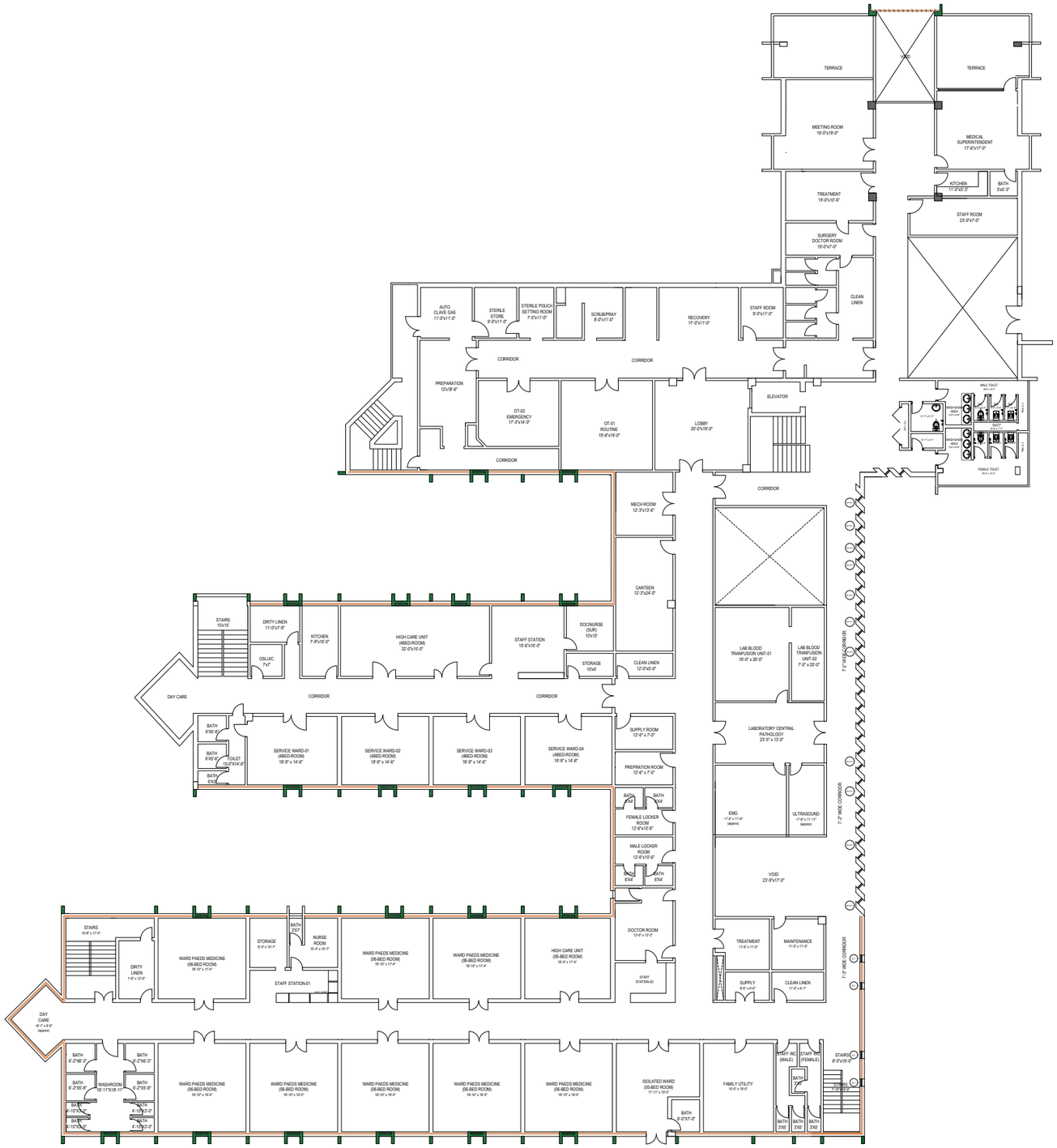
A-001

REV 00



Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	GROUND FLOOR PLAN	A - 2

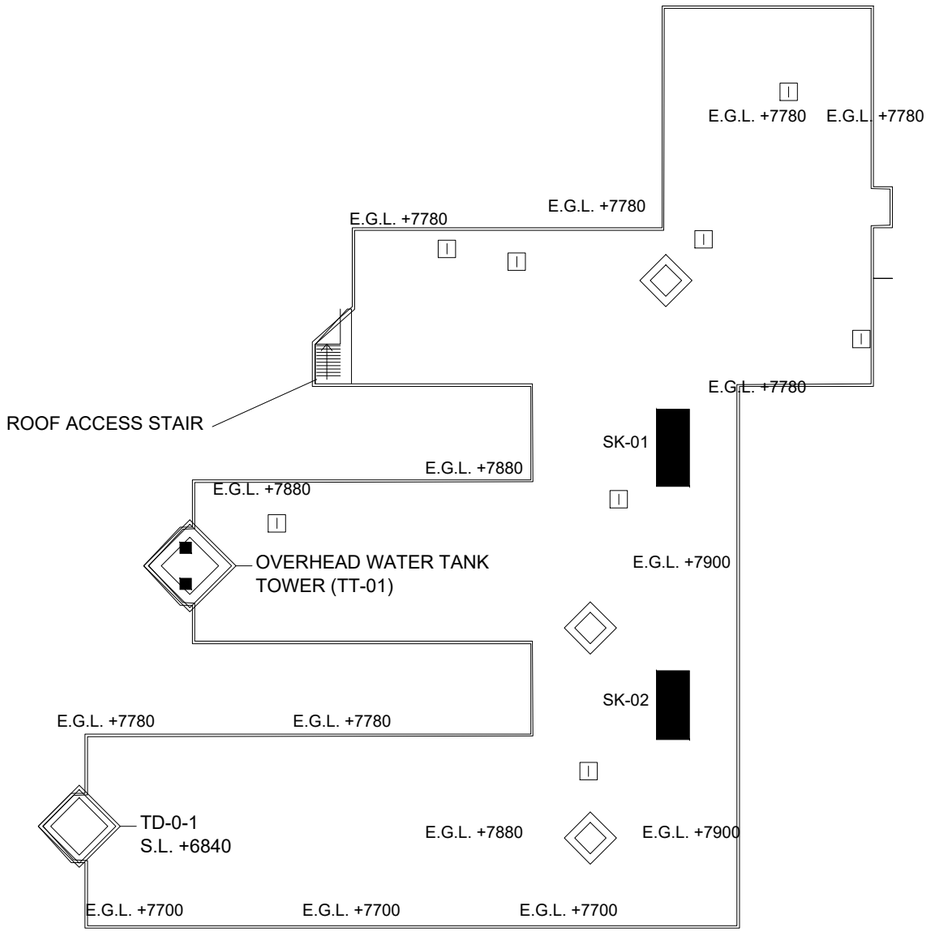


Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	**SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)**	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	**FIRST FLOOR PLAN**	**A - 2**

ROOF NOTES

1. ALL DIMENSIONS IN FEET AND INCHES; ROOF LEVELS IN mm. ROOF OUTLINE DERIVED FROM THE GROUND / FIRST FLOOR CAD PLAN (EXTERNAL WALLS).
2. E.G.L. = EDGE / GUTTER LEVEL. TYPICAL LEVELS +7780, +7880 / +7900 (RIDGES), +7700 (SOUTH EDGE).
3. TT-01: OVERHEAD WATER TANK TOWER AT THE WEST END OF BLOCK B (LOUVRED TOWER ABOVE ROOF). TD-0-1: TOWER AT SOUTH-WEST END OF BLOCK B, S.L. +6840.
4. ROOF ACCESS STAIR AT THE WEST END OF THE BLOCK A WING; STAIR OUTLINE AND TREAD COUNT ARE INDICATIVE.
5. BLACK HATCHED BLOCKS: SKYLIGHTS SK-01 (UPPER) & SK-02 (LOWER). DIAMOND SYMBOLS: ROOF-LIGHTS AND VENTS. PARAPET 9" THICK.
6. EQUIPMENT, TOWER AND LEVEL TAG POSITIONS ARE APPROXIMATE. VERIFY ON SITE.



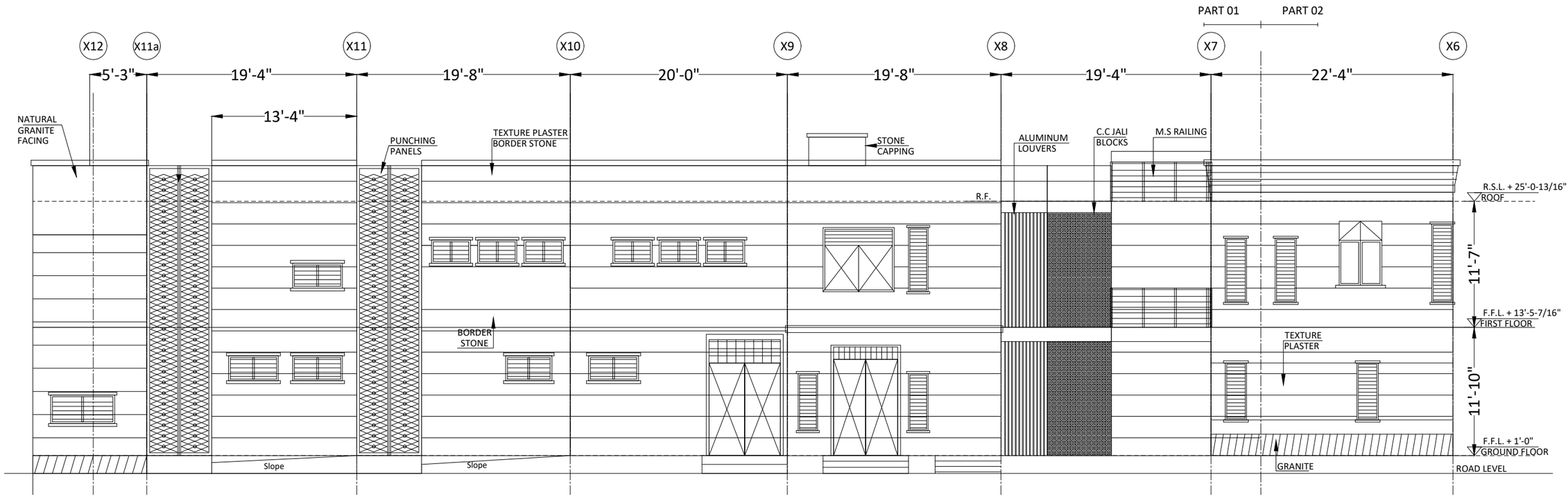
1 ROOF PLAN - BLOCK A & BLOCK B

SCALE: 1:500

N

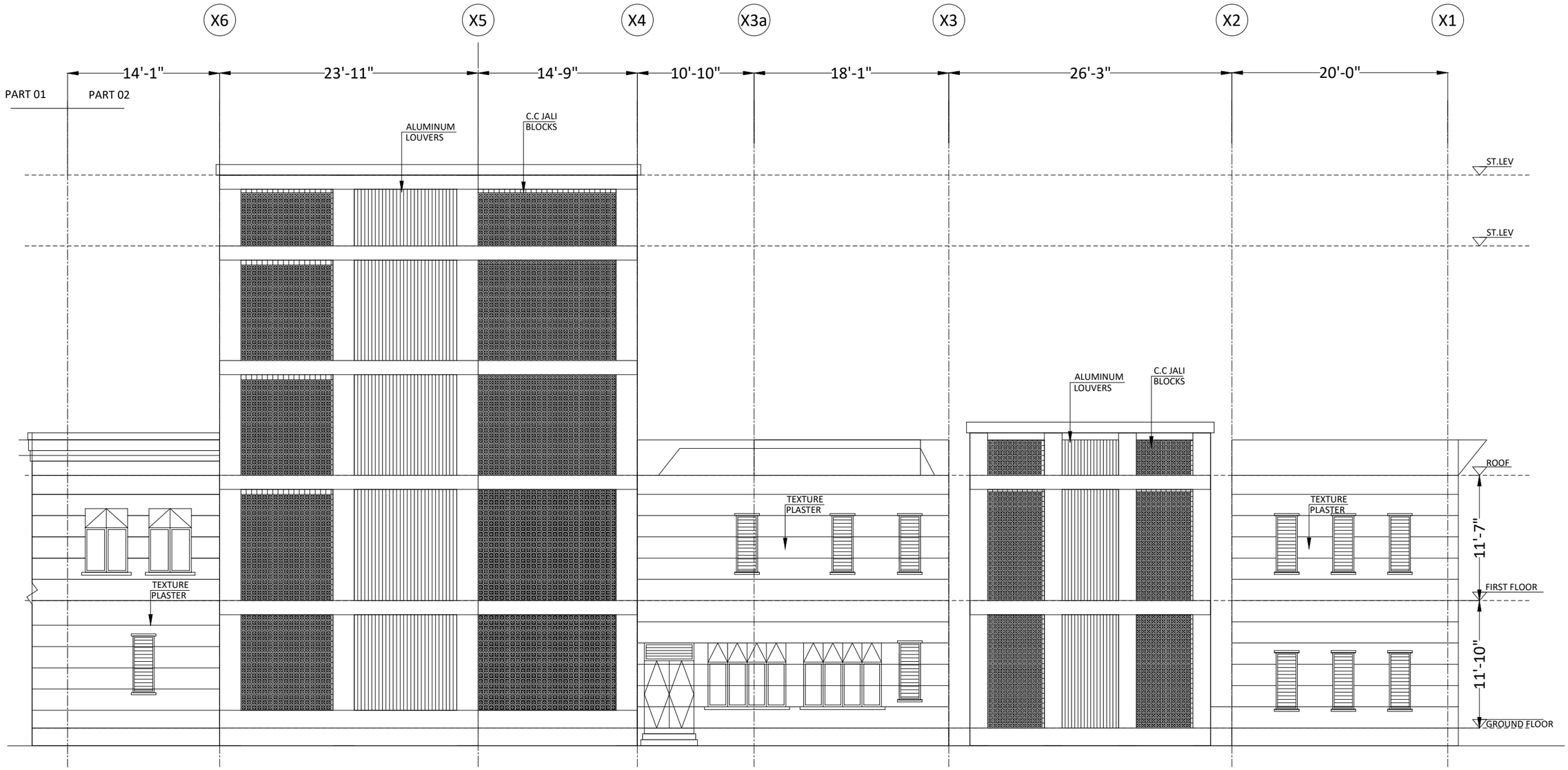
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	ROOF PLAN BLOCK A & BLOCK B	A - 3 REV 00



Drawing shall not be copied or used without permission.

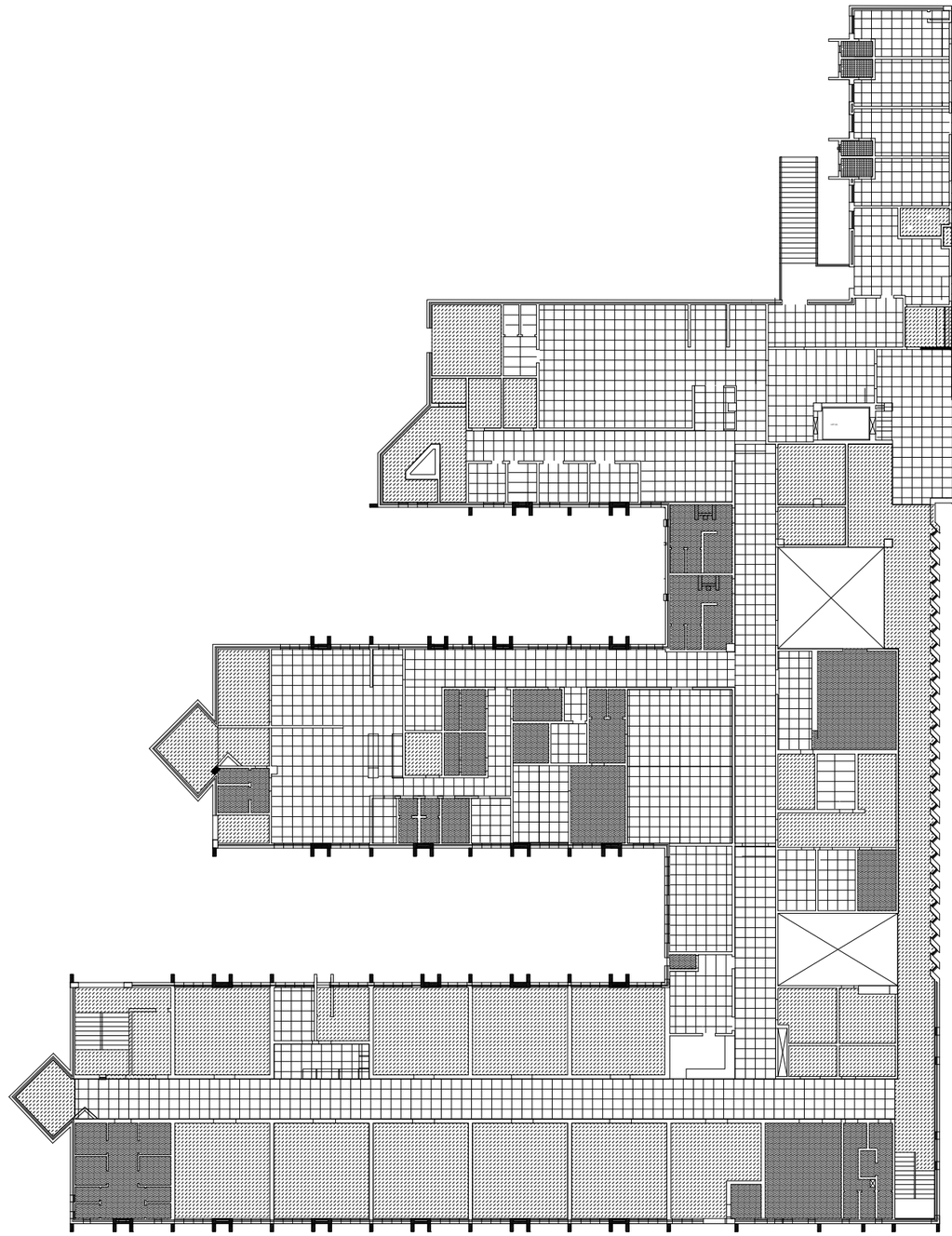
CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi	FRONT ELEVATION PART-01	A - 4
					CHECKED BY		
					APPROVED BY		



FRONT ELEVATION PART-02

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi	FRONT ELEVATION PART-02	A - 5
					CHECKED BY		
					APPROVED BY		



VP+GYPSUM BOARD

T-BAR CEILING

VP+PLASTER

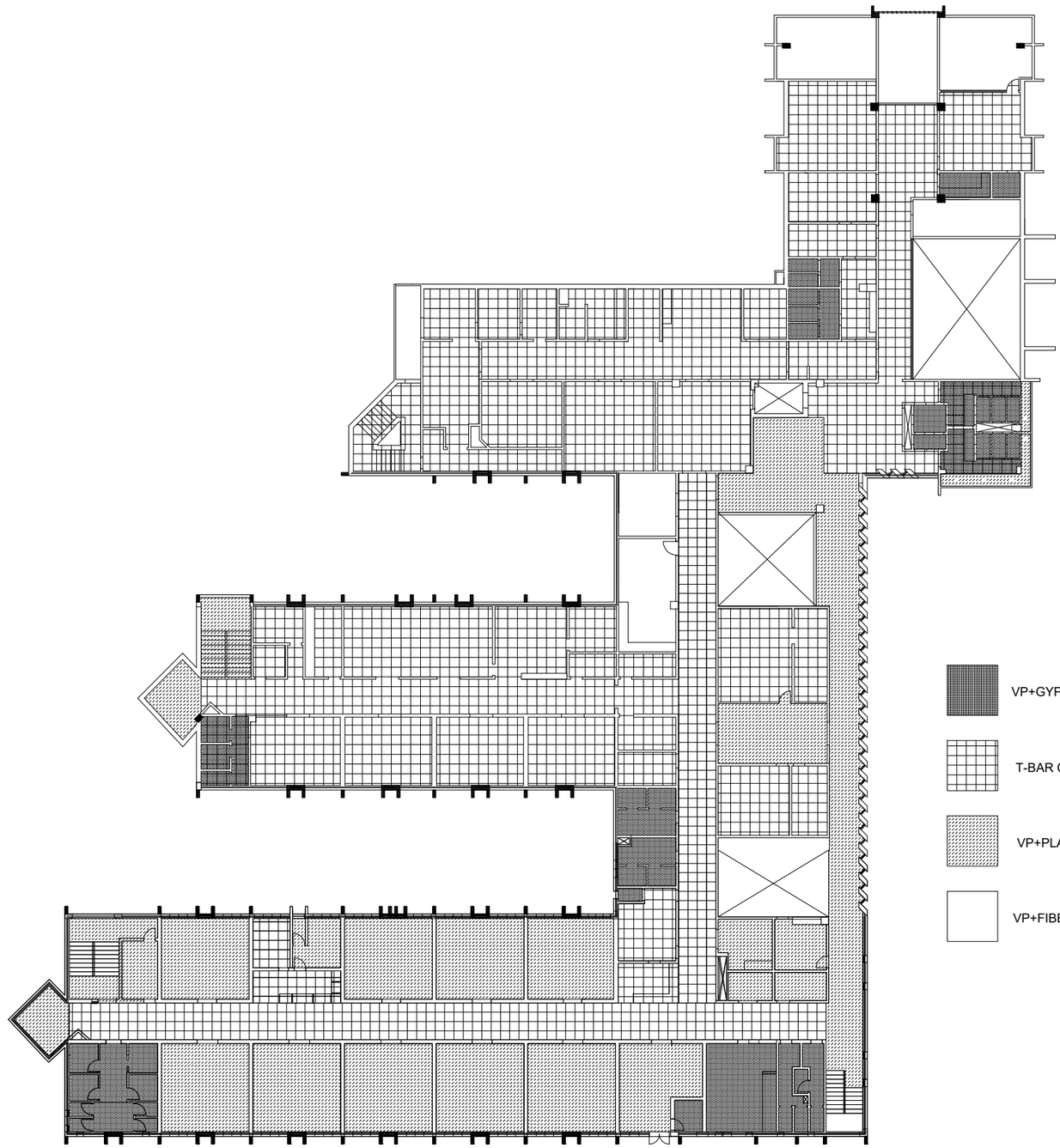
VP+FIBER CEMENT PANEL

GROUND FLOOR CEILING LAYOUT PLAN

SCALE: 1:350 ALL DIMENSIONS IN INCHES

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi	CEILING LAYOUT PLAN	A - 6
					CHECKED BY:	GROUND FLOOR	REV 00
					APPROVED BY:		



VP+GYPSUM BOARD

T-BAR CEILING

VP+PLASTER

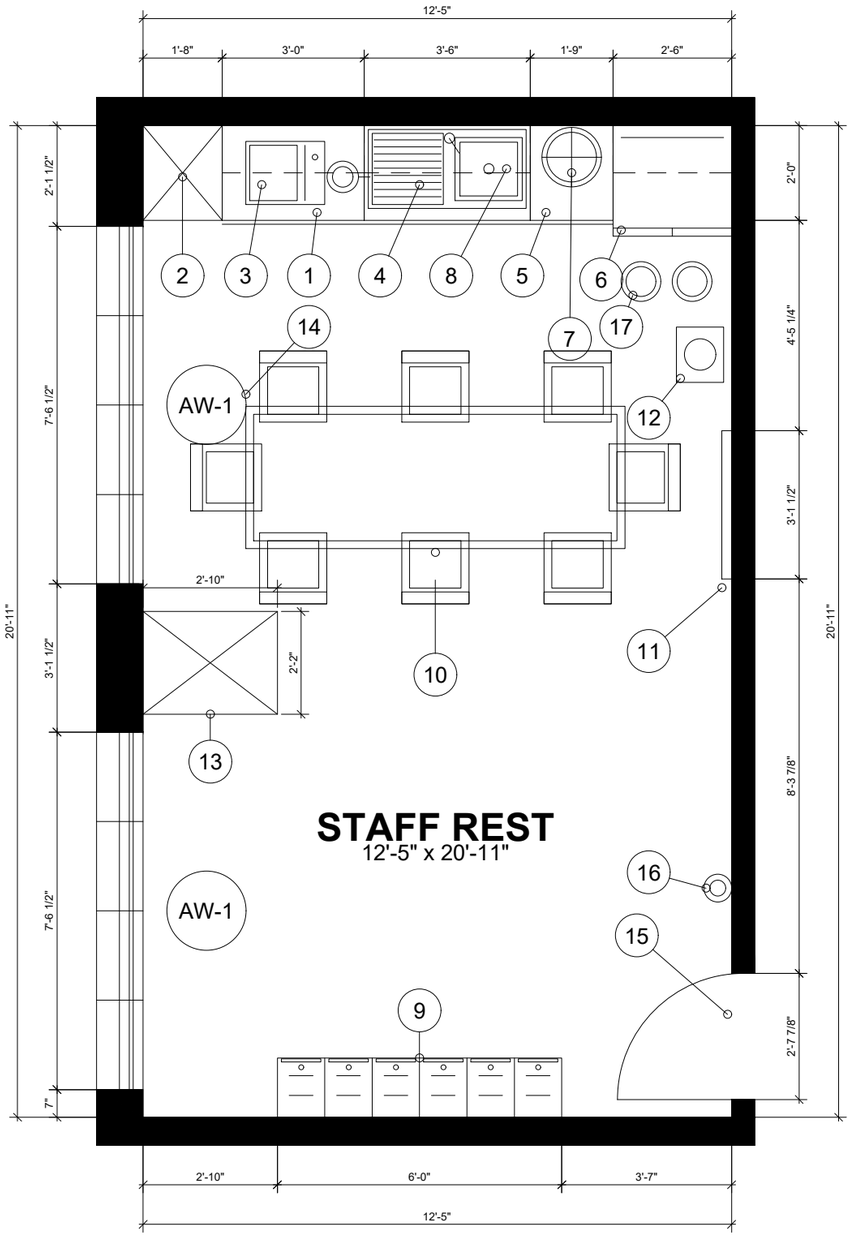
VP+FIBER CEMENT PANEL

FIRST FLOOR CEILING LAYOUT PLAN

SCALE: 1:350 ALL DIMENSIONS IN INCHES

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi	CEILING LAYOUT PLAN	A - 7
					CHECKED BY:	FIRST FLOOR	REV 00
					APPROVED BY:		



FURNITURE LAYOUT PLAN

1

SCALE: 1:40

KEYED NOTES - LAYOUT PLAN

1. COUNTER RUN: BASE UNITS 2'-0" DEEP x 3'-0" HIGH, LAM-1 DOORS, CT-1 SOLID-SURFACE TOP 3/4", 4" KICK PLATE. WALL CABINETS 1'-0" DEEP (DASHED) ABOVE.
2. TALL PANTRY / STORAGE CABINET 1'-8" W x 2'-0" D x 7'-0" H.
3. BASE UNIT 3'-0" W: MICROWAVE OVEN AND ELECTRIC KETTLE ON COUNTER (CLIENT SUPPLY).
4. SINK UNIT 3'-6" W: S.S. SINK 3'-4" x 1'-8" (ONE BOWL + DRAINER), SWAN-NECK MIXER, BOTTLE TRAP.
5. BASE UNIT 1'-9" W WITH 3 DRAWERS (CUTLERY / CROCKERY).
6. REFRIGERATOR, DOUBLE DOOR, 2'-6" W x 2'-4" D x 5'-8" H (CLIENT SUPPLY).
7. ELECTRIC GEYSER 10 GAL (45 L), 15" DIA, WALL-MOUNTED 4'-8" TO 7'-0" AFFL, WITH T&P VALVE AND DP ISOLATOR.
8. WALL CABINETS 1'-0" DEEP, 4'-6" TO 7'-0" AFFL, WITH UNDER-CABINET LED STRIP.
9. STAFF LOCKERS ALONG SOUTH WALL: 6 NOS., 12" W x 15" D x 6'-0" H, STEEL, KEY LOCK. SPLIT AC UNIT ABOVE.
10. DINING TABLE 8'-0" x 3'-0" x 2'-6" H WITH 8 CHAIRS (3 + 3 + 1 + 1).
11. LED TV 43" WALL-MOUNTED ON EAST WALL, CENTRE AT 5'-0" AFFL, FACING DINING TABLE (CLIENT SUPPLY).
12. FLOOR-STANDING WATER DISPENSER (HOT / COLD), 1'-0" x 1'-2".
13. EXISTING SHAFT 2'-10" x 2'-2" (AS PER LAYOUT): KEEP CLEAR, 2'-0" ACCESS.
14. EXISTING AW-1 (AS PER GROUND FLOOR LAYOUT).
15. EXISTING DOOR D1 IN EAST WALL AT SOUTH-EAST CORNER (NOT MOVED), OPENS INTO ROOM AGAINST SOUTH WALL.
16. FIRE EXTINGUISHER 6 kg DCP, WALL-MOUNTED, HANDLE AT 3'-6" AFFL.
17. WASTE BINS 2 NOS. (GENERAL / RECYCLABLE), PEDAL TYPE.

GENERAL NOTES

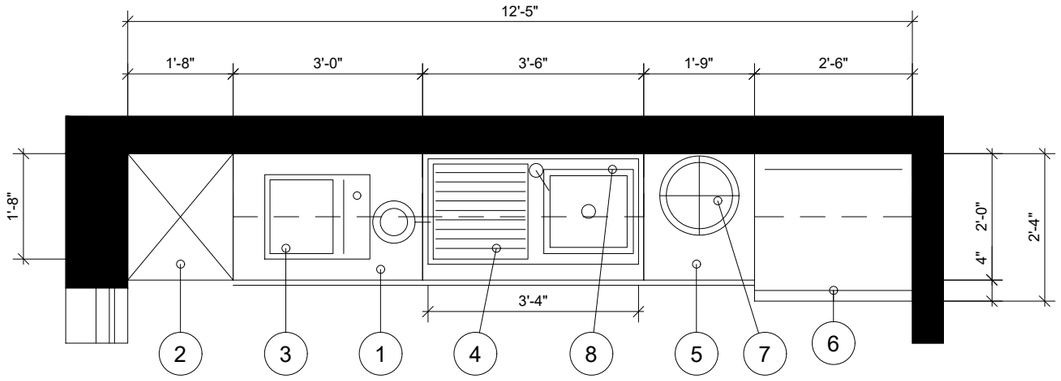
1. ALL DIMENSIONS IN FEET AND INCHES. ROOM OUTLINE, DOOR D1, AW-1 AND SHAFT FROM THE GROUND FLOOR LAYOUT; VERIFY ON SITE.
2. PLAN NORTH = TOP OF SHEET (AS PER GROUND FLOOR LAYOUT). FALSE CEILING ASSUMED AT 9'-0" AFFL; VERIFY WITH MEP.
3. NO GAS OR COOKING HOB IN THIS ROOM: ELECTRIC APPLIANCES ONLY (HOSPITAL FIRE SAFETY).
4. CLIENT-SUPPLY ITEMS: REFRIGERATOR, MICROWAVE, KETTLE, TV, WATER DISPENSER. FURNITURE SIZES ARE INDICATIVE; FINAL SELECTION BY CLIENT.
5. SERVICE ROUTES AND POINT HEIGHTS TO BE CONFIRMED BY THE MEP CONSULTANT BEFORE FABRICATION.

GRAPHIC SCALE 1:40

0 2' 4' 6' 8' 10'

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	STAFF REST FURNITURE LAYOUT PLAN	A - 8 REV 00

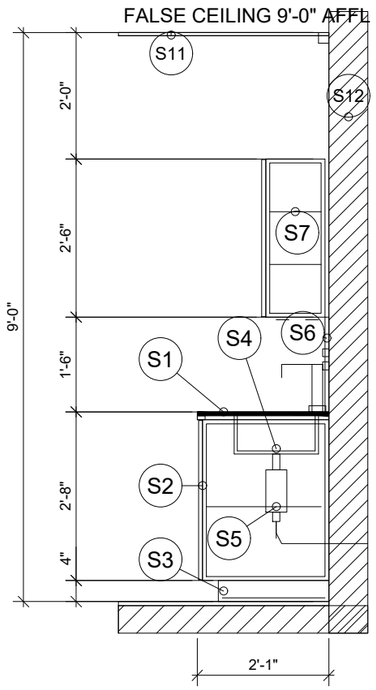


1 KITCHENETTE PLAN

SCALE: 1:30

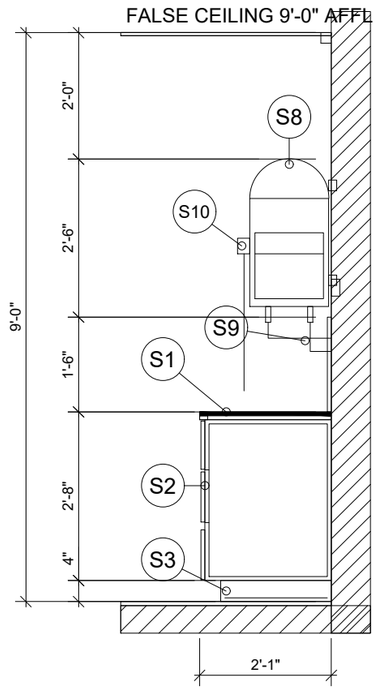
SECTION KEYED NOTES

S1 CT-1 SOLID SURFACE 3/4" TOP WITH 3/4" APRON ON 3/4" PLY.
S2 18 mm MR PLY CARCASS, LAM-1 FINISH, 3/4" PANELS.
S3 AL-1 KICK PLATE 4" HIGH, RECESSED 3".
S4 S.S. SINK, 18 GAUGE, 8" DEEP BOWL.
S5 BOTTLE TRAP Ø1 1/2"; WASTE Ø2" THROUGH WALL AT 11" AFFL, FALL 1:40.
S6 WL-2 TILE ON 1/2" MORTAR, TO 4'-6" AFFL.
S7 WALL CABINET 1'-0" DEEP, ADJUSTABLE SHELVES, UNDER-CABINET LED.
S8 GEYSER ON 2 NOS. WALL BRACKETS, M10 EXPANSION BOLTS.
S9 CW / HW Ø1/2" IN CHASE, ISOLATING VALVES, HW INSULATED.
S10 T&P DISCHARGE Ø1/2" TO TUNDISH / SINK WASTE.
S11 FALSE CEILING 9'-0" AFFL ON T-GRID.
S12 4 1/2" BLOCK WALL, 1/2" PLASTER, EMULSION PAINT.



2 SECTION A-A (SINK)

SCALE: 1:30

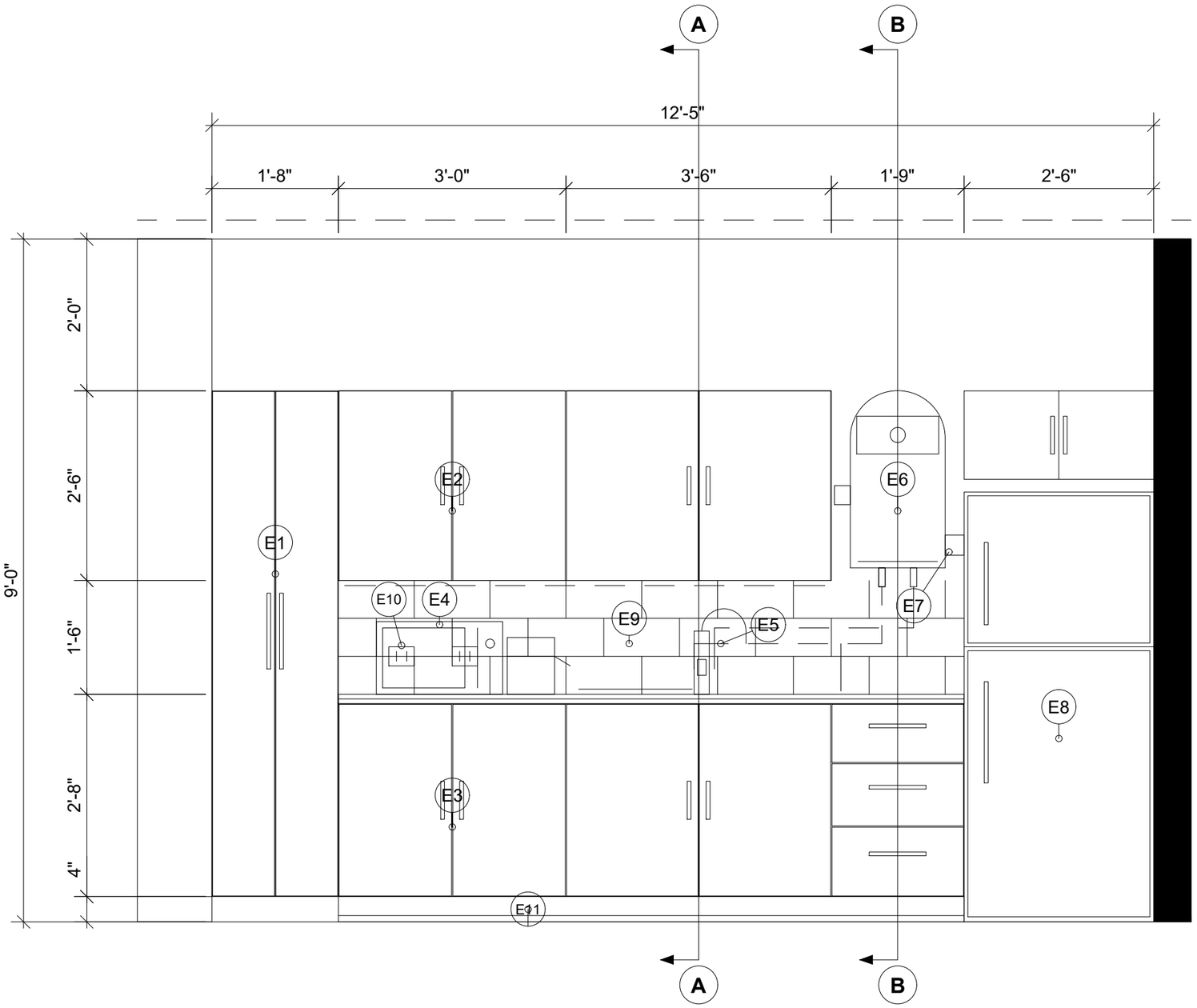


3 SECTION B-B (GEYSER)

SCALE: 1:30

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	STAFF REST KITCHENETTE PLAN & SECTIONS	A - 9 REV 00



ELEVATION KEYED NOTES

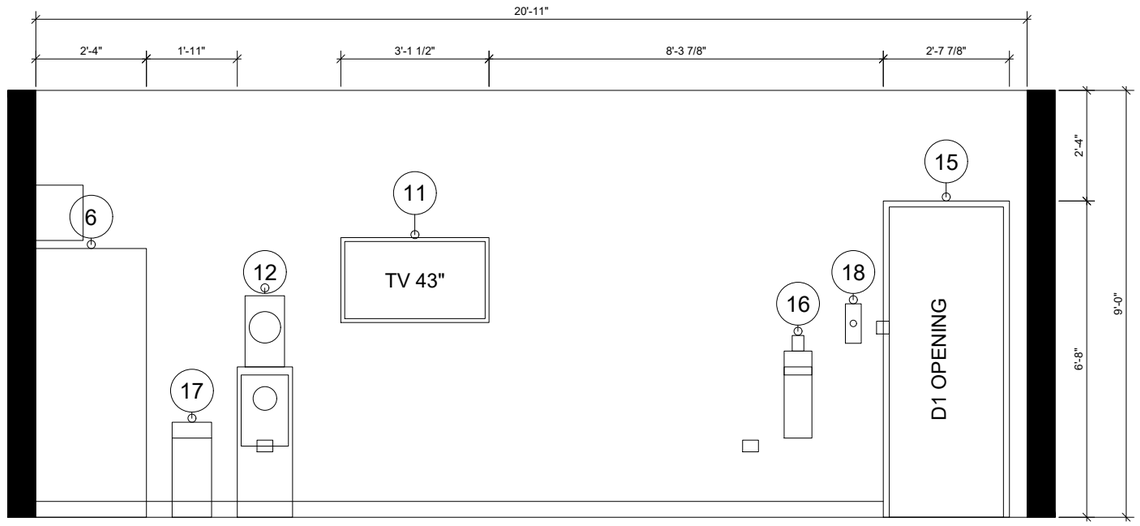
- **E1** TALL UNIT 1'-8" W x 7'-0" H, 2 DOORS, LAM-1.
- **E2** WALL CABINETS 1'-0" DEEP, 2'-6" HIGH, 2 DOORS EACH, LAM-1.
- **E3** BASE UNITS 3'-0" HIGH TO TOP OF CT-1, SOFT-CLOSE HINGES / RUNNERS.
- **E4** MICROWAVE OVEN ON COUNTER (CLIENT SUPPLY).
- **E5** S.S. SINK WITH SWAN-NECK MIXER (Ø1/2" CW + HW).
- **E6** ELECTRIC GEYSER 10 GAL, 15" DIA, BOTTOM AT 4'-8" AFFL, T&P VALVE ON LEFT.
- **E7** 20 A DP ISOLATOR WITH NEON FOR GEYSER, 5'-0" AFFL.
- **E8** REFRIGERATOR WITH 1'-0" HIGH OVERHEAD CABINET (WALL UNIT, 2 DOORS).
- **E9** WL-2 CERAMIC TILE BACKSPLASH 12" x 6" (BRICK BOND), 3'-0" TO 4'-6" AFFL.
- **E10** DOUBLE SOCKET 13A, RCD-PROTECTED, 3'-6" AFFL.
- **E11** AL-1 ALUMINIUM KICK PLATE 4" HIGH, RECESSED 3".

1 ELEVATION - KITCHENETTE WALL (LOOKING NORTH)

SCALE: 1:20

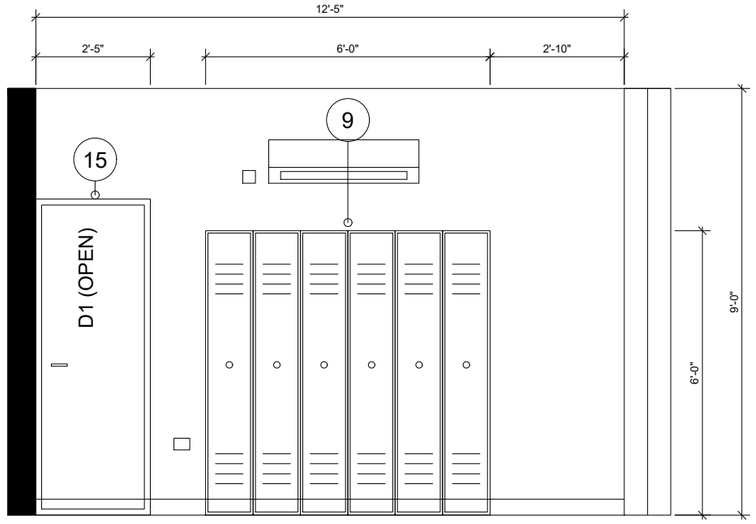
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	STAFF REST KITCHENETTE ELEVATION	A - 10 REV 00



1 ELEVATION - EAST WALL (LOOKING EAST)

SCALE: 1:40



2 ELEVATION - LOCKER WALL (LOOKING SOUTH)

SCALE: 1:40

ELEVATION KEYED NOTES

TAGS 6, 9, 11, 12, 15, 16, 17: SEE LAYOUT PLAN KEYS ON SHEET A - 15.

AC SPLIT AC INDOOR UNIT 3'-2" LONG x 11" HIGH, BOTTOM AT 7'-0" AFFL, ABOVE LOCKERS (BY MEP).

18 HAND-SANITISER DISPENSER, WALL-MOUNTED, 3'-8" AFFL.

FINISH SCHEDULE

FL-1 PORCELAIN TILE 2' x 2', MATT, ON MORTAR BED.

SK-1 PORCELAIN SKIRTING 4" HIGH.

WL-1 EMULSION PAINT OFF-WHITE ON PLASTER.

WL-2 CERAMIC TILE 12" x 6" (WHITE GLOSS) BACKSPLASH.

CL-1 MINERAL FIBRE TILE 2' x 2' ON T-GRID, WHITE.

CT-1 SOLID SURFACE 3/4", WHITE / LIGHT GREY (COLOUR TBC).

LAM-1 HIGH-PRESSURE LAMINATE ON 18 mm MR PLY (CABINETS / LOCKERS).

AL-1 ANODIZED ALUMINIUM KICK PLATE, SILVER.

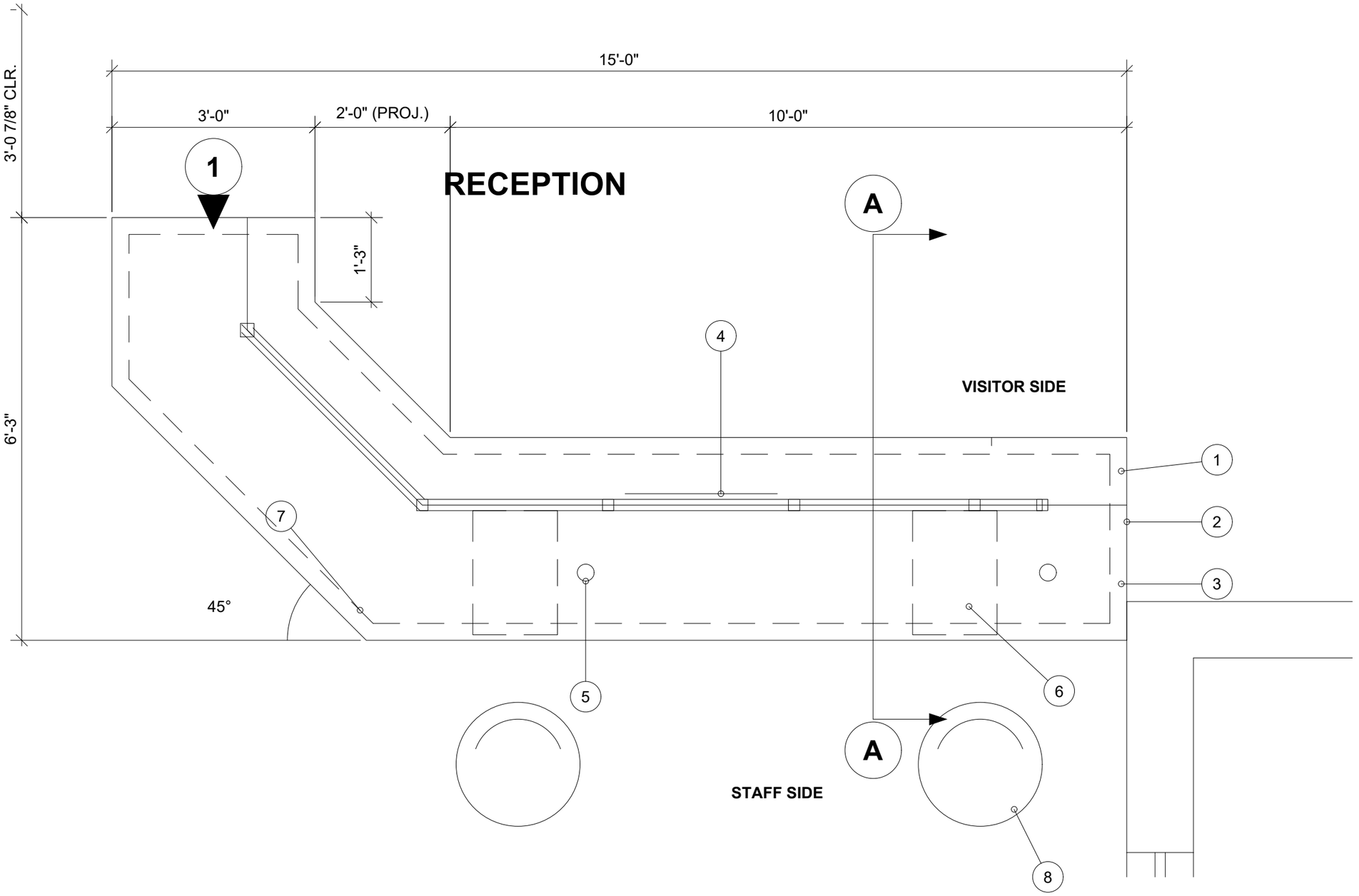
UPH-1 WASHABLE HOSPITAL-GRADE VINYL UPHOLSTERY (DINING CHAIRS).

GENERAL NOTES

1. ALL DIMENSIONS IN FEET AND INCHES. ROOM OUTLINE, DOOR D1, AW-1 AND SHAFT FROM THE GROUND FLOOR LAYOUT; VERIFY ON SITE.
2. PLAN NORTH = TOP OF SHEET (AS PER GROUND FLOOR LAYOUT). FALSE CEILING ASSUMED AT 9'-0" AFFL; VERIFY WITH MEP.
3. NO GAS OR COOKING HOB IN THIS ROOM: ELECTRIC APPLIANCES ONLY (HOSPITAL FIRE SAFETY).

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	STAFF REST ELEVATIONS & FINISH SCHEDULE	A - 11 REV 00



PLAN KEYED NOTES

1. TRANSACTION LEDGE, 1'-0" DEEP, TOP AT 3'-6" AFF (ST-1) WITH SOLID TIMBER EDGE (WD-1).
2. FLUTED WOOD END PANEL (WD-1), 2'-0" WIDE, FULL HEIGHT.
3. STAFF WORK SURFACE, 2'-0" DEEP, TOP AT 2'-6" AFF (ST-1).
4. GLASS PARTITION ON TIMBER SILL, ALUMINUM FRAME (AL-2), GLASS (GL-1), 6'-3" OVERALL HEIGHT AFF.
5. 3" DIA. CABLE GROMMET WITH CAP, TYP. AT EACH WORK STATION.
6. MOBILE 3-DRAWER PEDESTAL, 1'-3" W X 1'-10" D (BY OWNER), BELOW WORK SURFACE.
7. TOE-KICK RECESS, 4" HIGH X 3" SETBACK, ALUMINUM KICK PLATE WITH LED (AL-1), SHOWN HIDDEN.
8. STAFF CHAIR (BY OWNER, NOT IN CONTRACT).

N

P

PLAN - RECEPTION COUNTER

SCALE: 1:20

EXISTING WALLS SHOWN FOR REFERENCE ONLY (SOURCE: CEILING PLAN)

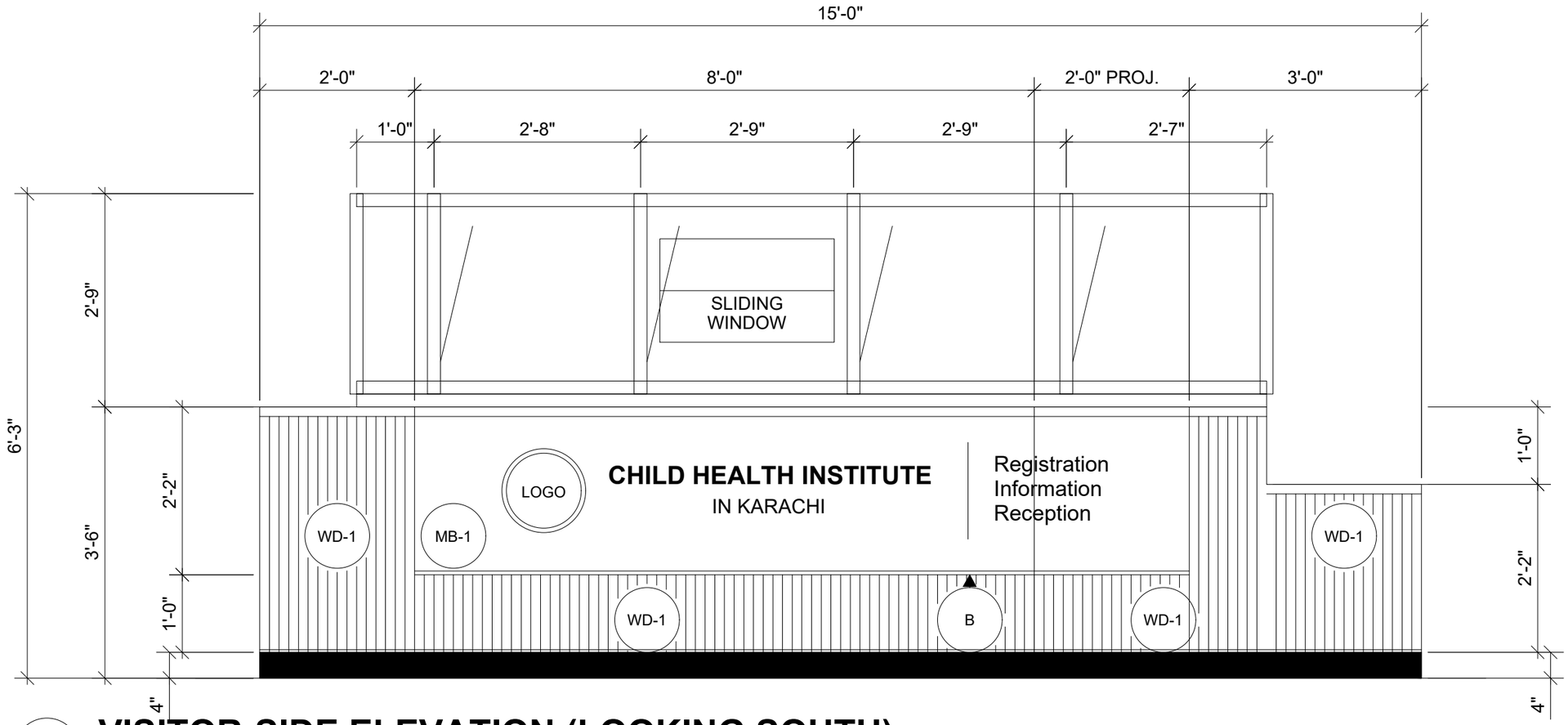
0 2' 4' 6'

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	RECEPTION COUNTER PLAN	A - 12 REV 00

FINISH SCHEDULE

ST-1 SOLID SURFACE, WHITE, 3/4" THK. (COLOR TO BE CONFIRMED BY DESIGNER).
MB-1 MARBLE-LOOK PORCELAIN OR STONE PANEL, WHITE WITH GREY VEINING, 3/4" THK.
WD-1 NATURAL WOOD VENEER / SOLID TIMBER, CLEAR FINISH; FLUTED SLATS WHERE NOTED.
WV-1 WOOD VENEER, 1/4" THK., CLEAR FINISH (STAFF SIDE).
AL-1 ALUMINUM KICK PLATE / LED CHANNEL, 4" HIGH, BRUSHED SILVER.
AL-2 ANODIZED ALUMINUM FRAME, SILVER, 2" X 2".
GL-1 1/2" CLEAR TEMPERED OR LAMINATED SAFETY GLASS.

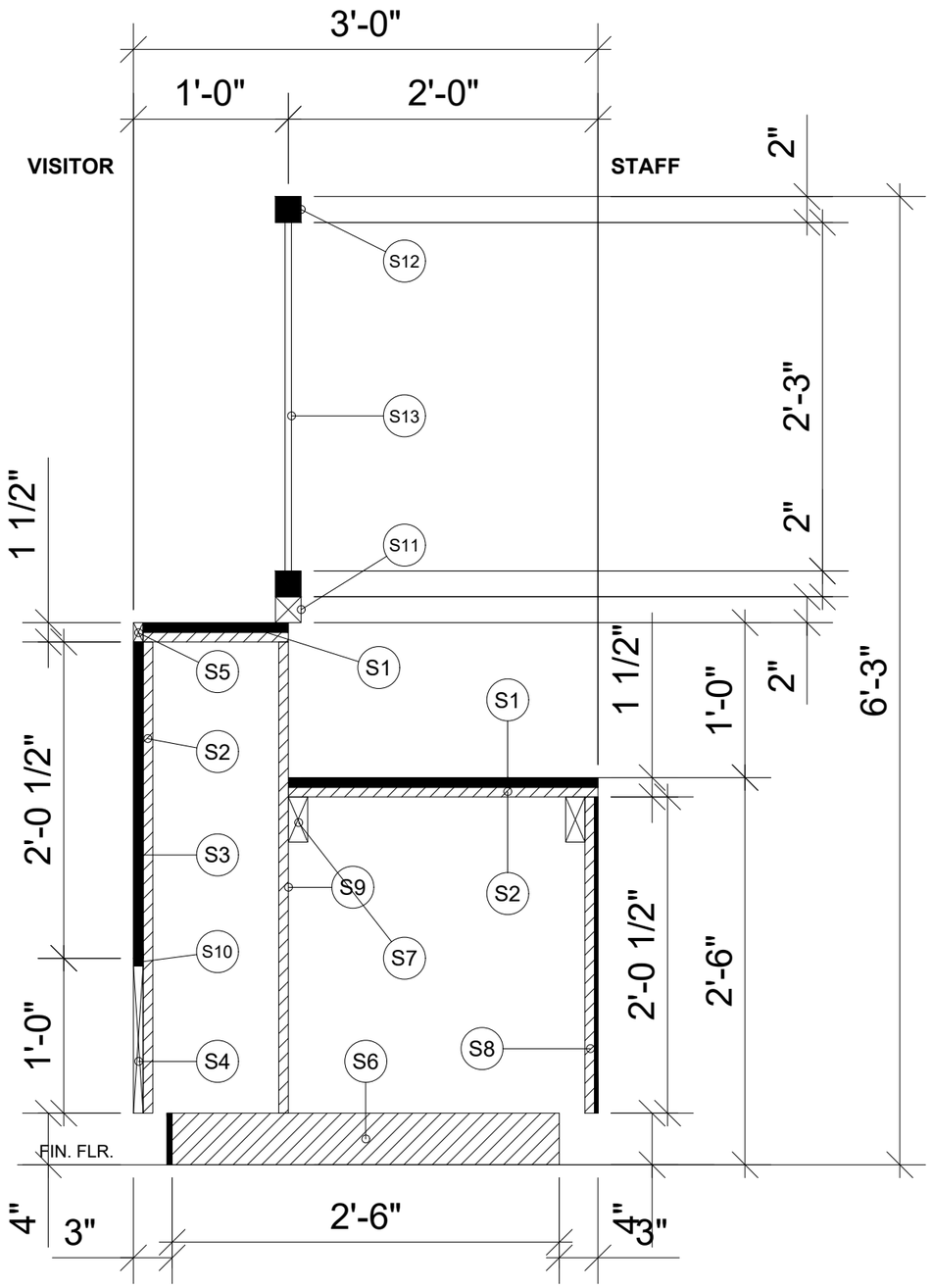


1 VISITOR-SIDE ELEVATION (LOOKING SOUTH)

SCALE: 1:20

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	RECEPTION COUNTER VISITOR-SIDE ELEVATION	A - 13 REV 00



A SECTION A - THROUGH GLASS PARTITION

SCALE: 1:12

SECTION KEYED NOTES

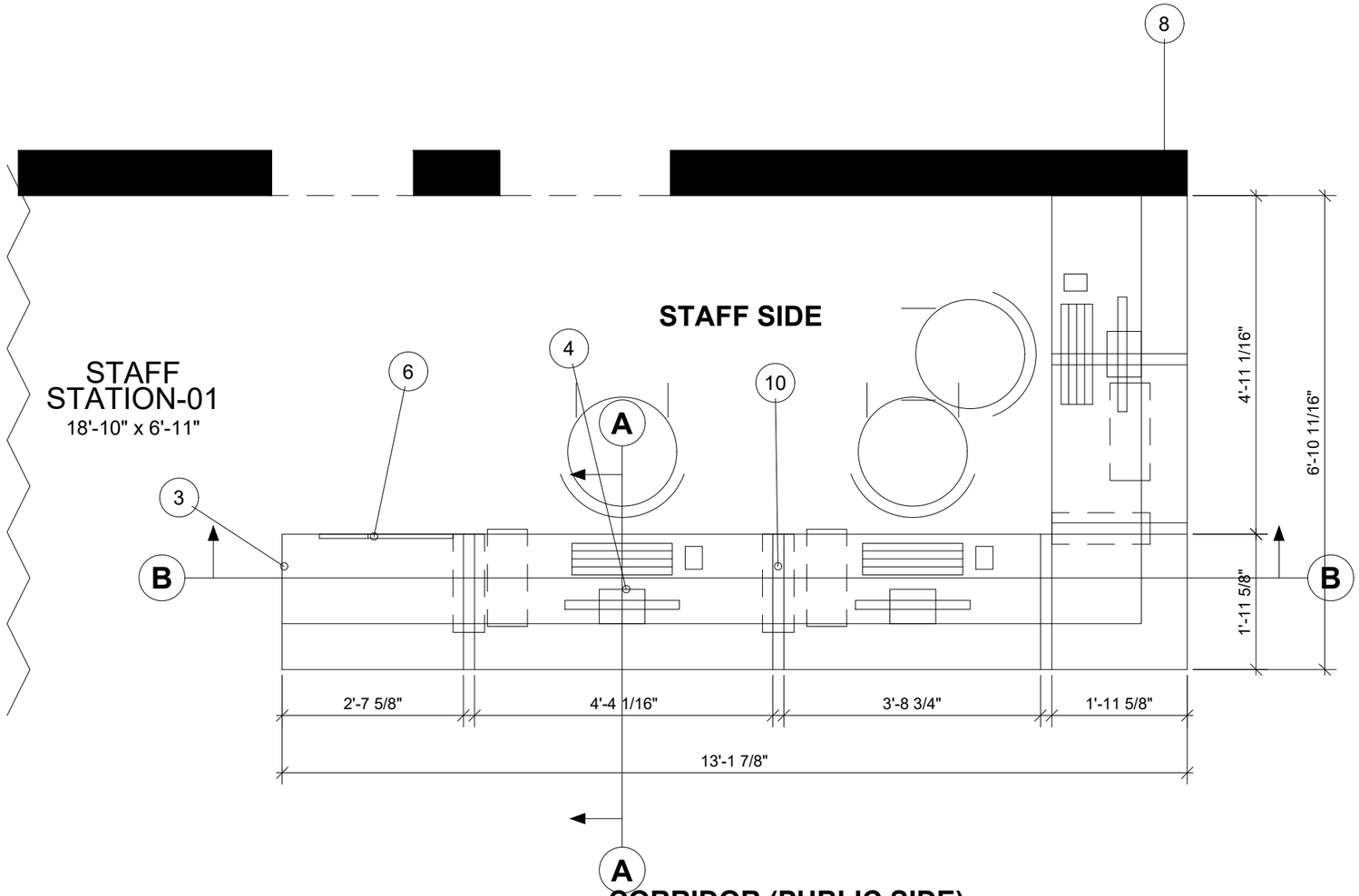
S1 3/4" SOLID SURFACE TOP (ST-1).
S2 3/4" PLYWOOD SUBSTRATE / BACKER.
S3 3/4" MARBLE-LOOK PORCELAIN OR STONE PANEL (MB-1), BONDED TO BACKER.
S4 3/4" FLUTED WOOD SLATS (WD-1), 1" WIDE AT 1 1/2" O.C.
S5 SOLID TIMBER EDGE (WD-1), 3/4" X 1 1/2".
S6 PLINTH: 3/4" PLYWOOD BASE FRAME, 4" HIGH, 3" SETBACK.
S7 2X4 BLOCKING (1 1/2" X 3 1/2"), GLUED AND SCREWED.
S8 BACK PANEL: 3/4" PLYWOOD WITH 1/4" WV-1 FINISH (STAFF SIDE).
S9 3/4" PLYWOOD RISER; CONCEALED WIRE CHASE ON VISITOR SIDE.
S10 ALUMINUM LED CHANNEL WITH LED STRIP.
S11 2" X 2" TIMBER SILL (WD-1) UNDER GLASS FRAME.
S12 2" X 2" ANODIZED ALUMINUM RAIL / POST (AL-2).
S13 1/2" TEMPERED OR LAMINATED GLASS (GL-1).

ABBREVIATIONS

AFF ABOVE FINISHED FLOOR
CLR. CLEAR
DIA. DIAMETER
F.F. FINISHED FLOOR
PROJ. PROJECTED
THK. THICK
TYP. TYPICAL

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi	RECEPTION COUNTER	A - 14
					CHECKED BY	SECTION A	REV 00
					APPROVED BY		



KEYED NOTES

1 TRANSACTION LEDGE: 8" WIDE, 3" RCC SLAB WITH 3/4" SOLID-SURFACE TOP (ST-1) AT 3'-6" AFFL.

2 STAFF WORK SURFACE (PC DESK): 4" RCC CANTILEVER SLAB, ST-1 TOP AT 2'-6" AFFL.

3 PUBLIC FACE: WD-1 FLUTED TIMBER SLATS ON 12 mm PLY BACKER FIXED TO 4 1/2" PLASTERED BLOCK WALL.

4 PC SET PER DESK: 20" MONITOR, KEYBOARD AND MOUSE (SUPPLIED BY CLIENT).

5 CPU ON STEEL HOLDER FIXED UNDER WORK SLAB (DASHED).

6 BASE CABINET B1, 2 DOORS, LAM-1 FINISH, 2'-0" CLEAR HEIGHT.

7 AL-1 ALUMINIUM KICK PLATE 4" HIGH.

8 10 mm EXPANSION JOINT, SEALED, WHERE COUNTER MEETS EXISTING WALL.

10 BLOCK PARTITION 5 1/2" (4 1/2" BL-1 + PLASTER) BETWEEN PC BAYS; KNEEHOLE 25 1/4" CLEAR.

KEYED NOTES (CONT.)

11 RCC KERB 6" WIDE x 6" HIGH (4" ABOVE FFL), CAST WITH FLOOR SLAB.

12 2" REVEAL / JOINT LINES AS PER LAYOUT PLAN (WORKING-2).

13 EXISTING WALL / DOOR TO REMAIN.

14 RCC WORK SLAB 4" THICK (3000 psi): TOP BARS 10 mm @ 4" C/C, BOTTOM 8 mm @ 5" C/C.

15 HOLLOW SEALED CORNER PIER, 4 1/2" BLOCK, SAME FINISHES.

16 S.S. LETTERS 'STAFF STATION-01' 3" HIGH, SATIN FINISH.

18 CABLE GROMMET 3" DIA AT BACK OF EACH DESK.

19 DOUBLE SOCKET + DATA OUTLET AT 2'-9 1/2" AFFL (ELECTRICAL BY OTHERS).

N

1 FINISHED PLAN - STAFF STATION-01

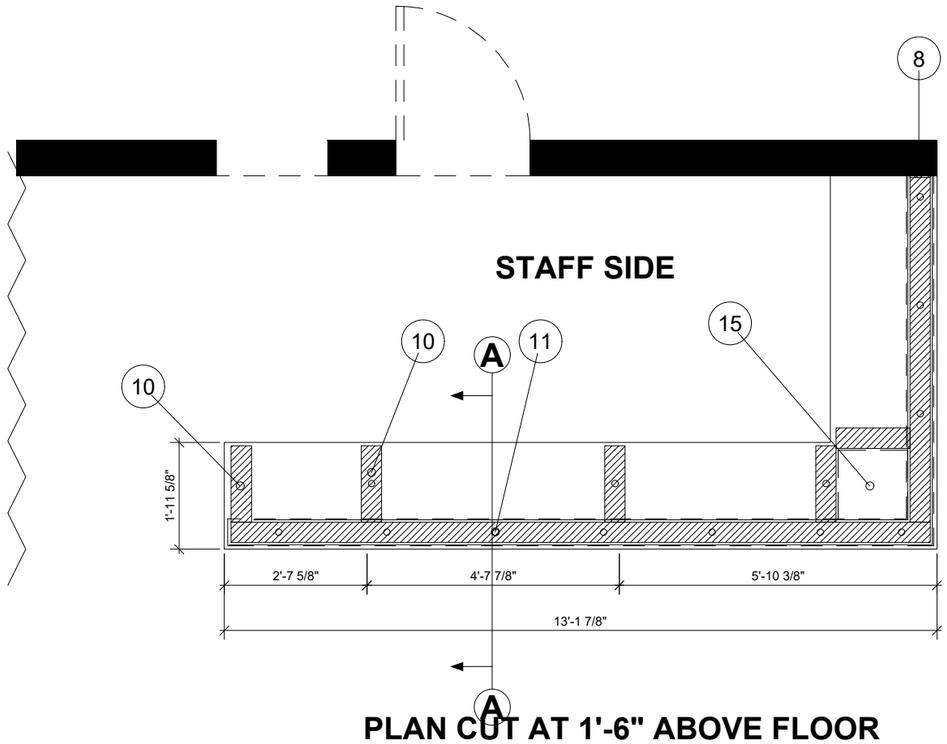
SCALE: 1:25

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	STAFF STATION-01 FINISHED PLAN	A - 15 REV 00

GENERAL NOTES

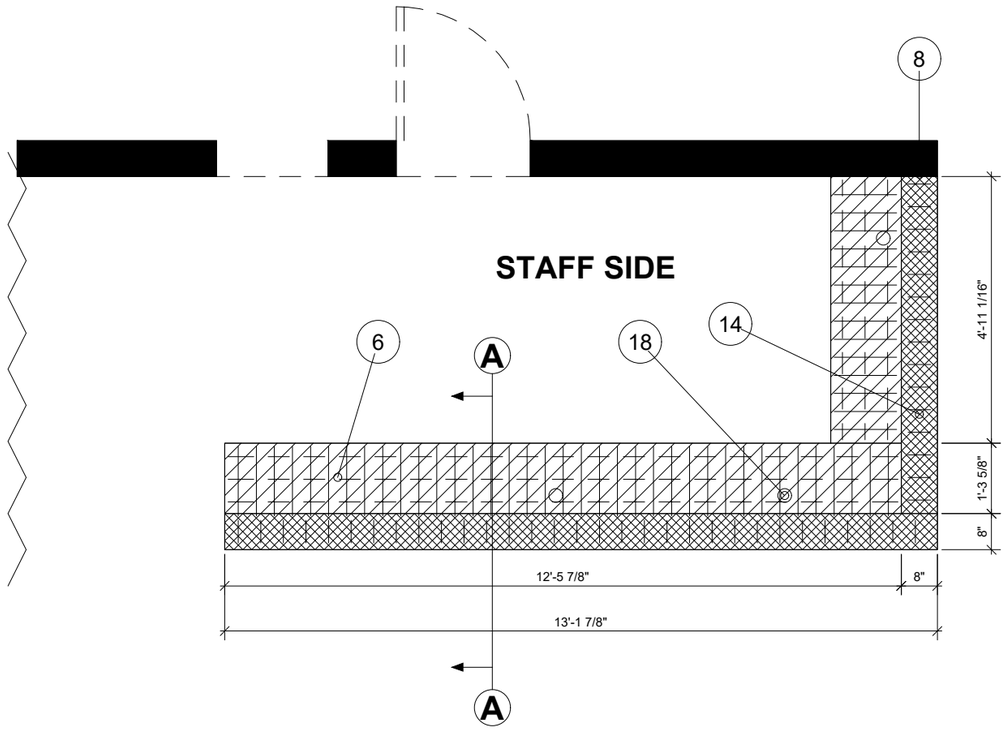
1. ALL DIMENSIONS IN FEET AND INCHES. COUNTER OUTLINE FOLLOWS THE GROUND FLOOR LAYOUT PLAN (WORKING-2); VERIFY ON SITE.
2. COUNTER IS BUILT-IN: KERB, BLOCK WORK AND RCC SLABS FIRST, THEN PLASTER, THEN SHOP-FABRICATED FINISHES.
3. RCC 1:2:4 (3000 psi MIN.), GRADE-60 BARS, 3/4" COVER. 4" WORK SLAB IS A CANTILEVER: TOP BARS ANCHORED IN WALL TIE-BAND 4 1/2" x 4".
4. COUNTER DEPTH 1'-11 5/8" LEAVES ABOUT 17" DESK DEPTH: SLIM / ALL-IN-ONE MONITORS RECOMMENDED. DEEPER DESK NEEDS LAYOUT CHANGE.
5. ELECTRICAL, DATA CABLING AND PC SUPPLY BY OTHERS; LEAVE SLEEVES AND CABLE TRAY BEFORE CASTING.
6. SIZES AND REINFORCEMENT ARE INDICATIVE - STRUCTURAL ENGINEER TO CONFIRM.
7. EXISTING WALLS AND DOOR SHOWN FOR REFERENCE ONLY.



PLAN CUT AT 1'-6" ABOVE FLOOR

2 BLOCK WORK PLAN

SCALE: 1:35

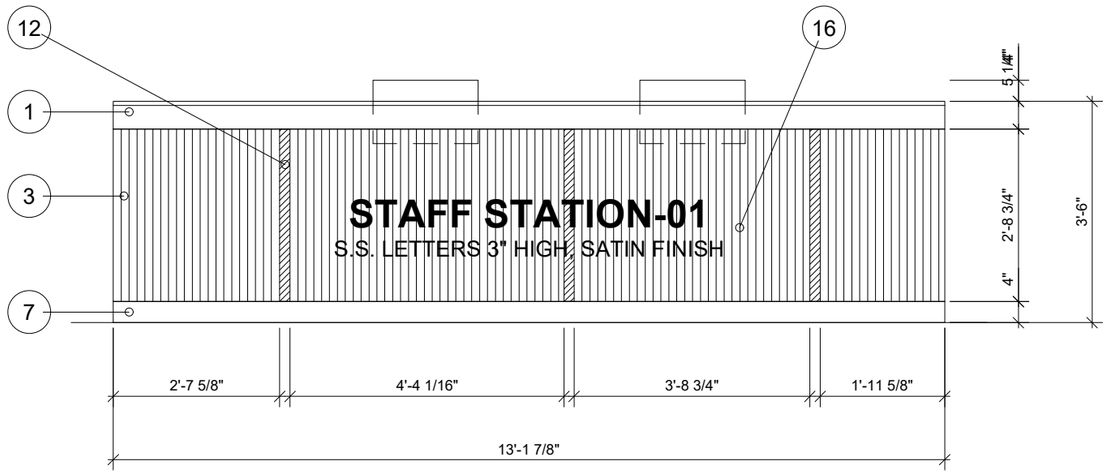


3 RCC SLAB LAYOUT & REINFORCEMENT

SCALE: 1:35

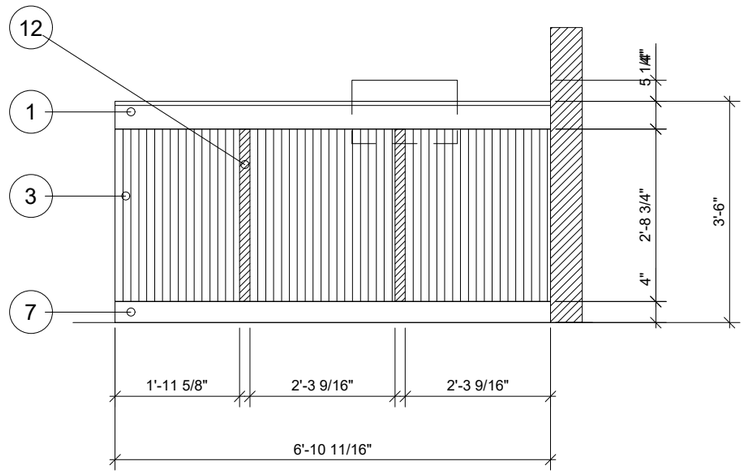
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	STAFF STATION-01 BLOCK WORK & RCC PLANS	A - 16 REV 00



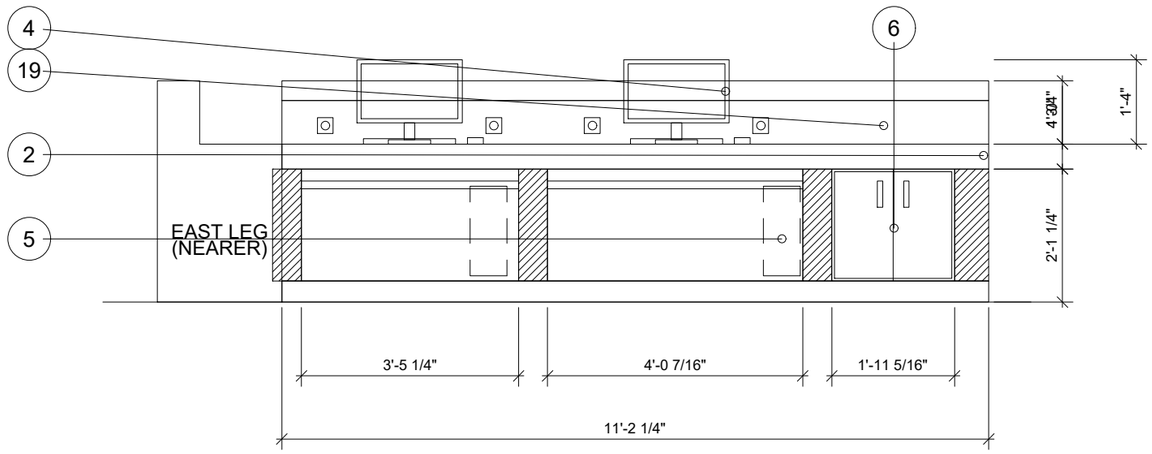
1 PUBLIC-SIDE ELEVATION (LOOKING NORTH)

SCALE: 1:30



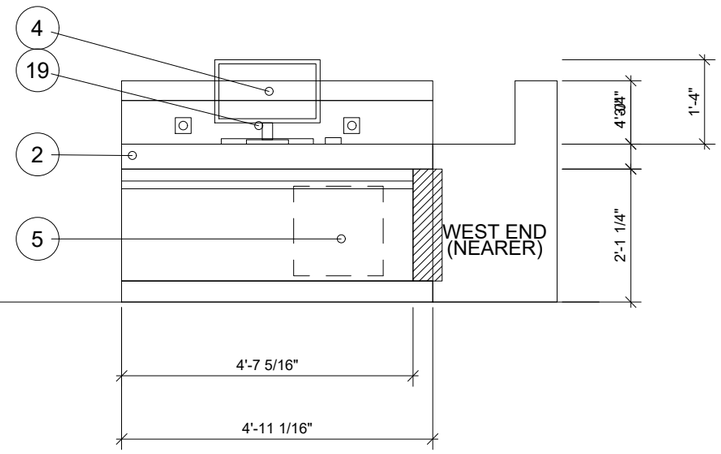
2 PUBLIC-SIDE ELEVATION (LOOKING WEST)

SCALE: 1:30



3 STAFF-SIDE ELEVATION (LOOKING SOUTH)

SCALE: 1:30

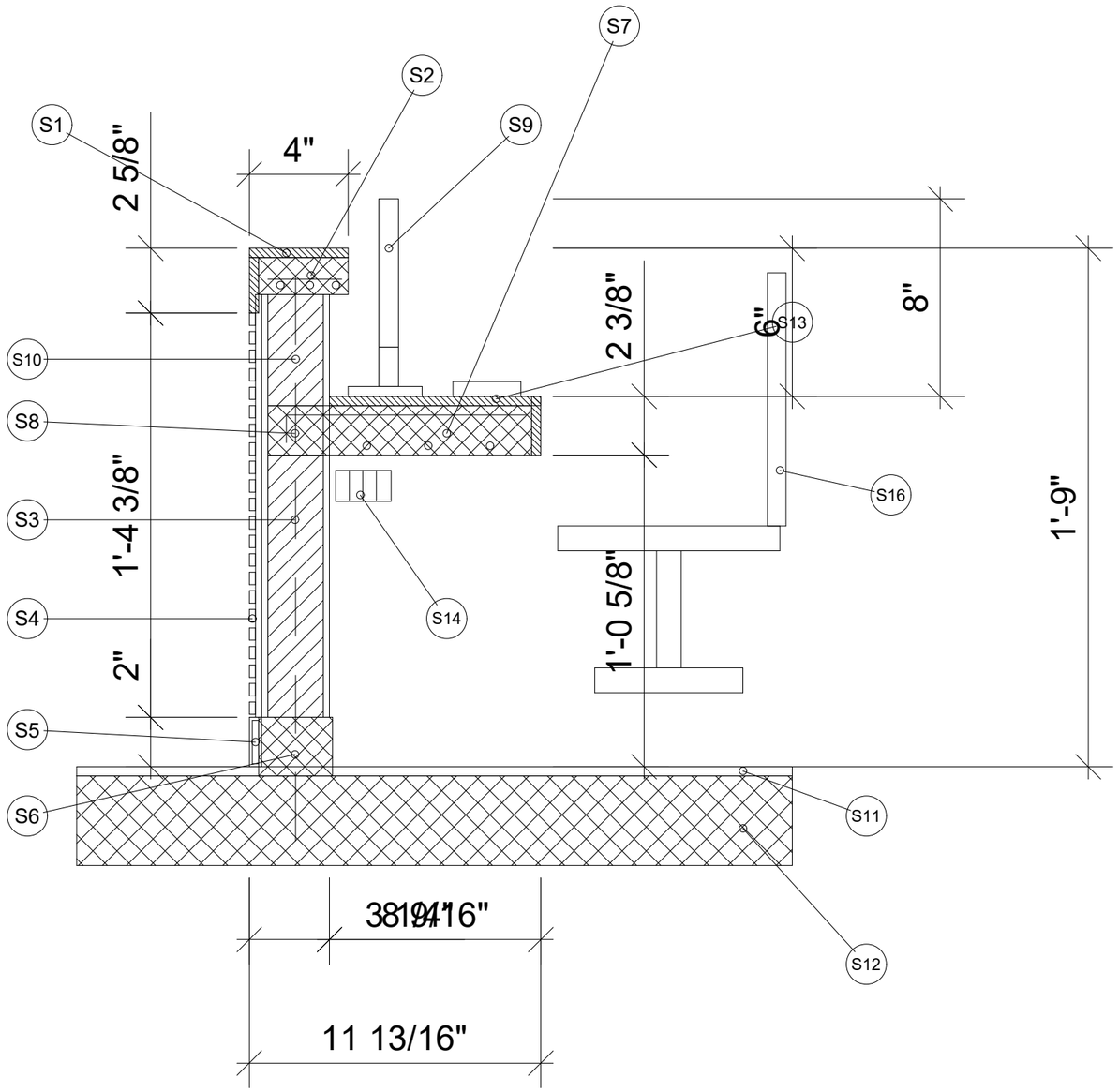


4 STAFF-SIDE ELEVATION (LOOKING EAST)

SCALE: 1:30

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	STAFF STATION-01 ELEVATIONS	A - 17 REV 00



1 **SECTION A-A**

SCALE: 1:12

SECTION KEYED NOTES

S1 ST-1 SOLID SURFACE 3/4" TOP AND APRON (LEDGE).
S2 RCC LEDGE SLAB 3" THICK, 3000 psi, 8 mm DIA @ 5" C/C BOTH WAYS.
S3 BLOCK WALL / PARTITION (BL-1), 1:4 MORTAR, 1/2" PLASTER BOTH SIDES.
S4 WD-1 FLUTED TIMBER SLATS 1/2" ON 12 mm PLY BACKER.
S5 AL-1 ALUMINIUM KICK PLATE 4" HIGH.
S6 RCC KERB 6" x 6", CAST WITH FLOOR SLAB.
S7 RCC WORK SLAB 4" THICK, 3000 psi, CAST MONOLITHICALLY WITH TIE-BAND.
S8 LAM-1 LAMINATE 3/4" ON PLY BACKER (STAFF FACE).
S9 20" MONITOR ON STAND (CLIENT SUPPLY).
S10 8 mm DIA VERTICAL DOWEL @ 2'-0" C/C.
S11 PORCELAIN FLOOR TILE ON MORTAR BED.
S12 RCC FLOOR SLAB (STRUCTURAL).
S13 ST-1 SOLID SURFACE 3/4" WORK TOP.
S14 CPU ON STEEL HOLDER.
S15 STAFF CHAIR (REFERENCE ONLY).
S16 KEYBOARD AND MOUSE.
S17 CPU ON STEEL HOLDER (SECTION).
S18 BASE CABINET B1 WITH INTERNAL SHELF.
S19 HOLLOW CORNER PIER.

Drawing shall not be copied or used without permission.

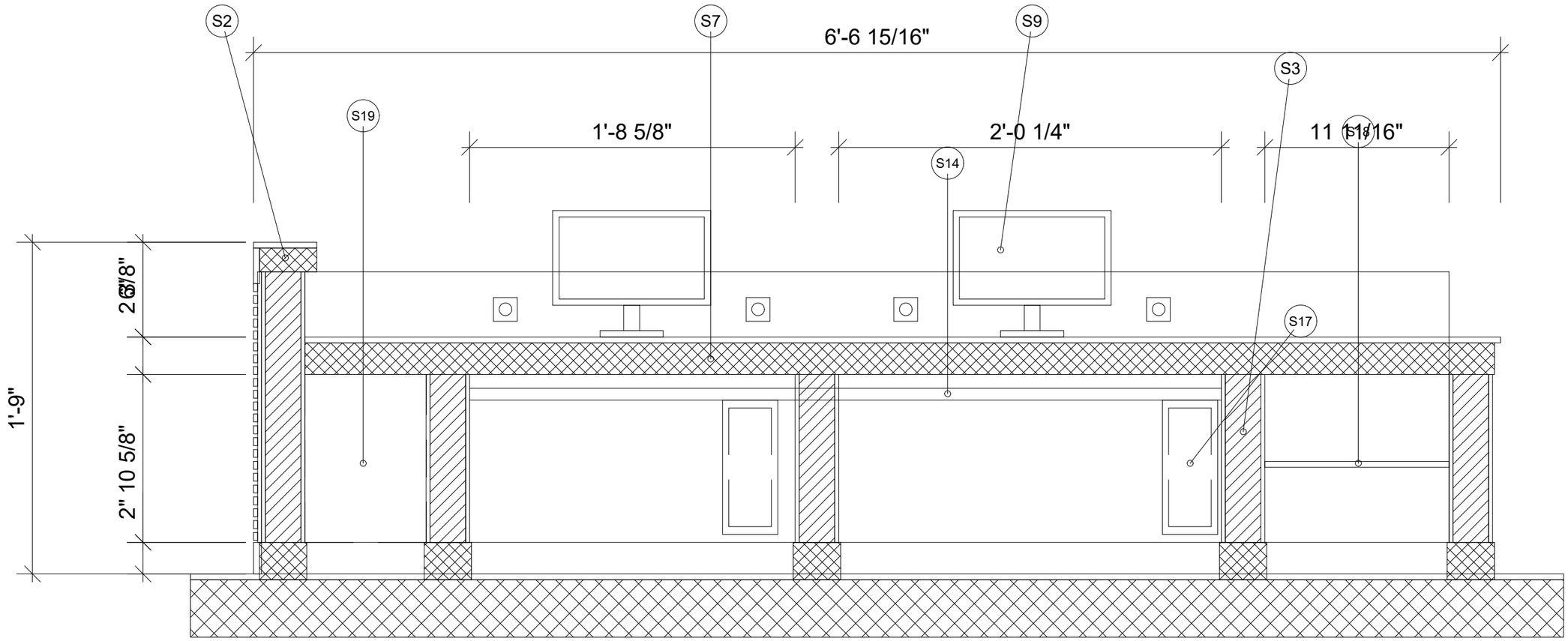
CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi	STAFF STATION-01	A - 18
					CHECKED BY	SECTION A-A	REV 00
					APPROVED BY		

FINISH SCHEDULE

ST-1	SOLID SURFACE 3/4", WHITE / LIGHT GREY (COLOUR TO BE CONFIRMED BY DESIGNER).
WD-1	FLUTED TIMBER SLATS (SAME AS RECEPTION COUNTER), NATURAL WOOD FINISH.
LAM-1	HIGH-PRESSURE LAMINATE 1 mm, ON 12 mm PLY BACKER (STAFF FACE).
AL-1	ANODIZED ALUMINIUM KICK PLATE 4" HIGH, SILVER.
BL-1	4 1/2" SOLID CONCRETE BLOCK.
PT-1	EMULSION PAINT ON PLASTER, OFF-WHITE.

ABBREVIATIONS

AFFL	ABOVE FINISHED FLOOR LEVEL
RCC	REINFORCED CEMENT CONCRETE
FFL	FINISHED FLOOR LEVEL
BW	BOTH WAYS
C/C	CENTRE TO CENTRE
TYP.	TYPICAL

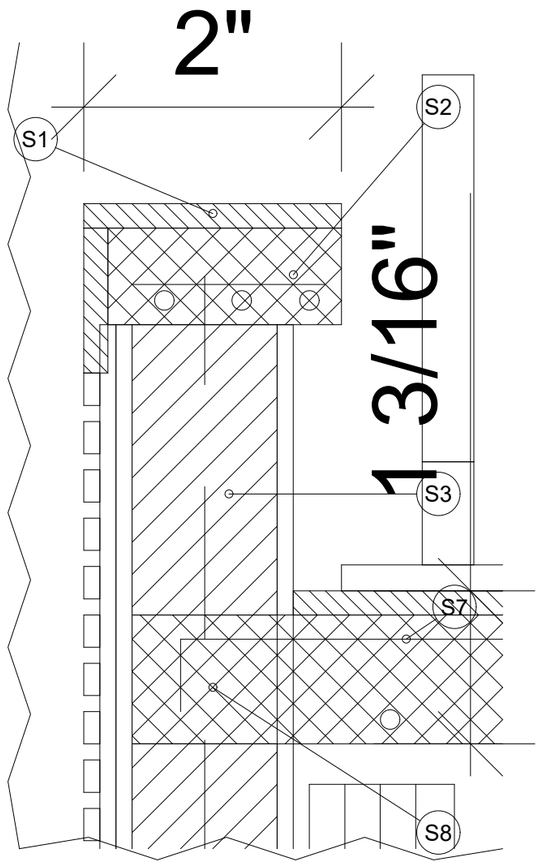


2 SECTION B-B

SCALE: 1:15

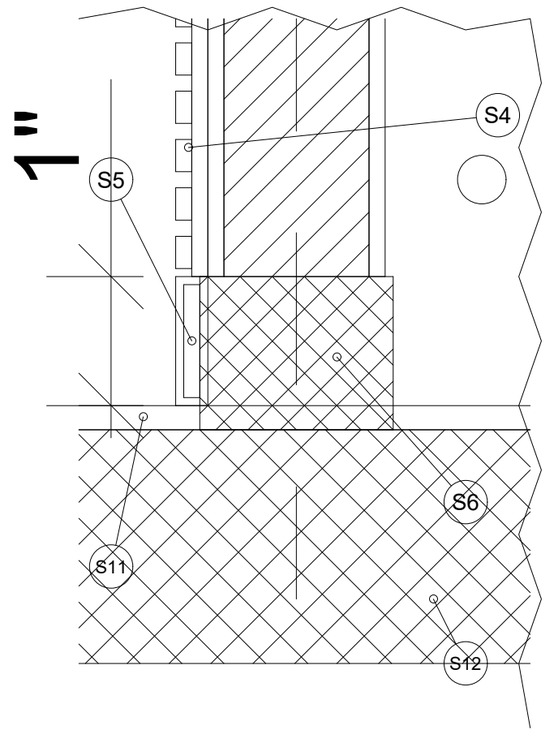
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	STAFF STATION-01 SECTION B-B & FINISHES	A - 19 REV 00



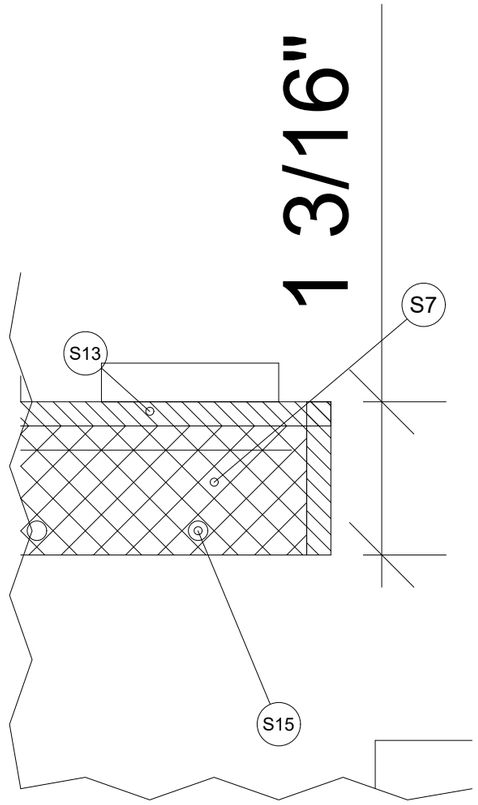
3 DETAIL - LEDGE

SCALE: 1:5



4 DETAIL - BASE

SCALE: 1:5



5 DETAIL - WORK EDGE

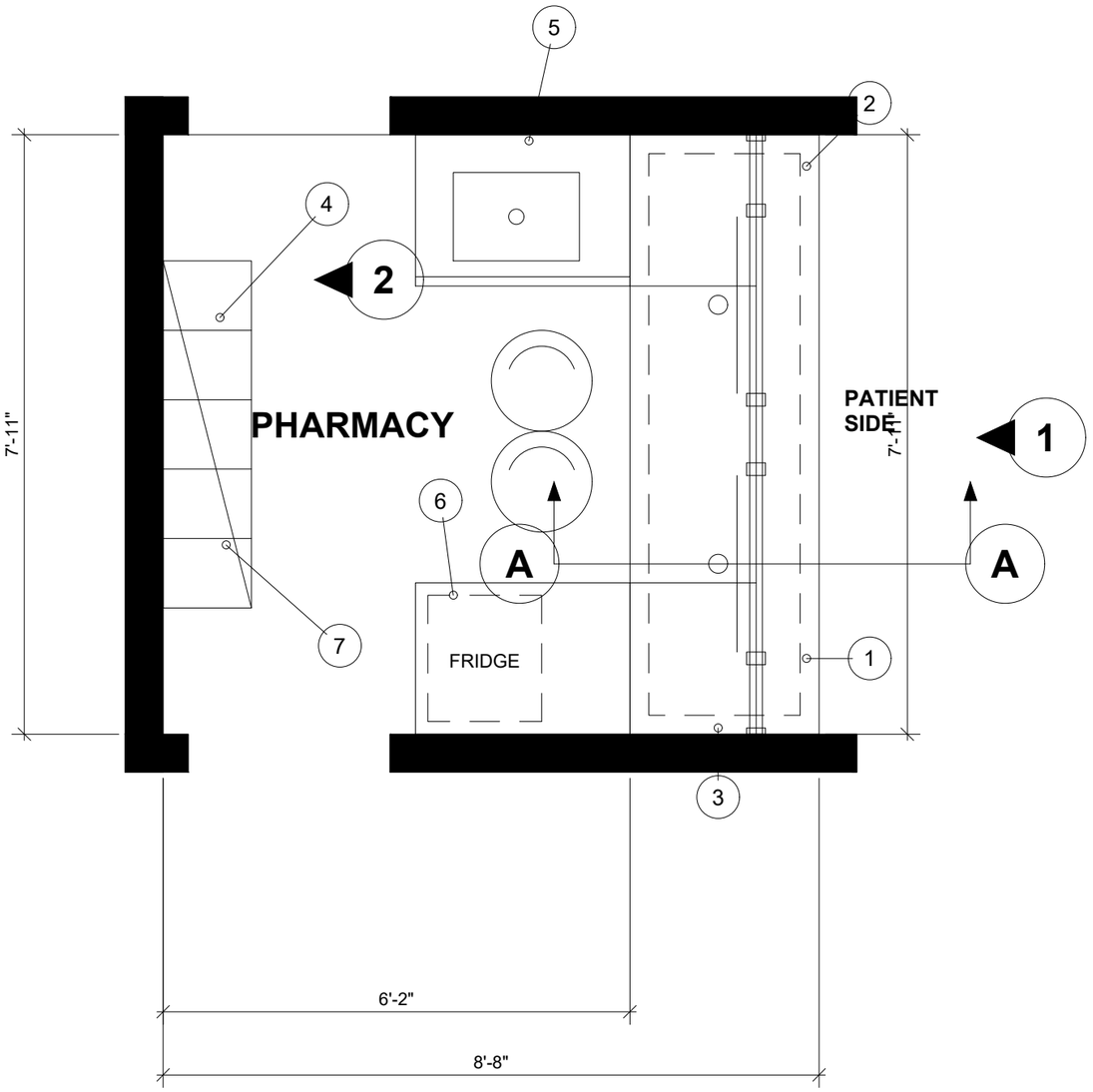
SCALE: 1:5

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	STAFF STATION-01 DETAILS	A - 20 REV 00

PLAN KEYED NOTES

1. PATIENT LEDGE, 10" DEEP, TOP AT 3'-6" AFF (ST-1) WITH SOLID TIMBER EDGE (WD-1).
2. COUNTER AND GLASS PARTITION RUN FULL ROOM DEPTH (7'-11") BETWEEN EXISTING WALLS.
3. PHARMACIST WORK SURFACE, 1'-8" DEEP, TOP AT 2'-10" AFF (ST-1).
4. OPEN SHELVING 1'-2" DEEP, 7'-0" HIGH, ON LOCKABLE BASE CABINET (WD-1).
5. COMPOUNDING BENCH WITH STAINLESS SINK, 2'-0" DEEP, TOP AT 3'-0" AFF.
6. UNDER-COUNTER MEDICINE REFRIGERATOR (BY OWNER) IN BASE CABINET.
7. ADJUSTABLE SHELVES AT 1'-0" PITCH, LED UNDER EACH SHELF.



PLAN - PHARMACY

SCALE: 1:25

ROOM SIZE PER CEILING PLAN (8'-8" X 7'-11"). VERIFY ON SITE.

0 2' 4' 6'

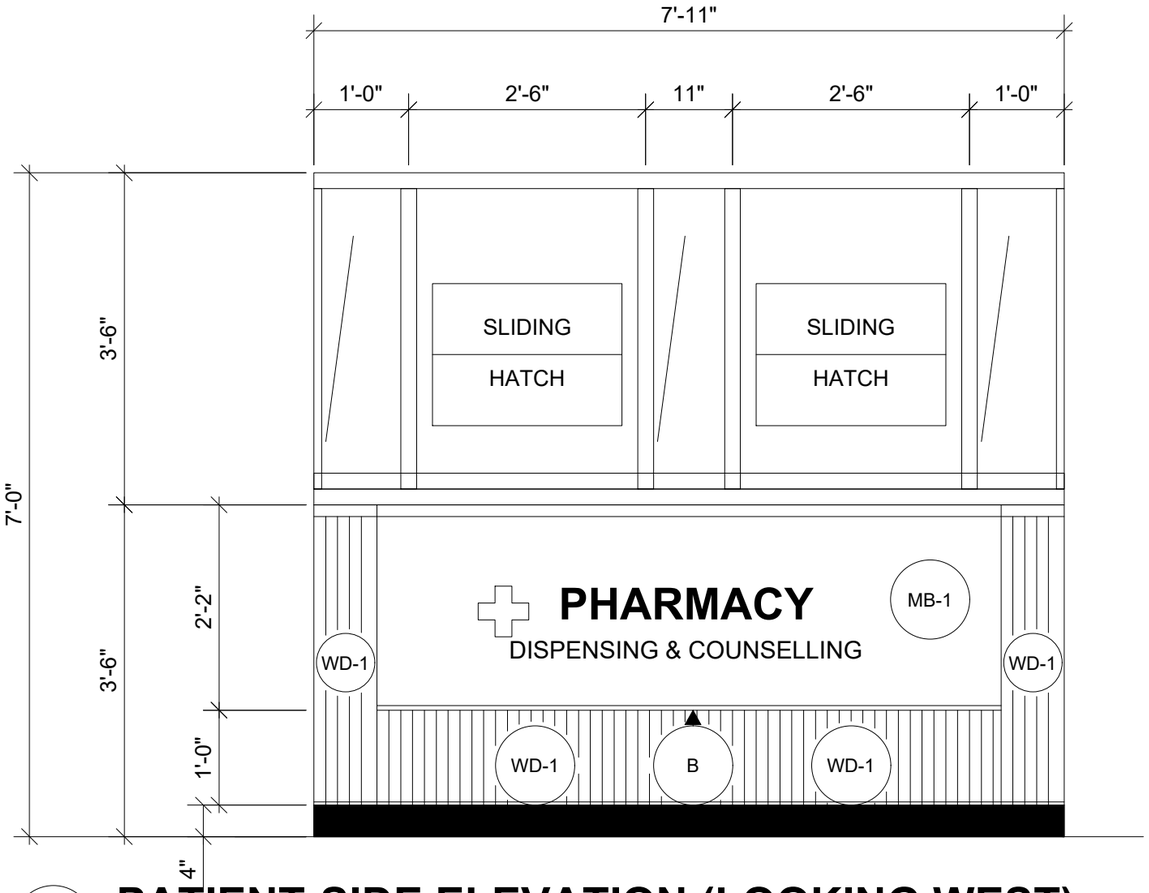
N

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi	PHARMACY PLAN	A - 21 REV 00
					CHECKED BY		
					APPROVED BY		

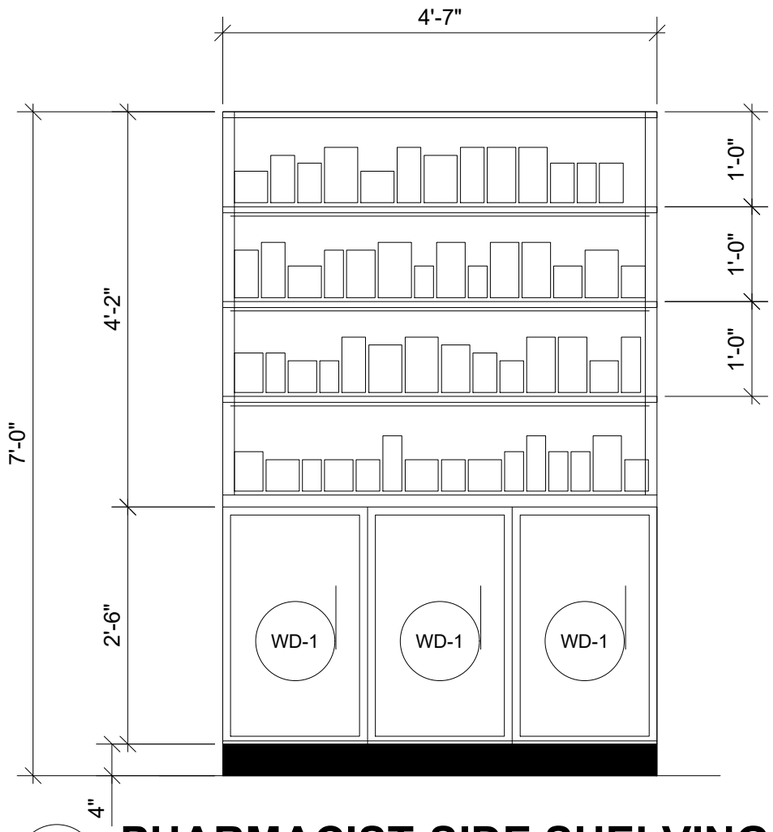
FINISH SCHEDULE

ST-1 SOLID SURFACE, WHITE, 3/4" THK. (COLOR TO BE CONFIRMED BY DESIGNER).
MB-1 MARBLE-LOOK PORCELAIN OR STONE PANEL, WHITE WITH GREY VEINING, 3/4" THK.
WD-1 NATURAL WOOD VENEER / SOLID TIMBER, CLEAR FINISH; FLUTED SLATS WHERE NOTED.
AL-1 ALUMINUM KICK PLATE / LED CHANNEL, 4" HIGH, BRUSHED SILVER.
AL-2 ANODIZED ALUMINUM FRAME, SILVER, 2" X 2".
GL-1 1/2" CLEAR TEMPERED OR LAMINATED SAFETY GLASS.
SS-1 STAINLESS STEEL SINK AND TOP, BRUSHED FINISH (COMPOUNDING BENCH).



1 **PATIENT-SIDE ELEVATION (LOOKING WEST)**

SCALE: 1:20

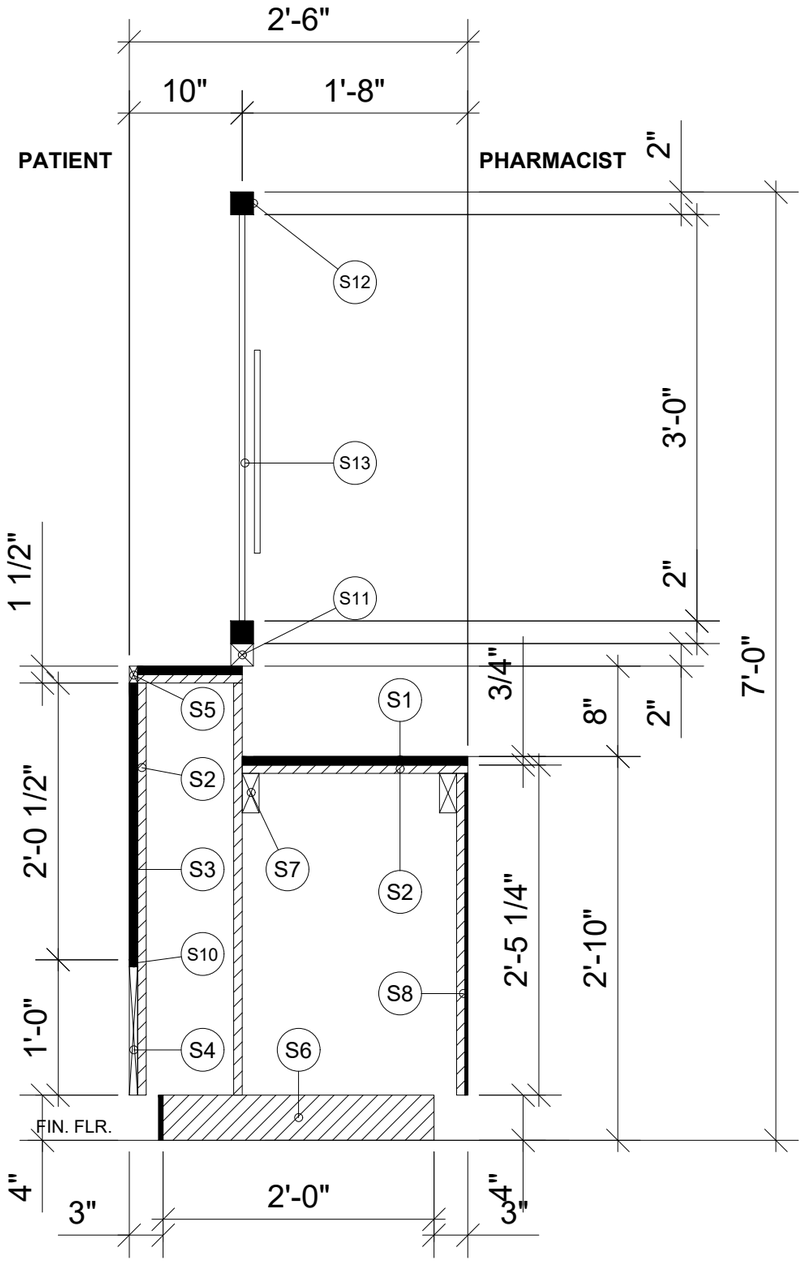


2 **PHARMACIST-SIDE SHELVING**

SCALE: 1:20

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	PHARMACY ELEVATIONS	A - 22 REV 00



SECTION KEYED NOTES

S1 3/4" SOLID SURFACE TOP (ST-1).
S2 3/4" PLYWOOD SUBSTRATE / BACKER.
S3 3/4" MARBLE-LOOK PORCELAIN OR STONE PANEL (MB-1), BONDED TO BACKER.
S4 3/4" FLUTED WOOD SLATS (WD-1), 1" WIDE AT 1 1/2" O.C.
S5 SOLID TIMBER EDGE (WD-1), 3/4" X 1 1/2".
S6 PLINTH: 3/4" PLYWOOD BASE FRAME, 4" HIGH, 3" SETBACK.
S7 2X4 BLOCKING (1 1/2" X 3 1/2"), GLUED AND SCREWED.
S8 BACK PANEL: 3/4" PLYWOOD WITH 1/4" WOOD VENEER (PHARMACIST SIDE).
S10 ALUMINUM LED CHANNEL WITH LED STRIP.
S11 2" X 2" TIMBER SILL (WD-1) UNDER GLASS FRAME.
S12 2" X 2" ANODIZED ALUMINUM RAIL / POST (AL-2).
S13 1/2" TEMPERED OR LAMINATED GLASS (GL-1).

ABBREVIATIONS

AFF ABOVE FINISHED FLOOR
CLR. CLEAR
DIA. DIAMETER
F.F. FINISHED FLOOR
PROJ. PROJECTED
THK. THICK
TYP. TYPICAL

A

SECTION A - DISPENSING COUNTER

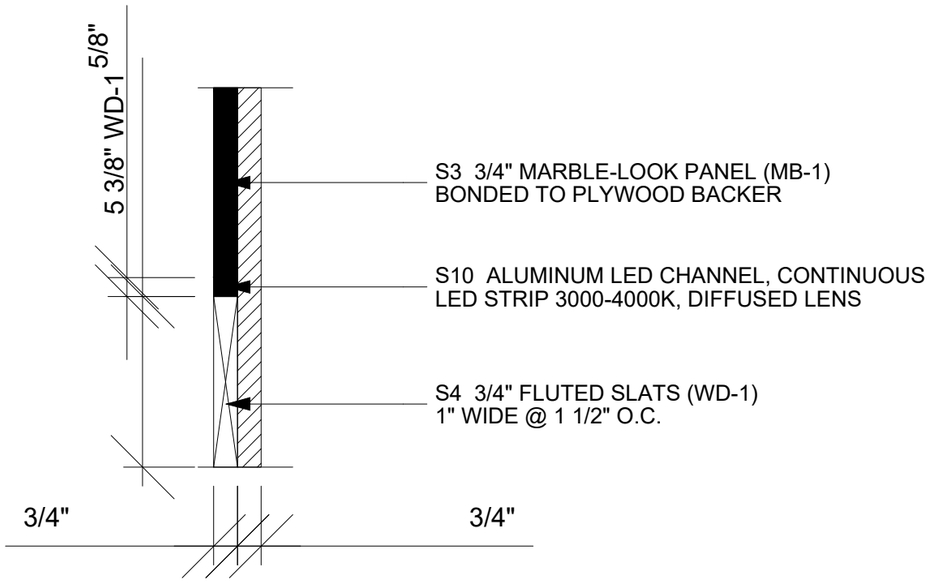
SCALE: 1:14

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi	PHARMACY SECTION A	A - 23 REV 00
					CHECKED BY		
					APPROVED BY		

GENERAL NOTES

1. ALL DIMENSIONS ARE IN FEET AND INCHES. FABRICATOR TO VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD BEFORE FABRICATION AND REPORT ANY DISCREPANCY TO THE DESIGNER.
2. WOODWORK, COUNTER AND GLASS PARTITION TO BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE ARCHITECTURAL WOODWORK STANDARDS (AWS), CUSTOM GRADE, UNLESS NOTED OTHERWISE.
3. COUNTER IS FREE-STANDING. SECURE PLINTH TO THE FLOOR WITH CONCEALED ANGLE CLIPS. SHELVING TO BE FIXED TO THE WEST WALL WITH CONCEALED STEEL BRACKETS INTO BLOCKING.
4. GLASS: 1/2" TEMPERED OR LAMINATED SAFETY GLASS IN 2" ANODIZED ALUMINUM FRAME, 3'-8" TO 7'-0" ABOVE FINISHED FLOOR. TWO SLIDING DISPENSING HATCHES, EACH 2'-6" WIDE, WITH KEYED LOCK.
5. SIGNAGE (SYMBOL AND PHARMACY NAME) PER CLIENT ARTWORK, APPLIED TO THE MARBLE-LOOK PANEL. SIZES AND POSITIONS ARE INDICATIVE.
6. CONTINUOUS LED STRIP IN ALUMINUM CHANNEL AT THE BASE (AL-1) AND AT THE JOINT BETWEEN FLUTED BAND AND MARBLE PANEL. PROVIDE SEPARATE DRIVER WITH ACCESS PANEL; COORDINATE POWER WITH ELECTRICAL.
7. MEDICINE STORAGE: PROVIDE A LOCKABLE CABINET FOR CONTROLLED SUBSTANCES AND A DEDICATED POWER POINT FOR THE MEDICINE REFRIGERATOR, AS REQUIRED BY THE DRUG REGULATORY AUTHORITY.
8. FINISH COLORS, WOOD SPECIES AND STONE PATTERN TO BE SELECTED BY THE DESIGNER. SUBMIT SAMPLES AND SHOP DRAWINGS FOR APPROVAL BEFORE FABRICATION.

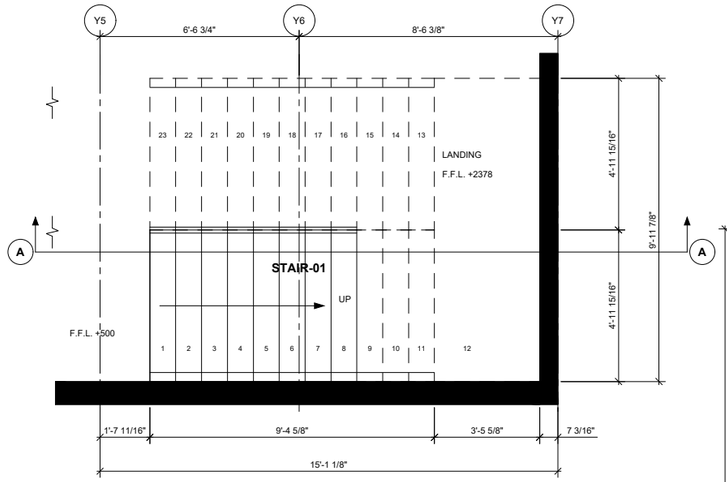


B **DETAIL - LED / FLUTED JOINT**

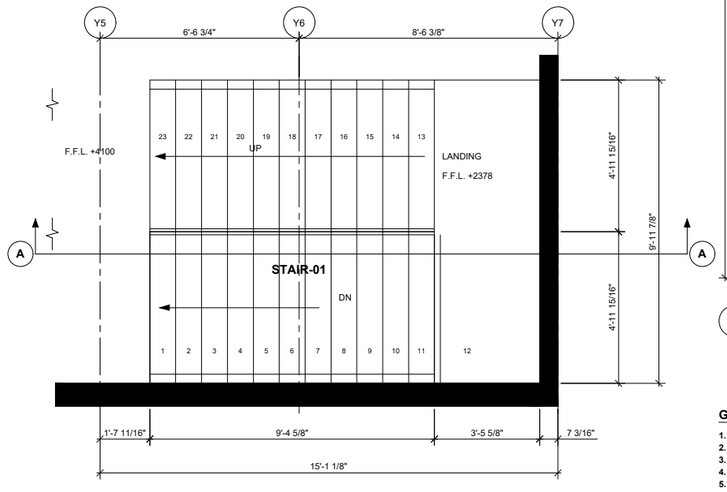
SCALE: 1:5

Drawing shall not be copied or used without permission.

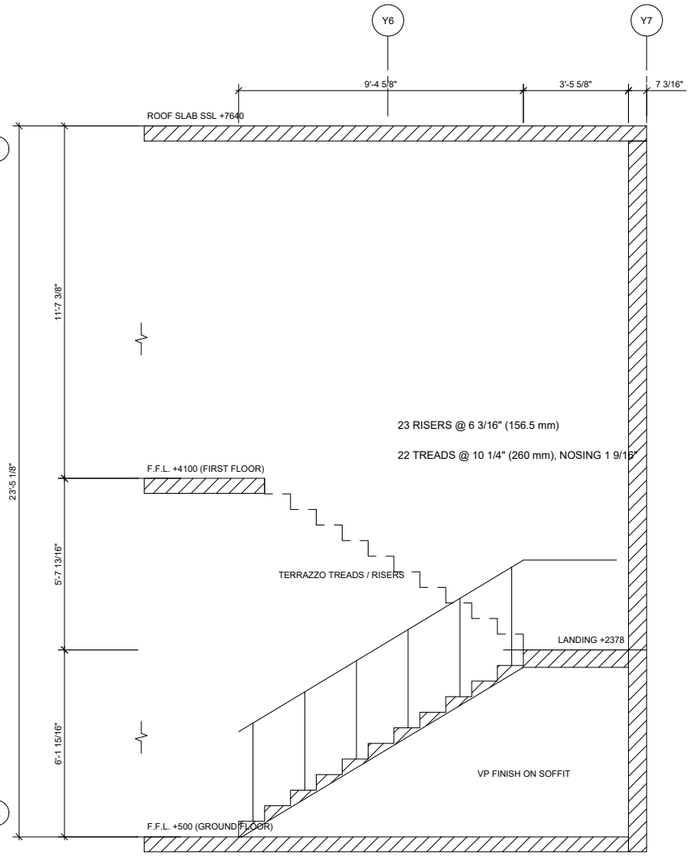
CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi	PHARMACY DETAIL & GENERAL NOTES	A - 24 REV 00
					CHECKED BY		
					APPROVED BY		



1 **GROUND FLOOR PLAN - STAIR-01**
SCALE: 1:25



2 **FIRST FLOOR PLAN - STAIR-01**
SCALE: 1:25



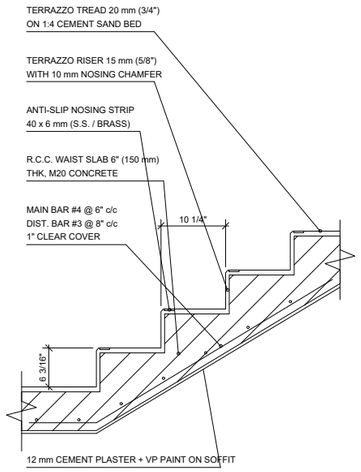
3 **SECTION A-A - STAIR-01**
SCALE: 1:25

GENERAL NOTES

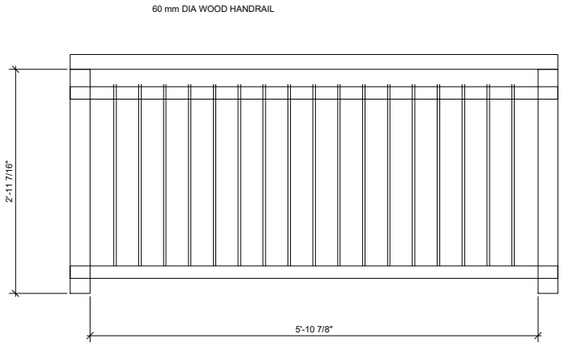
1. ALL DIMENSIONS IN FEET AND INCHES; LEVELS IN mm AS PER ARCHITECTURAL SECTION (GROUND FLOOR F.F.L. +500).
2. REDRAWN FROM STAIR DETAILS 01, SHEET A600. VERIFY ALL DIMENSIONS ON SITE BEFORE CASTING.
3. TWO FLIGHTS OF 1'-11 7/8" CLEAR WIDTH, 23 RISERS @ 156.5 mm AND 22 TREADS @ 260 mm; INTERMEDIATE LANDING +2378.
4. STAIR FINISH: TERRAZZO TREADS AND RISERS WITH ANTI-SLIP NOSING. SOFFIT: VP (VINYL PLASTIC) PAINT.
5. RAILING 900 mm HIGH: 60 mm DIA WOOD HANDRAIL, 10 mm DIA S.S. BALUSTERS @ 100 c/c, 50x10 S.S. FLAT POSTS @ 900 c/c.
6. FLIGHT / LANDING POSITIONS ARE SCALED FROM THE SCANNED DRAWING; STRUCTURAL SIZES AS PER STRUCTURAL DRAWINGS.

Drawing shall not be copied or used without permission.

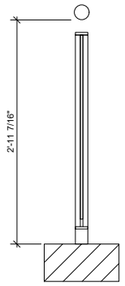
CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	**SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)**	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi	**STAIR-01** PLANS & SECTION	**A - 25** REV 00
					CHECKED BY		
					APPROVED BY		



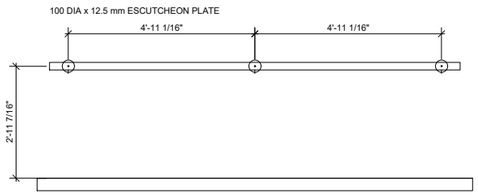
1 TERRAZZO TREAD / RISER DETAIL
SCALE: 1:10



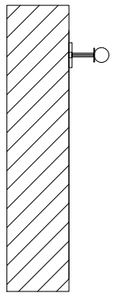
2 BALUSTRADE ELEVATION
SCALE: 1:10



3 BALUSTRADE SECTION
SCALE: 1:10



4 WALL-MOUNTED RAILING ELEVATION
SCALE: 1:20



5 WALL-MOUNTED RAILING SECTION
SCALE: 1:10

DETAIL NOTES

1. WOOD HANDRAIL 60 mm DIA, POLISHED, FIXED TO 50x10 S.S. FLAT.
2. BALUSTERS 10 mm DIA S.S. PIPE @ 100 c/c; POSTS 50x10 S.S. FLAT @ 900 c/c, BASE-PLATE FIXED TO SLAB WITH ANCHOR BOLTS.
3. WALL RAILING: 60 mm DIA WOOD ON 25x3 G.I. FLAT, 15 mm DIA BAR SUPPORTS @ 1500 c/c, 100 DIA x 12.5 mm ESCUTCHEON PLATE.
4. TERRAZZO TREAD 20 mm / RISER 15 mm ON CEMENT-SAND BED; NOSING 40 mm.

Drawing shall not be copied or used without permission.

CLIENT
HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT
SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

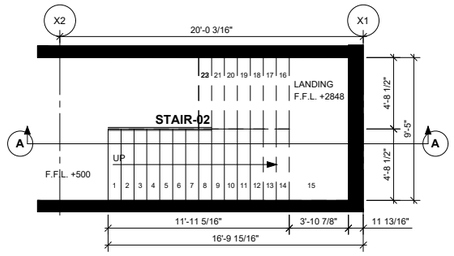
REVISIONS

REV	DESCRIPTION	DATE

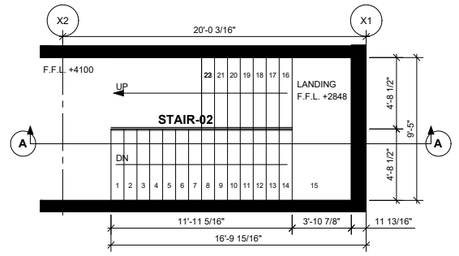
SIGN-OFF
DRAWN BY
Zohaib Saleem Abbasi
CHECKED BY
APPROVED BY

DRAWING TITLE
STAIR-01
RAILING & DETAILS

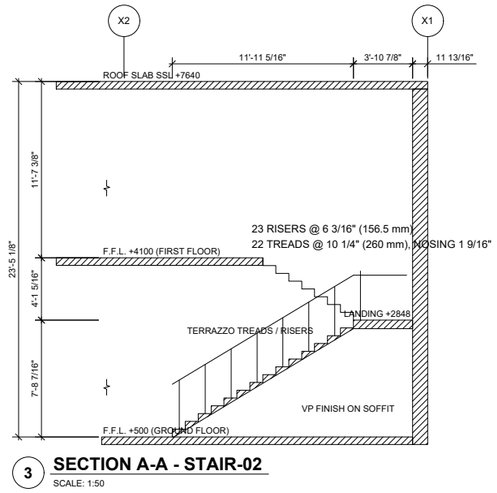
DRAWING NO.
A - 26
REV 00



1 GROUND FLOOR PLAN - STAIR-02
SCALE: 1:50



2 FIRST FLOOR PLAN - STAIR-02
SCALE: 1:50



3 SECTION A-A - STAIR-02
SCALE: 1:50

GENERAL NOTES

1. ALL DIMENSIONS IN FEET AND INCHES; LEVELS IN mm AS PER ARCHITECTURAL SECTION (GROUND FLOOR F.F.L. +500).
2. REDRAWN FROM STAIR DETAILS 01, SHEET A601. VERIFY ALL DIMENSIONS ON SITE BEFORE CASTING.
3. TWO FLIGHTS, 23 RISERS @ 156.5 mm AND 22 TREADS @ 260 mm; INTERMEDIATE LANDING +2848. FLIGHT / LANDING POSITIONS SCALED FROM SCANNED DRAWING.
4. STAIR FINISH: TERRAZZO TREADS AND RISERS WITH ANTI-SLIP NOSING. SOFFIT: VP (VINYL PLASTIC) PAINT.
5. RAILING 900 mm HIGH: 60 mm DIA WOOD HANDRAIL, 10 mm DIA S.S. BALUSTERS @ 100 c/c, 50x10 S.S. FLAT POSTS @ 900 c/c.
6. FLIGHT / LANDING POSITIONS ARE SCALED FROM THE SCANNED DRAWING; STRUCTURAL SIZES AS PER STRUCTURAL DRAWINGS.

Drawing shall not be copied or used without permission.

CLIENT

HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT

SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

REVISIONS

REV	DESCRIPTION	DATE

SIGN-OFF

DRAWN BY
Zohaib Saleem Abbasi

CHECKED BY

APPROVED BY

DRAWING TITLE

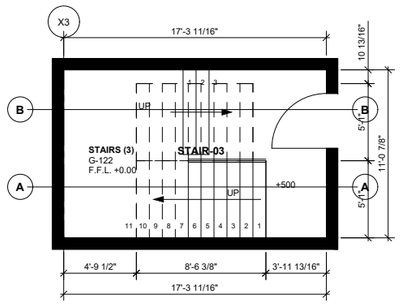
STAIR-02

PLANS & SECTION

DRAWING NO.

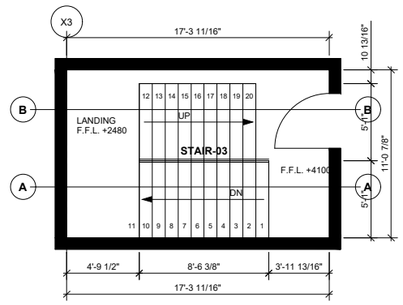
A - 27

REV 00



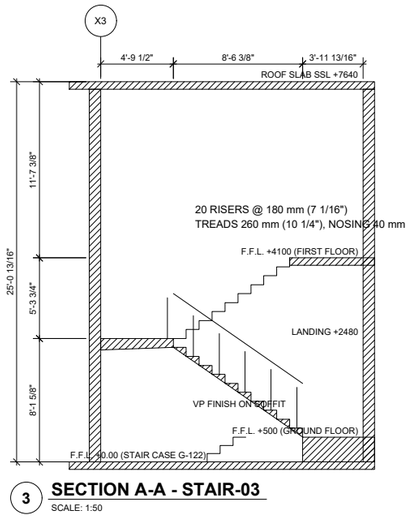
1 GROUND FLOOR PLAN - STAIR-03

SCALE: 1:50



2 FIRST FLOOR PLAN - STAIR-03

SCALE: 1:50



3 SECTION A-A - STAIR-03

SCALE: 1:50

GENERAL NOTES

1. ALL DIMENSIONS IN FEET AND INCHES; LEVELS IN mm AS PER ARCHITECTURAL SECTION (GROUND FLOOR F.F.L. +500).
2. REDRAWN FROM STAIR DETAILS 01, SHEET A602. VERIFY ALL DIMENSIONS ON SITE BEFORE CASTING.
3. 20 RISERS @ 180 mm AND 19 TREADS @ 260 mm; INTERMEDIATE LANDING +2480. POSITIONS SCALED FROM SCANNED DRAWING.
4. STAIR FINISH: TERRAZZO TREADS AND RISERS WITH ANTI-SLIP NOSING. SOFFIT: VP (VINYL PLASTIC) PAINT.
5. RAILING 900 mm HIGH: 60 mm DIA WOOD HANDRAIL, 10 mm DIA S.S. BALUSTERS @ 100 c/c, 50x10 S.S. FLAT POSTS @ 900 c/c.
6. FLIGHT / LANDING POSITIONS ARE SCALED FROM THE SCANNED DRAWING; STRUCTURAL SIZES AS PER STRUCTURAL DRAWINGS.

Drawing shall not be copied or used without permission.

CLIENT

HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT

SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

REVISIONS

REV	DESCRIPTION	DATE

SIGN-OFF

DRAWN BY
Zohaib Saleem Abbasi

CHECKED BY

APPROVED BY

DRAWING TITLE

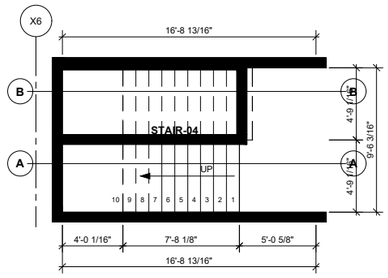
STAIR-03

PLANS & SECTION

DRAWING NO.

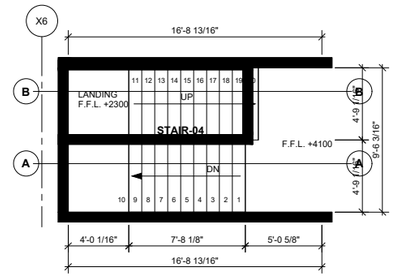
A - 28

REV 00



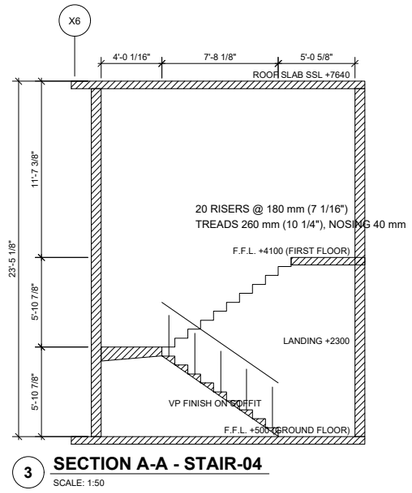
1 GROUND FLOOR PLAN - STAIR-04

SCALE: 1:50



2 FIRST FLOOR PLAN - STAIR-04

SCALE: 1:50



3 SECTION A-A - STAIR-04

SCALE: 1:50

GENERAL NOTES

1. ALL DIMENSIONS IN FEET AND INCHES; LEVELS IN mm AS PER ARCHITECTURAL SECTION (GROUND FLOOR F.F.L. +500).
2. REDRAWN FROM STAIR DETAILS 01, SHEET A603. VERIFY ALL DIMENSIONS ON SITE BEFORE CASTING.
3. 20 RISERS @ 180 mm AND 19 TREADS @ 260 mm; INTERMEDIATE LANDING +2300; POSITIONS SCALED FROM SCANNED DRAWING.
4. STAIR FINISH: TERRAZZO TREADS AND RISERS WITH ANTI-SLIP NOSING. SOFFIT: VP (VINYL PLASTIC) PAINT.
5. RAILING 900 mm HIGH: 60 mm DIA WOOD HANDRAIL, 10 mm DIA S.S. BALUSTERS @ 100 c/c, 50x10 S.S. FLAT POSTS @ 900 c/c.
6. FLIGHT / LANDING POSITIONS ARE SCALED FROM THE SCANNED DRAWING; STRUCTURAL SIZES AS PER STRUCTURAL DRAWINGS.

Drawing shall not be copied or used without permission.

CLIENT

HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT

SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

REVISIONS

REV	DESCRIPTION	DATE

SIGN-OFF

DRAWN BY
Zohaib Saleem Abbasi

CHECKED BY

APPROVED BY

DRAWING TITLE

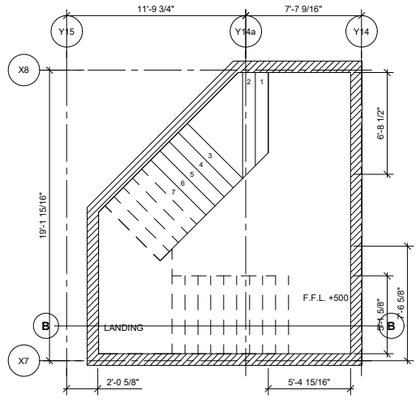
STAIR-04

PLANS & SECTION

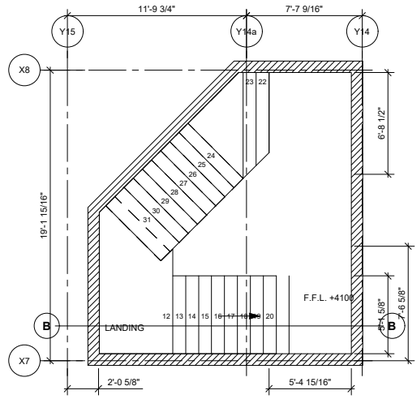
DRAWING NO.

A - 29

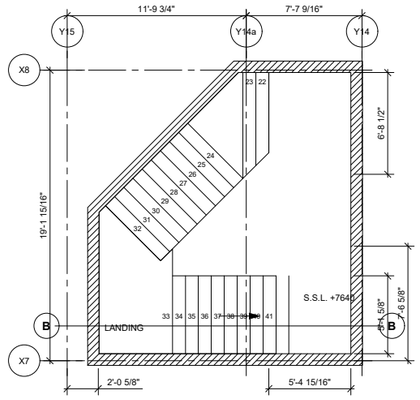
REV 00



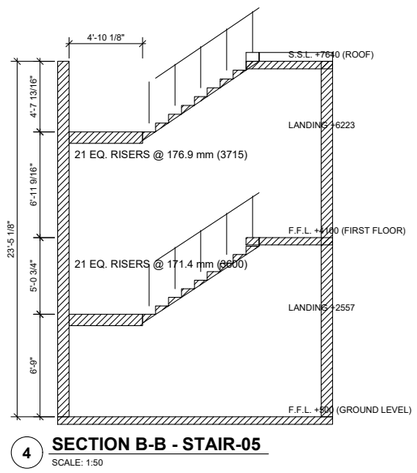
1 GROUND FLOOR PLAN - STAIR-05
SCALE: 1:50



2 FIRST FLOOR PLAN - STAIR-05
SCALE: 1:50



3 ROOF PLAN - STAIR-05
SCALE: 1:50



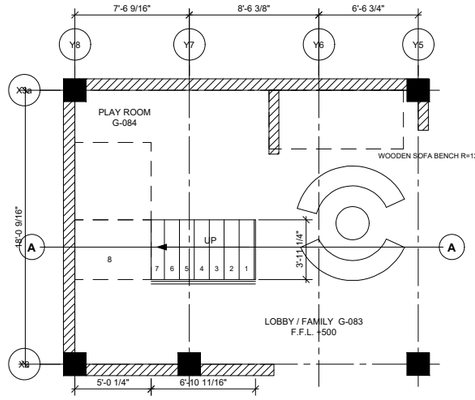
4 SECTION B-B - STAIR-05
SCALE: 1:50

GENERAL NOTES

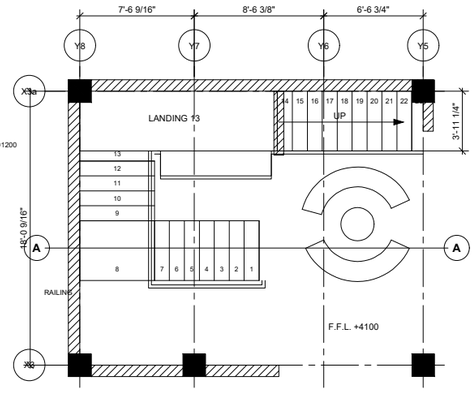
1. ALL DIMENSIONS IN FEET AND INCHES; LEVELS IN mm. REDRAWN FROM STAIR DETAILS 05, SHEET A604. VERIFY ALL DIMENSIONS ON SITE.
2. STAIR-05 HAS TWO IDENTICAL STAGES: 1-21 (GROUND TO FIRST FLOOR, 3600 / 21 EQUAL RISERS) AND 22-42 (FIRST FLOOR TO ROOF, 3715 / 21 EQUAL RISERS).
3. EACH STAGE: 2 STRAIGHT TREADS, 45 DEG DIAGONAL FLIGHT, LANDING (+2557 AND +6223) AND 9 STRAIGHT RISERS. TREADS 260 mm, NOSING 40 mm.
4. DIAGONAL FLIGHT WIDTH 1565 mm, STRAIGHT FLIGHT WIDTH 1565 mm; GRID Y14a TO Y14 2325 mm; Y15 TO Y14a 3600 mm.
5. FLIGHT / LANDING POSITIONS SCALED FROM THE SCANNED DRAWING; SOME DIMENSIONS OF THE SOURCE ARE ILLEGIBLE AND ARE TO BE CONFIRMED.
6. SECTION A-A OF SHEET A604 (ALONG THE DIAGONAL AXIS) IS NOT REPRODUCED HERE; SECTION B-B IS SHOWN.

Drawing shall not be copied or used without permission.

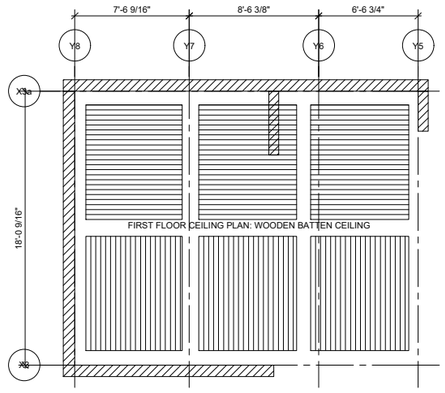
CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	STAIR-05 PLANS & SECTION	A - 30 REV 00



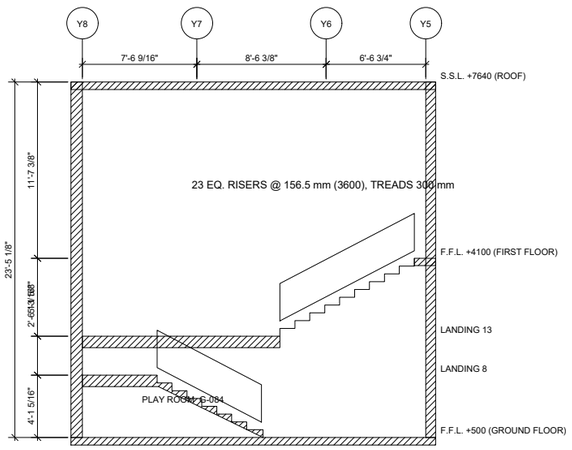
1 GROUND FLOOR PLAN - STAIR-06
SCALE: 1:50



2 FIRST FLOOR PLAN - STAIR-06
SCALE: 1:50



3 FIRST FLOOR CEILING PLAN - STAIR-06
SCALE: 1:50



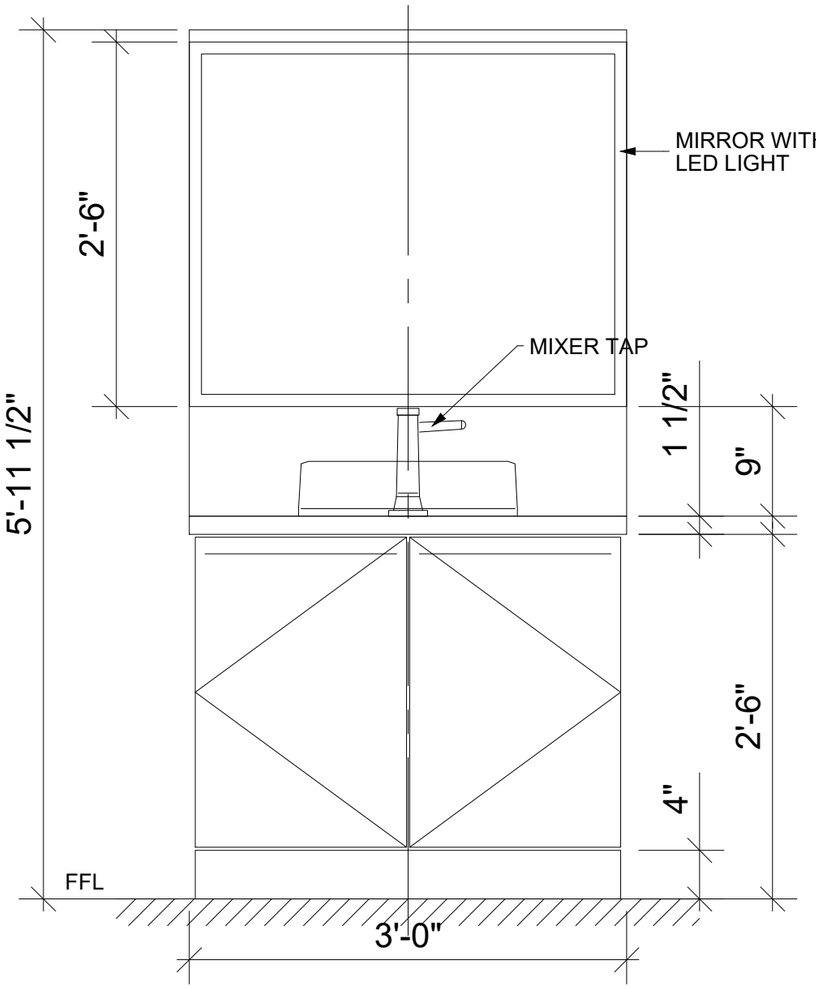
4 SECTION A-A - STAIR-06
SCALE: 1:50

GENERAL NOTES

1. ALL DIMENSIONS IN FEET AND INCHES; LEVELS IN mm. REDRAWN FROM STAIR DETAILS 06, SHEET A605. VERIFY ALL DIMENSIONS ON SITE.
2. STAIR-06 (LOBBY / FAMILY G-083): 23 EQUAL RISERS @ 156.5 mm (3600), TREADS 300 mm. FLIGHT 1-7 WEST, FLIGHT 8-13 NORTH, FLIGHT 14-23 EAST.
3. WALL FINISH: CERAMIC TILE 300 x 300; SOFFIT AND CEILING: VP ON CEMENT MORTAR; CEILING PLAN: WOODEN BATTENS AS PER SOURCE.
4. RAILING WITH CERAMIC TILE PATTERN PANELS (DETAILS ON A606). WOODEN SOFA BENCH R=1200, D=400, FABRIC CUSHION, WOODEN PAINTED VARNISH BASE.
5. FLIGHT / LANDING POSITIONS SCALED FROM THE SCANNED DRAWING; ILLEGIBLE SOURCE DIMENSIONS TO BE CONFIRMED.
6. SECTIONS B-B AND C-C OF SHEET A605 AND WALL FINISH ELEVATIONS ARE NOT REPRODUCED HERE.

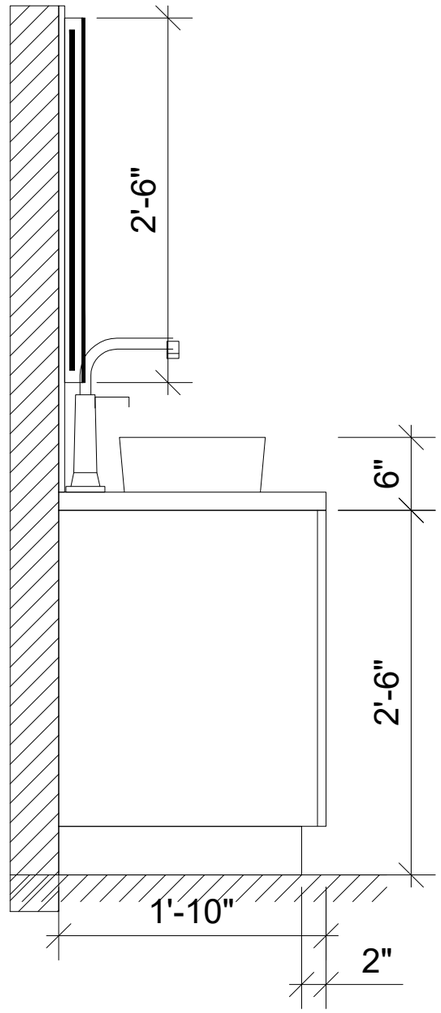
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	STAIR-06 PLANS & SECTION	A - 31 REV 00



FRONT ELEVATION

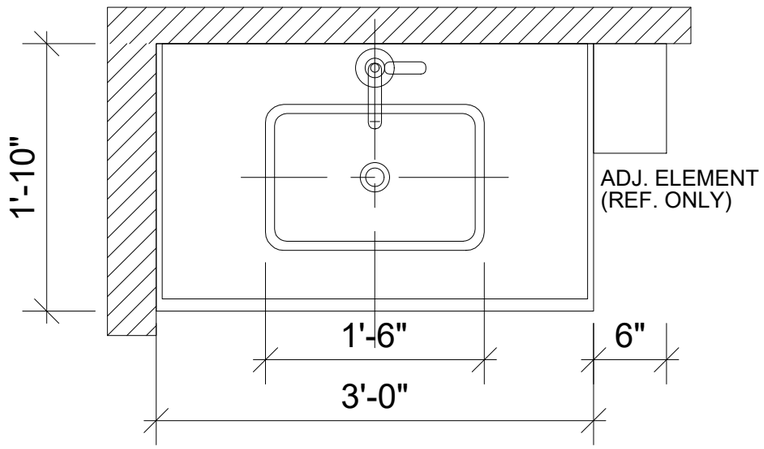
SCALE 1:13



SIDE ELEVATION

SCALE 1:13

SPECIFICATIONS :		
1.	Overall Size	: 3'-0" (W) x 1'-10" (D) x 2'-6" (H) (Vanity Cabinet)
2.	Counter Top	: Marble / Solid Surface (0'-1 1/2" thk)
3.	Wash Basin	: Counter Top Basin (1'-6" x 1'-0" approx.)
4.	Mirror	: 3'-0" (W) x 2'-6" (H) with LED Light
5.	Cabinet	: 18mm thk plywood with laminate / wooden finish
6.	Accessories	: Mixer tap, pop-up waste, LED light, hinges, handleless

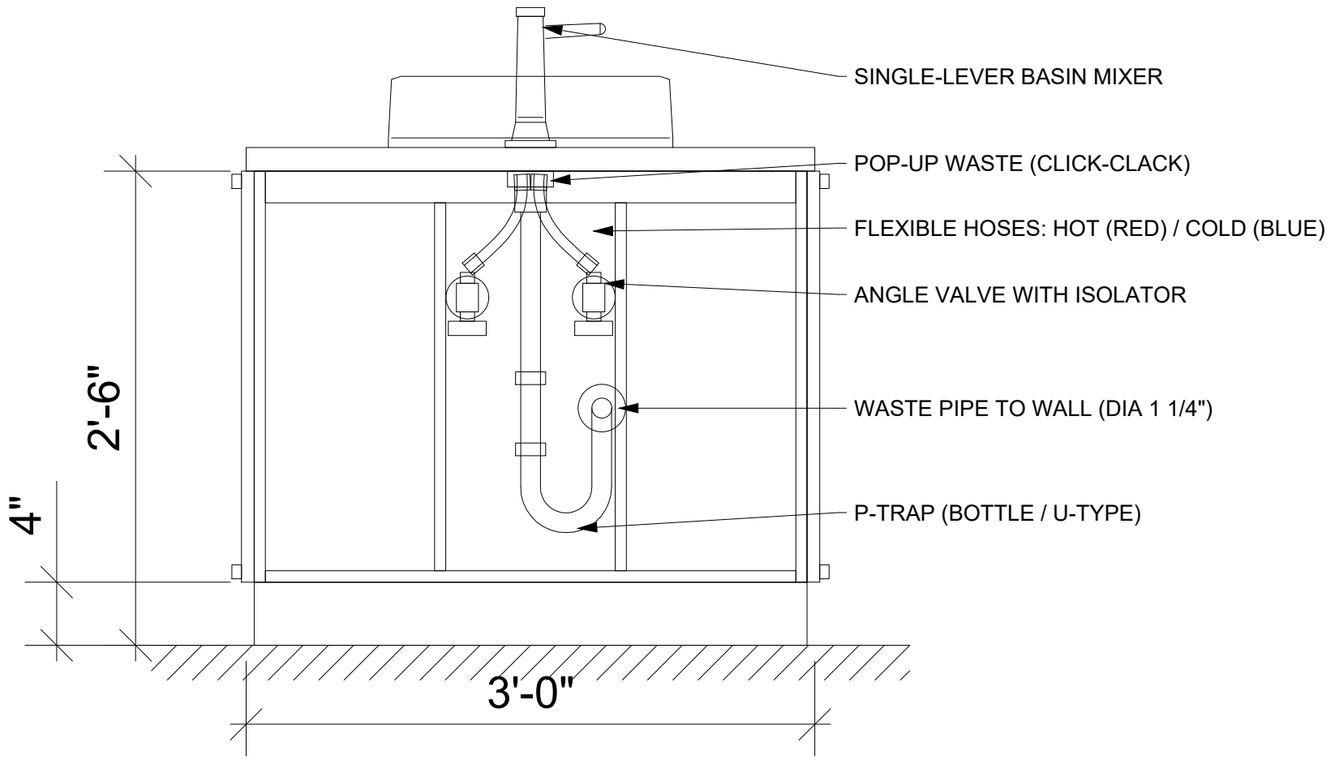


TOP VIEW

SCALE 1:13

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	VANITY UNIT PLAN & ELEVATIONS	A - 32 REV 00



GENERAL NOTES

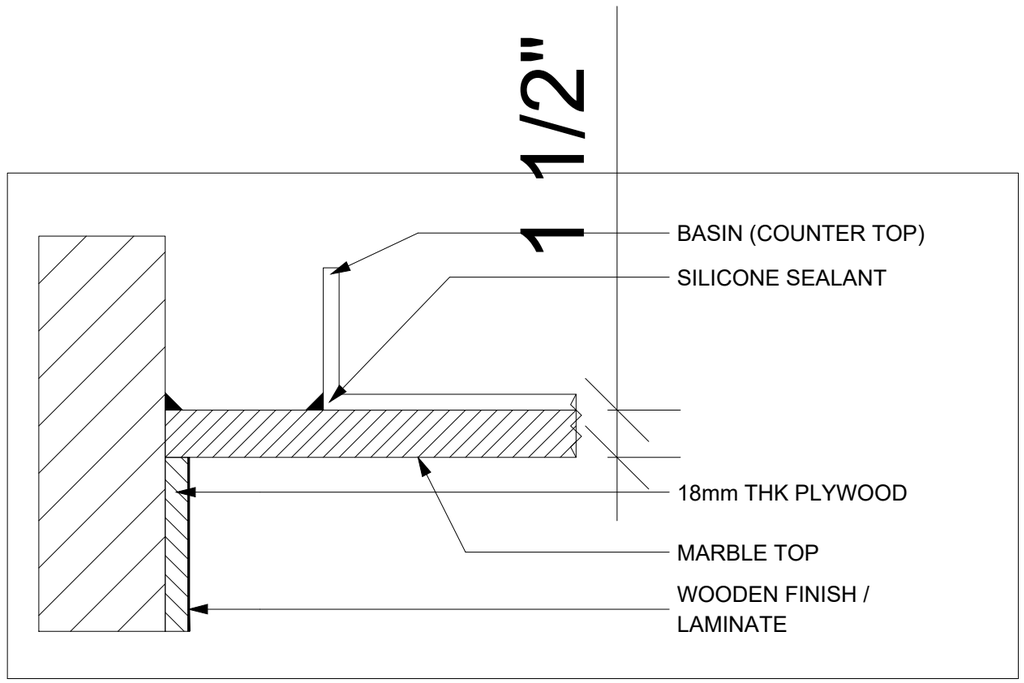
1. ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS NOTED OTHERWISE.
2. DO NOT SCALE FROM THIS DRAWING. VERIFY ALL DIMENSIONS AT SITE.
3. CABINET HEIGHT 2'-6" FROM FINISHED FLOOR LEVEL (FFL), INCLUDING PLINTH.
4. CUT-OUT AND TAP HOLE TO BASIN / TAP MANUFACTURER'S TEMPLATE.
5. FIX CABINET TO WALL. SILICONE SEAL BETWEEN WORKTOP AND WALL.
6. PLUMBING: ISOLATING ANGLE VALVES ON HOT AND COLD SUPPLIES.

FRONT VIEW (WITH STORAGE)

SCALE 1:10

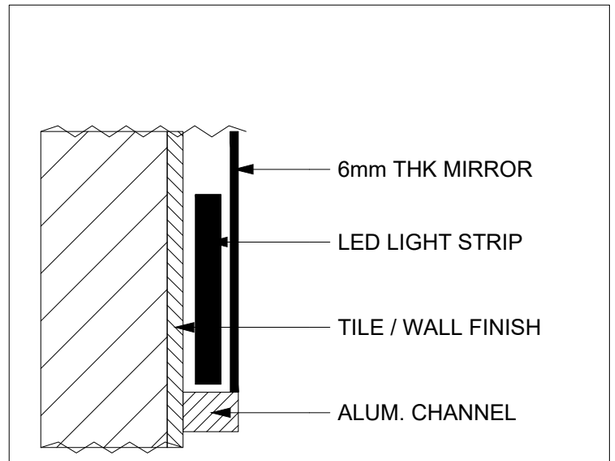
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	VANITY UNIT FRONT VIEW (WITH STORAGE)	A - 33 REV 00



COUNTERTOP DETAIL

SCALE 1:5

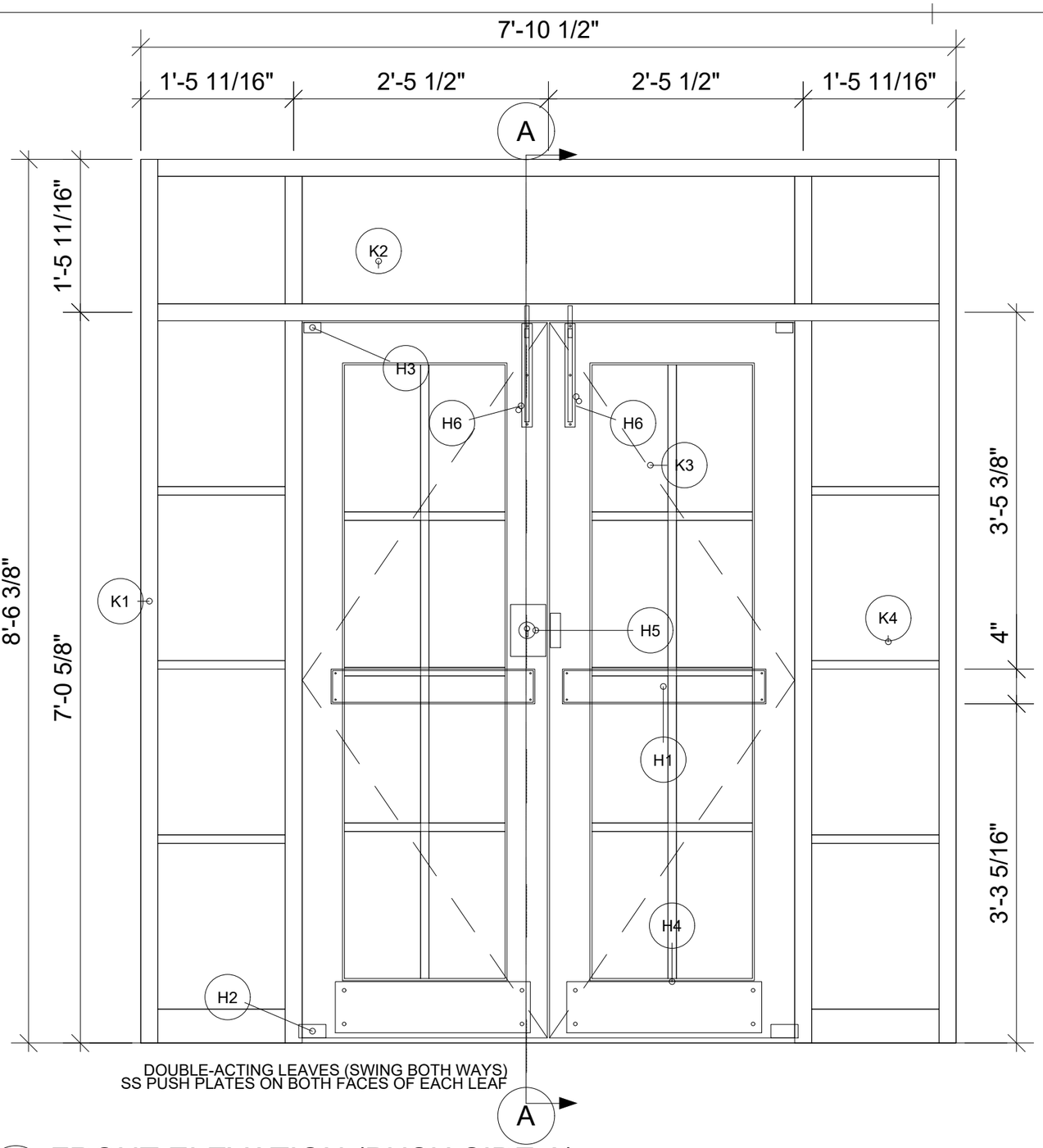


MIRROR DETAIL

SCALE 1:5

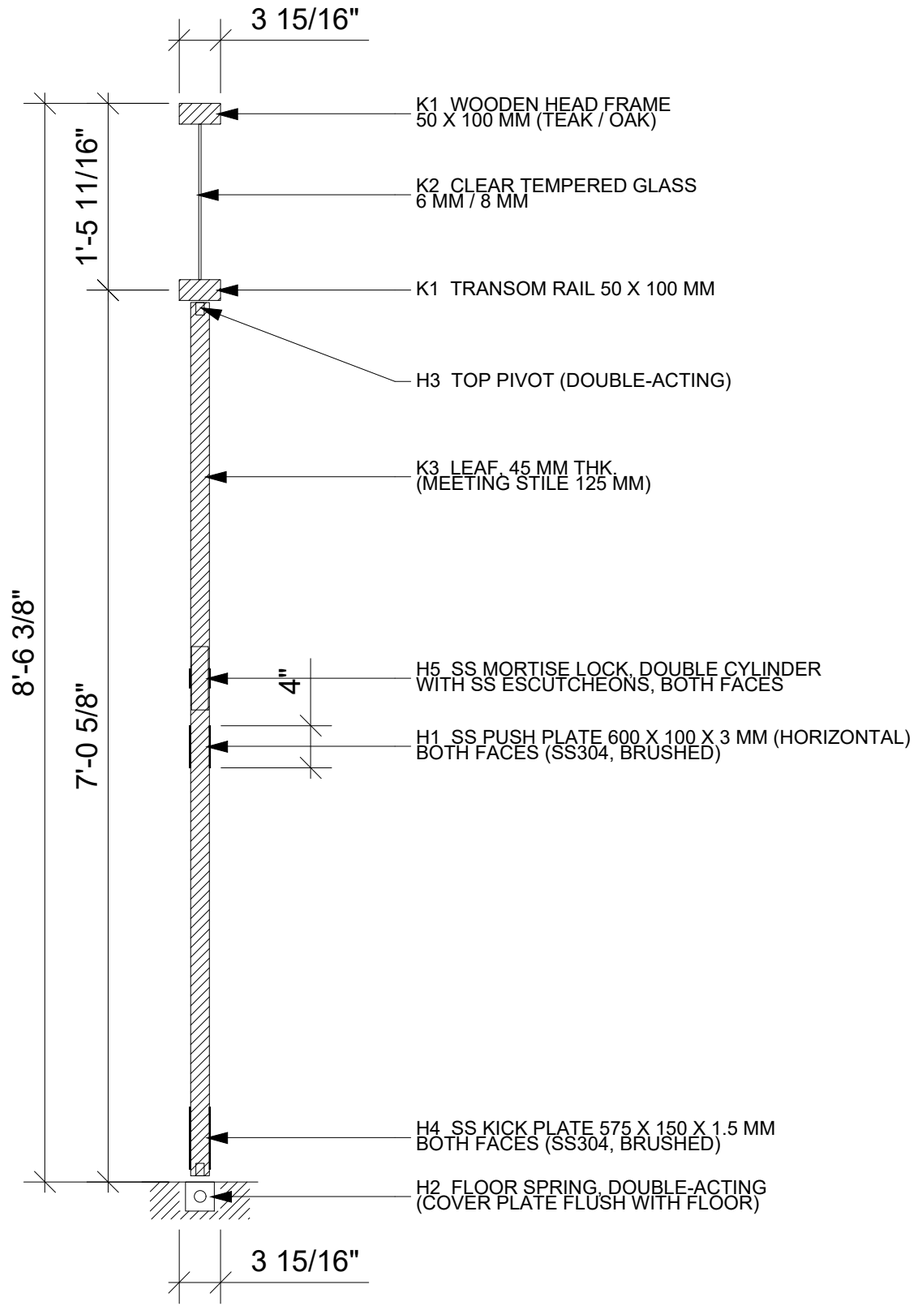
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	VANITY UNIT DETAILS	A - 34 REV 00



1 FRONT ELEVATION (PUSH SIDE A)

SCALE: 1:15



A SECTION A-A

SCALE: 1:15

Drawing shall not be copied or used without permission.

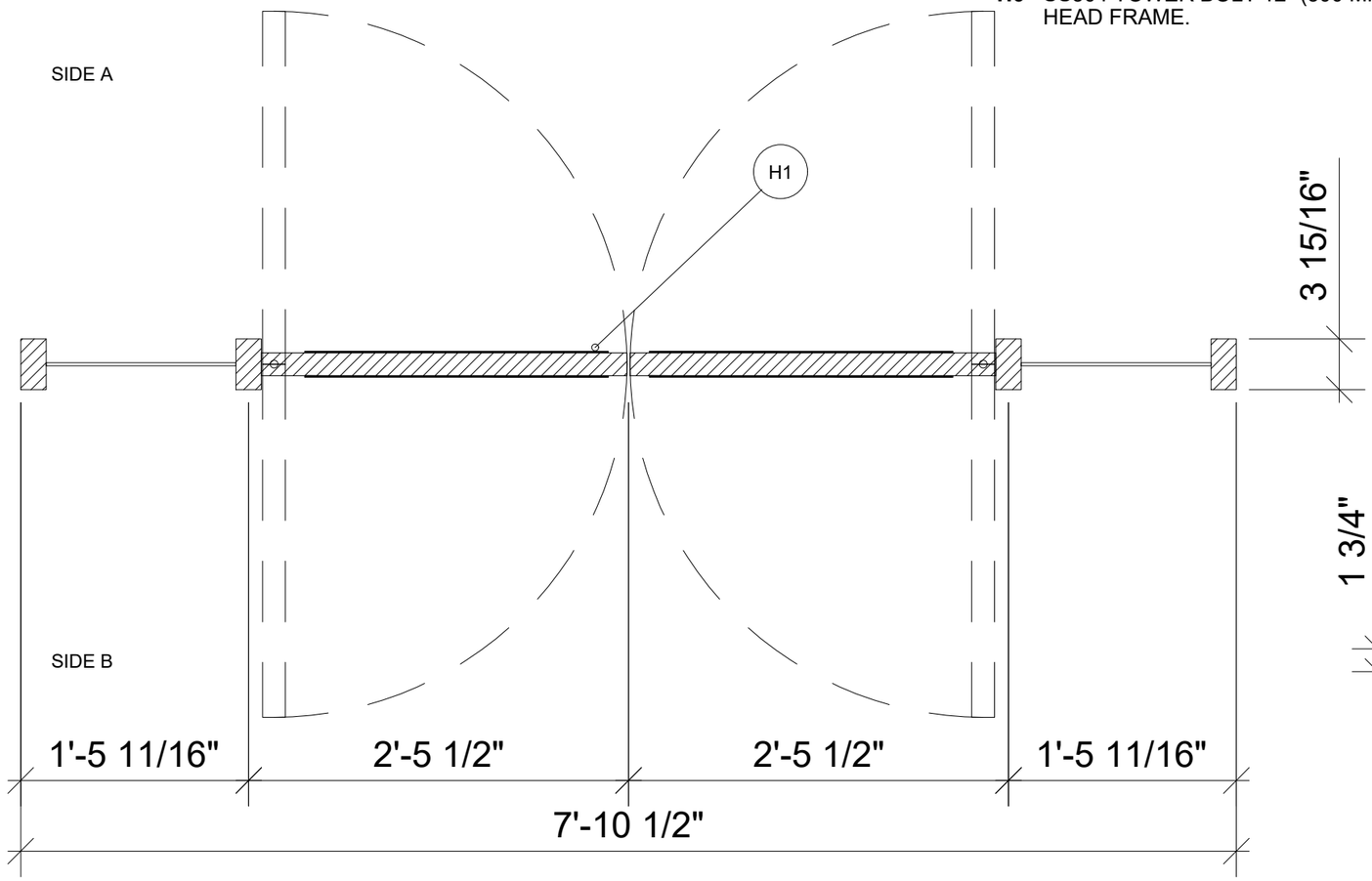
CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi	MAIN DOOR	A - 35
					CHECKED BY:	ELEVATION & SECTION A-A	REV 00
					APPROVED BY:		

GENERAL NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES (MM) UNLESS NOTED. VERIFY OPENING SIZE AND HARDWARE ON SITE BEFORE FABRICATION.
2. BOTH LEAVES ARE DOUBLE-ACTING: THEY SWING 90 DEG. TO EITHER SIDE ON FLOOR SPRINGS AND TOP PIVOTS. PROVIDE A CLEAR SWING AREA ON BOTH SIDES (RADIUS 697 MM).
3. FRAME FINISH: TEAK / OAK AS PER DESIGNER'S SAMPLE. GLASS: CLEAR TEMPERED, 6 MM / 8 MM.
4. PROVIDE SS PUSH PLATES ON BOTH FACES SO THE DOOR IS OPERATED FROM EITHER SIDE; NO PULL HANDLES.
5. SIZE FOLLOWS THE REFERENCE SKETCH (2400 X 2600 MM OVERALL); FIT TO THE OPENING WITH 10 MM PERIMETER CLEARANCE AS REQUIRED.

KEYED NOTES

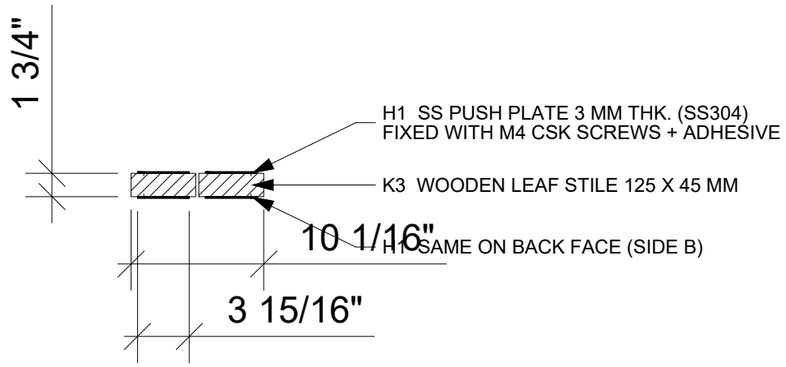
K1 WOODEN FRAME, 50 X 100 MM, TEAK / OAK FINISH (CLEAR PU).
K2 CLEAR TEMPERED GLASS, 6 MM OR 8 MM, IN SIDELIGHTS, TRANSOM AND LEAVES.
K3 DOUBLE-ACTING LEAF, 722 X 2105 X 45 MM; STILES AND TOP RAIL 125 MM, BOTTOM RAIL 175 MM.
K4 WOODEN MUNTIN, 25 X 50 MM (2 X 4 LITES PER LEAF, 4 LITES PER SIDELIGHT).
H1 SS PUSH PLATE 600 X 100 X 3 MM (HORIZONTAL), SS304 BRUSHED, BOTH FACES OF EACH LEAF, CENTRE 1050 MM AFF.
H2 FLOOR SPRING, DOUBLE-ACTING (BOTH-WAY SWING), 90 DEG. HOLD-OPEN OPTIONAL, FLUSH COVER.
H3 TOP PIVOT, DOUBLE-ACTING, FIXED IN TRANSOM RAIL.
H4 SS KICK PLATE 575 X 150 X 1.5 MM, SS304 BRUSHED, BOTH FACES OF EACH LEAF, FIXED WITH CSK SCREWS + ADHESIVE.
H5 SS MORTISE LOCK, DOUBLE EURO CYLINDER (KEY OPERATED BOTH SIDES), SS ESCUTCHEONS; LOCK ON ONE LEAF, KEEPER ON THE OTHER.
H6 SS304 TOWER BOLT 12" (300 MM), AT TOP OF MEETING STILE OF BOTH LEAVES, SHOOTING INTO HEAD FRAME.



2 PLAN (CUT AT 1050 MM AFF) - BOTH-WAY SWING
SCALE: 1:12

DOOR SCHEDULE

TYPE	DOUBLE-LEAF, DOUBLE-ACTING DOOR WITH TWO SIDELIGHTS AND TRANSOM
OVERALL	2400 MM (W) X 2600 MM (H) X 100 MM (D)
LEAVES	TWO, 722 X 2105 X 45 MM EACH
GLASS	CLEAR TEMPERED 6 / 8 MM
FINISH	WOOD, TEAK / OAK; SS304 BRUSHED
KICK PLATE	SS304, 575 X 150 X 1.5 MM, BOTH FACES, EACH LEAF
LOCK	SS MORTISE LOCK, DOUBLE CYLINDER, 3 KEYS
BOLTS	SS TOWER BOLT 12" (300 MM), 2 NOS. (TOP OF EACH LEAF)



B DETAIL - SS PUSH PLATE
SCALE: 1:12

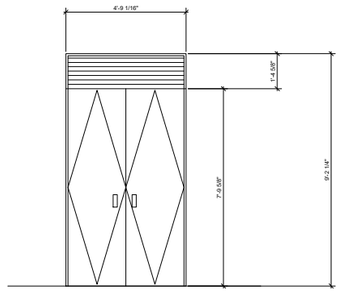
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	MAIN DOOR PLAN, DETAIL B & NOTES	A - 36 REV 00

SD1 STEEL DOOR

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	STEEL
GLAZING	-
HARDWARE	AS PER SOURCE



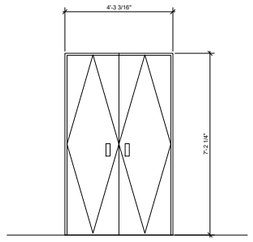
Floor Finish

LEVEL G/F -390 / -430 AS PRINTED

SD1a STEEL DOOR

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 01 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	STEEL
GLAZING	-
HARDWARE	AS PER SOURCE



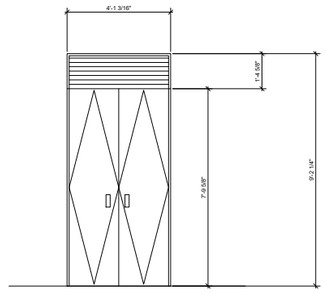
Floor Finish

LEVEL F/F -30; DH 2113

SD1b STEEL DOOR

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 01 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	STEEL
GLAZING	-
HARDWARE	AS PER SOURCE

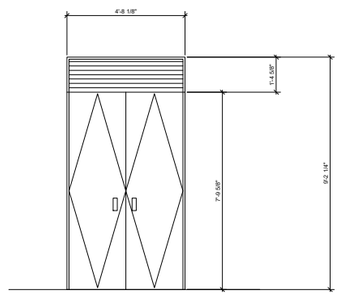


Floor Finish

SD1c STEEL DOOR

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	STEEL
GLAZING	-
HARDWARE	AS PER SOURCE



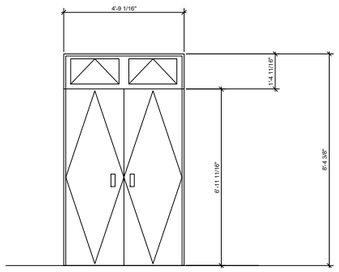
Floor Finish

LEVEL G/F -300 / -420

SD2 STEEL DOOR

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	STEEL
GLAZING	-
HARDWARE	AS PER SOURCE



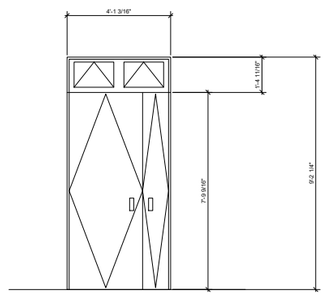
Floor Finish

HEIGHT TO BE VERIFIED

SD2a STEEL DOOR

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	STEEL
GLAZING	-
HARDWARE	AS PER SOURCE



Floor Finish

LEAVES 885 + 365

ALL DIMENSIONS IN FEET AND INCHES. SCALE 1:75

Drawing shall not be copied or used without permission.

CLIENT

HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT

SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

REVISIONS

REV	DESCRIPTION	DATE

SIGN-OFF

DRAWN BY
Zohaib Saleem Abbasi

CHECKED BY

APPROVED BY

DRAWING TITLE

DOORS

STEEL / ALUMINUM DOORS (1/3)

DRAWING NO.

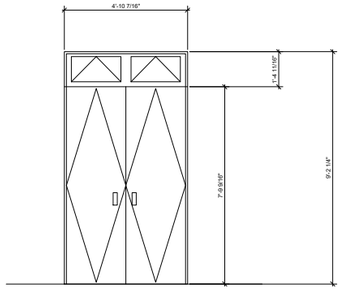
A - 37

REV 00

SD2b STEEL DOOR

GROUND FLOOR - 01 QTY. 01 Nos.
FIRST FLOOR - 00

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	STEEL
GLAZING	-
HARDWARE	AS PER SOURCE

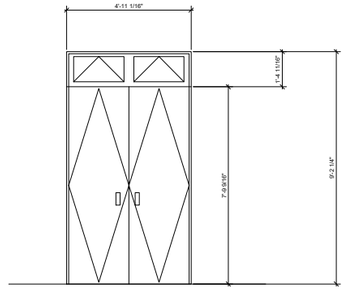


Floor Finish

SD2c STEEL DOOR

GROUND FLOOR - 01 QTY. 02 Nos.
FIRST FLOOR - 01

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	STEEL
GLAZING	-
HARDWARE	AS PER SOURCE

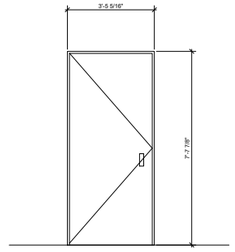


Floor Finish

SD4 STEEL DOOR

GROUND FLOOR - 01 QTY. 01 Nos.
FIRST FLOOR - 00

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	STEEL
GLAZING	-
HARDWARE	AS PER SOURCE



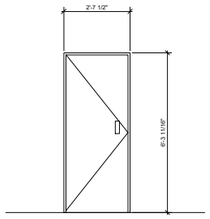
Floor Finish

DOOR WITH SIDE PLATE; DH 2031

SD4a STEEL DOOR

GROUND FLOOR - 01 QTY. 01 Nos.
FIRST FLOOR - 00

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	STEEL
GLAZING	-
HARDWARE	AS PER SOURCE



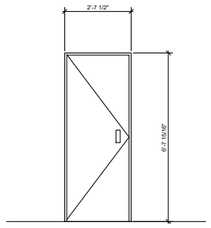
Floor Finish

DH 1803

SD7 STEEL DOOR

GROUND FLOOR - 01 QTY. 01 Nos.
FIRST FLOOR - 00

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	STEEL
GLAZING	-
HARDWARE	AS PER SOURCE



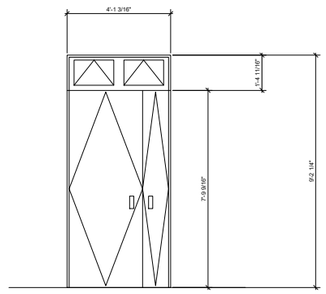
Floor Finish

DH 2013

SD5 STEEL DOOR

GROUND FLOOR - 01 QTY. 02 Nos.
FIRST FLOOR - 01

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	STEEL
GLAZING	-
HARDWARE	AS PER SOURCE



Floor Finish

ALL DIMENSIONS IN FEET AND INCHES. SCALE 1:75

Drawing shall not be copied or used without permission.

CLIENT

HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT

SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

REVISIONS

REV	DESCRIPTION	DATE

SIGN-OFF

DRAWN BY
Zohaib Saleem Abbasi

CHECKED BY

APPROVED BY

DRAWING TITLE

DOORS

STEEL / ALUMINUM DOORS (2/3)

DRAWING NO.

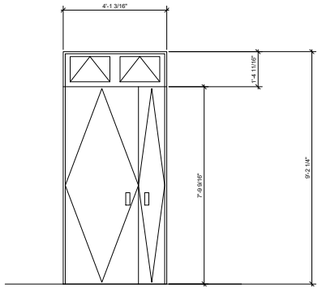
A - 38

REV 00

SD5a STEEL DOOR

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	STEEL
GLAZING	-
HARDWARE	AS PER SOURCE

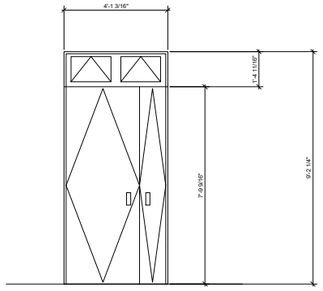


Floor Finish

SD5b STEEL DOOR

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	STEEL
GLAZING	-
HARDWARE	AS PER SOURCE

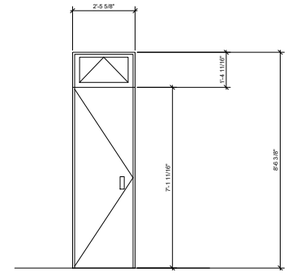


Floor Finish

SD6 STEEL DOOR

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 02 03 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	STEEL
GLAZING	-
HARDWARE	AS PER SOURCE



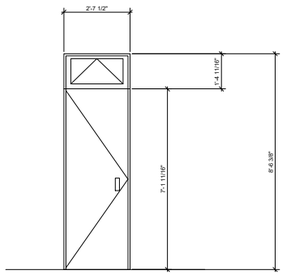
Floor Finish

DH 2113

SD6b STEEL DOOR

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 01 02 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	STEEL
GLAZING	-
HARDWARE	AS PER SOURCE



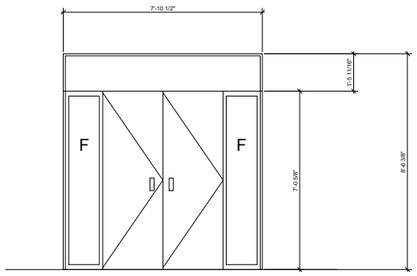
Floor Finish

DH 2128

AD1 ALUMINUM DOOR

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	GLASS 8mm THK BEHIND PERFORATED ALUM. COMPOSITE
HARDWARE	AS PER SOURCE



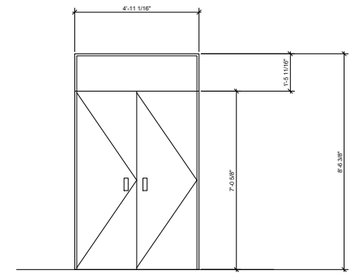
Floor Finish

450 | 750 | 750 | 450

AD2 ALUMINUM DOOR

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	GLASS 8mm THK BEHIND PERFORATED ALUM. COMPOSITE
HARDWARE	AS PER SOURCE



Floor Finish

750 | 750

ALL DIMENSIONS IN FEET AND INCHES. SCALE 1:75

Drawing shall not be copied or used without permission.

CLIENT

HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT

SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

REVISIONS

REV	DESCRIPTION	DATE

SIGN-OFF

DRAWN BY
Zohaib Saleem Abbasi

CHECKED BY

APPROVED BY

DRAWING TITLE

DOORS

STEEL / ALUMINUM DOORS (3/3)

DRAWING NO.

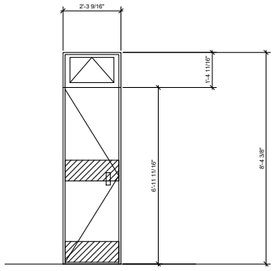
A - 39

REV 00

WD6c WOODEN DOOR

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 02 03 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



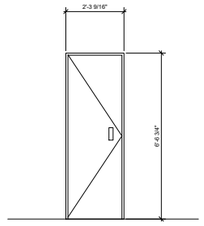
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD6ax WOODEN DOOR

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 04 04 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



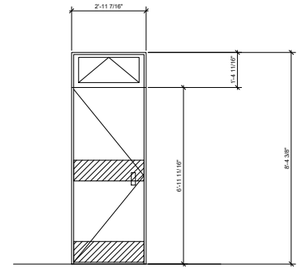
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD6cx WOODEN DOOR

GROUND FLOOR - 03 QTY.
FIRST FLOOR - 00 03 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



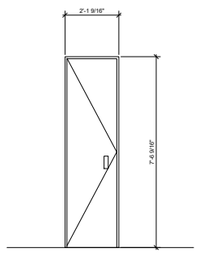
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD7a WOODEN DOOR

GROUND FLOOR - 02 QTY.
FIRST FLOOR - 00 02 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



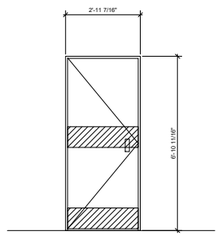
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD8 WOODEN DOOR

GROUND FLOOR - 07 QTY.
FIRST FLOOR - 07 14 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



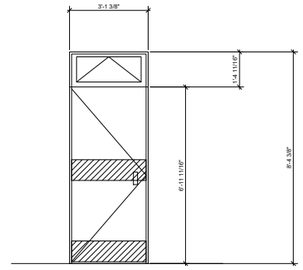
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD100 WOODEN DOOR

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 01 02 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

ALL DIMENSIONS IN FEET AND INCHES. SCALE 1:75

Drawing shall not be copied or used without permission.

CLIENT

HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT

SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

REVISIONS

REV	DESCRIPTION	DATE

SIGN-OFF

DRAWN BY
Zohaib Saleem Abbasi

CHECKED BY

APPROVED BY

DRAWING TITLE

DOORS

WOOD / PVC / SS DOORS (1/3)

DRAWING NO.

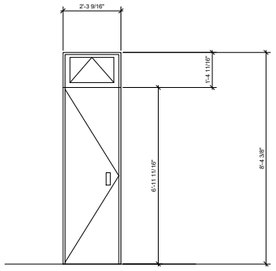
A - 40

REV 00

WD102 WOODEN DOOR

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 01 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



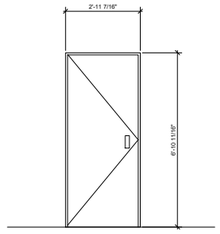
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD103 WOODEN DOOR

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 01 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



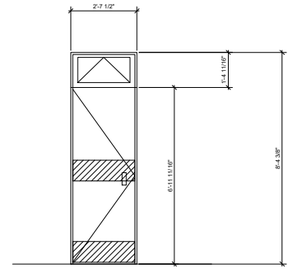
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD110 WOODEN DOOR

GROUND FLOOR - 08 QTY.
FIRST FLOOR - 06 14 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



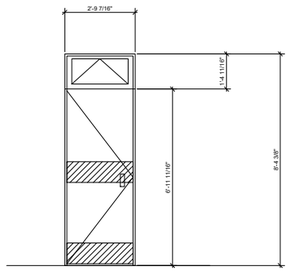
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD111 WOODEN DOOR

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 02 03 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



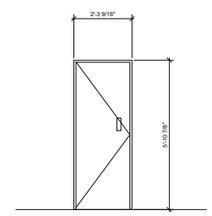
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD112a WOODEN DOOR

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 01 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



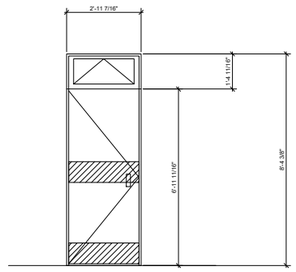
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

PD1 PVC DOOR

GROUND FLOOR - 05 QTY.
FIRST FLOOR - 06 11 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	PVC
GLAZING	-
HARDWARE	MCL, LH, DS, BHG



Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

ALL DIMENSIONS IN FEET AND INCHES. SCALE 1:75

Drawing shall not be copied or used without permission.

CLIENT

HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT

SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

REVISIONS

REV	DESCRIPTION	DATE

SIGN-OFF

DRAWN BY
Zohaib Saleem Abbasi

CHECKED BY

APPROVED BY

DRAWING TITLE

DOORS

WOOD / PVC / SS DOORS (2/3)

DRAWING NO.

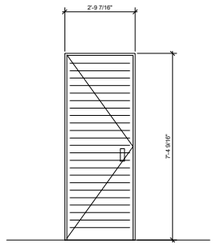
A - 41

REV 00

PD1a PVC DOOR

GROUND FLOOR - 04 QTY.
FIRST FLOOR - 05 09 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	PVC
GLAZING	-
HARDWARE	MCL, LH, DS, BHG



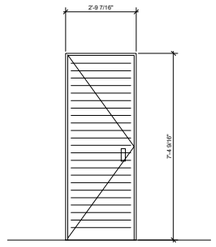
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

PD100 PVC DOOR

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 01 02 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	PVC
GLAZING	-
HARDWARE	MCL, LH, DS, BHG



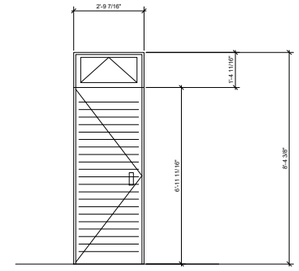
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

PD PVC DOOR

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 01 02 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	PVC
GLAZING	-
HARDWARE	MCL, LH, DS, BHG



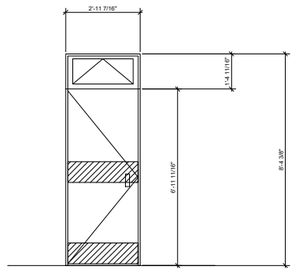
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

X STAINLESS STEEL DOOR

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	STAINLESS STEEL H.L.
GLAZING	LEAD SHEET Pb1.5mm
HARDWARE	MCL, FB, PD, BHG, DS



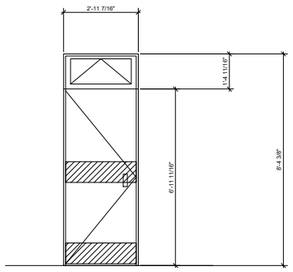
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

X3 STAINLESS STEEL DOOR

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	STAINLESS STEEL H.L.
GLAZING	LEAD SHEET Pb1.5mm
HARDWARE	MCL, FB, PD, BHG, DS



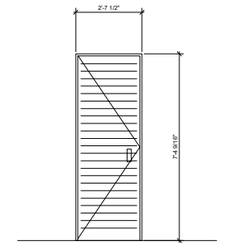
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

STD1 STAINLESS STEEL DOOR

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 02 02 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	STAINLESS STEEL
GLAZING	-
HARDWARE	AHG, PD, MCL, DS, FB



Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

ALL DIMENSIONS IN FEET AND INCHES. SCALE 1:75

Drawing shall not be copied or used without permission.

CLIENT

HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT

SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

REVISIONS

REV	DESCRIPTION	DATE

SIGN-OFF

DRAWN BY
Zohaib Saleem Abbasi

CHECKED BY

APPROVED BY

DRAWING TITLE

DOORS

WOOD / PVC / SS DOORS (3/3)

DRAWING NO.

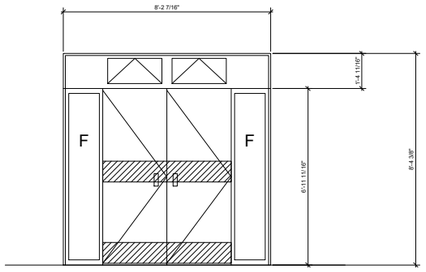
A - 42

REV 00

WD1 WOODEN DOOR

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 02 03 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



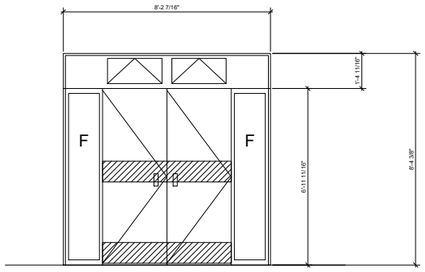
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD1z WOODEN DOOR

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



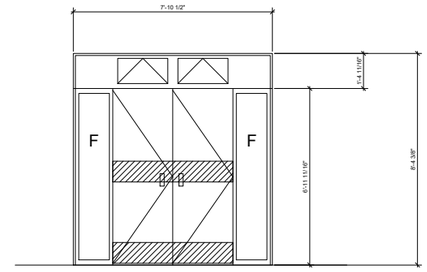
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD1a WOODEN DOOR

GROUND FLOOR - 04 QTY.
FIRST FLOOR - 08 12 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



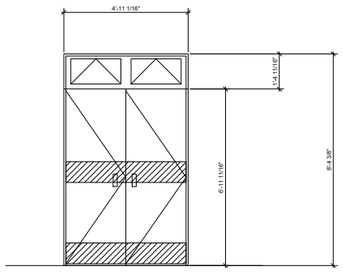
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD2 WOODEN DOOR

GROUND FLOOR - 05 QTY.
FIRST FLOOR - 03 08 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



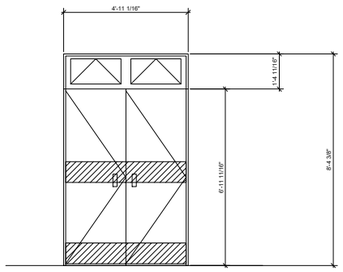
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD2a WOODEN DOOR

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 01 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



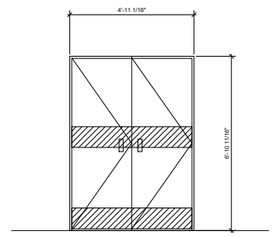
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD2b WOODEN DOOR

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 01 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

ALL DIMENSIONS IN FEET AND INCHES. SCALE 1:75

Drawing shall not be copied or used without permission.

CLIENT

HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT

SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

REVISIONS

REV	DESCRIPTION	DATE

SIGN-OFF

DRAWN BY
Zohaib Saleem Abbasi

CHECKED BY

APPROVED BY

DRAWING TITLE

DOORS

WOODEN DOORS (1/3)

DRAWING NO.

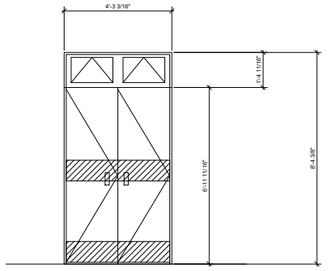
A - 43

REV 00

WD3 WOODEN DOOR

GROUND FLOOR - 07 QTY.
FIRST FLOOR - 03 10 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



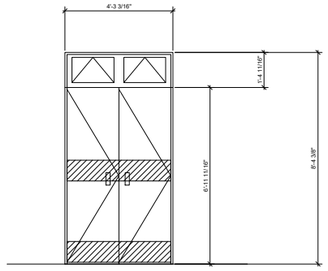
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD3bz WOODEN DOOR

GROUND FLOOR - 08 QTY.
FIRST FLOOR - 12 20 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



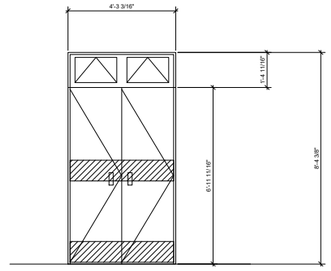
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD3z WOODEN DOOR

GROUND FLOOR - 10 QTY.
FIRST FLOOR - 04 14 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



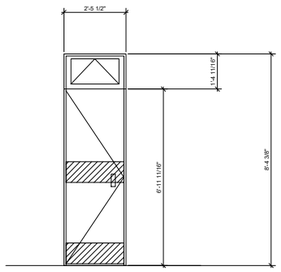
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD4 WOODEN DOOR

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 02 02 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



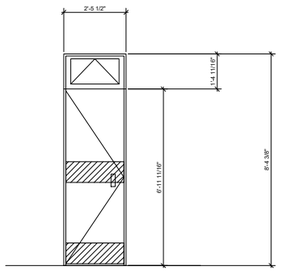
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD5 WOODEN DOOR

GROUND FLOOR - 22 QTY.
FIRST FLOOR - 19 41 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



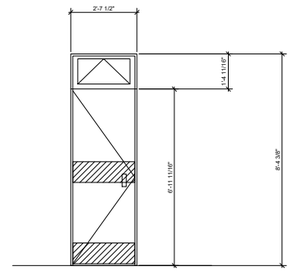
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD5x WOODEN DOOR

GROUND FLOOR - 13 QTY.
FIRST FLOOR - 07 20 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

ALL DIMENSIONS IN FEET AND INCHES. SCALE 1:75

Drawing shall not be copied or used without permission.

CLIENT

HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT

SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

REVISIONS

REV	DESCRIPTION	DATE

SIGN-OFF

DRAWN BY
Zohaib Saleem Abbasi

CHECKED BY

APPROVED BY

DRAWING TITLE

DOORS

WOODEN DOORS (2/3)

DRAWING NO.

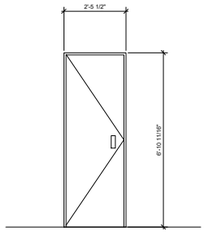
A - 44

REV 00

WD5e WOODEN DOOR

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 01 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



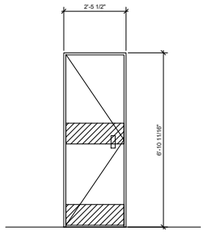
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD5x1 WOODEN DOOR

GROUND FLOOR - 02 QTY.
FIRST FLOOR - 00 02 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



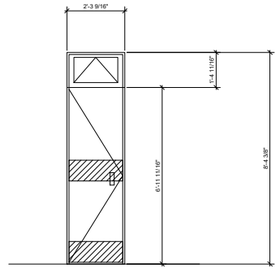
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD5cx WOODEN DOOR

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 01 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



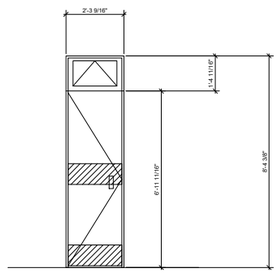
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD6 WOODEN DOOR

GROUND FLOOR - 10 QTY.
FIRST FLOOR - 02 12 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



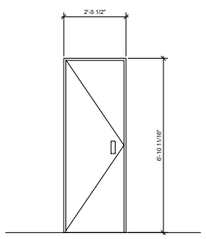
Floor Finish

SIZE ESTIMATED - NOT LEGIBLE IN SOURCE (+/-100 mm)

WD6a WOODEN DOOR

GROUND FLOOR - 13 QTY.
FIRST FLOOR - 12 25 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP (STEEL FRAME)
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



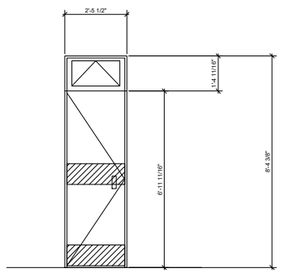
Floor Finish

SIZE ESTIMATED; QTY PRINTED 31 vs GF+FF 25 - VERIFY

WD6b WOODEN DOOR

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 01 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	WOOD, SOP
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	MCL, LH, DS, BHG



Floor Finish

SIZE ESTIMATED; STEEL FRAME, SG

ALL DIMENSIONS IN FEET AND INCHES. SCALE 1:75

Drawing shall not be copied or used without permission.

CLIENT

HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT

SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

REVISIONS

REV	DESCRIPTION	DATE

SIGN-OFF

DRAWN BY
Zohaib Saleem Abbasi

CHECKED BY

APPROVED BY

DRAWING TITLE

DOORS

WOODEN DOORS (3/3)

DRAWING NO.

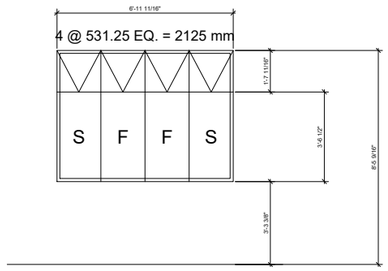
A - 45

REV 00

AW1 ALUMINUM WINDOW

GROUND FLOOR - 34 QTY.
FIRST FLOOR - 34 68 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	IS

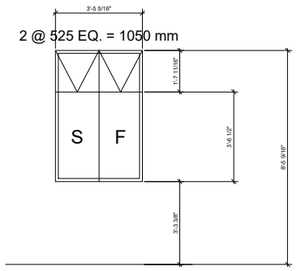


Floor Finish

AW2 ALUMINUM WINDOW

GROUND FLOOR - 16 QTY.
FIRST FLOOR - 19 35 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	IS

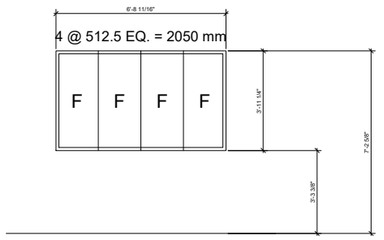


Floor Finish

AW3 ALUMINUM WINDOW

GROUND FLOOR - 19 QTY.
FIRST FLOOR - 00 19 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	

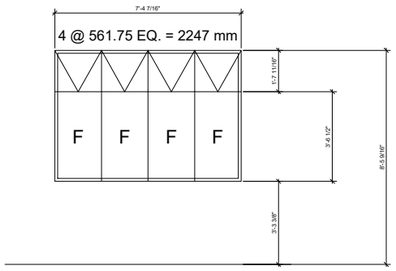


Floor Finish

AW4 ALUMINUM WINDOW

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 30 31 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	

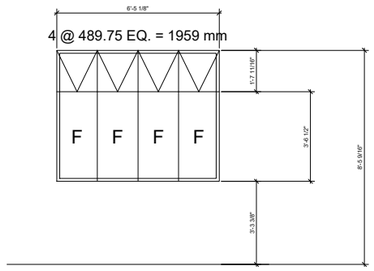


Floor Finish

AW5 ALUMINUM WINDOW

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 01 02 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	

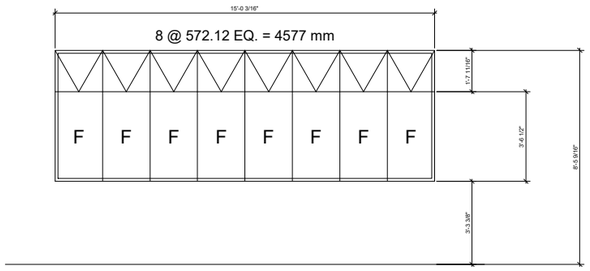


Floor Finish

AW6 ALUMINUM WINDOW

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	



Floor Finish

ALL DIMENSIONS IN FEET AND INCHES. SCALE 1:75

Drawing shall not be copied or used without permission.

CLIENT

HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT

SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

REVISIONS

REV	DESCRIPTION	DATE

SIGN-OFF

DRAWN BY
Zohaib Saleem Abbasi

CHECKED BY

APPROVED BY

DRAWING TITLE

WINDOWS

WINDOWS & LOUVERS (1/7)

DRAWING NO.

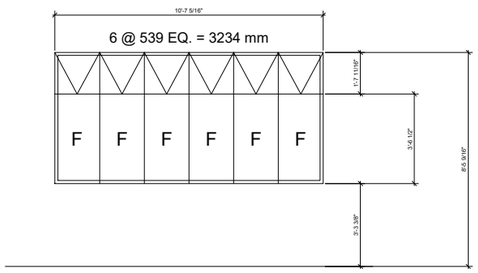
A - 46

REV 00

AW6a ALUMINUM WINDOW

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	

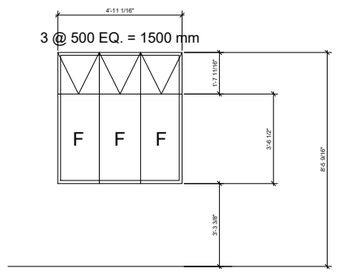


Floor Finish

AW7 ALUMINUM WINDOW

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 00 00 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	

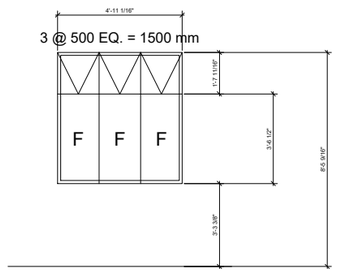


Floor Finish

AW7a ALUMINUM WINDOW

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	

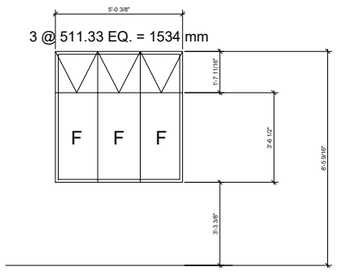


Floor Finish

AW8 ALUMINUM WINDOW

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	

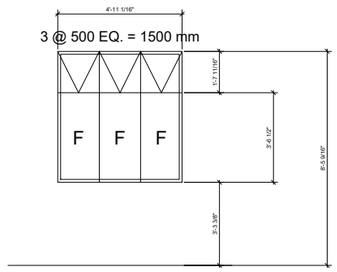


Floor Finish

AW9 ALUMINUM WINDOW

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 02 02 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	

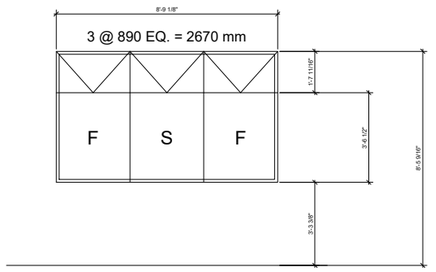


Floor Finish

AW10 ALUMINUM WINDOW

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	IS



Floor Finish

ALL DIMENSIONS IN FEET AND INCHES. SCALE 1:75

Drawing shall not be copied or used without permission.

CLIENT

HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT

SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

REVISIONS

REV	DESCRIPTION	DATE

SIGN-OFF

DRAWN BY
Zohaib Saleem Abbasi

CHECKED BY

APPROVED BY

DRAWING TITLE

WINDOWS

WINDOWS & LOUVERS (2/7)

DRAWING NO.

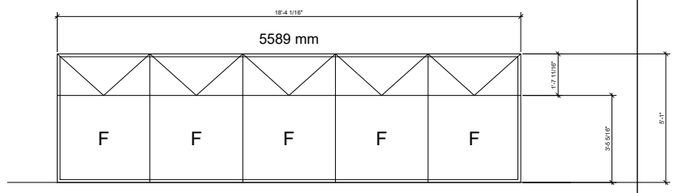
A - 47

REV 00

AW12 ALUMINUM WINDOW

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 02 02 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	

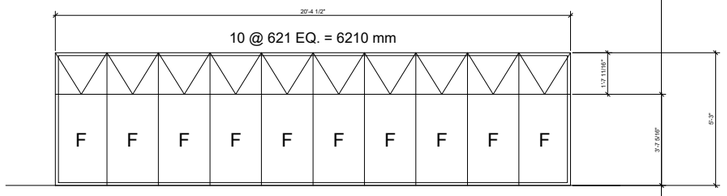


Floor Finish

AW13 ALUMINUM WINDOW

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 02 02 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	

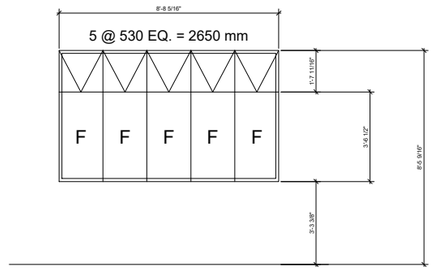


Floor Finish

AW17a ALUMINUM WINDOW

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 04 04 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	

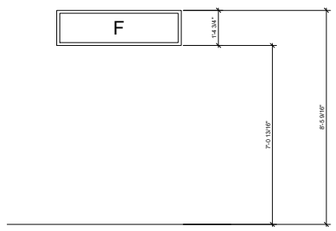


Floor Finish

AW20 ALUMINUM WINDOW

GROUND FLOOR - 23 QTY.
FIRST FLOOR - 19 42 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	



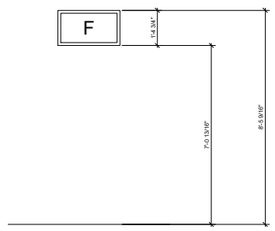
23 GF / 19 FF

Floor Finish

AW21 ALUMINUM WINDOW

GROUND FLOOR - 26 QTY.
FIRST FLOOR - 11 37 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	



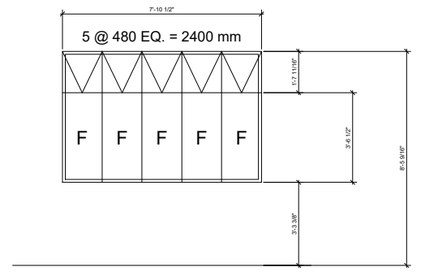
26 GF / 11 FF

Floor Finish

AW23 ALUMINUM WINDOW

GROUND FLOOR - 02 QTY.
FIRST FLOOR - 00 02 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	



Floor Finish

ALL DIMENSIONS IN FEET AND INCHES. SCALE 1:75

Drawing shall not be copied or used without permission.

CLIENT

HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT

SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

REVISIONS

REV	DESCRIPTION	DATE

SIGN-OFF

DRAWN BY
Zohaib Saleem Abbasi

CHECKED BY

APPROVED BY

DRAWING TITLE

WINDOWS

WINDOWS & LOUVERS (3/7)

DRAWING NO.

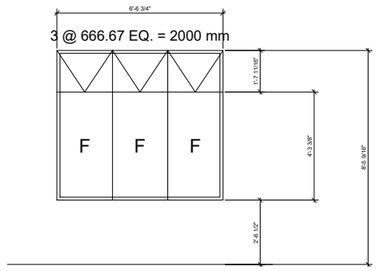
A - 48

REV 00

AW25 ALUMINUM WINDOW

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	

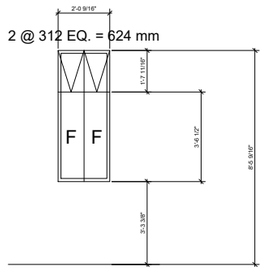


Floor Finish

AW26 ALUMINUM WINDOW

GROUND FLOOR - 02 QTY.
FIRST FLOOR - 00 02 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	

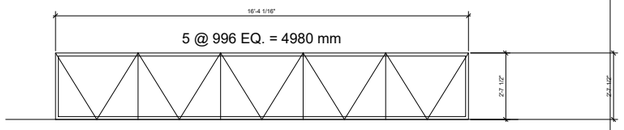


Floor Finish

AW28 ALUMINUM WINDOW (ROOF)

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	



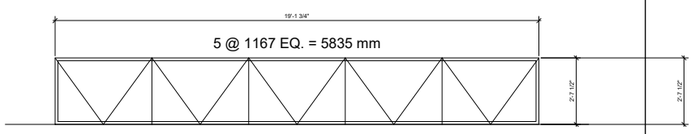
ROOF FLOOR - 01 No.

Floor Finish

AW29 ALUMINUM WINDOW (ROOF)

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	



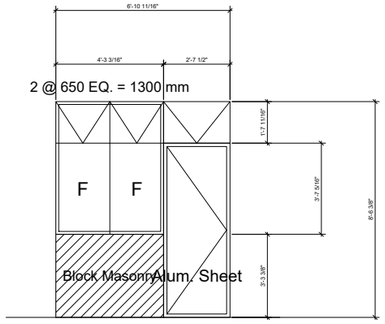
ROOF FLOOR - 01 No.

Floor Finish

AW8a ALUMINUM WINDOW

GROUND FLOOR - 01 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW + DOOR: MCL, LH, DS, BHG
FRAME / TRIM	ALUMINUM
OTHERS	

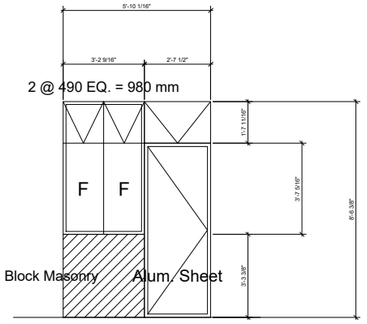


Floor Finish

AW9a ALUMINUM WINDOW

GROUND FLOOR - 03 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW + DOOR: MCL, LH, DS, BHG
FRAME / TRIM	ALUMINUM
OTHERS	



QTY AS PRINTED: GF -03, 01 Nos. (VERIFY)

Floor Finish

ALL DIMENSIONS IN FEET AND INCHES. SCALE 1:75

Drawing shall not be copied or used without permission.

CLIENT

HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT

SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

REVISIONS

REV	DESCRIPTION	DATE

SIGN-OFF

DRAWN BY
Zohaib Saleem Abbasi

CHECKED BY

APPROVED BY

DRAWING TITLE

WINDOWS

WINDOWS & LOUVERS (4/7)

DRAWING NO.

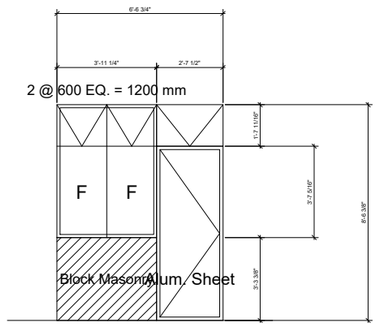
A - 49

REV 00

AW9b ALUMINUM WINDOW

GROUND FLOOR - 03 QTY.
FIRST FLOOR - 00 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW + DOOR: MCL, LH, DS, BHG
FRAME / TRIM	ALUMINUM
OTHERS	



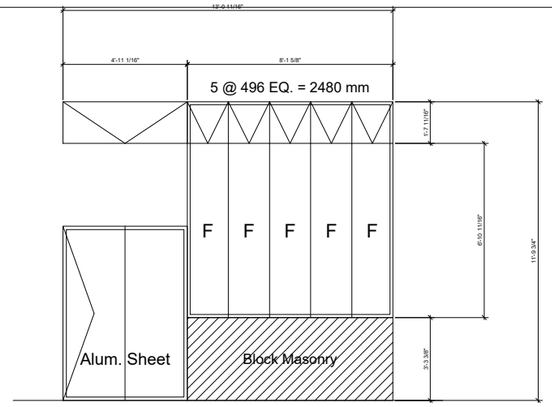
SHARES HEADER WITH AW9a (VERIFY)

Floor Finish

AW14 ALUMINUM WINDOW

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 02 02 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW + DOOR: MCL, LH, DS, BHG
FRAME / TRIM	ALUMINUM
OTHERS	

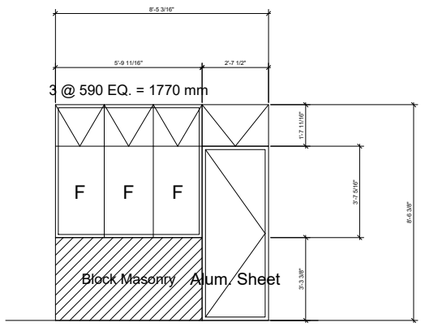


Floor Finish

AW15 ALUMINUM WINDOW

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 01 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW + DOOR: MCL, LH, DS, BHG
FRAME / TRIM	ALUMINUM
OTHERS	



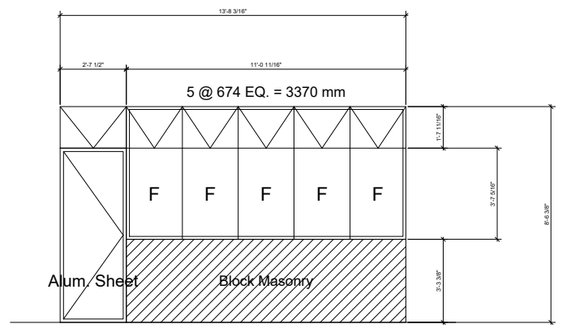
AW15 = LEFT BAY + RIGHT BAY (2570 / 4170), 1 No.

Floor Finish

AW15 ALUMINUM WINDOW

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 01 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW + DOOR: MCL, LH, DS, BHG
FRAME / TRIM	ALUMINUM
OTHERS	



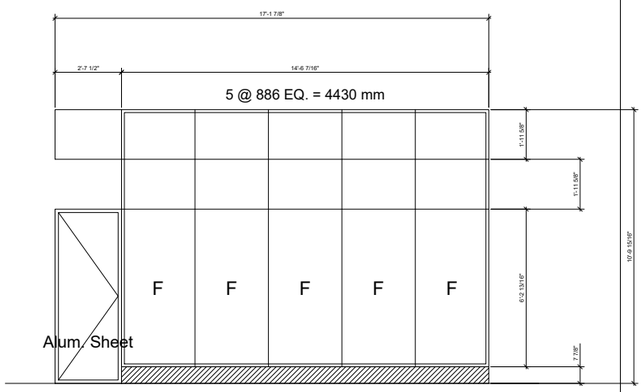
SEE AW15 (LEFT)

Floor Finish

AW18 ALUMINUM WINDOW

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 01 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	WINDOW + DOOR: MCL, LH, DS, BHG
FRAME / TRIM	ALUMINUM
OTHERS	



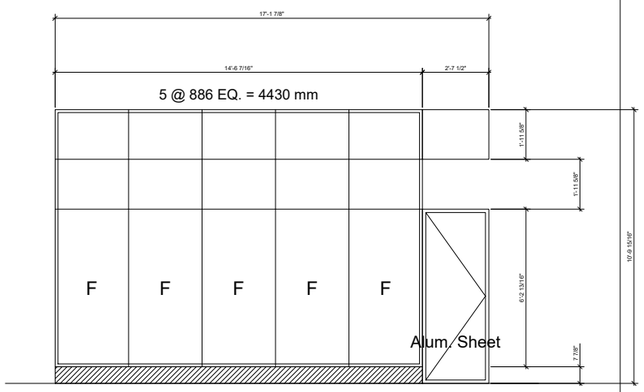
DOOR 2100 HIGH

Floor Finish

AW19 ALUMINUM WINDOW

GROUND FLOOR - 00 QTY.
FIRST FLOOR - 01 01 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	WINDOW + DOOR: MCL, LH, DS, BHG
FRAME / TRIM	ALUMINUM
OTHERS	



DOOR 2100 HIGH

Floor Finish

ALL DIMENSIONS IN FEET AND INCHES. SCALE 1:75

Drawing shall not be copied or used without permission.

CLIENT

HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT

SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

REVISIONS

REV	DESCRIPTION	DATE

SIGN-OFF

DRAWN BY
Zohaib Saleem Abbasi

CHECKED BY

APPROVED BY

DRAWING TITLE

WINDOWS

WINDOWS & LOUVERS (5/7)

DRAWING NO.

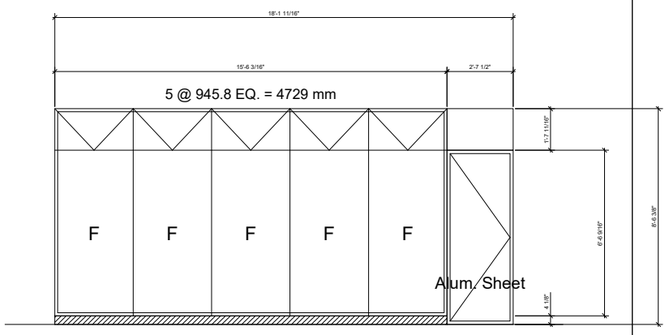
A - 50

REV 00

AW27 ALUMINUM WINDOW

GROUND FLOOR - 01 QTY. 01 Nos.
FIRST FLOOR - 00

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	WINDOW + DOOR: MCL, LH, DS, BHG
FRAME / TRIM	ALUMINUM
OTHERS	

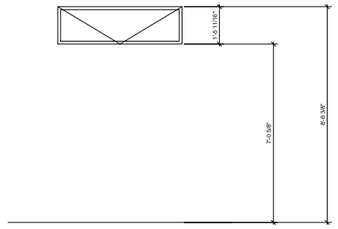


DOOR 2100 HIGH — Floor Finish

PW1 PVC WINDOW

GROUND FLOOR - 00 QTY. 02 Nos.
FIRST FLOOR - 02

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	PVC
GLAZING	
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	STEEL (PVC COVERED)
OTHERS	

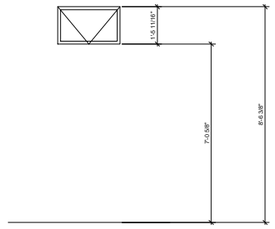


Floor Finish

PW2 PVC WINDOW

GROUND FLOOR - 00 QTY. 02 Nos.
FIRST FLOOR - 02

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	PVC
GLAZING	
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	STEEL (PVC COVERED)
OTHERS	

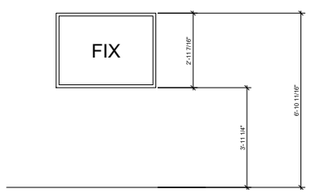


Floor Finish

X2 STAINLESS STEEL WINDOW

GROUND FLOOR - 01 QTY. 01 Nos.
FIRST FLOOR - 00

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	STAINLESS STEEL H.L.
GLAZING	LEAD GLASS (=Pb1.5mm)
HARDWARE	MCL, FB, PD, BHG, DS
FRAME / TRIM	LEAD SHEET Pb1.5mm
OTHERS	

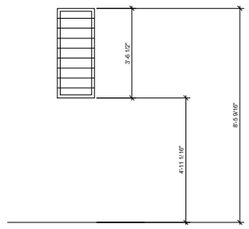


Floor Finish

G1 GLASS LOUVER

GROUND FLOOR - 21 QTY. 28 Nos.
FIRST FLOOR - 07

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	IS

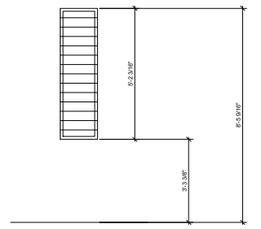


Floor Finish

G2 GLASS LOUVER

GROUND FLOOR - 11 QTY. 23 Nos.
FIRST FLOOR - 12

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	IS



Floor Finish

ALL DIMENSIONS IN FEET AND INCHES. SCALE 1:75

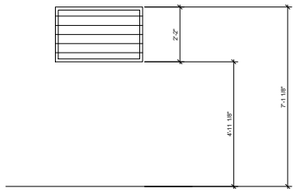
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi	WINDOWS	A - 51
					CHECKED BY	WINDOWS & LOUVERS (6/7)	REV 00
					APPROVED BY		

G4 GLASS LOUVER

GROUND FLOOR - 10 QTY.
FIRST FLOOR - 08 18 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 5mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	IS



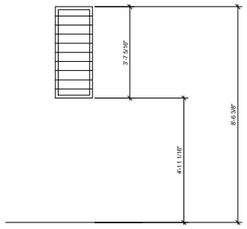
SILL 1057 OR 1502 AS PRINTED

Floor Finish

AG1 ALUMINUM LOUVER

GROUND FLOOR - 02 QTY.
FIRST FLOOR - 05 07 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	
HARDWARE	ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	IS

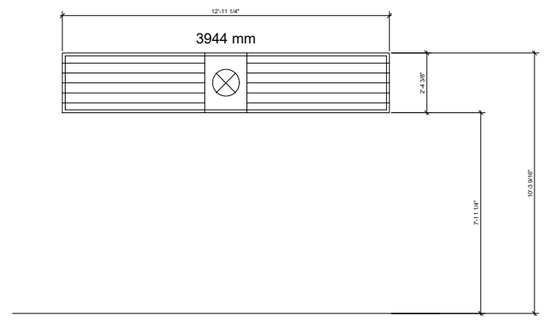


Floor Finish

AG02 ALUMINUM LOUVER

GROUND FLOOR - 02 QTY.
FIRST FLOOR - 00 02 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	
HARDWARE	ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	



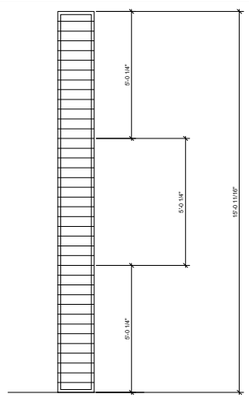
CENTRE PANEL = EXHAUST FAN (MECH. WORK)

Floor Finish

AW/AG1 ALUMINUM WINDOW

GROUND FLOOR - 13 QTY.
FIRST FLOOR - 00 13 Nos.

LOCATION	AS PER PLAN
DIMENSION	AS BELOW
FINISH	ANODIZED
GLAZING	FLOAT GLASS 8mm THK
HARDWARE	WINDOW-ALL NECESSARY ITEMS
FRAME / TRIM	ALUMINUM
OTHERS	IS



LOUVER / FIXED GLASS WITH FLY MESH, HEIGHT VERIFY

Floor Finish

ALL DIMENSIONS IN FEET AND INCHES. SCALE 1:75

Drawing shall not be copied or used without permission.

CLIENT

HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT

SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

REVISIONS

REV	DESCRIPTION	DATE

SIGN-OFF

DRAWN BY
Zohaib Saleem Abbasi

CHECKED BY

APPROVED BY

DRAWING TITLE

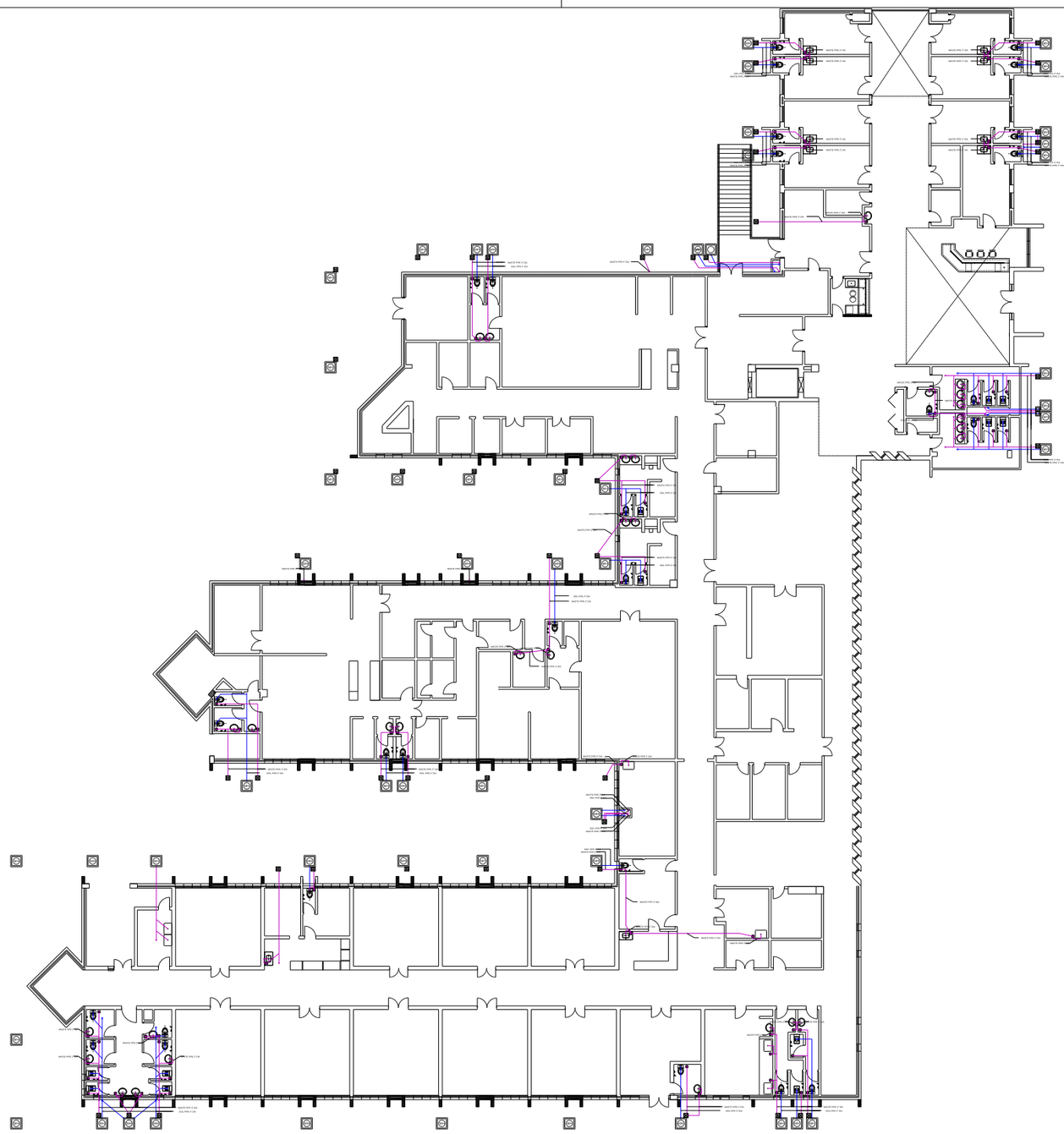
WINDOWS

WINDOWS & LOUVERS (7/7)

DRAWING NO.

A - 52

REV 00

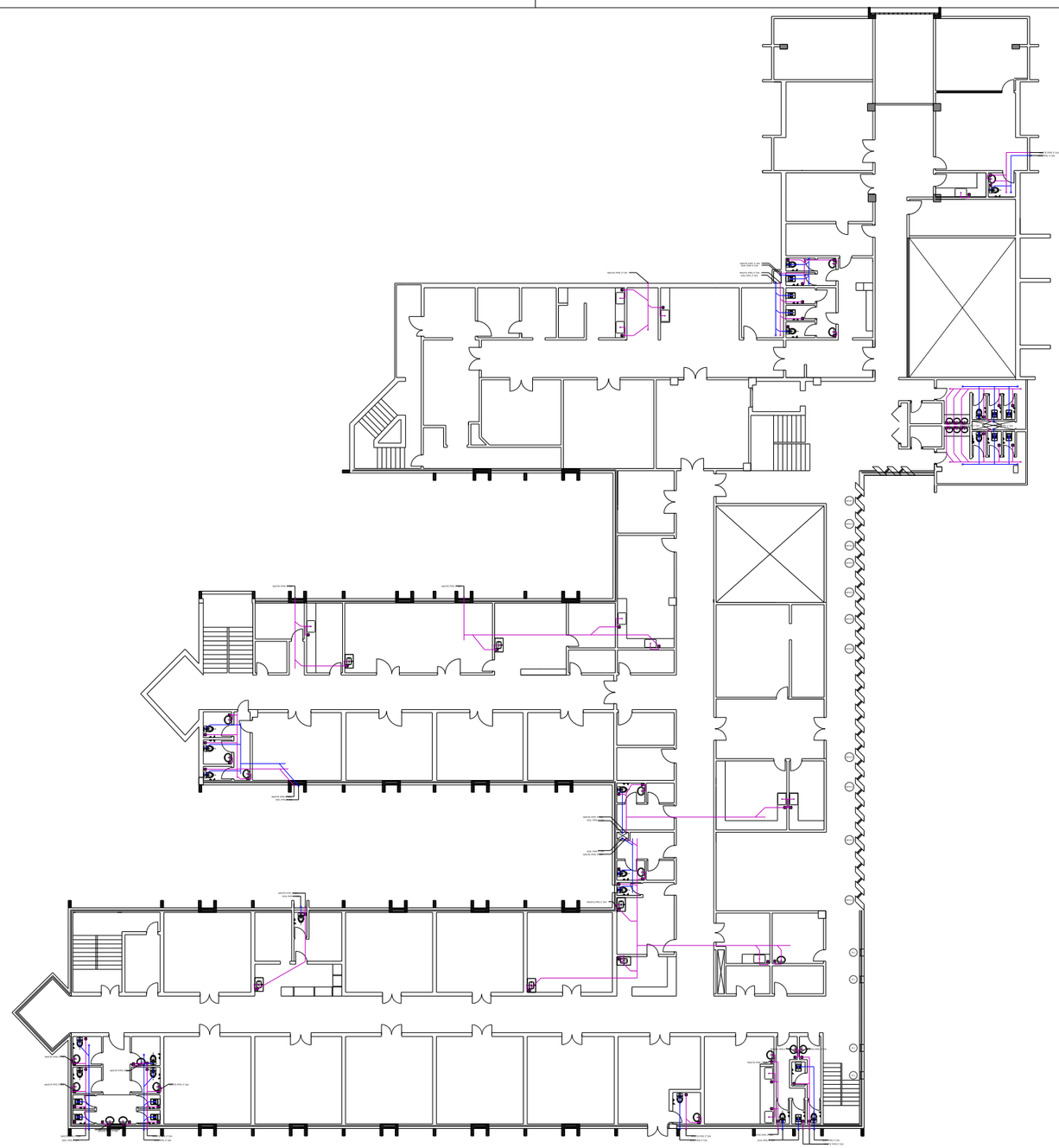


GROUND FLOOR PLAN DRAINAGE LAYOUT PLAN

SCALE: 1:350 ALL DIMENSIONS IN INCHES

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	DRAINAGE LAYOUT PLAN GROUND FLOOR	P - 01 REV 00



FIRST FLOOR PLAN DRAINAGE LAYOUT PLAN

SCALE: 1:350 ALL DIMENSIONS IN INCHES

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	DRAINAGE LAYOUT PLAN FIRST FLOOR	P - 02 REV 00

GENERAL NOTES - DRAINAGE

1. THESE DRAWINGS SHALL BE READ WITH THE ARCHITECTURAL, STRUCTURAL AND OTHER SERVICES DRAWINGS. ANY DISCREPANCY SHALL BE REPORTED TO THE ENGINEER BEFORE EXECUTION.
2. ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE. PIPE SIZES ARE NOMINAL INTERNAL DIAMETERS. DO NOT SCALE FROM THE DRAWINGS; VERIFY ALL DIMENSIONS AT SITE.
3. SOIL PIPES (WC / URINAL) ARE 4" DIA. WASTE PIPES ARE 3" DIA, EXCEPT 2" DIA FOR WASH BASIN / SINK CONNECTIONS TO FLOOR DRAIN, AS INDICATED ON THE PLANS.
4. ALL PIPES AND FITTINGS SHALL BE OF THE MATERIAL AND CLASS SPECIFIED IN THE APPROVED SPECIFICATIONS / BOQ AND SHALL BE JOINTED STRICTLY AS PER MANUFACTURER'S RECOMMENDATIONS.
5. MINIMUM GRADIENTS (UNLESS NOTED): 4" DIA - 1:40, 3" DIA - 1:30, 2" DIA - 1:25. PIPES SHALL BE LAID TO UNIFORM GRADE BETWEEN POINTS WITHOUT SAGS OR HUMPS.
6. EVERY FIXTURE SHALL BE PROVIDED WITH A WATER SEAL TRAP OF MINIMUM 50 mm (2") SEAL. FLOOR DRAINS SHALL BE FITTED WITH REMOVABLE CP / SS GRATING AND P-TRAP.
7. MANHOLES / INSPECTION CHAMBERS SHALL BE PROVIDED AT EVERY CHANGE OF DIRECTION, GRADE OR PIPE SIZE, AT JUNCTIONS AND AT MAXIMUM 50 FT (15 m) INTERVALS ON STRAIGHT RUNS.
8. SOIL / WASTE STACKS SHALL BE CONTINUED UPWARDS AS VENT PIPES AND TERMINATED 600 mm ABOVE FINISHED ROOF LEVEL WITH A VENT COWL / WIRE BALLOON GUARD.
9. CLEANOUTS (ACCESS PLUGS) SHALL BE PROVIDED AT THE BASE OF EVERY STACK AND AT ACCESSIBLE LOCATIONS ON LONG HORIZONTAL RUNS. BENDS AT THE BASE OF STACKS SHALL BE LONG RADIUS.
10. BRANCH CONNECTIONS SHALL BE MADE WITH 45 DEG JUNCTIONS (Y-BRANCHES). RIGHT-ANGLE (T) CONNECTIONS ARE NOT PERMITTED ON HORIZONTAL DRAINS.
11. PIPES BELOW GROUND SHALL BE LAID ON A 100 mm SAND BED AND SURROUNDED WITH 150 mm SAND ABOVE THE CROWN (SEE DETAIL A - 66). MINIMUM COVER 450 mm, 900 mm UNDER ROADS / VEHICULAR AREAS.
12. PIPES PASSING THROUGH WALLS, BEAMS OR SLABS SHALL BE PROVIDED WITH SLEEVES. NO PIPE SHALL BE EMBEDDED IN STRUCTURAL MEMBERS WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.
13. HORIZONTAL PIPES ABOVE GROUND SHALL BE SUPPORTED AT MAX. 4 FT (1.2 m) CENTRES USING APPROVED CLAMPS. VERTICAL PIPES SHALL BE CLAMPED AT EVERY FLOOR AND AT MAX. 6 FT (1.8 m).
14. ALL DRAINAGE WORK SHALL BE TESTED BEFORE BACKFILLING OR CONCEALMENT BY WATER / AIR TEST AS PER SPECIFICATIONS AND WITNESSED BY THE ENGINEER. TEST RECORDS SHALL BE SUBMITTED.
15. DRAINAGE FROM THE BUILDING SHALL DISCHARGE TO THE EXTERNAL SEWER / DISPOSAL SYSTEM AS SHOWN ON THE SITE DRAINAGE DRAWINGS. THE CONTRACTOR SHALL VERIFY INVERT LEVELS AT SITE.
16. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL BEFORE EXECUTION AND PREPARE AS-BUILT DRAWINGS ON COMPLETION.

LEGEND

———	SOIL PIPE 4" DIA (AS SHOWN ON PLAN)
———	WASTE PIPE 3" / 2" DIA (AS SHOWN ON PLAN)
○	VERTICAL SOIL PIPE / STACK
○	VERTICAL WASTE PIPE
MH	MANHOLE / INSPECTION CHAMBER
GT	GULLY TRAP

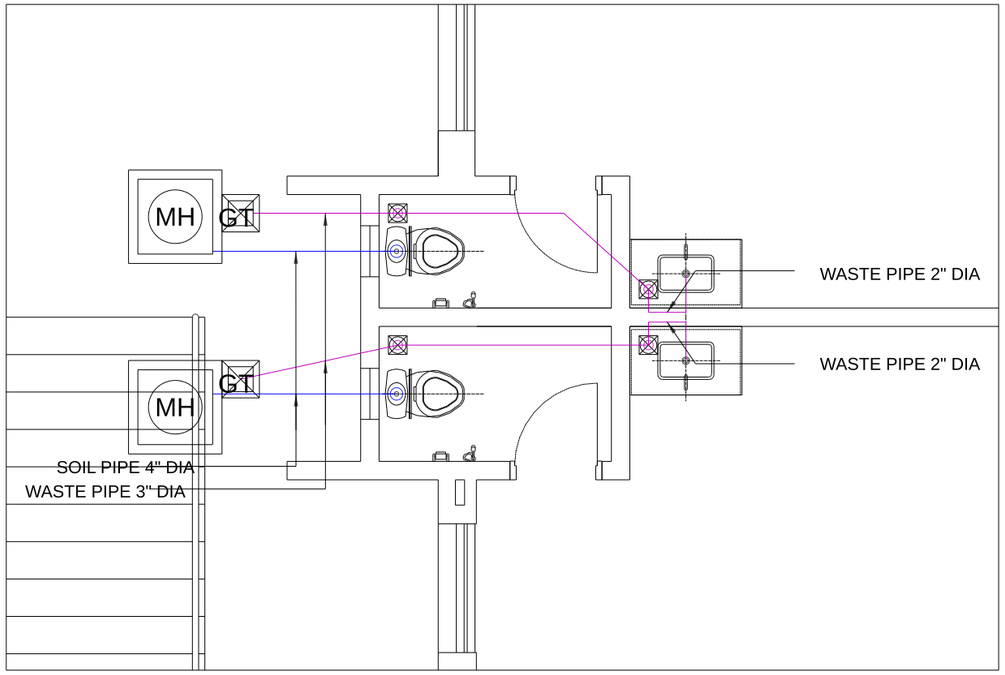
ABBREVIATIONS

GL	GROUND LEVEL
FFL	FINISHED FLOOR LEVEL
PCC	PLAIN CEMENT CONCRETE
RCC	REINFORCED CEMENT CONCRETE
CI	CAST IRON
CP / SS	CHROME PLATED / STAINLESS STEEL
NRV	NON-RETURN VALVE
OHT / UGT	OVERHEAD / UNDERGROUND TANK
CW / HW	COLD WATER / HOT WATER
HWR	HOT WATER RETURN
WC	WATER CLOSET
WHB	WASH HAND BASIN
FD	FLOOR DRAIN

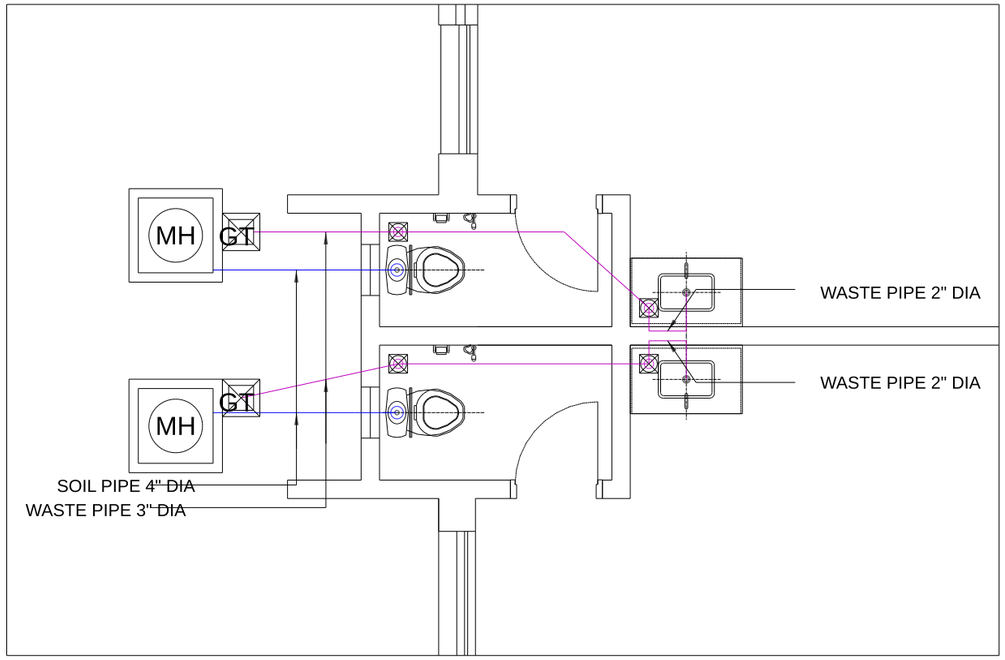
NOTE: SYMBOLS / SIZES ARE AS SHOWN ON THE PLANS.

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	GENERAL NOTES DRAINAGE SYSTEM	P - 03 REV 00



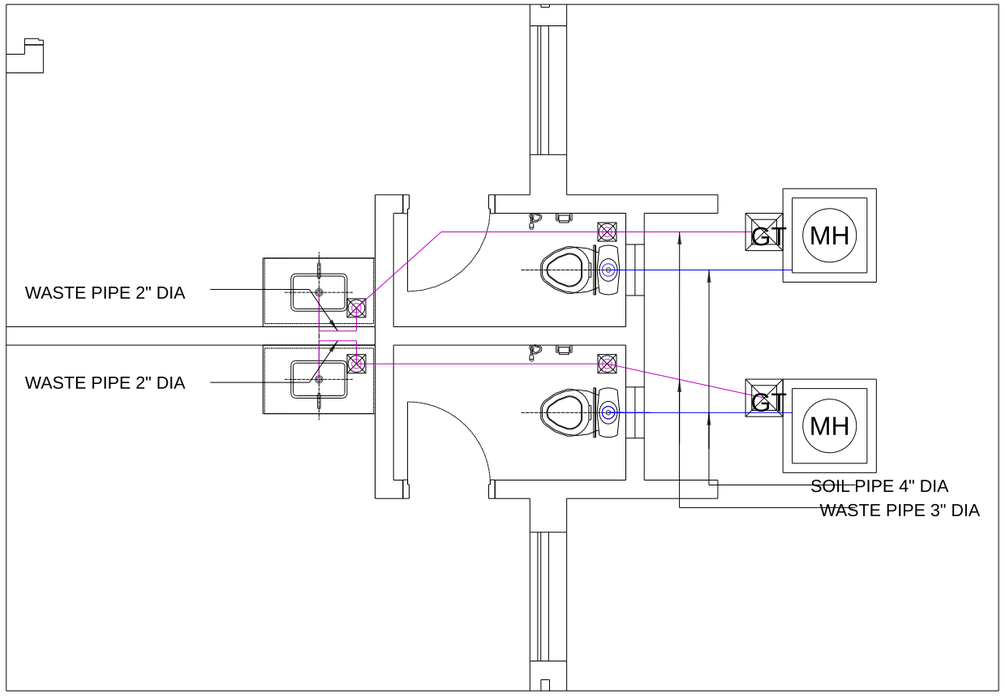
3 ENLARGED PLAN - 3 (GROUND FLOOR)
SCALE 1:50



1 ENLARGED PLAN - 1 (GROUND FLOOR)
SCALE 1:50

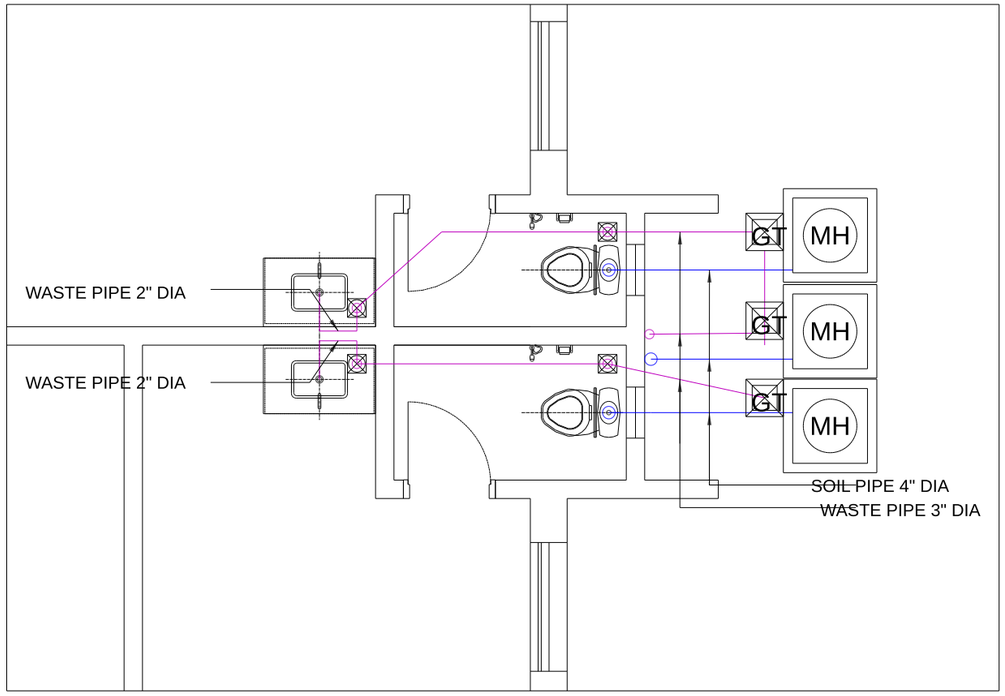
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	ENLARGED PLANS DRAINAGE SYSTEM - GROUND FLOOR	P - 04 REV 00



2 ENLARGED PLAN - 2 (GROUND FLOOR)

SCALE 1:50

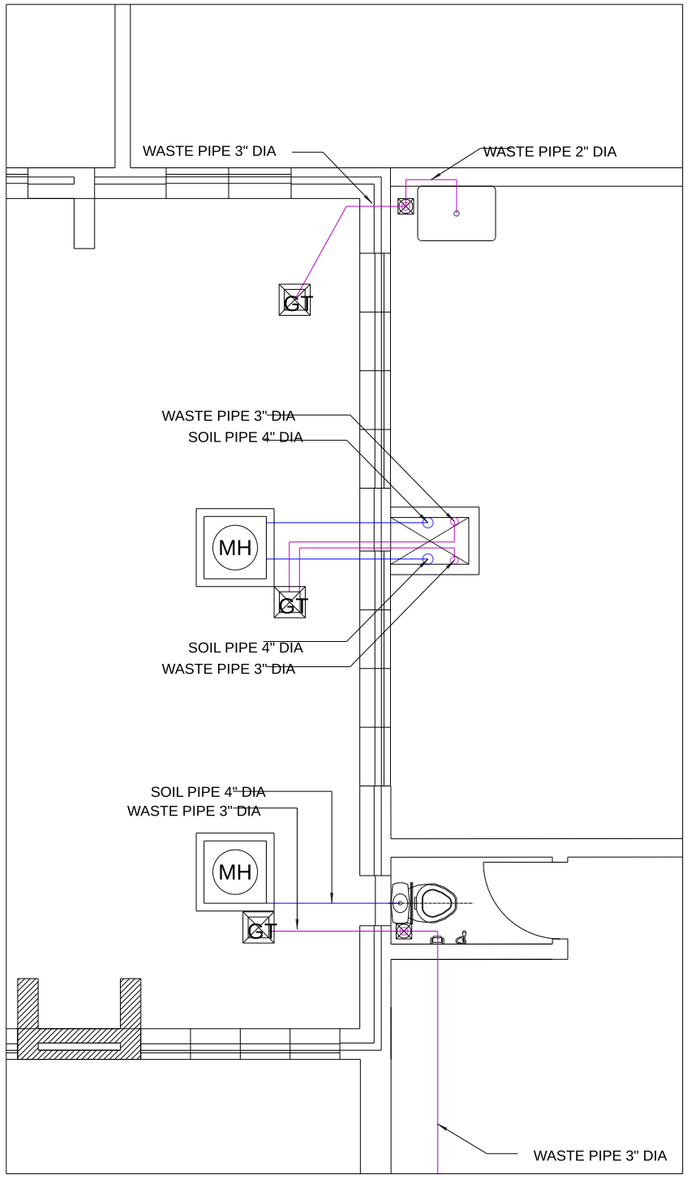


4 ENLARGED PLAN - 4 (GROUND FLOOR)

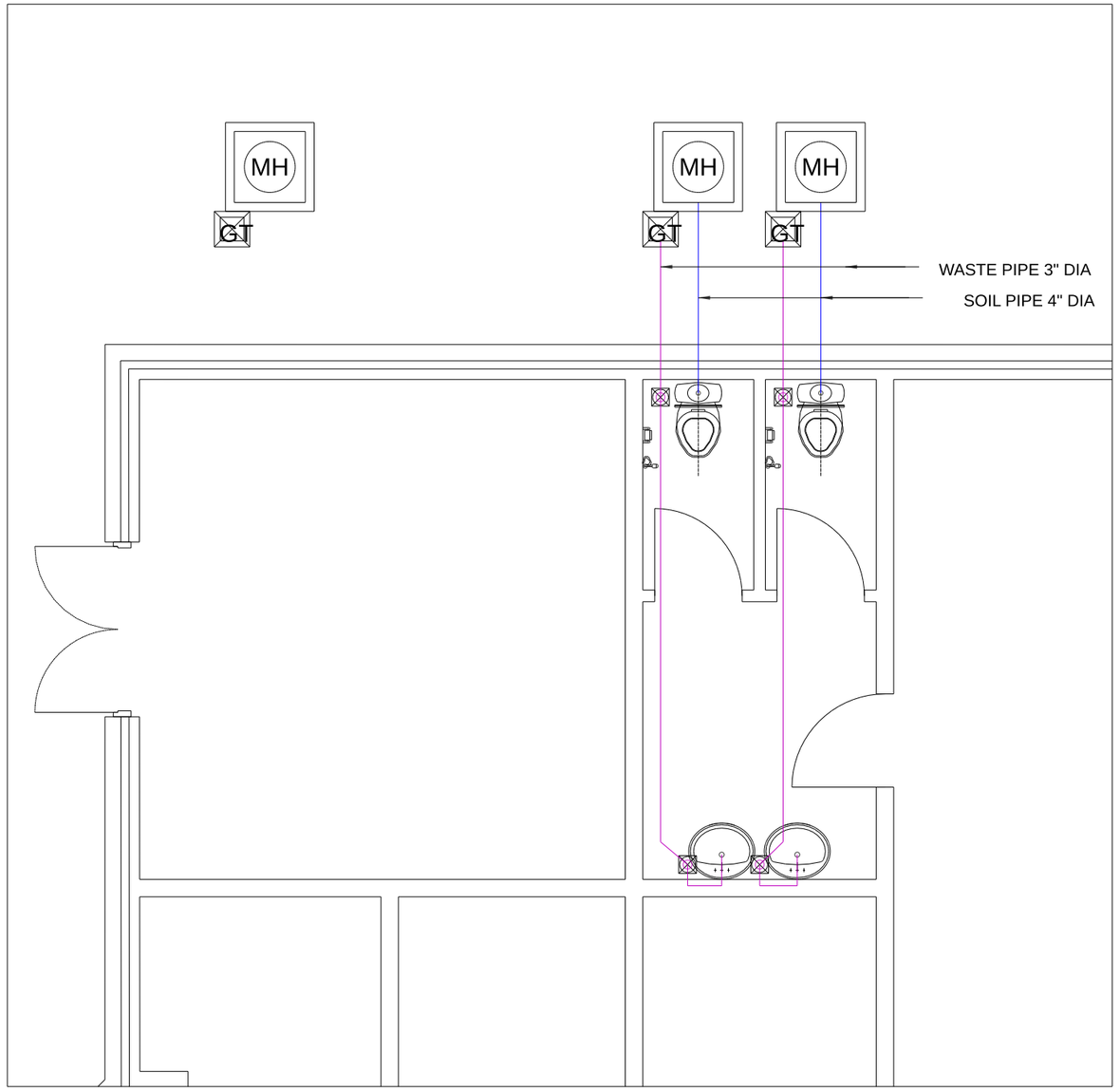
SCALE 1:50

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	ENLARGED PLANS DRAINAGE SYSTEM - GROUND FLOOR	P - 05 REV 00



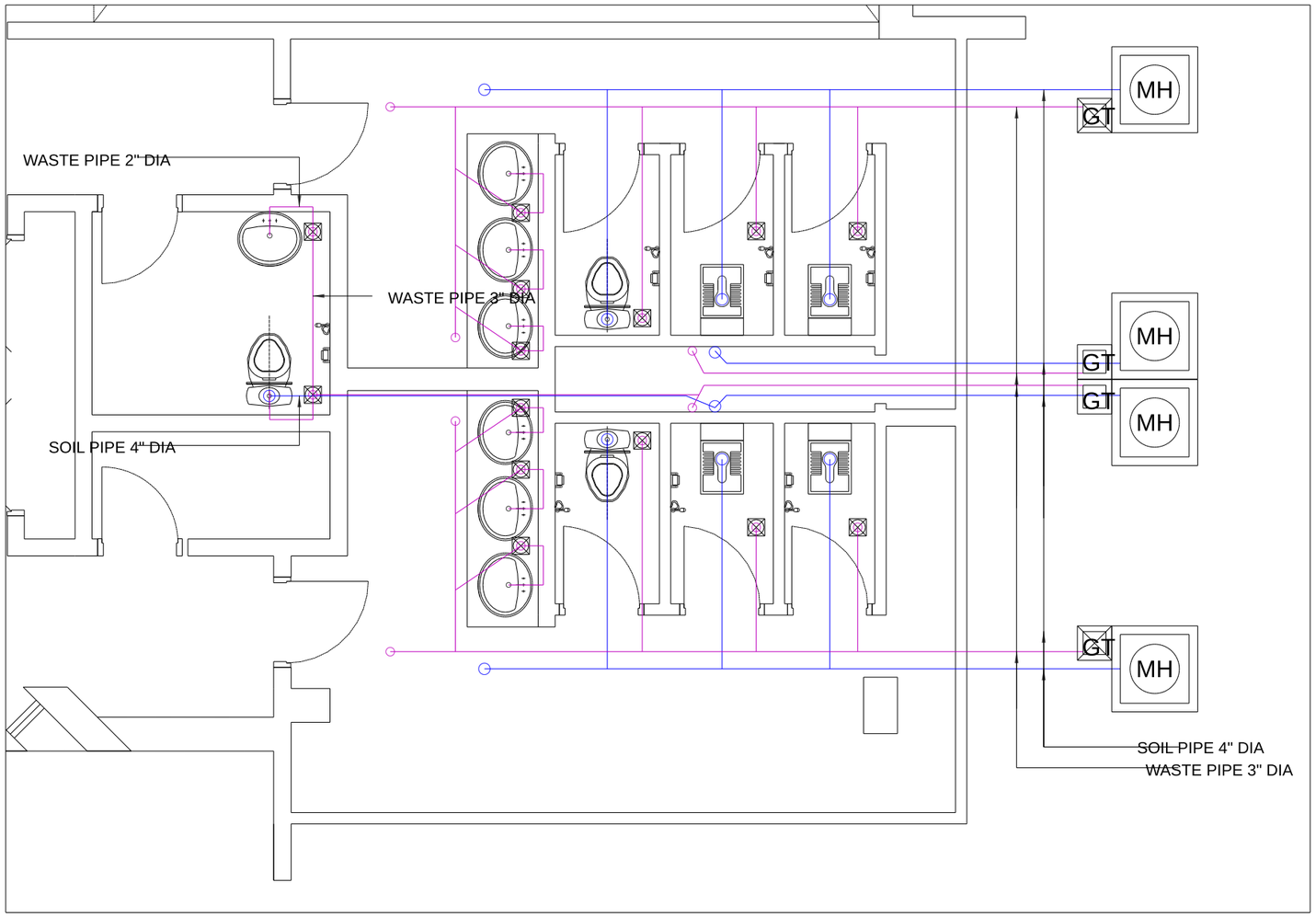
11 ENLARGED PLAN - 11 (GROUND FLOOR)
SCALE 1:60



5 ENLARGED PLAN - 5 (GROUND FLOOR)
SCALE 1:50

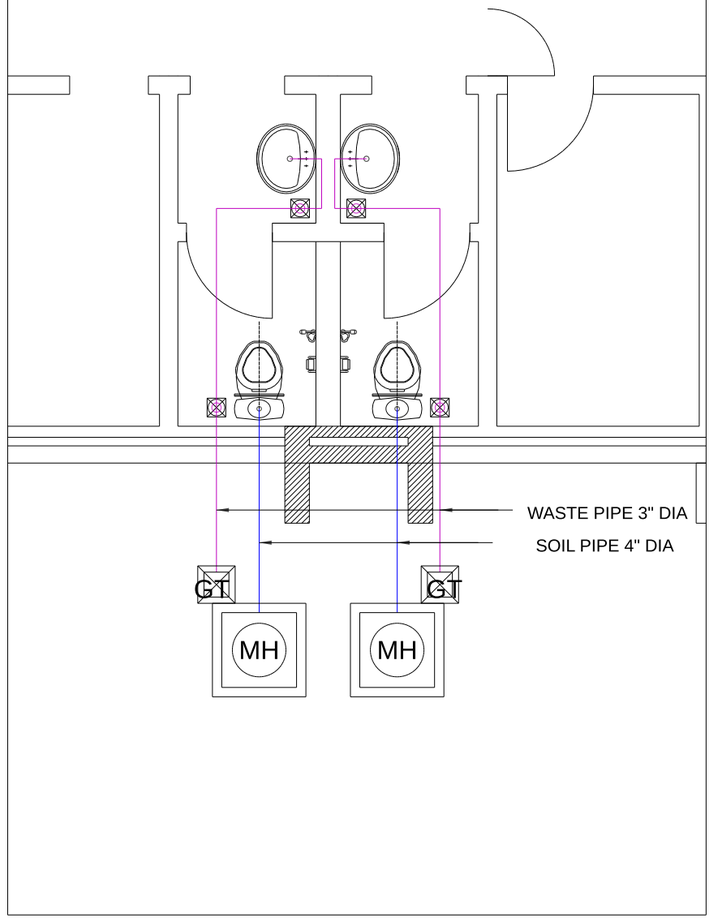
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	ENLARGED PLANS DRAINAGE SYSTEM - GROUND FLOOR	P - 06 REV 00



6 ENLARGED PLAN - 6 (GROUND FLOOR)

SCALE 1:50

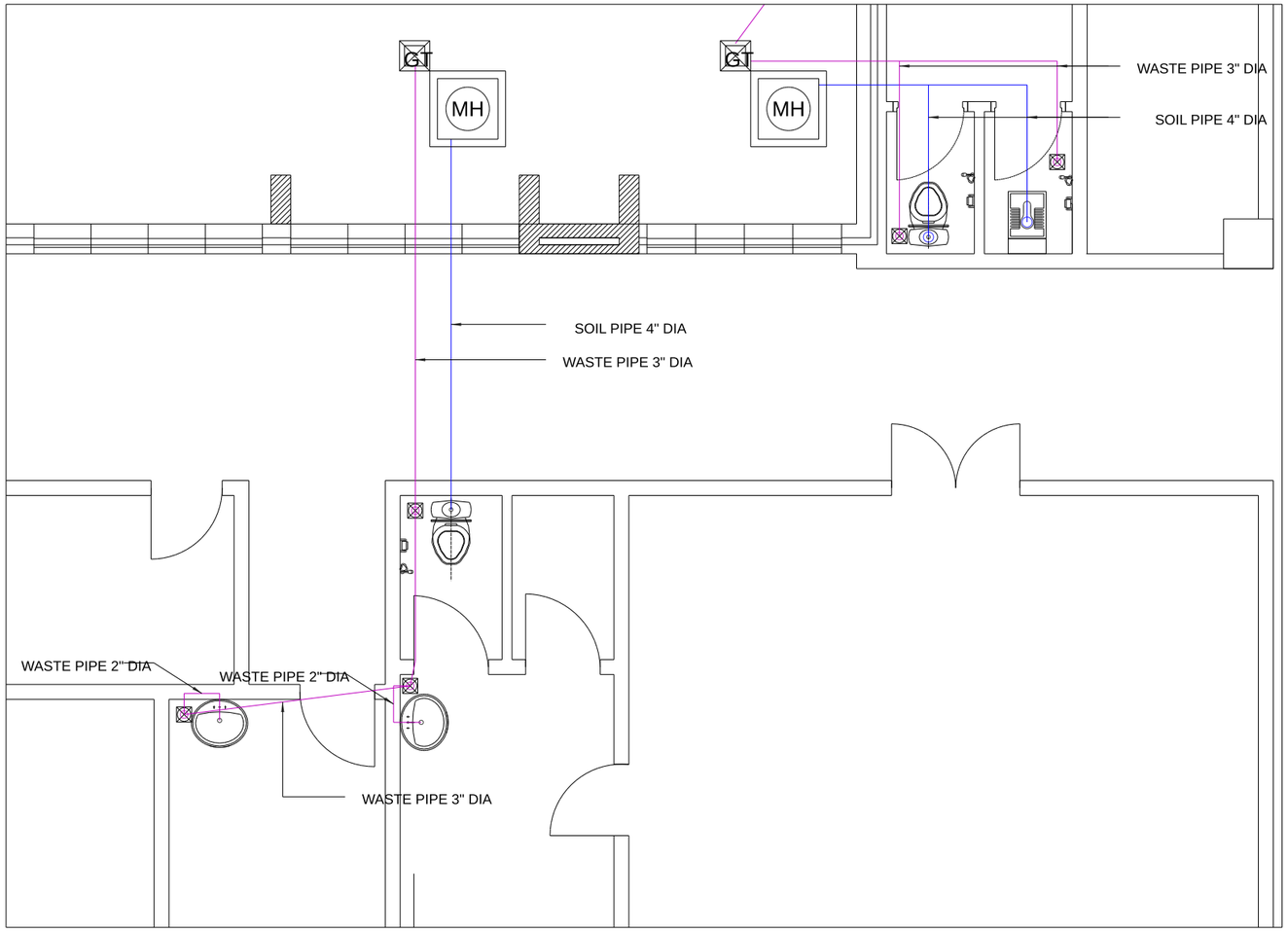


10 ENLARGED PLAN - 10 (GROUND FLOOR)

SCALE 1:50

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	ENLARGED PLANS DRAINAGE SYSTEM - GROUND FLOOR	P - 07 REV 00

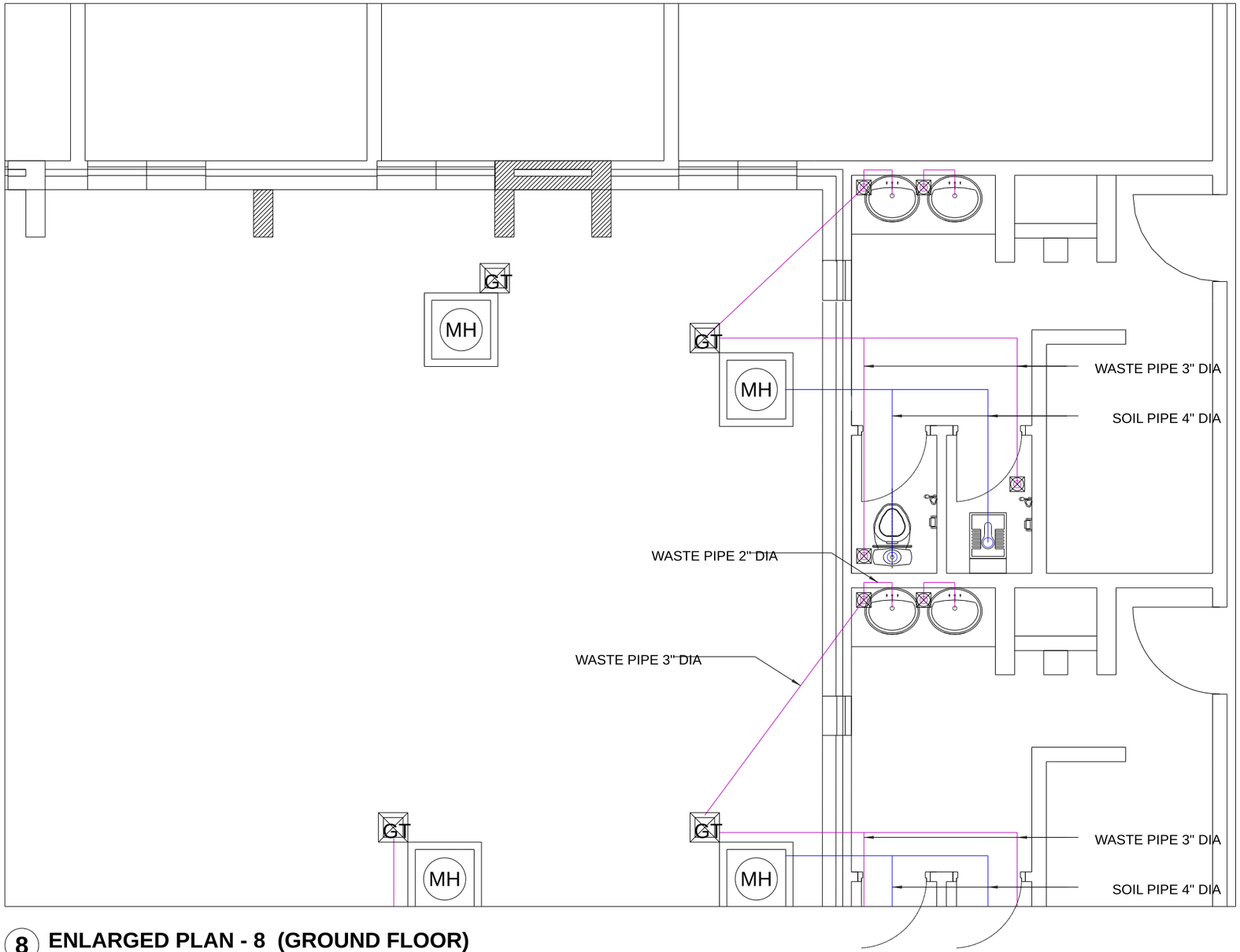


7 ENLARGED PLAN - 7 (GROUND FLOOR)

SCALE 1:60

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	ENLARGED PLANS DRAINAGE SYSTEM - GROUND FLOOR	P - 08 REV 00

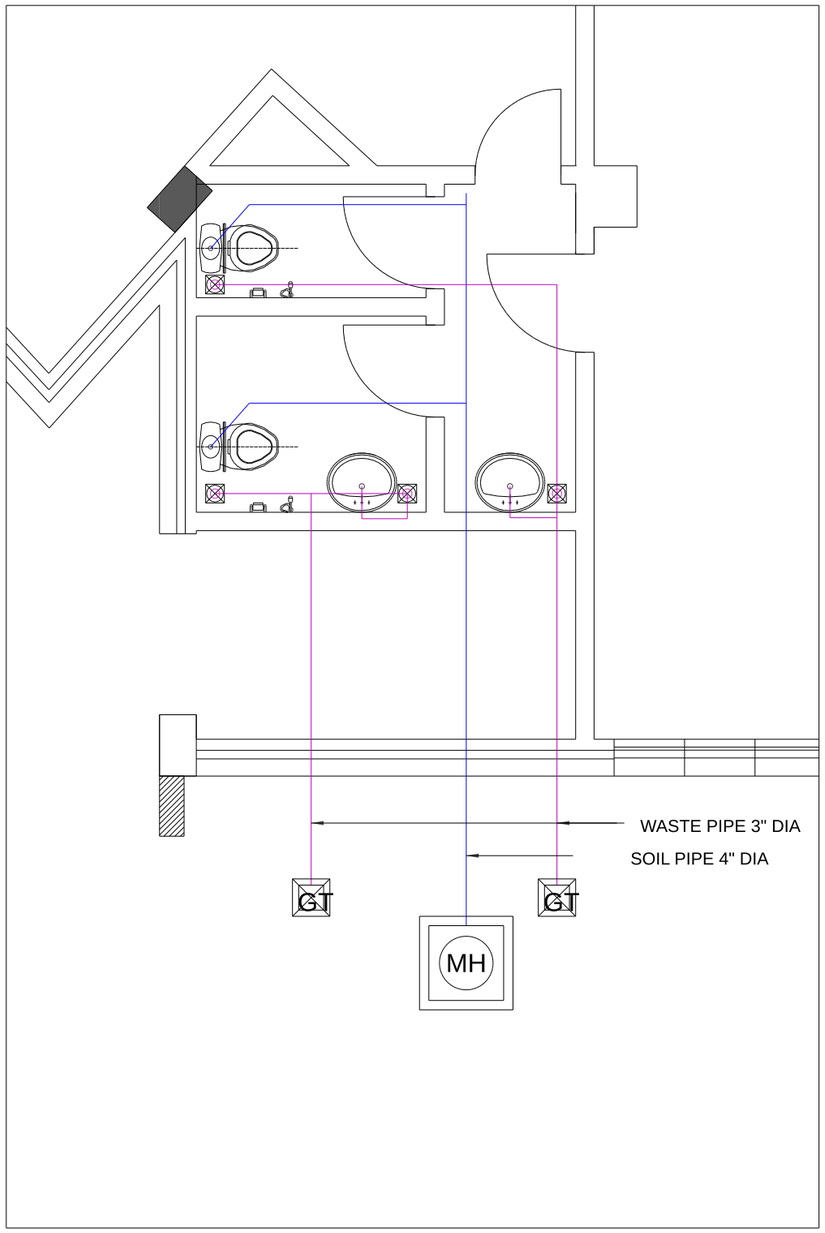


8 ENLARGED PLAN - 8 (GROUND FLOOR)

SCALE 1:50

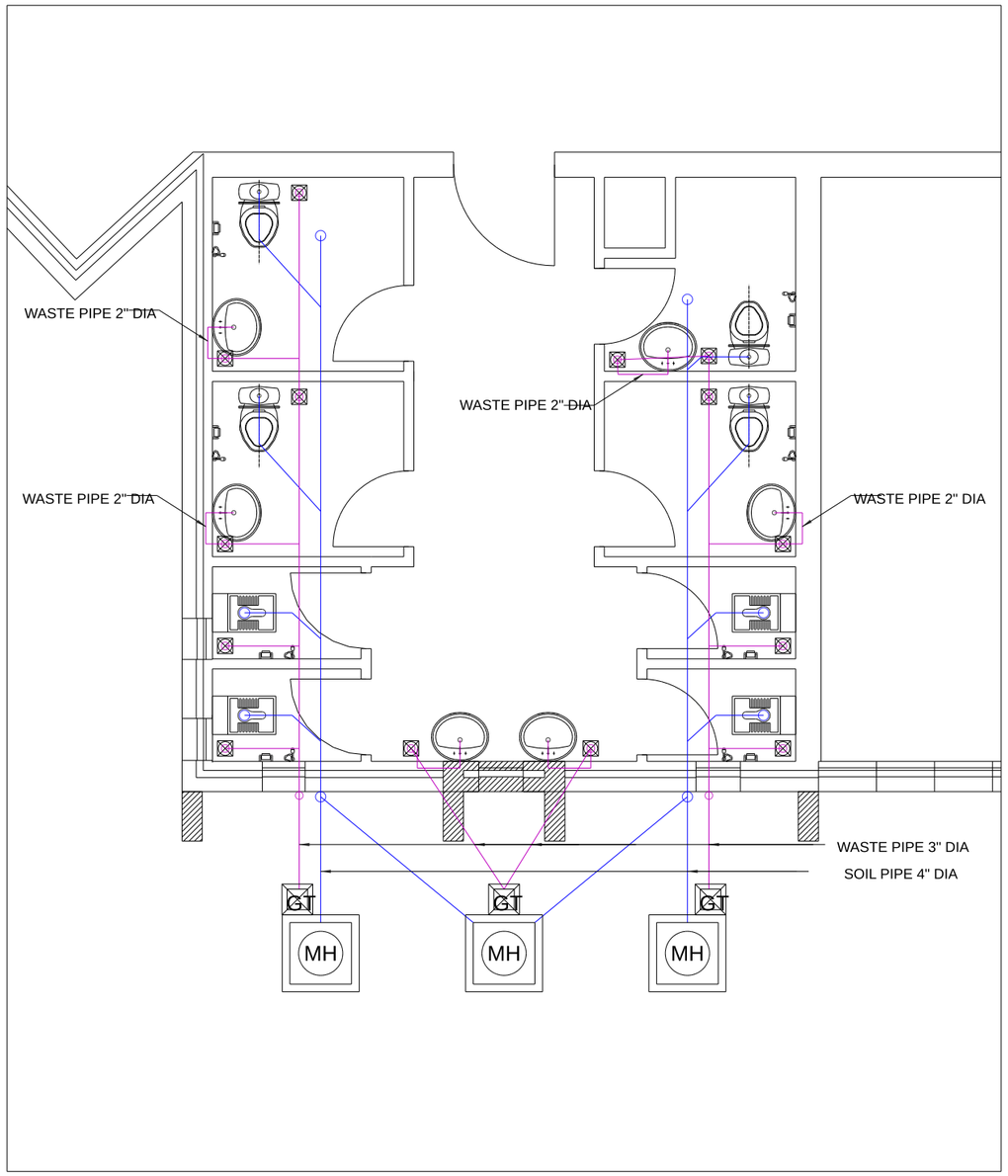
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	ENLARGED PLANS DRAINAGE SYSTEM - GROUND FLOOR	P - 09 REV 00



9 ENLARGED PLAN - 9 (GROUND FLOOR)

SCALE 1:50

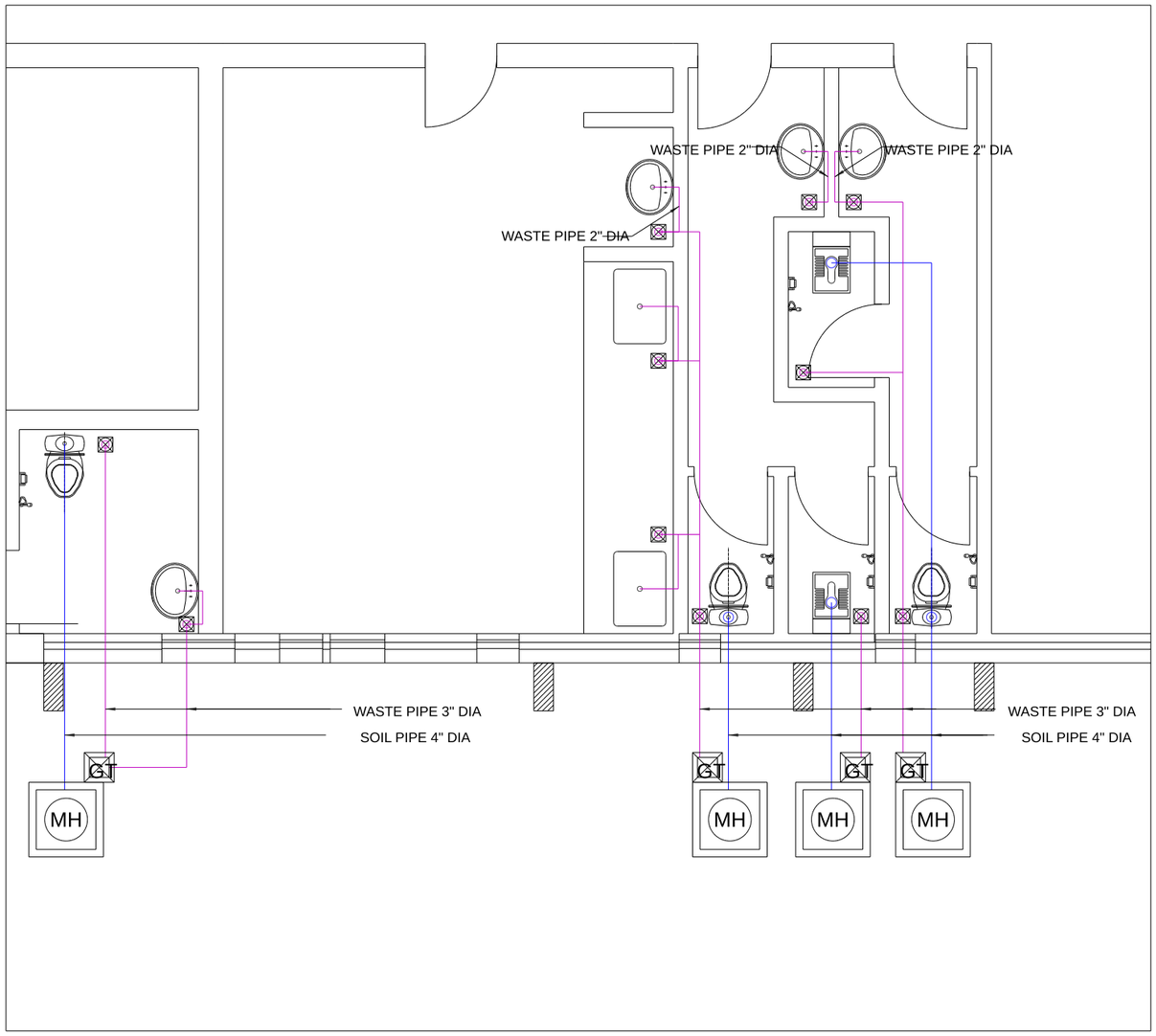


12 ENLARGED PLAN - 12 (GROUND FLOOR)

SCALE 1:60

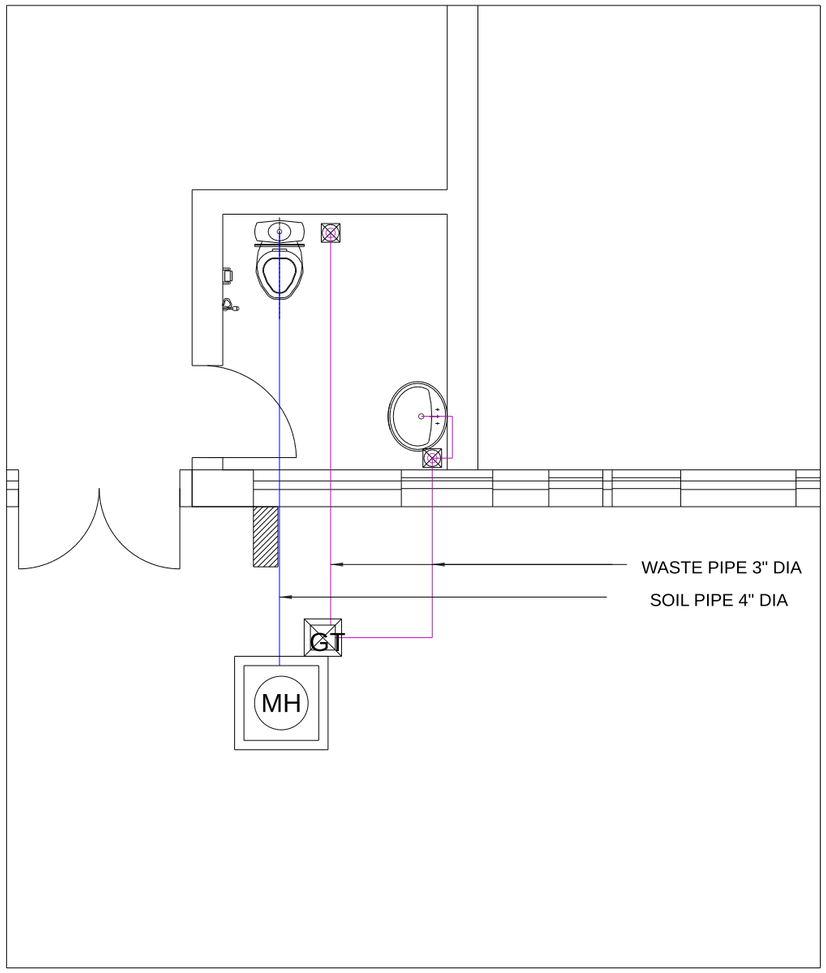
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	ENLARGED PLANS DRAINAGE SYSTEM - GROUND FLOOR	P - 10 REV 00



14 ENLARGED PLAN - 14 (GROUND FLOOR)

SCALE 1:60

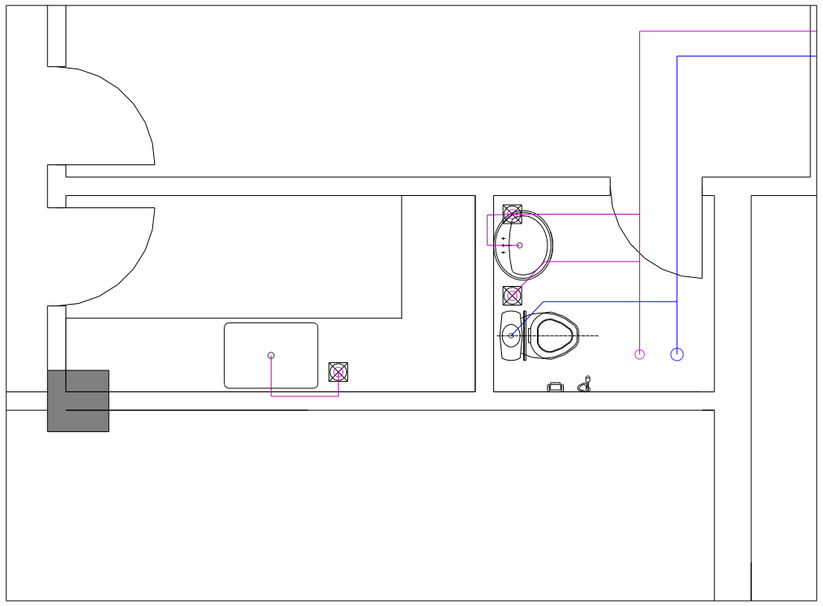


13 ENLARGED PLAN - 13 (GROUND FLOOR)

SCALE 1:50

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	ENLARGED PLANS DRAINAGE SYSTEM - GROUND FLOOR	P - 11 REV 00

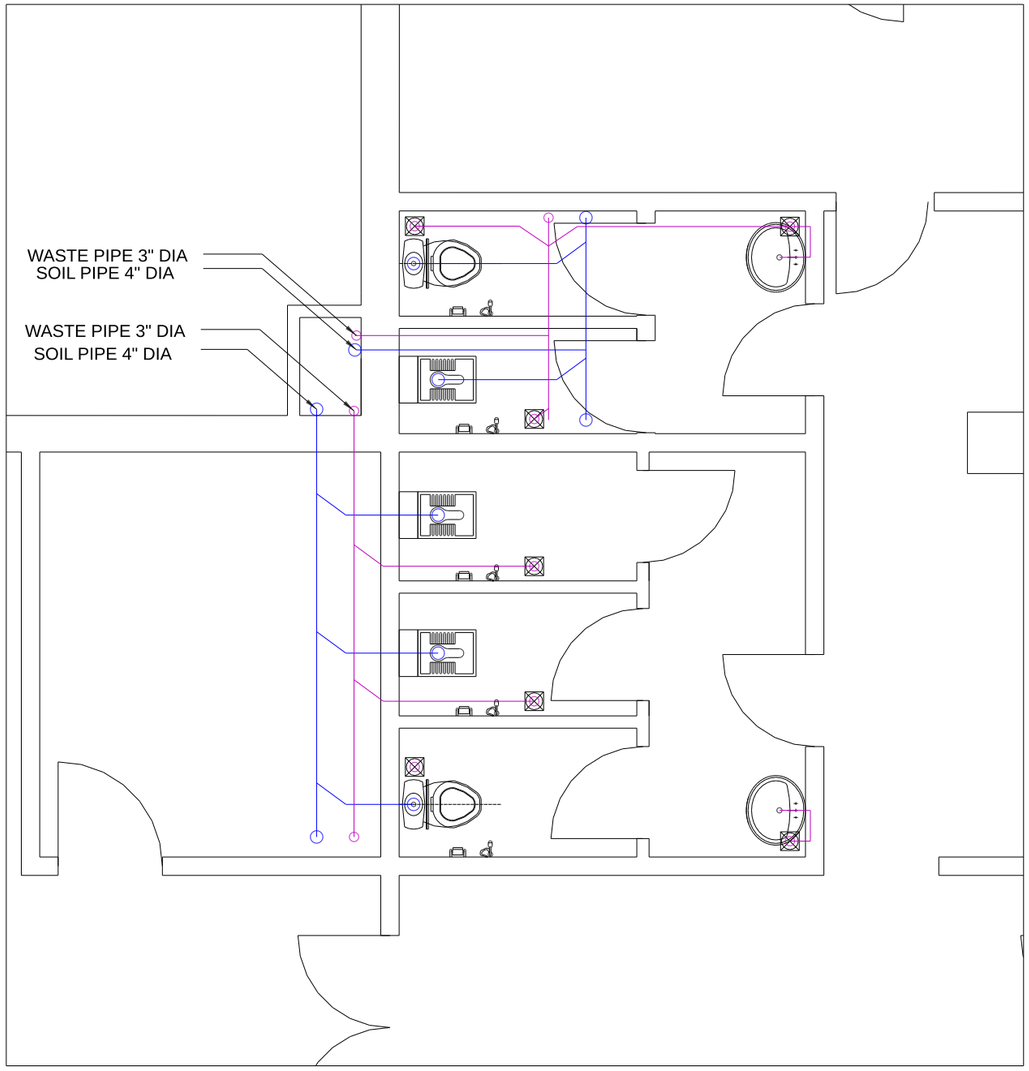


1 ENLARGED PLAN - 1 (FIRST FLOOR)

SCALE 1:50

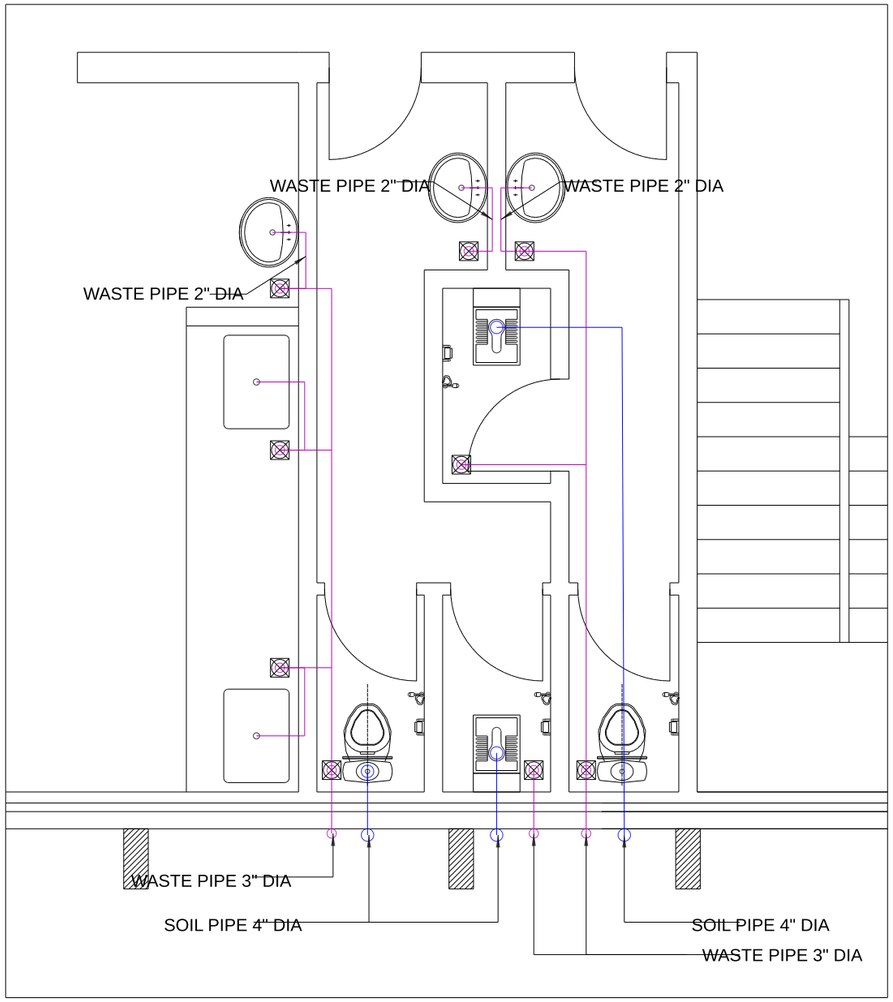
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	ENLARGED PLANS DRAINAGE SYSTEM - FIRST FLOOR	P - 12 REV 00



2 ENLARGED PLAN - 2 (FIRST FLOOR)

SCALE 1:50

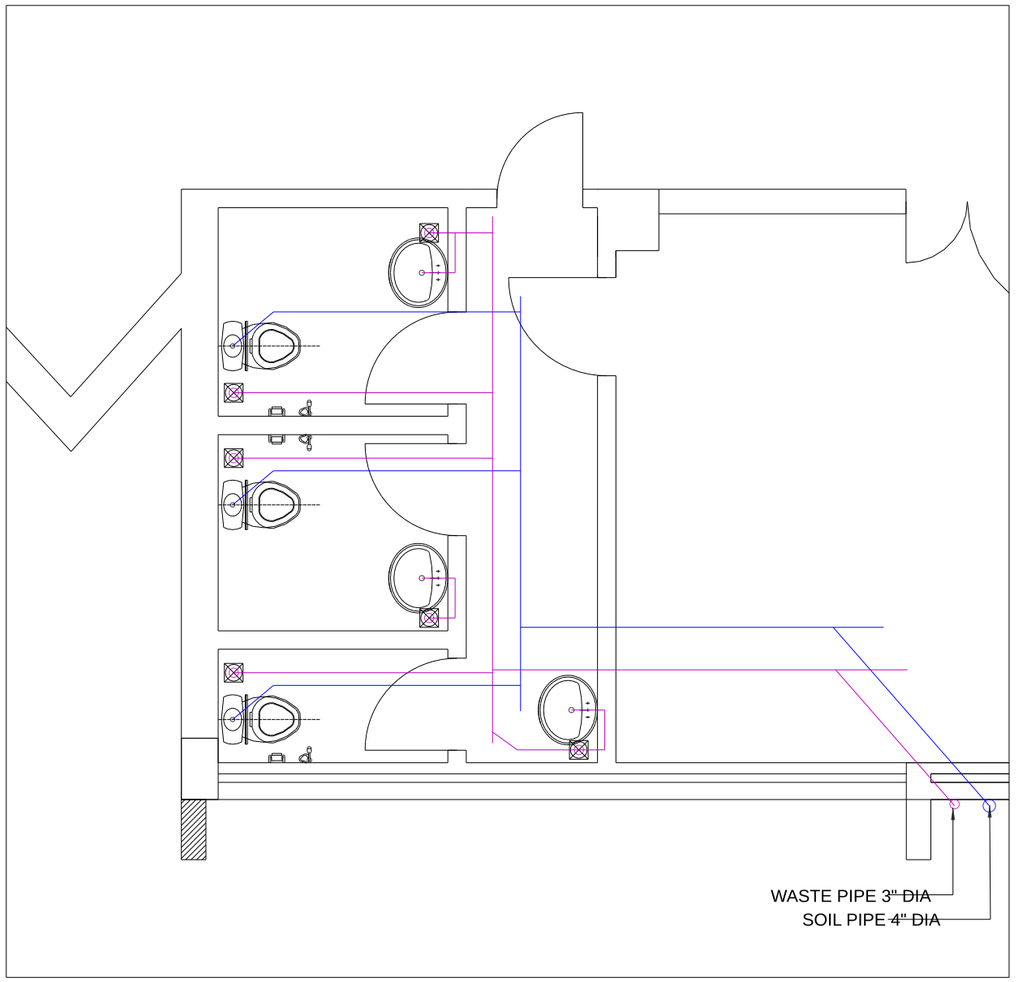


7 ENLARGED PLAN - 7 (FIRST FLOOR)

SCALE 1:50

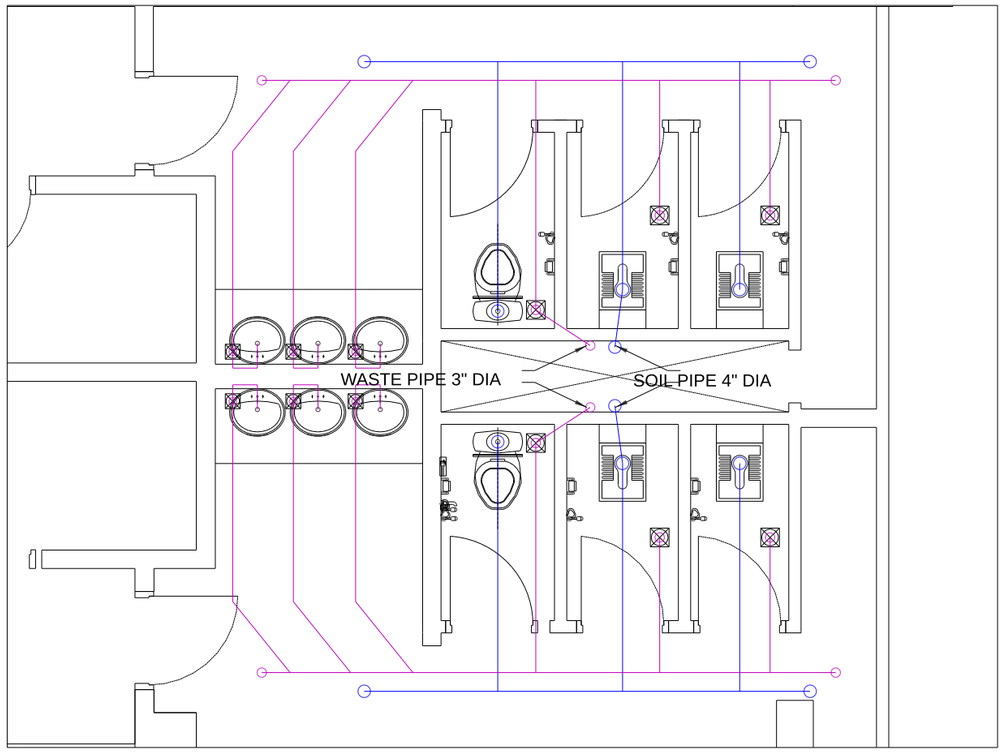
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	ENLARGED PLANS DRAINAGE SYSTEM - FIRST FLOOR	P - 13 REV 00



4 ENLARGED PLAN - 4 (FIRST FLOOR)

SCALE 1:50

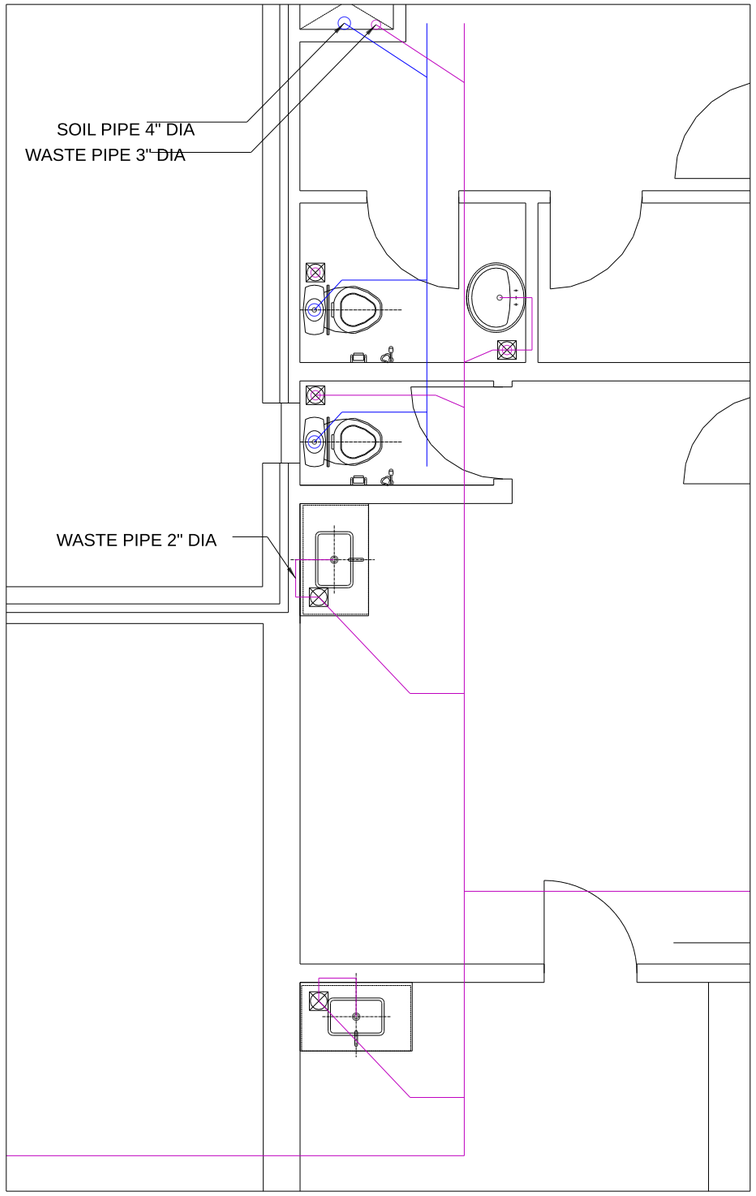


3 ENLARGED PLAN - 3 (FIRST FLOOR)

SCALE 1:50

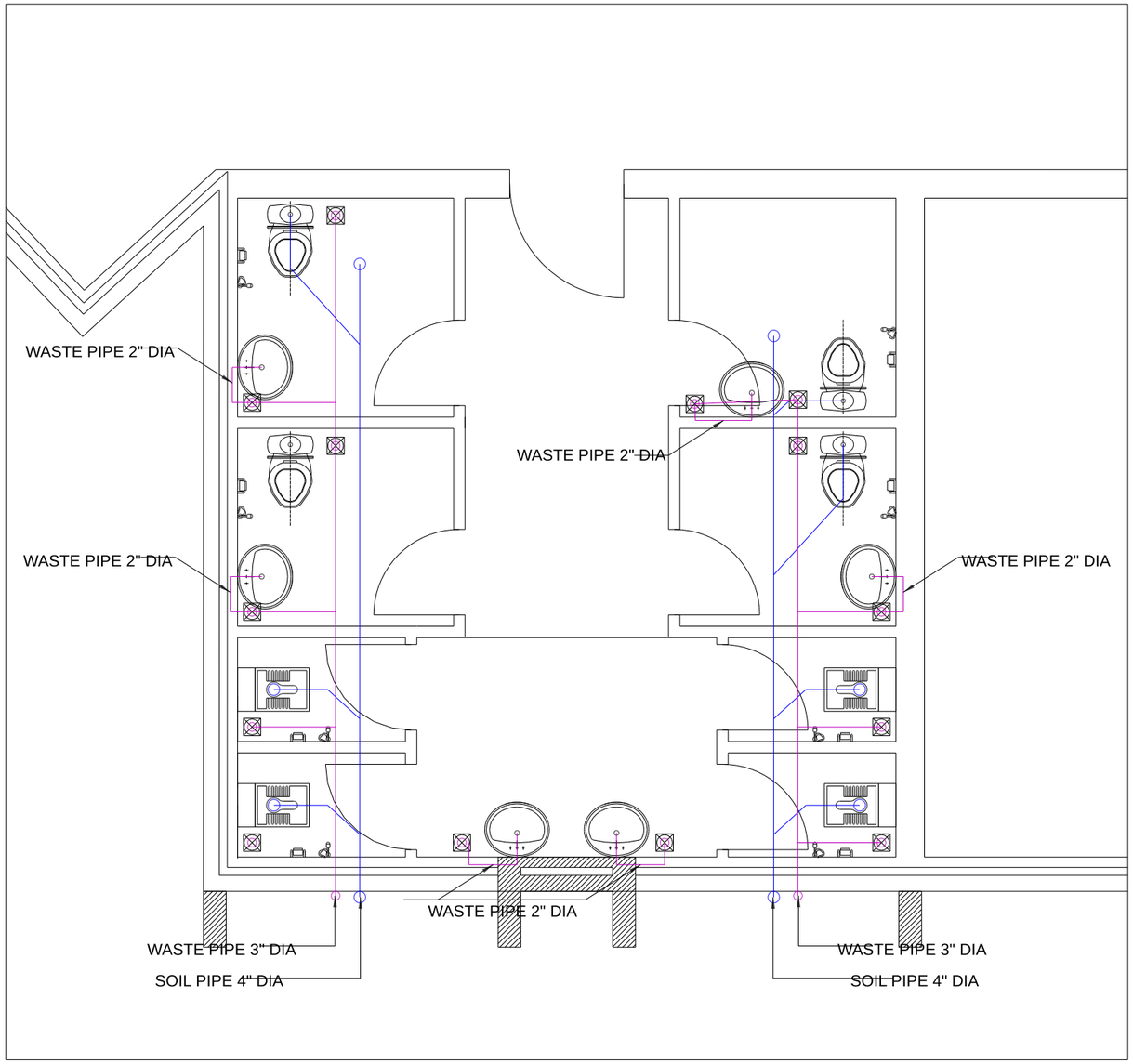
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	ENLARGED PLANS DRAINAGE SYSTEM - FIRST FLOOR	P - 14 REV 00



5 ENLARGED PLAN - 5 (FIRST FLOOR)

SCALE 1:50



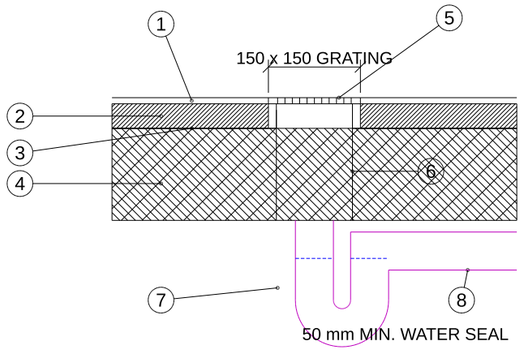
6 ENLARGED PLAN - 6 (FIRST FLOOR)

SCALE 1:50

Drawing shall not be copied or used without permission.

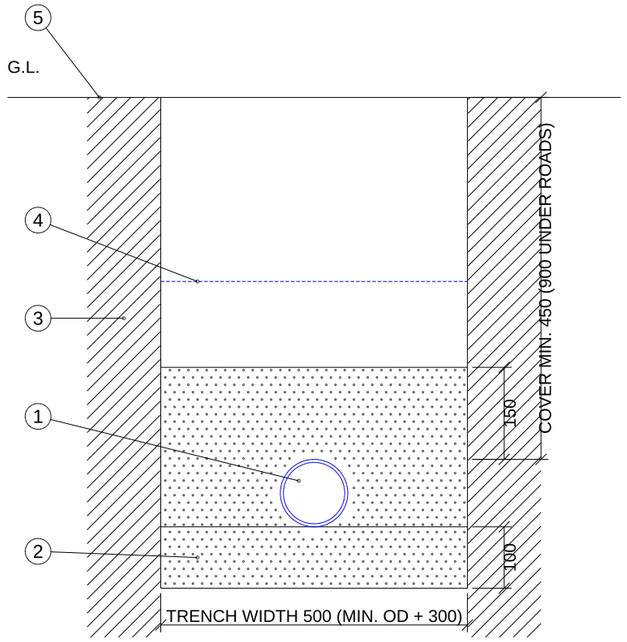
CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	ENLARGED PLANS DRAINAGE SYSTEM - FIRST FLOOR	P - 15 REV 00

1 FLOOR DRAIN - SECTION
SCALE 1:10



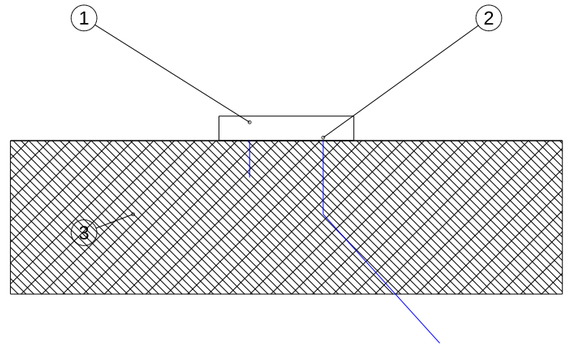
1. FLOOR FINISH (TILES) LAID TO FALL
2. CEMENT MORTAR BED, SLOPED 1:100 TOWARDS DRAIN
3. WATERPROOFING MEMBRANE, TURNED UP AT DRAIN BODY
4. RCC FLOOR SLAB
5. CP / SS GRATING, FLUSH WITH FINISHED FLOOR
6. FLOOR DRAIN BODY, 2" (50 mm) OUTLET
7. P-TRAP WITH MIN. 50 mm WATER SEAL
8. WASTE PIPE TO STACK / MANHOLE (SIZE AS PER PLAN)

2 PIPE TRENCH AND BEDDING - SECTION
SCALE 1:10



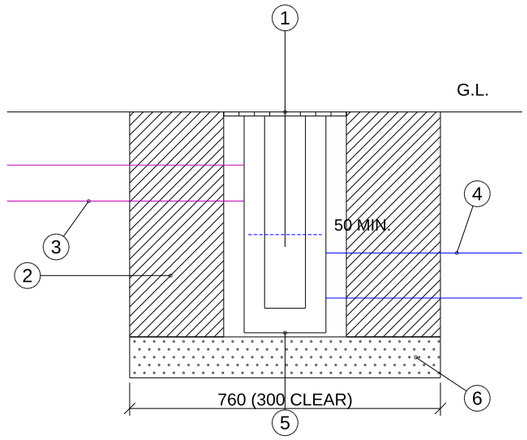
1. uPVC / HDPE DRAIN PIPE AS PER PLAN
2. 100 mm SAND BED AND 150 mm SAND SURROUND ABOVE CROWN, WELL COMPACTED
3. SELECTED EXCAVATED MATERIAL (NO STONES > 25 mm) COMPACTED IN 150 mm LAYERS
4. WARNING TAPE 300 mm ABOVE PIPE
5. SURFACE RESTORED TO MATCH EXISTING FINISH

3 CLEAN OUT IN THE SLAB - SECTION
SCALE 1:10



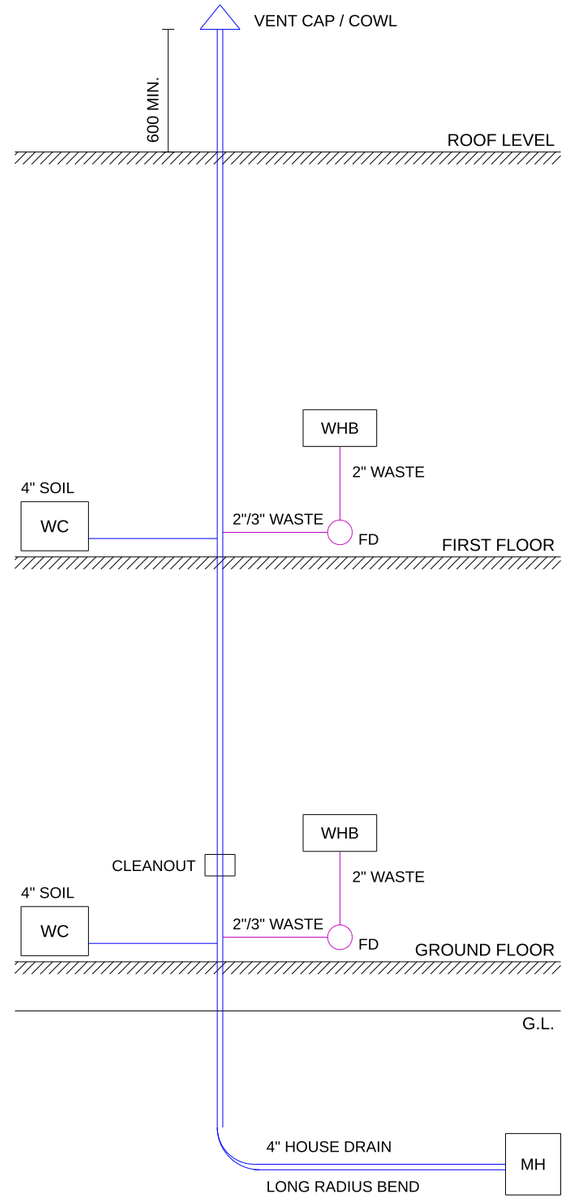
1. CLEAN-OUT COVER AS SPECIFIED, FLUSH WITH FINISHED FLOOR
2. 100 mm CAST-IRON / uPVC CLEAN-OUT ACCESS
3. RCC SLAB (WYE BRANCH DOWN TO 110 mm DRAIN PIPE)

4 GULLY TRAP - SECTION
SCALE 1:15



1. CAST IRON / G.I. GRATING 300 x 300 mm
2. 230 mm BRICK CHAMBER, 12 mm PLASTER INSIDE
3. 3" (75 mm) WASTE INLET (AS PER PLAN)
4. 4" (100 mm) OUTLET TO DRAIN
5. GULLY TRAP / POT WITH MIN. 50 mm WATER SEAL
6. 100 mm PCC 1:4:8 BASE

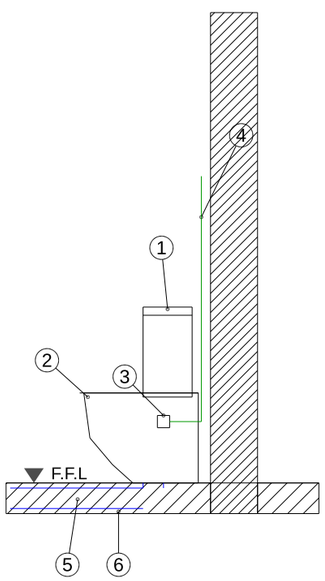
5 SOIL / VENT STACK - SCHEMATIC
NOT TO SCALE



ALL FIXTURES TRAPPED; STACK EXTENDED AS VENT

Drawing shall not be copied or used without permission.

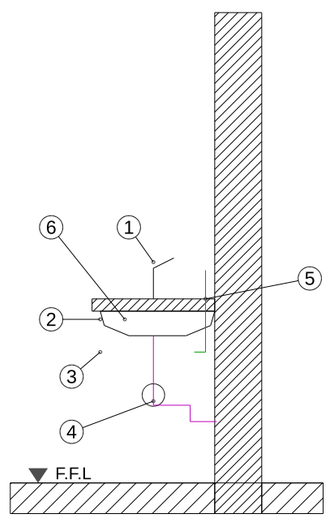
CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	TYPICAL DETAILS DRAINAGE SYSTEM	P - 16 REV 00



1. LOW-LEVEL CISTERN, FLOAT VALVE + DUAL FLUSH
2. EUROPEAN TYPE WATER CLOSET PAN (FLOOR MOUNTED)
3. ANGLE STOP COCK, 15 mm CW CONNECTION
4. 15 mm CW PIPE, CHROME PLATED COPPER FEED
5. 100 mm SOIL PIPE RUN IN SLAB (S-OUTLET), 1:60 FALL
6. SAND FILLING IN SLAB RECESS

SCALE 1:30

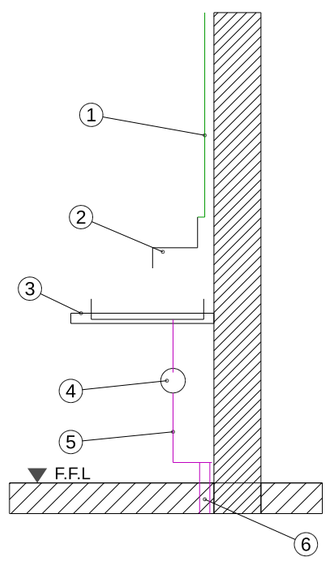
DETAIL OF EUROPEAN TYPE WATER CLOSET



1. MIXER TAP, DECK / WALL MOUNTED
2. COUNTER TOP WITH CUT-OUT AS PER INTERIOR DESIGN
3. TEE STOP COCK, 15 mm CW / HW
4. BOTTLE TRAP, 32 mm / 50 mm WASTE TO DRAIN
5. 15 mm CW / HW PIPES IN WALL CHASE
6. LAVATORY BASIN, UNDER-COUNTER / WALL HUNG

SCALE 1:30

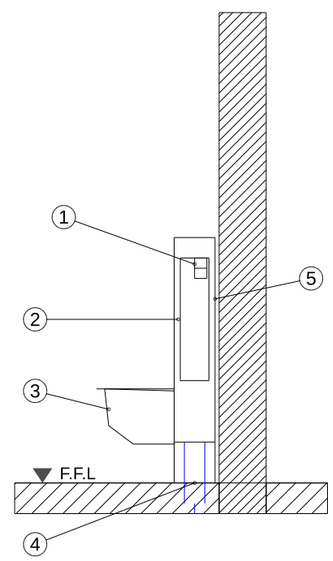
DETAIL OF LAVATORY



1. 20 mm CW PIPE FROM ABOVE FALSE CEILING (A.F.C.)
2. SWAN-NECK TAP / MIXER ON WALL
3. KITCHEN SINK (SS) ON COUNTER
4. BOTTLE TRAP, 40 mm OUTLET
5. 50 mm DRAIN PIPE DOWN TO FLOOR DRAIN / SLEEVE
6. SLEEVE THROUGH SLAB TO BE FILLED WITH NON-SHRINK GROUT

SCALE 1:30

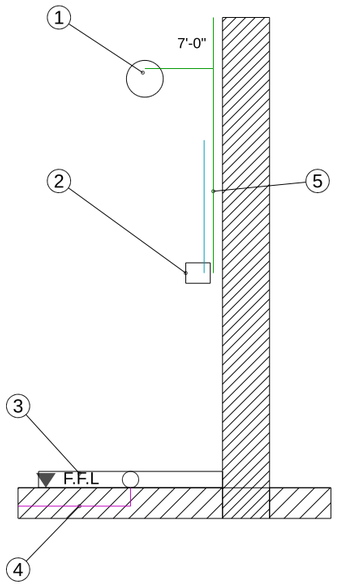
SIDE VIEW DETAIL OF KITCHEN SINK



1. DUAL-FLUSH ACTUATOR PLATE (FLUSH BUTTON)
2. CONCEALED CISTERN WITH STEEL SUPPORT FRAME (IN-WALL CARRIER)
3. WALL-HUNG WATER CLOSET, SEAT 400 mm A.F.F.L
4. 100 mm WASTE / SOIL PIPE TO STACK
5. DRYWALL / BLOCK MASONRY PANELLING AS PER ARCHITECT

SCALE 1:30

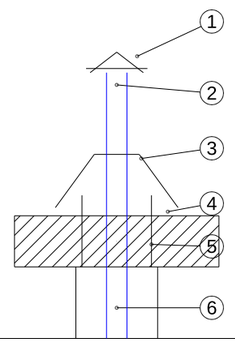
DETAIL OF WALL HUNG WATER CLOSET



1. SHOWER HEAD, 15 mm CW/HW ARM
2. HOT & COLD MIXER / CONCEALED STOP COCK, 1050 mm A.F.F.L
3. SHOWER TRAY WITH 50 mm TRAPPED WASTE
4. 50 mm DRAIN PIPE (P-TRAP) TO FLOOR DRAIN
5. BLOCK MASONRY WALL, THICKNESS AS SHOWN ON PLAN

SCALE 1:30

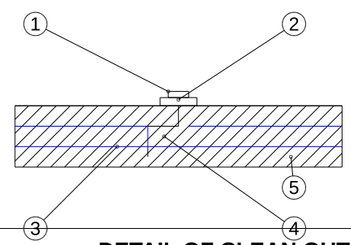
DETAIL OF SHOWER TRAY



1. VENT COWL
2. VENT STACK, 100 mm uPVC
3. PIPE FLASHING SHEET, TURNED UP 150 mm
4. WATERPROOFING MEMBRANE ON ROOF SLAB
5. SLEEVE THROUGH SLAB, FILLED WITH NON-SHRINK GROUT
6. SOIL / WASTE uPVC PIPE FROM BELOW

SCALE 1:30

DETAIL OF VENT THRU AT ROOF LEVEL



1. CLEAN-OUT COVER (BRASS / CHROME) FLUSH WITH F.F.L
2. BRASS SCREW PLUG, GASKETED
3. 100 mm DRAIN PIPE (INCOMING)
4. WYE / 45 deg. BRANCH WITH CLEAN-OUT ACCESS
5. CONCRETE SLAB

SCALE 1:30

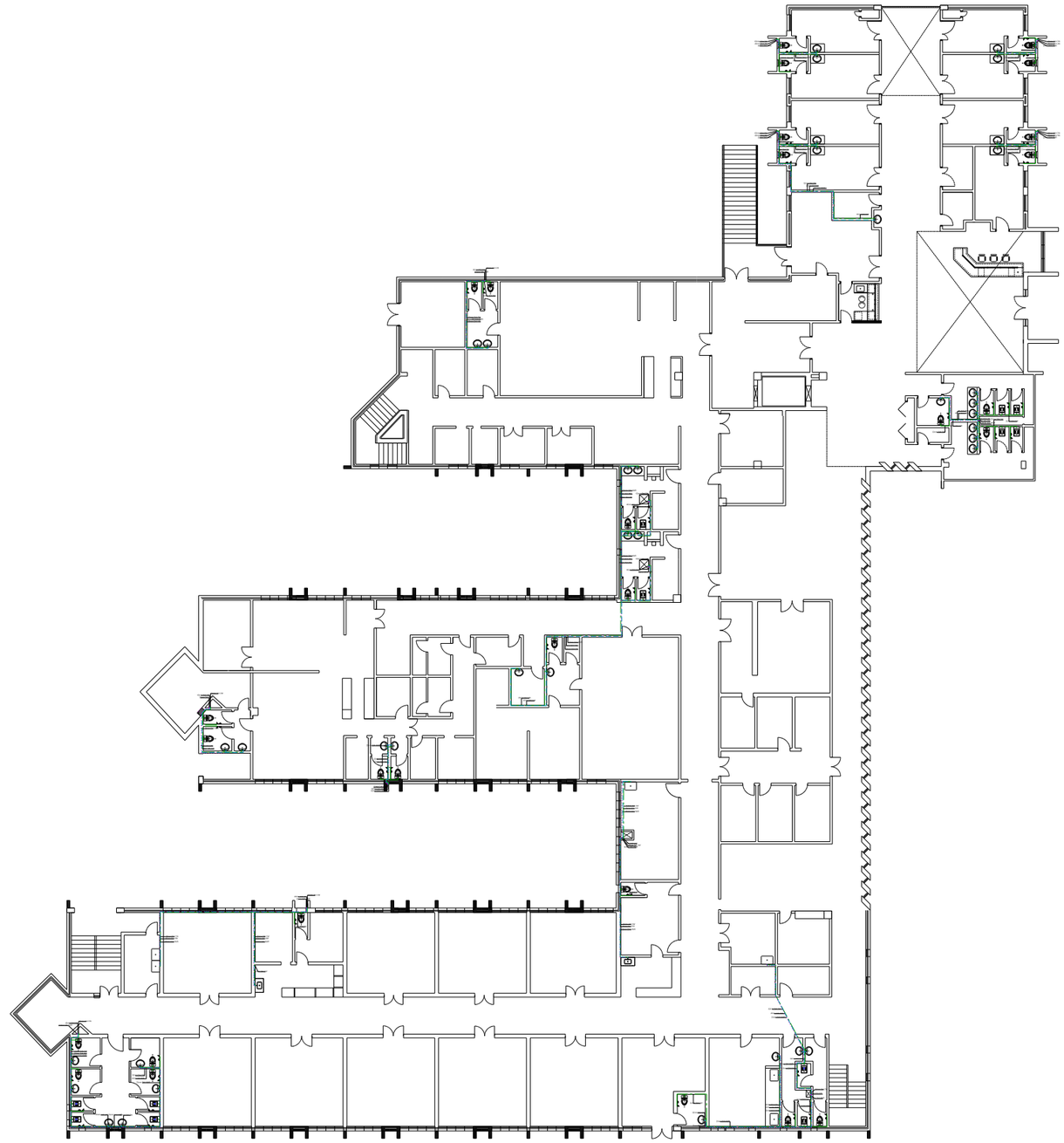
DETAIL OF CLEAN OUT PLUG

NOTES

1. ALL DETAILS ARE TYPICAL AND SCHEMATIC; DIMENSIONS IN mm UNLESS NOTED.
2. FIXTURE MOUNTING HEIGHTS ARE FROM FINISHED FLOOR LEVEL (F.F.L).
3. FIXTURE MODELS, COUNTER CUT-OUTS AND CARRIER FRAMES AS PER ARCHITECT / MANUFACTURER.
4. ALL PIPE SLEEVES THROUGH SLABS AND WALLS TO BE FILLED WITH NON-SHRINK GROUT.
5. REFER GENERAL NOTES SHEET FOR MATERIAL AND TESTING REQUIREMENTS.

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi	FIXTURE SECTIONS	P - 17
					CHECKED BY:	DRAINAGE SYSTEM	REV 00
					APPROVED BY:		

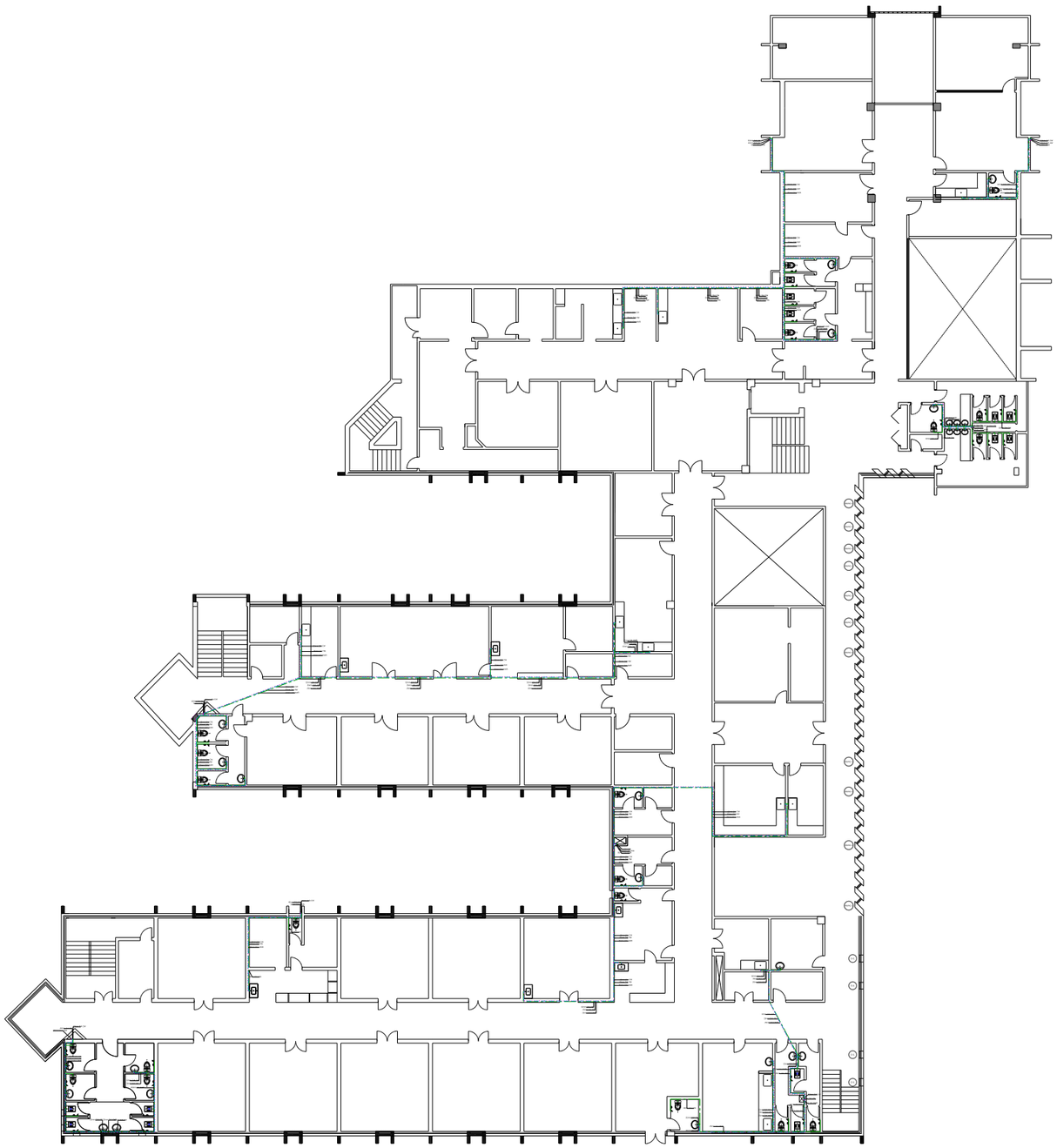


WATER SUPPLY SYSTEM GROUND FLOOR

SCALE: 1:350 ALL DIMENSIONS IN INCHES

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	WATER SUPPLY LAYOUT GROUND FLOOR	P - 18 REV 00



WATER SUPPLY SYSTEM FIRST FLOOR

SCALE: 1:350 ALL DIMENSIONS IN INCHES

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	WATER SUPPLY LAYOUT FIRST FLOOR	P - 19 REV 00

GENERAL NOTES - WATER SUPPLY

1. THESE DRAWINGS SHALL BE READ WITH THE ARCHITECTURAL, STRUCTURAL AND OTHER SERVICES DRAWINGS. ANY DISCREPANCY SHALL BE REPORTED TO THE ENGINEER BEFORE EXECUTION.
2. ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE. PIPE SIZES ARE NOMINAL OUTSIDE DIAMETERS IN mm AS LABELLED ON THE PLANS (CW - COLD WATER, HW - HOT WATER, HWR - HOT WATER RETURN). DO NOT SCALE FROM THE DRAWINGS.
3. ALL PIPES AND FITTINGS SHALL BE OF THE MATERIAL, PRESSURE CLASS AND MAKE SPECIFIED IN THE APPROVED SPECIFICATIONS / BOQ AND JOINTED AS PER MANUFACTURER'S RECOMMENDATIONS.
4. AN ISOLATION VALVE SHALL BE PROVIDED ON EACH BRANCH SERVING A TOILET BLOCK / WARD / ROOM GROUP AND AT THE BASE OF EACH RISER, TO ALLOW ISOLATION WITHOUT SHUTTING DOWN THE WHOLE SYSTEM.
5. PIPES SHALL BE CONCEALED IN WALL CHASES OR ABOVE FALSE CEILING WHERE POSSIBLE. CHASES SHALL NOT EXCEED 1/3 OF WALL THICKNESS. TYPICAL DETAILS: SEE DRAWING A - 80.
6. PIPES PASSING THROUGH WALLS, BEAMS OR SLABS SHALL BE PROVIDED WITH SLEEVES AND SEALED WITH NON-HARDENING SEALANT. NO PIPE SHALL BE EMBEDDED IN STRUCTURAL MEMBERS WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.
7. HORIZONTAL PIPES SHALL BE SUPPORTED WITH CLAMPS / HANGERS AT SPACINGS RECOMMENDED BY THE MANUFACTURER (TYPICAL VALUES ON A - 80). VERTICAL PIPES SHALL BE CLAMPED AT EVERY FLOOR.
8. HOT WATER (HW) AND HOT WATER RETURN (HWR) PIPES SHALL BE THERMALLY INSULATED AND PROTECTED AS PER APPROVED SPECIFICATIONS. COLD WATER PIPES RUNNING NEAR HOT PIPES SHALL BE INSULATED TO PREVENT HEAT GAIN.
9. PROVISION FOR THERMAL EXPANSION SHALL BE MADE ON LONG RUNS AS PER MANUFACTURER'S RECOMMENDATIONS (OFFSETS / EXPANSION LOOPS).
10. WATER SUPPLY PIPES SHALL BE KEPT AT LEAST 150 mm ABOVE DRAINAGE PIPES WHERE THEY CROSS OR RUN PARALLEL, AND SHALL NEVER PASS THROUGH SEPTIC TANKS, MANHOLES OR DRAINAGE CHAMBERS.
11. BURIED PIPES SHALL BE LAID ON A SAND BED WITH MIN. 450 mm COVER (900 mm UNDER ROADS) AND MARKED WITH WARNING TAPE 300 mm ABOVE THE PIPE.
12. ALL SYSTEMS SHALL BE PRESSURE TESTED BEFORE CONCEALMENT AT A PRESSURE AND DURATION AS PER APPROVED SPECIFICATIONS (GENERALLY 1.5 x WORKING PRESSURE) AND SHALL SHOW NO LOSS OF PRESSURE.
13. BEFORE COMMISSIONING THE SYSTEM SHALL BE FLUSHED AND DISINFECTED (CHLORINATED) AND THE WATER SHALL BE TESTED FOR POTABILITY.
14. ALL VALVES, FITTINGS AND EQUIPMENT SHALL BE ACCESSIBLE FOR OPERATION AND MAINTENANCE. VALVES SHALL BE LABELLED WITH THEIR FUNCTION.
15. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL BEFORE EXECUTION AND PREPARE AS-BUILT DRAWINGS ON COMPLETION.

LEGEND

- COLD WATER (CW) PIPE - 63 / 32 mm DIA
- HOT WATER (HW) PIPE - 40 / 25 mm DIA
- HOT WATER RETURN (HWR) PIPE - 32 / 25 mm DIA
- VERTICAL PIPE / RISER (DROP) - SIZE AS PER PLAN

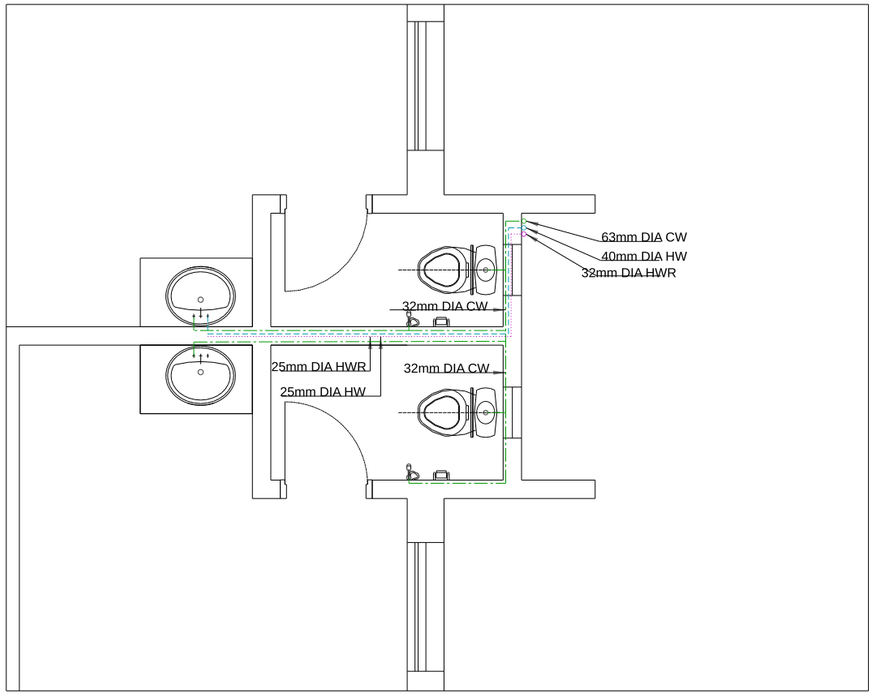
ABBREVIATIONS

GL	GROUND LEVEL
FFL	FINISHED FLOOR LEVEL
PCC	PLAIN CEMENT CONCRETE
RCC	REINFORCED CEMENT CONCRETE
CI	CAST IRON
CP / SS	CHROME PLATED / STAINLESS STEEL
NRV	NON-RETURN VALVE
OHT / UGT	OVERHEAD / UNDERGROUND TANK
CW / HW	COLD WATER / HOT WATER
HWR	HOT WATER RETURN
WC	WATER CLOSET
WHB	WASH HAND BASIN

NOTE: SYMBOLS / SIZES ARE AS SHOWN ON THE PLANS.

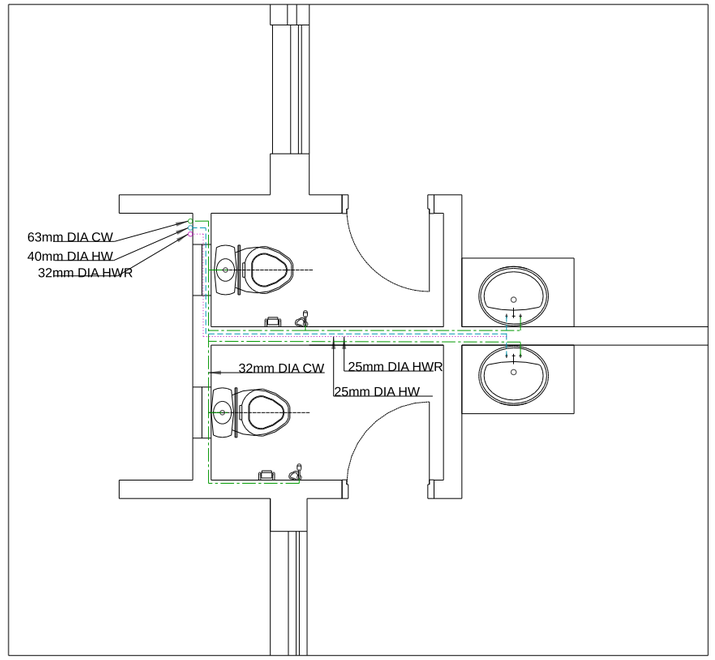
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY DATE: 01-11-2026	GENERAL NOTES WATER SUPPLY SYSTEM	P - 20 REV 00



4 ENLARGED PLAN - 4 (GROUND FLOOR)

SCALE 1:50

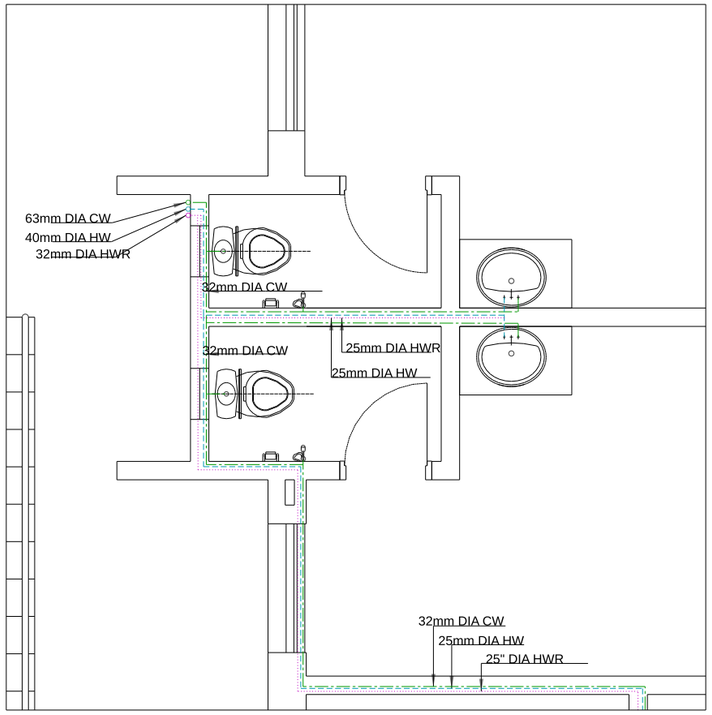


1 ENLARGED PLAN - 1 (GROUND FLOOR)

SCALE 1:50

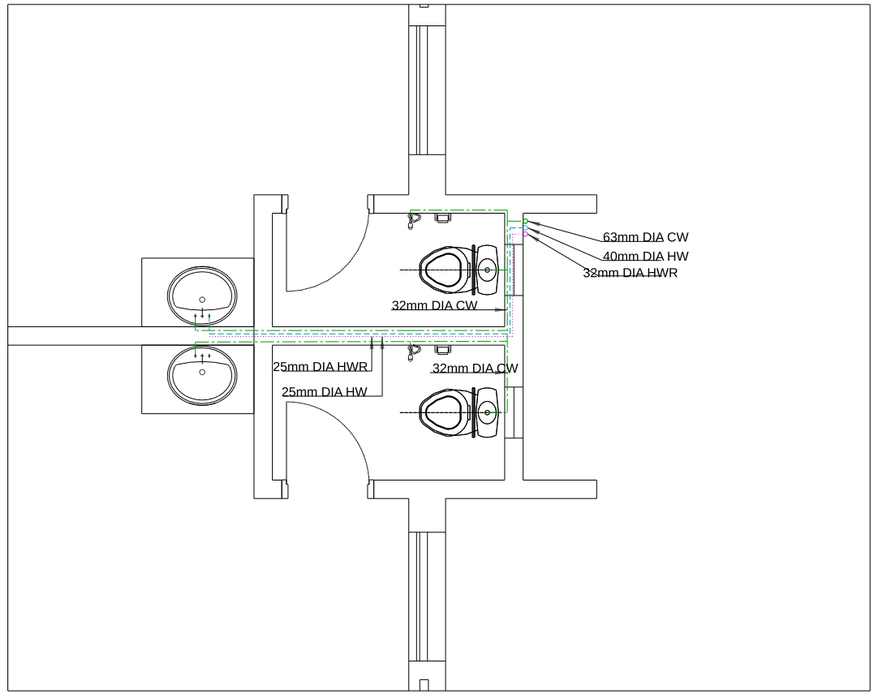
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	ENLARGED PLANS WATER SUPPLY SYSTEM - GROUND FLOOR	P - 21 REV 00



3 ENLARGED PLAN - 3 (GROUND FLOOR)

SCALE 1:50

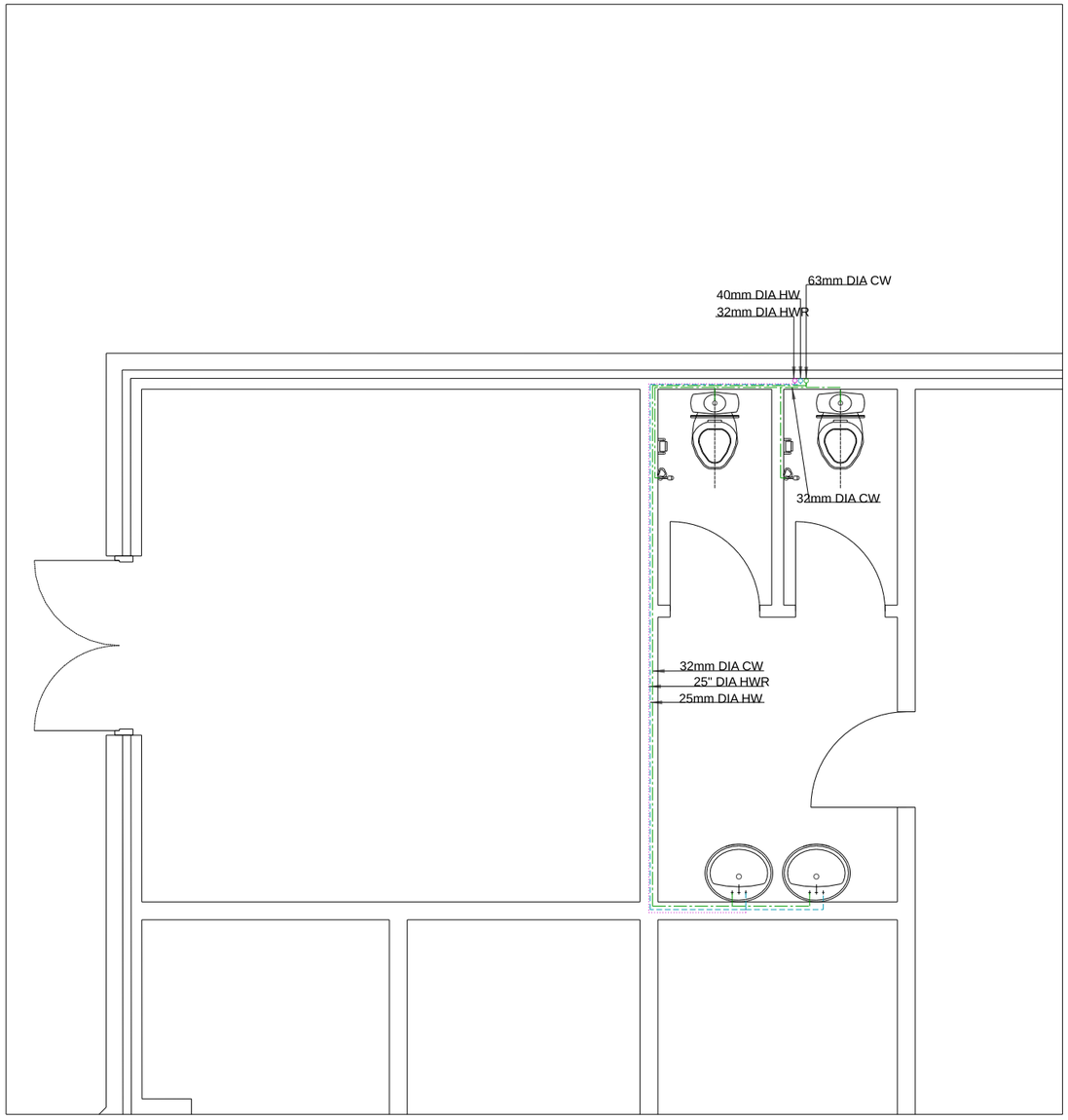


2 ENLARGED PLAN - 2 (GROUND FLOOR)

SCALE 1:50

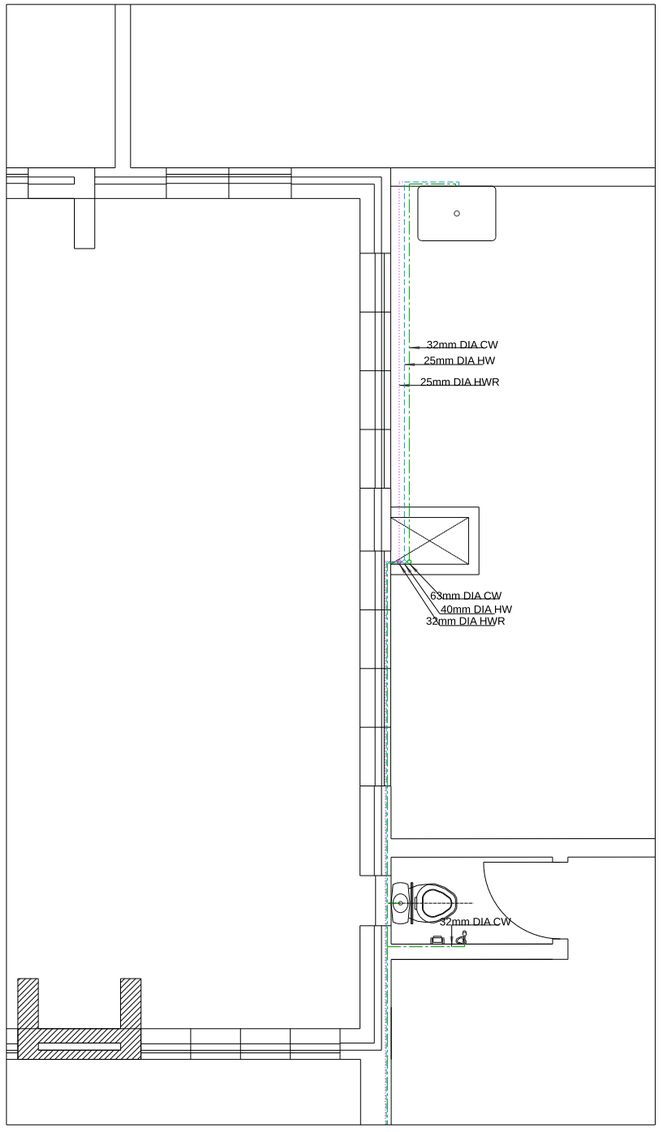
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	ENLARGED PLANS WATER SUPPLY SYSTEM - GROUND FLOOR	P - 22 REV 00



5 ENLARGED PLAN - 5 (GROUND FLOOR)

SCALE 1:50

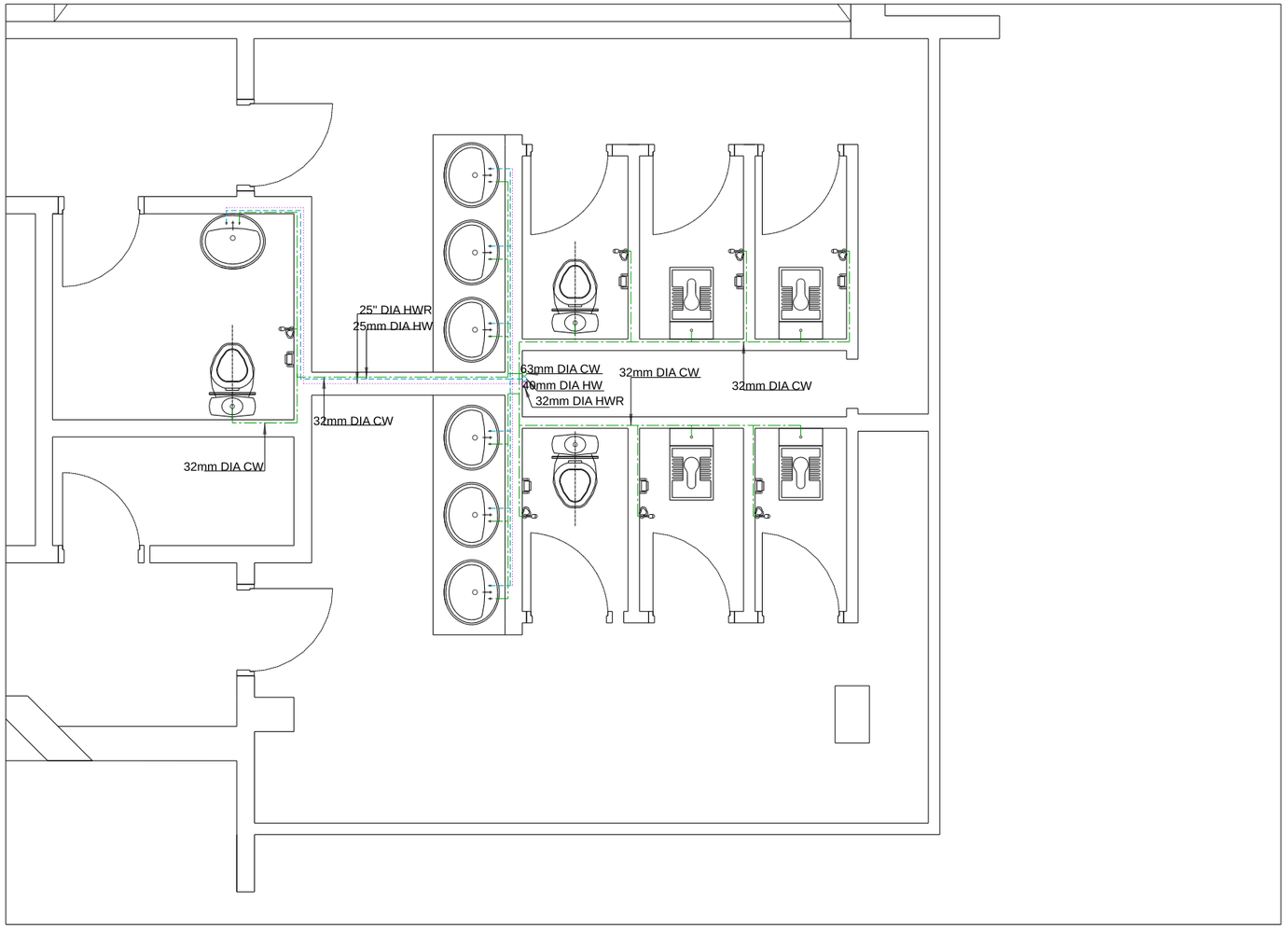


11 ENLARGED PLAN - 11 (GROUND FLOOR)

SCALE 1:60

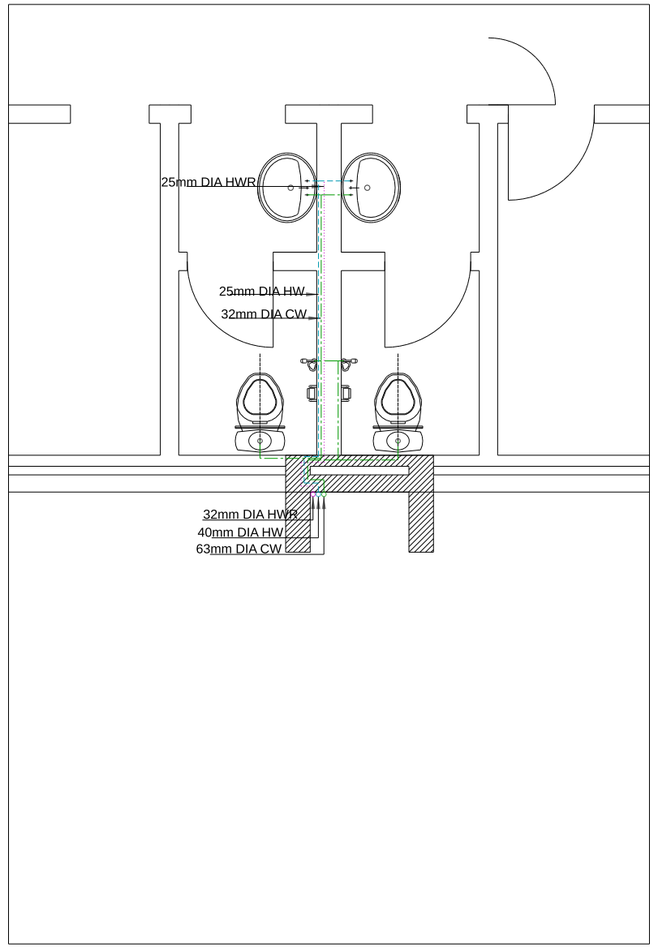
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	ENLARGED PLANS WATER SUPPLY SYSTEM - GROUND FLOOR	P - 23 REV 00



6 ENLARGED PLAN - 6 (GROUND FLOOR)

SCALE 1:50

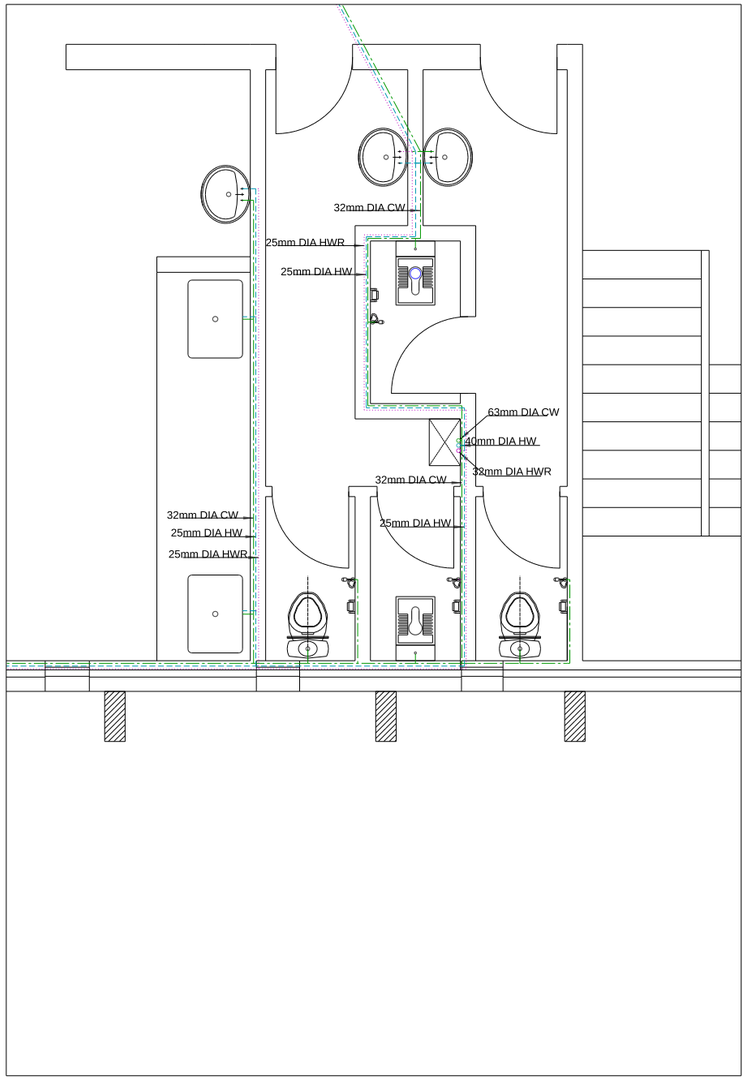


10 ENLARGED PLAN - 10 (GROUND FLOOR)

SCALE 1:50

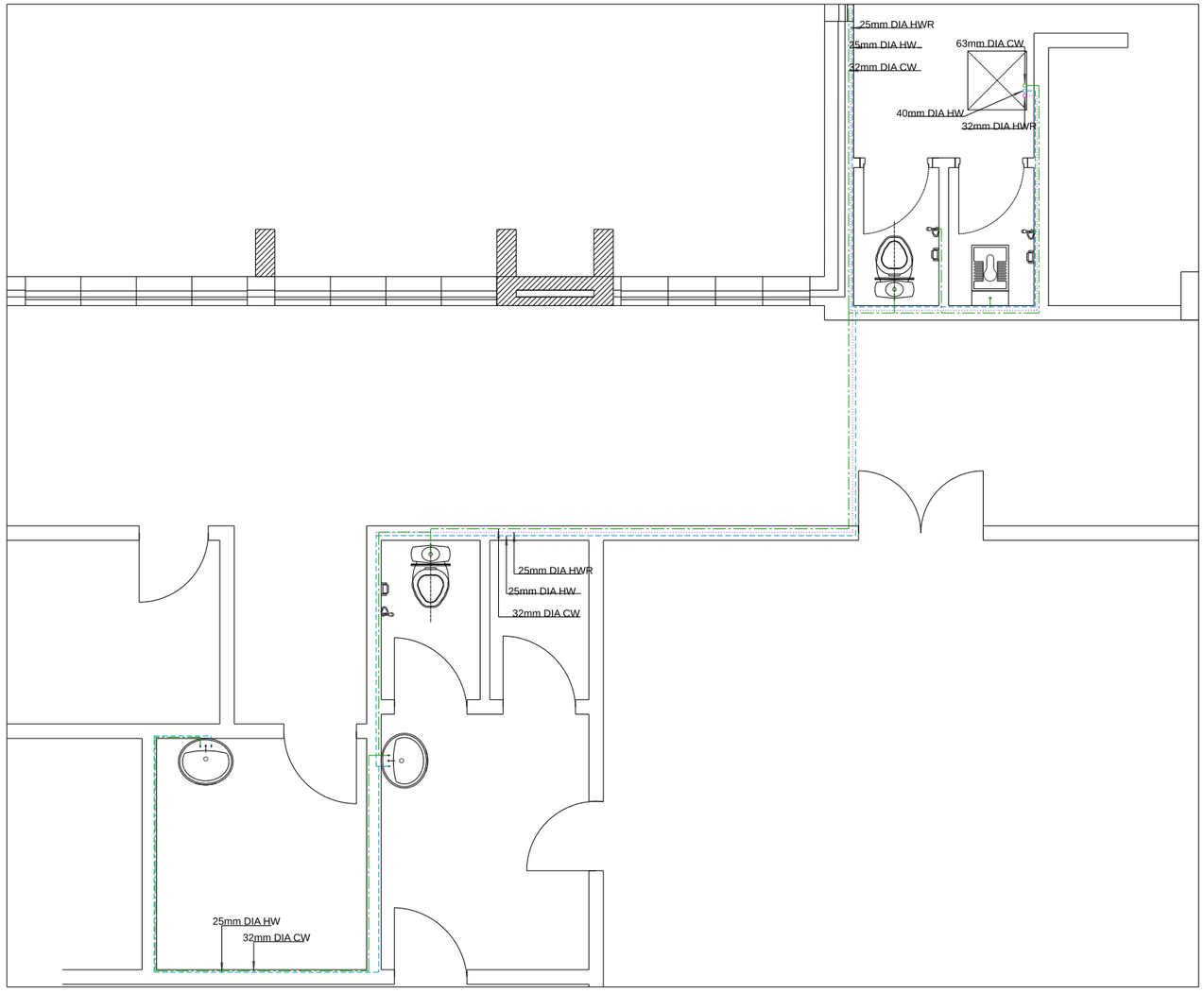
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	ENLARGED PLANS WATER SUPPLY SYSTEM - GROUND FLOOR	P - 24 REV 00



14 ENLARGED PLAN - 14 (GROUND FLOOR)

SCALE 1:60

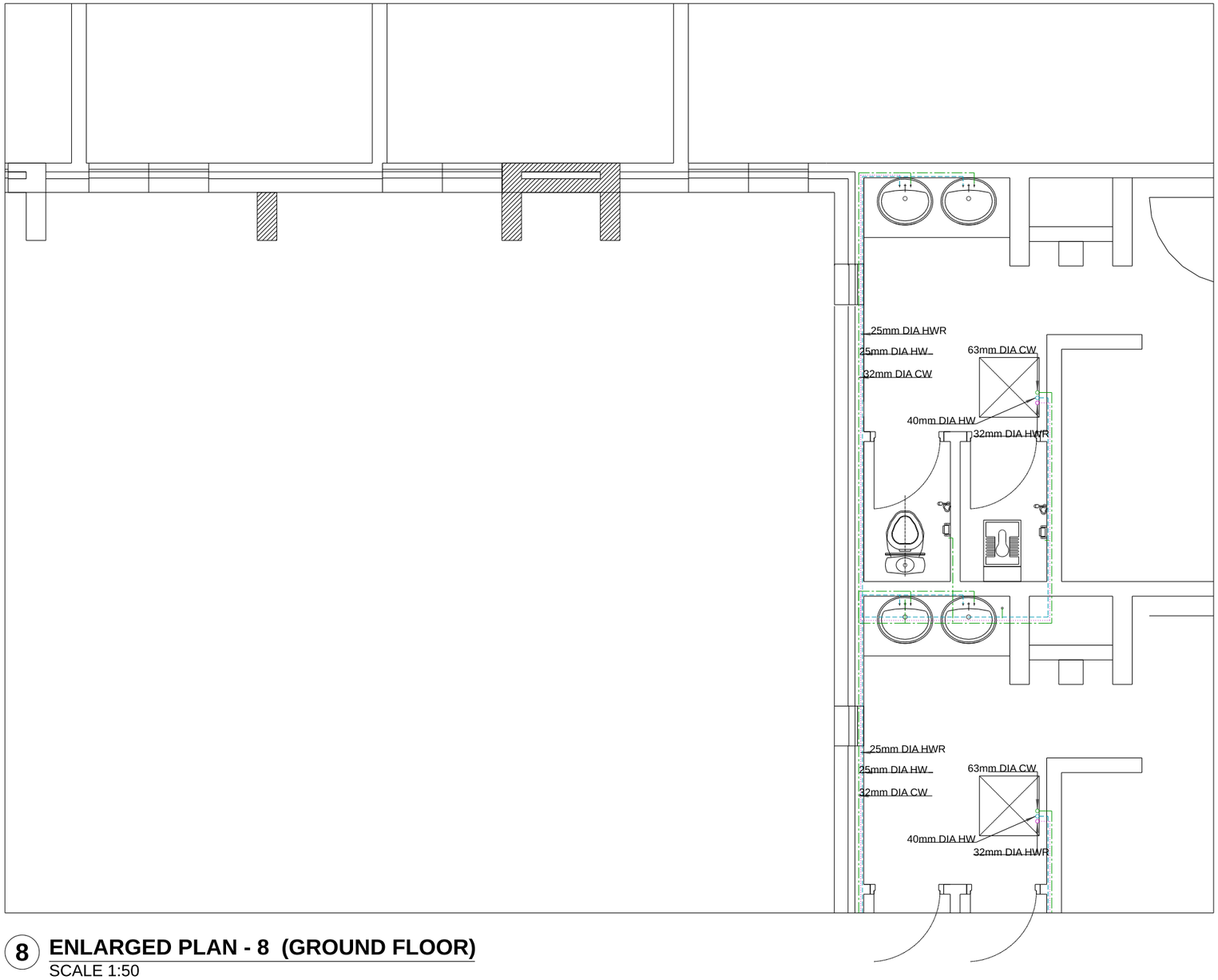


7 ENLARGED PLAN - 7 (GROUND FLOOR)

SCALE 1:60

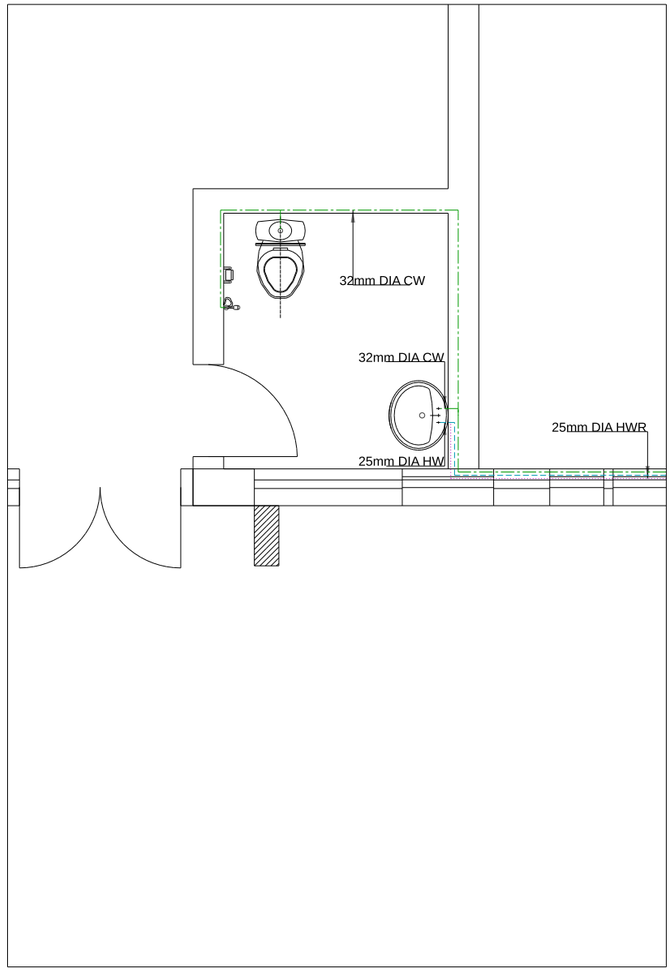
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	ENLARGED PLANS WATER SUPPLY SYSTEM - GROUND FLOOR	P - 25 REV 00



8 ENLARGED PLAN - 8 (GROUND FLOOR)

SCALE 1:50

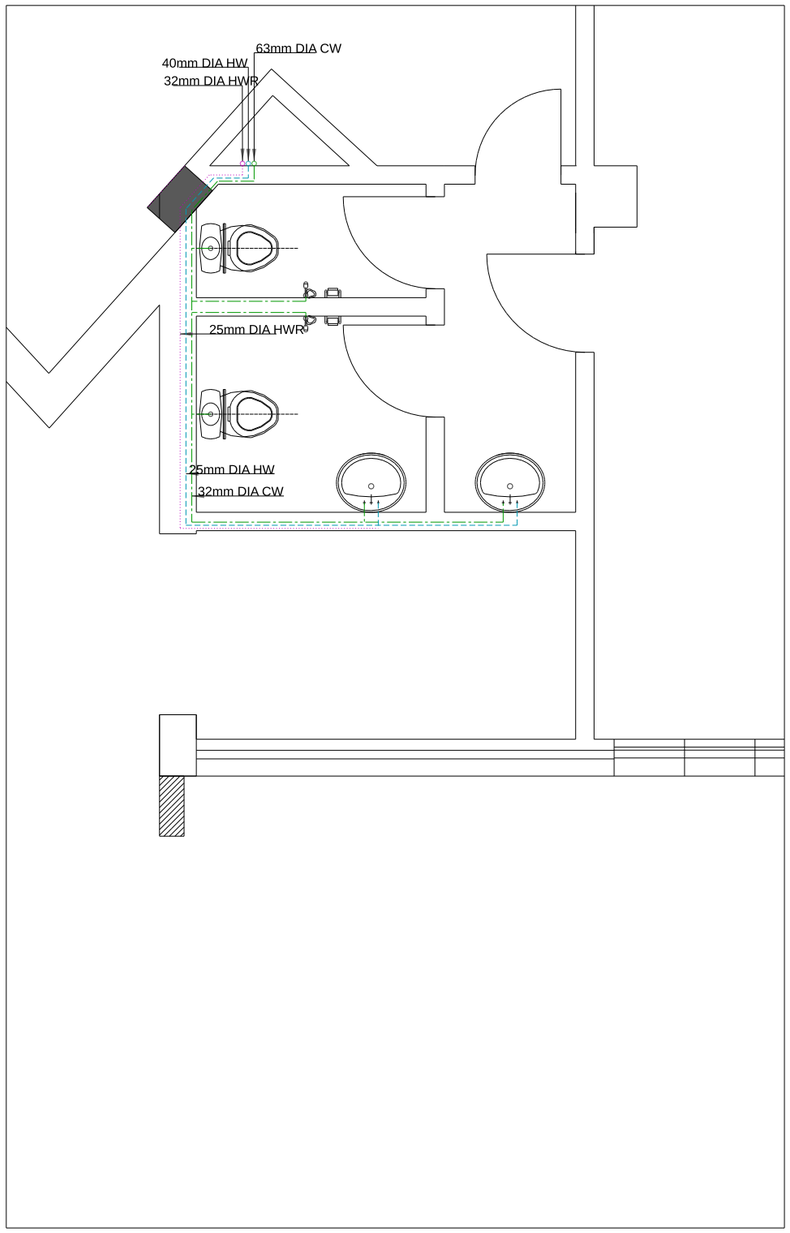


13 ENLARGED PLAN - 13 (GROUND FLOOR)

SCALE 1:50

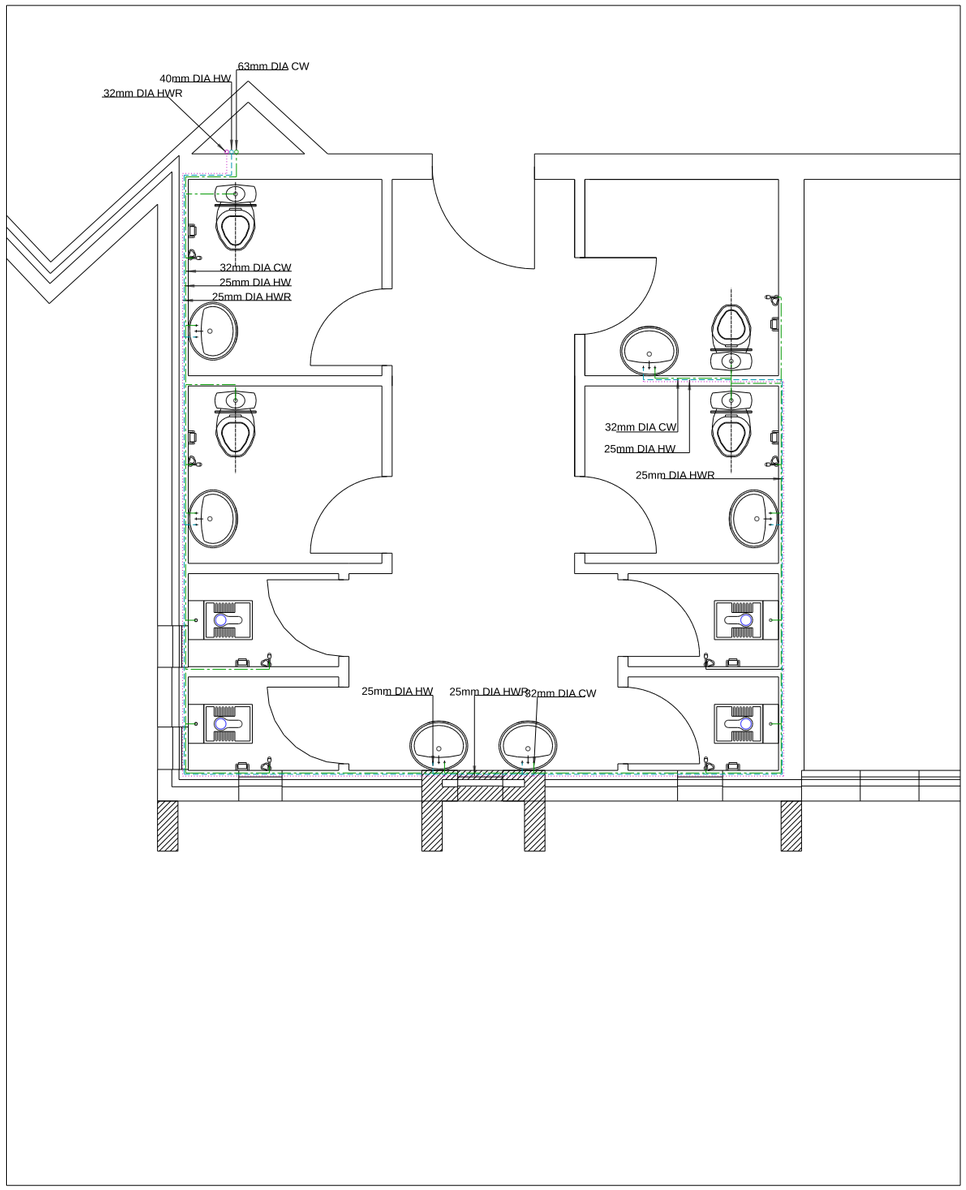
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	ENLARGED PLANS WATER SUPPLY SYSTEM - GROUND FLOOR	P - 26 REV 00



9 ENLARGED PLAN - 9 (GROUND FLOOR)

SCALE 1:50

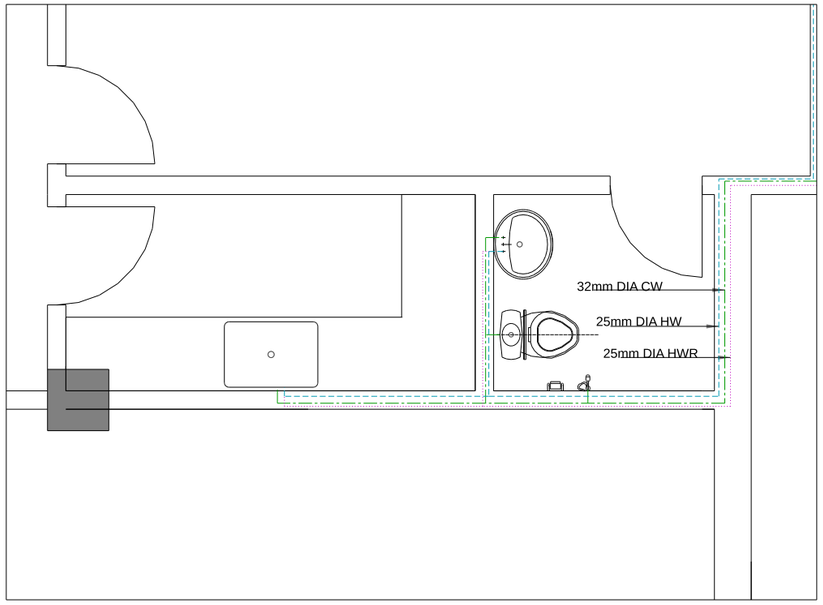


12 ENLARGED PLAN - 12 (GROUND FLOOR)

SCALE 1:60

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi	ENLARGED PLANS	P - 27
					CHECKED BY	WATER SUPPLY SYSTEM - GROUND FLOOR	REV 00
					APPROVED BY		

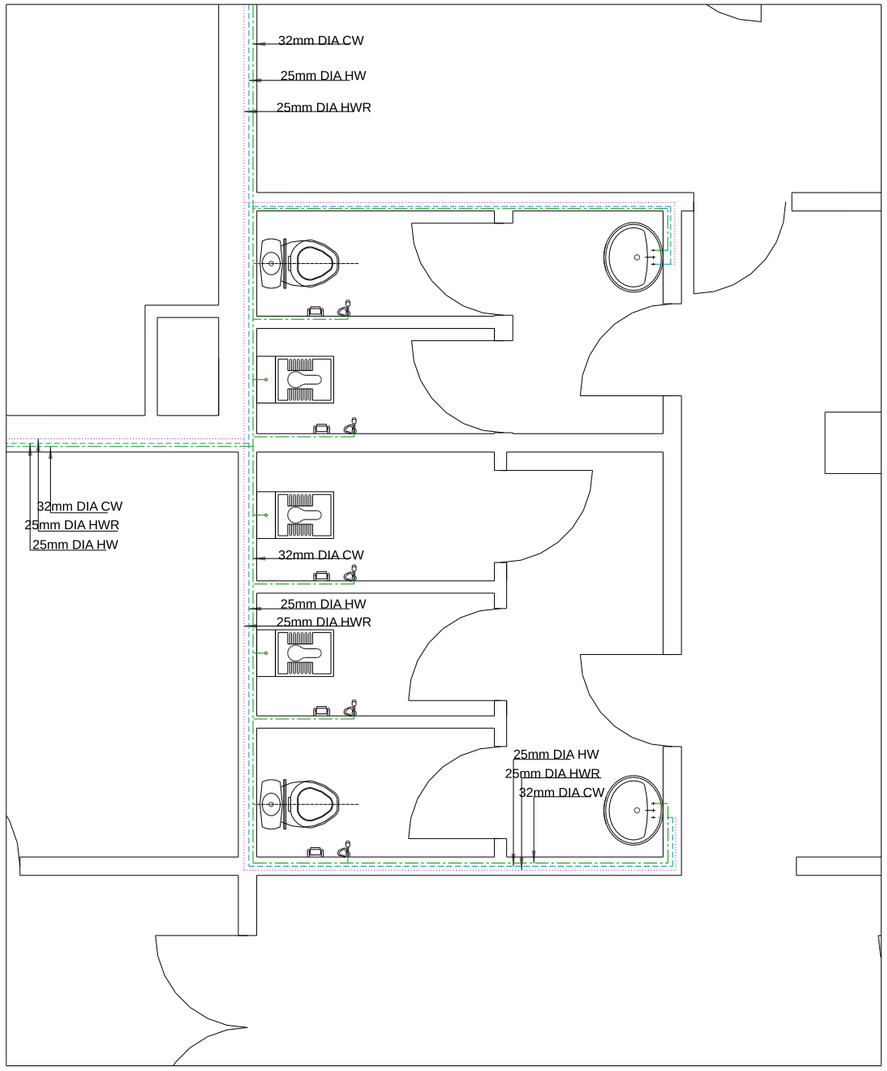


1 ENLARGED PLAN - 1 (FIRST FLOOR)

SCALE 1:50

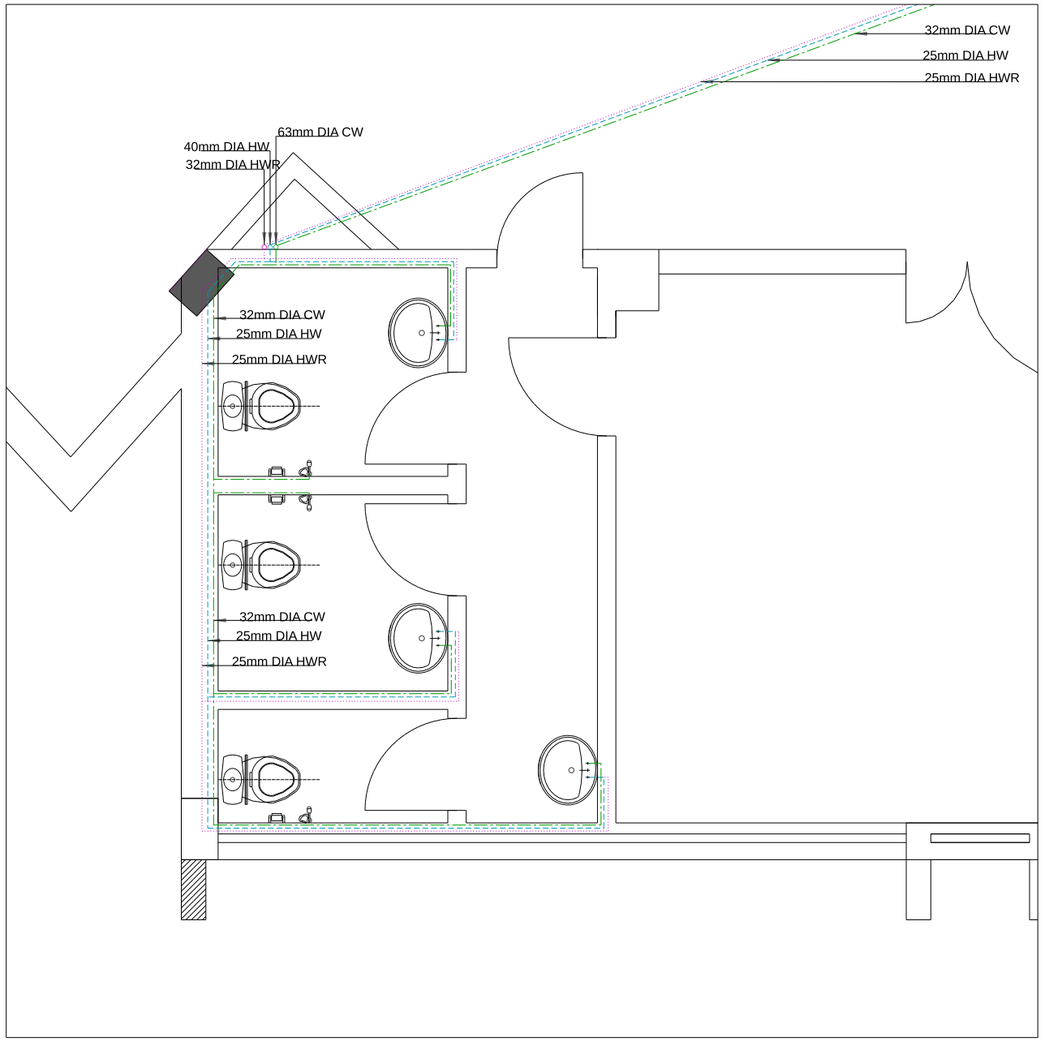
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	ENLARGED PLANS WATER SUPPLY SYSTEM - FIRST FLOOR	P - 28 REV 00



2 ENLARGED PLAN - 2 (FIRST FLOOR)

SCALE 1:50

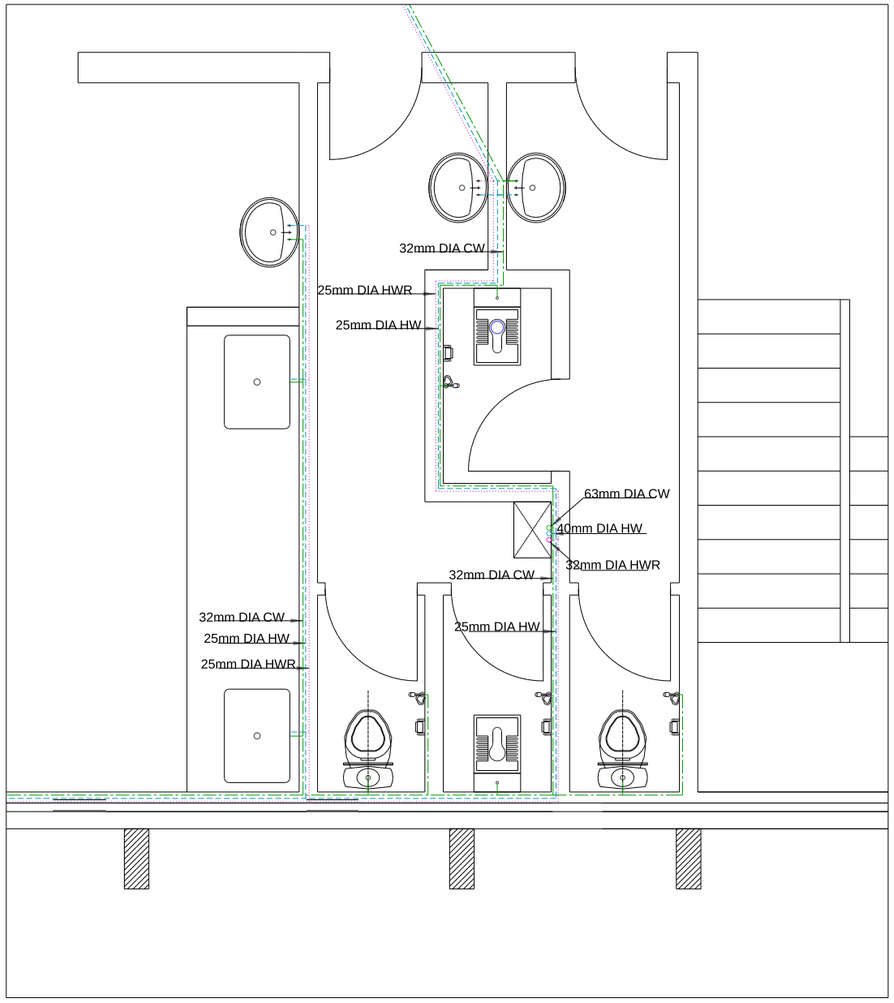


4 ENLARGED PLAN - 4 (FIRST FLOOR)

SCALE 1:50

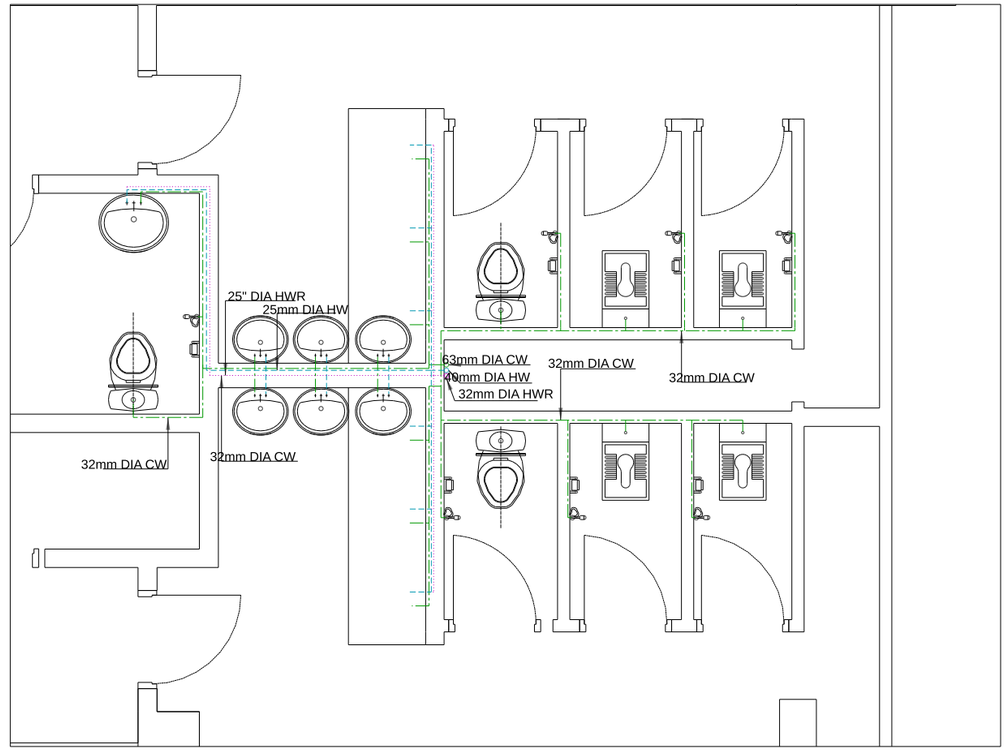
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	ENLARGED PLANS WATER SUPPLY SYSTEM - FIRST FLOOR	P - 29 REV 00



7 ENLARGED PLAN - 7 (FIRST FLOOR)

SCALE 1:50

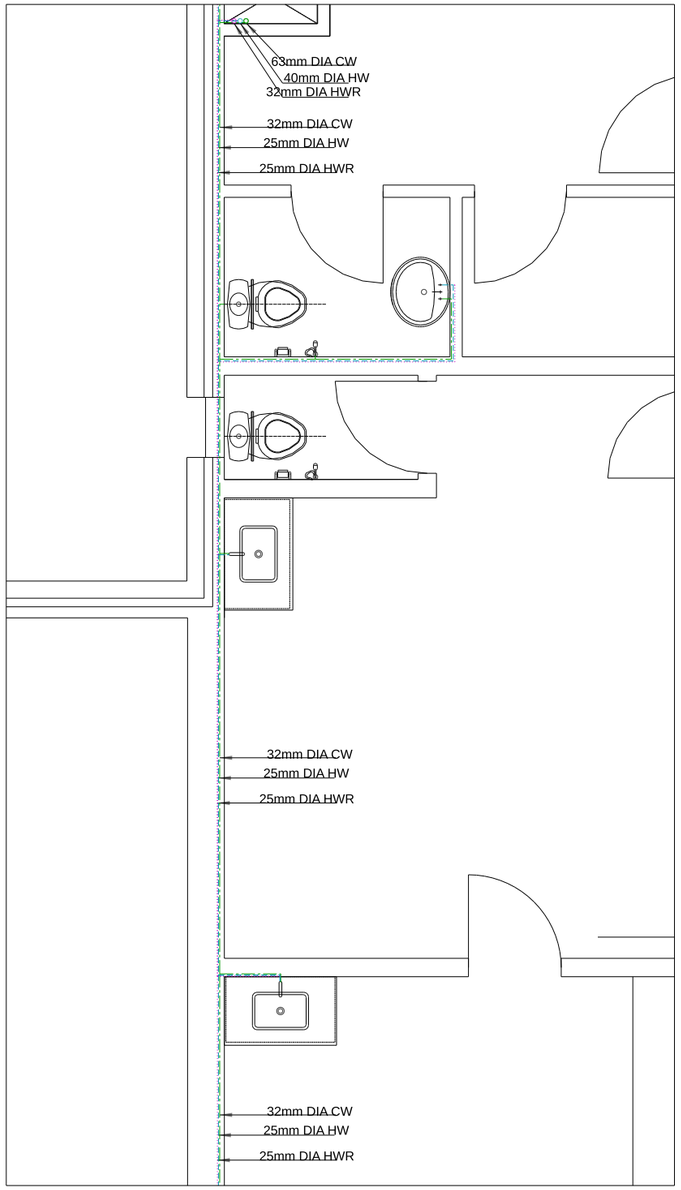


3 ENLARGED PLAN - 3 (FIRST FLOOR)

SCALE 1:50

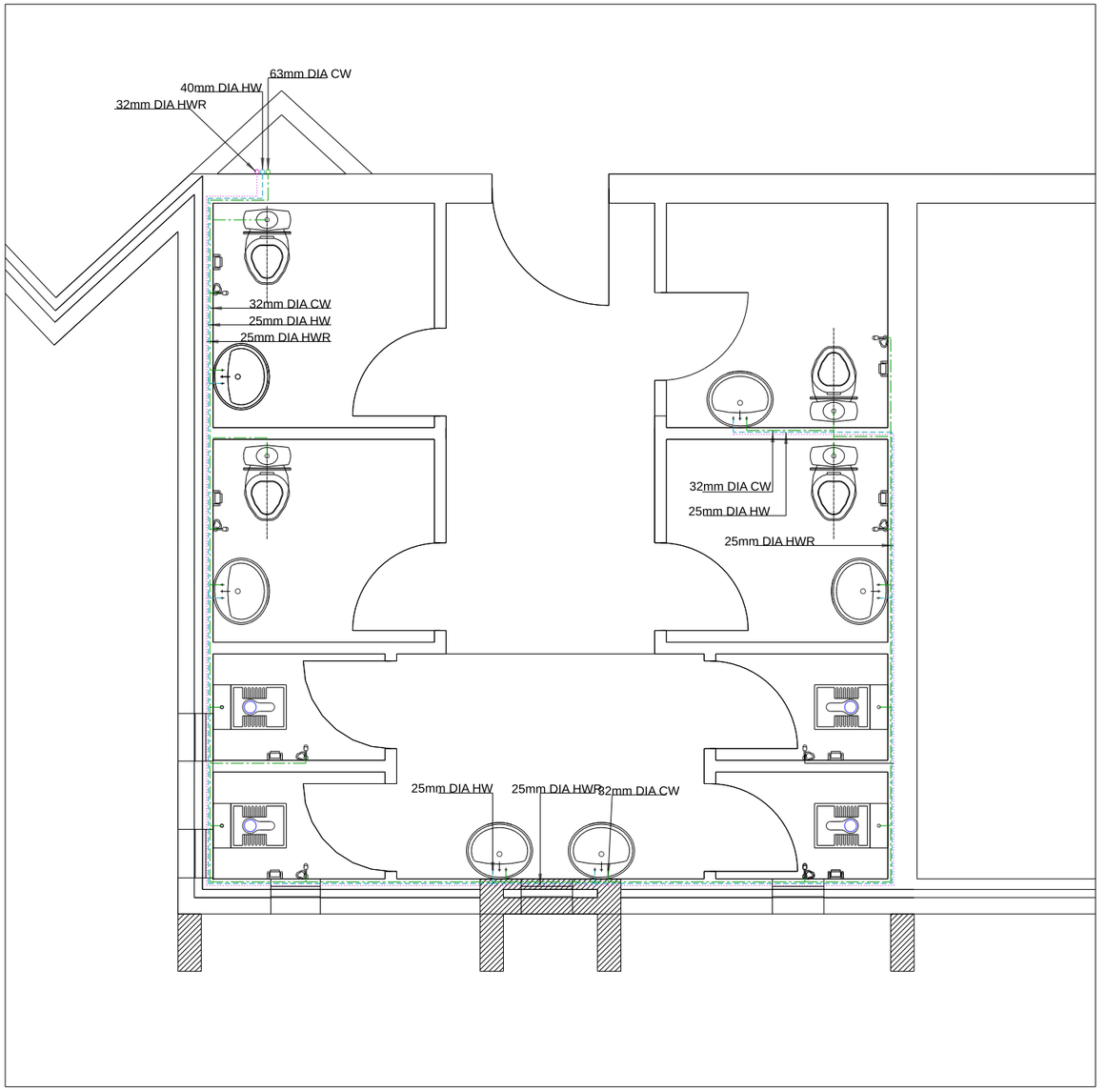
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	ENLARGED PLANS WATER SUPPLY SYSTEM - FIRST FLOOR	P - 30 REV 00



5 ENLARGED PLAN - 5 (FIRST FLOOR)

SCALE 1:50



6 ENLARGED PLAN - 6 (FIRST FLOOR)

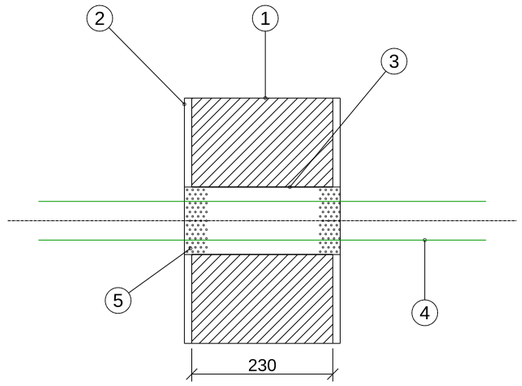
SCALE 1:50

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	ENLARGED PLANS WATER SUPPLY SYSTEM - FIRST FLOOR	P - 31 REV 00

1 PIPE THROUGH WALL / SLAB - SECTION

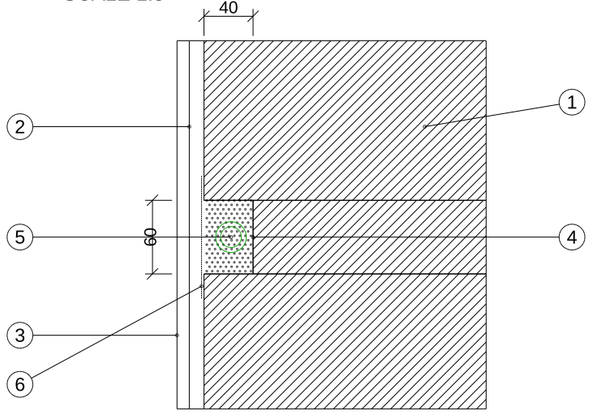
SCALE 1:10



1. 230 mm BRICK / RCC WALL OR SLAB
2. CEMENT PLASTER BOTH FACES
3. PVC / G.I. SLEEVE (4" / 110 mm) FOR PIPE UP TO 63 mm, PROJECTING 25 mm EACH FACE
4. WATER SUPPLY PIPE (SIZE AS PER PLAN), FREE TO MOVE IN SLEEVE
5. NON-HARDENING WATERPROOF SEALANT BOTH ENDS OF SLEEVE

2 CONCEALED PIPE IN WALL - PLAN

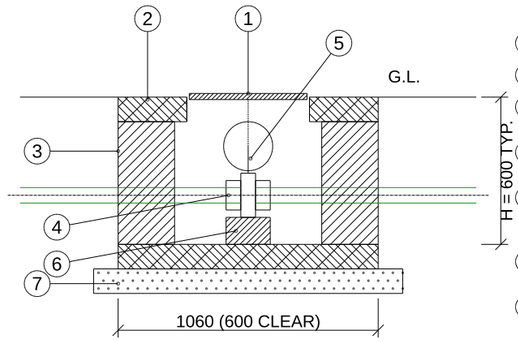
SCALE 1:5



1. 230 mm BRICK WALL
2. 12 mm CEMENT PLASTER 1:3
3. WALL TILE / FINISH WITH ADHESIVE
4. CHASE 60 x 40 mm MAX. (NOT MORE THAN 1/3 WALL THICKNESS), FILLED WITH CEMENT MORTAR 1:3
5. PPR / WATER SUPPLY PIPE (20-25 mm), WRAPPED WITH PROTECTIVE TAPE
6. GALVANIZED WIRE MESH 150 mm WIDE OVER CHASE BEFORE PLASTER

3 VALVE CHAMBER - SECTION

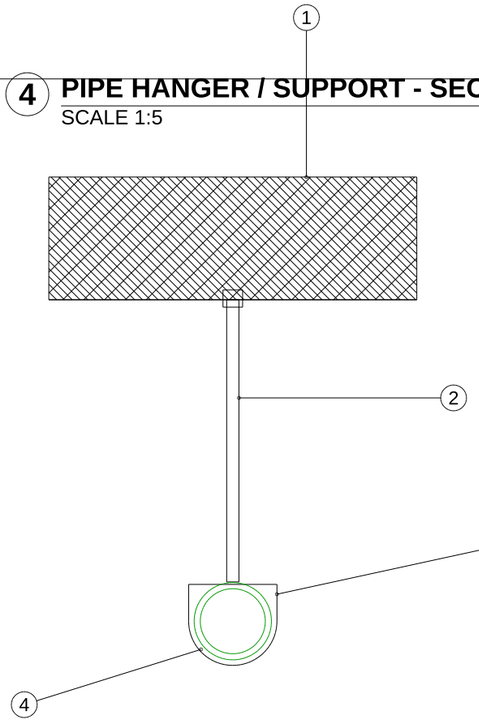
SCALE 1:25



1. CI COVER AND FRAME
2. 150 mm RCC COVER SLAB
3. 230 mm BRICK WALL, PLASTERED INSIDE
4. WATER SUPPLY PIPE (SIZE AS PER PLAN)
5. GATE / BALL ISOLATION VALVE WITH SPINDLE EXTENSION AND KEY
6. BRICK / PCC PIPE SUPPORT PEDESTAL
7. RCC BASE SLAB ON PCC

4 PIPE HANGER / SUPPORT - SECTION

SCALE 1:5



1. RCC SLAB / BEAM SOFFIT
2. M10 THREADED ROD WITH ANCHOR FASTENER / EXPANSION BOLT
3. G.I. CLEVIS HANGER / CLAMP (RUBBER LINED)
4. WATER SUPPLY PIPE (SIZE AS PER PLAN)

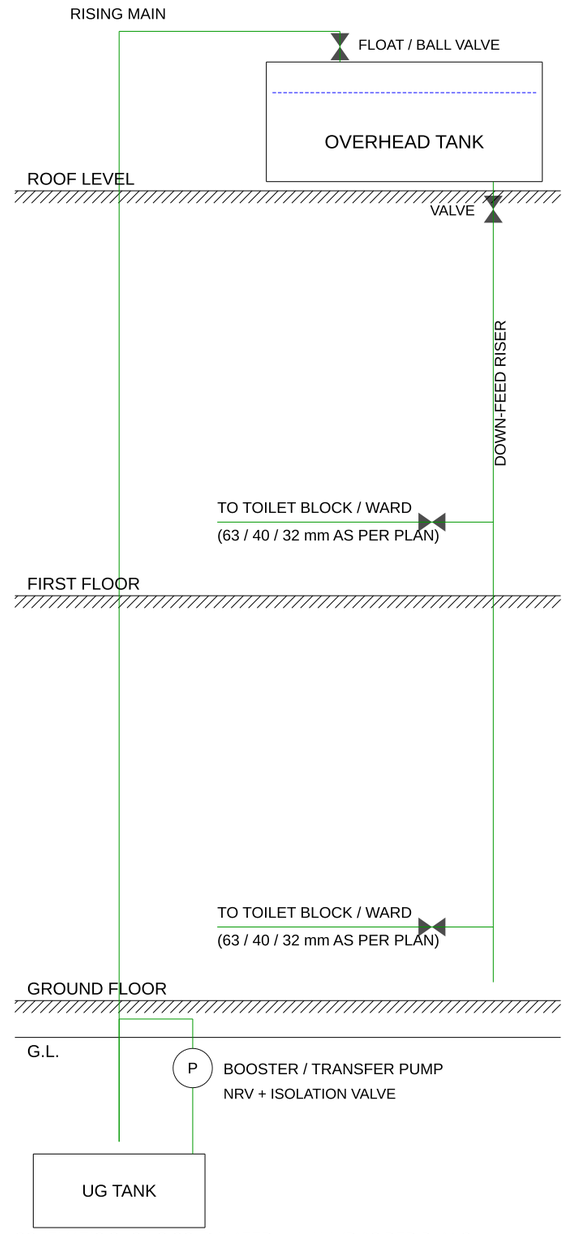
SUPPORT SPACING (HORIZ.):
(TYPICAL VALUES)

DIA. 25 mm	- 900 mm c/c
DIA. 32 mm	- 1000 mm c/c
DIA. 40 mm	- 1100 mm c/c
DIA. 50 mm	- 1250 mm c/c
DIA. 63 mm	- 1400 mm c/c

VERT.: 1.5 x HORIZ. SPACING

5 WATER SUPPLY - SCHEMATIC

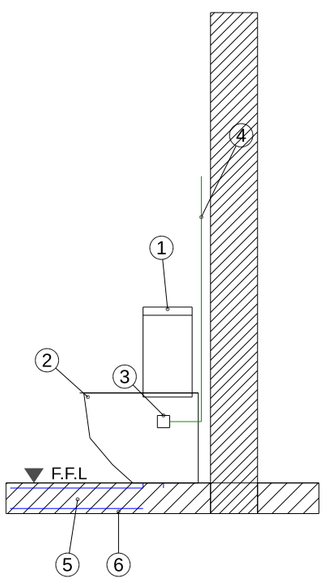
NOT TO SCALE



SCHEMATIC SHOWS COLD WATER; HW / HWR AS PER PLANS

Drawing shall not be copied or used without permission.

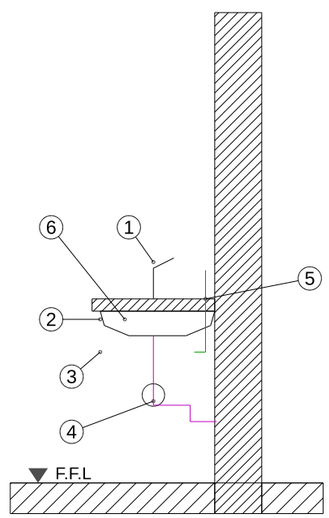
CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	TYPICAL DETAILS WATER SUPPLY SYSTEM	P - 32 REV 00



1. LOW-LEVEL CISTERN, FLOAT VALVE + DUAL FLUSH
2. EUROPEAN TYPE WATER CLOSET PAN (FLOOR MOUNTED)
3. ANGLE STOP COCK, 15 mm CW CONNECTION
4. 15 mm CW PIPE, CHROME PLATED COPPER FEED
5. 100 mm SOIL PIPE RUN IN SLAB (S-OUTLET), 1:60 FALL
6. SAND FILLING IN SLAB RECESS

SCALE 1:30

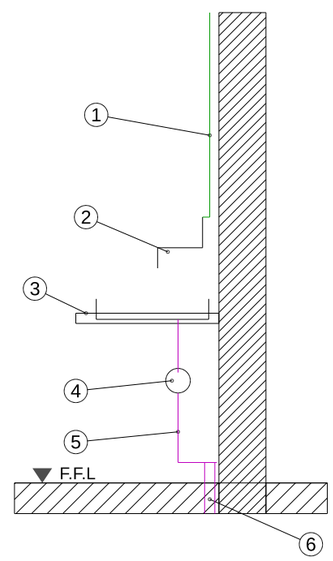
DETAIL OF EUROPEAN TYPE WATER CLOSET



1. MIXER TAP, DECK / WALL MOUNTED
2. COUNTER TOP WITH CUT-OUT AS PER INTERIOR DESIGN
3. TEE STOP COCK, 15 mm CW / HW
4. BOTTLE TRAP, 32 mm / 50 mm WASTE TO DRAIN
5. 15 mm CW / HW PIPES IN WALL CHASE
6. LAVATORY BASIN, UNDER-COUNTER / WALL HUNG

SCALE 1:30

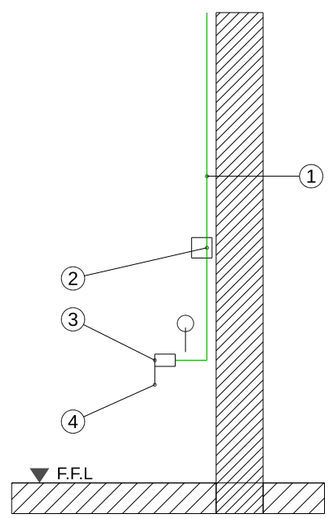
DETAIL OF LAVATORY



1. 20 mm CW PIPE FROM ABOVE FALSE CEILING (A.F.C.)
2. SWAN-NECK TAP / MIXER ON WALL
3. KITCHEN SINK (SS) ON COUNTER
4. BOTTLE TRAP, 40 mm OUTLET
5. 50 mm DRAIN PIPE DOWN TO FLOOR DRAIN / SLEEVE
6. SLEEVE THROUGH SLAB TO BE FILLED WITH NON-SHRINK GROUT

SCALE 1:30

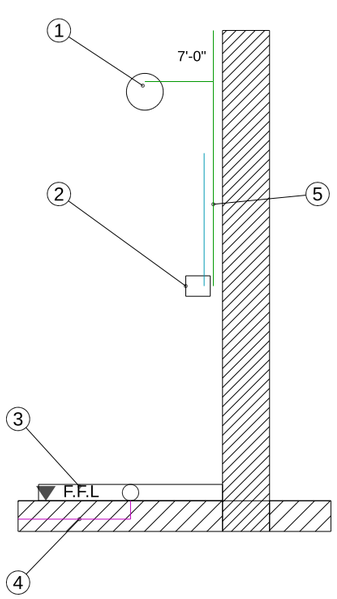
SIDE VIEW DETAIL OF KITCHEN SINK



1. 15 mm CW PIPE FROM CEILING SLAB DOWN IN WALL CHASE
2. WALL BRACKET / CLIPS AT 1.0 m c/c
3. LONG-NECK BIB COCK, CHROME PLATED, 600 mm A.F.F.L
4. HOSE UNION / HOSE CONNECTION

SCALE 1:30

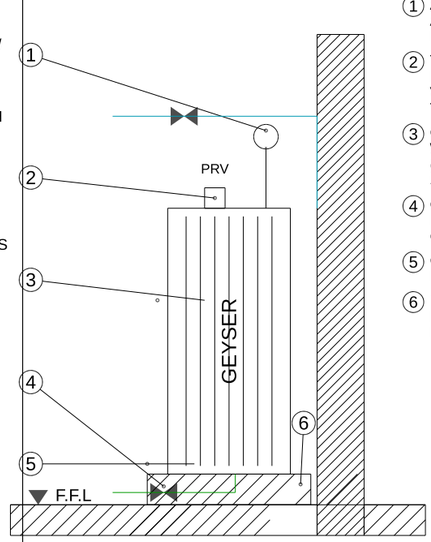
BIB TAP DETAIL



1. SHOWER HEAD, 15 mm CW/HW ARM
2. HOT & COLD MIXER / CONCEALED STOP COCK, 1050 mm A.F.F.L
3. SHOWER TRAY WITH 50 mm TRAPPED WASTE
4. 50 mm DRAIN PIPE (P-TRAP) TO FLOOR DRAIN
5. BLOCK MASONRY WALL, THICKNESS AS SHOWN ON PLAN

SCALE 1:30

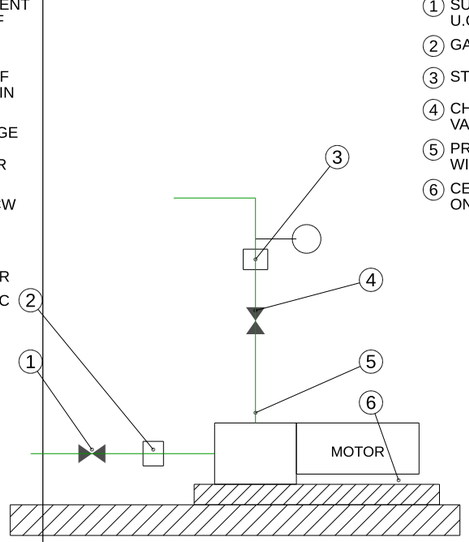
DETAIL OF SHOWER



1. AUTOMATIC AIR VENT AT HIGH POINT OF HW PIPE
2. TEMPERATURE & PRESSURE RELIEF VALVE (T&P), DRAIN TO FLOOR
3. GEYSER / STORAGE WATER HEATER (CAPACITY AS PER SCHEDULE)
4. GATE VALVE ON CW INLET, UNION CONNECTION
5. CW INLET 20 mm FROM CW HEADER
6. 100 mm THICK RCC FOUNDATION / PLINTH

SCALE 1:30

DETAIL OF GEYSER



1. SUCTION PIPE FROM U.G. TANK
2. GATE VALVE
3. STRAINER
4. CHECK VALVE + GATE VALVE
5. PRESSURE GAUGE WITH COCK
6. CENTRIFUGAL PUMP ON RCC PLINTH

SCALE 1:30

DETAIL OF WATER TRANSFER PUMP

NOTES

1. ALL DETAILS ARE TYPICAL AND SCHEMATIC; DIMENSIONS IN mm UNLESS NOTED.
2. FIXTURE MOUNTING HEIGHTS ARE FROM FINISHED FLOOR LEVEL (F.F.L).
3. FIXTURE MODELS, COUNTER CUT-OUTS AND CARRIER FRAMES AS PER ARCHITECT / MANUFACTURER.
4. ALL PIPE SLEEVES THROUGH SLABS AND WALLS TO BE FILLED WITH NON-SHRINK GROUT.
5. REFER GENERAL NOTES SHEET FOR MATERIAL AND TESTING REQUIREMENTS.

Drawing shall not be copied or used without permission.

CLIENT

HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT

SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

REVISIONS

REV	DESCRIPTION	DATE

SIGN-OFF

DRAWN BY
Zohaib Saleem Abbasi

CHECKED BY

APPROVED BY

DRAWING TITLE

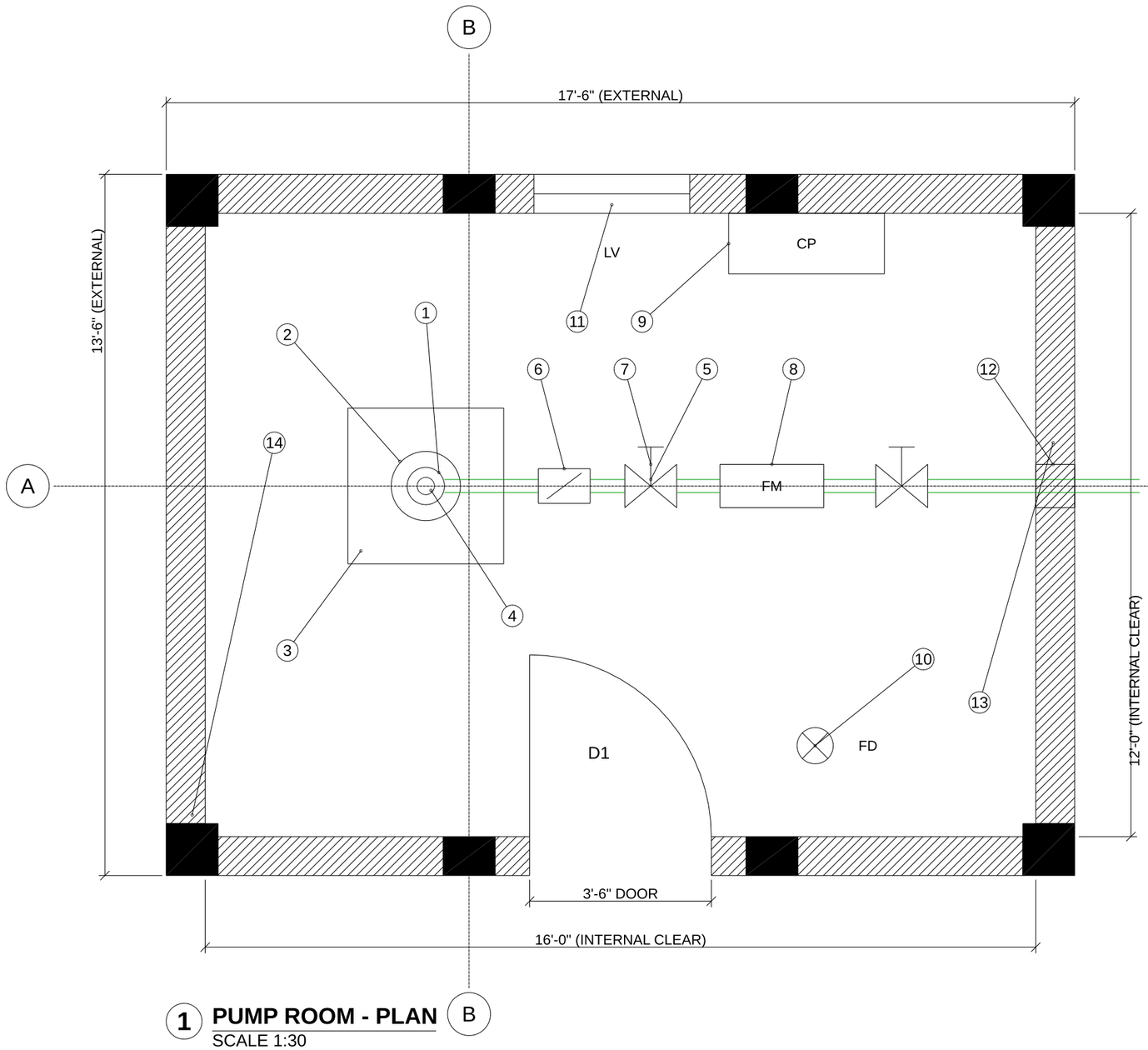
FIXTURE SECTIONS

WATER SUPPLY SYSTEM

DRAWING NO.

P - 33

REV 00



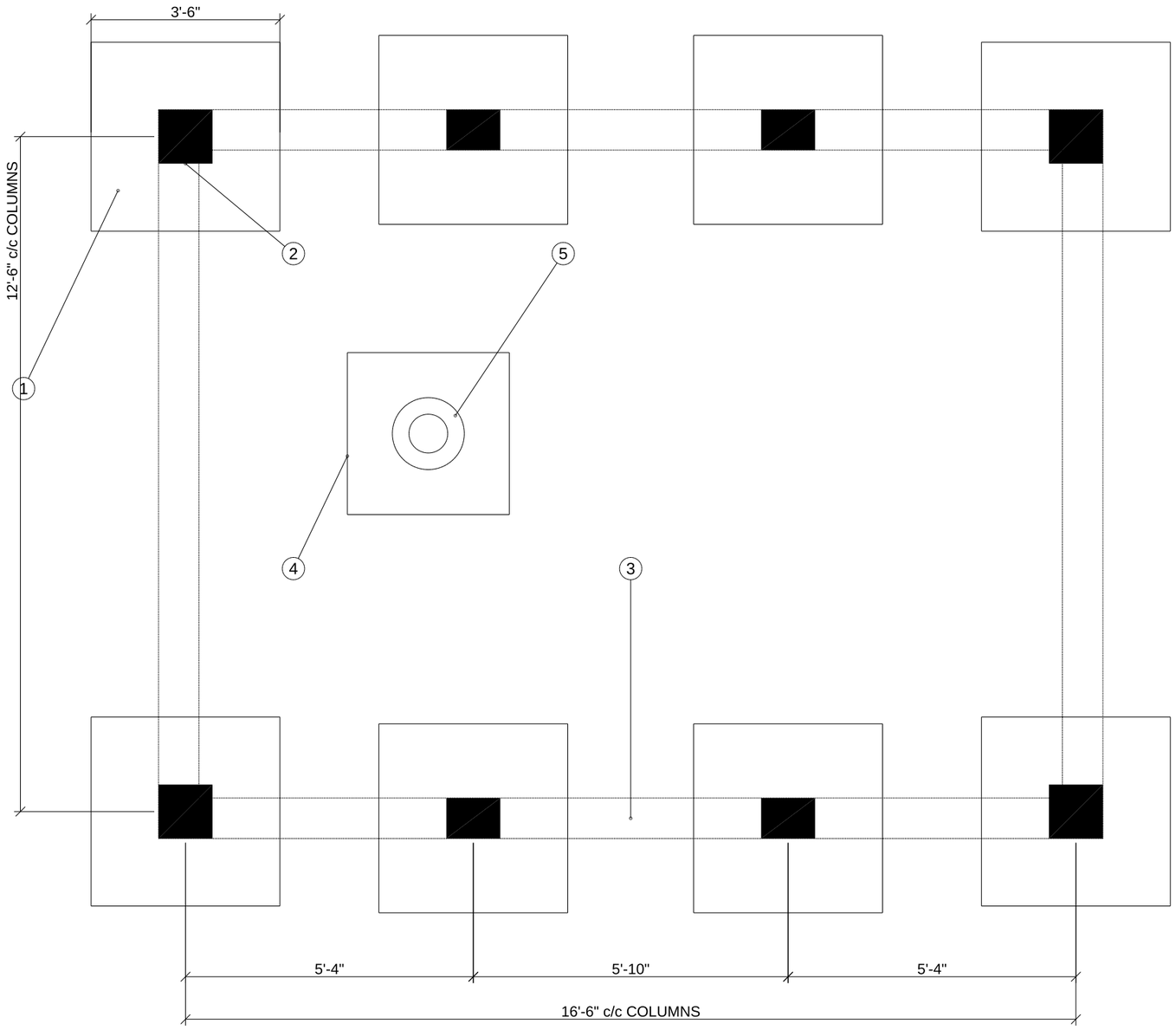
1. TUBEWELL, 750'-0" DEEP, 8-5/8" DIA MS CASING (SEE A - 88)
2. 16" DIA CONDUCTOR CASING, CEMENT GROUTED
3. RCC PEDESTAL 3'-0" x 3'-0"
4. SUBMERSIBLE PUMP SET INSIDE CASING (SEE A - 88)
5. RISING MAIN 2-1/2" DIA GI
6. NON-RETURN VALVE
7. GATE VALVE
8. FLOW METER (FM)
9. CONTROL PANEL (CP) WITH STARTER
10. FLOOR DRAIN (FD)
11. LOUVRE (LV), 3'-0" WIDE
12. PIPE SLEEVE THROUGH WALL, RISING MAIN TO WATER TANK
13. 9" THICK BRICK WALL, CEMENT PLASTER BOTH SIDES
14. RCC COLUMN C1, 12" x 12" (CORNER) / 12" x 9" (SEE A - 83)

1 PUMP ROOM - PLAN
SCALE 1:30

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	PUMP ROOM AND TUBEWELL PLAN	P - 34 REV 00

① ISOLATED FOOTING F1, 3'-6" x 3'-6" x 1'-0" THICK, ON 4" PCC (SEE A - 87)
② RCC COLUMN C1, 12" x 12" (CORNER) / 12" x 9" (OTHERS)
③ PLINTH BEAM PB, 9" x 12" (SHOWN DASHED) ALL ROUND
④ RCC PEDESTAL 3'-0" x 3'-0" FOR WELL HEAD (SEE A - 85)
⑤ 16" DIA CONDUCTOR CASING / 8-5/8" DIA CASING OF TUBEWELL

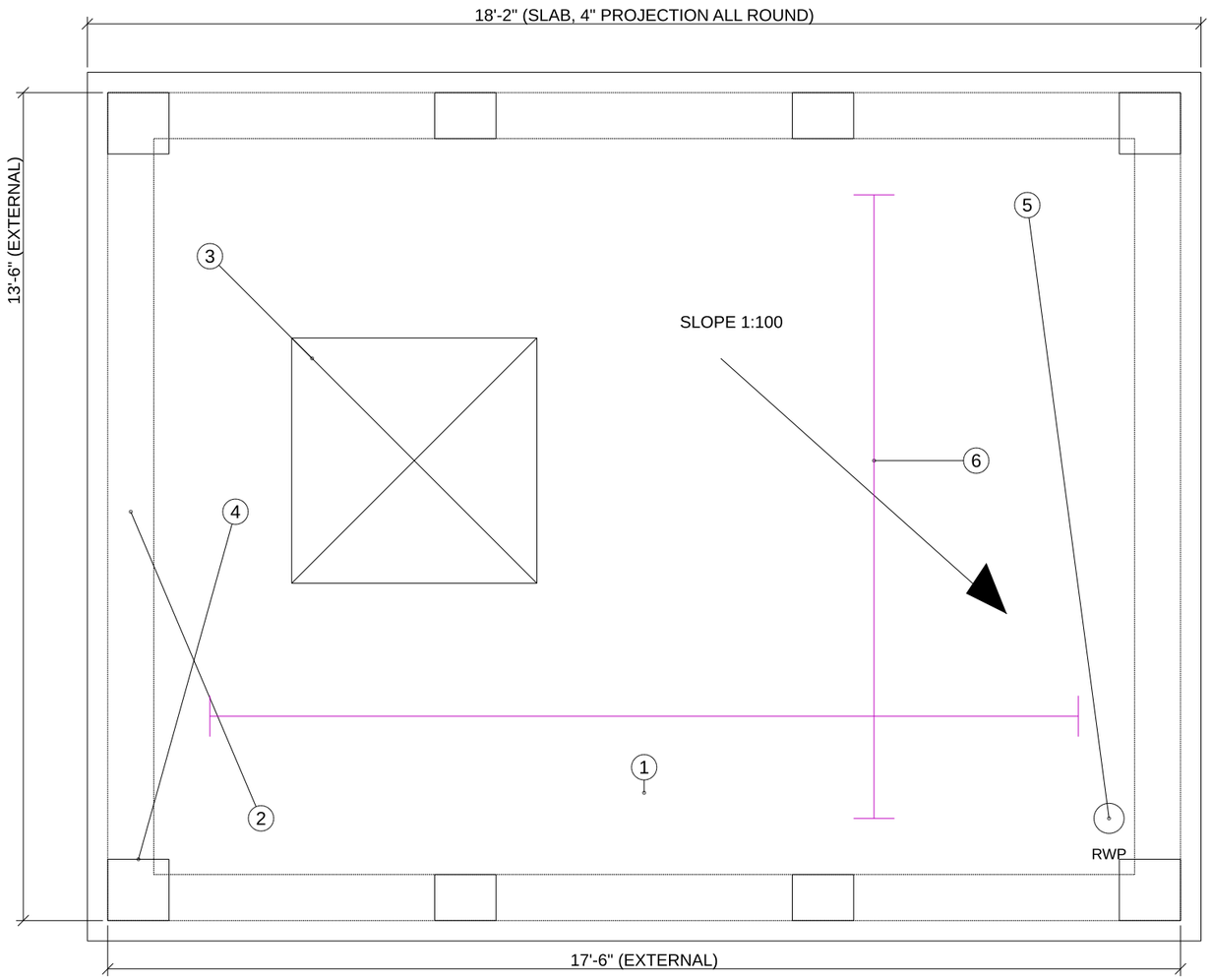


① FOUNDATION PLAN
SCALE 1:30

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	PUMP ROOM AND TUBEWELL FOUNDATION PLAN	P - 35 REV 00

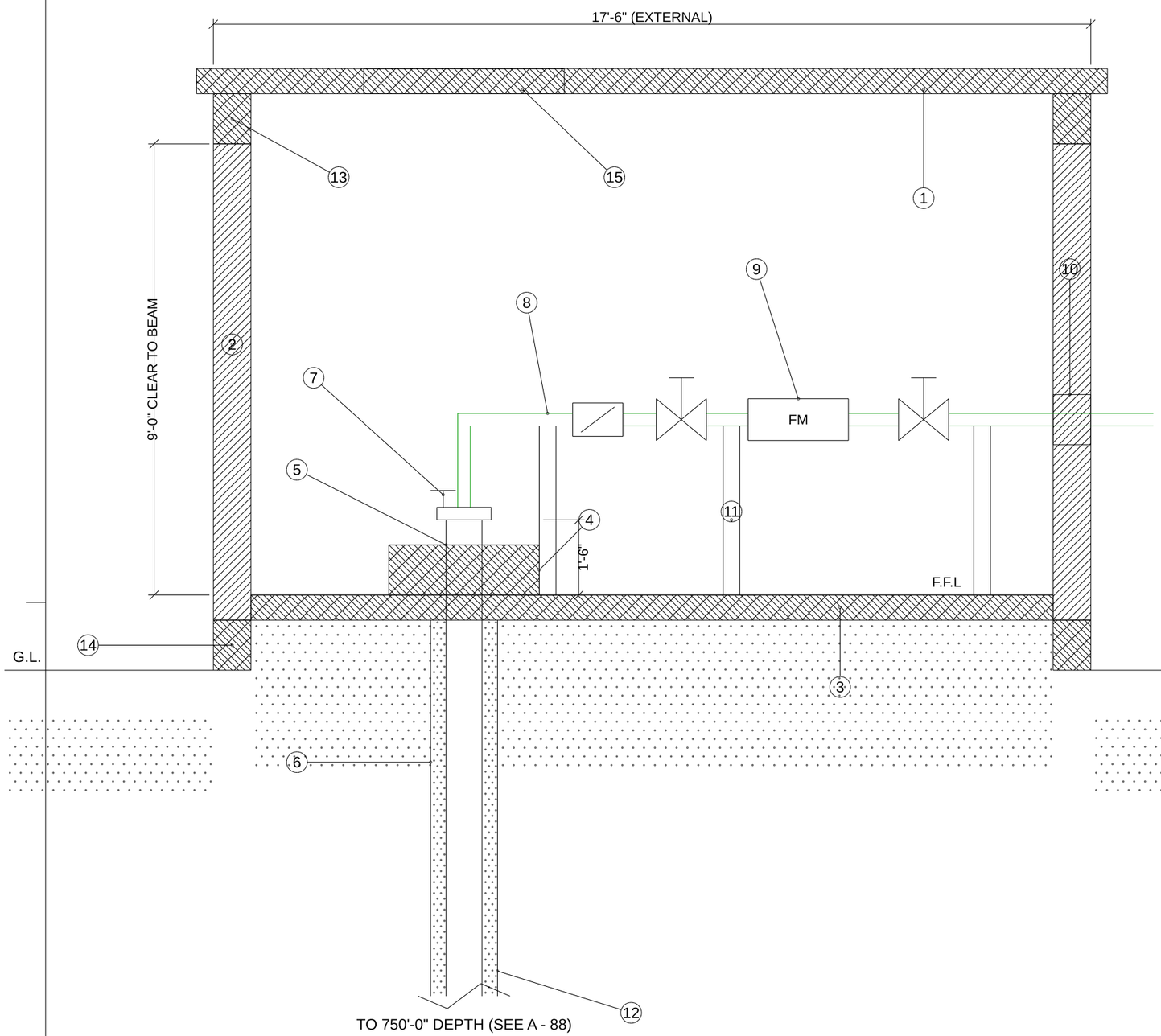
① RCC ROOF SLAB S1, 6" THICK, #4 @ 6" c/c BOTH WAYS (BOTTOM)
② ROOF BEAMS RB, 9" x 18" (INCL. SLAB) OVER ALL WALLS (SHOWN DASHED)
③ REMOVABLE RCC COVER 4'-0" x 4'-0" OVER WELL HEAD FOR PUMP PULLING
④ RCC COLUMNS BELOW (SEE A - 83)
⑤ RAIN WATER PIPE (RWP) 4" DIA, WITH WATERPROOFING AND 4" DRIP PROJECTION
⑥ TYPICAL BOTTOM BARS #4 @ 6" c/c (SEE A - 87)



① ROOF SLAB PLAN
SCALE 1:30

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	PUMP ROOM AND TUBEWELL ROOF SLAB PLAN	P - 36 REV 00



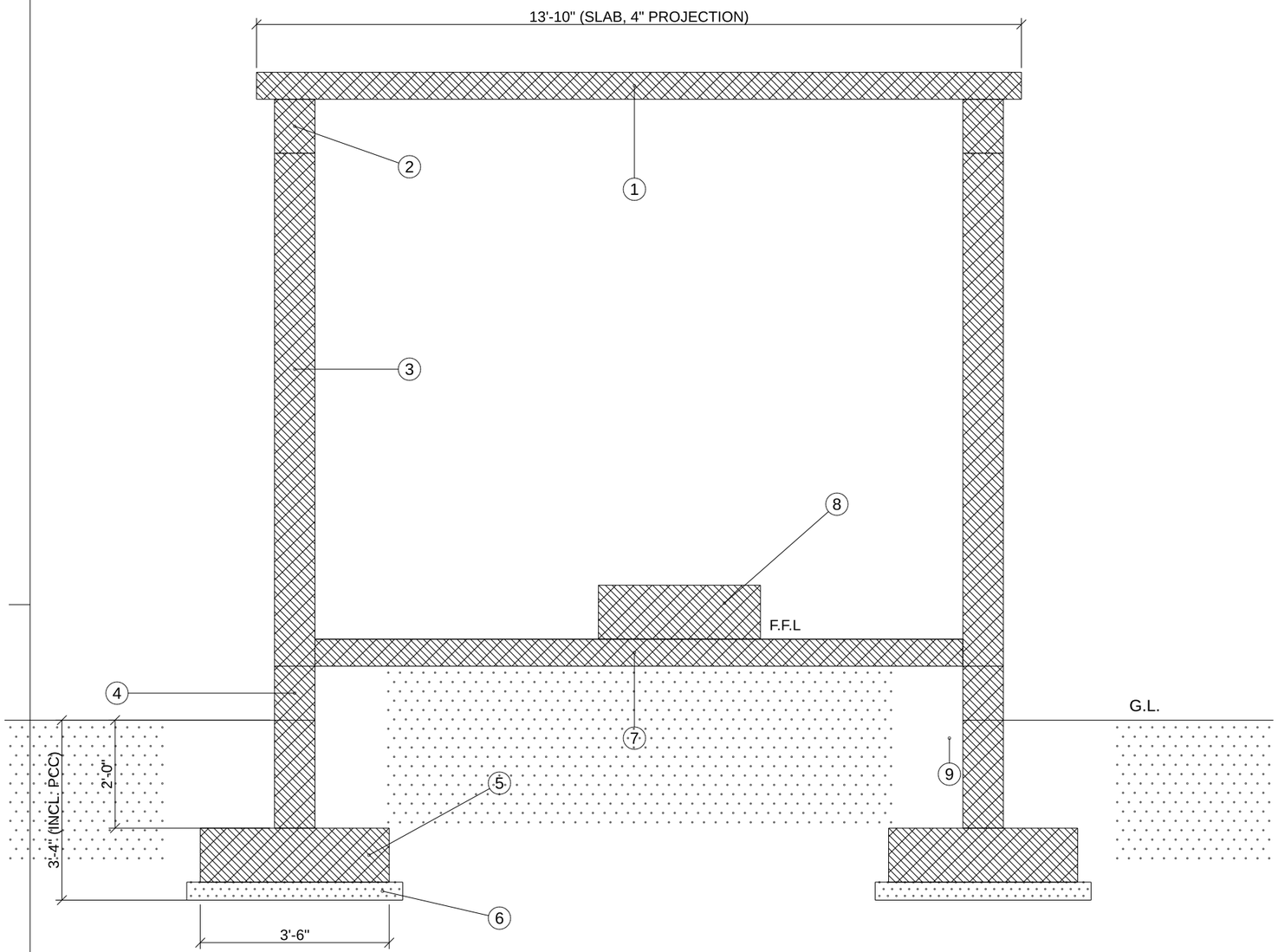
1. RCC ROOF SLAB, 6" THICK, WITH WATERPROOFING
2. 9" THICK BRICK WALL, CEMENT PLASTER BOTH SIDES
3. RCC FLOOR SLAB 6" THICK ON COMPACTED FILL
4. RCC PEDESTAL 3'-0" x 3'-0" x 1'-0"
5. 8-5/8" DIA MS CASING, 1'-6" ABOVE FFL
6. 16" DIA CONDUCTOR CASING, CEMENT GROUTED
7. SANITARY WELL CAP WITH CABLE GLAND AND VENT
8. RISING MAIN 2-1/2" DIA GI
9. NON-RETURN VALVE, GATE VALVES AND FLOW METER
10. PIPE SLEEVE THROUGH WALL
11. PIPE SUPPORT
12. SUBMERSIBLE PUMP SET AT 620'-0" DEPTH (SEE A - 88)
13. ROOF BEAM RB, 9" x 12" BELOW SLAB
14. PLINTH BEAM PB, 9" x 12"
15. REMOVABLE RCC COVER 4'-0" WIDE OVER WELL HEAD

1 SECTION A-A

SCALE 1:30

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	PUMP ROOM AND TUBEWELL SECTION A-A	P - 37 REV 00



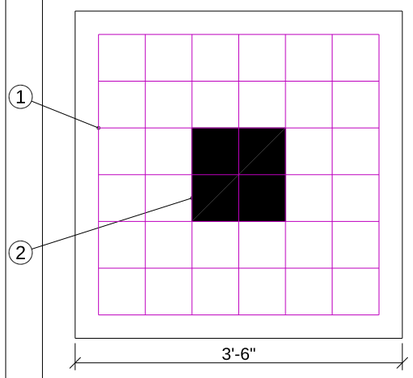
1. RCC ROOF SLAB 6" THICK WITH WATERPROOFING
2. ROOF BEAM RB 9" x 12" BELOW SLAB
3. RCC COLUMN C1, 12" x 9", 4 - #6 BARS, #3 TIES @ 6" c/c
4. PLINTH BEAM PB 9" x 12" (LEVEL WITH G.L.)
5. RCC ISOLATED FOOTING F1, 3'-6" x 3'-6" x 1'-0", #5 @ 6" c/c BOTH WAYS
6. 4" PCC 1:4:8 UNDER FOOTING
7. RCC FLOOR SLAB 6" ON COMPACTED FILL AND DPC
8. RCC PEDESTAL FOR WELL HEAD (BEYOND)
9. COMPACTED BACKFILL / EXISTING SOIL

1 SECTION B-B
SCALE 1:30

Drawing shall not be copied or used without permission.

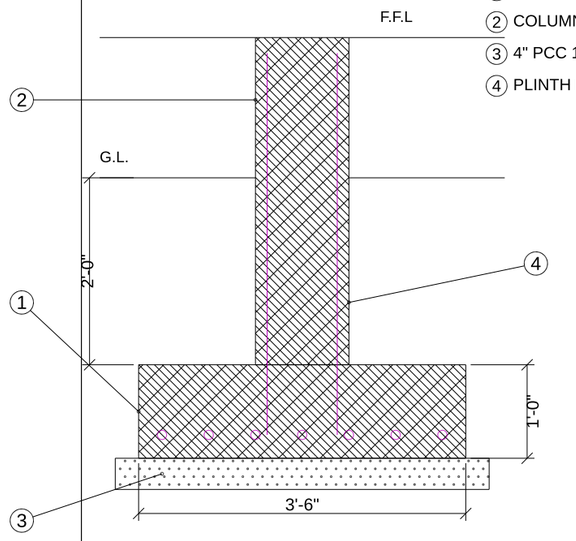
CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	PUMP ROOM AND TUBEWELL SECTION B-B	P - 38 REV 00

1 #5 @ 6" c/c BOTTOM BARS, BOTH WAYS
2 COLUMN C1 STARTER BARS



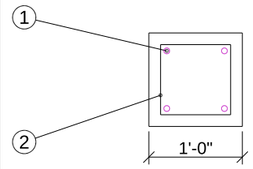
1 FOOTING F1 - PLAN
SCALE 1:20

1 FOOTING 3'-6" x 3'-6" x 1'-0" THICK
2 COLUMN 12" WIDE WITH 4 - #6 BARS
3 4" PCC 1:4:8
4 PLINTH BEAM PB



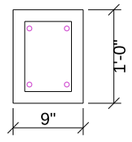
2 FOOTING F1 - SECTION
SCALE 1:20

1 4 - #6 VERTICAL BARS
2 #3 TIES @ 6" c/c, 1-1/2" COVER

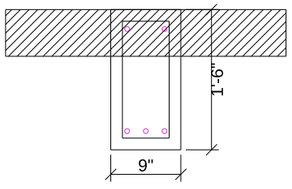


3 COLUMN C1 - SECTION
SCALE 1:20

PB (9" x 12")

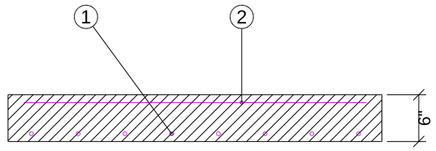


RB (9" x 18")



4 BEAM SECTIONS
SCALE 1:20

1 6" THICK RCC SLAB, #4 @ 6" c/c (BOTTOM)
2 DISTRIBUTION / TOP STEEL #3 @ 9" c/c



BOTTOM BARS #4 @ 6" c/c, COVER 3/4"

5 ROOF SLAB S1 - SECTION
SCALE 1:20

GENERAL NOTES (TYPICAL)

1. CONCRETE: 3000 psi (1:2:4) AT 28 DAYS. STEEL: GRADE 60 (60,000 psi) DEFORMED BARS.
2. COVER: FOOTING 3", COLUMN AND BEAM 1-1/2", SLAB 3/4".
3. BRICK MASONRY 9" THICK IN CEMENT SAND MORTAR 1:4. DPC 1" THICK 1:2:4 AT PLINTH.
4. BOTTOM OF FOOTING 3'-0" BELOW G.L. SAFE BEARING CAPACITY TO BE CONFIRMED BY SOIL REPORT.
5. ALL SIZES AND REINFORCEMENT ARE TYPICAL AND TO BE CONFIRMED BY THE STRUCTURAL ENGINEER.

MARK	SIZE	REINFORCEMENT
F1	3'-6" x 3'-6" x 1'-0"	#5 @ 6" c/c B.W.
C1	12" x 12" / 12" x 9"	4 - #6, #3 TIES @ 6"
PB	9" x 12"	2 - #5 T&B, #3 @ 6"
RB	9" x 18" (INCL. SLAB)	2 - #5 TOP, 3 - #5 BOT, #3 @ 6"
S1	6" SLAB	#4 @ 6" c/c B.W.

Drawing shall not be copied or used without permission.

CLIENT
HEALTH DEPARTMENT, GOVERNMENT OF SINDH

PROJECT
SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)

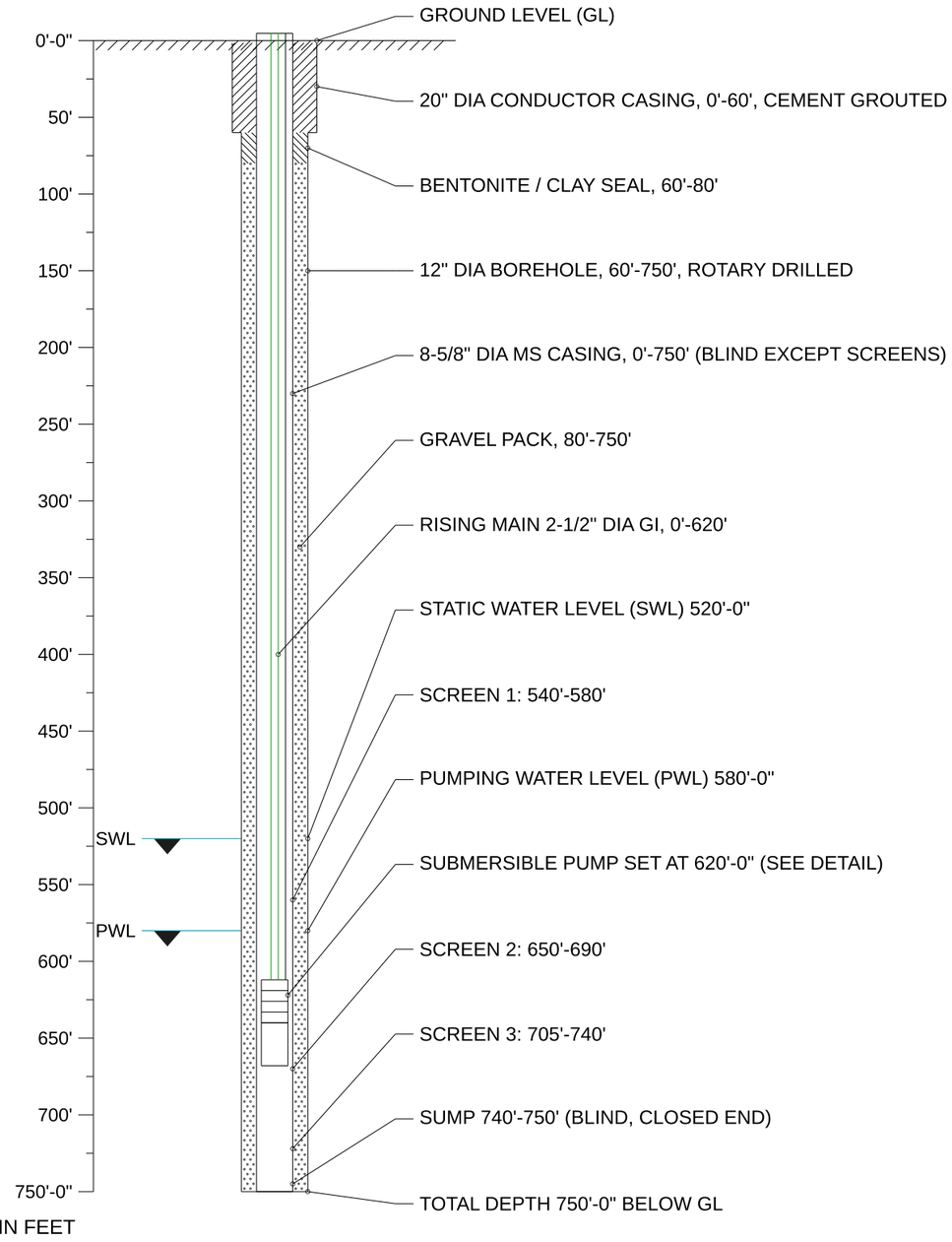
REVISIONS

REV	DESCRIPTION	DATE

SIGN-OFF
DRAWN BY
Zohaib Saleem Abbasi
CHECKED BY
APPROVED BY

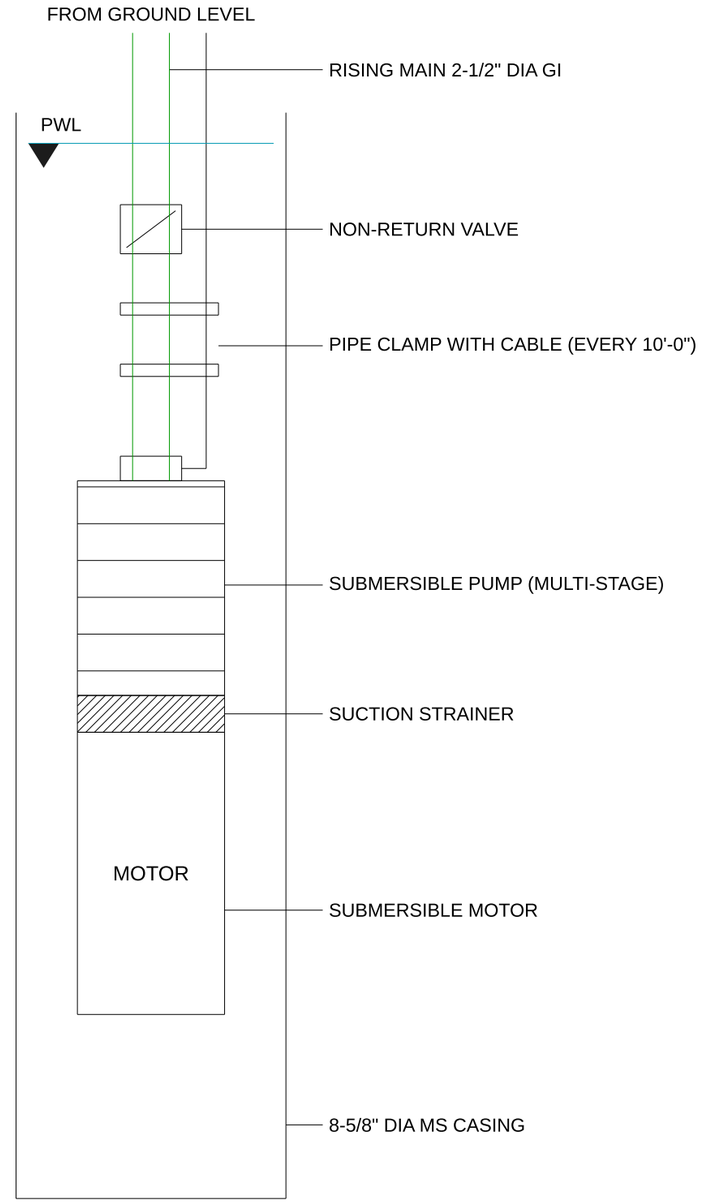
DRAWING TITLE
PUMP ROOM AND TUBEWELL
RCC DETAILS AND NOTES

DRAWING NO.
P - 39
REV 00



TUBEWELL - BOREHOLE PROFILE

VERTICAL SCALE 1" = 100'-0". BOREHOLE AND CASING WIDTHS ARE EXAGGERATED (NOT TO SCALE HORIZONTALLY).

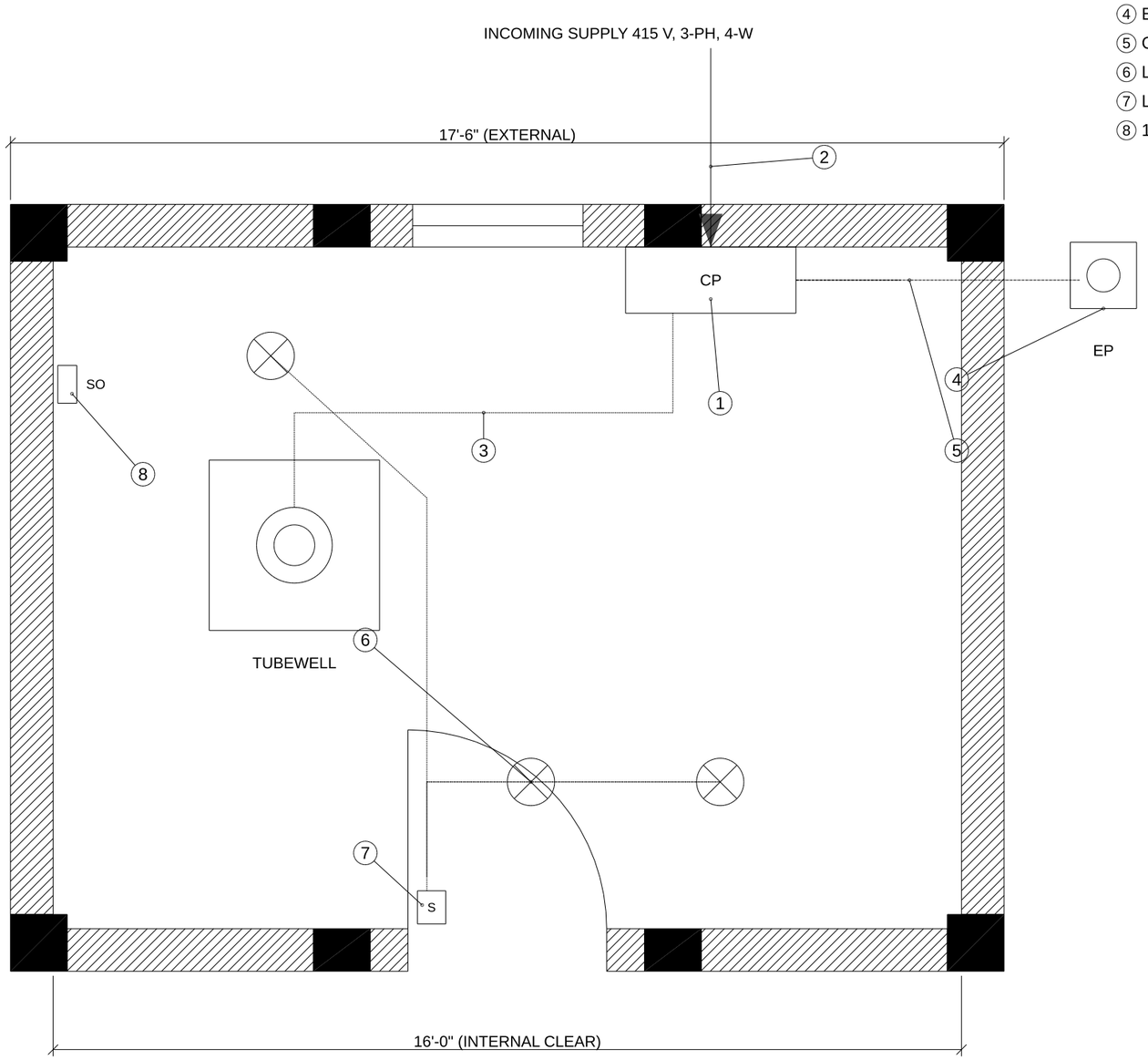


PUMP SETTING DETAIL (NOT TO SCALE)

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	PUMP ROOM AND TUBEWELL BOREHOLE AND PUMP SETTING	P - 40 REV 00

① CONTROL PANEL (CP): STARTER, PROTECTION, METERING
② INCOMING SUPPLY 415 V, 3-PH, 4-W, 50 Hz FROM MAIN LV PANEL
③ 2" DIA GI CONDUIT IN FLOOR, CP TO WELL HEAD (MOTOR CABLE 4C x 16 sq.mm)
④ EARTH PIT (EP) WITH GI ELECTRODE, SEE DETAIL ON A-90
⑤ GI EARTH CONDUCTOR 25 x 3 mm, CP TO EARTH PIT
⑥ LED LIGHT FITTING (3 NOS.)
⑦ LIGHT SWITCH (S)
⑧ 13 A SOCKET OUTLET (SO)



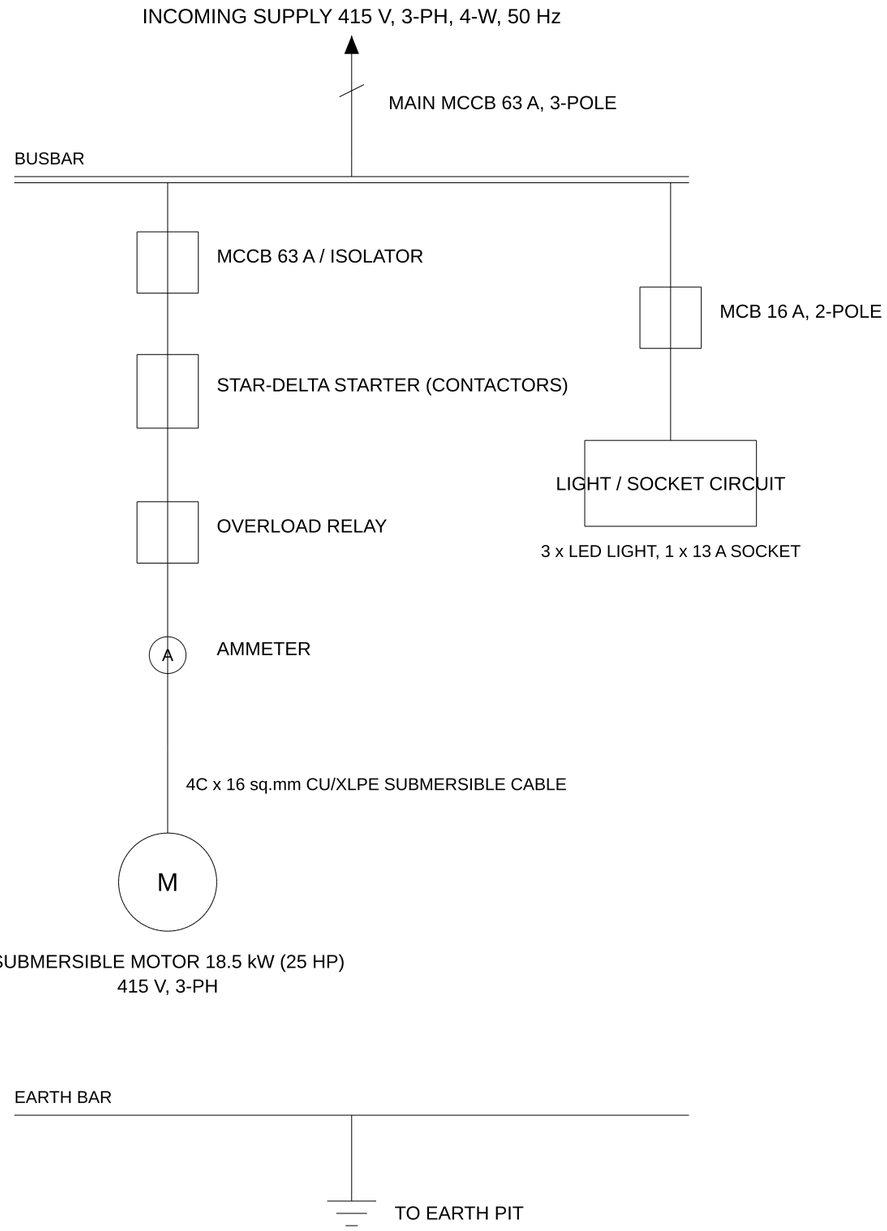
① PUMP ROOM - ELECTRICAL LAYOUT
SCALE 1:30

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	PUMP ROOM AND TUBEWELL ELECTRICAL LAYOUT	P - 41 REV 00

1 SINGLE LINE DIAGRAM

NOT TO SCALE



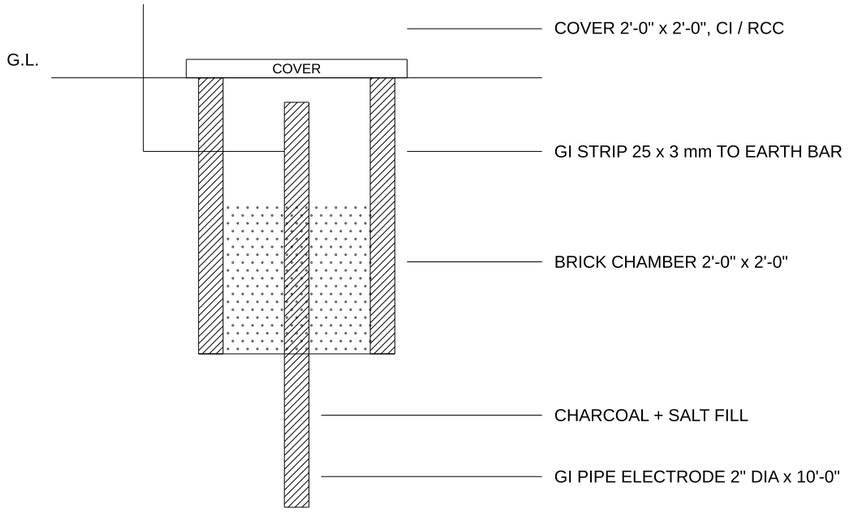
SIZES AND RATINGS ARE INDICATIVE AND TO BE CONFIRMED BY THE ELECTRICAL ENGINEER.

2 LOAD SCHEDULE

ITEM	RATING	PROTECTION	CABLE
SUBMERSIBLE PUMP	18.5 kW, 415 V	MCCB 63 A + O/L	4C x 16 sq.mm
LIGHTS / SOCKET	1 kW	MCB 16 A	2C x 2.5 sq.mm
INCOMER	415 V, 3-PH, 4-W	MCCB 63 A	4C x 25 sq.mm

3 EARTH PIT - SECTION

NOT TO SCALE



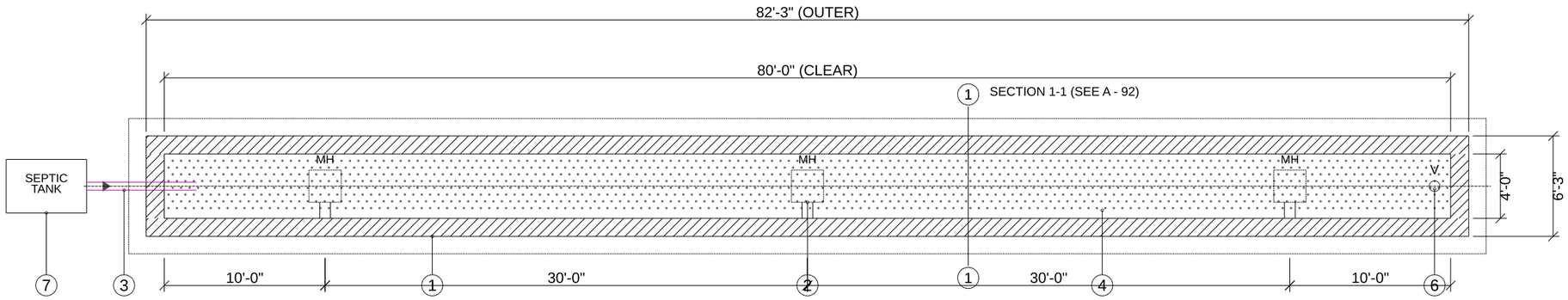
EARTH RESISTANCE NOT MORE THAN 5 OHM

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	PUMP ROOM AND TUBEWELL SINGLE LINE DIAGRAM AND EARTHING	P - 42 REV 00

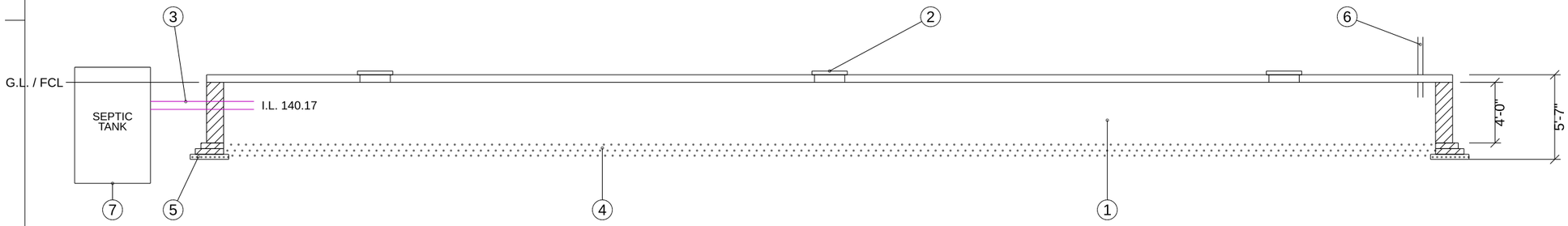
1 SOAKAGE TRENCH - PLAN (SLAB NOT SHOWN)

SCALE 1:100



2 SOAKAGE TRENCH - LONGITUDINAL SECTION

SCALE 1:100



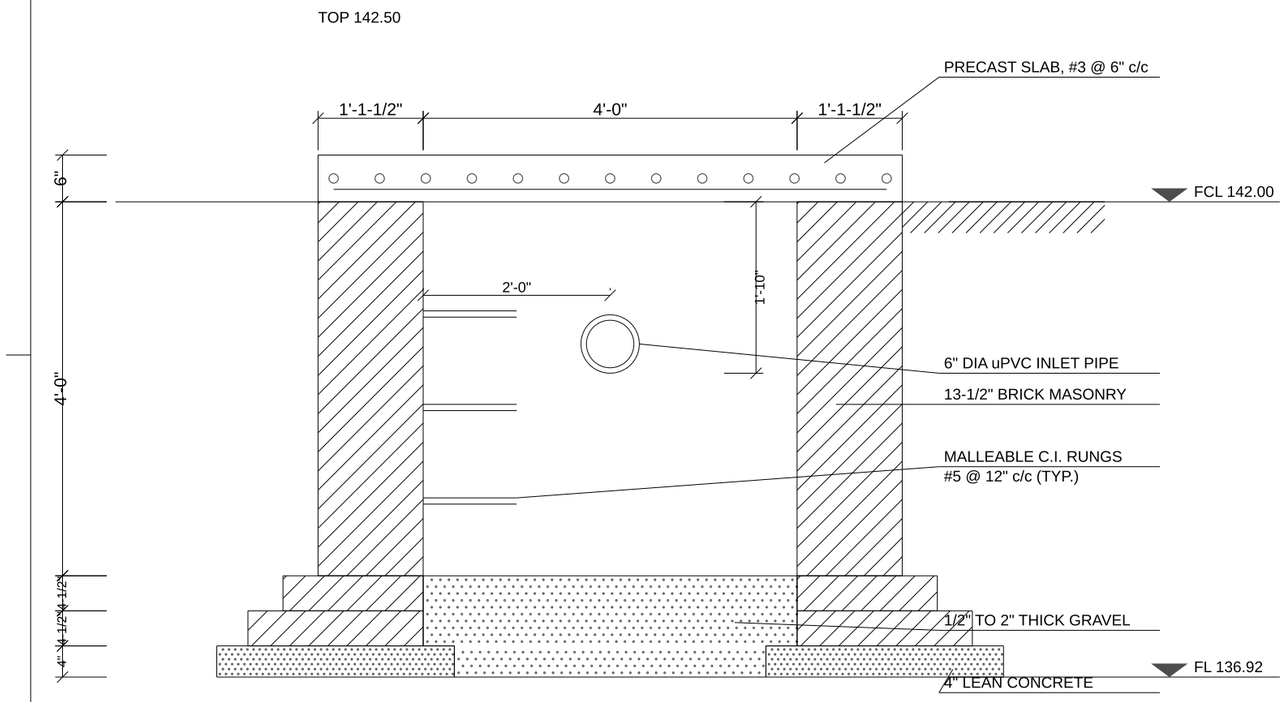
1. 13-1/2" BRICK MASONRY WALLS (SEE SECTION 1-1, A - 92)
2. PRECAST SLAB 6" THK, #3 @ 6" c/c, WITH 2'-0" x 2'-0" C.I. ACCESS MANHOLE (MH) AT 10', 40', 70'. MALLEABLE C.I. RUNGS #5 @ 12" c/c (TYP.)
3. 6" DIA uPVC INLET PIPE FROM SEPTIC TANK, I.L. 140.17
4. 1/2" TO 2" THICK GRAVEL BED
5. 4" LEAN CONCRETE
6. VENT PIPE 4" DIA, 3'-0" ABOVE G.L. (V)
7. SEPTIC TANK (EXISTING / PROPOSED) - SEE SEPARATE DRAWING

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	SOAKAGE TRENCH PLAN AND LONGITUDINAL SECTION	P - 43 REV 00

SECTION 1-1

SCALE 1:20



DESIGN BASIS (TO BE CONFIRMED)

TRENCH (CLEAR)	80'-0" LONG x 4'-0" WIDE x 4'-0" HIGH CHAMBER
TRENCH (OUTER)	82'-3" x 6'-3" (13-1/2" BRICK WALLS), FL 5'-1" BELOW G.L.
CHAMBER VOLUME	80 x 4 x 4 = 1,280 cu.ft (~ 9,575 US gal)
GRAVEL BED	80'-0" x 3'-3" x 1'-1" = 281 cu.ft, VOIDS 40% = 112 cu.ft
ABSORPTION AREA (BED BOTTOM)	80 x 3.25 = 260 sq.ft

DAILY CAPACITY = ABSORPTION AREA x ABSORPTION RATE

ABSORPTION RATE (US gal/sq.ft/day)	DAILY CAPACITY (US gal/day)
1.0 (SLOW SOIL, CLAY LOAM)	260
2.0 (MEDIUM SOIL, SILT / FINE SAND)	520
3.0 (FAST SOIL, SAND)	780

NOTES

1. SECTION 1-1 IS TAKEN FROM THE REFERENCE SECTION PROVIDED. LEVELS (TOP 142.50, FCL 142.00, I.L. 140.17, FL 136.92) ARE AS IN THAT SECTION; CONFIRM WITH SITE LEVELS.
2. THE 4'-0" x 4'-0" CHAMBER ACTS AS A STORAGE / SETTLING TRENCH; EFFLUENT SOAKS THROUGH THE GRAVEL BED. ABSORPTION RATE TO BE FIXED FROM A SITE PERCOLATION TEST.
3. DAILY INFLOW (SEPTIC TANK EFFLUENT) MUST NOT EXCEED THE CAPACITY ABOVE. IF IT DOES, INCREASE THE LENGTH, ADD A SECOND TRENCH OR WIDEN THE GRAVEL BED.
4. BOTTOM (FL) OF TRENCH TO BE AT LEAST 3'-0" ABOVE THE HIGHEST GROUND WATER LEVEL. TRENCH TO BE AT LEAST 100'-0" FROM ANY TUBEWELL, 20'-0" FROM BUILDINGS (CONFIRM AS PER LOCAL REGULATIONS).
5. ONLY SEPTIC TANK EFFLUENT IS TO ENTER THE TRENCH. NO RAIN WATER, KITCHEN OIL OR HARMFUL CHEMICALS.
6. PRECAST SLAB 6" THK WITH #3 @ 6" c/c, 2'-0" x 2'-0" C.I. ACCESS MANHOLE COVERS AT 10'-0", 40'-0" AND 70'-0". RUNGS #5 @ 12" c/c ON ONE LONG WALL AT EACH MANHOLE.
7. NO VEHICLE TRAFFIC OR HEAVY LOAD OVER THE TRENCH. KEEP TREES AWAY.
8. ALL SIZES EXCEPT THE REFERENCE SECTION ARE TYPICAL AND TO BE CONFIRMED BY THE ENGINEER.

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	SOAKAGE TRENCH CROSS SECTION, DESIGN BASIS AND NOTES	P - 44 REV 00

GENERAL NOTES

GENERAL AND POWER SYSTEM

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

2. THESE NOTES SHALL BE APPLICABLE TO THE ENTIRE ELECTRICAL WORKS. IF THE SITE CONDITIONS NECESSITATE ANY ALTERATIONS OR DEVIATIONS THE DIRECTIONS OF THE ENGINEER SHALL BE CONSIDERED AS FINAL INSTRUCTIONS.
3. ALL ELECTRICAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH BOQ, TECHNICAL SPECIFICATIONS, ARCHITECTURAL, STRUCTURAL, PLUMBING AND HVAC DRAWINGS & ALL OTHER RELEVANT DETAILS.
4. DIMENSIONS / MEASUREMENTS GIVEN IN LAYOUT AND DETAILED DRAWINGS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALCULATE THE ACTUAL DIMENSIONS/ MEASUREMENTS ACCORDING TO STRUCTURAL AND ARCHITECTURAL DRAWINGS.
5. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITH ALL RELEVANT DETAILS TO THE ENGINEER FOR APPROVAL ACCORDING TO THE GENERAL CONDITIONS OF CONTRACT WELL IN TIME BEFORE COMMENCEMENT OF THAT WORK.
6. THE CONTRACTOR SHALL SUBMIT COMPLETE ELECTRICAL CALCULATIONS WHEREIN SPECIFIED IN THE RELEVANT SECTIONS OF SPECIFICATION FOR THE APPROVAL OF ENGINEER.
7. PROPER CO-ORDINATION OF ELECTRICAL WORKS WITH OTHER SERVICES SHALL BE CARRIED OUT AT SITE.
8. ALL NON-CURRENT CARRYING PARTS i.e. OUTER CASINGS OF EQUIPMENT SUCH AS LT PANELS, OUTDOOR DISTRIBUTORS/FEEDER PILLARS DISTRIBUTIONS BOARDS, AUXILIARY CONSTRUCTIONS FOR EQUIPMENT ETC. SHALL BE CONNECTED TO THE GROUNDING/ EARTHING SYSTEM AT REQUIRED NUMBER OF POINTS WITH SPECIFIED SIZES OF CONDUCTORS. WATER PIPES ALONG ELECTRICAL LINE SHALL BE BONDED TO THE EARTHING SYSTEM WITH AT LEAST 10 Sq.mm. SINGLE CORE, COPPER CONDUCTOR PVC CABLE.
9. ELECTRICAL POINTS FOR EQUIPMENTS SHALL BE INSTALLED IN CO-ORDINATION WITH ANY OTHER SPECIALIZED SYSTEM OF OTHER SERVICES SUCH AS COMMUNICATION SYSTEMS, HVAC, PLUMBING ETC. THE LOCATION ON ELECTRICAL DRAWINGS IS ONLY INDICATIVE.
10. ARRANGEMENT OF ELECTRICAL EQUIPMENTS ON ELECTRICAL DRAWINGS ARE TENTATIVE. EXACT ARRANGEMENT OF EQUIPMENTS SHALL BE MADE IN VIEW OF ITS PHYSICAL DIMENSIONS AND EASE OF MAINTENANCE.
11. LOADS ON ALL PHASES SHALL BE BALANCED AT THE TESTING/COMMISSIONING STAGE.
12. ALL UNDERGROUND PIPES SHALL BE LAID MINIMUM 900 MM BELOW FINAL GROUND LEVEL/TOP OF PAVEMENT, AS MEASURED FROM TOP OF PIPES. THE DEPTH MAY BE INCREASED / DECREASED DUE TO THE SITE CONDITIONS AFTER OBTAINING ENGINEERS APPROVAL
13. CABLE MARKERS SHALL BE PROVIDED AT 100 METER INTERVALS ALONG STRAIGHT RUNS OF CABLE ROUTE AND AT EACH BEND.
14. CONDUIT/DUCT RUN UNDER FLOOR SHALL HAVE A MINIMUM COVER OF 50mm FROM TOP OF CONDUIT/DUCT TO FINISH FLOOR LEVEL.
15. ARRAGEMENT / LOCATION OF SLEEVES FOR INCOMING SUPPLY OF DISTRIBUTION BOARDS IN WATCH TOWER SHALL BE AS PER DRAWING OR ADJUSTED AS PER SITE CONDITION
16. THE COLOR CODE OF CONDUCTOR INSTALLATION SHALL BE AS FOLLOWS:
    A. LINE – RED
    B. LINE – YELLOW
    C. LINE – BLUE
    D. NEUTRAL – BLACK
    E. GROUND – GREEN
17. RUN GREEN-YELLOW OR GREEN SINGLE CORE PVC INSULATED COPPER CONDUCTOR CABLE OF SPECIFIED SIZES AS EARTH CONTINUITY CONDUCTOR (ECC) ALL ALONG LIGHT AND POWER WIRING. WHEREVER THE SIZE IS NOT SPECIFIED THE FOLLOWING CRITERIA SHALL BE OBSERVED TO DETERMINE MINIMUM CROSS SECTIONAL AREA OF EARTH CONTINUITY CONDUCTOR (ECC) IN RELATION TO THE CROSS SECTIONAL AREA OF ITS PHASE CONDUCTORS. RUN SEPARATE ECC FOR EACH CIRCUIT.
    - ECC & PHASE CONDUCTOR OF SAME SIZE FOR UPTO AND INCLUDING 16 Sqmm CABLES.
    - 16 Sqmm ECC FOR PHASE CONDUCTOR OF 16 Sqmm, 25 Sqmm & 35 Sqmm CABLES.
    - FOR CABLES OF 50 Sqmm AND ABOVE SIZES, ECC IS HALF SIZE OF PHASE CONDUCTOR.
    - MAXIMUM SIZE OF ECC IS 70 Sqmm (IF NOT MENTIONED OTHERWISE).
18. ALL WIRING TO LIGHT AND SOCKET CIRCUITS & FOR CONTROLS SHALL BE CARRIED OUT WITH SINGLE CORE PVC INSULATED COPPER CONDUCTOR CABLE OF SPECIFIED VOLTAGE GRADE IN SURFACE GI OR CONCEALED PVC CONDUIT OF SPECIFIED SIZE. UNLESS SPECIFICALLY STATED ON DRAWINGS/BOQ.
19. LIGHT CONTROL SWITCH SHALL BE INSTALLED 150 mm. AWAY FROM THE SIDE OF DOOR IN ROOMS.
20. BEFORE DETERMINING THE CUT LENGTHS OF CABLE, THE ACTUAL MEASUREMENT AT SITE SHALL BE MADE WITH PROVISION FOR SLACK AT LT PANELS / LT OUTDOOR DISTRIBUTORS / FEEDER PILLARSDISTRIBUTION BOARDS AND SPARE LENGTH FOR LOOPS AS REQUIRED.
21. ALL UNDERGROUND PIPES AFTER INSTALLATION SHALL BE PLUGGED AND SEALED AT BOTH ENDS AND JOINTS TO AVOID INGRESS OF WATER INTO PIPES.
22. APPROPRIATE SIZE CLASS 'D' PVC PIPES SHALL BE LAID ALL ALONG THE CROSSINGS OF CABLES UNDER ROADS OR PAVED AREAS.
23. THE NUMBER OF CABLES IN ANY CONDUIT/PIPE SHALL BE DETERMINED SUCH THAT THE RATIO OF SUM OF CROSS- SECTIONAL AREAS OF CABLES INCLUDING PROTECTIVE EARTH CONDUCTOR TO INTERNAL CONDUIT/ PIPE AREA IS NOT MORE THAN 40 %, PROVIDED THERE ARE ONLY TWO BENDS. WHERE ADDITIONAL BENDS OR RESTRICTIONS ARE ENCOUNTERED, THE NUMBER OF CABLES SHALL BE REDUCED ACCORDINGLY.
24. THE ROUTES OF EXTERNAL CABLE AND PIPES SHALL BE FOLLOWED AS SHOWN ON THE DRAWING. ANY CHANGE IN ROUTES REQUIRED DUE TO SITE CONDITIONS SHALL BE MADE IN CO-ORDINATION WITH OTHER SERVICES, AFTER OBTAINING ENGINEER'S APPROVAL

GENERAL AND POWER SYSTEM

25. WHERE CABLES ENTER BUILDINGS, THESE SHALL BE LAID IN PROTECTIVE PIPES. WHEN THE AREA IS PAVED A MANHOLE SHALL BE PROVIDED OUTSIDE THE BUILDING.
26. WHERE PIPES ARE LAID UNDER ROAD/PAVED AREA OR ANY OTHER CROSSING, 50% SPARE PIPES OF TOTAL NO. OF PIPES SHALL BE LAID ALONGWITH PRESENTLY UTILIZED PIPES.
27. SPARE PIPES SHOWN SHALL HAVE THEIR ENDS PROPERLY PLUGGED WITH MANUFACTURED CAP AND MADE WATER TIGHT. BOTH ENDS OF PIPES SHALL BE MARKED BY PIPE END MARKERS FOR IDENTIFICATION.
28. ALL ROUTING OF PIPES, PIPE TRENCHES & CONNECTION DETAILS SHALL BE CARRIED OUT WITH THE APPROVAL OF THE ENGINEER.
29. THE No. OF SINGLE CORE CABLES IN ANY CONDUIT SHALL BE DETERMINED SUCH THAT THE RATIO OF SUM OF CROSS- SECTIONAL AREAS OF CABLES INCLUDING PROTECTIVE EARTH CONDUCTOR TO INTERNAL CONDUIT/ PIPE AREA 0.4:1.0. WHERE DIFFERENT SIZES OF CABLES RUN IN SAME CONDUIT THE SIZE SHALL BE BASED ON ACTUAL CABLE AREA. WHEREVER CONDUIT SIZE IS NOT SPECIFIED, 20 mm. DIA CONDUIT SHALL BE INSTALLED PROVIDED IT MEETS THE ABOVE CRITERIA.THE FOLLOWING TABLE IS GIVEN AS GENERAL GUIDELINE.

S.NO	NOMINAL CONDUCTOR SIZE(SQMM)	NO. & DIA OF WIRES	NOMINAL OVERALL DIA	20 MM DIA (3/4" DIA)	25 MM DIA (1" DIA)	32 MM DIA (1¼" DIA)
1	1.5	1/1.38	3.1	10	18	30
2	2.5	1/1.78	3.5	8	14	23
3	2.5	7/0.67	3.8	7	12	20
4	4	7/0.85	4.3	5	9	15
5	6	7/1.04	4.9	4	7	12
6	10	7/1.35	6.2	2	4	7
7	16	7/1.70	7.3	–	3	5
8	25	7/2.14	9.0	–	2	3
9	35	19/1.53	10.3	–	–	2

30. ALL UNDERGROUND PIPES, MAN HOLES & HANDHOLES SHALL BE PROPERLY SEALED WATER TIGHT AT ENDS/JOINTS AFTER INSTALLATION.
31. ALL WIRING FOR CONTROLS SHALL BE CARRIED OUT WITH 1 CORE PVC CABLES OF SPECIFIED REQUIRED VOLTAGE GRADE AND SIZES.
32. THE WIRING SHALL BE CONTINUOUS LOOPING-IN AND LOOPING-OUT TYPE AND NO JOINT IN WIRES SHALL BE ALLOWED.
33. THE WIRING SYSTEM SHALL BE CARRIED OUT ONLY AFTER THE CONDUIT SYSTEM IS COMPLETELY INSTALLED AND ALL OUTLET BOXES, ETC. ARE FIXED IN POSITION. ALL ROUGH EDGES OF CONDUITS / ACCESSORIES SHALL BE SMOOTH BEFORE WIRING.
34. MOUNTING HEIGHTS OF ELECTRICAL FITTINGS WHEN MEASURED FROM FINISHED FLOOR LEVEL (F.F.L.) TO THE BOTTOM OF FITTINGS SHALL BE AS UNDER, UNLESS OTHERWISE SHOWN OR INSTRUCTED.

FEEDER PILLAR	FLOOR MOUNTED
DISTRIBUTION BOARD	1200 mm
MOTOR CONTROL CENTER	1200 mm
ON/OFF PUSH BUTTON STATION	1200 mm
LIGHT CONTROL SWITCH	1200 mm
SOCKET OUTLETS IN GENERAL AREAS	250 mm
SOCKET OUTLETS IN KITCHEN	150 mm (ABOVE COUNTER)
SOCKET OUTLETS/MCCBs/MCB FOR AC/CU UNITS	REFER HVAC DRAWINGS

35. ALL FLOOR MOUNTED ELECTRICAL EQUIPMENT, SUCH AS SWITCHGEARS, DG SET, FEEDER PILLARS / OUTDOOR DISTRIBUTORS FREE-STANDING PANEL BOARDS AND CONTROL PANELS SHALL BE MOUNTED AT 300mm HIGH CONCRETE PAD, UNLESS MENTIONED / APPROVED OTHERWISE BY THE ENGINEER.
36. ALL MCCBs INSTALLED SHALL BE COMPLETE WITH ADJUSTABLE THERMAL AND MAGNETIC SETTINGS OF APPROPRIATE RANGE.
37. ALL MCBs USED FOR PROTECTION OF INDUCTIVE LOADS SHALL BE OF TYPE-2 CHARACTERISTICS.
38. ALL MCCBs/MCBs IN THE MAIN SWITCHBOARDS, FEEDER PILLARS / OUTDOOR DISTRIBUTORS DISTRIBUTION PANEL BOARDS,PANEL BOARDS SHOWN HEREIN OF THE TYPE SUITABLE FOR PROTECTION INCORPORATING OVER-LOAD AND SHORT CIRCUIT AND OTHERPROTECTING CIRCUITS SHALL BE SELECTED SO THAT THEY ARE ABLE TO BE COORDINATED WITH BOTH THE UPSTREAM PROTECTIVE DEVICE (ALSO EARTH FAULT PROTECTION WHERE SHOWN IN THE DRAWINGS) AND DOWNSTREAM PROTECTION DEVICES.
39. DISCONNECT SWITCHES FOR MECHANICAL EQUIPMENT SHALL BE CIRCUIT BREAKER TYPE OR LOAD BREAK NON-FUSIBLE HEAVY DUTY TYPE OR AS INDICATED IN THE DRAWINGS. THE ENCLOSURES SHALL BE DUST – TIGHT, NEMA-4 (IP-53) FOR INTERIOR INSTALLATIONS; RAIN-TIGHT/DUST-TIGHT, NEMA 4X (IP-65) FOR EXTERIOR INSTALLATIONS, UNLESS OTHERWISE INDICATED.
40. PROJECT IS SITUATED ON SEA SHORE AND HENCE THE ENVIRONMENT IS HIGHLY CORROSIVE. THEREFORE, THE CONTRACTOR IS REQUIRED TO IMPLEMENT NECESSARY MEASURE FOR ENSURING PERFECT PROTECTION AGAINST CORROSION FOR EACH AND EVERY ELECTRICAL EQUIPMENT AND MATERIAL.
41. MOUNTING HEIGHTS OF ELECTRICAL FITTINGS WHEN MEASURED FROM FINISHED FLOOR LEVEL (F.F.L.) TO THE BOTTOM OF FITTINGS SHALL BE AS UNDER, UNLESS OTHERWISE SHOWN OR INSTRUCTED.

L.T SWITCH BOARD	FLOOR MOUNTED
DISTRIBUTION BOARD	1200 mm
LIGHT CONTROL SWITCH	1200 mm
SOCKET OUTLETS IN GENERAL AREAS	450 mm
INDUSTRIAL SOCKET OUTLET IN GENERAL AREAS	600 mm

42. IF EXISTING SERVICE/CULVERTS/DRAIN ETC. ARE PRESENT, MV CABLE SHALL BE LAID USING THRUST BORING OR THE SUPPORT AS APPROVED BY THE ENGINEER. NO PAYMENT SHALL BE MAID AND ITS COST IS DEEMED TO BE INCLUDED IN THE ITEM ELSE WHEREIN BOQ

LIGHTING SYSTEM

1. THE CONTRACTOR SHALL COORDINATE THE FINAL LIGHTING FIXTURE LOCATIONS WITH SUSPENDED CEILING LAYOUTS AND LOCATIONS OF THE MECHANICAL EQUIPMENT AND LOW CURRENT PRIOR TO START OF INSTALLATION.
2. ALL LIGHTING FIXTURES ARE RATED AT 230 VOLTS, 1 PHASE, 50Hz UNLESS MENTIONED OTHERWISE.
3. MINIMUM SIZE OF BRANCH CIRCUIT WIRE SHALL BE 2.5mm² UNLESS INDICATED OTHERWISE.
4. ALL LED LUMINAIRES SHALL HAVE LAMPS OF SAME COLOR TEMPERATURE OF 4000K UNLESS STATED OTHERWISE OR AS INSTRUCTED BY THE PROJECT ARCHITECH
5. THE LIGHTING LAYOUTS ARE SUBJECT TO CHANGE BASED ON FINAL ARCHITECTURAL REFLECTED CEILING PLAN AND FURNITURE LAYOUT.
6. LED MODEL INDICATED IS SUBJECT TO CHANGE BASED ON THE ACTUAL BRAND TO BE USED IN LINE WITH THE SUITABLE LUX LEVEL CRITERIA.
7. G.I. CONDUIT SHALL BE USED FOR SURFACE WIRING & PVC CONDUIT SHALL BE USED FOR CONCEALED WIRING. ALL SURFACE WIRING ACCESSORIES INCLUDING PIPE SHALL BE ADEQUATELY PROTECTED AGAINST CORROSION

EARTHING SYSTEM

1. ALL GROUNDING INSTALLATION SHALL BE IN ACCORDANCE WITH THE REQUIREMENT OF RELEVANT CODE.
2. ALL EQUIPMENT SHALL BE GROUNDED WITH GROUND WIRE CONNECTED TO THE GROUNDING ELECTRODE. THE MAXIMUM GROUNDING RESISTANCE SHALL BE AS SPECIFIED IN THE GROUNDING SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE TO EARTH ALL ELECTRICAL & MECHANICAL EQUIPMENT AS REQUIRED BY THE RELEVANT CODE.

CLIENT	**PROJECT**	**REVISIONS**	**SIGN-OFF**
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	**SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)**	REV / DESCRIPTION / DATE	**DRAWN BY** Zohaib Saleem Abbasi **CHECKED BY** **APPROVED BY**

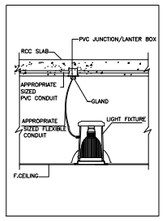
DRAWING TITLE

GENERAL NOTES

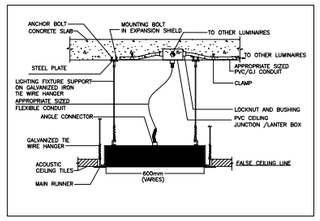
DRAWING NO.

E - 01

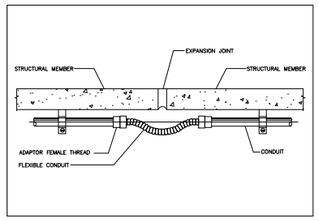
REV 00



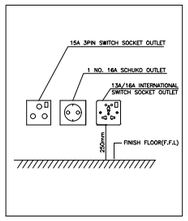
① RECESSED MOUNTED DOWNLIGHT INSTALLATION DETAIL(TYPICAL)



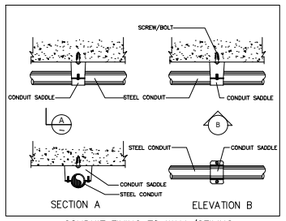
② RECESSED MOUNTED SMART LED PANEL INSTALLATION DETAIL(TYPICAL) (600x600mm)



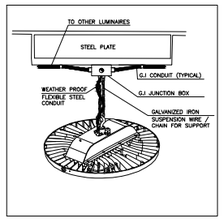
③ INSTALLATION DETAIL FOR CONDUIT OVER STRUCTURAL EXPANSION JOINT (TYPICAL)



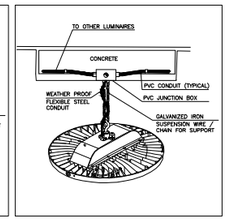
④ SOCKET OUTLET MOUNTING HEIGHT IN GENERAL AREAS (TYPICAL)



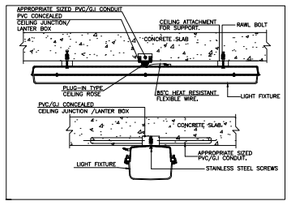
⑤ CONDUIT FIXING TO WALL/CEILING STRUCTURE (TYPICAL)



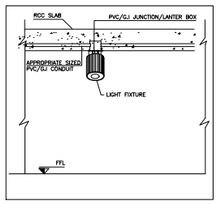
⑥ HIGHBAY LIGHT INSTALLATION DETAIL ON PREFABRICATED ROOF TYPICAL



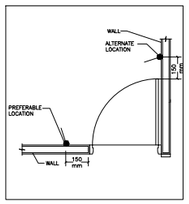
⑦ HIGHBAY LIGHT INSTALLATION DETAIL ON CONCRETE ROOF TYPICAL



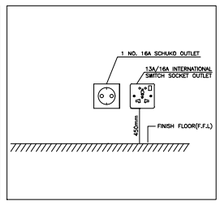
⑧ SURFACE MOUNTED LIGHT FIXTURE INSTALLATION DETAIL(TYPICAL)



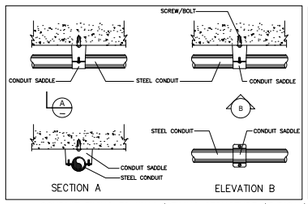
⑨ SURFACE MOUNTED DOWNLIGHT INSTALLATION DETAIL(TYPICAL)



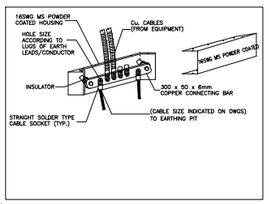
⑩ SWITCH LOCATION DETAIL (TYPICAL)



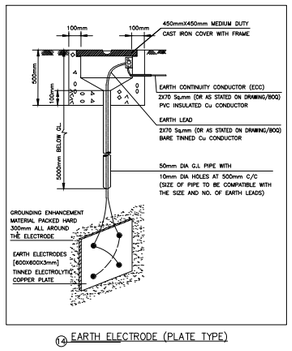
⑪ SOCKET OUTLET MOUNTING HEIGHT (TYPICAL)



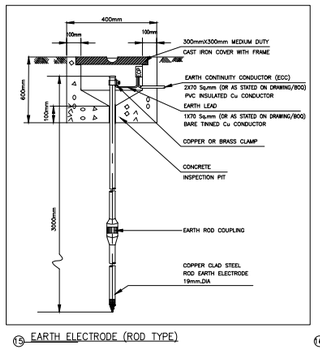
⑫ CONDUIT FIXING TO WALL/CEILING STRUCTURE (TYPICAL)



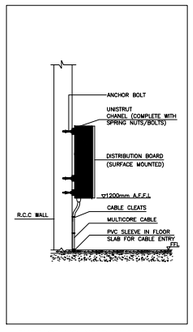
⑬ EARTH CONNECTING POINT (ECP)



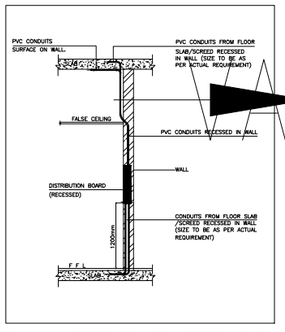
⑭ EARTH ELECTRODE (PLATE TYPE)



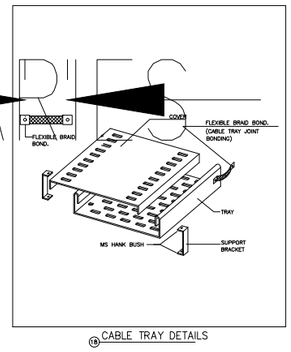
⑮ EARTH ELECTRODE (ROD TYPE)



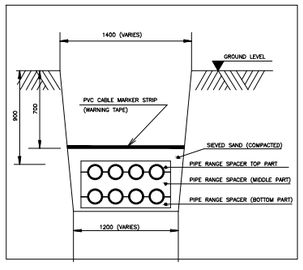
⑯ SURFACE MOUNTED DISTRIBUTION BOARD INSTALLATION DETAIL (TYPICAL)



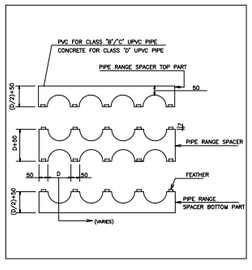
⑰ RECESSED MOUNTED DISTRIBUTION BOARD INSTALLATION DETAIL (TYPICAL)



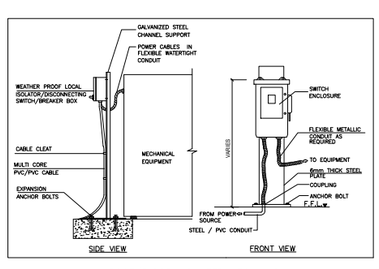
⑱ CABLE TRAY DETAILS



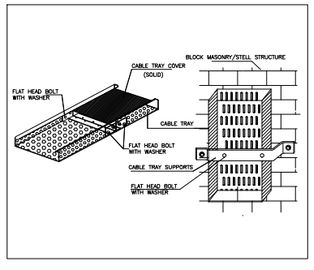
⑲ TRENCH CROSS SECTION (H.T / L.T)



⑳ PIPE RANGE SPACER TO KEEP THE PIPES IN POSITION (TYPICAL FOR "D" DIA PIPES) WHERE "D" INDICATES DIA IN MM



㉑ ROOF/FLOOR MOUNTED MECHANICAL EQUIPMENT ELECTRICAL SUPPLY DETAIL (TYPICAL)



㉒ TYPICAL INSTALLATION DETAIL OF VERTICAL CABLE TRAY

CLIENT **HEALTH DEPARTMENT, GOVERNMENT OF SINDH**	**PROJECT** **SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)**	**REVISIONS** REV / DESCRIPTION / DATE	**SIGN-OFF** **DRAWN BY** Zohaib Saleem Abbasi **CHECKED BY** **APPROVED BY**
DRAWING TITLE **GENERAL NOTES**	**DRAWING NO.** **E - 02** REV 00		

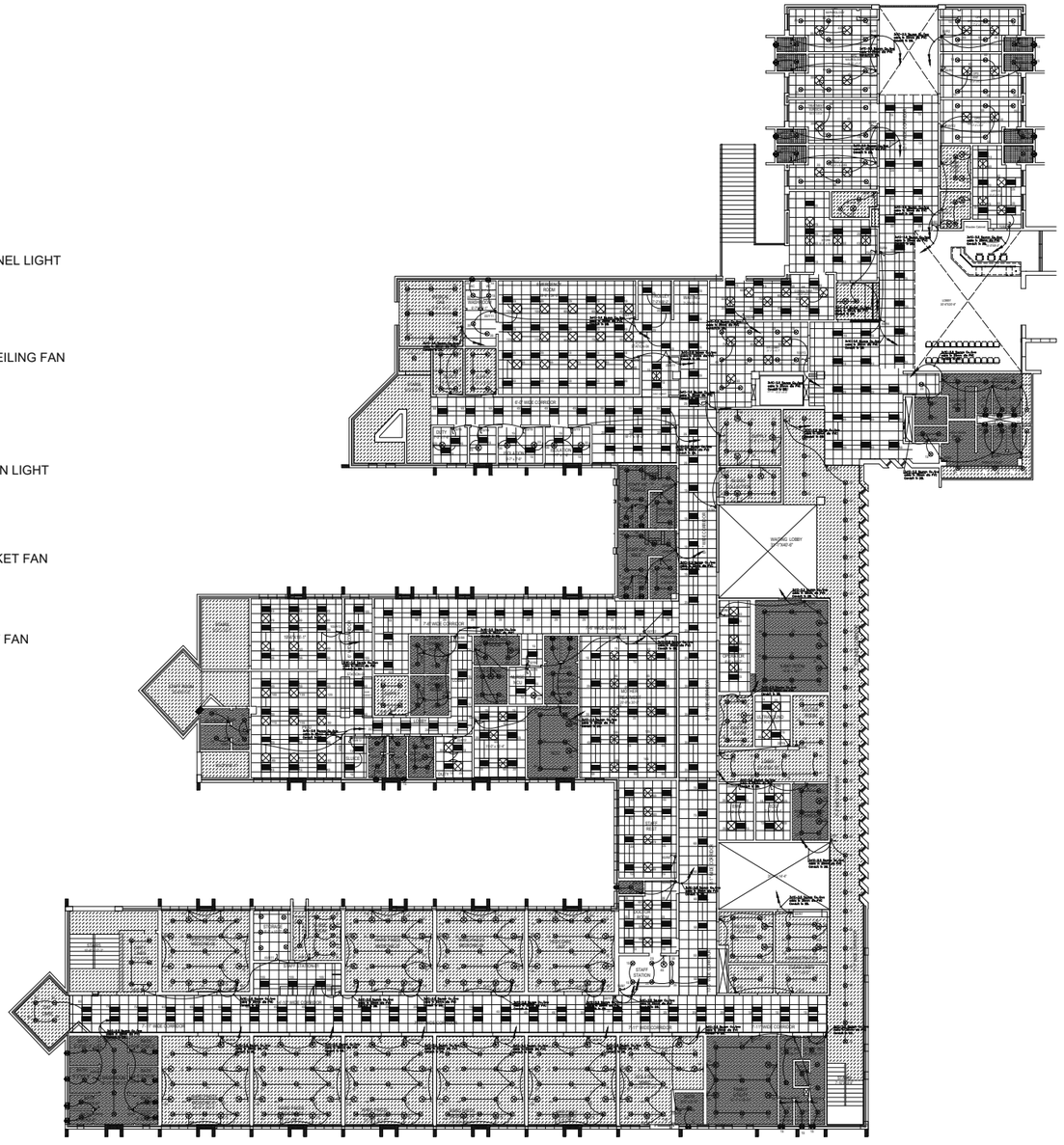
2X2 LED PANEL LIGHT

2X2 FALSE CEILING FAN

LED DOWN LIGHT

BRACKET FAN

EXHAUST FAN



GROUND FLOOR PLAN

GROUND FLOOR CEILING LAYOUT PLAN

SCALE: 1:350 ALL DIMENSIONS IN INCHES

Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY Zohaib Saleem Abbasi	CEILING LAYOUT PLAN	E - 03
					CHECKED BY	GROUND FLOOR	
					APPROVED BY		REV 00

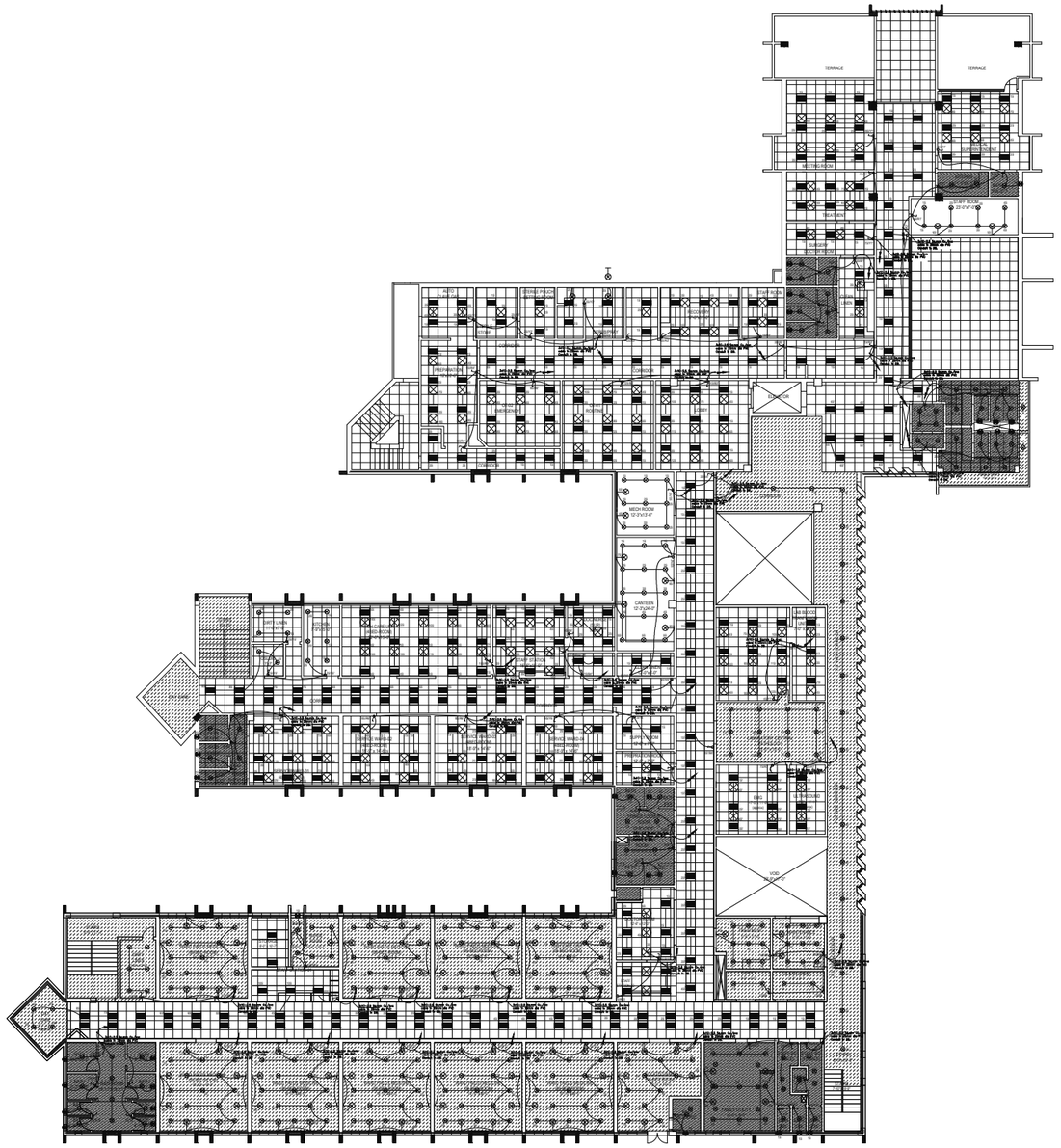
2X2 LED PANEL LIGHT

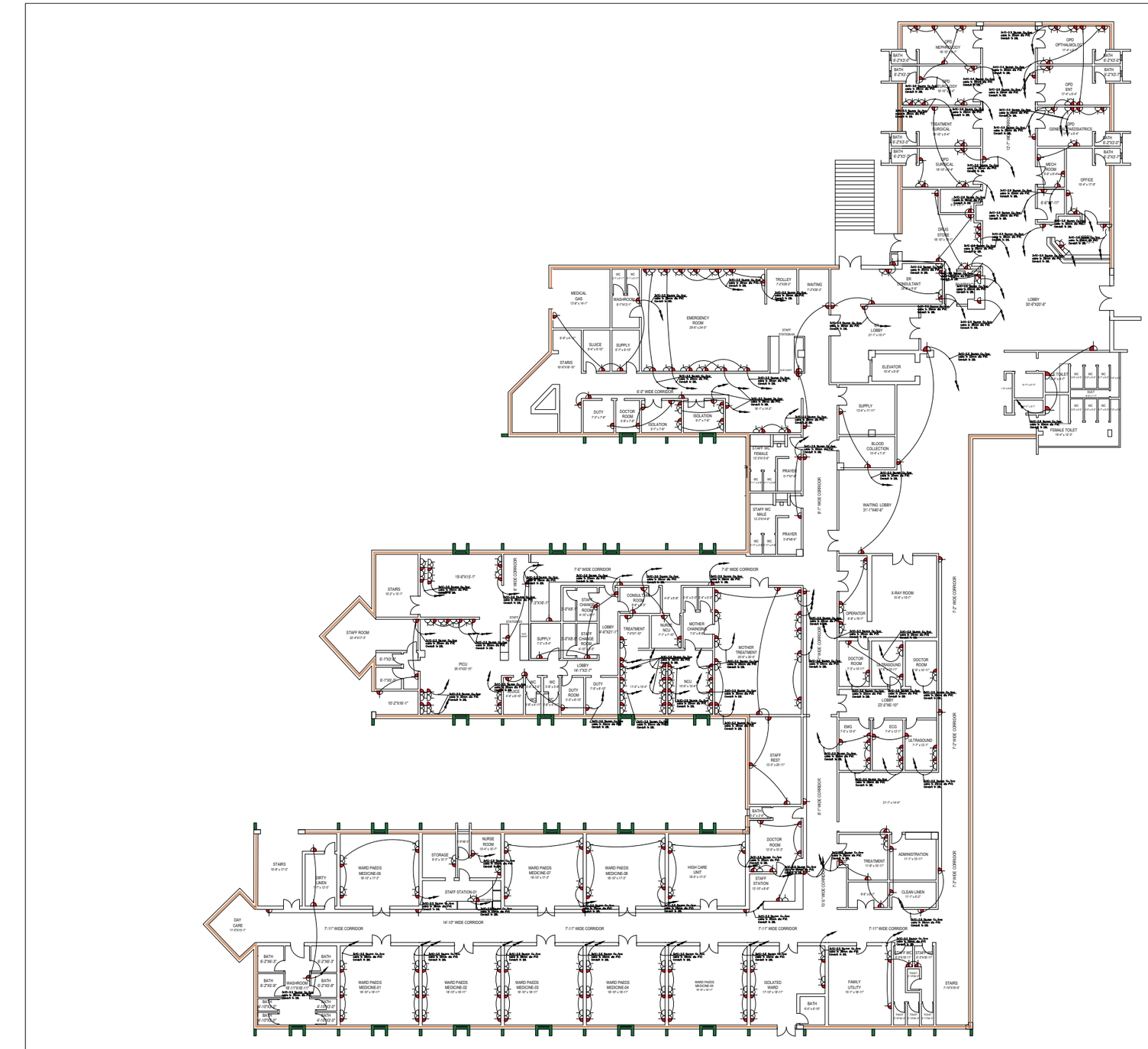
2X2 FALSE CEILING FAN

LED DOWN LIGHT

BRACKET FAN

EXHAUST FAN

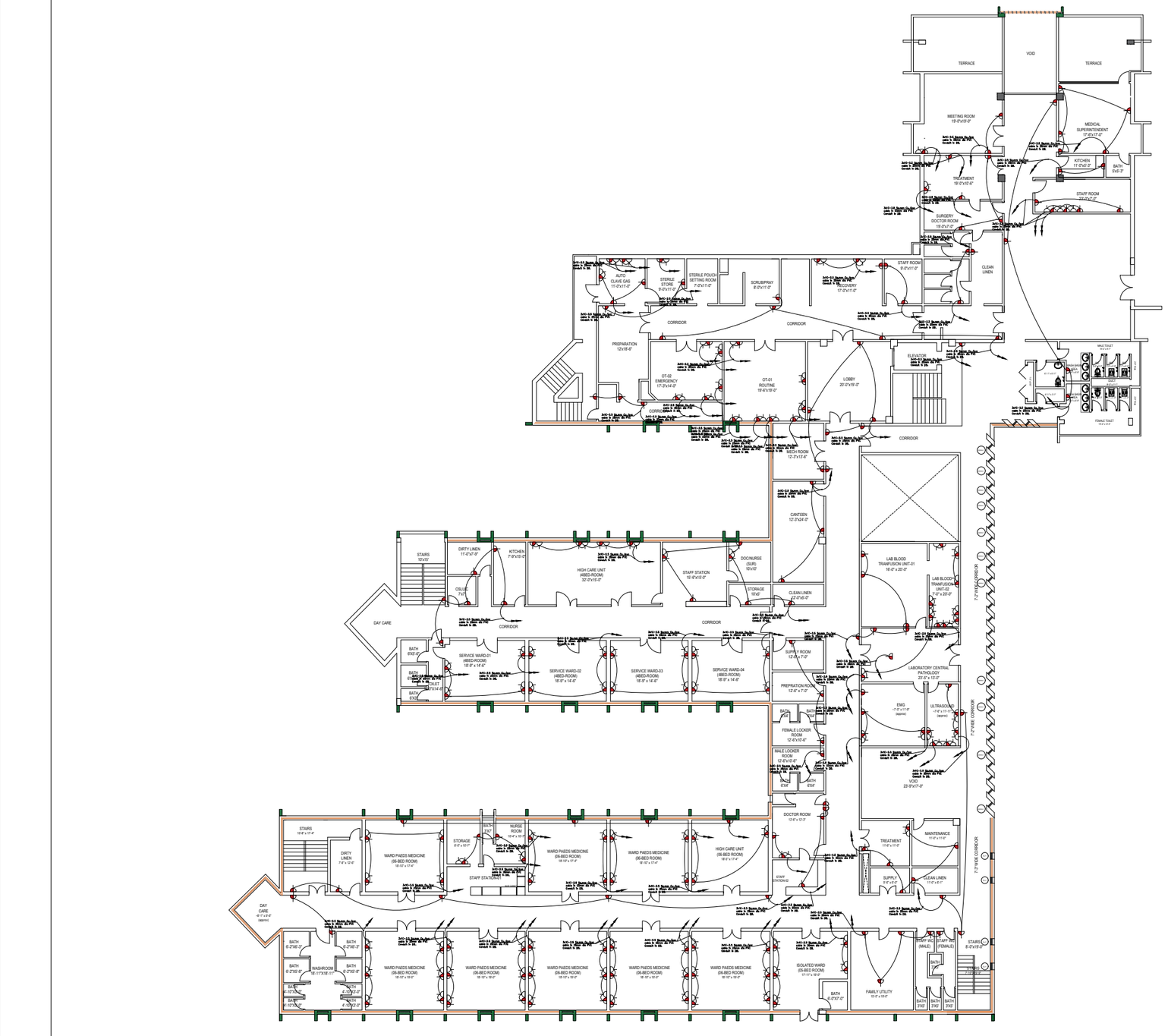

TERRACE
TERRACE
MEETING ROOM
LIFT ROOM
LIFT ROOM
LIFT



Drawing shall not be copied or used without permission.

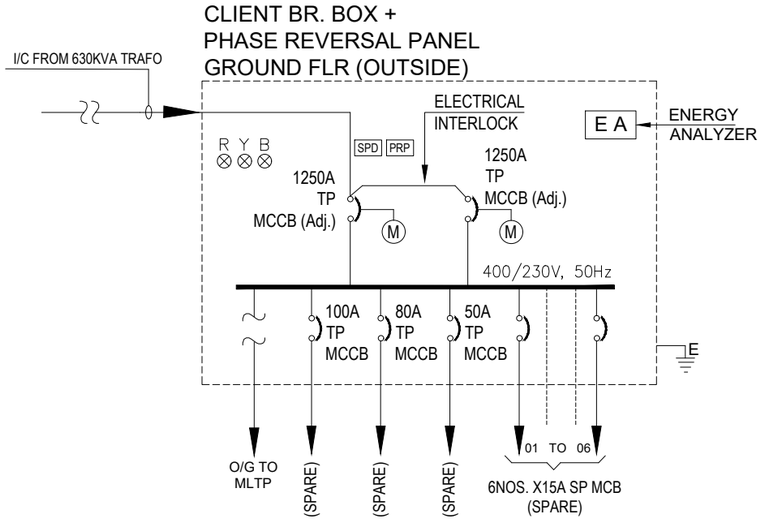
GROUND FLOOR PLAN

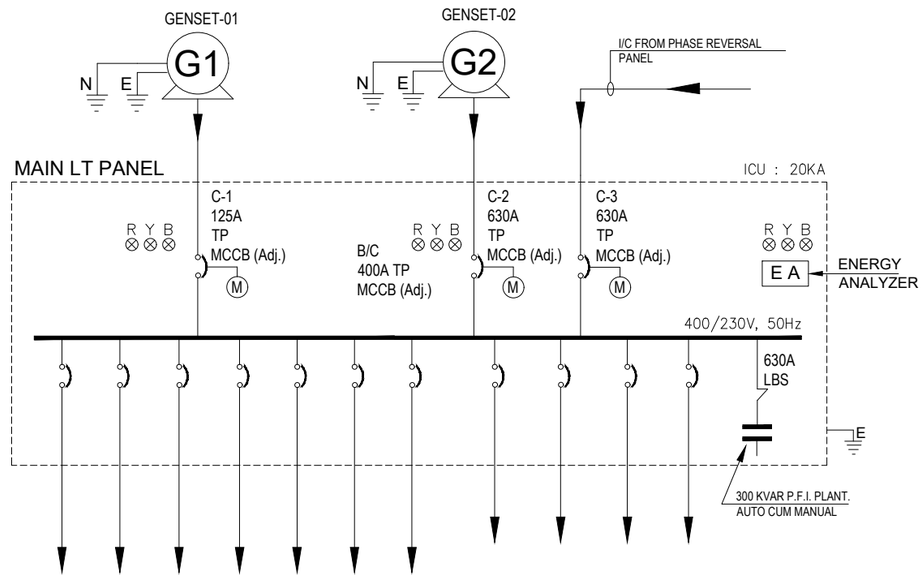
CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	POWER LAYOUT - GROUND FLOOR	E-05

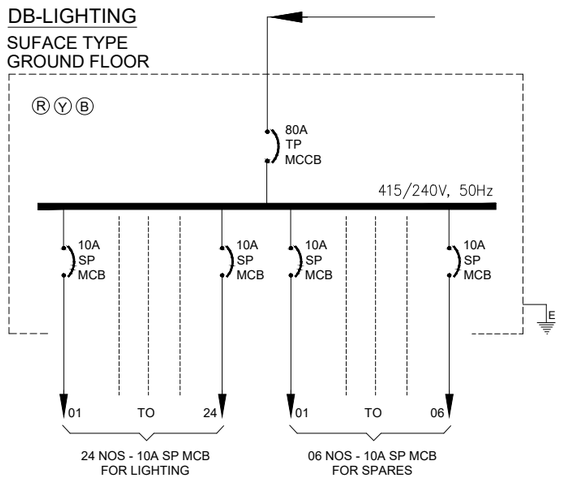


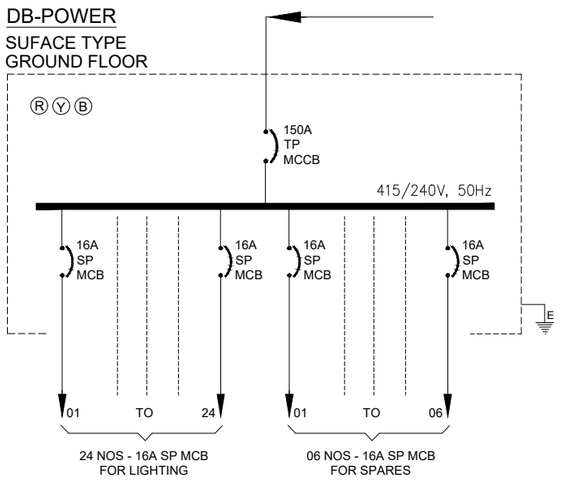
Drawing shall not be copied or used without permission.

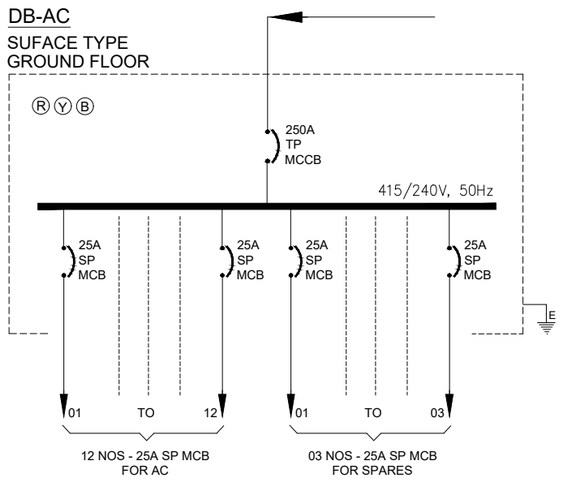
CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	POWER LAYOUT - FIRST FLOOR	E-06





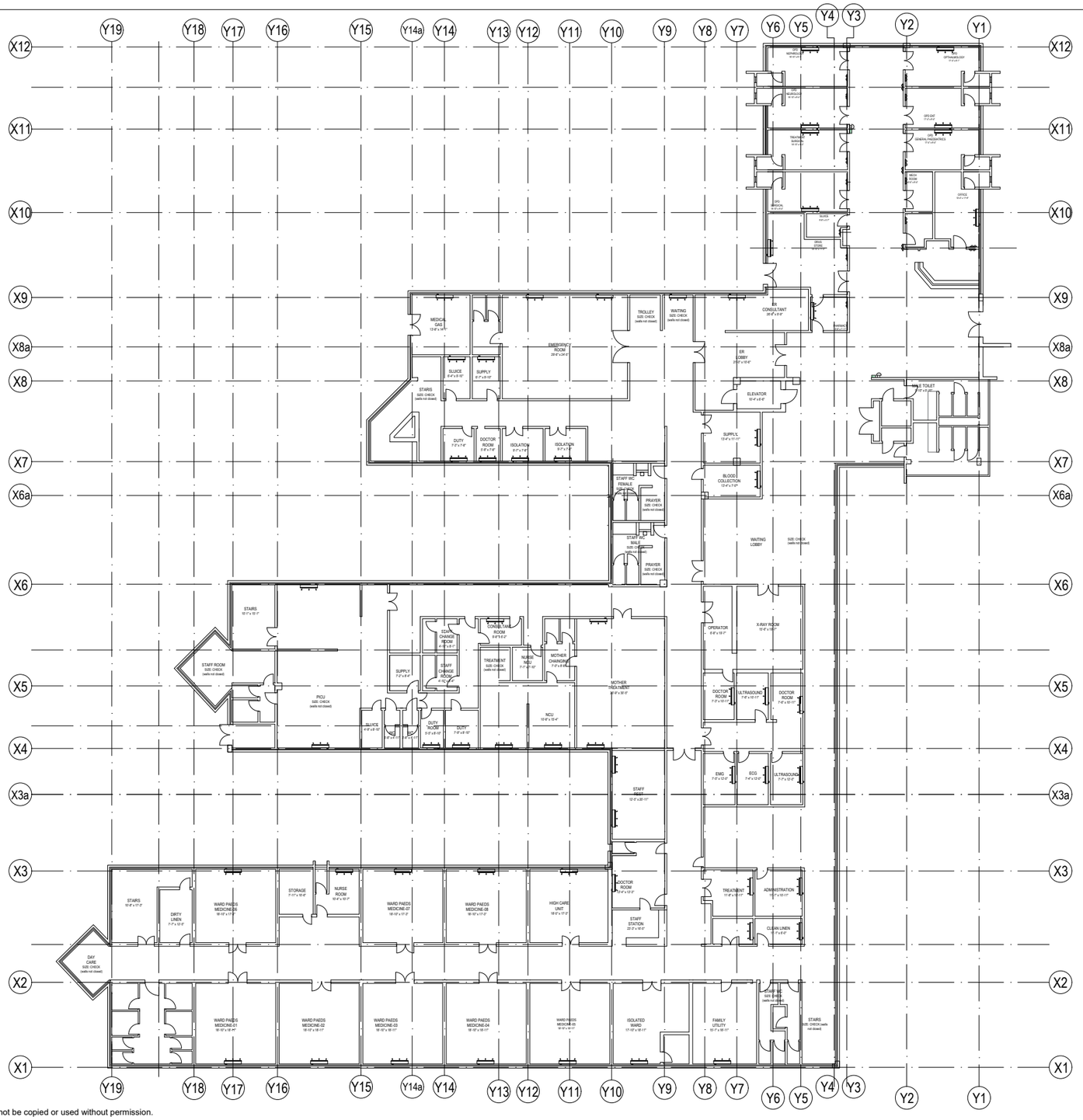






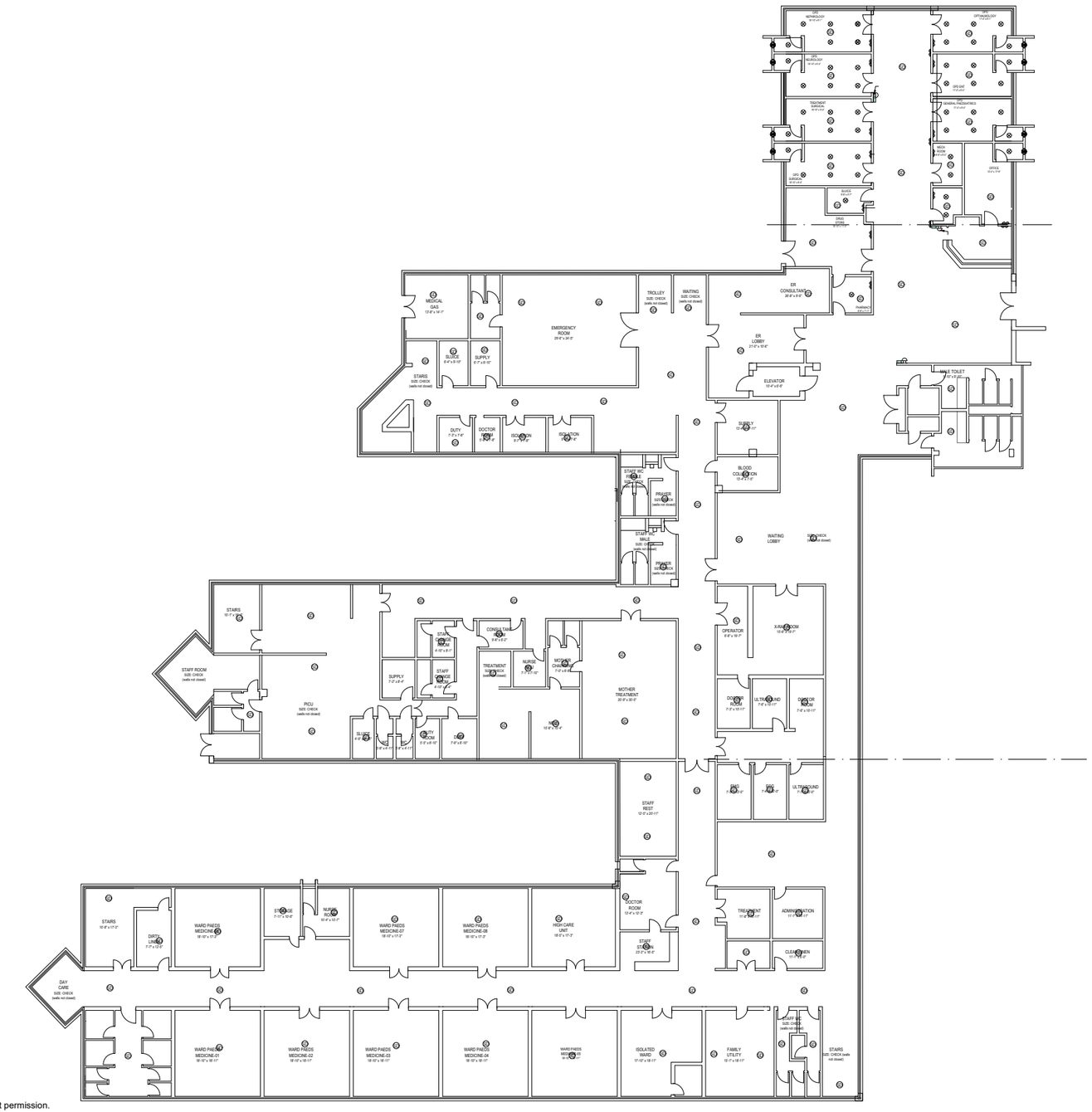
Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi	SINGLE LINE DIAGRAM	E-07
					CHECKED BY		
					APPROVED BY		



Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY APPROVED BY	AC LAYOUT - GROUND FLOOR	E-08



Drawing shall not be copied or used without permission.

CLIENT	PROJECT	REVISIONS			SIGN-OFF	DRAWING TITLE	DRAWING NO.
HEALTH DEPARTMENT, GOVERNMENT OF SINDH	SINDH INSTITUTE OF CHILD HEALTH AND NEONATOLOGY (SICHN)	REV	DESCRIPTION	DATE	DRAWN BY: Zohaib Saleem Abbasi CHECKED BY: APPROVED BY:	FIRE ALARM SYSTEM - GROUND FLOOR	E-09

Sr. No. 1894

GOVERNMENT OF SINDH
SINDH INSTITUTE OF CHILD HEALTH & NEONATOLOGY (SICHN)

No-SICHN/GoS/Re-Mod/Constitution of PC/2025-26/243 Date: 01-04-2026

NOTIFICATION

In partial modification of this office Notification **No-SICHN/GoS/Constitution of PC/2025-26/110** dated: **28.10.2025** the procurement committee has been modified for the procurement of goods, works and services with the approval of Executive Director – SICHN. The composition of Procurement committee is as under:

1. Dr. Shahid Raza, Chief Executive Officer, SICHN, Karachi — **Chairman**
2. Mr. Jalaluddin Akber, Prof at Baqai Medical University/Member of BoD — **Member**
3. Mr. Zulfiqar Ali Dars, Deputy Secretary, Health Department, GoS — **Member**

ToRs of the Committee are as under:

The TORS / Functions / Responsibilities of the procurement Committee in accordance with Rule-8 Of SPP Rules 2010 (Amended 2019) Shall be as under:

I. Preparing bidding documents.
II. Making recommendations for the award contract to the competent Authority.
III. Perform any other function ancillary and incidental to above.

(Prof. Syed Jamal Raza)
Executive Director-SICHN, Karachi

Copy forwarded for information to:

1. The P.S to the Chairperson, Board of Directors, SICHN, Karachi
2. The P.S to the Secretary, Health Department, Government of Sindh
3. All Concerned Member
4. Office File.

Prof. SYED JAMAL RAZA
Executive Director
Sindh Institute of Child Health & Neonatology
Karachi.

(Prof. Syed Jamal Raza)
Executive Director-SICHN, Karachi

GOVERNMENT OF SINDH
SINDH INSTITUTE OF CHILD HEALTH & NEONATOLOGY (SICHN)

No-SICHN/Re-Constitution of Committee/CRC/2023-24/63

Date: 16-04-2024

NOTIFICATION

In Subservience to the Complaint Redressal Committee of this office Notification **No-SICHN/Constitution of Committees/2021-22/05** dated: **01.11.2021** the Complaint Redressal Committee is hereby re-constituted in order to address the complaints of bidder as per SPPRA Rules:

1.	Prof. Syed Jamal Raza, Executive Director, SICHN, Karachi	**Chairman**
2.	Mr. Aftab Ahmed Junejo, Accounts Officer, A.G Sindh, Karachi	**Member**
3.	Prof. Khemchand N Moorani, General Secretary, NICH Trust, Karachi	**Member**

The TORS / Functions / Responsibilities of the Complaint Redressal Committee in accordance with Rule-31 of SPP Rules 2010 (Amended 2019).

(Prof. Syed Jamal Raza)
Executive Director-SICHN, Karachi

Prof. SYED JAMAL RAZA
Executive Director
Sindh Institute of Child
Health & Neonatology
Karachi.

Copy forwarded for information to:

1. The P.S to the Chairperson, Board of Directors, SICHN, Karachi
2. The P.S to the Secretary, Health Department, Government of Sindh
3. All Concerned Member
4. Office File.

(Prof. Syed Jamal Raza)
Executive Director-SICHN, Karachi

Prof. SYED JAMAL RAZA
Executive Director
Sindh Institute of Child
Health & Neonatology
Karachi.

CamScanner