BIDDING DOCUMENTS

FOR

PUNJAB INCLUISVE CITIES PROGRAM (PICP)

PROVISION OF STORM WATER FACILITIES IN HAROONABAD CITY

Local Government &
Community Development
Government of the Punjab

MUNICIPAL COMMITTEE HAROONABAD

NOVEMBER 2026

TENDER NOTICE

PROVISION OF STORM WATER FACILITIES IN HAROONABAD CITY

Municipal Committee Haroonabad (hereinafter referred to as the "Client") **invites** bids from **Contractors/Firms /Companies** registered on **Punjab e-procurement system** having valid license from **PEC in category C-3** or above with specialization in codes **(CE-09, CE-10 & ME-06)** registered with **FBR** and **PRA** (having Active Filer **NTN** and **PNTN**), for "**PROVISION OF STORM WATER FACILITIES IN HAROONABAD CITY**"

2. Subject procurement shall be carried out through **Punjab e-procurement system** of Punjab Procurement Regulatory Authority (PPRA) only. Bidding Documents containing detailed requirements, terms and conditions is available for the registered bidders on **Punjab e-procurement system** at https://ep.punjab.gov.pk and Punjab Procurement Regulatory Authority (PPRA) Website http://ppra.punjab.gov.pk
3. **Single Stage Two Envelop** bidding procedure will be adopted. The bids prepared in accordance with the instructions in the bidding documents, must be submitted on **Punjab e-procurement system** on or before **07-12-2026**, not later than **12:00 PM**. Technical Bids will be opened on the same day on **Punjab e-procurement system** at **12:30 PM.** Submission of hard copies of bids shall not be accepted.
4. All interested bidders/contractors/firms must deposit the Bid Security/Earnest Money @ 3% of the estimated cost, amounting to **Rs. 10,761,283/-**, in favor of MC Haroonabad, digitally through the Online Payment System of Punjab e-Procurement System (linked with BOP), in accordance with the Government of the Punjab directions. No manual Bid Security in the form of CDR/Bank Guarantee shall be accepted.
5. Only technically responsive bidder(s) will be qualified for opening of financial bid(s). Financial bid of bidder(s) found technically non-responsive shall remain un-opened in the **Punjab e-procurement system.**
6. If the e-bid or proposal including record submitted on the **Punjab e-procurement system** found corrupt, un-readable or contain virus, the e-bid or proposal shall be rejected.
7. The bidder shall submit e-bids through uploading **PDF file** on **Punjab e-procurement system.**
8. The procurement shall made under PPRA Rules and Punjab Procurement Regulations-amended till date
9. The procuring agency may reject all bids or proposals at any time prior to the acceptance of a bid or proposal under **Punjab PPRA Rules 2014 (Rule-35).**
10. Conditional tender will not be accepted.
11. No tender via telegraph or by post will be accepted. Bid submitted through **Punjab e-procurement system** shall only be considered.
12. The bidder Shall be required to quote their rates against each entry/item of DNIT/BOQS in their financial bids. Bid quoted in percentage (%) of estimated cost shall be rejected.
13. The URL of the website of the PPRA is https://ep.punjab.gov.pk/ and response time shall be calculated from the date of publication of the advertisement on the website of the PPRA.
14. The bids will be valid for **120 days.**
15. Estimated cost **Rs. 358,709,446.00**

Chief Officer
Municipal Committee
Haroonabad

Administrator
Municipal Committee
Haroonabad

CamScanner
CamScanner

BIDDER INFORMATION

NAME OF FIRM_____

ADDRESS _____

MODE OF BID SECURITY & DOCUMENT NO. _____

DATED_____

BID SECURITY ISSUED By (Name of Bank / Branch) _____

INTRODUCTION

MC Haroonabad is working to improve the Drainage system/rain water management in modern ways to serve the public of MC Haroonabad under Punjab Inclusive Cities Program. So, MC has decided to execute the scheme named as "**PROVISION OF STORM WATER FACILITIES IN HAROONABAD CITY"**

Accordingly, well reputed and established construction companies/ firms registered with Pakistan Engineering Council (PEC) in the category "**C-3 or above**" (with specialization in **Code CE-09, CE-10 & ME-06**), having required technical, financial and managerial capabilities, are invited to participate in the bidding process for the above said project through submission of their requisite technical bid.



INSTRUCTIONS TO BIDDER

1. Proposals shall be in English language.
2. The bidding procedure shall be a single stage two envelope.
3. Bids submitted through **Punjab e-procurement system** shall only be considered for opening in the office of **Chief Officer Haroonabad** situated at **Municipal Committee Office in Haroonabad, located on Quaid-e-Azam Rd, Al-Wadood Colony, Haroonabad.**
4. Only registered persons, entity with authorized credentials etc. on PPRA eligible to participate/ submit their e-bids or proposal by using **Punjab e-procurement system**.
5. In the first instance, the "Technical Proposal" shall be opened on **e-procurement** and the "Financial Proposal" shall be remained unopened in **e-procurement**. All bids shall be opened publicly in the presence of the bidders or their representatives who may choose to be present.
6. The bidder Shall be required to quote their rates against each entry/item of DNIT/BOQS in their financial bids. Bid quoted in percentage (%) of estimated cost shall be rejected.
7. No tender will be received telegraphically or by post.
8. Conditional tender will not be accepted.
9. The bidder should quote rate after careful study of bid document
10. The lowest evaluated bidder will be required to furnish the performance guarantee before entering into a contract. Should the lowest evaluated bidder refuse or fail for any reason to furnish performance guarantee, it should constitute a just cause for rejection of tender / annulment of award and in event of such rejection / annulment the entire earnest money shall be forfeited to government/procuring agency, as compensation for such default.
11. The procuring agency shall evaluate the technical proposal in the manner prescribed in advance, without reference to the price and shall reject any proposal which does not conform to the specified requirements
12. During the technical evaluation no amendments in the technical proposal shall be permitted and if the employer deems necessary to seek clarifications it will be sought in-writing
13. After the evaluation and approval of the technical evaluation report, the procuring agency shall open the financial proposals of the technically responsive bidders on e-procurement, publicly at the time, date and venue announced and communicated to the bidders in advance, within the bid validity period
14. The financial bids of technically non-responsive bidders shall be retained un-opened on e-procurement.

    (A) During Financial evaluation following procedures adopted as and where required:

    i. The tenderer shall work out the amount against each item of work in the bid schedule and will indicate the total amount of his tender on which he is willing to complete the works. The total amount worked out in the bid schedule shall be entered by the tenderer in his tender as his tender price for the work in case of discrepancy between amounts in figures and in words the amount in words shall prevail.
    ii. Should any discrepancy be found in the amount of pay items or if a column of amount is found blank after filling in a unit rate, the unit rate filled by the tenderer will be extended in working out of the amount of the tender and the total amount of the bid schedule will be adjusted accordingly.
    iii. If a unit rate is left blank, but the amount against the item is filled, the unit rate will be worked out on the basis of the amount divided by the quantity of the item shown in the bid schedule.
    iv. If it is found that the tenderer has not entered any unit rate and amount against any of the pay items of the bid schedule, the Engineer-in-charge shall fill in the blanks by noting the word **"Nil"** in such blanks at the time of opening of the tender. Such pay items shall be deemed to be covered by the rat

v. If the tenderer does not accept the adjusted/corrected amount of tender according to the above provision, his tender shall be rejected and the earnest money forfeited.
vi. All the bidders shall be required to quoted their rates against each entry/item of DNIT/BOQs (instead of percentage) and completely fill the pages of rate analysis/summary/sub summary (as required by the procuring agency) in their financial bids.

15. The lowest evaluated bidder shall be awarded the contract
16. ***Each page of bidding documents (along with supporting documents i.e. technical brouchers / catalogue etc.) has to be stamped and signed by the authorized signatory of the firms / company / contractor.***
17. Cutting / erasing (if any) shall be initialed by authorized person of the company
18. The procuring agency may reject all the bids or proposals at any time prior to the acceptance of a bid or proposal. The procuring agency shall upon request communicate to any bidder, the ground for its rejection of all bids or proposal but shall not be required to justify the grounds
19. Any bidder feeling aggrieved by any act of the procuring agency after the submission of his bid may lodge a grievance/complaint through e-procurement system in accordance with PPRA Rules (updated till date). Mere fact of lodging of a complaint shall not warrant suspension of the procurement process.
20. The Bidding documents along with detail terms conditions are available for the registered bidders on **e-procurement** at https://ep.punjab.gov.pk and Punjab Procurement Regulatory Authority (PPRA) website http://ppra.punjab.gov.pk
21. **E-stamp** paper according to stamp act article **No.22-A(a)(v)** shall be provided by the successful bidder for execution of Contract Agreement.
22. Successful bidder shall provide Contractor **"All Risk Policy**" by insurance company having AA rating from PACRA / JCR for execution of contract agreement. (Details in Special Conditions)
23. The sub-contractor's experience shall not be considered for evaluation.
24. The **e-bid** or proposal submitted through **e-procurement** shall be uploaded and opened as per schedule mentioned in tender notice published on PPRA and e-procurement. **Submission of hardcopies of bids shall not be accepted**.
25. Joint Venture must comply with the following requirements:
    i. In accordance with PEC Bye Laws, Foreign Firms are required to form JVs with local Firms.
    ii. The joint venture must collectively satisfy the technical evaluation criteria. Heretofore, for which purpose the relevant figures for each of the partners shall be added together to arrive at the JV's total capacity.
    iii. The lead partner shares shall not be less than 51% and members of JV should not be more than three.
    iv. The bidder shall provide intended JV agreement at the time of bidding and the only successful bidder shall have to provide the JV agreement registered with sub registrar mentioning the joint and several liabilities with respect to the contract at the time of execution of contract agreement. In case of failure to provide register JV agreement at the time of contract agreement the securities submitted by the bidder shall be forfeited.
    v. Any change in a technically responsive/ qualified JV after evaluation, shall be subject to the written approval of the client such approval may be denied if
    vi. Lead Partner withdraw from a JV and lead partner do not meet the qualifying / technical evaluation criteria;



vii. The new lead partner to a JV does not stand qualified/ responsive individually or as another JV; or
viii. In the opinion of the Client, a substantial reduction in competition would result.
ix. One firm shall not be partner in more than one JV.
x. Bid shall be signed by all members in the JV so as to legally bind all partners, jointly and severally.
xi. The technical evaluation of a JV does not necessarily qualify any of its partners individually or as a partner in any other JV or association. In case of dissolution of a JV, each one of the constituent firms may be declared qualified / technically responsive if they meet all the requirements as described in technical criteria and any partner of JV has requested/shall request for the same and then his qualification shall be subject to the written approval of the Client.
xii. The Bidder (including all members of a JV) must not be associated, nor have been associated in the past, with the consultants or any other entity that has prepared the design, specifications and bidding documents for the project, or was proposed as Engineer for the contract, over the last **year (01) year**. Any such association may result in disqualification/ non-responsiveness of the Bidder.
xiii. A firm/contractor/JV may participate only in one bid only for the contract. If a firm submits more than one bid, single or as a JV, all bids including that bidder will be rejected.
xiv. Any Firm / Bidder may get the bidding documents from **e-procurement system** individually and participate in bidding by making/incorporating Joint Venture (JV) with the condition that intended JV agreement must be attached with Technical Proposal mentioning the joint and several liabilities with respect to the contract and only the successful bidder shall provide the JV agreement must be registered with sub registrar mentioning the joint and several liabilities with respect to the contract at the time of execution of contract agreement.
xv. In case of JV bid security attached with bid shall be on account of Joint Venture or any firm / member of JV.

Fraud and Corrupt Practices:

Bidders and their sub-contractors under contracts must observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Employer:

a) Defines, for the purposes of this provision, the terms set forth below are defined as follows:

- "Corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party.
- "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
- "Coercive practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a part
- "Collusive practice" mea between two or more parties designed to achieve an improp ng influencing improperly the actions of another party.

- obstructive practice" means (a) deliberately destroying· falsifying· altering· or concealing of evidence material to an investigation by the Employer; making false statements to investigators in order to materially impede an investigation by the Employer; (c) failing to comply with requests to provide information· documents· or records in connection with an office of Anticorruption investigation; (d) 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 (e) materially impeding the Employer's contractual rights of audit or access to information
- "Integrity violation" is any act which violates the Government's Anticorruption Policy· including (i) to (v) above and the following: abuse, conflict of interest· violations of the Government sanctions, retaliation against whistleblowers or witnesses· and other violations of the Government's Anticorruption Policy including failure to adhere to the highest ethical standard.

b) will reject any B i d / proposal for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations in competing for the Contract;

c) will cancel the contract if it determines at any time that its representatives or those of the Bidder were engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations during the selection process or the execution of the Contract; and

d) will sanction bidders or its successor including declaring ineligible, either indefinitely or for a stated period of time, to participate in bidding activities in Pakistan if it at any time determines that the firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for, or in executing Contract

e) Will have the right to require that consultants permit the Government or its appointed agent to inspect their accounts and records and other documents relating to the submission of proposals and contract performance.

TENDER PRICE

The quoted price shall be:

i. In Pak Rupees;

ii. Inclusive of All Taxes excluding **PRA Tax**

BID SECURITY

The Tenderer shall furnish the Bid Security (Earnest Money) as under:

i. For a sum equivalent to amount mentioned in Notice published/ appeared on **e-procurement/PPRA website** denominated in Pakistani Rupees; and the mode as mentioned in Tender Notice published.

ii. The bid security must be on the account of bidder otherwise bid shall be rejected.

iii. Having a minimum validity period of **28-Days** beyond the bid validity period.

iv. The bid security of unsuccessful/technically non-responsive bidder shall be returned on the expiry of the grievance period or the decision of the complaint, if any, filed by the non-responsive bidder, whichever is later: provided that the procuring agency may return the bid security earlier if the disqualified or non-responsive bidder, contractor submits an affidavit, through an authorized representative, to the effect that he is satisfied with the proceedings of the procuring agency.

v. The bid security of successful bidder shall be released after successful signing of contract agreement

PERFORMANCE GUARANTEE

The successful bidder shall furnish Performance Guarantee as under:

i. Within Fifteen days **(15) days** of the receipt of the Acceptance Letter from the Procuring Agency;

ii. For a sum equivalent to **5%** of the accepted tender price.

iii. Denominated in Pakistani Rupees issued from any scheduled bank of Pakistan.

iv. The successful bidder/contractor/firm shall deposit the **Performance Guarantee**, in favor of **MC Haroonabad**, digitally through the **Online Payment System of Punjab e-Procurement System (linked with BOP)**, in accordance with the directions of the **Government of the Punjab**. The Performance Guarantee shall remain valid for a period of **three (03) months beyond the successful completion of the Contract**.

v. Performance Guarantee shall be returned 03-months beyond successful completion of contract.



CONTRACT DURATION.

The contract duration period is **Eight (08) months.**

BID VALIDITY

The bid shall have a minimum validity period of **(120) days** from the last date for submission of the Tender. The Procuring Agency may solicit the Tenderer's consent to an extension of the validity period of the Tender. The request and the response thereto shall be made in writing however the bid validity will be extended not more then **180- days** (PPRA Rule 28.3).

REQUIRED DOCUMENTS FOR TECHNICAL PROPOSAL

Documents should be attached along with Technical proposal as per evaluation and qualification criteria

The Contractor shall attach relevant documents as a support which is required in technical evaluation criteria duly signed and stamped by bidder otherwise bids shall not be qualified.

REQUIRED DOCUMENTS FOR FINANCIAL PROPOSAL

Financial proposal shall be submitted as per bidding documents on Punjab e-procurement system.



GENERAL CONDITIONS

General Direction for tenderer and general conditions of contract issued from Finance Department Government of Punjab shall be applicable.

SPECIAL CONDITIONS

Conditions provided in this section shall prevail upon the general conditions of the contract.

1.	The Engineer's (Consultant) Authority to issue Variation in emergency	**2% of the Contract Price** stated in the Letter of Acceptance with the written approval of client.
2.	Law applicable	The relevant laws applied in the Province of Punjab.
3.	Minimum amount of Third Party Insurance	The contractor shall provide the insurance cover from the Start Date to the end of the Defects Liability Period. The amount of insurance taken out by the Contractor per occurrence with number of occurrences unlimited shall be as follows: a. Bodily injury (any one person) PKR 02 (Two) Million (Max) b. Fatal Case (any one person) PKR 03 (Three) million (Minimum) c. Property Damages Depending upon nature of loss (100% of the Damage) All employees, including permanent, contractual, and daily-wage workers, shall be covered under the insurance. The contractor shall also comply with all applicable labour laws, rules, and regulations of the Government of Punjab for compensation.
4.	Time for Commencement	Within 7 days from the date of receipt of Engineer's Notice to Commence which shall be issued within 14 days after signing of Contract Agreement.
5.	Amount of Liquidated Damages	**0.1 %** of the Contract Price 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.
6.	Defects Liability Period	**365 days** from the effective date of Taking Over Certificate.
7.	Percentage of Retention Money	As per applicable rules and guidelines of Govt. of the Punjab
8.	Minimum amount of Interim Payment Certificates(Running Bills)	Greater than **PKR. Ten Million (10 Million) except last 2 IPC's**
9.	Time of Payment from delivery of Engineer's Interim Paymen Certificate to the Employer.	

10.	Mobilization Advance (Interest Free)	As per applicable rules and guidelines of Govt. of the Punjab
11.	Environment, Health and Safety	• The Contractor shall strictly comply with all Environmental, Health and Safety (EHS) SOPs, including requirements relating to labor/construction workers, women workers, Environmental and Social Management and Monitoring Plan (ESMMP), and Environmental and Social Commitment Framework (ESCF), to ensure full compliance with E&S safeguards. The Contractor shall ensure mandatory provision and proper use of appropriate Personal Protective Equipment (PPE) by all workers at all times during construction activities. • Within 14 days of the Letter of Acceptance, the Contractor shall submit a Site-Specific Environmental, Health and Safety Management Plan (SS-EHSMP) to the Supervision Consultant for approval, addressing all applicable monitoring and mitigation measures specified in the project's IEE/EIA/ESIA. The CVs of EHS/E&S personnels shall be submitted to the Supervisory consultant. • The Contractor should ensure that his Sub-contractors (only specified during bidding) comply with the SSEHSMP/SOPs and other applicable requirements. • Submit monthly E&S progress report on the compliance of such measures to the Supervision Consultant. • If any unforeseen health, safety, or environmental risks arise during the Contract, the Contractor shall update the SS-EHSMP to include the potential impacts and required mitigation measures. • In case of any serious injury requiring medical treatment or hospitalization, or a fatal accident, the Contractor shall immediately inform MC Haroonabad, Representative of Supervision Consultant and Representative of PMDFC E&S Team.

12.	**Social Management**	• The Contractor shall register all environmental, social, and gender-related complaints received from the community or workforce in the on-site GRC Complaint Register. • The Contractor shall be solely responsible for any property damages caused by the acts or omissions caused by the Contractor. • The Contractor shall compensate affected community members for any damages resulting from construction activities, in accordance with applicable laws and the approved E&S requirements. • The Contractor shall ensure equal wages for male and female workers in accordance with the Government's minimum wage notifications; provide 90 days of paid maternity leave to eligible female employees as per applicable Punjab Government provisions; display information on the Protection against Harassment of Women at the Workplace Act, 2010 at the site; and provide separate prayer and washroom facilities for female workers. • The Contractor shall provide job opportunities to persons with disabilities were deemed fit, and they shall be treated in accordance with the Empowerment of Persons with Disabilities Act 2022.

13.	**Monitoring/Surveillance of Project**	• The Contractor shall document the entire project and its assets from multiple static angles using several weather-resistant, solar-powered time-lapse cameras with mounting structures, installed at locations determined in consultation with the Client. The cameras shall be programmed to capture ultra-high-definition images (6K output resolution) every 30 minutes, with UHD time-lapse video sequences from each camera delivered at project completion and at mutually agreed intervals for progress monitoring, meetings, public relations, and marketing. The Contractor shall also provide a Progress Centre, an in-house developed, secured, cloud-based collaboration and monitoring web platform including: project-wise Progress Dashboard; live time-lapse with downloadable MP4 video and live-lapse comparison; multi-image viewing with box, split, and side-by-side comparison; WhatsApp integration; 24-hour support; API integration for progress wall setup; optional BIM integration; responsive, cross-platform access on desktop and mobile apps (Google Play and Apple App Store) with multi-factor authentication, where the mobile app shall allow user management, configuration change requests, and support contact; quick-switch between cameras or projects; real-time weather widget; AI People Flow, AI Health & Safety Analysis, and AI Equipment Tracking; multi-project gridwall; and integration to display progress on the Client's website or application.

In addition to above Special Conditions, further stipulations/provisions for project compliance are as follows;

- The successful bidder shall have to arrange **pre-shipment** inspection at manufacturer's site of work by a firm of international repute regarding their correctness and genuineness in respect of items to be imported from abroad. The certificate so issued be provided at the time of delivery at site failing which material will not be accepted.
- Engineers and technical staff mentioned for the project execution should be available with the contractor. Employer or consultant may initiate surprise visits to ensure presence and availability of required personnel.
- Upon receiving work order/acceptance letter the successful bidder shall report to the **MC Haroonabad** for further Contractual Obligations and furnish Work Program within 14 days from the date of receipt of work order/acceptance letter.
- **Equivalent**: Equivalency of any component shall be subject to prior approval from **the Design & Supervision Consultant**
- The Successful bidder shall have to :erial checked and finished work tested by the supervisory staff t **abs (UET or equivalent)** and obtains a certificate to this effect :e released if the material is not

checked and finished product not tested.

- **Use of Batching Plant for RCC Works:** Mixing, transportation and pouring of concrete for all RCC works during construction shall be carried out only through Batching Plant, Transit Mixer and Concrete Pump arrangement. Manual arrangement is not allowed. The bidder shall **submit an undertaking** confirming compliance with this requirement, along with an **authorization/confirmation letter** from the proposed Batching Plant confirming its commitment to supply concrete of the required design mix throughout the project completion period. Failure to submit the required undertaking and Batching Plant authorization/confirmation letter shall render the bid non-responsive and shall be treated as a knock-out criterion.
- The Successful bidder shall provide **One (01) Year** warranty certificate from the completion of work (DOC) of all equipment and Pumping machinery from the original manufacturer and will be responsible for rectification of any fault if occurred at his own cost within **07** days as directed and to the satisfaction of Engineer In-charge.
- **OEM/Authorized Representative Requirement:** All equipment and machinery proposed in the Technical Bid shall be sourced from the **Original Equipment Manufacturer (OEM) or its duly authorized representative/dealer**. The bidder shall submit a valid OEM authorization letter or authorization from the OEM's duly authorized representative, as applicable, for the proposed equipment and machinery. Any equipment or machinery not supported by the requisite authorization shall be treated as non-responsive on a knock-out basis and shall not be considered for technical evaluation.
- Retention money against the Equipment and Machinery will be released after expiry of warranty period i.e. 01-year staring from the date of issuance of successful commissioning and handing over certificate.
- Financial rules / instructions issued from time to time by the Finance Department Government of Punjab shall be applicable.
- The payment of Mobilization, Secured Advance, Price adjustment/variation and Escalation if any, will be considered in accordance with instructions issued (time to time) by the Finance Department Government of the Punjab.



Basic Eligibility

The firms fulfilling the following basic requirements shall only be considered for further evaluation (relevant documents to be attached):

a) Registration with PEC in the respective Category **C-3** or above and with specialization in relevant code i.e. **(CE-09, CE-10 & ME-06)** (in case of JV*)
b) Memorandum and Article of Association/Registration certificate of the Firm/ /Partnership deed registered with sub-registrar/ Affidavit of sole proprietorship and JV Agreement duly signed by all members in case of bidder participating as Joint Venture.
c) Income Tax and PRA registration certificates **(NTN & PNTN).**
d) The Bidder shall provide audit report of last **Four (04) Years** (Financial Year 2022-2023, 2023-2024, 2024-2025 and 2025-2026) duly certified from chartered accountant firm.
e) Litigation history if any, of the previous 10-years in which the Bidder was either directly or substantially indirectly involved in. The bidder shall provide accurate information on the prescribed Performa about any litigation or arbitration resulting from contracts completed or ongoing under its execution over the last 10-year. A consistent history of court / arbitral award against the bidder or any member of J.V may result in disqualifying bidder. This requirement also applies to contract executed by the bidder as J.V member. All pending litigation shall in total not represent more than Forty percent (40%) of the Applicant's net worth and shall be treated as resolved against the Applicant, each member of J.V shall meet this requirement otherwise whole J.V shall be considered as non-responsive.

   Or

   Otherwise provide no litigation certificate on **E-stamp paper** duly certified by Notary Public / Oath Commissioner.
f) Certificate of "No black listing" with **MC Haroonabad** on **E-stamp paper** duly certified by Notary Public / Oath Commissioner.

Note:-

i. **In case of joint venture, any member of JV has to fulfill the **Basic Eligibility criteria mentioned at sr.no. a & d** and all members of JV must fulfill the basic eligibility criteria mentioned at **sr. b, c, e and f***
ii. *Any Fake document shall result in black listing of firm*
iii. *All the documents must be in English language and foreign language documents must be translated and attested from the embassy. (The non-attested translated documents will not be considered).*
iv. ***This part of evaluation shall be on knockout bases in case the bidder fails to comply any of the above requirements he shall not be considered for further evaluation.***

3.0 Qualification Criteria

3.01 General

Responsiveness of Technical Bid will be based on the criteria given in succeeding paras **3.0.2** to **3.0.7** regarding the Applicant's Financial Soundness, Experience Record, Personnel Capabilities and Equipment Capabilities as demonstrated by the Applicant's responses in the forms attached to this letter. The Employer reserves the right to waive minor deviations, if these don't materially affect the capability of an applicant to perform the contract. Joint Venture experience & resources shall be considered. Consortium or Association of firms will be considered for similar treatment as in case of Joint Venture. Keeping in view the complexity of the Project, the Qualification criteria evolved is as follows:

Part-A

Sr. No.	Category	Weightage/Mark
1.	Experience Record	35
2.	Personnel Capabilities	15
3.	Equipment Capabilities	20
4.	Financial Soundness	30
	Total:	**100**

Part-B

Sr. No.	Category	Weightage/Mark
1.	Technical Specifications Pumping Machinery	Knock out basis

Part-C

Sr. No.	Category	Weightage/Mark
1.	Technical Specifications of Dewatering Sets	Knock out basis

Note: Responsiveness status shall be determined on the pass/fail basis (collectively in Part A B & C). The Applicant must score total 65 Marks in Part-A and at least 50% marks in each category, to qualify. If any applicant fails to score 50% marks in any of the above categories, will be considered disqualified/non-responsive. Part B & C shall be evaluated on knockout basis and the applicant must have to fulfill the specification & requirements in given Part-B & C in case bidder fails to comply any of the given specification & hall be considered non-responsive.

PART-A

The further detailed criteria for each category developed is given under each head as follows:

3.02 Experience Record

Credit Marks for experience shall be awarded on the basis of following qualifications:

Sr. No.	Description	Marks Assigned	Explanation for Marks Obtained
A)	**Specific Experience** At least **Two (02) Projects** of *similar nature and complexity having minimum cost ***Rs.250-Million each** completed or **substantially completed in last **ten (10)-years** with Government Departments, comprising following components (read with "Explanation for Marks Obtained"). • ***RCC work*** *(*must be available in both Projects) • ***Laying of HDPE pipes*** *(*may be considered from separate project) • ***Supply installation of pumping machinery*** *(*may be considered from separate project) Marks will be given as per breakup given as under: **Break up of Marks** I. RCC Work not less than **50,000-cft** excluding RCC pipes in each project **(16marks)** **II.** Laying of HDPE Pipes (dia of pipe not less than **315mm**) having **minimum length of 900 Rft** in each project (01 mark for each project) **(02-marks)** **III.** Supply Installation of Pumping Machinery, having minimum accumulative pumping capacity not less than **4-cfs** capacity in each project (01 mark for each project) **(02-marks)**	20	**20 Marks** will be given if the firm/contractor has completed or substantially completed at least 02 projects of similar nature and complexity with minimum cost of **Rs. 250-Million each** in last **ten (10) years.** Marks will be given as per Breakup mentioned in "Description". (No marks shall be given if supporting documents substantiating the claim are not attached. i.e. Work Order with complete BOQ & Contract Agreement / Final Bill with detail BOQ, and performance certificate / completion certificate is not provided). **Note:** The projects should have RCC component (which is mandatory) of required quantity (**50,000 -cft**), otherwise the projects will not be considered for evaluation. The other two components (Laying of HDPE pipes & Supply Installation of Pumping Machinery) can be considered either from same project or from any other projects meeting the minimum requirements laid down under "Description". In case any component other than RCC is missing the corresponding marks shall not be awarded according to Breakup of marks **No Marks** will be awarded in case 02 projects having RCC component of required quantity (**50,000-cft**) and cost not less than **Rs. 250-Million** is not completed.

B)	**<u>In Hand/Running Projects:</u>** Work of similar nature complexity in Hand Project comprising following components (read with "Explanation for Marks Obtained"). • ***RCC work*** *(*must be available in both projects) • ***Laying of HDPE pipes*** *(*may be considered from separate project) • ***Supply installation of pumping machinery*** *(*may be considered from separate project) having minimum cost **Rs. 250-Million** in hand / running. **<u>Breakup of Marks</u>** I. RCC Work not less than (**50,000-cft**) excluding RCC pipes **(04-marks)** II. Laying of **HDPE Pipes** (dia of pipe not less than **315mm**) having **minimum length of 900-Rft (1.5mark)** III. Supply Installation of Pumping Machinery, having minimum accumulative pumping capacity not less than (**4-cfs**) capacity. **(1.5-mark)**	07	• **07 Marks** are given for **01 Project** of similar nature in hand as per Breakup mentioned in "Description". • **No Mark** will be awarded if the contract agreement / work order with complete BOQ copy of running bills with detailed BOQ is not provided. **Note:** The project should have RCC component (which is mandatory) of required quantity (**50,000 -cft**) and cost shall not be less than **Rs. 250-Million**, otherwise the project will not be considered for evaluation. The other two components (Laying of HDPE pipes & Supply Installation of Pumping Machinery) can be considered either from same project or from any other projects meeting the minimum requirements laid down under "Description". In case any component other than RCC is missing the corresponding marks shall not be awarded according to Breakup of marks. **No Marks** will be awarded in case project having RCC component of required quantity (**50,000-cft**) and cost not less than **Rs. 250-Million** is not available.
C)	**<u>Financial outlay of Projects</u>** 03 marks will be given for the project mentioned at serial number "**A**" having cost more than **Rs.350-Million** and one **(01)** mark shall be given for each **20%** extra upto maximum marks i.e. **05-marks**	05	No marks shall be given if documentary prove/evidence i.e. contract agreement / work order and performance certificate / completion certificate / final bill is not attached.
D)	**<u>General Experience</u>** Any single project comprising General Civil Works i.e. concrete work, building work, Canals, road and pavement water supply system, sewerage system, construction of Drains etc. having cost of **Rs. 250-Million** completed in last **ten (10) years**. **<u>Note:</u>** Other than works considered at Sr. No. **"A"** above.	03	No marks shall be given if work order with complete BOQ/ contract agreement / final bill, and performance certificates/completion certificate is not provided.
Total Marks Allocated			**35**

NOTE:

- ***Similarity**: shall be based on physical size, complexity, methods/technology and or other characteristics described in Part-A. Segregation of number of small value/quantity

contracts (less than the value/quantity specified under requirement) to meet the overall requirement will not be accepted.

- ****Substantial completion**: Substantially completed work will be considered for evaluation. Substantial completion shall be based on 80% or more works completed under the contract, duly certified by employer
- *****Summation of small value of contracts** shall not be aggregated as experience in similar nature of works.
- In case of number of works more than the specified, only two the projects / works completed shall be considered having maximum possibility of marks.
- The applicant must submit JV agreement in case of projects completed as a partner of JV clearly showing percentage share of all partners of JV, if the JV agreement showing percentage of the partners is not attached, the submitted project will not be considered during evaluation. The applicant must submit the JV agreement along with application if applying as partner in JV.
- For projects under which the bidder executed/completed as a joint venture member, only the bidder's share as member of that Joint Venture (JV) shall be considered as experience of similar nature as given above.
- Any Fake document shall result in black listing of firm
- All the documents must be in English language and foreign language documents must be translated and attested from the embassy (The non-attested translated documents will not be considered).

3.03 Personnel Capabilities

Credit Marks shall be awarded under this category using the following criteria.

Sr. No.	Description	Marks Assigned	Explanation for Marks Obtained
i)	**B.Sc Engineers registered** with Pakistan Engineering Council (PEC) Total No. of Engineers required=02 (i) RE (Civil) with min 07 year experience = 1No (ii) RE (Mechanical) with min 05 year experience = 1No	6	• **4 Marks** will be given if the individual experience of at least 01 no. of B.Sc Engineer Civil (registered) is equal to 07 years or above. In case of non-availability of Registered Engineer (Civil) no mark will be given. • **2 Marks** will be given if the individual experience of at least 01 no. of B.Sc Engineer Mechanical (registered) is equal to 05 years or above. In case of non-availability of Registered Engineer (Mechanical) no mark will be given. • **No marks** will be given if the documentary proof is not attached which shall be counter verified from PEC
ii)	**Environment, Health and Safety (EHS) staff** a) Environment Specialist (BS Environmental Sciences/Engineering, 02 years' experience) – 01 No. b) Health and Safety Specialist (BS Environmental Sciences/Engineering or equivalent, 02 years experience, NEBOSH certification will be preferred) – 01 No.	3	• **1.5 Marks** will be given if the individual experience of at least 1 no. of Environmental Specialist is equal to 02 years or above. In case of non-availability, no mark will be given. • **1.5 Marks** will be given if the individual experience of at least 1 no. of Health & Safety Specialist is equal to 02 years or above. In case of non-availability, no mark will be given. • **No marks** will be given if the documentary proof is not attached

iii)	**<u>Associates Engineers (DAE)</u>**	6	• **4 Marks** will be given if at least 02 No. of Associates Engineers (02 No DAE Civil) (02-Marks for each) having experience equal to 5 years or above. No mark will be given if Associate Engineer (DAE Civil) having less than 5year experience is employed by the Contractor. • **2 Marks** will be given if the total no. of Associate Engineers are 2nos. (1 Electrical and 1 Mechanical) (01-Mark for each) having 5year or above experience.
Total Marks Allocated			**15**



3.04 Equipment Capabilities

Proof of ownership /lease / hire (in case lease/hire agreement between both parties must be on non-judicial e-stamp paper) must be attached by the Contractor.
Credit Marks shall be granted on the basis of the following criteria for various kinds of equipment relevant for the Project:

S.#	NAME OF EQUIPMENT / MACHINERY	NO. OF EQUIPMENT	MARKS	Remarks
1	Batching Plant and Transit mixer	01-No Batching plant (BP) and 02-No transit mixer (TM) & 01 No Concrete Pump (CP).	BP=5 TM=2 CP=1 **Total** = 08	No marks if the Purchase Certificate/Ownership or any other Proof of ownership Lease / Hiring Agreement/Authorization is not attached **Note:** if number of equipment is less than required no. of equipment, proportionate marks will be given.
2	Excavators	2No.	02	
3	Generator	1 No.	01	
4	Theodolite / Total station	1 No.	0.5	
5	Lab equipment for field tests such as sieve analysis, crushing strength, slump test, compaction test etc.	Complete Sets	0.5	
6	Dewatering Set, Welding plant & Chain Pulley blocks	2 No. Each	01	
7	Compactor & Vibrator	2 No. Each	02	
8	Dumper trucks Tractor Trolley & Search lights	4 No. Each	02	
9	Water Tank, Wheel Barrows, Air Compressor, Tool Kit	1No. Each	01	
10	Hydraulic Testing Lab Equipment's	Complete	0.5	
11	Scaffolding / Steel Shuttering Plates	10,000 Sft	01	
12	Mobile Crane	1 No.	0.5	
	Total marks equipment (T&P)		**20**	

3.0.5 Financial Position

For Financial Status assessment, the Applicants may be required to submit Audited financial statements of last 04-years
Credit Marks shall be awarded on the basis of the following criteria:

Sr. No.	Description	Marks Assigned	Criteria for Marks Obtained
a)	**Available Bank Balance/Credit Line** (Bank Statement/Running Finance/Credit Facilities / L.G / L.C Facilities) Attachment of latest bank statement / Bank credit line certificate / letter of credit (must be valid for a period extending at least 120 days beyond the bid submission date) is compulsory.	15	• **7.5 Marks** are given if the available bank credit line limit is equal to **Rs.75-Million.** • For limit less than **Rs.150-Million**, but greater than **Rs. 75-Million**, use following weightage 15 x (A/**150**) • Full marks will be given for the limit equal to or more than **Rs. 150-Million** A= Available Bank Cash/ Credit Line Limit *No Mark will be given in case of limits less than **Rs. 75-Million**.*
b)	**Average Annual Turnover** in last **04 Years** Attachment of Annual Audit report of last 04-years duly certified by Chartered Accountant is Compulsory.	15	• Full Marks are given if the available Average Annual Turnover for last Four years is equal to or more than **Rs.500-Million**. • For the Average Annual Turnover less than **Rs.500-million** but is greater than **Rs.250-Million** weightage is as given below 15x(A/500) A= Average Annual Turnover in last three years. *No Mark will be given in case of less than **Rs.250-Million.***
	Total Marks Allocated	**30**	

PART – B

3.0.6 TECHNICAL SPECIFICATIONS

Contractor must attach authorization from (OEM) Original Equipment Manufacturer certificate and will be bound to use this arrangement during execution and the offered product must meet the following requirements:

S.#	Description / Specification	Bidder to Specify
1	Providing, installation, testing & commissioning of Horizontal centrifugal pump having impeller stainless steel or better, and electric Motor and motor Control Unit (S/D) consisting of the magnetic contactors, molded case circuit breaker, EOCR, EVR, phase failure relay, phase reversal Protection relay amperemeter, voltmeter, volt selector switch, ampere selector switch, auto manual switch, current transformer with auto On/Off or manual On/Off along with power factor improvement plant (PFI). complete in all respect as per satisfaction of Engineer In-charge and suitable to the civil structure and as per following specifications: **Pump** Min. Efficiency = 80% Min solid Passage Size = 100 mm Maximum speed = 1450 rpm Impeller: Stainless steel Casing: Cast iron ASTM A 48 Class 35, EN GJL 250 or better Shaft: Stainless Steel AISI 304 or better Shaft Sleeve: Stainless Steel AISI 304 or better Pump Capacity = 04 cusecs,50 ft. Head **Motor** • Maximum 1450 RPM/4Pole with cooling fan and Star Delta Connections • Capacity = 50 HP Minimum Insulation Class = F • Minimum Operational Temperature= 45° C • Min. Efficiency = as per IE-3 • Ingress protection: IP 55 **Motor Control Unit (MCU) / Star Delta Panel** • Suitable capacity circuit breaker for motor, • Suitable capacity magnetic contactors for motor, • Required capacity thermal overload relay for motor, • under/over voltage relay; • electronic over current relay, • phase failure relay, • phase reversal protection relay • indication lamps, • digital ampere meter, volt meter, hour run meter • thermistor relay for high temperature protection, • on/off switch, Suitable cables from power meter to panel and from panel to electric motor for star and delta connection, complete in all	

	respects. All the equipment shall be from internationally reputed manufacturers subject to approval of the Engineer	

Note:- This part of evaluation shall be of knock out basis if the bidder fails to provide the authorization from Original Equipment Manufacturer (OEM) and to comply the given specifications he shall be considered as non-responsive.

PART – C

3.0.7 TECHNICAL SPECIFICATIONS

Contractor must attach authorization from (OEM) Original Equipment Manufacturer certificate and will be bound to use this arrangement during execution and the offered product must meet the following requirements:

S.#	Description / Specification	Bidder to Specify
1	**Specifications for 3.4 cusec capacity Dewatering Set** Supply of Fully Automatic Auto-Prime solid handling dewatering pump sets (3.4 Cusecs) •Minimum 3" (75mm) solid handling capacity •Standard construction with SG iron casting •SS316 impeller (255mm diameter impeller) and wear plates •SS431 shaft, fitted with oil-cooled mechanical seal of silicon carbide, capable of running dry for extended periods, incorporating fully automatic compressor priming facility •Suction/ Discharge connections minimum 150mm x 150mm or above respectively (with Bauer quick connect couplers) close coupled wisth water cooled diesel engine having power not less than 44kw/59HP with RPM up to 2000 •Electric start, battery, and engine control panel with shutdown protection against high engine RPM •Low oil pressure, high temperature complete with emergency stop •Ambient temperature/atmosphere: Max 50°C Tropical (Hot & Humid), Relative humidity: Max 100% •All mounted on a common fabricated steel base with single axle trailer complete with two jack stands Towing arrangement and minimum 10 hours fuel tank Pump should be able to develop a minimum head of 20 m and flow of 350 m^3/hr Maximum flow: Not less than 485m3/h (4.7 cusecs) Efficiency of duty point shall not be less than 74%. Each unit shall be supplied with 5m x 6" or above reinforced rubber	

	suction hose and 33m x 6" or above discharge PVC lay flat type hose, complete with quick Bauer type couplings. Country of Origin: Europe/UK/USA/Australia/Japan/UAE or equivalent **Inspection Requirements:** • 3rd Party pre-shipment Inspection from International reputed firms (SGS, TUV, Bureau Veritas or equivalent). Inspection certificate and all relevant documentation must be provided after successful inspection.	

Note:
This part of evaluation shall be of knock out basis and must be compliant.

1) In case the bidder is other than manufacturer, the bidder must provide the authorization letter from Original Equipment Manufacturer (OEM) / authorized distributor of OEM for the items/goods /equipment. The bidder must also comply with the technical specifications given above otherwise he shall be considered as non-responsive and shall not be considered for further evaluation.
2) In case of equivalent or better specifications from the specifications listed above, this will also be accepted by the Procurement Committee / Bid Opening & Evaluation Committee, provided the bidder attaches detail of the relevant specifications along with the authorization from Original Equipment Manufacturer (OEM). Failure to provide OEM authorization in such cases will render the bid non-responsive. The decision of the committee shall be final.
3) The Contractor must also provide undertaking for the availability of spares parts for the period of ten (10) years that will be made part of the main contract.



EXECUTIVE SUMMARY

1) Storm water drainage in Haroonabad has been a major environmental hazard and civic problem. Haroonabad's flat terrain leaves it particularly vulnerable to stormwater accumulation, as the existing drainage system lacks the capacity to manage runoff during a rainfall event. In several parts of the city, water sits stagnant for extended periods, disrupting the daily lives of residents and creating conditions that are both unhygienic and difficult to navigate. The proposed project aims to resolve this through the development of an improved stormwater drainage system. Underground storage tanks will be installed at the worst affected locations to collect and temporarily store runoff, with provision for its timely and proper disposal after each rain event.
2) Responsiveness status shall be determined on the pass/fail basis (collectively in Part A, B & C). The Applicant must score total 65 Marks in Part-A and at least 50% marks in each category, to qualify. If any applicant fails to score 50% marks in any of the categories, will be considered disqualified/non-responsive. The applicant must have to fulfill the specification in given Part-B & Part-C in case bidder fails to comply any of the given specification he shall be considered non-responsive.
3) First Technical bids will be opened and MC Haroonabad will examine the same as per evaluation criteria given in bidding documents. Financial proposals of only those bidders shall be opened who are technically qualified.



SOPS FOR AS-BUILT DRAWINGS/COMPLETION PLANS

No final bill of any development/Repair & Maintenance work, irrespective of the source of funding, shall be cleared by the Finance Section MC Haroonabad unless its As-built Drawing/Completion Plan has been cleared by the Engineer In-charge MC Haroonabad. In order to facilitate the incorporation of the As-built Drawings into GIS and their clearance from the Engineer In-charge, the drawings must conform to the following criteria:

1. As-built Drawings should be drawn to an appropriate scale with a reference coordinate system.
2. Free hand drawings or drawings not to the scale shall not be accepted.
3. Where applicable, building drawing and internal structure detail drawings should be submitted in AutoCAD format.
4. Standardized legends should be mentioned on the drawing sheets.
5. Drawing sheet(s)/map(s) must be duly signed by:
    i) Sub Engineer
    ii) MO (Infra/WATSAN)
    iii) Consultant
6. Covering letter by the Engineer In-charge should be attached with an As-built Drawing/Completion Plan and addressed to the Finance Section MC Haroonabad.
7. As-built Drawings must be submitted as soon as work on site is completed. No Completion Plan or As-Built Drawing shall be accepted after more than six (06) months from the date of completion of work, without a cogent reason.
8. Drawings/maps should contain the following contract details:
    i) Name of Project
    ii) Tender No. / Work Order No.
    iii) Name of Contractor
    iv) Name of Consultant (if applicable)
    iv) Start & Completion Date
9. All data used in the making of the As-built drawings must also be enclosed in soft format/GIS vector files stored on a CD/DVD/USB drive or other storage medium.
10. At least two (02) copies of drawings/maps of completion plan should be submitted, 01 for record of the Engineer In-charge, 01 for Finance Section MC Haroonabad.
11. Total final cost incurred on the project/scheme, should be written on the Completion Plan for incorporation in asset management system.
12. Any information additional to the requirements contained herein that may be deemed necessary by the Engineer in-charge, must be made available in order to receive final clearance.



For Sewerage System:

13. In case of disposal/lift stations, drawings should have GPS coordinates, detail of pumping machinery and pipe material showing:

i) Discharge capacity
ii) Motor manufacturer's name, Horse Power, RPM
iii) Pump manufacturer's name, Pump Capacity, Head
iv) Transformer manufacturer's name, power KVA
v) Motor Control Unit manufacturer's name, details
vi) Force Main: Length, size & material
vii) Bar Screen: Length, size & material
viii) Penstock Gate: Length, size & material

14. Sewer Lines, Manholes and Gully grating (if any) drawings should have the following information:

i) Invert level of sewer with respect to the Mean Sea Level (MSL)
ii) Sewer size, material and length
iii) Starting / Ending Point, all vertices / bends
iv) Flow direction and detail of existing connecting line(s)
v) Size of gully gratings and detail of connecting sewer lines, if any
vi) Size & GPS Coordinates of manholes and material of manhole cover
vii) Depth of Manhole w.r.t. MSL/NSL
viii) Width of Road/street in feet.
ix) Newly laid or replaced line(s) should be precisely marked on the exact side of road/street (left, right, upper, down or middle) while preparing the as-built drawing.

15. The Completion Plan/As-Built Drawing shall be accompanied by a certificate duly signed by the concerned Engineer In-charge, bearing the following statement: **"It is hereby certified that all the existing house connections have been shifted from old to the newly installed sewer network and the old sewer line(s) under this Completion Plan have been disconnected from the network and abandoned."**

For Water Supply System:

16. In case of OHR: Coordinates, Completion date, Height, Bowl Base, Bottom Water Level (BWL), Top Water Level (TWL), Bowl Top and capacity should be provided.

17. In case of Tube well, drawings should have GPS coordinates, Inlet and Outlet Pipe material and Sizes., detail of pumping machinery, complete bore log and pipe material showing:

i) Strata chart, bore log report and conversion report
ii) Motor manufacturer's name, Horse Power, RPM
iii) Pump manufacturer's name, Pump Capacity, Head
iv) Transformer manufacturer's name, KVA
v) Housing pipe: Length, size & material
vi) Strainer: Length, size & material



vii) Blind pipe: Length, size & material

viii) Bail plug: Length, size & material

ix) Overlap: Length, starting & ending depths

18. In case of drawings of filtration plant, it should be equipped with the following information:

i) Main features of plant

ii) GPS coordinates

iii) Name & capacity of plant

iv) Manufacturer's name with installation details

v) Expected lifespan & replacement dates of filters

vi) Water source for plant

19. In case of drawings of water bottling plant, it should be equipped with the following information:

i) Name, capacity, coordinates of the plant & water source for plant

ii) Manufacturer's name with installation details

iii) Daily and monthly bottle filling capacity

20. In case of water supply pipelines following information should be provided:

i) Pipe diameter, material, thickness, length and type of joint

ii) Coordinates of starting / ending point, all vertices / bends and detail of existing connecting line(s)

iii) Pipe manufacturer's name

iv) Depth of pipeline w.r.t. MSL/NSL

v) Coordinates, and diameter of fire / flushing / lorry hydrants & valves with their types and manufacturer's name

vi) Width of road/street in feet

vii) Dia, length & location of plugging points of abandoned pipelines, if any

viii) Newly laid or replaced line(s) should be precisely marked on the exact side of road/street (left, right, upper, down or middle) while preparing the as-built drawing.

21. Location and No. of house connections should be provided on each line, if the same have been provided under the scheme/project.

22. The Completion Plan/As-Built Drawing shall be accompanied by a certificate duly signed by the concerned Engineer In-charge, bearing the following statement: **"It is hereby certified that all existing house connections have been shifted from old line(s) to the newly installed water supply line(s) and the old water supply line(s) under this Completion Plan have been disconnected from the network and abandoned."**

<u>For Storm Water Drainage System:</u>

23. In case of drainage / disposal/ lift stations, drawings should have GPS coordinates, detail of pumping machinery and pipe material showing:

i) Motor, manufacturer's name, Horse Power, rpm

ii) Pump, manufacturer's name, Pump Capacity, Head

iii) Transformer, manufacturer

iv) Motor Control Unit, manufacturer's name, details

v) Force Main: Length, size & material

vi) Bar Screen: Length, size & material

vii) Penstock Gate: Length, size & material

24. Drains should have the following information:

i) Plan along with coordinates for Start, End and Bends / Vertices.

ii) Invert level of Drain

iii) Lining material type

iv) L-section profile

v) X-section of drains & Road/Ground Level

25. Building drawing and internal structure detail drawings should be in AutoCAD format.

26. Plan for a bridge on a drain should be in AutoCAD format and should have Base Slab Height, Size & Number of Piers and Invert Levels.

27. In case of sewer drain, the drawing should contain the information of invert level, size and material of sewer, start, bends & end point coordinates.

For Buildings and Other Civil Structures:

28. In case of buildings and other structures following information is to be provided:

i) GIS based location/site plan with accurately marked total area and covered/floor area

ii) Copies of floor plan or architectural drawings in soft form (image/CAD format).

iii) Street address, height, number of storeys, land/plot ownership and purpose of construction work.

Application Form A-2 **Page___of____Pages**

General Experience Record

Name of Applicant or partner of a joint venture

All individual firms and all partners of a joint venture are requested to complete the information in this form. The information supplied should be the annual turnover of the Applicant (or each member of a joint venture), in terms of the amounts billed to clients for each year for work in progress or completed as stipulated in qualification criteria.

Use a separate sheet for each partner of a joint venture.

Annual Turnover (Construction only)		
Year	**Turnover (in actual currency)**	**Equivalent Rupees in Millions.**
1.		
2.		
3.		
4.		
5.		

Application Form A-3 **Page____of_____Pages**

Joint Venture Summary

Names of all Partners of a Joint Venture
1. Lead Partner
2. Partner
3. Partner
4. Partner
5. Partner
6. Partner

Total value of annual construction turnover, in terms of work billed to clients,

Annual Turnover Data (Construction only; Equivalent in Pak Rupees, Millions)				
Partner	**Form A-2 Page No.**	**Year 1**	**Year 2**	**Year 3**
1. Lead Partner				
2. Partner				
3. Partner				
4. Partner				
5. Partner				
	Total:			

Application Form A-4 **Page____of_____Pages**

Particular Experience Record

Name of Applicant or partner of a joint venture

The Applicant shall be required to pass the specified requirements applicable to this form, as set out in the: Instructions to Applicants".

On a separate page, using the format of Application Form A-5, each applicant or partner of a Joint Venture is required to list all contracts of a value equivalent to ***as stipulated in qualification criteria****, of a similar nature and complexity to the contract for which the Applicant wishes to qualify, undertaken during the last* ***Ten years***[1]*. The information is to be summarized, using Application Form A-5, for each contract completed or under execution by the Applicant or by each partner of a Joint Venture.*

Application Form A-5 **Page____of_____Pages**

Details of Contracts of Similar Nature and Complexity

Name of Applicant or partner of a joint venture

Use a separate sheet for each contract.

1.	Name of Contract
	Country
2.	Name of Employer
3.	Employer Address .....
4.	Nature of works and special features relevant to the contract for which the Applicant wishes to apply for ....
5.	Contract Role (Tick One) (a) Sole Contractor (b) Partner in a Joint Venture
6.	Value of the total contract (in specified currencies) at completion, or at date of award for current contract Currency…….. Currency…….. Currency……..
7.	Equivalent in Pak/Rs.
8.	Date of Award
9.	Date of Completion
10.	Contract Duration (Years and Months) _____Years _____Months
11.	Specified Requirements[1] ....

1 *Insert any specific criteria required for particular operations, such as annual volume of earthmoving, underground excavation, or placing concrete etc.*

Application Form A-6 **Page____of_____Pages**

Personnel Capabilities

Name of Applicant

For specific positions essential to contract implementation, Applicants should provide the names of at least two candidates qualified to meet the specified requirements stated for each position. The data on their experience should be supplied on separate sheets using one Form for each candidate (Application Form A-8).

1.	Title of Position
	Name of Prime Candidate
	Name of Alternate Candidate
2.	Title of Position
	Name of Prime Candidate
	Name of Alternate Candidate
3.	Title of Position
	Name of Prime Candidate
	Name of Alternate Candidate
4.	Title of Position
	Name of Prime Candidate
	Name of Alternate Candidate



Application Form A-7 **Page____of_____Pages**

Candidate Summary

Name of Applicant

Position		**Candidate** [Tick appropriate one] ☐ Prime ☐ Alternate
Candidate information	1. Name of Candidate	2. Date of Birth
	3. Professional Qualification	
Present employment	4. Name of employer	
	Address of employer	
	Telephone	Contact (manager/personnel officer)
	Fax	Telex
	Job title of candidate	Years with present employer

*Summarize professional experience over the last **10-years**, in reverse chronological order. Indicate particular technical and managerial experience relevant to the Project.*

Month/ Dates/Years		**Company / Project / Position / Relevant technical and management experience**
From	**To**	



Application Form A-08

Equipment Capabilities

Name of Applicant

The Applicant shall provide adequate information to demonstrate clearly that he has the capability to meet the requirements for each and all items of equipment listed in the Instructions to Applicants. A separate Form shall be prepared for each item of equipment listed in para 3.3.4 of the Instructions to Applicants, or for alternative equipment proposed by the Applicant.

Item of Equipment		
Equipment information	1. Name of manufacturer	2. Model and power rating
	3. Capacity	4. Year of manufacture
Current status	5. Current location	
	6. Details of current commitments	
Source	7. Indicate source of the equipment ☐ Owned ☐ Rented ☐ Leased	

Omit the following information if it is owned by the Applicant or partner.

Owner	8. Name of owner	
	9. Address of owner	
	Telephone	Contact name and title
	Fax	Telex
Agreement	Details of rental/lease specific to the Project.	



Financial Capability

Name of Applicant or Partner of a Joint Venture

Applicants, including each partner of a joint venture, should provide financial information to demonstrate that they meet the requirements stated in the Instructions to Applicants. Each applicant or partner of a joint venture must fill-in this form. If necessary, use separate sheets to provide complete banker information. A copy of the audited balance sheets should be attached.

Banker	Name of banker	
	Address of banker	
	Telephone	Contact name and title
	Fax	Telex

*Summarize actual assets and liabilities in Pak Rupees (Equivalent at the current rate of exchange at the end of each year) for the previous **AS STIPULATED IN EXPERIENCE CRITERIA**, based upon known commitments, projected assets and liabilities in pak Rupees equivalent for the next two years.*

Financial information in Pak Rs. or equivalent	**Actual: previous three year**					**Projected: next two years**	
	1	**2**	**3**	**4**	**5**	**6**	**7**
1. Total assets							
2. Current assets							
3. Total liabilities							
4. Current liabilities							
5. Profits before taxes							
6. Profits after taxes							

Specific proposed sources of financing to meet the cash flow of the Project, net of current commitments (Instructions to Applicants, para 3.3.5).

Source of financing	**Amount (Pak Rs. or equivalent)**
1.	
2.	
3.	
4.	

Attach audited financial statements as stipulated in the experience criteria (for individual applicant or each partner of joint venture).

Firms owned by individuals, and partnerships, may submit their balance sheets certified by a registered accountant, and supported by copies of tax returns, if audits are not required by the laws of their countries of origin in case of foreign firms



Litigation History

Name of Applicant or Partner of a Joint Venture

*Applicants, including each of the partners of a joint venture, should provide information on any history of litigation or arbitration resulting from contracts executed in the last **Ten (10)-years** or currently under execution (Instructions to Applicants). A separate sheet should be used for each partner of joint venture.*

Year	Award FOR or AGAINST Applicant	Name of client, cause of litigation, and matter in dispute	Disputed amount (current value Pak Rs. or equivalent)

LETTER OF TECHNICAL BID
&
SCHEDULES TO BID



LETTER OF TECHNICAL BID
FOR
PROVISION OF STORM WATER FACILITIES IN HAROONABAD CITY

Dated_____

To,

Chief Officer - MC Haroonabad

1. Having examined the Bidding Documents including Instructions to Bidders, Conditions of Contract, Specifications, Drawings, Schedules to Bid, Schedule of Prices and Addenda Nos. ……for the execution of the above-named Works, we, the undersigned, being a company doing business under the name of and address…… …….. and being duly incorporated under the laws of… hereby offer to execute and complete such Works and remedy any defects therein in conformity with the said documents including Addenda thereto.
2. We understand that all the Schedules attached hereto form part of this Bid.
3. As security for due performance of the undertakings and obligations of this Bid, we submit herewith a Bid Security in the amount of Pak Rs…… DCR No…… Dated…../……/…….. Issued by …… Bank, Branch Name/Code… drawn in the favor of, or made payable to the Employer, and valid for a period **28-Days** beyond the period of validity of Bid.
4. We undertake, if our Bid is accepted, to commence the Works and to deliver and complete the whole of the Works comprised in the Contract within the time(s) stated in Preamble to the Conditions of Contract.
5. We agree to abide by this Bid for the period of **120-days** from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
6. We undertake, if our Bid is accepted to execute the Performance Security referred to in bidding documents for the due performance of the Contract.
7. Unless and until a formal Agreement is prepared and executed, this Bid, together with your written acceptance thereof, shall constitute a binding contract between.
8. We do hereby declare that the Bid is made without any collusion, comparison of figures or arrangement with any other person or persons making a Bid for the Works.
9. We, the firm or suppliers for any part of the Contract, do not have any conflict of interest.
10. We are not participating, as a Bidder or member of JV, in more than one bid in this bidding process.
11. 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 constitution of the joint venture shall not be altered without the prior consent of the Employer. (Please delete in case of Bid from a single firm).
12. Dated this **day of…… 2026**

NAME OF BIDDER_____

ADDRESS_____

SIGNATURE_____

STAMP_____

STANDARD FORMS

Standard Forms include the following:

- Form of Performance Security (Bank Guarantee)
- Form of Bank Guarantee/Bond for Advance Payment
- Integrity pact



BANK GUARANTEE
(See Clause 7)

Penal sum of bond _____

(express in words and figures)

KNOW ALL MEN BY THESE PRESENTS THAT Mr./MESSERS_____ (Name of contractor) Whose official address is _____

As principal(s) (herein after referred to as principal) and the Bank of Punjab or scheduled Bank(s) of Pakistan (hereinafter appearing in the schedule of sureties, as sureties (hereinafter some time called the surety at the request of the principal are held and firmly bond to the Government of the Punjab acting through the Executive Engineer _____

Division_____or his successor or assigns) a body organized and existing under and by virtue of laws of the Government of the Punjab, in the penal sum of the amount stated above lawful money for the payment of which sum well and truly made we bind ourselves our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

PROVIDED THAT We, the sureties, bound ourselves in such sum jointly and severally, as well as, severally only for the purpose of allowing a joint actions against any or all of us and for all other purposes, each surety bond itself, jointly and severally with the principal for the payment of such sum only as set forth opposite its name in the following schedule:-

SCHEDULE OF SURETIES

Name of bank, branch and address	Limit of liability

The conditions of the above obligations is such that:

WHEREAS, the tender of the above bounden principal has been accepted and he has entered into a contract with the Executive Engineer_____Division _____for the work_____*(Name of work)*_____on the _____day of_____20_____

AND WHEREAS, under the terms of the contract Government has required the principal to furnish a performance guarantee to form a part of the contract.

NOW THEREFORE, it is agreed as follows:-

1) If the above bounden principal shall well truly and faithfully perform the contract and comply with and fulfill all the undertakings, terms and provisions thereof, and satisfy all the obligations of the said principal arising there under, and comply with all covenants therein contained and contained in the specifications, plan and other instruments constituting a part of the contract, required to be performed by the said principal, in the manner and within the time provided in the contract or any extension granted by the Government with or without notice to the surety(s) and shall he Government, for all costs and

damages which the Government may suffer by reason of failure so to do, and shall fully reimburse and repay the said Executive Engineer Division _____all out-lay and expenses which may incur in making good any such default and reasonable counsel fee incurred in the prosecution of defense of any action arising out of or in connection with any such default, and shall pay all persons who have contracts directly with the principal for labour and materials; if any, in connection with the work performed under the contract or any addition in or alternation thereto, or if the contract has not otherwise been rescinded by the Government under the provisions of clause 60 if general conditions of contract, then this obligation shall be null and void and of no effect, otherwise to remain in full force and effect and virtue.

2) The said surety, for value received, hereby stipulate and agree that no change in or in respect of any matter or thing concerning the said contract on the part of the Government or the Engineer-in-charge, extension in time, alteration in or addition to the terms of the contract between the Government and the contractor or to the extent and nature of the work be construed, completed and maintained there under, or the specifications accompanying the same shall in any way affect its obligations to this guarantee and it does hereby waive notice of any change extension in time, alteration or addition to the terms of the contractor to the specifications.

3) The liability of the surety is irrevocable and shall in no case exceed the aggregate amount stated on the top of this guarantee which each surety binds itself and promise to pay the whole or any part of this amount on demand to the Executive Engineer Division_____Without question and without reference to the principal. Provided that the notice of demand shall be given by the aforesaid Executive Engineer, in writing to the surety.

IN WITNESS WHEREOF, the above named principal and the surety have executed this instrument under its seal on this day of 20

The name and corporate seal of the surety being hereto affixed and these presents duly signed by its undersigned representatives pursuant to the authority of its Government body.

Principal (Contractor)

Address _____

Sureties 1____Bank of Pakistan Ltd. Or Bank of Punjab___Branch

FORM OF BANK GUARANTEE/BOND FOR ADVANCE PAYMENT

Guarantee No._____
Executed on_____
Expiry date_____

[Letter by the Guarantor to the Employer]

WHEREAS the _____(hereinafter called the Employer) has entered into a Contract for _____ _____(Particulars of Contract)_____, with_____(hereinafter called the Contractor)_____

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

AND WHEREAS the Employer has asked the Contractor to furnish Guarantee to secure advance payment for performance of his obligations under the said Contract.

AND WHEREAS_____(Bank) (hereinafter called the Guarantor) at the request of the Contractor and in consideration of the Employer 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 fulfillment of any of his obligations for which the advance payment is made, the Guarantor shall be liable to the Employer for payment not exceeding the aforementioned amount.

Notice in writing of any default, of which the Employer shall be the sole and final judge, as aforesaid, on the part of the Contractor, shall be given by the Employer 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 come into force as soon as the advance payment has been credited to the account of the Contractor.

This guarantee shall expire not later than_____by which date It is understood that you will return this Guarantee to us on expiry or after settlement of the total amount to be claimed hereunder.

Guarantor (Bank)

Witness:

1. Signature _____

Name _____

Corporate Secretary (Seal) Title _____

2. _____

_____ _____

Name, Title & Address Corporate Guarantor (Seal)

.



INTEGRITY PACT

[To be filled and signed by the Bidder on Judicial Stamp Paper of Rs. 100] **DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC. PAYABLE BY THE SUPPLIERS OF GOODS, SERVICES & WORKS IN CONTRACTS WORTH RS. 10.00 MILLION OR MORE**

Contract No_____ Dated_____

Contract Value: **Rs.**_____

Contract Title: **PROVISION OF STORM WATER FACILITIES IN HAROONABAD CITY**

…… [*Name of Supplier/ Contractor / Manufacturer*] hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Pakistan (GoP) or any administrative subdivision or agency thereof or any other entity owned or controlled by GoP through any corrupt business practice.

Without limiting the generality of the foregoing,__[*Name of Supplier/ Contractor / Manufacturer*] 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 GoP, except that which has been expressly declared pursuant hereto.

_____[*Name of Supplier/ Contractor / Manufacturer*] certifies 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 GoP and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

_____[*Name of Supplier/ Contractor / Manufacturer*] 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 GoP under any law, contract or other instrument, be voidable at the option of GoP.

Notwithstanding any rights and remedies exercised by GoP in this regard,_____[*Name of Supplier/ Contractor / Manufacturer*] agrees to indemnify GoP for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GoP in an amount equivalent to ten time the sum of any commission, gratification, bribe, finder's fee or kickback given by__[*Name of Supplier/ Contractor / Manufacturer*] 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 GoP.

Name of Buyer: ……	Name of Seller/Supplier: ……
Signature: ……	Signature: ……
[Seal]	[Seal]



SPECIAL PROVISIONS

SPECIAL PROVISIONS (CIVIL WORKS)

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SPECIFICATIONS - SPECIAL PROVISIONS (CIVIL WORKS)

Haroonabad is a city and the headquarters of Haroonabad Tehsil in Bahawalnagar District, southern Punjab, Pakistan. The city sits on the edge of the Cholistan Desert. The surrounding land is agricultural in nature, supporting crops. The terrain is notably flat, with an average elevation of 157 metres and very little variation across the area. As per the 2023 Census, Haroonabad Tehsil recorded a total population of 615,476. The climate is marked by extreme seasonal variation, with summer temperatures reaching up to 49 to 50°C and winter temperatures occasionally dropping below zero.

Scope of the work for this particular project:

PROVISION OF STORM WATER FACILITIES IN MC HAROONABAD

The Project has the following objectives;

The implementation of this project is expected to deliver the following key objectives:

- To reduce urban flooding and minimize ponding in the low- lying areas of Haroonabad city.
- To improve the overall efficiency of stormwater drainage and reduce prolonged surface water stagnation after rainfall events.
- To shorten ponding duration and limit the spread of surface runoff across streets and open areas.
- To protect public health by preventing the accumulation of stagnant water, which serves as a breeding ground for disease vectors and poses serious hygiene risks to the
- surrounding population.
- To safeguard both public and private infrastructure, including roads, utilities, and buildings, from damage caused by repeated flooding.
- To ensure smooth traffic movement and uninterrupted mobility during and after rainfall events by keeping roads clear of standing water.
- To support sustainable urban development by integrating a reliable stormwater management solution that can serve the city's growing needs.
- To improve the overall environmental conditions and enhance the quality of life for residents in the project area.

Under the Assignment, stormwater drainage system including underground storage tank has been planned to drain of severely ponded area during rains. Thus, the project contributes to strengthening urban service delivery systems and addressing critical infrastructure gaps in Haroonabad, in line with broader provincial development and urban resilience objectives.

SP-2 DESCRIPTION OF THE WORKS

2.1 The work included in this Contract are as follows but not limited to these items only:

Sr. No.	Description
1	Inlet Drains
2	Proposed RCC Drains
3	RCC Stormwater Storage Tanks
4	Pumping Machinery and Pump House
5	Linear Storage
6	Force Main
7	Dewatering Sets
8	Bypass Arrangement
9	Env & Social Mitigatio

SP-3 SITE OF WORKS

The work mainly comprising of **PROVISION OF STORM WATER FACILITIES IN MC HAROONABAD**

SP-4 SETTING OUT

Setting out data and control points for the works will be provided by the Engineer following the Notice to Commence but, in any case, prior to start of work

SP-5 CLIMATOLOGICAL DATA

Not used.

SP-6 UTILITIES

The Contractor shall directly enquire from the utility companies about availability of connections of electric power supply and telephone lines for his use at the Site. In case of non-availability of electric power supply from national grid to meet his requirements the Contractor shall provide at his own cost electric power generators as necessary for supply of power for the various parts of the Works including his camps, offices, stores, workshops and other installations as well as for the Engineer's Site office provided under Sub-Clause SP 20.1. The Contractor shall bear all costs for constructing, operating and maintaining the generation system, including the standby generation system, and distribution system including providing diesel, oil or other consumables and all services and necessary attendance to ensure uninterrupted power supply at all times.

The Contractor shall make his own investigations and arrangements for supply of water of acceptable quality for construction requirements and safe drinking water for his staff and workmen and for the staff of the Engineer.

No separate payment will be made to the Contractor for works performed under this Clause and the costs thereof shall be deemed to be included in the rates and prices of the various items in the Bill of Quantities.

SP-7 TOPOGRAPHY AND GEOLOGY OF THE SITE

The details of Topography is with the Employer / Engineer.

SP-8 EXTENT OF WORK

The Contractor shall remove all debris and unsuitable construction to the Engineer's satisfaction with no additional cost.

The Contractor shall construct the Works in accordance with the Drawings and Specifications and as directed by the Engineer. The Contractor shall procure, furnish, provide and arrange all the necessary construction materials, equipment, transportation, fuel, electric power, water and services; be responsible for the construction and maintenance of the construction camps, offices, workshops and warehouses that he may require, and perform all other work necessary for completion of the Works described herein, in complete conformity with the Contract.

SP-9 DRAWINGS

9.1 Bidding Drawings

The Drawings provided as separate volume of Bid Documents and hereinafter referred to as Bid Drawings show the scope of the work to be performed by the Contractor. The Bid Drawings shall not be used as a basis for fabrication or construction, but may be used as the basis for planning, scheduling and placing preliminary orders for materials, subject to corrections based on future issue of Construction Drawings. Any other Drawings if issued through Addenda, before opening of Tenders, shall become part of the Bid Drawings.

9.2 Construction Drawings

After award of Contract, Bidding Drawings will be replaced by Drawings issued by the Engineer for Construction, with such modifications as may be necessary. The Drawings Issued for Construction will include Bid Drawings re-issued, Bidding Drawings modified and additional Drawings as required to develop in greater detail the construction required and shall be referred to hereinafter as "Construction Drawings". The Construction Drawings that show changes from the Tender Drawings and Specifications, will be reviewed by the Engineer for determination of adjustments, if any, of the Contract Price in accordance with the provisions of Variations, of the Conditions of Contract. The work shall be executed in conformity with the Construction Drawings.

The Engineer and Contractor shall jointly prepare a schedule for issuance of Drawings Issued for Construction of the various parts of the Works based on a list of drawings provided by the Engineer.

9.3 Checking of Drawings

The Contractor shall carefully check all Construction Drawings as soon as practicable after receipt thereof, and shall promptly advise the Engineer of any errors if discovered.

SP-10 RIGHT TO CHANGE

The Engineer may find it desirable to change location, alignment, dimensions or design of one or more of the features of the Works to conform to the newly disclosed conditions. Toward this end, the Engineer reserves the right to make such reasonable changes, and the Contractor's operations shall be conducted so as to accommodate any such changes in the Works.

SP-11 DRAWINGS/DATA TO BE FURNISHED BY EMPLOYER /ENGINEER

11.1 Procedure for Submittal of Contractor's Drawings

All drawings showing construction details shall be provided by the Employer/Engineer.

11.2 Other Drawings

Other drawings additional to those referred to herein-above required by the Specifications showing proposed methods of constructing Temporary Works and all bar bending schedules shall be submitted by the Contractor to the Engineer for approval.



11.3 Ownership of Drawings etc.

All the drawings, details, and any other information or documents furnished by the Engineer shall become the property of the Employer.

SP-12 COOPERATION WITH OTHER CONTRACTORS

The Contractor shall cooperate and coordinate his work with that of the other contractors (if any) working at the Site, to whatever extent may be necessary to complete the Works in accordance with the approved programme and the Engineer's instructions.

SP-13 QUALITY OF MATERIALS

All materials, fixtures, fittings, and supplies furnished under the Contract shall be new and unused, of standard first grade quality and of the best workmanship and design. No inferior or low grade materials and supplies 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 of 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 with these requirements and, in every case, he shall quote this Clause in full to each such manufacturer or supplier.

Prior to procurement, the Contractor shall furnish to the Engineer, for his approval, the names of the manufacturers of all equipment and materials which he contemplates incorporating in the Works. With this information, the Contractor shall also furnish such pertinent information as to capacities, efficiencies and sizes, and such other information as may be required by the Engineer. Samples of materials shall be submitted to the Engineer for approval unless waived of by the Engineer. Equipment, materials, supplies and articles installed or used without the Engineer's approval shall be at the risk of subsequent rejection.

The Contractor shall use non-reactive aggregates from suitable quarries for concrete work. The Contractor shall use deformed steel reinforcement bars rolled from Pakistan Steel Mills billet or equivalent from re-rolling mills proposed by the Contractor and approved by the Engineer.

SP-14 INSPECTIONS AND TESTS

14.1 Inspection

All equipment and materials furnished under the Contract and all work performed in connection therewith under the Contract shall be subject to inspection and testing by the Engineer and as mentioned in the special conditions of the document at all times and in all stages of completion. Confirmatory tests shall also be carried out at the Site or at an approved laboratory, as instructed by the Engineer. These tests shall be witnessed by the Engineer and performed at no additional cost to the Employer.
Contractor will submit his submittal to Engineer/Employer in case of Non-scheduled items or Items to be imported for approval prior to booking to supplier/manufacturer before undertaking the item into execution. Pre-shipment inspection of the selected manufacturer's equipment will be carried out by a firm of international repute.

Contractor must submit Bill of lading of such imported equipment prior to transport to site. Confirmatory tests shall also be carried out at the Site or at an approved laboratory, as instructed by the Engineer.



14.2 Testing

The Engineer will make such tests on concrete, aggregates, fill materials, reinforcing steel and other materials as he may from time to time select, and the Contractor shall provide at his own cost such samples or assistance in sampling materials at the Site as the Engineer may reasonably require. Testing by the Engineer shall in no way relieve the Contractor of his responsibility to test materials to ensure that they meet all the specified requirements and to control their quality. The Engineer may accept that items manufactured away from the Site meeting the specified requirements without further testing subject to the Contractor furnishing satisfactory proof of compliance with these Specifications in one or more of the ways described below.

The Contractor shall provide free of charge such material testing equipment, labour, materials, electricity, fuel, water, stores, apparatus and feedstock as may be reasonably required by the Employer to carry out the Tests as per the required frequency.

Manufacturer's Certificate of Compliance

In the case of standard labelled stock products of standard manufacture which have a record of satisfactory performance in similar work over a period of not less than five years, the Engineer may accept a notarised statement from the approved manufacturer certifying that the product conforms to the applicable specifications.

Mill Certificates

Regarding materials for which such practice is usual, the Engineer may accept the approved manufacturer's certified mill and laboratory certificates.

Testing Laboratory Certificates

The Engineer may accept a certificate from a authorized labs (UET or equivalent), 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.

Service Record

If a demonstrable satisfactory service record for a period not less than five (05) years is available for a material, certain specified tests may be waived off by the Engineer.

14.3 Cost

The cost of any laboratory, field and shop tests required from any agency of compliance with under Specifications shall be borne by the Contractor.

SP-15 CONSTRUCTION PROGRAMME

15.1 General

The Contractor shall submit his programme for execution of the Works in accordance with Clause 14.1 [*Programme to be Submitted*], under the Conditions of Contract, to the Engineer for approval. The programme may contain adjustments if any, to the CPM (Critical Path Method) based Bar Chart submitted with the Bid. The completion date, milestones, and key targets indicated in Appendix-E to Bid, or dates earlier than the said milestone and key target dates, shall be shown on the construction programme to be submitted by the Contractor. Other dates including rates of progress for various parts of the Works in the construction programme may be changed by the Contractor and submitted for approval. The operations under each section of the programme submitted by the Contractor shall be broken down in greater detail than those shown on the Schedule submitted with the Bid.

The programme shall also show the timing of provision of any facilities the Contractor is required to supply for use by the Employer and the Engineer, in such manner that these shall be available as stipulated in the Contract and instructed by the Engineer.

15.2 Submittals

(a) The initial submittal shall include a description of the major items of construction equipment planned to be used. The description of the equipment shall include the type, number of units, their capacity, etc. The forecast shall include the estimated dates on which each major item of construction equipment will be on the job. The Bar Chart shall be submitted within 14 days after receipt of the Letter of Acceptance.

The submittal shall consist of:

(i) 4 copies of the Bar Chart.
(ii) A narrative summary of the construction plan.
(iii) A backup of the schedule files on re-writable CD disks or pen drive.

The Engineer will review the construction schedule and the approved initial submittal will be the Project Baseline Schedule by which the performance of the Contractor will be measured

(b) Monthly submittals shall show completed progress of each activity during the past month, with forecast for the coming month. Hammock networks shall be incorporated on the Base Line Schedule of activities. Each monthly submittal shall contain:

(i) 4 copies of the Bar Chart.
(ii) 4 copies of a time scaled logic diagram for the next three months.
(iii) A narrative summary of the schedule related issues and status. The



narrative shall include discussion of pending schedule changes submitted to the Engineer in the past month.

(iv) A backup of the schedule files on rewritable CDs or pen drive.

(c) The successful bidder shall submit the supervision plan in respect of Environmental Health Safety SOPs and ENVIRONMENTAL & SOCIAL MITIGATION PLAN on monthly basis along-with other deliverables manifesting the progress activities as per schedule.

15.3 Progress Schedule

Both the bar charts and network analysis schedules shall be continuously monitored and kept current and updated by the Contractor throughout the work, and at least on every milestone date and submitted for approval. The Contractor's schedules shall be available for examination during normal business hours. All revisions shall be accompanied by a detailed explanation of the reasons for the changes and describing any new or modified construction procedure proposed and, if applicable, any steps being taken to improve progress to achieve completion within the Time for Completion.

SP-16 LAYOUT OF WORKS

16.1 Reference Points, Lines and Levels

The Engineer will lay out a reference line or lines in the field with accompanying points and/or bench-marks to enable the Contractor to establish there from survey control for construction.

16.2 Verification

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

16.3 Primary Control Points

Based upon the Engineer's 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 disturbed or 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.

16.4 Construction Surveyors

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



16.5 Basic Control Monument

Based upon the Engineer's 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 in Sub-Clause 16.7 below.

16.6 Surveys and Computations

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 required by 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.

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 and agreed by an authorized representative of the Engineer.

16.7 Tolerances

Degree of accuracy for the survey works shall satisfy the following specified tolerances:

(a) Alignment of tangents and curves shall be within 0.1 foot for 1,000 feet i.e., an accuracy of 1:10,000.

(b) Structure points shall be set within 0.01foot accuracy from point to point, except where tighter tolerances are required.

(c) Cross-section points shall be located within 0.10 foot, horizontally and 0.01 foot vertically.

(d) Permissible closing error for a levelling line meant for establishing Temporary Bench Mark (TBMs) shall not exceed $0.045 \times \sqrt{M}$ foot, where M is in miles. The permissible closing error shall be duly adjusted.

16.8 Material and Equipment

The Contractor shall provide all materials, equipment and labour required for work.

SP-17 STANDARDS AND SPECIFICATIONS

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 Specifications contained in the following list or to equivalent applicable Standards and Specifications. Copies of these Standards and Specifications may be purchased from the indicated agency, which publishes them:

-	British Standard	BS
-	American Concrete Institute	ACI
-	American Society for Testing and Materials	ASTM

Where relevant Standards and Codes of Practice now quote metric units only, these are to be interpreted as required to the Imperial (foot/pound) unit for the purposes of this Contract.

All materials and workmanship not fully specified herein or covered by an approved Standard shall be of such a kind as is used in first class work and suitable to the climate in the Project Area.

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.

SP-18 ACCESS TO SITE

18.1 Right of Way for Access and Haul Routes

The Contractor shall be responsible for providing and maintaining access routes for the Works. The right of way for access to the Works from existing roads will be provided by the Employer. The Contractor shall make his own investigations of the condition of available public or private roads and of clearances, restrictions, bridge load limits and other limitations that affect or may affect transportation and ingress and egress at the job sites. The repair and reinstatement of roadways, drain and canal banks if damaged during operation shall be the responsibility of the Contractor without any additional cost to the Employer. The Employer controlled right of way shall be the Right of Way (ROW) available to the Contractor for carrying out the Works.

18.2 Restoration of Site

On completion of the Works, the Site shall be restored by the Contractor to its original conditions as far as practicable and left in tidy condition.

SP-19 FACILITIES TO BE PROVIDED BY THE CONTRACTOR AT SITE

19.1 Contractor's Camps

The Contractor is required to arrange the facility of housing in nearby area of the project for the labour through portable containers or house on rent in compliance with PMDFC SOPs for labour / construction worker including women worker. In case of failure and on lodging of complaint by the labour to the Engineer will result in fining of Rs. 5000 / day. Preference shall be given to utilization of local labour / construction workers.

19.2 Temporary Sanitary Facilities

(a) The Contractor shall provide adequate temporary sanitary conveniences for the use of his employees and persons engaged on the work, including the Engineer and his employees. He shall ensure that his employees and labour make proper use of the latrines and do not foul the Site.

(b) In addition to toilet facilities, suitable and adequate washing facilities shall be provided.

(c) Sanitary facilities shall be located as directed or approved by the Engineer and



shall be maintained in a clean and sanitary condition during the entire course of the work.

(d) The septic tank and/or temporary holding tank(s) shall be kept pumped out at such intervals that the tank(s) will not overflow and contaminate the ground, flowing streams or surface drainage.

(e) On completion of the Works, sanitary facilities shall be properly disinfected and all evidence of same including temporary buried tanks and foundations removed from the Site.

19.3 Medical Facilities

The Contractor shall arrange provision of adequate medical facilities for his employees.

Adequately equipped dispensary/ies with qualified and experienced staff shall be provided by the Contractor at his camps. In addition suitably equipped first aid stations manned by trained staff shall be provided at strategic locations, to administer first aid treatment at all times free of charge to all persons on the Site, including personnel of the Engineer and the Employer. The nature, number and location of facilities furnished and the Contractor's staff for administering first-aid treatment shall meet the requirements of the Health Services of the Government of Pakistan.

19.4 Operation and Maintenance of the Camps and Facilities

For the purpose of operation and maintenance of the camps and facilities provided as above, the Contractor shall comply with all applicable provisions of the Pakistani Labour Laws and specifically to the following requirements:

(a) Camp areas shall be kept dry and free from dense vegetation. Measures shall be taken to control dust within the camp area, by water or oil spraying or other approved means.

(b) Any ponded water around a camp shall be sprayed weekly with oil or other approved anti-malaria liquid.

(c) The Contractor shall provide garbage collection and disposal services for his construction camps and the Engineer's office. Disposal shall be by burial (landfill) and/or incineration. Disposal area shall be located a sufficient distance away and downwind from camp facilities and offices so as not to create objectionable odours or health hazards. Equipment, methods of collection and disposal and location of disposal areas shall be submitted to the Engineer for approval.

(d) The interior walls and ceilings of buildings shall be lime washed or painted. The whole of the open spaces around the buildings shall be swept each day and all rubbish removed. The living areas shall be suitable for the climatic conditions. Roof height shall not be less than 10.5 ft. and adequate number of ceiling fans shall be provided.

(e) Adequate sanitary conveniences, including washing and bathing places shall be maintained at each of the camps. All sanitary fixtures, receptacles, toilet rooms, lavatories and wash rooms shall be cleaned and disinfected at least once every day.



19.5 Drainage

The ground around the buildings shall be graded to slope away from building perimeters so as to provide adequate drainage and shall be thoroughly compacted. Excavated material shall be disposed of by filling in low areas or as otherwise directed by the Engineer.

19.6 Water Supply

The Contractor shall arrange for the water supply for his staff residences, labour camps, site offices, work yards, workshops, and various camp facilities. Construction of pumps, storage tanks, overhead tank, distribution system, and their proper running and maintenance shall be his responsibility. Water shall be supplied to the camps 24 hours a day. Adequate supply of water, cooled in summer, shall be ensured in camps and sites of work. Water samples shall be tested periodically to ensure that it is fit for human consumption.

19.7 Electricity Supply

The Contractor shall provide electricity required for the Works including labour camps, staff residences, offices including the Engineer's Site office and various camp facilities. The Contractor shall also provide sufficient standby electricity supply arrangements for his needs.

19.8 Utility Lines

The Contractor Shall conduct his operations, make necessary arrangements, take suitable precautions and perform all required work incidental to the protection of and avoidance of interference with power, telephone, water and other utilities within the areas of his operations in connection with the Contract. No separate payment shall be made for such incidental work. In case the utility lines are required to be relocated the Contractor shall arrange their relocation with the concerned departments and organizations. The Contractor shall obtain cost estimates for relocation of utilities for the Engineer/Employer's approval before execution of the Work. The Contractor shall be reimbursed the actual approved cost carried in by him.

19.9 Handing Over/Removal after Completion

Upon completion of the Works, the Contractor shall remove all the Contractor's camps, labour and staff accommodation, site office, other installations and buildings constructed and all facilities provided by the Contractor under this Clause, and the Site cleared and reinstated to the satisfaction of the Engineer.

19.10 Measurement and Payment

Except as provided in SP-19.8 no separate payment will be made for the work included under the Clause SP-19; the cost thereof is deemed to be included in the rates and prices of other items entered in the Bill of Quantities. The contractor is bound to comply with all the instructions stated in SP-19 and in case of otherwise or if any complaint lodged by the labour to the Engineer / Client, the contractor will be penalized for amounting to Rs. 5000 / day.

ESMP-related costs included in each IPC shall be reviewed and endorsed by the Supervision Consultant for pay[illegible]stent E&S non-compliance, the Contractor shall be required to r[illegible]n-compliance to the satisfaction of the Supervision Consultant b[illegible]e next construction activities.

SP-20 PROVISION OF FACILITIES FOR THE ENGINEER (FOR CONSULTANT STAFF) /EMPLOYER

20.1 Facilities for Engineer/Employer's Staff:

(a) Site offices:

One furnished portacabin with all the requisite accessories for the Engineer / Employer

20.2 Ownership of Site facilities

All facilities/utilities provided by the contractor as stated above in Clause-20.1 will be property of Engineer In charge after successful handing taking over of project and expiration of defect liability period considering that the said amount is included in all items listed in Bill of Quantities. Where such facilities are not specifically included or priced in the BOQ, their provision and subsequent disposition shall remain at the Contractor's discretion, subject to the requirements of the Contract.

20.3 Measurement and Payment

No extra/separate payment will be made to Contractor considering that Contractor has quoted his bid keeping in view of such expanses.

SP-21 PROGRESS PHOTOGRAPHS

The Contractor shall furnish to the Engineer every month, for the site of Fifteen colour photographs on CD or pen drive and 4 colour prints of each photograph taken with a digital camera to clearly show the progress of construction. Each photograph shall be submitted in four prints of size 20 cm x 25 cm. Each print shall be marked on the back side with the caption of the activity, date and serial number. There shall be no writing, lettering or marking on the face of the photograph. Progress photographs shall be submitted from the month, following the month in which Notice to Commence is issued and continued till completion of the Works. In case of monitoring dashboard and reporting through IT enabled mode, hard copies won't be necessary.

No separate payment will be made for the work specified herein and the cost thereof shall be deemed to be included in the other items of the Bill of Quantities.

SP-22 SITE FACILITIES TO BE PROVIDED BY THE EMPLOYER

22.1 General

Without prejudice to the generality of the various clauses of the Contract and except for the facilities referred to hereinafter, particular attention is drawn to the obligations of the Contractor to make his own arrangements for providing, maintenance and furnishing of labour camps, staff residences, offices, workshops, stores watching and guarding thereof.

The Contractor shall submit his written demand of his requirements of land for his Site Facilities as herein specified, at least 28 days in advance.

22.2 Area for Storage and Workshop

The contractor will arrange an size for the facilities listed to Tender and approved by the E rage, and workshop areas. The Contractor shall provide and ı ost, all fencing, any necessary

clearing, land levelling, foundations and above ground structures for sheds, covered areas, workshops, electricity, telephone, water distribution and waste water disposal etc. as he may need to meet his requirements.

SP-23 SAFETY MEASURES AT CONSTRUCTION SITE

a) Pursuant to the provisions of Sub-Clause, for Safety Measures the Contractor shall observe high standards of safety for men and machines at all times and with regard to safety.

b) The Contractor shall take all possible measures to protect his personnel from harm. In case of any casualty or injury to any person due to the Contractor's operations, the Contractor shall ensure quality medical treatment and payment of due compensation.

c) The Contractor shall not permit casual observers or unauthorized persons to come close to areas where excavation or other hazardous operations are being performed. An illustrative safety/barricading arrangement is attached for reference and guidance purposes only; the Contractor shall be responsible for providing appropriate safety and barricading arrangements in accordance with the site conditions and applicable E&S and safety requirements.

SP-24 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 the 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 conform 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 corrected as directed by the Engineer at no additional cost to the Employer.

Contractor/E&S personnel will get appreciation/performance certificate from Engineer in charge upon compliance with E&S attributes at satisfactory completion.

The Environmental Health Safety SOPs for Labour/Construction Workers including Women workers, Initial Environmental Examination (IEE), E&S Implementation cost breakup and E&S Screening checklists are attached with this bidding document.

FINANCIAL BID
PART-II

PROVISION OF STORM WATER FACILITIES IN HAROONABAD CITY

BIDDER INFORMATION

NAME OF FIRM_____

ADDRESS _____

MODE OF BID SECURITY & DOCUMENT NO. _____

DATED_____

BID SECURITY ISSUED By (Name of Bank / Branch) _____



LETTER OF FINANCIAL BID SUBMISSION
FOR
PROVISION OF STORM WATER FACILITIES IN HAROONABAD CITY

Dated_____

To,

Chief Officer - MC Haroonabad

1. Having examined the Bidding Documents including Instructions to Bidders, Conditions of Contract, Specifications, Drawings, Schedules to Bid, Schedule of Prices and Addenda Nos. ……for the execution of the above-named Works, we, the undersigned, being a company doing business under the name of and address……and being duly incorporated under the laws of…… hereby offer at the total cost of Rs._____to execute and complete such Works and remedy any defects therein in conformity with the said documents including Addenda thereto.
2. We understand that all the Schedules attached hereto form part of this Bid.
3. We undertake, if our Bid is accepted, to commence the Works and to deliver and complete the whole of the Works comprised in the Contract within the time(s) stated in Preamble to the Conditions of Contract.
4. We agree to abide by this Bid for the period of **120-days** from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
5. We undertake, if our Bid is accepted to execute the Performance Security referred to in bidding documents for the due performance of the Contract.
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.
7. We do hereby declare that the Bid is made without any collusion, comparison of figures or arrangement with any other person or persons making a Bid for the Works.
8. We, the firm or suppliers for any part of the Contract, do not have any conflict of interest.
9. We are not participating, as a Bidder or member of JV, in more than one bid in this bidding process.
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 constitution of the joint venture shall not be altered without the prior consent of the Employer. (Please delete in case of Bid from a single firm).

Dated this…… day of _____2025

NAME OF BIDDER_____

ADDRESS_____

SIGNATURE_____

STAMP_____

FINANCIAL BID

FOR

PROVISION OF STORM WATER FACILITIES IN HAROONABAD CITY

SUMMARY OF COST

FOR

Provision of Stormwater Facilities in Haroonabad City

Sub Head	Description.	Amount.(Rs.)
1	Inlet Drains	
2	Proposed RCC Drains	
3	RCC Stormwater Storage Tanks	
4	Pumping Machinery and Pump House	
5	Linear Storage	
6	Force Main	
7	Dewatering Sets	
8	Bypass Arrangement	
9	ESMP	
	Total.(Rs)	
Amount in Words:-		
Note:- **i. These rates are exclusive of PRA charges.** **ii. Carriage of aggergate is to be paid seperately unless otherwise specified in the description.**		



Bill of Quantities

SUB-HEAD 1: INLET DRAINS.

S.No.	MRS Ref#	Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
		MRS ITEMS. Based on (MRS, 2ND BI- ANNUAL 2026)				
1	Ch-4, I-45	Dismantling and Removing Road Metal	0.09	o/oCft		
2	Ch-3, I-7-1-A)-i)	Earthwork excavation in open cutting for storm water channels, drains, sullage drains in open areas, roads, streets, lanes, including under pinning of walls and shoring to protect existing works shuttering and timbering the trenches, dressed to designed level and dimensions, trimming, removal of surface water from trenches, back filling and surplus excavated material disposed of and dressed within 50 ft. (15 m) lead:-				
		1) Upto 5' (1.5 meter) depth A) By Manual	0.12	o/ooCft		
3	Ch-6, I-5	Cement concrete plain i/c placing, compacting, finishing and curing complete. (i/c washing of stone aggregate)				
	i	(1:4:8)	0.07	%Cft		
4	Ch-6, I-12b	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labourcharges for binding of steel reinforcement (also includes removal of rust from bars): -.(Deform Bars) .G-60	0.87	0/0Kg		
5	Ch-13, I-9	Bitumen coating to plastered or cement concrete surface: i) 20 lbs. per 100 Sft. (9.07 Kg per Sq.m) (02 coats)	0.32	0/0Sft		
6	Ch-3, I-17c	Transportation of surplus mateial & earth all types when the total distance i/c the lead covered in the item of work is up to 4 miles	0.10	0/00Cft		
7	Ch-26, I-36-b)	Bailing out water: - (Provisional Item)				
		by pump	0.00	o/ooCft		
8	Ch-6, I-9	Placing, compacting, finishing and curing of concrete using Ordinary Portland Cement / Sulphate resisting cement /Slag cement as may be required; including screening, washing of aggregates and mixing of constituents using batching plant,Transportation by transit mixer, pouring with pump in the required proportions to achievea nominal cylindrical strength in the field as per ACI214, with the specified consistency. i/c the cost of shuttering, compaction with Viberator, excluding the cost of Admixture, as approved and directed by the Engineer Incharge. (4000 psi)				

Bill of Quantities

SUB-HEAD 1: INLET DRAINS.

S.No.	MRS Ref#	Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
		b) Retaining/ Shear walls laid in situ or precast laid in position, or prestressed members cast (Formwork on both sides)				
		(iv) 4000 psi, Upto 9" thick	13.00	P.Cft.		
		c) Substructure (Foundations, Pile Cap, Raft, Strip and Footing Beam				
		(iv) 4000 psi	16.00	P.Cft.		
9	Ch-3, I-13(b)	Rehandling of earthwork: (b) upto a lead of 50 ft (15 m).	0.03	0/00Cft		
10	Ch-3, I-25	Compaction of earthwork with power road roller, including ploughing, mixing, moistening earth to optimum moisture content in layers, etc. complete: i) 95% to 100% maximum modified AASHTO dry density.	0.03	0/00Cft		
11	Ch-6, I-32-ii	Providing and embedding 10" (250mm) wide PVC waterstopperin expansion joints of RCC structures (Retaining walls, watertanks, Slabs) complete in all respect. 10mm Thick	15.33	P.Rft		
12	CH 25, I 10+11	Fabrication of heavy steel work, with angle, tees, flat iron round iron and sheet iron for making trusses, girders, tanks, etc., including cutting, drilling, revitting, handling, assembling and fixing, but excluding erection in position. & Erection and fitting in position iron trusses, staging of water tanks, etc. (Providing and fixing M.S Grating comprising of MS L Iron frame 4" x 4" x 5/8" embedded in concrete, 3"x3"x5/8" MS L Iron, MS Flat Bars 3"X5/8" @ 3" c/c, 2"x1/2" MS Flat welded with all and 1" square bars duly welded. Size 6' X 1.5')	3.97	%kg		
13	Anslysis Attached	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. 240 km	0.31	100cft		
					Total Cost for 1 x Drain	
				Total Inlet Drains	**13**	-
						Grand Total Cost for 13 x Drains

SUB-HEAD 2: PROPOSED RCC RECTANGULAR DRAINS

S.No.	MRS Ref#	Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
		MRS ITEMS. Based on (MRS, 2ND BI- ANNUAL 2026)				
1	Ch-4, I-45	Dismantling and Removing Road Metal	90.86	o/oCft		
2	Ch-3, I-7-1-A)-i)	Earthwork excavation in open cutting for storm water channels, drains, sullage drains in open areas, roads, streets, lanes, including under pinning of walls and shoring to protect existing works shuttering and timbering the trenches, dressed to designed level and dimensions, trimming, removal of surface water from trenches, back filling and surplus excavated material disposed of and dressed within 50 ft. (15 m) lead:-				
		1) Upto 5' (1.5 meter) depth A) By Manual	172.72	o/ooCft		
3	Ch-6, I-5	Cement concrete plain i/c placing, compacting, finishing and curing complete. (i/c washing of stone aggregate)				
	i	(1:4:8)	68.83	%Cft		
4	Ch-13, I-9	Bitumen coating to plastered or cement concrete surface: i) 20 lbs. per 100 Sft. (9.07 Kg per Sq.m) (02 coats)	595.10	0/0Sft		
5	Ch-3, I-17c	Transportation of surplus mateial & earth all types when the total distance i/c the lead covered in the item of work is up to 4 miles	145.45	0/00Cft		
6	Ch-26, I-36-b)	Bailing out water: - (Provisional Item)				
		by pump	1.82	o/ooCft		
7	Ch-6, I-9	Placing, compacting, finishing and curing of concrete using Ordinary Portland Cement / Sulphate resisting cement /Slag cement as may be required; including screening, washing of aggregates and mixing of constituents using batching plant,Transportation by transit mixer, pouring with pump in the required proportions to achievea nominal cylindrical strength in the field as per ACI214, with the specified consistency. i/c the cost of shuttering, compaction with Viberator, excluding the cost of Admixture, as approved and directed by the Engineer Incharge. (4000 psi)				

SUB-HEAD 2: PROPOSED RCC RECTANGULAR DRAINS

S.No.	MRS Ref#	Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
		a) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects				
		(iv) 4000 psi	15,130.61	P.Cft.		
		b) Retaining/ Shear walls laid in situ or precast laid in position, or prestressed members cast (				
		(iv) 4000 psi, Upto 9" thick	32,959.00	P.Cft.		
		c) Substructure (Foundations, Pile Cap, Raft, Strip and Footing Beam				
		(iv) 4000 psi	18,447.00	P.Cft.		
8	Ch-6, I-12b	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labourcharges for binding of steel reinforcement (also includes removal of rust from bars): -.(Deform Bars) .G-60	1,378.64	0/0Kg		
9	Ch-3, I-13b	Rehandling of earthwork: (b) upto a lead of 50 ft (15 m).	36.36	0/00Cft		
10	Ch-3, I-25	Compaction of earthwork with power road roller, including ploughing, mixing, moistening earth to optimum moisture content in layers, etc. complete:				
		i) 95% to 100% maximum modified AASHTO dry density.	36.36	0/00Cft		
11	Ch-21, I-6	Constructing standard gully grating chamber, 3'x2½' (900x750 mm), with chinaware trap as per PHED Drawing STD/PD No. 3 of 1977, complete in all respects. (Optional)	10.00	Each		
12	Ch-6, I-32-ii	Providing and embedding 10" (250mm) wide PVC waterstopperin expansion joints of RCC structures (Retaining walls, watertanks, Slabs) complete in all respect. 10mm Thick	9,900.00	P.Rft		
13	Analysis Attcahed	Reinforced Polymer Composite, 25.5" Round Manhole Cover with Ring weight 55 Kg, load bearing EN124 C250 (25 Ton axle load point load).	50.00	Each.		

SUB-HEAD 2: PROPOSED RCC RECTANGULAR DRAINS

S.No.	MRS Ref#	Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
14	Ch 18 - I 23	Providing and fixing M.S Grating comprising of Angle Iron frame size 1.50" x 1.50" x 3/16" and 1/2" square bars duly welded @ 4" c/c, including painting charges etc complete in all respect.	29.00	P.Sft		
15	CH 25, I 10+11	Fabrication of heavy steel work, with angle, tees, flat iron round iron and sheet iron for making trusses, girders, tanks, etc., including cutting, drilling, revitting, handling, assembling and fixing, but excluding erection in position. & Erection and fitting in position iron trusses, staging of water tanks, etc. (Providing and fixing M.S Grating comprising of MS L Iron frame 4" x 4" x 5/8" embedded in concrete, 3"x3"x5/8" MS L Iron, MS Flat Bars 3"X5/8" @ 3" c/c, 2"x1/2" MS Flat welded with all and 1" square bars duly welded and 1/2" dia holdfast @ 2" c/c welded with frame. Size 2' X 2')	58.99	%kg		
16	Analysis Attcahed	Providing and laying base course of crushed stone aggregate of approved quality and grade, and supply and spreading of stone screening, including placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHO dry density, including carriage of all materials to site of work except gravel and aggregate, incluidng carriage for 290 km of aggrgate	74.25	%cft		
17	CH 18, I- 12 a-iii	Cold milling of asphalt layer/concrete surface of specified thickness, loading of debris onto haul trucks via conveyor system and disposal at appropriate place i/c the charges of self propelled milling machine of specified size, dumper, pump, water lorry, compressor and Tungsten Carbide Bits etc complete in all respect as approved by Engineer Incharge	74,250.00	Psft		
18	CH 18, I- 10-a	Providing and laying plant premixed bituminous carpet, including compaction and finishing to required camber, grade and density.				
		xvi) 4.0% bitumen, Asphalt Base Course 1.5" thick	742.50	P.inch/%sft		
		xi) 4.5% bitumen, Asphalt Wea thick	.50	P.inch/%sft		

SUB-HEAD 2: PROPOSED RCC RECTANGULAR DRAINS

S.No.	MRS Ref#	Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
19	Anslysis Attached	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. 240 km	877.20	100cft		
20	Backup Attached	Screeing Chamber	1.00	Each		
		Grand Total				



SUB-HEAD 3

RCC STORM WATER STORAGE TANK (1.0 MG).

S/ No.	MRS Ref#	Description	Qty.	Unit.	Rate.(Rs.)	Amount. (Rs.)
		MRS ITEMS. Based on (MRS, 2ND BI- ANNUAL 2026)				
1	Ch-3, I-21b	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming.				
i)		Lift upto 5 ft.	97.82	0/00Cft		
ii)		Lift from 5.01 ft to 15.00 ft.	154.95	0/00Cft		
iii)		Lift above 15.00 ft.	20.27	0/00Cft		
2	Ch-3, I-27	Extra for slush or Daldal including dewatering*.	78.26	0/00Cft		
3	Ch-3, I-17c	Transportation of earth all types when the total distance i/c the lead covered in the item of work is up to 4 miles	264.85	0/00Cft		
4	Ch-3, I-13b	Rehandling of earthwork: (b) upto a lead of 50 ft (15 m).	66.21	0/00Cft		
5	Ch-3, I-25	Compaction of earthwork with power road roller, including ploughing, mixing, moistening earth to optimum moisture content in layers, etc. complete:				
		i) 95% to 100% maximum modified AASHTO dry density.	66.21	0/00Cft		
6	Ch-6, I-5h	Cement concrete plain i/c placing, compacting, finishing and curing complete. (i/c washing of stone aggregate)				
		(1:3:6).	64.56	0/0Cft		
7	Ch-6, I-9	Placing, compacting, finishing and curing of concrete using Ordinary Portland Cement / Sulphate resisting cement /Slag cement as may be required; including screening, washing of aggregates and mixing of constituents using batching plant,Transportation by transit mixer, pouring with pump in the required proportions to achievea nominal cylindrical strength in the field as per ACI214, with the specified consistency. i/c the cost of shuttering, compaction with Viberator, excluding the cost of Admixture, as approved and directed by the Engineer Incharge. (4000 psi)				
		a) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects				
		(iv) 4000 psi	15,910.94	P.Cft.		
		b) Retaining/ Shear walls laid in situ or precast laid in position, or prestressed members cast (Formwork on both sides)				
		(iv) 4000 psi, Upto 9" thick	7,795.00	P.Cft.		
		c) Substructure (Foundations, Pile Cap, Raft, Strip and Footing Beam				
		(iv) 4000 psi	.71	P.Cft.		

SUB-HEAD 3

RCC STORM WATER STORAGE TANK (1.0 MG).

S/ No.	MRS Ref#	Description	Qty.	Unit.	Rate.(Rs.)	Amount. (Rs.)
8	Ch-6, I-12 b	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labourcharges for binding of steel reinforcement (also includes removal of rust from bars): -.(Deform Bars) .G-60				
			1,710.01	0/0Kg		
9	Ch-13, I-9	Bitumen coating to plastered or cement concrete surface: i) 20 lbs. per 100 Sft. (9.07 Kg per Sq.m) (02 coats)	474.77	0/0Sft		
10	Ch-6, I-32-ii	Providing and embedding 10" (250mm) wide PVC waterstopperin expansion joints of RCC structures (Retaining walls, watertanks, Slabs) complete in all respect. 10mm Thick	1,092.00	P.Rft		
11	Ch-26, I-36 b)	Bailing out water: -				
		by pump	88.04	o/ooCft		
12	Ch-21, I-19c	Providing and installing, C.I. ventilating shaft painted with bituminous paint with foundation bolts, as per PHED Standard Drawing STD/PD No. 4 of 1977, complete in all respects (except concrete foundation block):- c) 12" (300 mm) i/d shaft				
		ii) 24 ft. (7.30 metre) long	4.15	%KG		
13	Ch-25, I-36	Providing and fixing stair railing of 2½" (63 mm) i/d G.I. pipe, welded with 5/8"x5/8" (16x16 mm) square M.S. bars 2'-9" (838 mm) high, fixed in each step, complete in all respects, including painting, polishing three coats.	19.89	P.Rft		
14	Ch-9, I-13	Providing & Fixing corrugated galvanized iron sheets with G.I. bolts, nuts, limpet and bitumen washers, wind ties, complete in all respects without valleys and ridges:-				
		a) 20 BWG	11.60	0/0Sft		
15	Ch-3, I-32	Turfing slopes of banks or lawns with grass sods including ploughing, laying, setting and watering (Turf got from within a distance of 5 miles (8 Km.) and maintenance for 15 days).	210.00	0/0Sft		
	Ch-9, I-46-b-ii	Providing and applying torch-on wate rproofing bitumenous membrane of specified thickness (made of Roof-Grip/Euro Bit) duly lapped/connected by heating with Torchover ps-6primer i/c preparation/smoothen the surface complete in all respect as approved and directed by the Engineer Incharge				
		b) Aluminum Foiled 4 mm	19,563.83	P.sft		



SUB-HEAD 3

RCC STORM WATER STORAGE TANK (1.0 MG).

S/ No.	MRS Ref#	Description	Qty.	Unit.	Rate.(Rs.)	Amount. (Rs.)
Anslysis Attached	Ch1-i-1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. 240 km	501.63	100cft		
		Grand Total				

SUB-HEAD 4: PUMP HOUSE AND PUMPING MACHINERY.

4.1: PUMP HOUSE AND PUMPING MACHINERY.

S/ No.	MRS Ref#	Description	Qty.	Unit.	Rate.(Rs.)	Amount. (Rs.)
		MRS ITEMS. Based on (MRS, 2ND BI- ANNUAL 2026)				
1	Ch-3, I-21b	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming.				
i)		Lift upto 5 ft.	2.30	0/00Cft		
ii)		Lift from 5.01 ft to 15.00 ft.	2.91	0/00Cft		
2	Ch-3, I-27	Extra for slush or Daldal including dewatering*.	2.30	0/00Cft		
3	Ch-3, I-17c	Transportation of earth all types when the total distance i/c the lead covered in the item of work is up to 4 miles	4.17	0/00Cft		
4	Ch-3, I-13(b)	Rehandling of earthwork: (b) upto a lead of 50 ft (15 m).	1.04	0/00Cft		
5	Ch-3, I-25	Compaction of earthwork with power road roller, including ploughing, mixing, moistening earth to optimum moisture content in layers, etc. complete: i) 95% to 100% maximum modified AASHTO dry density.	1.04	0/00Cft		
6	Ch-7, I-5	Pacca brick work in ground floor:- i) Cement, sand mortar:- (Ratio 1:4)	5.67	0/0Cft		
7	Ch-11, I-8b	Cement plaster (1:3), ½" (13 mm) thick.	15.12	0/0Sft		
8	Ch-6, I-5	Cement concrete plain i/c placing, compacting, finishing and curing complete. (i/c washing of stone aggregate) (1:3:6).	1.15	0/0Cft		
9	Ch-6, I-9	Placing, compacting, finishing and curing of concrete using Ordinary Portland Cement / Sulphate resisting cement /Slag cement as may be required; including screening, washing of aggregates and mixing of constituents using batching plant,Transportation by transit mixer, pouring with pump in the required proportions to achievea nominal cylindrical strength in the field as per ACI214, with the specified consistency. i/c the cost of shuttering, compaction with Viberator, excluding the cost of Admixture, as approved and directed by the Engineer Incharge. (4000 psi)				

SUB-HEAD 4: PUMP HOUSE AND PUMPING MACHINERY.

4.1: PUMP HOUSE AND PUMPING MACHINERY.

S/ No.	MRS Ref#	Description	Qty.	Unit.	Rate.(Rs.)	Amount. (Rs.)
		a) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects (iv) 4000 psi	247.68	P.Cft.		
		(b) Retaining/ Shear walls laid in situ or precast laid in position,or prestressed members cast (Formwork on both sides) (iv) 4000 PSI Upto 9" Thick	1,064.25	P.Cft.		
		c) Substructure (Foundations, Pile Cap, Raft, Strip and Footing Beam (iv) 4000 psi	648.00	P.Cft.		
11	Ch-6, I-12b	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labourcharges for binding of steel reinforcement (also includes removal of rust from bars): -.(Deform Bars) .G-60	59.93	0/0Kg		
12	Ch-13, I-9	Bitumen coating to plastered or cement concrete surface:-				
		i) 20 lbs. per 100 Sft. (9.07 Kg per Sq.m)	7.74	0/0Sft		
13	Ch-6, I-32	Providing and embedding 10" (250mm) wide PVC waterstopperin expansion joints of RCC structures (Retaining walls, watertanks, Slabs) complete in all respect.				
		i) 10" wide 6 mm thick	72.00	P.Rft		
14	Ch-25, I-31	Making and fixing steel grated door with 1/16" thic (1.5mm) sheeting, including angle iron frame 2" x2" x3/ 8 (50x50x10 mm) and ¾" (20 mm) square bars 4" (100 mm) centre to centre, with locking arrangement	35.00	PSft.		

SUB-HEAD 4: PUMP HOUSE AND PUMPING MACHINERY.

4.1: PUMP HOUSE AND PUMPING MACHINERY.

S/ No.	MRS Ref#	Description	Qty.	Unit.	Rate.(Rs.)	Amount. (Rs.)
15	Ch-25, I-46	Providing and fixing windows consisting of M. S. box section frame 2" x1½", (50x40mm) leaves frame 1½" x1" (40x25mm) box section frame for glazing 3/ 8" x3/ 8" (10x10mm) using 16 SWG sheet 'U' shaped rubber supported with 1" x1/ 8" (25x3mm) M. S. flat for fixing 3/ 16" (5 mm) thick glass panes M. S. box section ½" x½" (13x13mm) of 16 SWG for fixing 24 SWG wire gauze on outer side by means of ¾" x1/ 8" (20x3mm) M. S. flat and screws including grill of M. S. flat ½" x1/ 8" (13x3mm) or ¼" x¼" (6x6mm) square bar with independent frame of ½" x½" (13x13mm) box section of 16 SWG i/c all C. P. fitting and painting 3 coats complete in all respect.	36.00	PSft.		
16	Ch-9, I-20	Cast iron rain water down pipe fixed in position, excluding head and shoes, but i/c painting and clamps etc. 4" dia (100 mm) cast iron down pipe.	15.00	PRft.		
17	Ch-9, I-22	Shoes, bends, or offsetsd for rain water down pipe, i/c fixing and painting.	2.00	Each.		
18	Ch-9, I-21	Rain water down pipe cast iron head fixed in place, i/c cost of clampps, holdfast and painting.	1.00	Each.		
20	Ch-9, I-5	Single layer of tiles 9"x4½"x1½" (225x113x40 mm) laid over 4"(100 mm) earth and 1" (25 mm) mud plaster without Bhoosa, grouted with cement sand 1:3 on top of RCC roof slab, provided with 34 lbs. per %Sft. or 1.72 Kg/Sq.m bitumen coating sand blinded.	0.36	0/0Sft		
21	Ch-11, I-24 (a-3)	Distempering using Vinyle Emulsion Paint:- 3- Coats (Rate for 3 coats).	7.20	0/0Sft		
23	Ch-13, I-5	Painting new surface: (c) Preparing surface and painting of doors and windows any type (including edges)	0.71	0/0Sft		
25	Ch-13, I-33	Providing and applying weather shield paint of approved quality on external surface of building including preparation of surface , application of primer complete in all respect: a) new surface Two Coats	7.92	0/0Sft		
26	Ch-11, I-23	Priming coat of chalk under dis				

SUB-HEAD 4: PUMP HOUSE AND PUMPING MACHINERY.

4.1: PUMP HOUSE AND PUMPING MACHINERY.

S/ No.	MRS Ref#	Description	Qty.	Unit.	Rate.(Rs.)	Amount. (Rs.)
			6.48	0/0Sft		
27	Ch-19, I-20	P/F looking glass 55 x 40" cm (22"x16") size and 5mm thick 1st quality.				
			2.00	Each.		
29	Ch-23, I-52	Providing and fixing Chain Pulley Block of 5 ton capacity with 5 meter length of chain, as per required specifications complete in all respect and as approved by the Engineer Incharge				
			1.00	Each		
30	Ch-25 I-10+11	Fabrication of heavy steel work, with angle, tees, flat iron round iron and sheet iron for making trusses, girders, tanks, etc., including cutting, drilling, revitting, handling, assembling and fixing, but excluding erection in position. & Erection and fitting in position iron trusses, staging of water tanks, etc. (Steel Girder W 12X53)				
			4.29	%KG		
31	Ch-25 I-36	Providing and fixing stair railing of 2½" (63 mm) i/d G.I. pipe, welded with 5/8"x5/8" (16x16 mm) square M.S. bars 2'-9" (838 mm) high, fixed in each step, complete in all respects, including painting, polishing three coats.				
			34.09	P.Rft		
33	Ch-23, I-18-b	Providing, laying, cutting, jointing, testing cast iron pipe line (BS-2035) in trenches, with flanged and flanged joints, complete in all respects:				
		vii)12" (300 mm) i/d	40.00	P.Rft		
34	Ch-23, I-21-b	Providing and fixing cast iron special of B. S. S. Class `B' (such as bend, tee cross collar, reducer, tail piece, flanged spigot, cap, flanged socket, taper, angle branch, plug etc.) for cast iron pipe line , complete:-				
		(b) C.I. flanged specials, with flanged and flanged joints ii) 8" to 12" (200 to 300 mm) i/d	300.00	P.Kg		
35	Ch-23, I-35	Providing and fixing sluice valve of B.S.S. quality and weight, Class `B', for cast iron pipe line, and Asbestos cement pipe line (including cost of jointing material):-				
		vii) 12" i/d (300 mm	2.00	Each		

SUB-HEAD 4: PUMP HOUSE AND PUMPING MACHINERY.

4.1: PUMP HOUSE AND PUMPING MACHINERY.

S/ No.	MRS Ref#	Description	Qty.	Unit.	Rate.(Rs.)	Amount. (Rs.)
36	Ch-23, I-44-b	Providing and fixing heavy duty Check valve of specified diameter and material for pressure rating PN-16 made of Crane (USA), Hatersly (UK), Scon (Pakistan) or approved equivalent manufacturer i/c the cost of all accessories flanges,nut/bolt and gaskit where required complete in all respect as approved and directed by the Engineer Incharge (b) Flange Ended Ductile Iron Valve (xiv) 12" dia	2.00	Each		
37	(Quotation Attached)	Providing, installation, testing & commissioning of Horizontal centrifugal pump having impeller stainless steel and electric Motor and motor Control Unit (S/D) consisting of the magnetic contactors, molded case circuit breaker, EOCR, EVR, phase failure relay, phase reversal protection relay amperemeter, voltmeter, volt selector switch, ampere selector switch, auto manual switch, current transformer with auto On/Off or manual On/Off along with power factor improvement plant (PFI). complete in all respect as per satisfaction of Engineer Incharge and suitable to the civil structure and as per following specifications:				
	a)	**PUMP**				
1		Min. Efficiency = 80% Min solid Passage Size = 100 mm Maximum speed = 1450 rpm Impeller: Stainless steel Casing: Cast iron ASTM A 48 Class 35, EN GJL 250 Shaft:Stainless Steel AISI 304 Shaft Sleeve:Stainless Steel AISI 304				
	b)	**Electric Motor**				
2		Maximum 1450 RPM/4Pole with cooling fan and Star Delta Connections Capacity = 50 HP Minimum Insulation Class = F Minimum Opertational Temperature= 45^{o} C Min. Efficiency = as per IE-3 Ingress protection: IP 55				
	c)	**Motor Control Unit (MCU) / Star Delta Panel**				



SUB-HEAD 4: PUMP HOUSE AND PUMPING MACHINERY.

4.1: PUMP HOUSE AND PUMPING MACHINERY.

S/ No.	MRS Ref#	Description	Qty.	Unit.	Rate.(Rs.)	Amount. (Rs.)
3		• Suitable capacity circuit breaker for motor, • Suitable capacity magnetic contactors for motor, • Required capacity thermal overload relay for motor, • under/over voltage relay; • electronic over current relay, • phase failure relay, • phase reversal protection relay • indication lamps, • digital ampere meter, volt meter, hour run meter • thermistor relay for high temperature protection, • on/off switch,				
4	d)	Suitable cables from power meter to panel and from panel to electric motor for star and delta connection, complete in all respects. All the equipment shall be from internationally reputed manufacturers subject to approval of the Engineer				
		Pump Capacity = 04 cusecs,50 ft. Head	3.00	Each		
Anslysis Attached	Ch1-i-1	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. 240 km	11.02	100cft		
Analysis Attached		Electrification Works of Pumping Station in all respect.	1.00	P.Job		
		Grand Total				

SUB-HEAD 6: LINEAR STORAGE DRAINS

S.No.	MRS Ref#	Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
		MRS ITEMS. Based on (MRS, 2ND BI- ANNUAL 2026)				
1	Ch-4, I-45	Dismantling and Removing Road Metal	4.62	o/oCft		
2	Ch-3, I-7-1-A)-i)	Earthwork excavation in open cutting for storm water channels, drains, sullage drains in open areas, roads, streets, lanes, including under pinning of walls and shoring to protect existing works shuttering and timbering the trenches, dressed to designed level and dimensions, trimming, removal of surface water from trenches, back filling and surplus excavated material disposed of and dressed within 50 ft. (15 m) lead:-				
		1) Upto 5' (1.5 meter) depth				
		A) By Manual	105.88	o/ooCft		
3	Ch-6, I-5	Cement concrete plain i/c placing, compacting, finishing and curing complete. (i/c washing of stone aggregate)				
	i	(1:4:8)	3.50	%Cft		
4	Ch-13, I-9	Bitumen coating to plastered or cement concrete surface: i) 20 lbs. per 100 Sft. (9.07 Kg per Sq.m) (02 coats)	25.02	0/0Sft		
5	Ch-3, I-17c	Transportation of surplus mateial & earth all types when the total distance i/c the lead covered in the item of work is up to 4 miles	85.07	0/00Cft		
6	Ch-26, I-36-b)	Bailing out water: - (Provisional Item)				
		by pump	0.09	o/ooCft		
7	Ch-6, I-9	Placing, compacting, finishing and curing of concrete using Ordinary Portland Cement / Sulphate resisting cement /Slag cement as may be required; including screening, washing of aggregates and mixing of constituents using batching plant,Transportation by transit mixer, pouring with pump in the required proportions to achievea nominal cylindrical strength in the field as per ACI214, with the specified consistency. i/c the cost of shuttering, compaction with Viberator, excluding the cost of Admixture, as approved and directed by the Engineer Incharge. (4000 psi)				
		a) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects				
		(iv) 4000 psi	838.17	P.Cft.		
		b) Retaining/ Shear walls laid in situ or precast laid in position, or prestressed members cast (Formwork on both sides)				
		(iv) 4000 psi, Upto 9" thick	1,407.00	P.Cft.		
		c) Substructure (Foundations, Pile Cap, Raft, Strip and Footing Beam				
		(iv) 4000 psi	939.00	P.Cft.		

SUB-HEAD 6: LINEAR STORAGE DRAINS

S.No.	MRS Ref#	Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
8	Ch-6, I-12b	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labourcharges for binding of steel reinforcement (also includes removal of rust from bars): -.(Deform Bars) .G-60	111.45	0/0Kg		
9	Ch-3, I-13b	Rehandling of earthwork: (b) upto a lead of 50 ft (15 m).	21.27	0/00Cft		
10	Ch-3, I-25	Compaction of earthwork with power road roller, including ploughing, mixing, moistening earth to optimum moisture content in lavers. etc. complete: i) 95% to 100% maximum modified AASHTO dry density.	21.27	0/00Cft		
11	Ch-6, I-32-ii	Providing and embedding 10" (250mm) wide PVC waterstopperin expansion joints of RCC structures (Retaining walls, watertanks, Slabs) complete in all respect. 10mm Thick	300.00	P.Rft		
12	Anslysis Attached	Carriage of 100 Cft. (2.83 cu.m) of all materials like stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. 240 km	30.07	100cft		
		Grand Total				

SUB-HEAD 7: FORCEMAIN.

S.No.	MRS Ref#	Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
		MRS ITEMS. Based on (MRS, 1ST BI- ANNUAL 2026)				
1	Ch-4, I-45	Dismantling and removing road metalling.	16.83	%Cft		
2	Ch-3, I-46	Excavation of trenches in all kinds of soil, except cutting rock, for water supply pipe line upto 5 ft. depth from ground level including trimming dressing sides, leveling the beds of trenches to correct grade and cutting pits for joints etc. complete in all respect.				
		Upto 5.00' Depth.	29.61	o/ooCft		
3	Ch-10, I-3	Supplying and filling sand under floors and plugging of wells.	17.42	0/0Cft		
4	Ch-3, I-13a	Rehandling of earth work: a)Lead upto a single throw of Kassi, phaorah or Shovel.	23.69	o/ooCft		
5	Ch-3, I-17	Transportation of earth all types when total distance i/c the lead coverd in the item of work is more then 1000ft. (Lead upto 4 mile). Payment will be as per actual measurement.	7.61	o/ooCft		
6	Ch-6, I-5	Cement concrete plain i/c placing, compacting, finishing and curing complete. (i/c washing of stone aggregate) (1:2:4).	1.08	o/oCft		
7	Ch-23, I-30c	Providing, laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE-100) working presure pipe, Beta/ Dadex/ Popular/ IIL or equivalent including the cost of specials, in trenches, as approved & directed by the engineer incharge, complete in all respects. PN-10 (SDR-17) 450 mm	1,275.00	Rft		
	Quotataion Attached	Indication Tape	1,275.00	Rft		
9	Backup Attached	Air valve Chamber.	1.00	Each.		
10	Backup Attached	Hydrant Chamber	1.00	Each.		
11	Backup Attached	Washout Chamber.	1.00	Each.		
		Grand Total				



SUB HEAD 8: Dewatering Sets

Sr.	Description	Quantity	Rate *(Rs.)*	Unit	Amount *(Rs.)*
1	•Supply of Fully Automatic Auto-Prime solid handling dewatering pump sets (3.4 Cusecs) •Specification of dewatering set. •Minimum 3" (75mm) solid handling capacity •Standard construction with SG iron casting •SS316 impeller (255mm Diameter impeller) and wear plates •SS431 Shaft, fitted with oil cooled mechanical seal of Silicon carbide capable of running dry for extended period incorporating fully automatic compressor priming facility. •Suction/ Discharge connections 150mm x 150mm or above respectively (with Bauer quick connect couplers)close coupled with water cooled diesel engine having power not less than 44kw/59HP with RPM up to 2000. •Electric start, battery and engine control panel with shutdown protection against high engine RPM •Low oil pressure, high temperature complete with emergency stop •Ambient temperature/Atmosphere Max 500 C Tropical (Hot & Humid). Relative humidity Max 100%. •All mounted on a common fabricated steel base with single axle trailer complete with two jack stands •Towing arrangement and minimum 10 hours fuel tank •Pump should be able to develop a minimum total head of 20M and flow of 350m3/hr. •Maximum flow: Not less than 485m3/h (4.7 cusecs) •Efficiency of Duty point shall not less than 74%. •Each unit shall be supplied with 5mx6" or above reinforced rubber suction hose and 33mx6"or above discharge PVC lay flat type hose completes with quick bauer type couplings. •Country of Origin Europe / UK / USA / Australia / Japan / UAE or equivalent	**2**		**Each**	
	Inspection Requirements: 3rd party pre shipment inspection from international reputed firms (SGS, TUV, Bureau Veritas or Equivalent). Inspection Certificate and all relevant documentation must provided after successful inspection.				
			TOTAL = RS.		



SUB-HEAD 8: BYPASS ARRANGEMENT

	MRS Ref#	Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
		MRS ITEMS. Based on (MRS, 1ST BI- ANNUAL 2026)				
1	Ch-4, I-45	Dismantling and removing road metalling.	6.28	%Cft		
2	Ch-3, I-43	Earthwork excavation in open cutting for sewers and manholes as shown in drawings including shuttering and timbering, dressing to correct section and dimensions according to templates and levels, and removing surface water, in all types of soil except shingle, gravel and rock:-				
		i) 0 ft. to 7.0 ft. (0 to 2.10 m) depth	16.85	$^{o}/_{oo}$Cft		
		ii) 7-01 ft. to 15.0 ft. (2.15 to 4.5 m) depth	6.21	$^{o}/_{oo}$Cft		
3	Ch-3, I-8	Excavation in shingle or gravel formation and rock, not requiring blasting, undressed lead upto 100 ft (30 m). (Labour) i) dry	1.26	$^{0}/_{00}$Cft		
4	Ch-21, I-3	Providing and laying R.C.C. pipe sewers, moulded with cement concrete 1:1½:3 conforming to ASTM Specification C-76-20, Class III. Wall B, including carriage of pipe from factory to site of work, lowering in trenches to correct alignment and grade, jointing with rubber ring, cutting pipes where necessary, testing, etc., complete. v) 610 mm (24") i/d	438.00	Rft.		
5	Ch-21, I-21	Providing and laying crushed stone aggregate of 1/4" to 1-1/2" guage under and around the sewer pipe, including leveling, manual compaction, complete in all respects.	36.07	$^{0}/_{0}$Cft		
6	Ch-3, I-13(b)	Rehandling of earthwork: (b) upto a lead of 50 ft (15 m).	4.61	$^{0}/_{00}$Cft		
7	Ch-3, I-17c	Transportation of surplus mateial & earth all types when the total distance i/c the lead covered in the item of work is up to 4 miles	20.33	$^{0}/_{00}$Cft		
8	Ch-26, I-36b	Bailing out water: - ii) by pump	1.26	$^{0}/_{00}$Cft		
	Analysis Attached	**NSI Items** Providing and Fixing Penstock Gate	2.00	Each		
		Grand Total (MRS +				

Bill of Quantities 27 kW pump Motor

ELECTRIFICATION WORKS FOR PUMPING ARRANGEMENT

SR No.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE (Rs)	AMOUNT (Rs)
1.0	**Wiring**				
1.1	**Light Circuits** Supply, installation and commissioning of light circuit wiring as specfied in the drawings, from Distribution board to switch box to be wired with 3x2.5mm sq. (1P+1N+1PE) PVC insulated in 1" dia. heavy duty PVC conduit concealed in walls, roof slab, or on surface or above false ceiling or any requirement as per site conditions with all PVC conduit accessories, pull boxes, steel pull wires, with supplementary materials required for the completion of job as per requirement, specifications, standards, drawings, and to the approval of the Consultant/ Engineer. Each circuit shall have independent PE. Red for active. Black For Neutral. Green ECC for Earthing Wires: Pakistan Cable, Newage Cable, FAST Cable or equivalent.				
8-a-iii)	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only):- 250/440 volts, PVC insulated: 7/0.74 mm (7/0.029")	Rft	148.00		
3-a-iii)	Supply and erection of PVC pipe for wiring including inspection boxes, pull boxes, hooks, and repairing surface, etc., complete with all specials a) Recessed in walls i/c making jharries 25 mm i/d	Rft	69.00		
1.2	**Light Point Controlled By One Switch** Wiring of one light point controlled by one switch from switchboard to first point and wired with 3x2.5 mm sq. (P+N+PE) PVC insulated wires in 1" dia. heavy duty PVC conduit installed on RCC slab, above false ceiling, recessed in wall, columns slabs or above light carrier all PVC conduit accessories, 3" high PVC junction boxes, pull boxes, steel pull wires, PVC flexiable conduit from ceiling junction box with supplementary materials required for the completion of job as per requirement, specifications, standards, drawings, and to the approval of the Consultant/ Engineer, excluding cost of back boxes and switches of 10 Amps which is covered in other section. Red for Phase Black For Neutral. Green ECC for Earthing Wires: Pakistan Cable, Newage Cable, FAST Cable or equivalent.				
8-a-iii)	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only):- 250/440 volts, PVC insulated: 7/0.74 mm (7/0.029")	Rft	237.00		
3-a-iii)	Supply and erection of PVC pipe for wiring including inspection boxes, pull boxes, hooks, and repairing surface, etc., complete with all specials a) Recessed in walls i/c making jharries 25 mm i/d	Rft	69.00		
1.4	**Exhaust Fan Point** Same as Item No. 1.2 mentioned above but for fan.				

Bill of Quantities 27 kW pump Motor

ELECTRIFICATION WORKS FOR PUMPING ARRANGEMENT

SR No.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE (Rs)	AMOUNT (Rs)
8-a-iii)	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only):- 250/440 volts, PVC insulated: 7/0.74 mm (7/0.029")	Rft	60.00		
3-a-iii)	Supply and erection of PVC pipe for wiring including inspection boxes, pull boxes, hooks, and repairing surface, etc., complete with all specials a) Recessed in walls i/c making jharries 25 mm i/d	Rft	27.00		
1.5	**Ceiling Fan Point** Same as Item No. 1.2 mentioned above but wiring of Ceiling fan point.				
8-a-iii)	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only):- 250/440 volts, PVC insulated: 7/0.74 mm (7/0.029")	Rft	79.00		
3-a-iii)	Supply and erection of PVC pipe for wiring including inspection boxes, pull boxes, hooks, and repairing surface, etc., complete with all specials a) Recessed in walls i/c making jharries 25 mm i/d	Rft	33.00		
1.6	**Sockets**				
1.6.1	**Pin switch & plug combined recessed type :10-15 Amp** Supply and wiring of one 3 pin switch & plug combined recessed type 10-15 Amp outlet point from distribution board with single core 2x2.5mm^2(P+N) PVC insulated cable in & including PVC conduit recessed in walls/R.C.C. slab, or installed on surface of ceiling, all conduits accessories, junction boxes, pull boxes, etc. 2.5mm^2 cable as PE excluding cost of 3 pin 13 Amps switch & socket installed on & including 16 SWG sheet steel board recessed in walls with supplementary materials required for the completion of job as per requirement, specifications, standards, drawings, and to the approval of the Consultant/ Engineer. . Red for Phase Black For Neutral. Green ECC for Earthing Schneider, Legrand, Opal, BG, GE or equivalent.				
8-a-iii)	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only):- 250/440 volts, PVC insulated: 7/0.74 mm (7/0.029")	Rft	60.00		
3-a-iii)	Supply and erection of PVC pipe for wiring including inspection boxes, pull boxes, hooks, and repairing surface, etc., complete with all specials a) Recessed in walls i/c making jharries 25 mm i/d	Rft	20.00		
2.0	**Electrical Fixtures**				
	Supply at work, Installation, complete connections, testing & commissioning of following 230 V, 50 Hz, Electrical Modules mentioned below for internal Electrification complete in all aspects with any supplementary required as per drawings, modules themselves approval of the Consultant/Engineer to finish th				



Bill of Quantities 27 kW pump Motor

ELECTRIFICATION WORKS FOR PUMPING ARRANGEMENT

SR No.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE (Rs)	AMOUNT (Rs)
2.1	**Gang Light/Fans Control Switches**				
105-b-iii)	P/F PVC double layer Switch kit Face plate with specified switch holes i/c the cost of switches/ sockets/ dimmer made of Legrand/ ABB / Schenider or approved equvilent manufacturer, screws complete in all respect, as approved and directed by the Engineer Incharge (b) One way Gange Switch (Large) (iii) 06 Gange	Each	2		
105-a-v)	Fan Dimmer	Each	2		
2.2	**Lights**				
2.2.1	**Tube lights (Phillips or Equivalent)**				
	Supply and erection of LED Slim Tube Light 4Ft [1.2m] 40W flexible wire, including connection from ceiling rose, etc., complete in all respects or as approved and directed by Engineer Incharge.	Each	4		
2.3	**Exhaust Fan**				
102-b-i)	Providing and fixing Pakistan Energy Label NEECA approved Copperwinded Exaust Fan i/c the cost of necessary cable and hardware for connection from ceiling rose complete as approved and directed by Engineer Incharge. Steel body 12" sweep	Each	1		
2.4	**Ceiling Fan**				
104 ii)	Providing and fixing Pakistan Energy Label NEECA approved Copper winded Ceiling Fan i/c the cost of necessary cable and hardware for connection as approved and directed by Engineer Incharge ii) 48" dia	Each	2		
2.5	**Sockets**				
2.5.1	**Flat pin (Schneider or equivalent)**				
37-ii	Supply and erection of 3 pin, 10/15 Amp. wall socket. recessed type	Each	2		
3.0	**PVC Conduits** Supply and installation at site of PVC conduit heavy duty for power cables to be concealed in RCC slabs, walls, floor, columns above false ceiling or as required as per site conditions including cost of all PVC conduit accessories, steel pull wires, complete in all aspects.				
3-a-vi)	Supply and erection of PVC pipe for wiring including inspection boxes, pull boxes, hooks, and repairing surface, etc., complete with all specials a) Recessed in walls i/c making jharries 50 mm i/d	Rft	14.00		
4.0	**Power Cables**				
	Supply at work, Laying, testing and commissioning of following LT power cables mentioned below to be pulled in PVC conduits (to be installed inceilings, floor and walls) or to be laid in trenches or to be directly buried in ground or to be laid on the cable tray as per requirement including Termination kits, Electrical Conduit, cable ties, with supplementary materials as per requirement and necessary for the completion of the job, specifications, standards, as provided in the given drawings, and to the approval of the Consultant/ Engineer. Pakistan Cables, Newage Cables, Fast Cables or equivalent.				



Bill of Quantities 27 kW pump Motor

ELECTRIFICATION WORKS FOR PUMPING ARRANGEMENT

SR No.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE (Rs)	AMOUNT (Rs)
4.1	Supply and erection of copper conductor cables for service connection, in prelaid pipe/G.I. wire/trenches, etc. (rate for cable only):-				
11c-xiv)	PVC insulated, PVC sheathed Four core, 600/1000 volt non armoured cable:- 150 mm sq (37/0.093") From Transformer to MDB	Rft	150.00		
11c-vii)	PVC insulated, PVC sheathed 4 core, 600/1000 volt non armoured cable:- 16 mm (7/0.064")From MDB to Motor Starter Panels	Rft	40.00		
11c-vii)	PVC insulated, PVC sheathed 4 core, 600/1000 volt non armoured cable:- 16 mm (7/0.064") From MDB to welding socket	Rft	23.00		
11c-viii)	PVC insulated, PVC sheathed 4 core, 600/1000 volt non armoured cable:- 25 mm (19/0.052") From MDB to PFIP	Rft	20.00		
4.2	PVC insulated, PVC sheathed 3 core, 600/1000 volt cable:-				
11d-iv)	PVC insulated, PVC sheathed 3 core, 600/1000 volt armoured cable:- 16 Sq.mm (19/0.064") From Motor Starter Panels to Pump Motors	Rft	20.00		
4.3	Supply and erection of single core PVC insulated, PVC sheathed copper conductor, 600/1000 volts grade cable, as CPC in prelaid G.I. pipe/M.S. conduits/PVC pipe/G.I. wire/trenches, etc (rate for cable only):-				
10-vi)	35 mm sq (19/0.083") For Earthing of MDB to Earthing bus bar	Rft	10.00		
10-iv)	16 mm sq (7/0.064") For L&SPP earthing to Earthing bus bar	Rft	33.00		
10-iii)	10 Sq.mm (7/0.052") For L&SPP earthing to Earthing bus bar	Rft	23.00		
4.4	**Cable for Sump pump**				
	6 mm² 2 Core Submersible Flat Cable From MDB to Submersible sump pump	Rft	46.00		
4.5	Supply and erection of copper conductor cables for service connection, in prelaid pipe/G.I. wire/trenches, etc. (rate for cable only):-				
	PVC insulated, PVC sheathed twin core, 600/1000 volts. 10 Sq.mm (7/0.052") From MDB to L&SPP	Rft	30.00		
4.6	**Bare Copper conductors**				
	Supply, Installation, Testing & Commissioning of complete grounding system:				
113-vi)	35 mm² CU bare conductor From Earthing bus bar to Earthing pit	Rft	20.00		
5.0	**Distribution boards**				



Bill of Quantities 27 kW pump Motor

ELECTRIFICATION WORKS FOR PUMPING ARRANGEMENT

SR No.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE (Rs)	AMOUNT (Rs)
	Supply, installation, testing and commissioning of the following items of work (unless specifically stated otherwise) including all material, labour, tools, accessories, etc. required for proper completion of each item in all respect with digital voltmeter, voltage selector switch, digital ampere meter, Phase indication lights (R,Y,B), On/Off trip indication lights, MCCB, magnetic contactor relay, control switches and monitoring switches, Copper comb, wiring, Neutral and Earth bar, glands, door earthing, bus bars etc. with required depth and size, fabricated with 14SWG M.S sheet (Indoor/outdoor type), derusting, zinc phosphated, finish with electro static powder coating in approved color as per specification and drawings and as directed by the Consultant / Engineer. All the circuit breakers for power loads shall be of ABB, Schneider, Terasaki or equivalent and shall be provided as a single unit by manufacturers such as Electrech, Pempak, Bilal switchgears, Aqsa International or equivalent registered in Pakistan.				
5.1	**A) Main Distribution Board - (MDB) - IP23 - Indoor** **Incoming** 1 No. 4000A MCCB TP&N RC:25 kA **Outgoing** 2 Nos.100A MCCB TP RC: 25kA 1 Nos. 125A MCCB SP RC: 25kA 2 Nos. 20A MCB TP RC: 10kA 2 Nos. 20A MCB SP RC: 10kA (As per Single line diagram)	Job	1		
5.2	**B) Lighting & Small power panel- (L&SPP) IP23- Flush Mounted** **Incoming** 1 No. 40A MCCB SP&N RC:16 kA **Outgoing** 6 Nos. 10A MCB SP RC: 6kA (As per Single line diagram)	Job	1		
6.0	**WELDING SOCKET**				
	Supply and install 220V & 400V welding socket complete with all accessories.	Each	1		
7.0	**Earthing bus bar**				
	Supply at works, installation, testing and commissioning of the following earthing Copper bus bars including all material, labour, tools, lugs, accessories, etc. including termination of grounding cables/bare conductors alongwith all testing accessories complete in all respect required for proper completion of each item as per specification, drawings and as directed by the Consultant/Engineer.				
	I) Earthing Bus bar (300 mm x 50 mm x 5 mm)	Each	1		
8.0	**Transformer**				



Bill of Quantities 27 kW pump Motor

ELECTRIFICATION WORKS FOR PUMPING ARRANGEMENT

SR No.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE (Rs)	AMOUNT (Rs)
108-v)	Supply, insatllation, commissioning and testing of oil cooled type, Step down Power Transformer pole mounted of specified rating, 11/0.415kV, i/c the cost of lifting hooks, thermometers, LT & HT bushing 5-steps, tap changer, imported double float buchholz relay, 2 earthing terminals, roller wheels, connecting terminals for cables M.S box on transformer in order to cover complete L.T side, all necessary materials required for connections on H.T & L.T side, rated voltage 11000/415/240V specified impedance as specified by WAPDA/IEC system earth: Delta/Star, neutral solidly earthed, i/c Wapda testing charges, complete in all respects made of PEL, Siemens, Transfopower, Elmetec or as approved and directed by the Engineer Incharge. P/F PVC double layer Switch kit Face plate with specified switch holes i/c the cost of switches/ sockets/ dimmer made of Hi-Life/ Bush/ Schenider or approved equvilent manufacturer, screws complete as approved and directed by the Engineer Incharge 4% impedence without buchholz relay **(v) 100 KVA**	job	1		
9.0	**Energy Meter**				
	Supply, installtion testing and commissioning of Energy Meter as per WAPDA Specification complete in all respect and to the approval of the Consultant Engineer at site.	Job	1		
10.0	**Cable trays work**				
	Providing and fixing cable tray with straight flange fabricated with perforated G.I. Sheet of specified guage, size and depth duly supported on painted brackets of MS angle iron of 1-1/2"x1-1/2"x3/16" and MS patti of 1-1/2"x3/16" size @ 3 ft C/C, hangers i/c the cost of hard wares as approved and directed by the Engineer Incharge.				
99-i)	14 SWG 12"x4"	RFT	40		
11.0	**Level Switches (Optional)**				
	Supply, installation and commissioning of Level floating switches required for the start/stop operation of pumps including wiring, conduits, control panel and all accessories to complete the job complete in all respects and as per site requirement.	job	1		
12.0	**Power factor improvement panel (62.5 kVAr)**				
I 94 -i	P/F PFI PLANT (Power Factor Improvement Plant) comprising of components of required ratitngs, in MS box of 14 SWG i/c the cost of 3mm thick Backlite sheet (Safety Sheet) Lock, thimbles, power capacitors, Magnetic contactors, HRC fuses, Power factor controllers, Indication lights, Copper comb, Wiring, Netural & Earth bar, Door earthing, brass glands, push buttons, CTS, Controle MCB, Surge Suppressors, Auto/Manual Switches, Exhaust Fan, Temp regulators as per WAPDA standards complete in all respects as approved and directed by the	job	1		
13.0	**Earthing pit**				



Bill of Quantities 27 kW pump Motor

ELECTRIFICATION WORKS FOR PUMPING ARRANGEMENT

SR No.	DESCRIPTION	UNIT	QUANTITY	UNIT RATE (Rs)	AMOUNT (Rs)
	Construction of earthing pit of internal size 12'-4"x12'-4"x24" deep with 9" thick brick wall with cement mortar, internal plaster 1:4, RCC 4" thick cover with lifting hooks, Earthing rod & Clamp including all accessories complete in all respect required for completion of the job as per technical specifications and drawings and by the approval of the Consultant/ Engineer.	job	1		
14.0	**Trench System (For Direct Buried Cables)**				
3-8)	Excavation in shingle or gravel formation and rock, not requiring blasting, undressed lead upto 100 ft (30 m). (Labour Rate) i) Dry	1000 Cft	246.00		
18-24)	Providing and laying good quality / local sand cushion from approved source (compacted in layers not exceeding 6" thickness by mechanized means including the cost of front end loader, viberatory roller and all lead and lifts, dressing, watering complete in all respect as approved and directed by the Engineer Incharge.	Cft	170.23		
10-9)	Flat brick flooring laid in 1:6 cement mortar, over a bed of 3/4" (20 mm) thick cement mortar, 1:6.	100 Sft	9.14		
3-24)	Compaction of earthwork (soft, ordinary or hard soil) b) Compaction by rolling with animal driven roller/hand rammed: ii) ordinary soil (Labour Rate)	1000 Cft	4.82		
10-3)	Supplying and filling sand under floor, or plugging in wells.	100 Cft	1.45		
-	Providing and Laying Warning Tape	Rft	70		
-	Markers	Each	2		
				Total	



Bill of Quantities Screening Chamber

S/No.	MRS	Description	Qty	Unit	Rate	Amount (Rs.)
1	Ch-3, I-43-1)	Earthwork excavation in open cutting for sewers and manholes as shown in drawings including shuttering and timbering, dressing to correct section and dimensions according to templates and levels, and removing surface water, in all types of soil except shingle, gravel and rock:- i) 0 ft. to 7.0 ft. (0 to 2.10 m) depth	817.6	%0Cft		
2	Ch-6, I-5	Cement concrete plain i/c placing, compacting, finishing and curing complete. (i/c washing of stone aggregate) (1:4:8)	29.2	%Cft		
3	Ch-6, I-9	Placing, compacting, finishing and curing of concrete using Ordinary Portland Cement / Sulphate resisting cement /Slag cement as may be required; including screening, washing of aggregates and mixing of constituents using batching plant,Transportation by transit mixer, pouring with pump in the required proportions to achievea nominal cylindrical strength in the field as per ACI214, with the specified consistency. i/c the cost of shuttering, compaction with Viberator, excluding the cost of Admixture, as approved and directed by the Engineer Incharge. (4000 psi) a) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects 4000 psi Top Slab Deduction for screen cover and manhole Total Quantity	144.99 64.856 14.07 195.77	P.Cft.		
4		c) Substructure (Foundations, Pile Cap, Raft, Strip and Footing Beam	78.256	P.Cft.		
5	Ch-6, I-12	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labourcharges for binding of steel reinforcement (also includes removal of rust from bars): -.(Deform Bars) .G-60	1096.1	0/0Kg		
6	Ch-6, I-32-ii	Providing and embedding 10" (250mm) wide PVC waterstopperin expansion joints of RCC structures (Retaining walls, watertanks, Slabs) complete in all respect.	40	P.Rft		
7	Ch-13, I-9	Bitumen coating to plastered or cement concrete surface: i) 20 lbs. per 100 Sft. (9.07 Kg per Sq.m)	220.4	0/0Sft		
	Ch-3, I-17c	Transportation of surplus mateial & earth all types when the total distance i/c the lead covered in the item of work is up to 5 miles	654.08	0/00Cft		



Bill of Quantities Screening Chamber

S/No.	MRS	Description	Qty	Unit	Rate	Amount (Rs.)
	Ch-3, I-13(b)	Rehandling of earthwork: (b) upto a lead of 50 ft (15 m).	163.52	0/00Cft		
8	Ch-25, I-10,11	Fabrication of heavy steel work, with angle, tees, flat iron round iron and sheet iron for making trusses, girders, tanks, etc., including cutting, drilling, revitting, handling, assembling and fixing, but excluding erection in position. & Erection and fitting in position iron trusses, staging of water tanks, etc. Screen Bars i) MS Bars 3/8" x 2" ii) MS Bars 1/2" x 1/2" @ 4" c/c	 131.96 21.994	 Unit 0/0Kg 0/0Kg		
7	Ch-21, I-16	Providing and fixing, 6" (150 mm) thick R.C.C. manhole cover with 3"x3"x¼" (75x75x6mm) angle iron frame, 22" (550 mm) i/d as per standard drawing STD/PD No. 7 of 1977, complete in all respects.	1	Each		
				Total	**=**	

Rate Analysis for Sluice valve chamber for the operation of Lorry Hydrant

S/No.	MRS	Description	Qty	Unit	Rate	Amount (Rs.)
1	Ch-3, I-43-1)	Earthwork excavation in open cutting for sewers and manholes as shown in drawings including shuttering and timbering, dressing to correct section and dimensions according to templates and levels, and removing surface water, in all types of soil except shingle, gravel and rock:- i) 0 ft. to 7.0 ft. (0 to 2.10 m) depth	163.32	%0Cft	0.00	0.00
2	Ch-6, I-5	Cement concrete plain i/c placing, compacting, finishing and curing complete. (i/c washing of stone aggregate)				
		(1:2:4)	0.75	%Cft	49,170.00	368.78
		(1:2:4)	13.364	%Cft	49,170.00	6571.30
		(1:4:8)	8.0372	%Cft	36,128.40	2903.721
3	Ch-7, I-5	Pacca brick work in ground floor:-				
		i) cement, sand mortar:- Ratio 1:3	33.75	%Cft	40,065.95	13522.26
		i) cement, sand mortar:- Ratio 1:3	22.5	%Cft	40,065.95	9014.84
4	Ch-11, I-8	Cement plaster 1:3 upto 20' (6.00 m) height:-				
		b) ½" (13 mm) thick	36	%Sft	5160.55	1857.80
		b) ½" (13 mm) thick	72	%Sft	5160.55	3715.60
5	Ch-6, I-9	Placing, compacting, finishing and curing of concrete using Ordinary Portland Cement / Sulphate resisting cement /Slag cement as may be required; including screening, washing of aggregates and mixing of constituents using batching plant,Transportation by transit mixer, pouring with pump in the required proportions to achievea nominal cylindrical strength in the field as per ACI214, with the specified consistency. i/c the cost of shuttering, compaction with Viberator, excluding the cost of Admixture, as approved and directed by the Engineer Incharge. (4000 psi) a) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects 4000 psi	0.4488	P.Cft.	838.15	376.16

Rate Analysis for Sluice valve chamber for the operation of Lorry Hydrant

S/No.	MRS	Description	Qty	Unit	Rate	Amount (Rs.)
6	Ch-6, I-12-b)-ii	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labourcharges for binding of steel reinforcement (also includes removal of rust from bars): -.(Deform Bars) .G-60	7.5232	0/0Kg	30,802.75	2317.36
7	ch23 I-18-b)	Providing, laying, cutting, jointing, testing cast iron pipe line (BS-2035/4622) in trenches, , including cost of materials, such as lead, yarn, etc.complete in all respects; with flanged and flanged joints, complete in all respects: iv) 6" (150 mm) i/d	20	P.Rft	2,970.70	59414.00
8	Ch-23, I-21-b) b)	Providing and fixing cast iron special of B. S. S. Class `B' (such as bend, tee cross collar, reducer, tail piece, flanged spigot, cap, flanged socket, taper, angle branch, plug etc.) for cast iron pipe line , complete:- C.I. flanged specials, with flanged and flanged joints i) 3" to 6" (75 to 150 mm) i/d	100	P.Kg	462.95	46295
9	Ch-23, I-35	Providing and fixing sluice valve of B.S.S. quality and weight Class `B', for cast iron pipe line, and Asbestos material and labour. cement pipe line (including cost of jointing material):- 4" i/d (100 mm)	1	Each	23,053.15	23053.15
10	Ch-3, I-17c	Transportation of surplus mateial & earth all types when the total distance i/c the lead covered in the item of work is up to 5 miles	130.65	0/00Cft	13,436.3	1755.49
11	Ch-3, I-13(b)	Rehandling of earthwork: (b) upto a lead of 50 ft (15 m).	32.663	0/00Cft	5,684.45	185.67

Rate Analysis for Sluice valve chamber for the operation of Lorry Hydrant

S/No.	MRS	Description	Qty	Unit	Rate	Amount (Rs.)
12	Ch-23 I-61	Supply, installation, testing, and commissioning of Garden/fire Hydrants made by Haseen Habib / Teepu Engineering or approved equvilent manufacturer, according to B.S.S. 750 standard doubledelivery typehaving 4" dia barrel with 2 Nos. 2-1/2" valveincluding thecost of jointing material with all fittings and accessories complete in all respect as approved by the Engineer Incharge.	1	Each	59,684.15	59684.15
					Total =	**231035.28**



Bill of Quantities Air Valve Chamber

S/No.	MRS	Description	Qty	Unit	Rate	Amount (Rs.)
1	Ch-3, I-43-1)	Earthwork excavation in open cutting for sewers and manholes as shown in drawings including shuttering and timbering, dressing to correct section and dimensions according to templates and levels, and removing surface water, in all types of soil except shingle, gravel and rock:- i) 0 ft. to 7.0 ft. (0 to 2.10 m) depth	163.32	%0Cft		
2	Ch-6, I-5	Cement concrete plain i/c placing, compacting, finishing and curing complete. (i/c washing of stone aggregate) (1:2:4) (1:2:4) (1:4:8)	 0.75 13.364 8.0372	 %Cft %Cft %Cft		
3	Ch-7, I-5	Pacca brick work in ground floor:- i) cement, sand mortar:- Ratio 1:3 i) cement, sand mortar:- Ratio 1:3	 27 18	 %Cft %Cft		
4	Ch-11, I-8	Cement plaster 1:3 upto 20' (6.00 m) height:- b) ½" (13 mm) thick b) ½" (13 mm) thick	 36 72	 %Sft %Sft		

Bill of Quantities Air Valve Chamber

S/No.	MRS	Description	Qty	Unit	Rate	Amount (Rs.)
5	Ch-6, I-6 (a) (i)	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):- (a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:- (2) Type B (nominal mix 1: 1½: 3)	0.51	P.Cft.		
6	Ch-6, I-12-b-ii)	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labourcharges for binding of steel reinforcement (also includes removal of rust from bars): -.(Deform Bars) .G-60	8.5491	0/0Kg		
7	Ch-21, I-16	Providing and fixing, 6" (150 mm) thick R.C.C. manhole cover with 3"x3"x¼" (75x75x6mm) angle iron frame, 22" (550 mm) i/d as per standard drawing STD/PD No. 7 of 1977, complete in all respects.	1	Each		

Bill of Quantities Air Valve Chamber

S/No.	MRS	Description	Qty	Unit	Rate	Amount (Rs.)
8	Ch-23, I-21-b	Providing and fixing cast iron special of B. S. S. Class `B' (such as bend, tee cross collar, reducer, tail piece, flanged spigot, cap, flanged socket, taper, angle branch, plug etc.) for cast iron pipe line , complete:-				
	b)	C.I. flanged specials, with flanged and flanged joints:- i) 3" to 6" (75 to 150 mm) i/d	100	P.Kg		
9	Ch-23, I-37	Providing and fixing, air valve 2½ (65mm) dia of B.S.S. quality and weight (complete with jointing material). b) Double	1	Each		
10	Ch-23, I-35	Providing and fixing sluice valve of B.S.S. quality and Class `B', for cast iron pipe line, and Asbestos cement pipe line (including cost of jointing material):-				
	i)	3" i/d (75 mm)	1	Each		
11	Ch-3, I-17c	Transportation of surplus mateial & earth all types when the total distance i/c the lead covered in the item of work is up to 5 miles	130.65	0/00Cft		
12	Ch-3, I-13(b)	Rehandling of earthwork: (b) upto a lead of 50 ft (15 m).	32.663	0/00Cft		
					Total =	

Rate Analysis for Washout Chamber

S/No.	MRS	Description	Qty	Unit	Rate	Amount (Rs.)
1	Ch-3, I-43-1)	Earthwork excavation in open cutting for sewers and manholes as shown in drawings including shuttering and timbering, dressing to correct section and dimensions according to templates and levels, and removing surface water, in all types of soil except shingle, gravel and rock:- i) 0 ft. to 7.0 ft. (0 to 2.10 m) depth	163.32	%0Cft		
2	Ch-6, I-5	Cement concrete plain i/c placing, compacting, finishing and curing complete. (i/c washing of stone aggregate) (1:2:4) (1:2:4) (1:4:8)	 0.75 13.364 8.0372	 %Cft %Cft %Cft		
3	Ch-7, I-5	Pacca brick work in ground floor:- i) cement, sand mortar:- Ratio 1:3 i) cement, sand mortar:- Ratio 1:4	 33.75 22.5	 %Cft %Cft		
4	Ch-11, I-8	Cement plaster 1:3 upto 20' (6.00 m) height:- b) ½" (13 mm) thick b) ½" (13 mm) thick	 36 72	 %Sft %Sft		
5	Ch-6, I-9	Placing, compacting, finishing and curing of concrete using Ordinary Portland Cement / Sulphate resisting cement /Slag cement as may be required; including screening, washing of aggregates and mixing of constituents using batching plant,Transportation by transit mixer, pouring with pump in the required proportions to achievea nominal cylindrical strength in the field as per ACI214, with the specified consistency. i/c the cost of shuttering, compaction with Viberator, excluding the cost of Admixture, as approved and directed by the Engineer Incharge. (4000 psi) a) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects 4000 psi	0.4488	P.Cft.		

Rate Analysis for Washout Chamber

S/No.	MRS	Description	Qty	Unit	Rate	Amount (Rs.)
6	Ch-6, I-12-b)-ii	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labourcharges for binding of steel reinforcement (also includes removal of rust from bars): -.(Deform Bars) .G-60	7.5232	0/0Kg		
	Ch-3, I-17c	Transportation of surplus mateial & earth all types when the total distance i/c the lead covered in the item of work is up to 5 miles	130.65	0/00Cft		
	Ch-3, I-13(b)	Rehandling of earthwork: (b) upto a lead of 50 ft (15 m).	32.663	0/00Cft		
7	Ch-21, I-16	Providing and fixing, 6" (150 mm) thick R.C.C. manhole cover with 3"x3"x¼" (75x75x6mm) angle iron frame, 22" (550 mm) i/d as per standard drawing STD/PD No. 7 of 1977, complete in all respects.	1	Each		
8	Ch-23, I-21-b	Providing and fixing cast iron special of B.S.S. Class `B' (such as bend, tee cross collar, reducer, tail piece, flanged spigot, cap, flanged socket, taper, angle branch, plug etc.) for cast iron pipe line , complete:-				
	b)	C.I. flanged specials, with flanged and flanged joints i) 3" to 6" (75 to 150 mm) i/d	100	P.Kg		
9	Ch-23, I-35	Providing and fixing sluice valve of B.S.S. quality and weight, Class `B', for cast iron pipe line, and Asbestos cement pipe line (including cost of jointing material):- ix) 18" i/d (450 mm)	1	Each		
					Total =	

Feasibility Studies and Design of Rainwater Underground Storage Facilities in 14 Cities of Punjab Under Punjab Inclusive Cities Program (PICP), Stormwater Drainage Facilities in Haroonabad City

Cost for Environmental and Social Management and Monitoring Plan (ESMMP) Implementation

Duration of Project: 08 months			
Item	**Quantity**	**Tentative Cost/ Item-**	**Total Cost**
A-PPEs			
Face Masks (3 PLY) - box	50		
Safety Hard Helmets (MSA)	30		
Safety Shoes	30 pairs		
Hand Gloves	30 pairs		
Reflective Safety Vest (Orange)	30		
Safety Goggles	30		
B-Community Health and Safety			
First Aid Box Complete	03		
Safety Signs Boards	30		
Safety Tapes	30		
Portable Delineator with chain			
Emergency Portable Flood Lights	05		
Pole hanging waste bins	20		
DCP Fire Extinguisher	02		
Hiring of Environmental Specialist (for 08 months)	01		
C- Environment Quality Testing*			
Ambient Air Quality, Noise and Surface/Ground Water Quality - 03 sampling events – 06 samples per event (Total 18 samples)			
Total (PKR)-A+B+C			
Grand Total			

* C- Sampling will be carried out by an EPA-certified laboratory recommended by the SPO E&SM.

DRAWINGS

CLIENT:

LOCAL GOVERNMENT
& COMMUNITY DEVELOPMENT
DEPARTMENT

CONSULTANT:

PROJECT:

PUNJAB INCLUSIVE CITIES PROGRAM:
STORM WATER FACILITIES
IN HAROONABAD CITY

ISSUE	DESCRIPTION	DATE	REV.	DRN.	REC.	APRD.
00	PC1 - DRAWINGS	MAR, 2026				

DRAWING TITLE: LIST OF DRAWINGS

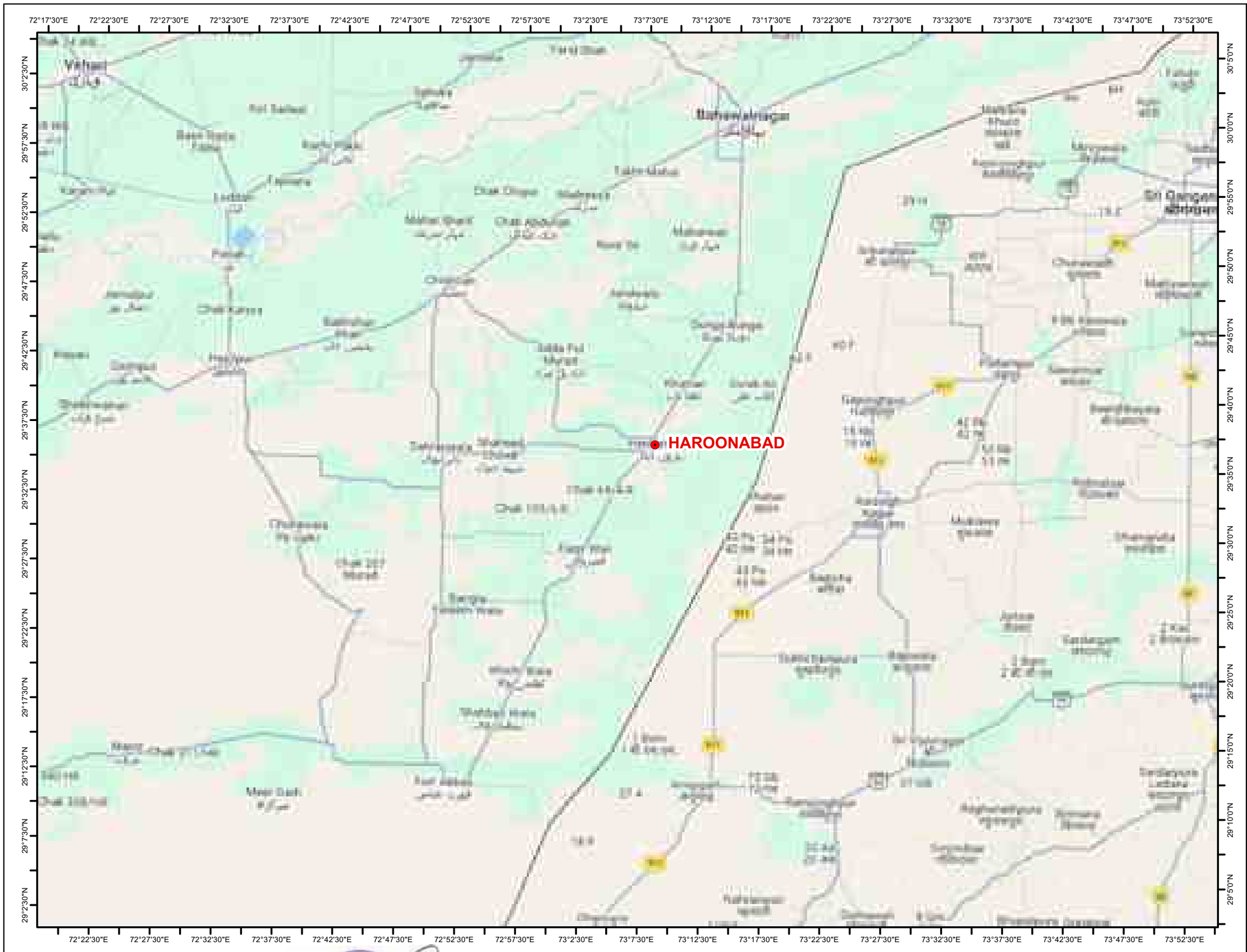
SCALE:

DRAWING NO: PMDFC/SWD/HRD/14/00

SHEET: (1 OF 1)

ACTUAL SHEET SIZE: A3

LOCATION PLAN
HAROONABAD CITY



SCALE- 1:500,000

0 5 10 Kilometers

EMPLOYER

LOCAL GOVERNMENT & COMMUNITY DEVELOPMENT DEPARTMENT

PROJECT

PUNJAB INCLUSIVE CITIES PROGRAM
STORM WATER FACILITIES
IN HAROONABAD CITY

ISSUE	DESCRIPTION	DATE	REV	DRN	REC	APRD
	PC-1 DRAWINGS	MAR 2026				

DRAWING TITLE: **LOCATION PLAN, HAROONABAD CITY**

SCALE:- 1:500,000

DRAWING NO: **PMDFC/SWD/HRD/14/01**

SHEET (1 OF 1)

ORIGINAL SHEET SIZE A3

CATCHMENT & PONDING AREA, HARDONABAD

Legend

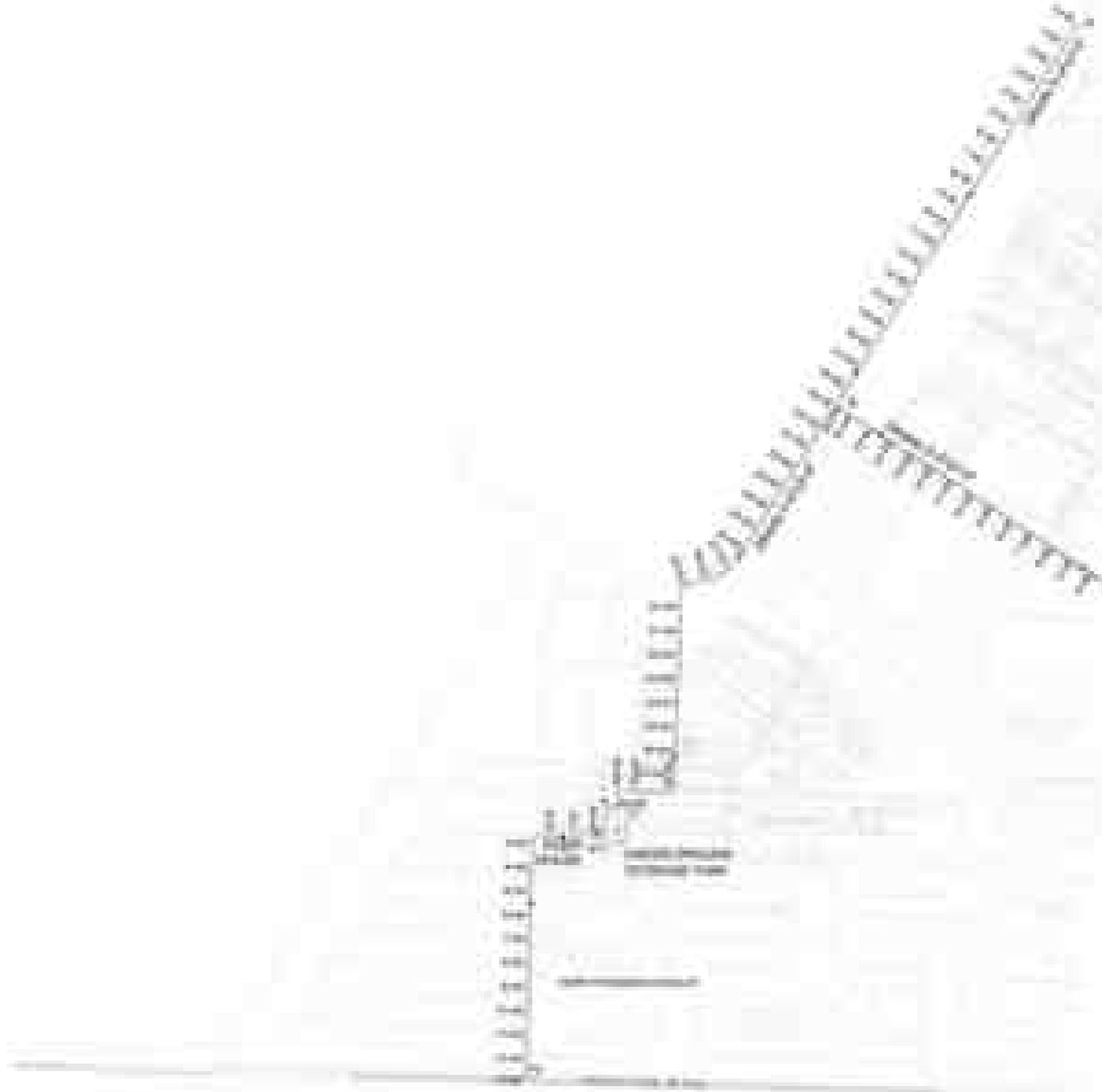
- Pump_Points
- CATCHMENT_AREA
- PONDING_AREA
- Railway Tracks

A3

M.C OFFICE ROAD AREA,
HARDONABAD

Legend

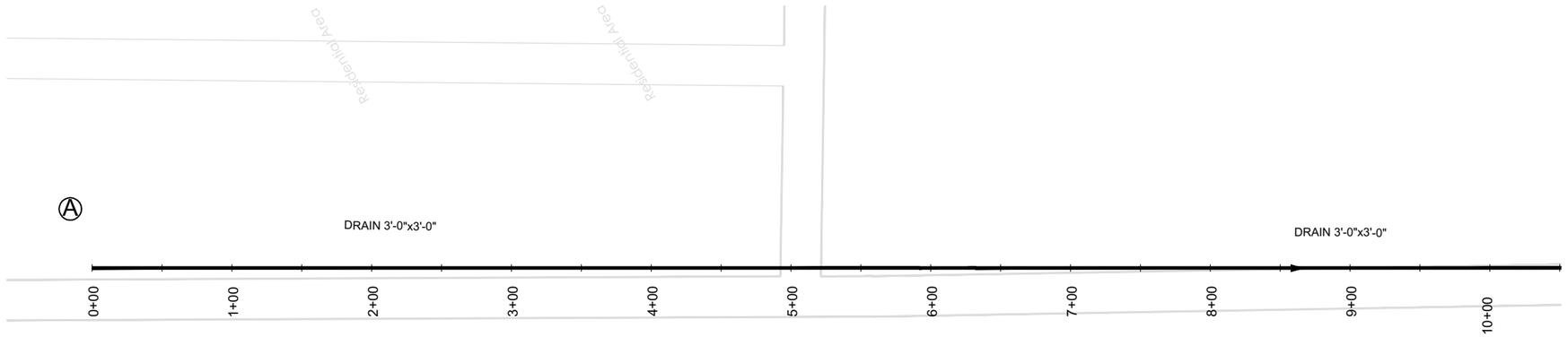
A3



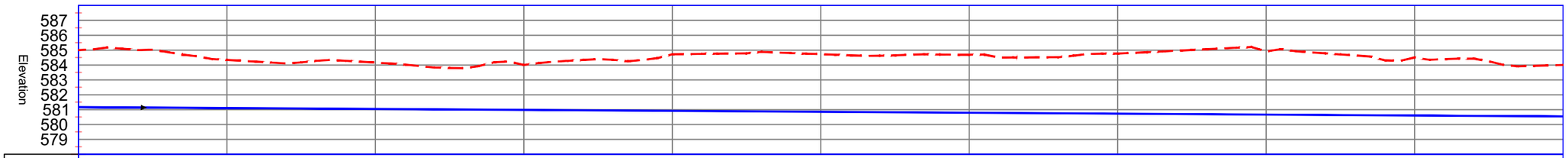
LEGEND

1. HDPE FORCEMAIN 450mm Ø
2. PROPOSED STORM DRAIN
3. UNDER GROUND STORAGE TANK
4. LINEAR STORAGE
5. PUMP HOUSE

A3



PLAN



SLOPE	DRAIN 3'-0"x3'-0" (S=0.00064)									
GROUND LEVELS	585.00	584.34	584.16	584.00	584.72	584.73	584.69	584.77	584.91	584.50	584.00
PIPE INVERT	581.17	581.11	581.04	580.98	580.92	580.85	580.79	580.72	580.66	580.60	580.53
R.D	0+00	1+00	2+00	3+00	4+00	5+00	6+00	7+00	8+00	9+00	10+00

Ⓐ

PROFILE

LEGEND:

1. NSL
2. PIPE TOP LEVEL

CLIENT:

LOCAL GOVERNMENT & COMMUNITY DEVELOPMENT DEPARTMENT

CONSULTANT:

PROJECT:

PUNJAB INCLUSIVE CITIES PROGRAM:
STORM WATER FACILITIES
IN HAROONABAD CITY

ISSUE	DESCRIPTION	DATE	REV.	DRN.	REC.	APRD.
00	PC1 - DRAWINGS	MAR, 2026				

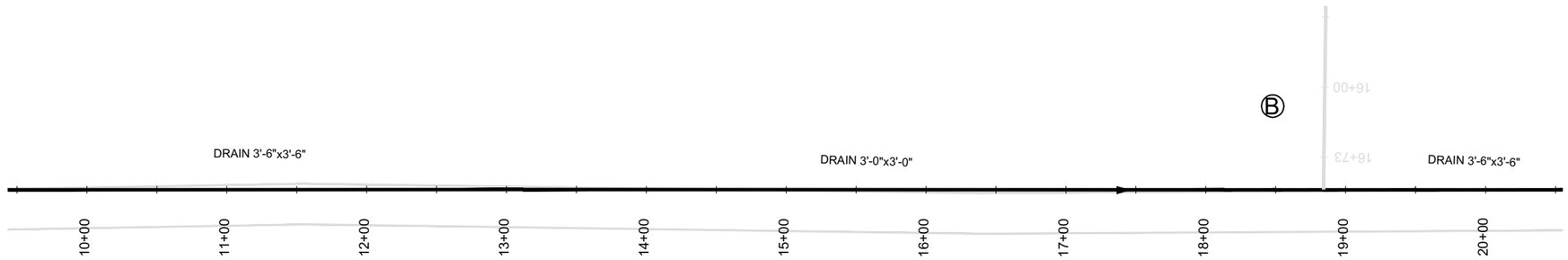
DRAWING TITLE: PROPOSED STORM DRAINS - PLAN AND PROFILE

SCALE: H 1"=80' V 1"=8'

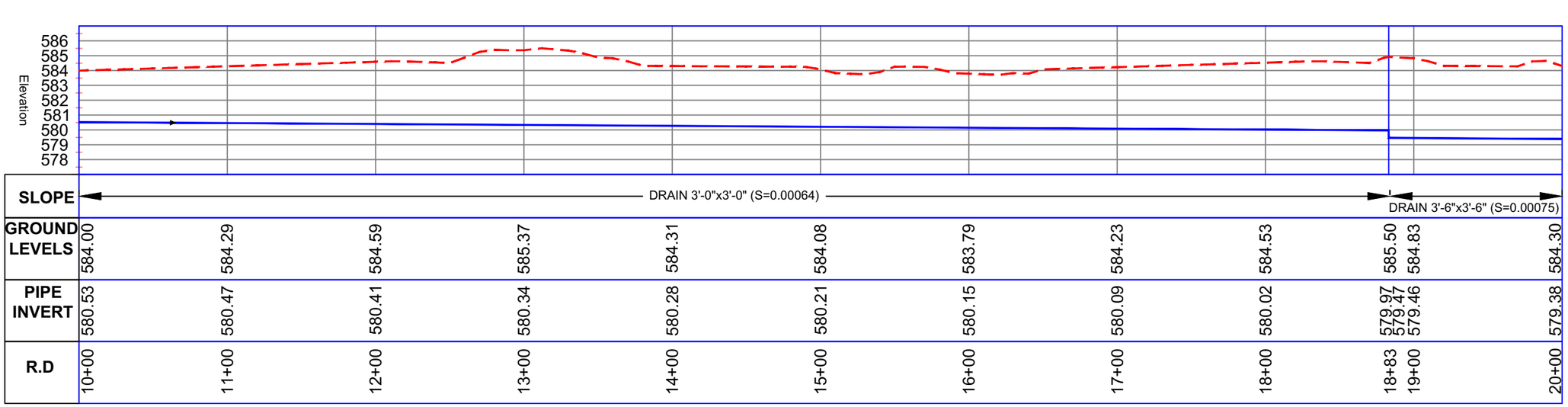
DRAWING NO: PMDFC/SWD/HRD/14/05

SHEET: (01 OF 06)

ACTUAL SHEET SIZE: A3



PLAN

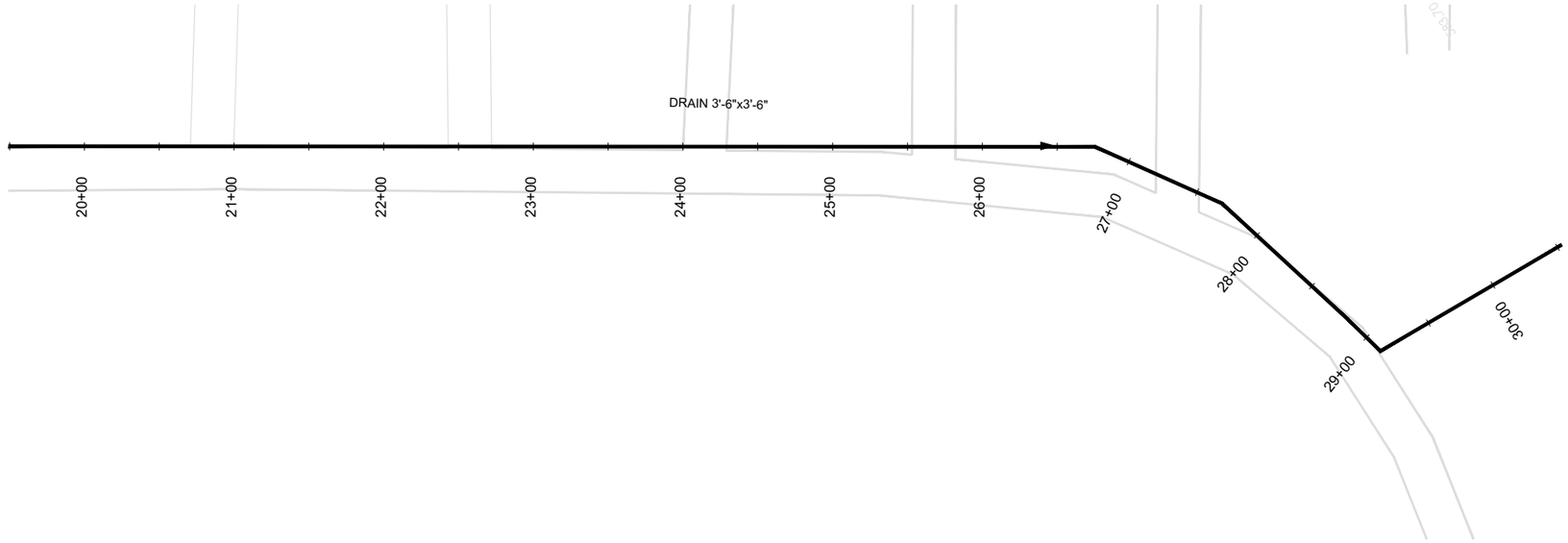


PROFILE

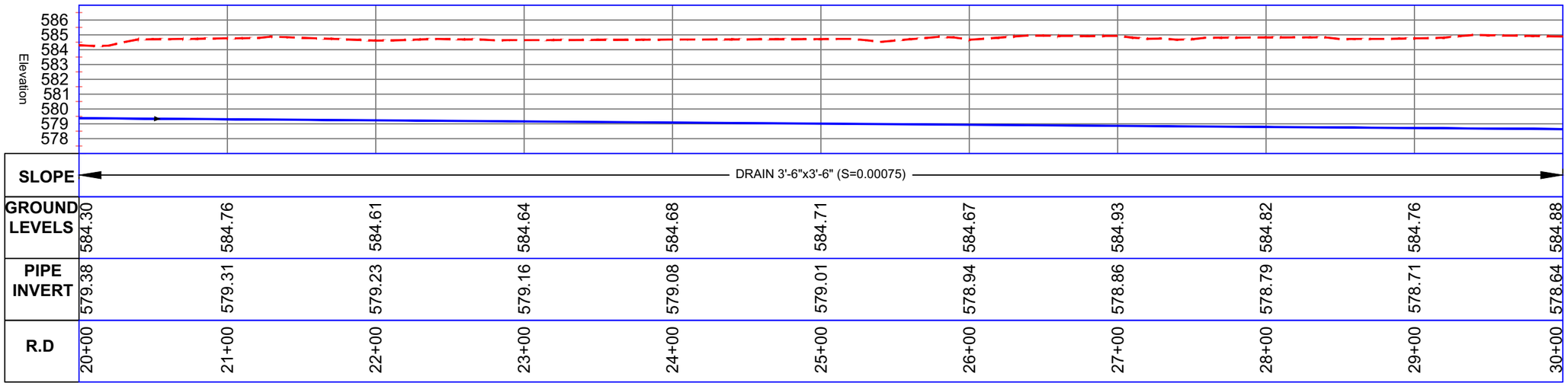
LEGEND:

1. NSL
2. PIPE TOP LEVEL

CLIENT: LOCAL GOVERNMENT & COMMUNITY DEVELOPMENT DEPARTMENT	CONSULTANT:	PROJECT: PUNJAB INCLUSIVE CITIES PROGRAM: STORM WATER FACILITIES IN HAROONABAD CITY					DRAWING TITLE: PROPOSED STORM DRAINS - PLAN AND PROFILE; SCALE H 1"=80' V 1"=8'
							DRAWING NO: PMDFC/SWD/HRD/14/05; SHEET: (02 OF 06); ACTUAL SHEET SIZE A3
			00	PC1 - DRAWINGS	MAR, 2026		
			ISSUE	DESCRIPTION	DATE	REV. DRN. REC. APRD.	



PLAN



GROUND LEVELS	584.30	584.76	584.61	584.64	584.68	584.71	584.67	584.93	584.82	584.76	584.88
PIPE INVERT	579.38	579.31	579.23	579.16	579.08	579.01	578.94	578.86	578.79	578.71	578.64
R.D	20+00	21+00	22+00	23+00	24+00	25+00	26+00	27+00	28+00	29+00	30+00

PROFILE

LEGEND:

1. NSL
2. PIPE TOP LEVEL

CLIENT:

LOCAL GOVERNMENT & COMMUNITY DEVELOPMENT DEPARTMENT

CONSULTANT:

PROJECT:

PUNJAB INCLUSIVE CITIES PROGRAM:
STORM WATER FACILITIES
IN HAROONABAD CITY

ISSUE	DESCRIPTION	DATE	REV.	DRN.	REC.	APRD.
00	PC1 - DRAWINGS	MAR, 2026				

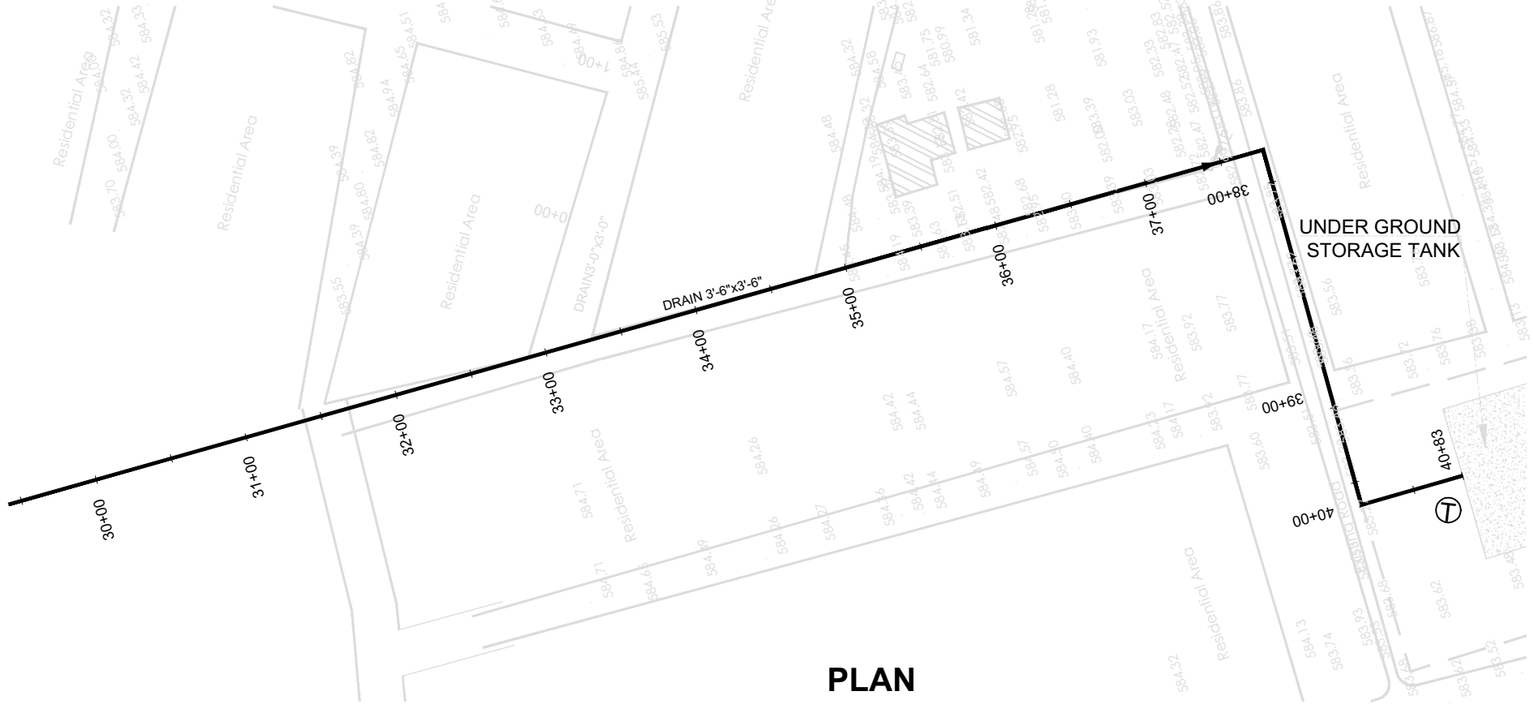
DRAWING TITLE: PROPOSED STORM DRAINS - PLAN AND PROFILE

SCALE: H 1"=80' V 1"=8'

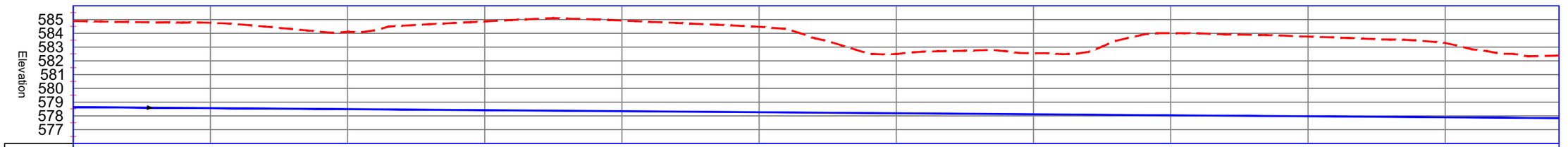
DRAWING NO: PMDFC/SWD/HRD/14/05

SHEET: (03 OF 06)

ACTUAL SHEET SIZE: A3



PLAN



SLOPE	DRAIN 3'-6"x3'-6" (S=0.00075)											
GROUND LEVELS	584.88	584.76	584.10	584.86	584.92	584.47	582.49	582.55	584.01	583.76	583.30	582.00
PIPE INVERT	578.64	578.56	578.49	578.41	578.34	578.26	578.19	578.11	578.04	577.97	577.89	577.83
R.D	30+00	31+00	32+00	33+00	34+00	35+00	36+00	37+00	38+00	39+00	40+00	40+83

PROFILE

LEGEND:

1. NSL
2. PIPE TOP LEVEL

CLIENT:

LOCAL GOVERNMENT & COMMUNITY DEVELOPMENT DEPARTMENT

CONSULTANT:

PROJECT:

PUNJAB INCLUSIVE CITIES PROGRAM:
STORM WATER FACILITIES
IN HAROONABAD CITY

ISSUE	DESCRIPTION	DATE	REV.	DRN.	REC.	APRD.
00	PC1 - DRAWINGS	MAR, 2026				

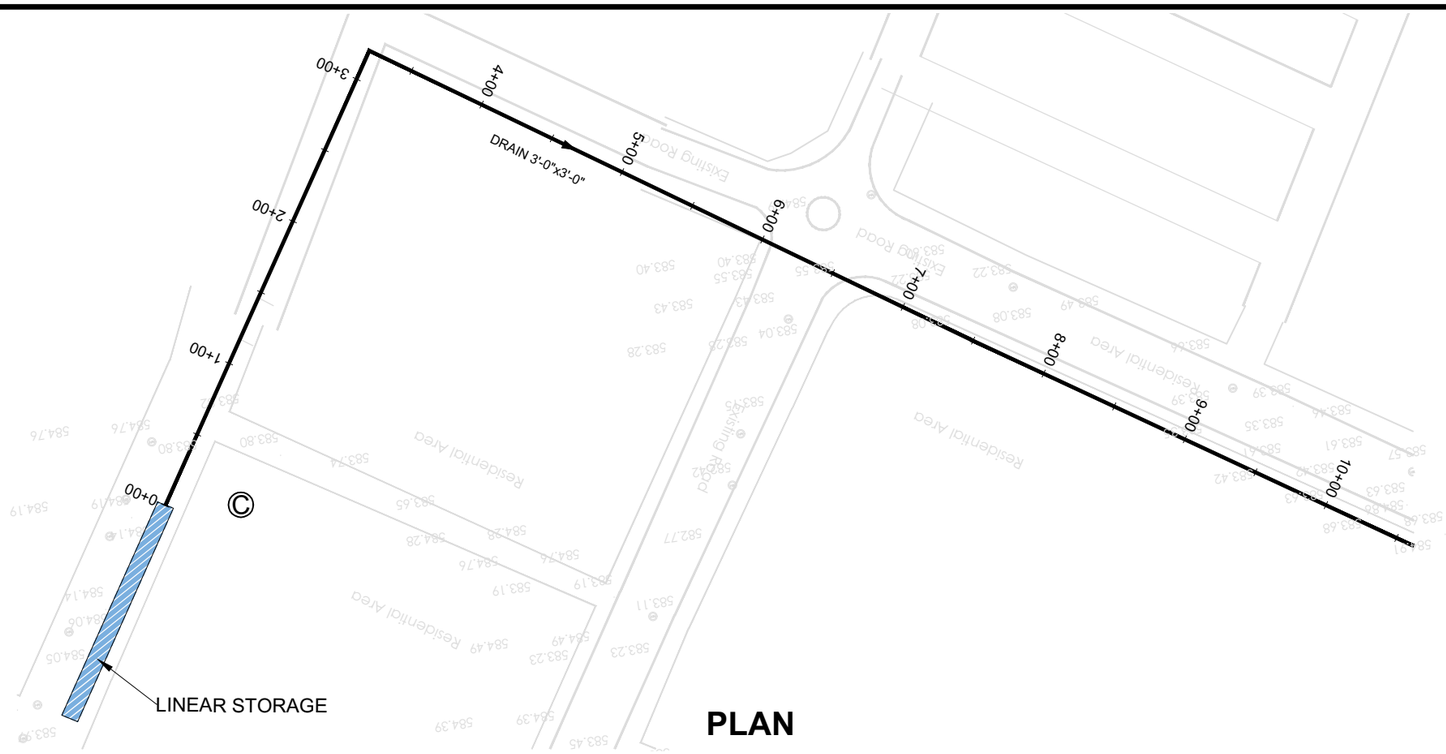
DRAWING TITLE: PROPOSED STORM DRAINS - PLAN AND PROFILE

SCALE: H 1"=80' V 1"=8'

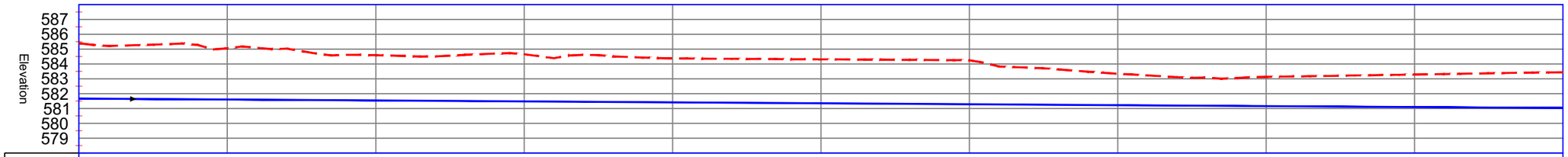
DRAWING NO: PMDFC/SWD/HRD/14/05

SHEET: (04 OF 06)

ACTUAL SHEET SIZE: A3



PLAN



SLOPE	DRAIN 3'-0"x3'-0" (S=0.00064)									
GROUND LEVELS	585.40	585.05	584.59	584.66	584.37	584.31	584.25	583.34	583.13	583.29	583.44
PIPE INVERT	581.67	581.61	581.54	581.48	581.41	581.35	581.29	581.22	581.16	581.09	581.03
R.D	0+00	1+00	2+00	3+00	4+00	5+00	6+00	7+00	8+00	9+00	10+00

PROFILE

LEGEND:

1. NSL
2. PIPE TOP LEVEL

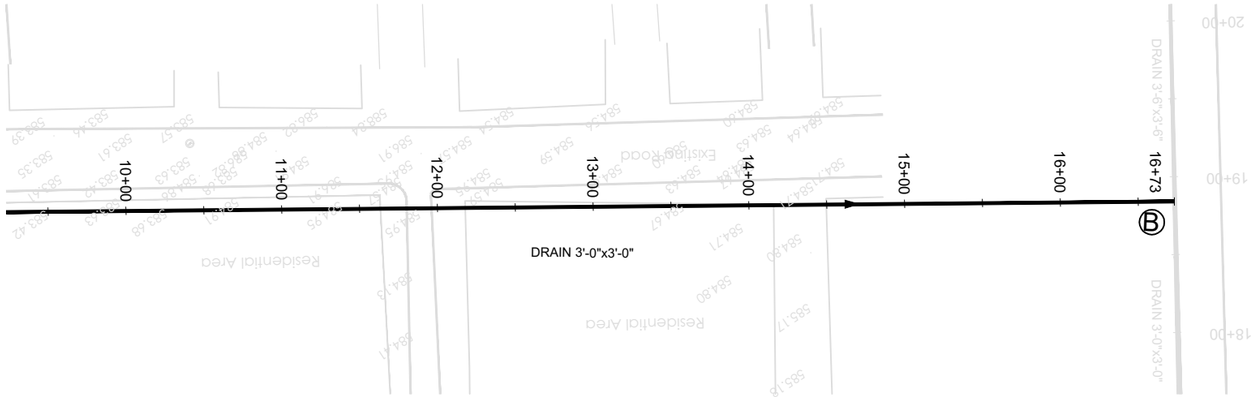
CLIENT:
LOCAL GOVERNMENT & COMMUNITY DEVELOPMENT DEPARTMENT

CONSULTANT:

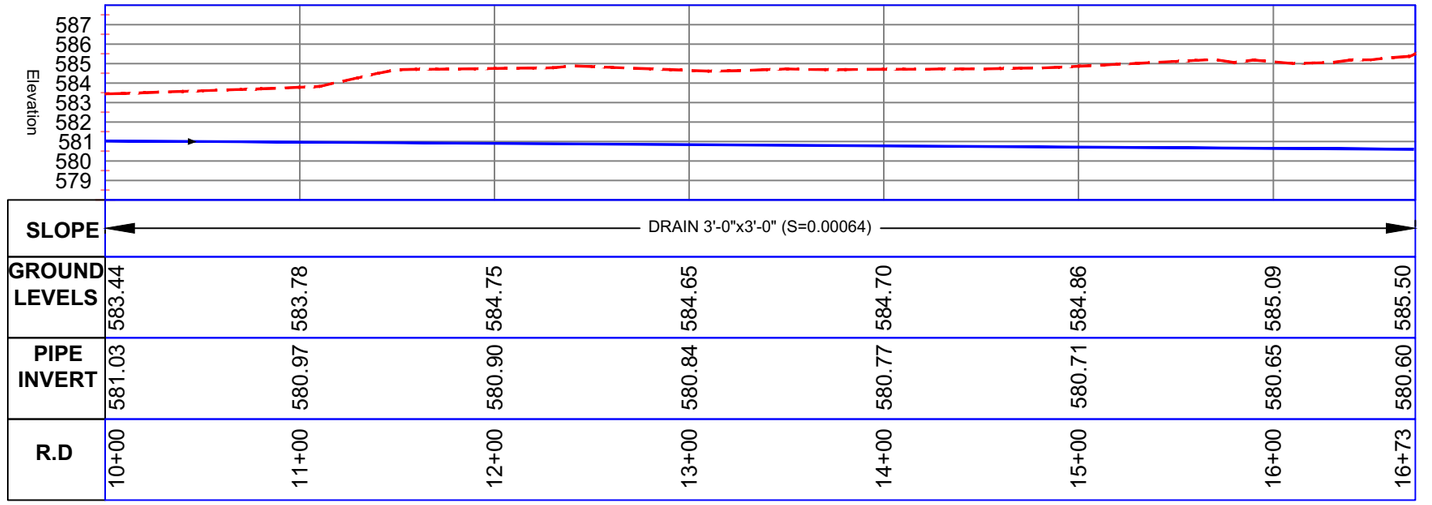
PROJECT:
PUNJAB INCLUSIVE CITIES PROGRAM:
STORM WATER FACILITIES
IN HAROONABAD CITY

ISSUE	DESCRIPTION	DATE	REV.	DRN.	REC.	APRD.
00	PC1 - DRAWINGS	MAR, 2026				

DRAWING TITLE: PROPOSED STORM DRAINS - PLAN AND PROFILE
DRAWING NO: PMDFC/SWD/HRD/14/05
SHEET: (05 OF 06)
SCALE: H 1"=80' V 1"=8'
ACTUAL SHEET SIZE: A3



PLAN



PROFILE

B

LEGEND:

1. NSL
2. PIPE TOP LEVEL

CLIENT:

LOCAL GOVERNMENT & COMMUNITY DEVELOPMENT DEPARTMENT

CONSULTANT:

PROJECT:

PUNJAB INCLUSIVE CITIES PROGRAM:
STORM WATER FACILITIES
IN HAROONABAD CITY

ISSUE	DESCRIPTION	DATE	REV.	DRN.	REC.	APRD.
00	PC1 - DRAWINGS	MAR, 2026				

DRAWING TITLE: PROPOSED STORM DRAINS - PLAN AND PROFILE

SCALE: H 1"=80' V 1"=8'

DRAWING NO: PMDFC/SWD/HRD/14/05

SHEET: (06 OF 06)

ACTUAL SHEET SIZE: A3

GENERAL NOTES

1-GENERAL

1- READ ALL DRAWINGS IN CONJUNCTION WITH ARCHITECTURAL, PLUMBING/SEWERAGE, MECHANICAL, ELECTRICAL AND ANY OTHER RELEVANT DRAWINGS.

2- NOTES GIVEN IN THIS DRAWING ARE APPLICABLE TO ALL DRAWINGS UNLESS MENTIONED OTHERWISE. NOTES WRITTEN ON A DRAWING, SHALL BE APPLICABLE TO THAT PARTICULAR DRAWING ONLY UNLESS OTHERWISE CROSS-REFERRED.

3- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE SPECIFICATIONS OF THE CONTRACT DOCUMENTS. IN ABSENCE OF ANY SPECIFICATIONS , ALL MATERIALS, TESTS AND WORKMANSHIP SHALL CONFORM TO RELEVANT ASTM, ACI/B.S CODES AND SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER.

4- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE STRUCTURES DURING CONSTRUCTION. HE SHALL ALSO VERIFY ALL DIMENSIONS AND LEVELS BEFORE EXECUTION OF WORK. ANY DISCREPANCY, ERROR OR OMISSION, IF FOUND, SHALL BE BROUGHT TO THE NOTICE OF THE ENGINEER FOR CORRECTION AND APPROVAL.

5- THE CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL AND VARIOUS SERVICES DRAWINGS FOR SIZES AND LOCATION OF ALL STRUCTURAL MEMBERS, FLOORS, WALLS, OPENINGS, FLOOR FINISHES, PIPES ETC.

6- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EXECUTION OF DEWATERING SYSTEM WHERE SO REQUIRED DURING CONSTRUCTION. HE SHALL SUBMIT HIS METHODOLOGY FOR APPROVAL OF ENGINEER BEFORE ANY ACTIVITY.

7- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND BAR BENDING SCHEDULES, 21 DAYS IN ADVANCE FOR APPROVAL, TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

8- TERMITE CONTROL TREATMENT SHALL BE CARRIED OUT AS PER SPECIFICATIONS.

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

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

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

12- BACKFILLING AROUND FOUNDATION SHOULD BE DONE SIMULTANEOUSLY ON BOTH SIDES TO AVOID ANY LATERAL DISPLACEMENT. BACKFILLING UNDER FLOORS AND AROUND FOUNDATIONS SHALL BE DONE IN LAYERS NOT EXCEEDING 6 iNCH. IN THICKNESS AND COMPACTED UPTO 95% MODIFIED PROCTOR DENSITY.

13- ENERGY DISSIPATER BLOCK SHOULD BE PROVIDED EXACT UNDER THE DRAIN INLET.

2-EXCAVATION

1- EXCAVATION SHALL BE MADE TO THE LINES AND LEVELS SHOWN ON THE DRAWINGS. THE ENGINEER MAY CHANGE THE EXTENT OR THE LEVELS OF EXCAVATION DURING THE PROGRESS OF WORKS.

2- THE CONTRACTOR MAY USE STABLE SLOPES OTHER THAN THOSE SHOWN ON THE DRAWINGS WITH THE PRIOR APPROVAL OF THE ENGINEER.

3- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF THE EXCAVATED AREA AND SHALL KEEP THE AREA IN A SOUND AND DRY CONDITION.

4- THE TERMITE CONTROL TREATMENT SHALL BE APPLIED AFTER EXCAVATION OF FOUNDATIONS ON BEDS AND SIDE SLOPES BEFORE CONCRETING OPERATION.

5- PART OF EXCAVATED MATERIAL, AS DIRECTED BY THE ENGINEER, SHALL BE PLACED IN STOCK PILES FOR BACKFILLING. ALL OTHER MATERIAL SHALL BE DISPOSED OF IN APPROVED DISPOSAL AREA AS DIRECTED BY THE ENGINEER.

6- ANY OVER EXCAVATED AREAS OR DOUBTFUL PATCHES, AS DIRECTED BY THE ENGINEER SHALL BE FILLED WITH LEAN CONCRETE.

3-FOUNDATIONS

1- THE DESIGN OF FOUNDATION IS BASED ON AN ALLOWABLE BEARING CAPACITY OF 1.5 TSF.

2- ALL FOUNDATIONS SHALL BE PLACED ON COMPETENT BEARING STRATA. IF ACCEPTABLE BEARING STRATA IS NOT FOUND AT INDICATED DEPTHS OF FOUNDATION, THE ENGINEER SHALL BE NOTIFIED IN WRITING FOR HIS INSTRUCTIONS.

3- THE EXCAVATED BED OF FOUNDATION SHOULD BE THOROUGHLY COMPACTED PRIOR TO LAYING BLINDING CONCRETE IN FOUNDATION. ANY LOOSE,WET,SOFT SOIL PATCH SHOULD BE REPLACED WITH WELL-COMPACTED SELECTED GRANULAR FILL COMPACTED TO 95% MODIFIED AASHTO DENSITY.

4- THE FOUNDATION BED SOIL SHOULD BE PROTECTED FROM INGRESS OF WATER FROM ANY SOURCE BY PROVIDING ADEQUATE SURFACE DRAINAGE SYSTEM AND ENSURING LEAK PROOF JOINTINGS OF SEWERAGE AND WATER SUPPLY LINES. EXCESSIVE AND UNCONTROLLED WATERING FOR CURING AND COMPACTION OF BACKFILL MATERIAL SHOULD BE AVOIDED.

4-REINFORCED CONCRETE

1- STRUCTURAL DESIGN IS BASED ON THE NATIONAL BUILDING CODE OF PAKISTAN AND AMERICAN CONCRETE INSTITUTE CODE OF REINFORCED CONCRETE,ACI 350R

2- ALL STRUCTURAL CONCRETE SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE (ACI) REQUIREMENTS.

3- THE LEAN/BLINDING CONCRETE SHALL BE (1:3:6)

4- THE MINIMUM WORK COMPRESSIVE CUBE STRENGTH OF STRUCTURAL CONCRETE FOR ALL STRUCTURAL MEMBERS, SHALL BE 4000 psi (1:1½:3) AT 28 DAYS

5- THE MINIMUM WORK COMPRESSIVE CONCRETE CUBE STRENGTH OF STRUCTURAL CONCRETE FOR ALL STRUCTURAL MEMBERS SHALL BE 4000 psi (1:1½:3) AT 28 DAYS. PLASTICIZER MAY BE USED WITH W/C RATIO OF 0.4 TO ACHIEVE THE DESIRED STRENGTH

6- . THE MINIMUM WORK COMPRESSIVE CONCRETE CUBE STRENGTH OF STRUCTURAL CONCRETE FOR PERIPHERAL R.C.C WALL AND COLUMNS IN WALL SHALL BE 4000 Psi.(1:1½:3) AT 28 DAYS

7- NO CONCRETING SHALL BE CARRIED OUT UNTIL PERMISSION IS GIVEN IN WRITING BY THE ENGINEER.

5-SHORING AND BRACING

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

2- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY AND STABILITY OF THE ADJACENT EXISTING STRUCTURES AND SHALL PROVIDE ADEQUATE SHORING AND BRACING DURING EXCAVATION AND CONSTRUCTION, WHEREVER AND WHENEVER REQUIRED TO THE SATISFACTION OF THE ENGINEER.

6-BRICK WORK

1- ALL BRICK WORK SHALL CONFORM TO SPECIFICATIONS GIVEN IN THE CONTRACT DOCUMENT.

2- ALL BRICKS SHALL BE SOUND, HARD, WELL BURNT AND OF UNIFORM SIZE,COLOUR AND TEXTURE. DIMENSIONAL VARIATION IN SIZES SHALL NOT EXCEED 1/8".

3- ALL BRICK WORK SHALL BE ERECTED PLUMB AND TRUE TO LINE AND LEVEL. THE MAXIMUM VARIATION IN ANY STOREY HEIGHT OR ANY LENGTH OF WALL SHALL BE 1/8" IN 10'.

4- ALL BRICK MASONRY FOR WALLS SHALL BE REINFORCED WITH MIILD STEEL FLAT/REINFORCEMENT AS SHOWN ON THE DRAWINGS.

5- TESTING OF COMPRESSIVE STRENGTH OF MASONRY SHALL BE DONE, IF SO DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH ASTM E447 OR PAKISTAN STANDARD-208.

6- THE AVERAGE COMPRESSIVE STRENGTH OF TWELVE HALVED BRICKS SHALL BE NOT LESS THAN 2500 Psi AND SHALL BE NOT LESS THAN 2000 Psi FOR ANY INDIVIDUAL BRICK.

7- BRICK SHALL BE LAID "FROG" UPWARD WITH MORTAR JOINT AND IN ENGLISH AND FLEMISH BOND OR AS DIRECTED BY THE ENGINEER.

8- ALL BRICK WORK SHALL BE LAID IN 1:5 CEMENT SAND MORTAR FOR 9 INCH THICK WALL AND 1:4 CEMENT SAND MOTAR FOR 4½ INCH THICK WALL.

9- ALL BRICK MASONRY WALLS SHALL BE PLASTERED WITH 1:4 CEMENT SAND MORTAR FOR INTERNAL FACE AND 1:3 FOR EXTERNAL FACE OF WALLS.

10- ALL INTERNAL WALLS, EXCEPT AS NOTED ON ARCH. DWG, ARE LIGHT WEIGHT DRY WALLS.

7-ELECTRICAL CONDUITS

1- CONDUITS, FOR ELECTRICAL WORKS, SHALL BE PLACED WITHIN THE REINFORCED CONCRETE. THEY SHALL BE PLACED WITHIN THE MIDDLE THIRD OF THE SECTION IN BEAMS AND WITHIN THE MIDDLE HALF OF THE THICKNESS IN SLABS.

SPACING BETWEEN PARALLEL CONDUITS SHALL NOT BE LESS THAN 6 INCHES.

8- STRUCTURAL STEEL

1- FABRICATION, PAINTING, ERECTION AND QUALITY CONTROL IS TO BE PERFORMED IN ACCORDANCE WITH AISC SPECIFICATIONS.

2- ALL STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-36 OR EQUIVALENT AS APPROVED BY THE ENGINEER.

3- ALL WELDING SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF AMERICAN WELDING SOCIETY, AWR, SPECIFICATIONS USING ELECTRODES E70XX.

4- IF EQUIVALENT DIAMETER OF STEEL BARS IN MM, AND THEIR DIAMETERS ARE AS UNDER.

Bar Size	#3	#4	#5	#6	#8
Bar Size (Inch)	3/8"	1/2"	5/8"	3/4"	1"
Bar Size (mm)	9.52	12.7	15.87	19.05	25.4
Weight (Kg/ft)	0.171	0.303	0.473	0.681	0.927

IN CASE OF NON AVAILABILITY OF STEEL REINFORCEMENT OF DIAMETER BARS AS SHOWN ON DRAWING, THE MATTER SHOULD BE REFERRED TO THE ENGINEER IN-CHARGE.

9- BACKFILL

1- BACKFILL HEIGHT SHALL NOT EXCEED MORE THAN 10FEET ABOVE TOP OF BASE SLAB BEFORE CASTING OF TOP SLAB.

10-REINFORCING STEEL

1- ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM-A615 GRADE 60 HAVING A MINIMUM YIELD STRENGTH OF 60,000 psi.

2- WHEREVER POSSIBLE FULL LENGTH OF REINFORCING BARS SHALL BE USED TO AVOID UNNECESSARY LAPS AND WASTAGE.

3- CLEAR COVER TO REINFORCEMENT SHALL BE:

SRTUCT.ELEMENT	COVER (INCHES)
FOOTINGS/RAFT	3"
BEAMS (BOTTOM)	1½"
BEAMS (SIDES)	1½"
COLUMNS	2"
SLABS	3/4"
WALLS (INNER FACE)	2"
WALLS (OUTER FACE IN CONTACT WITH EARTH)	2"

3- DEVELOPMENT LENGTH IN TENSION

(a) TOP BARS

fc' (psi) \ Bar Size	DEVELOPMENT LENGTH 'inch' (Fy=60,000 psi)								
	#3	#4	#5	#6	#7	#8	#9	#10	#11
3000	21	29	36	43	62	71	80	90	98
4000	18	25	31	37	54	62	70	77	85
5000	17	22	28	33	49	55	62	69	76

(b) BOTTOM BARS

fc' (psi) \ Bar Size	DEVELOPMENT LENGTH 'inch' (Fy=60,000 psi)								
	#3	#4	#5	#6	#7	#8	#9	#10	#11
3000	17	22	27	33	48	55	62	69	75
4000	15	19	24	29	42	48	53	60	65
5000	13	17	21	26	37	43	48	53	59

4- DEVELOPMENT LENGTH IN COMPRESSION

fc' (psi) \ Bar Size	DEVELOPMENT LENGTH 'inch' (Fy=60,000 psi)								
	#3	#4	#5	#6	#7	#8	#9	#10	#11
3000	9	11	14	17	20	22	25	28	30
4000	8	10	12	15	17	19	22	24	27
5000	8	9	11	14	16	18	20	22	25

5- SPLICE LENGTH IN TENSION

(a) TOP BARS

fc' (psi) \ Bar Size	SPLICE/LAP LENGTH 'inch' (Fy=60,000 psi)								
	#3	#4	#5	#6	#7	#8	#9	#10	#11
3000	28	37	46	56	81	93	105	116	128
4000	24	32	40	48	70	80	90	100	110
5000	21	28	36	43	63	72	80	90	99

(b) BOTTOM BARS

fc' (psi) \ Bar Size	SPLICE/LAP LENGTH 'inch' (Fy=60,000 psi)								
	#3	#4	#5	#6	#7	#8	#9	#10	#11
3000	22	29	36	43	63	72	80	90	98
4000	18	24	30	36	54	63	72	78	84
5000	17	22	28	33	48	55	62	69	76

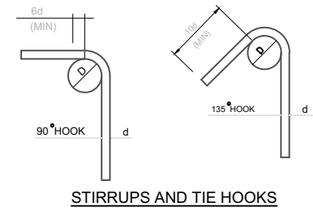
6- SPLICE LENGTH IN COMPRESSION

SPLICE LENGTH 'inch' IN COMPRESSION (Fy=60,000 psi)									
Bar Size	#3	#4	#5	#6	#7	#8	#9	#10	#11
Splice Length	12	15	19	23	26	30	34	38	42

EXCEPT AS OTHERWISE SHOWN ON THE DRAWING, WHENEVER REINFORCING BARS OF DIFFERENT SIZES ARE TO BE LAP SPLICED IN COMPRESSION, SPLICE LENGTH SHALL BE THE LARGER OF DEVELOPMENT LENGTH OF LARGER BAR, OR SPLICE LENGTH OF SMALLER BAR.
STAGGERED LAPS TO BE PLACED IN COLUMNS WHERE THERE IS CONGESTION.

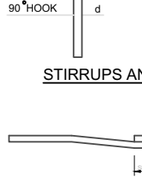
7- ALL REINFORCING STEEL SHALL BE ACCURATELY LOCATED IN THE FORMS AND HELD FIRMLY IN PLACE BEFORE AND DURING THE PLACEMENT OF CONCRETE, BY MEANS OF WIRE AND SUPPORTS ADEQUATE TO PREVENT DISPLACEMENT DURING THE COURSE OF CONSTRUCTION.

11- STIRRUPS, HOOKS, SPLICES AND REINFORCEMENT BAR SPACING DETAILS.



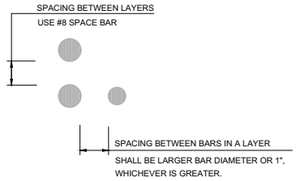
STIRRUPS AND TIE HOOKS

BAR DIA	D
#3	2¼"
#4	3"
#5	3 3/4"

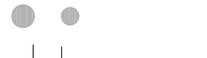


COLUMN SPLICE (TYP.)

BEAM SPLICE (TYP.)

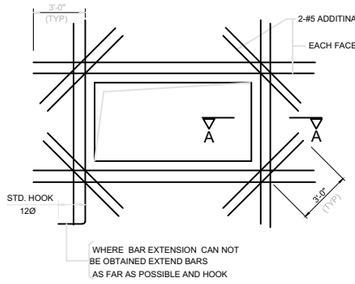


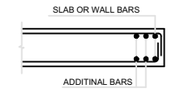
BAR SPACING IN BEAM



VERTICAL BAR SPACING IN COLUMNS

12- REINFORCEMENT DETAIL AT OPENING IN SLAB/SLEEVES.

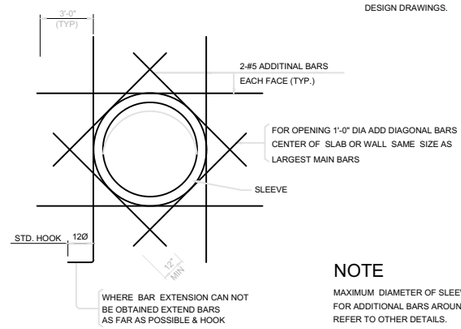




SECTION A-A

NOTES

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



NOTE

MAXIMUM DIAMETER OF SLEEVE IS 1'-0"
FOR ADDITIONAL BARS AROUND LARGER SLEEVE REFER TO OTHER DETAILS.

CLIENT:

LOCAL GOVERNMENT & COMMUNITY DEVELOPMENT DEPARTMENT

PROJECT:

PUNJAB INCLUSIVE CITIES PROGRAM: STORM WATER FACILITIES IN HAROONABAD CITY

CONSULTANTS:

ENGINEERING AXIS

SUNJIN ENGINEERING & ARCHITECTURE

ISSUE	DESCRIPTION	DATE	REV.	DRN.	REC.	APRD.
00	PC1 - DRAWINGS	12-11-2026				

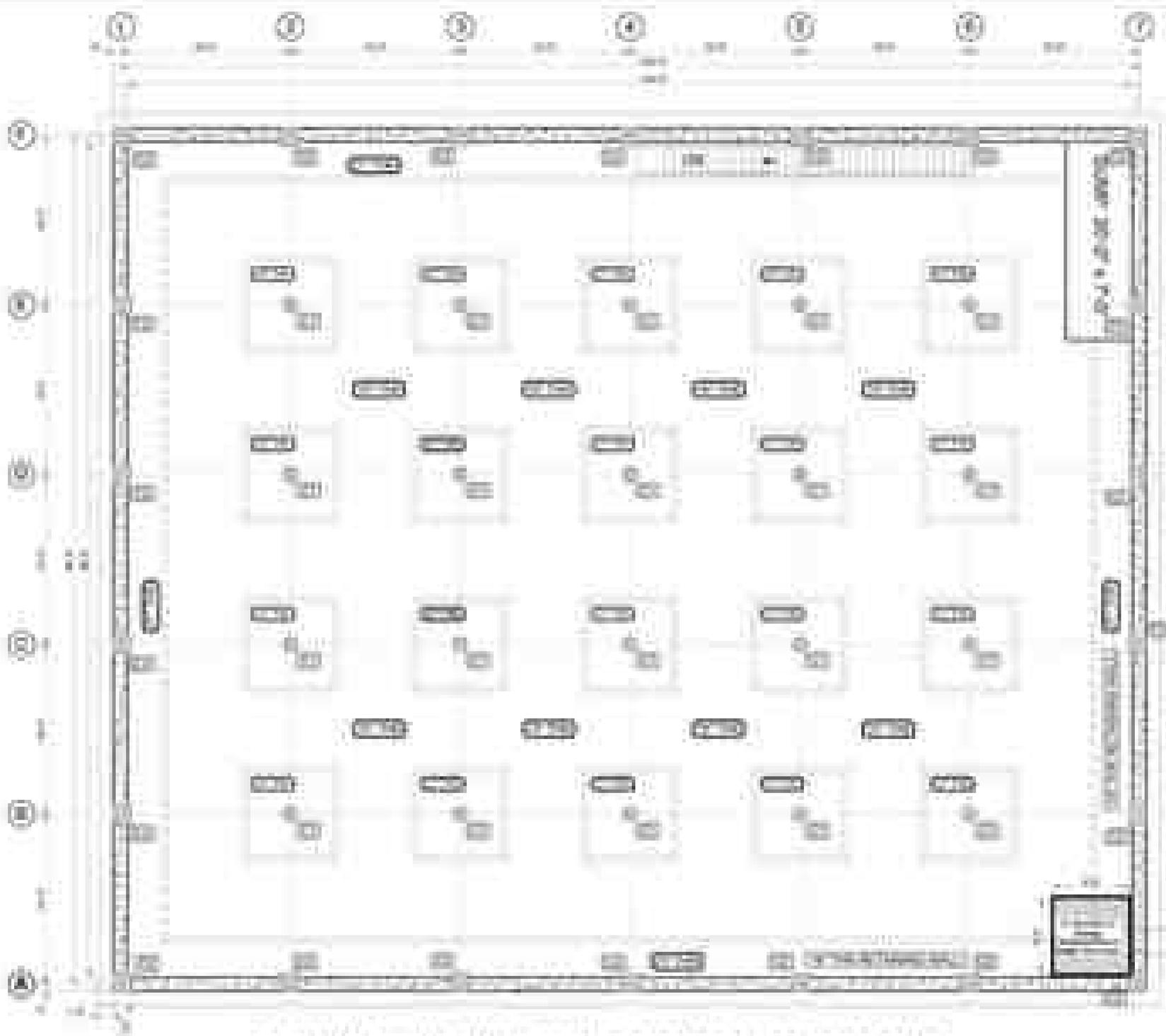
DRAWING TITLE: GENERAL NOTES FOR UNDERGROUND STORAGE TANK

SCALE: N.T.S

DRAWING NO: PMDFC/SWD/HRD/14/06

SHEET: (1 OF 8)

ACTUAL SHEET SIZE: A3



GENERAL ARRANGEMENT LAYOUT PLAN OF COLLECTION TANK

ENGINEERING AXIS

A3

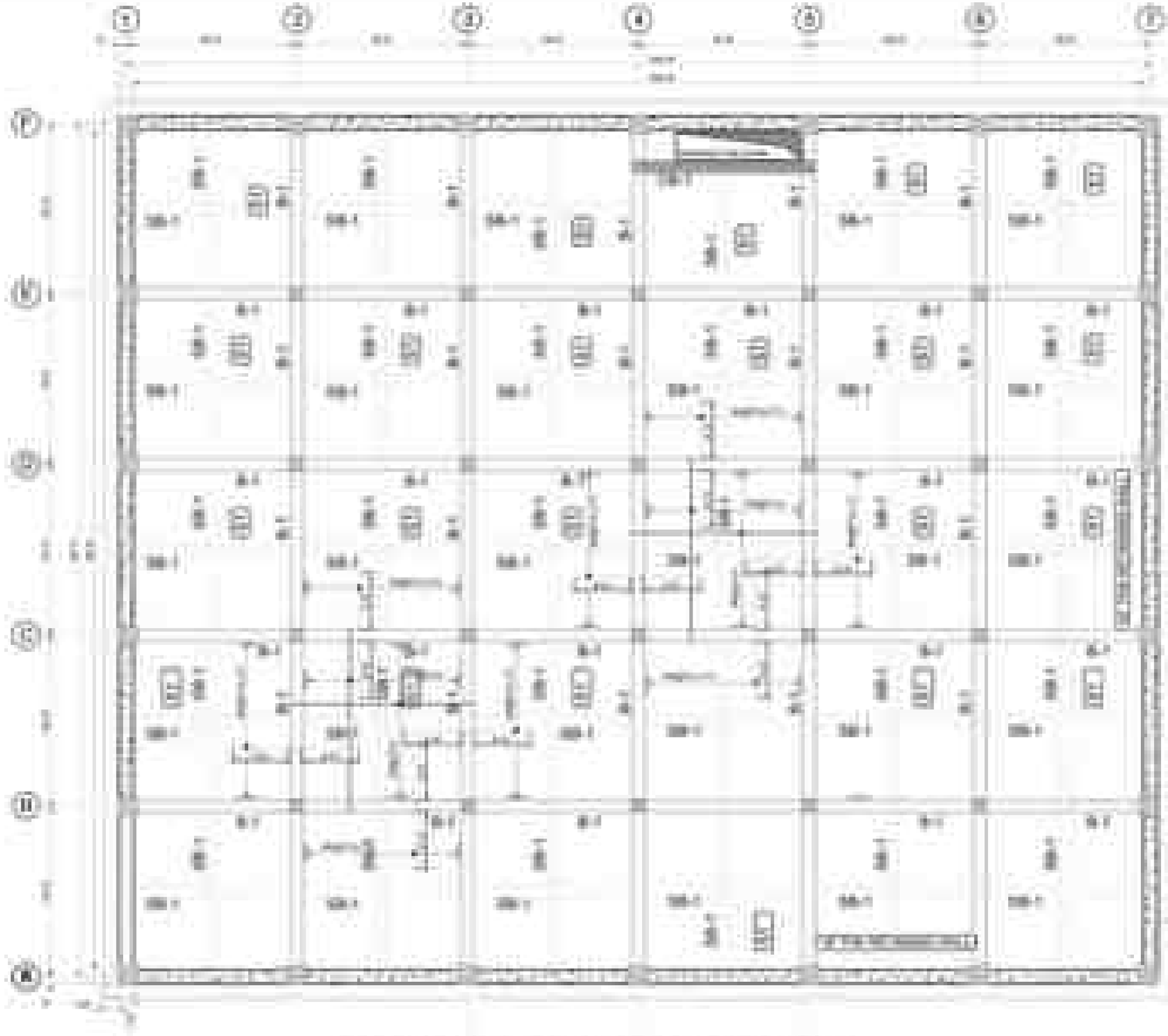


FOOTING LAYOUT PLAN OF COLLECTION TANK

ENGINEERING AXIS

SUNJAN

A3

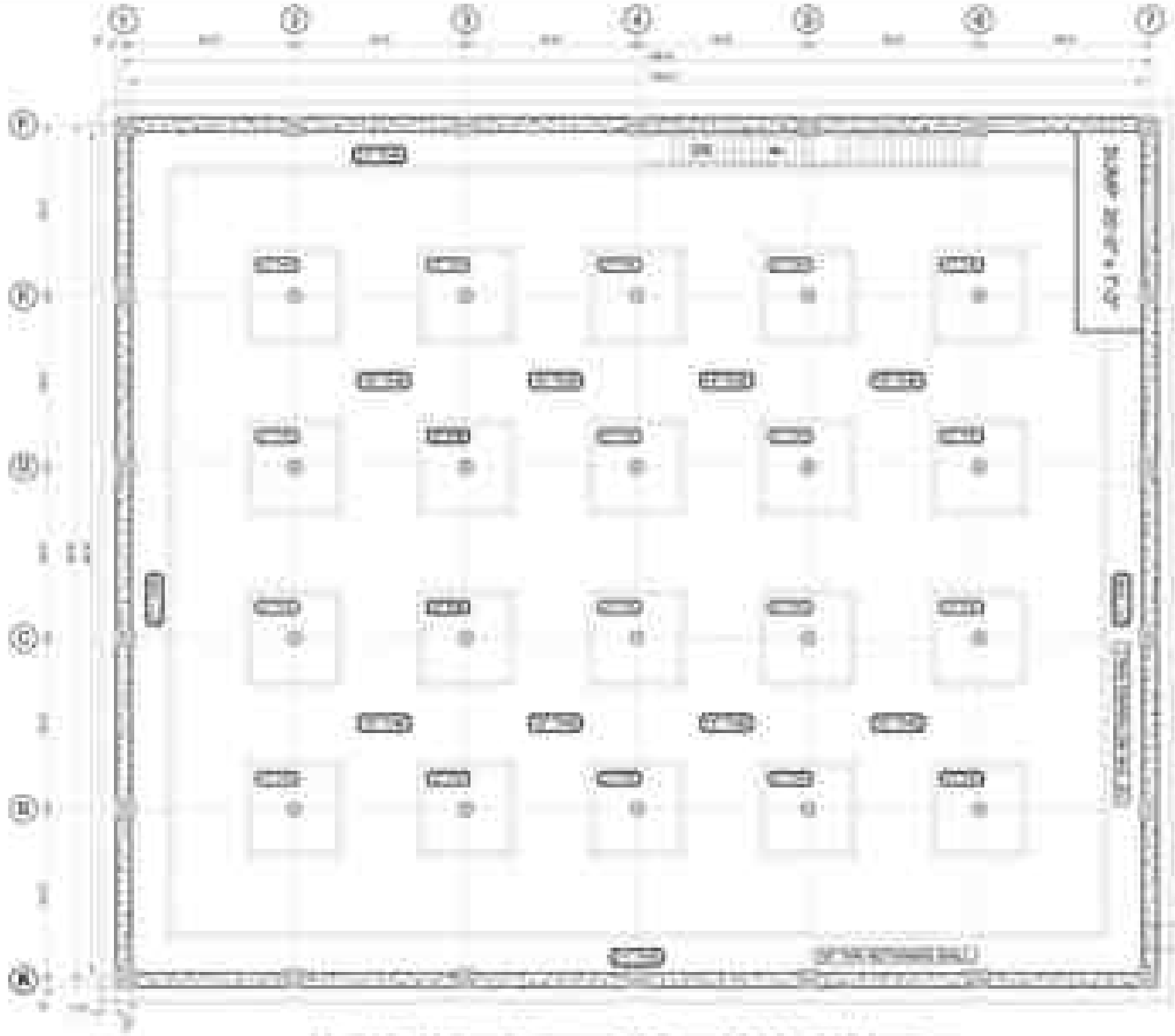


TOP SLAB LAYOUT PLAN OF COLLECTION TANK

ENGINEERING AXIS

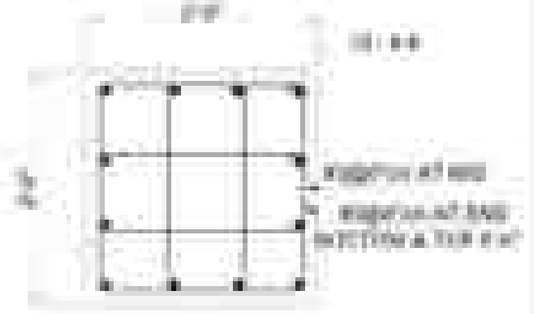
SUNJIN

A3





COLUMN C1

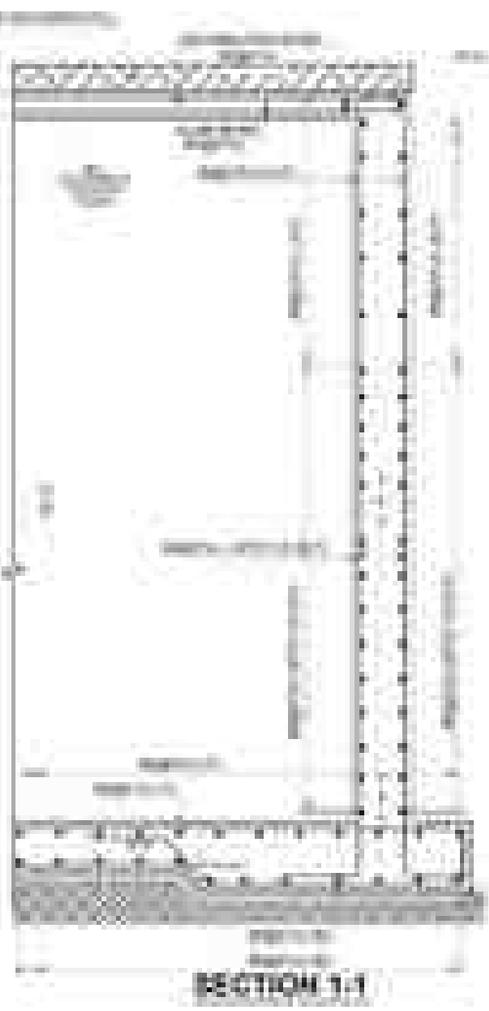


COLUMN C2

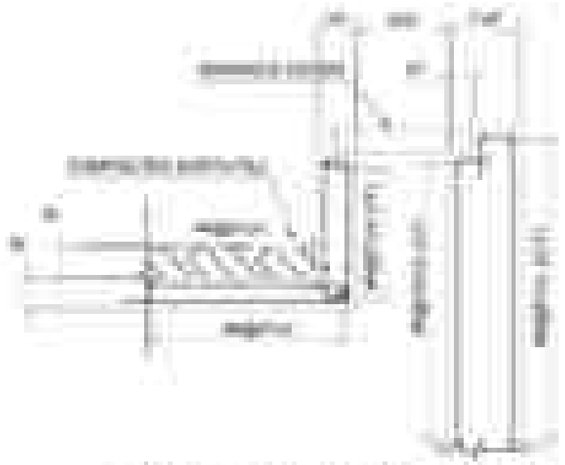
CONSTRUCTION JOINT LAYOUT PLAN OF COLLECTION TANK



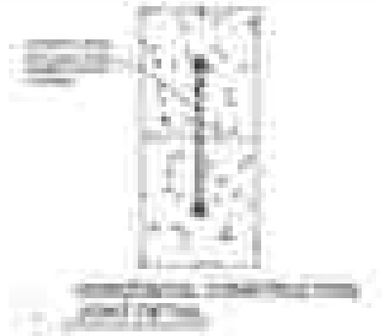
SECTION CONCRETE OUT LINE

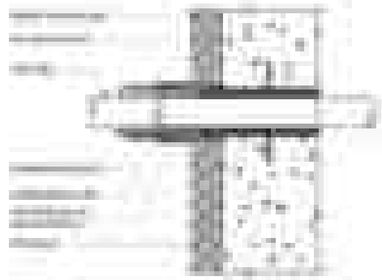


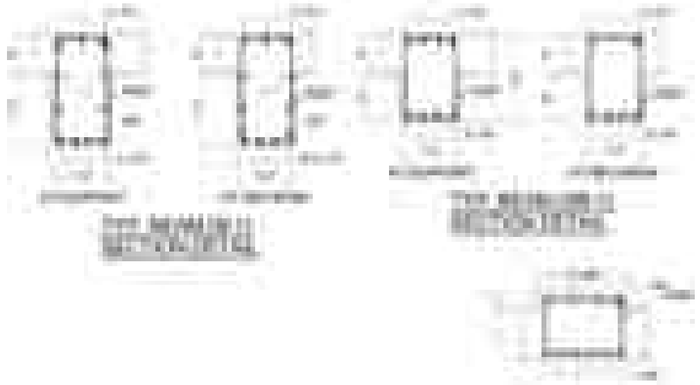
SECTION 1-1



TYPICAL MANHOLE DETAIL







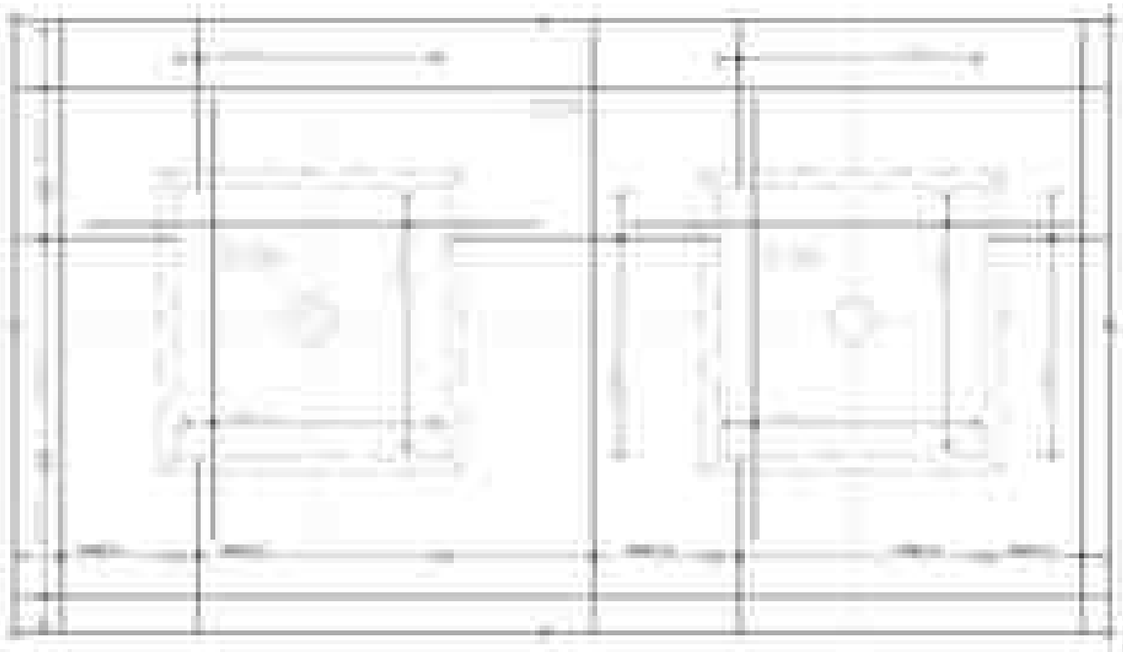


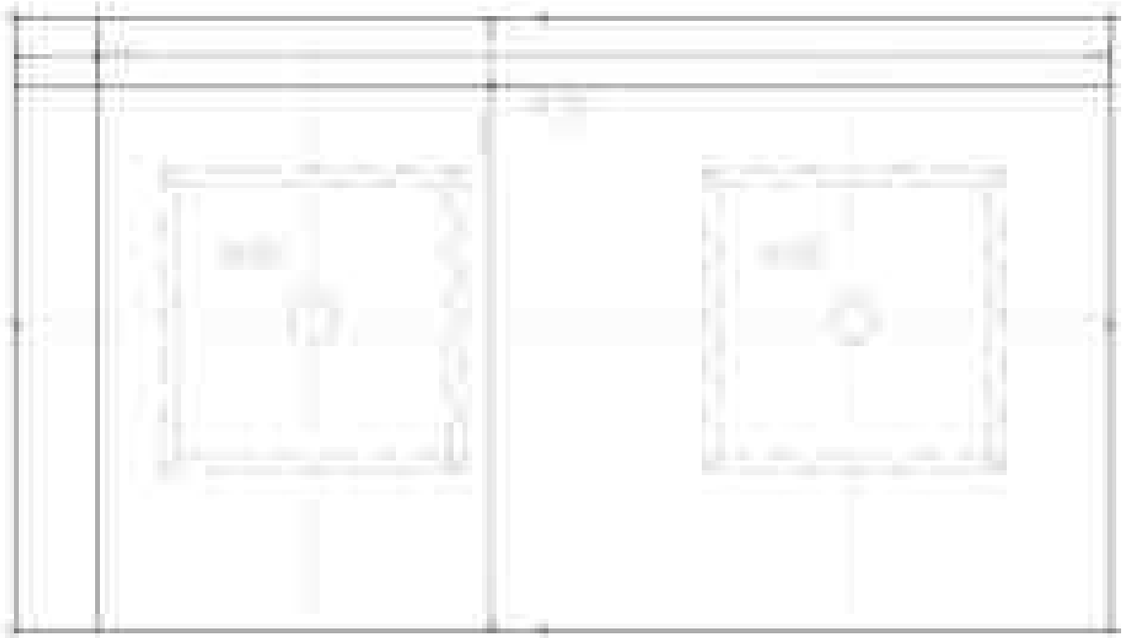
BEAM REINFORCEMENT SCHEDULE

MARK	SIZE	LONGITUDINAL REINFORCEMENT				LINKS	
		A	B	C	D	A	B



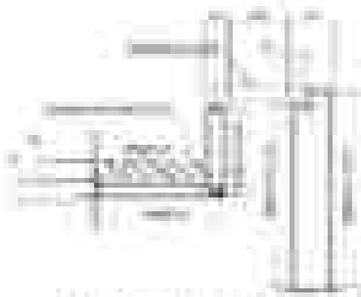








CONCRETE CUTOFF SECTION A-A



TYPICAL WINGWALL DETAIL

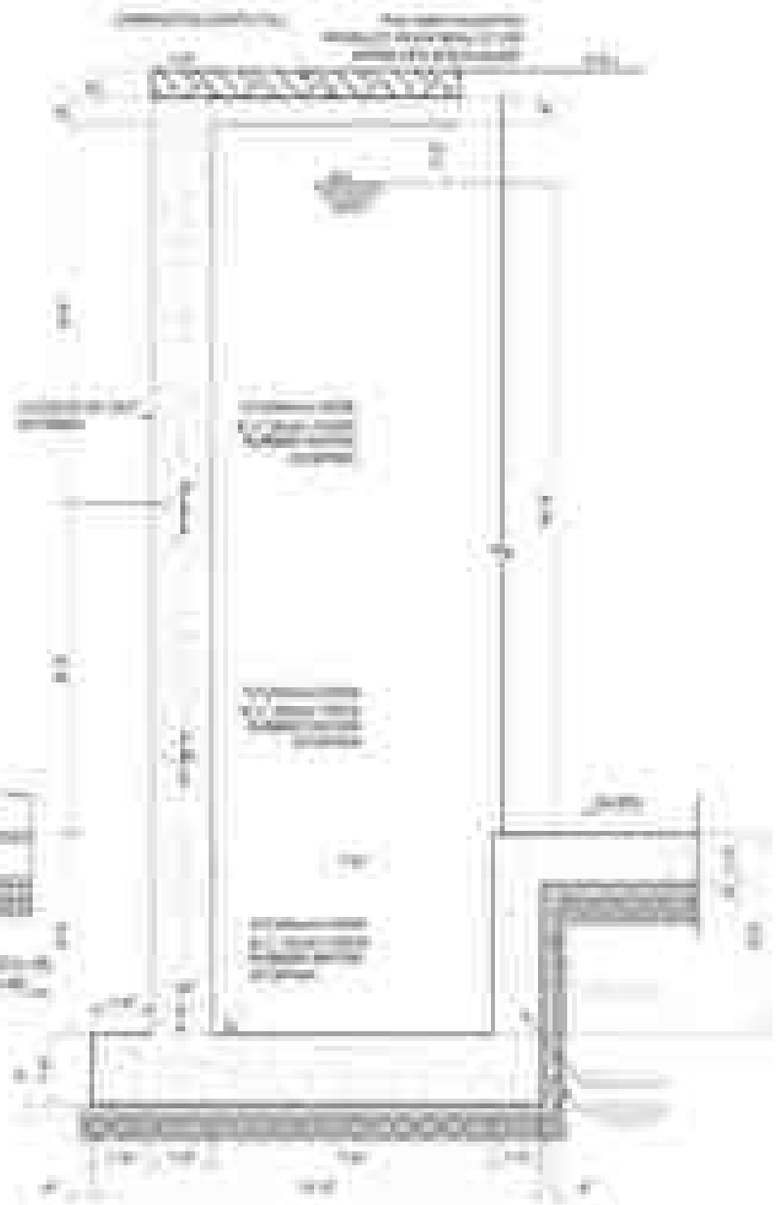


SECTION A-A

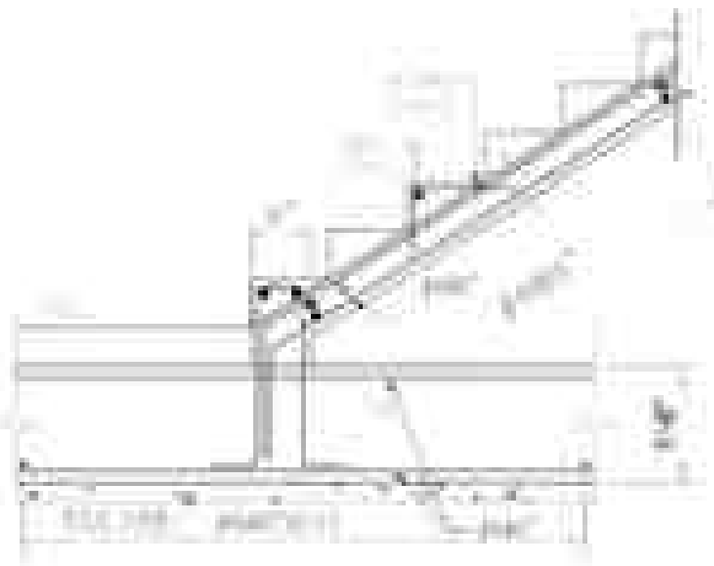




SECTION 3-3



SECTION CONCRETE OUT LINE



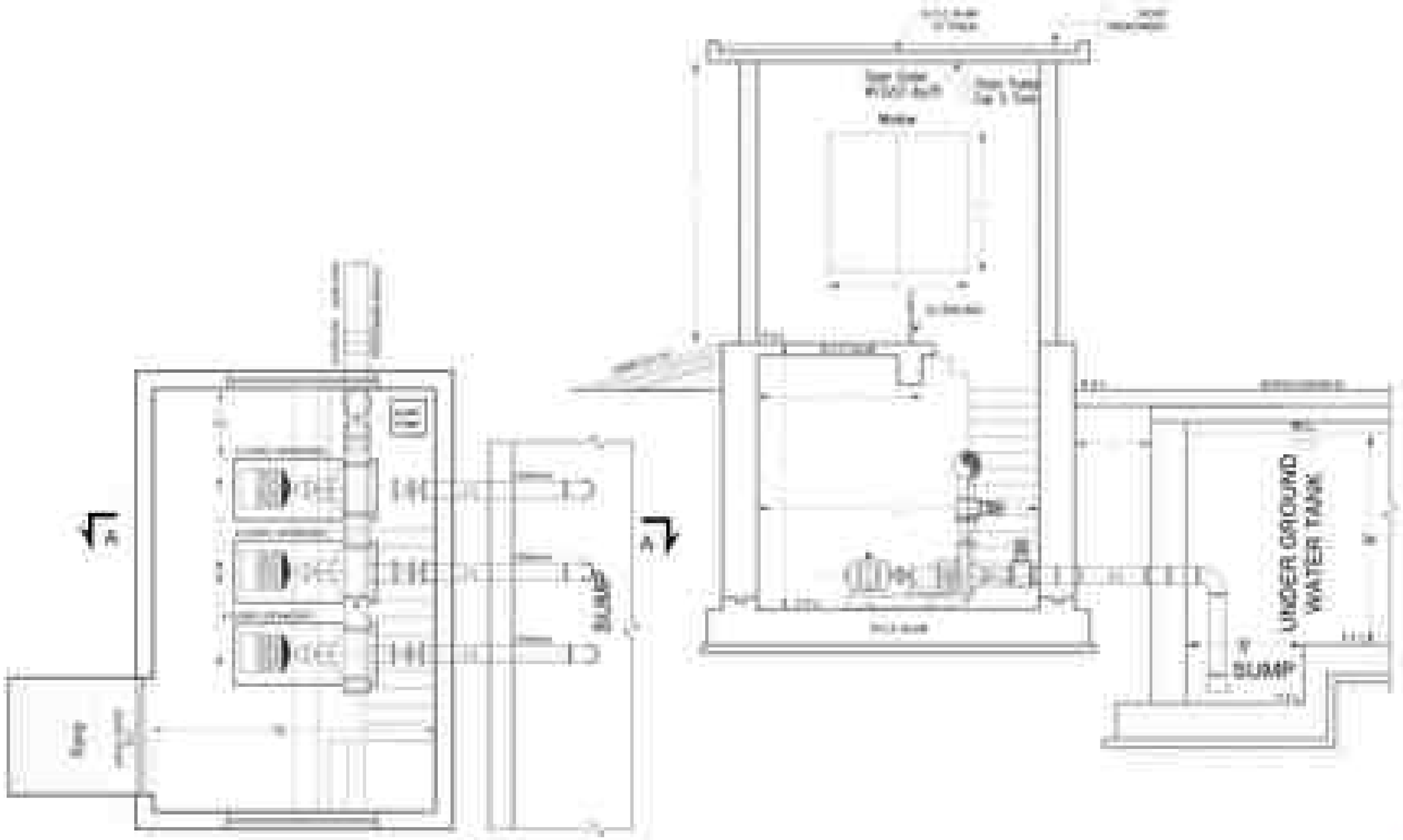
STAIR DETAIL





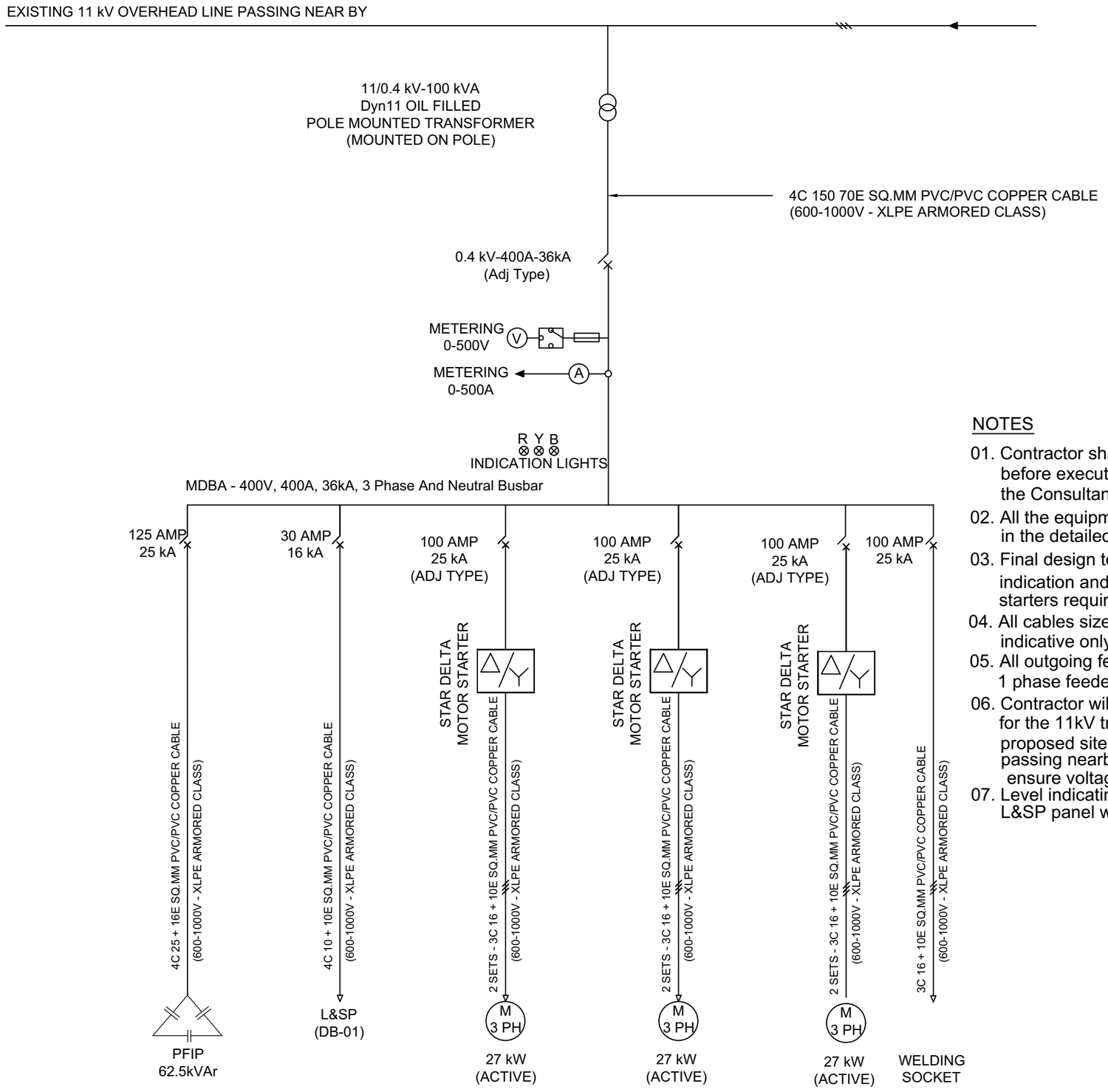






UNDER GROUND
WATER TANK SUMP

A3

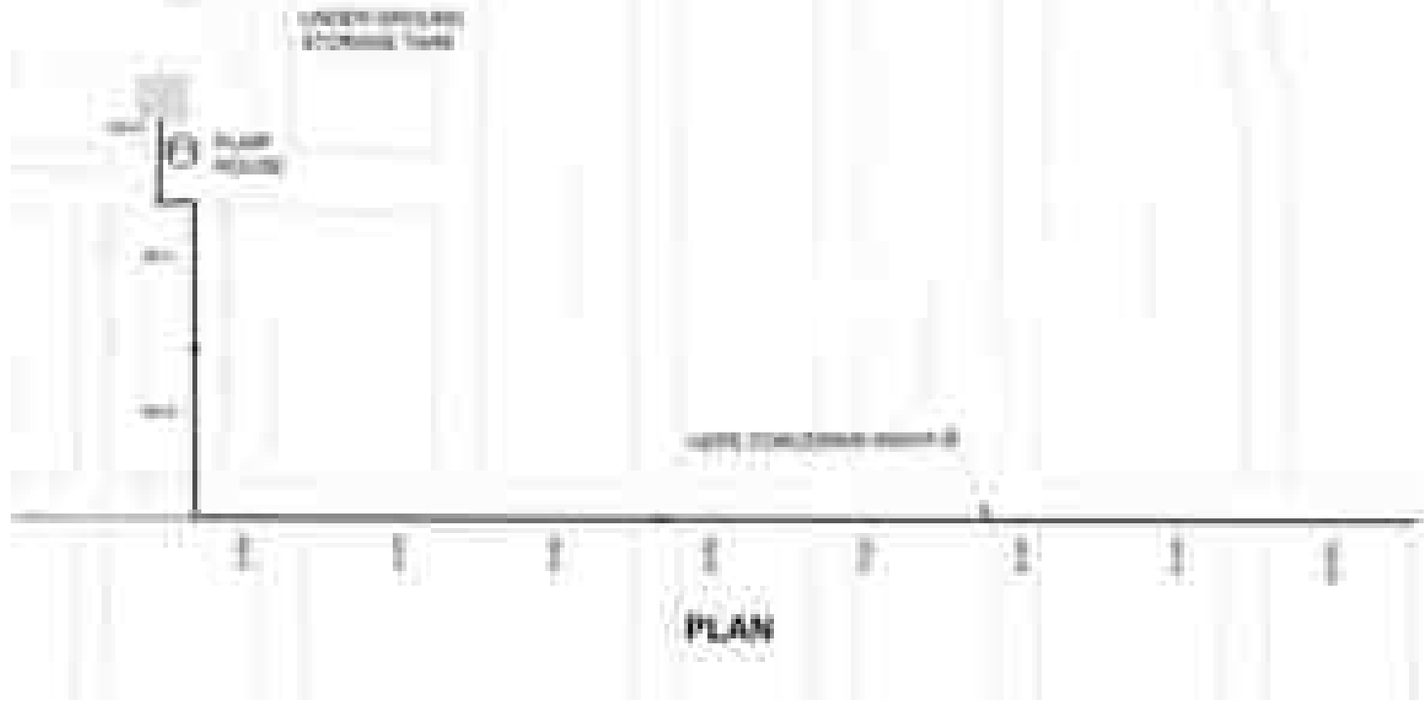


NOTES

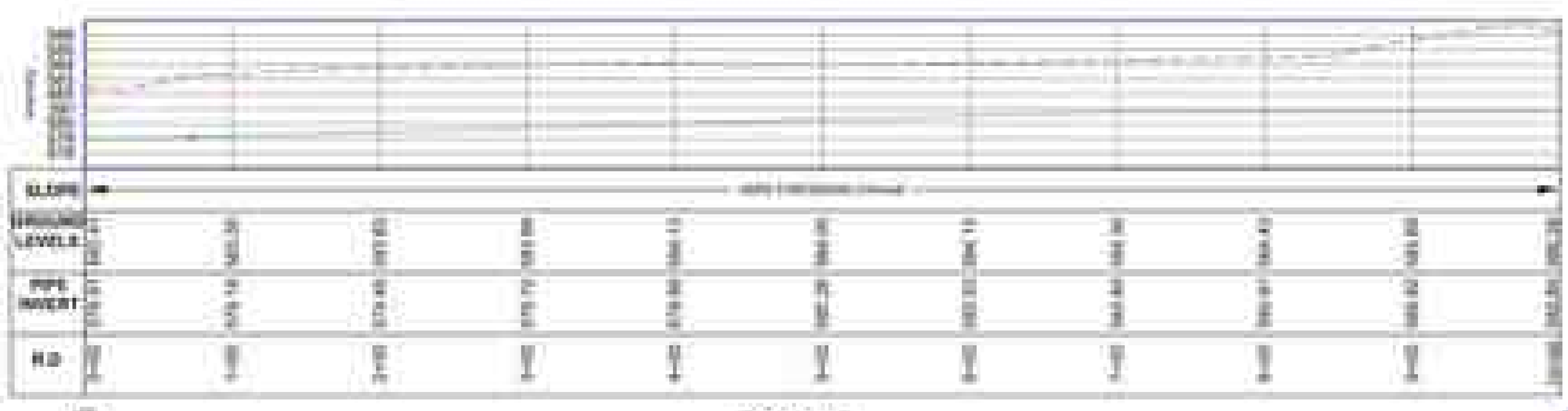
01. Contractor shall submit the detailed design before execution and shall get approval from the Consultant Engineer at site.
02. All the equipment layout plans will be finalized in the detailed design stage of this project.
03. Final design to include all CTs, VTs, protection, indication and metering equipment and motor starters required for safe and efficient operation.
04. All cables sizes, loads, breaker ratings, etc. are indicative only and may change in detailed design.
05. All outgoing feeders shown as 3 phase feeders, 1 phase feeders to be used where necessary.
06. Contractor will cordinate with WAPDA agency for the 11kV transmission line extension up to proposed site from existing 11kV lines passing nearby incase required. Contractor shall ensure voltage drops with in acceptance limits.
07. Level indicating switches to be powered up from L&SP panel with AC to DC converter.

SINGLE LINE DIAGRAM MAIN DISTRIBUTION BOARD - MDB

CLIENT: LOCAL GOVERNMENT & COMMUNITY DEVELOPMENT DEPARTMENT	CONSULTANT:	PROJECT: PUNJAB INCLUSIVE CITIES PROGRAM STORM WATER FACILITIES IN CHISHTIAN CITY					DRAWING TITLE: PUMP HOUSE - ELECTRIFICATION
			00	PC1 - DRAWINGS	MAR, 2026		DRAWING NO: PMDFC/SWD/HRD/14/08
			ISSUE	DESCRIPTION	DATE	REV. DRN. REC. APRD.	SHEET: (1 OF 1)
							SCALE: ACTUAL SHEET SIZE A3



PLAN

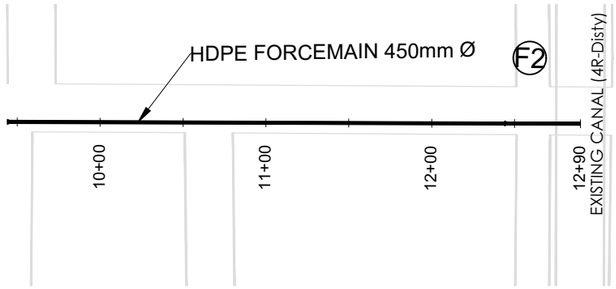


PROFILE

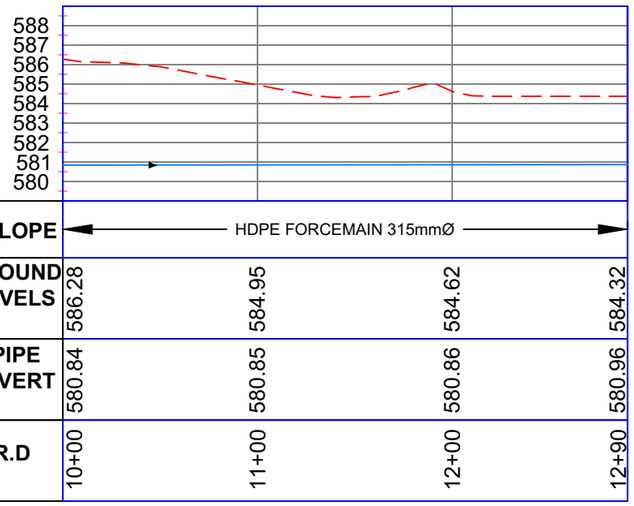
LEGEND:

1. NSL
2. PIPE TOP LEVEL

A3



PLAN



SLOPE	HDPE FORCEMAIN 315mmØ				
GROUND LEVELS	586.28	584.95	584.62	584.32	
PIPE INVERT	580.84	580.85	580.86	580.96	
R.D	10+00	11+00	12+00	12+90	

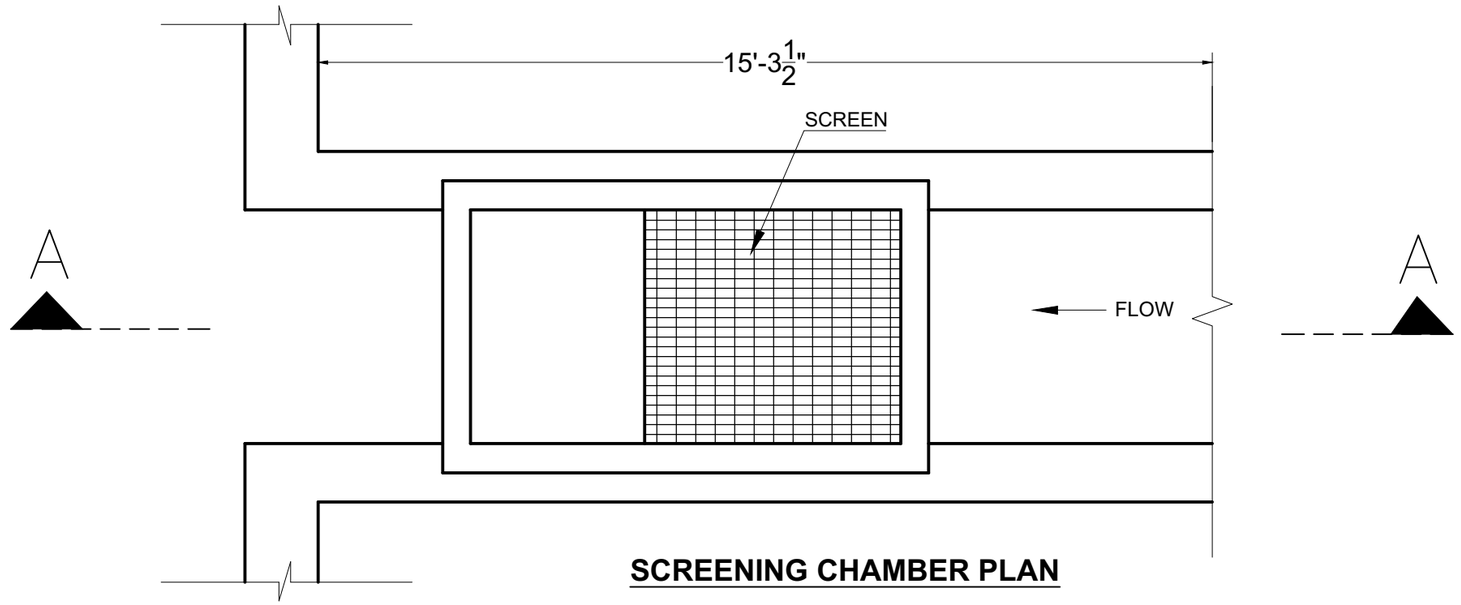
PROFILE

F2

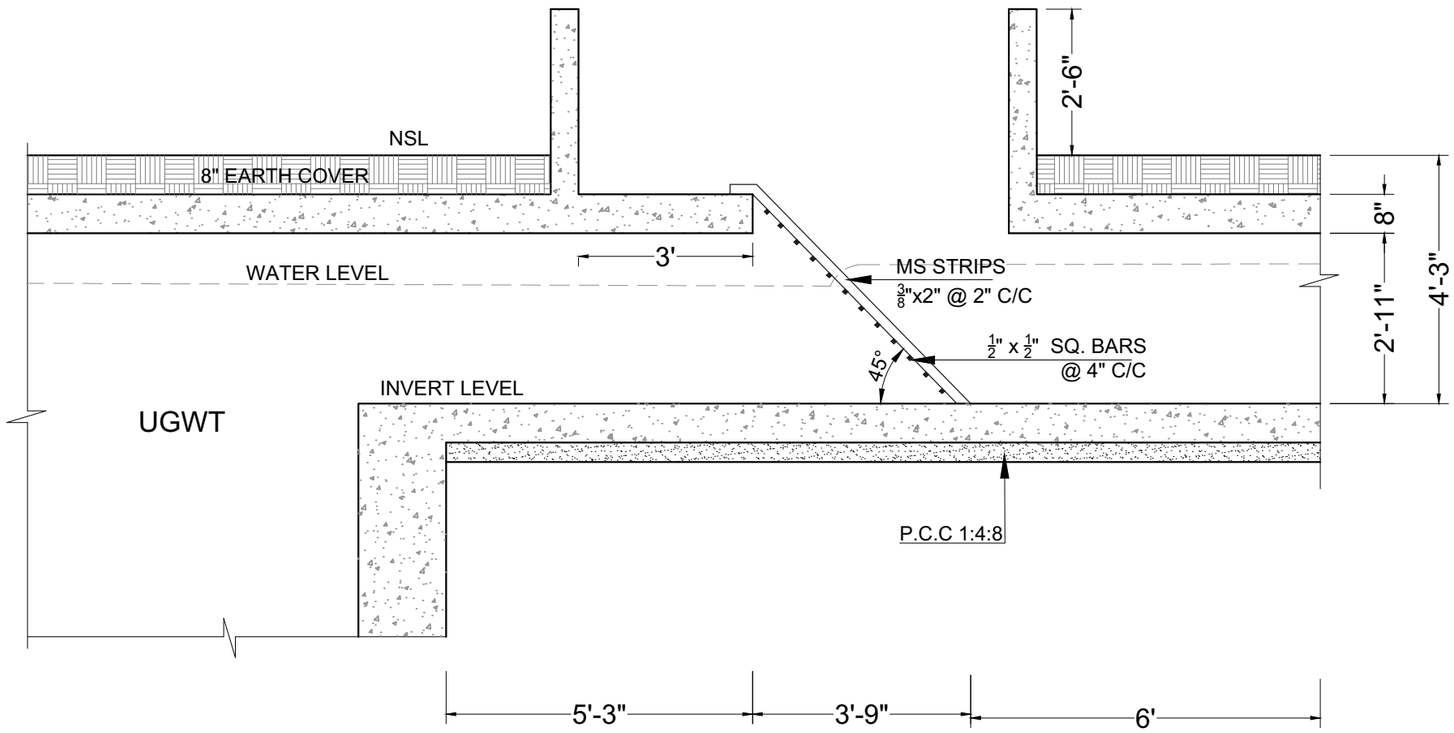
LEGEND:

1. NSL
2. PIPE TOP LEVEL

CLIENT: LOCAL GOVERNMENT & COMMUNITY DEVELOPMENT DEPARTMENT	CONSULTANT:	PROJECT: PUNJAB INCLUSIVE CITIES PROGRAM: STORM WATER FACILITIES IN HAROONABAD CITY							DRAWING TITLE: HDPE FORCEMAIN 450mm Ø - PLAN & PROFILE	SCALE H 1"=80' V 1"=8'
									DRAWING NO: PMDFC/SWD/HRD/14/09	SHEET: (2 OF 2)	ACTUAL SHEET SIZE A3
			00	PC1 - DRAWINGS	MAR, 2026						
			ISSUE	DESCRIPTION	DATE	REV.	DRN.	REC.	APRD.		



SCREENING CHAMBER PLAN



SECTION A-A

CLIENT: LOCAL GOVERNMENT & COMMUNITY DEVELOPMENT DEPARTMENT	CONSULTANT:	PROJECT: PUNJAB INCLUSIVE CITIES PROGRAM: STORM WATER FACILITIES IN HAROONABAD CITY					
			00	PC1 - DRAWINGS	MAR, 2026		
			ISSUE	DESCRIPTION	DATE	REV. DRN. REC. APRD.	

DRAWING TITLE: STORM WATER TANK SCREENING CHAMBER DETAIL

SCALE: 3/8"=1'

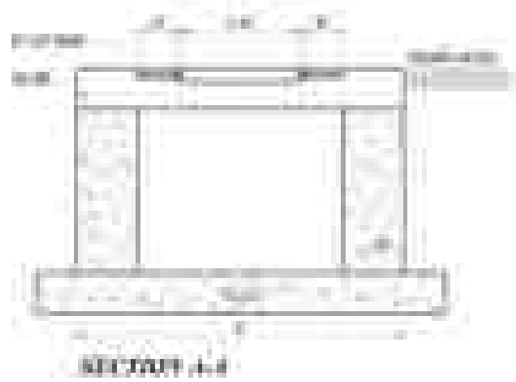
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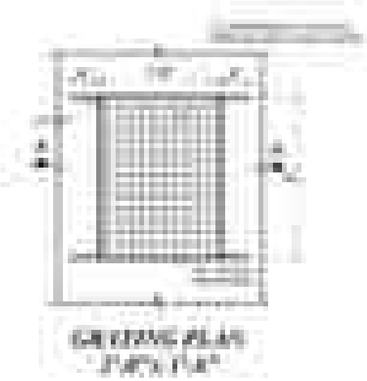
SHEET: (1 OF 1)

ACTUAL SHEET SIZE: A3









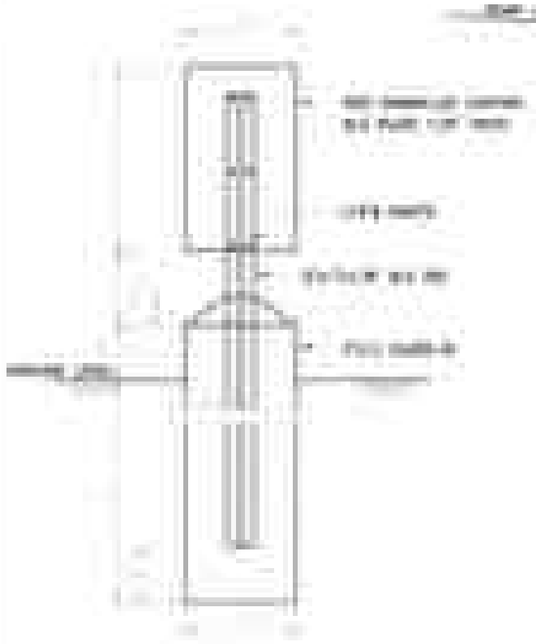




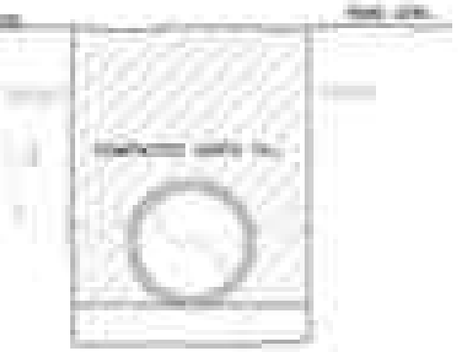




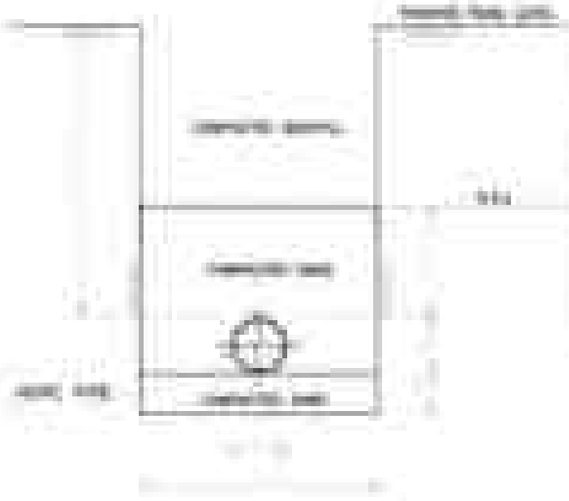
| | | |

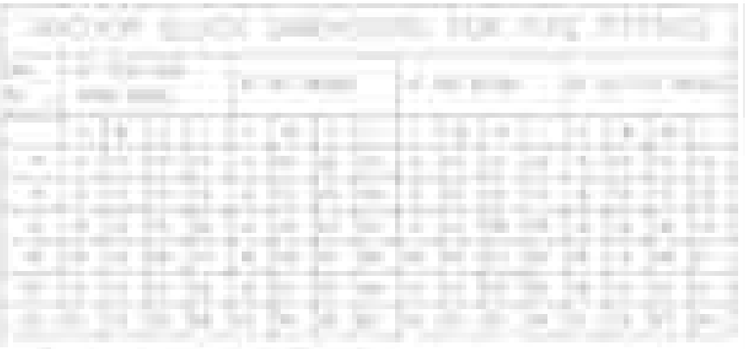


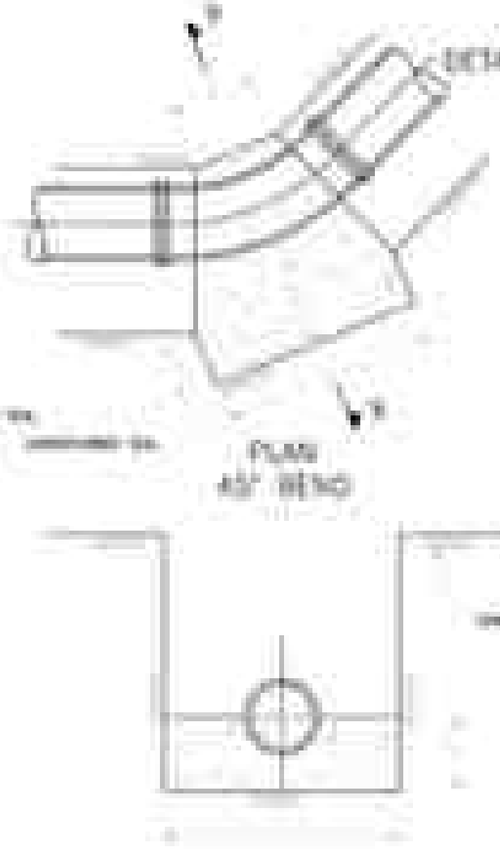
POST MOUNTED



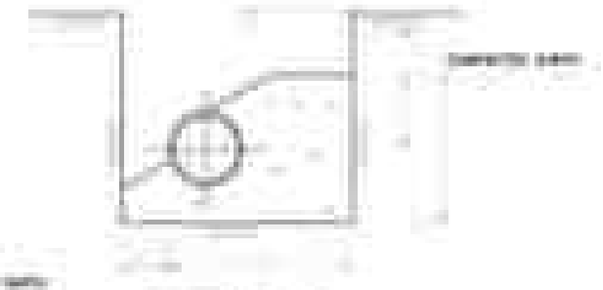
TRENCH DETAIL



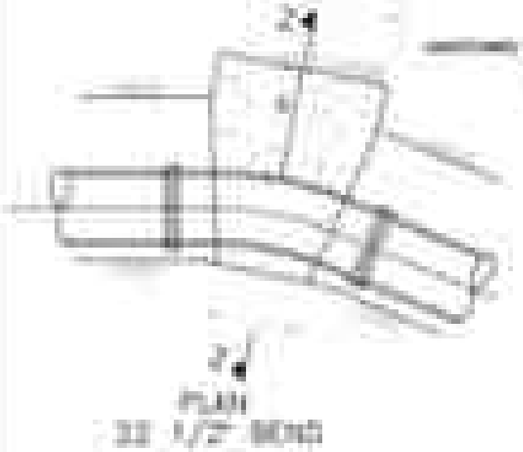




DETAIL FOR PIPE CROSSING UNDER ROAD



SECTION X-X



PLAN
22 1/2° BEND

PLAN
45° BEND

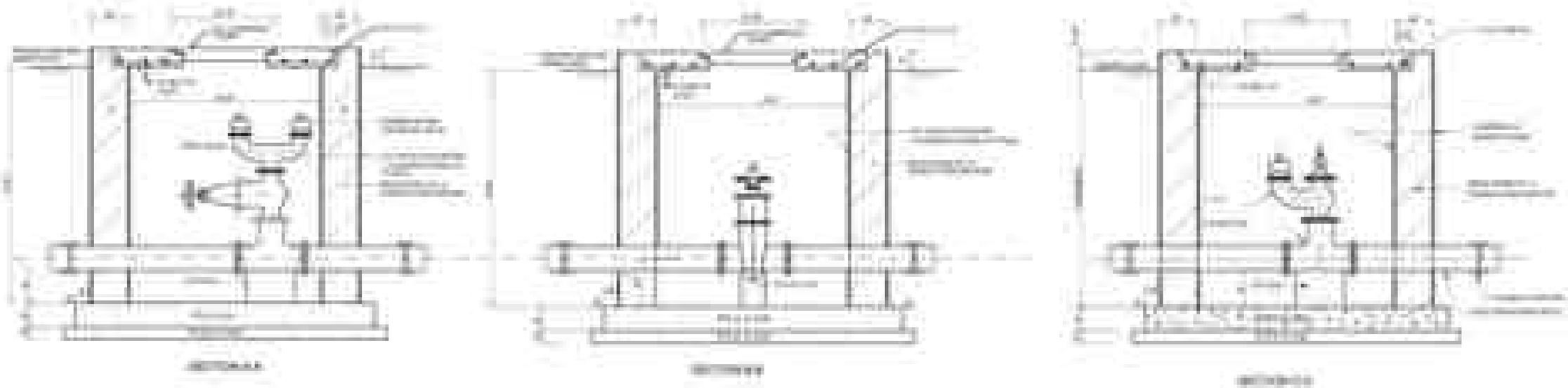
SECTION Z-Z

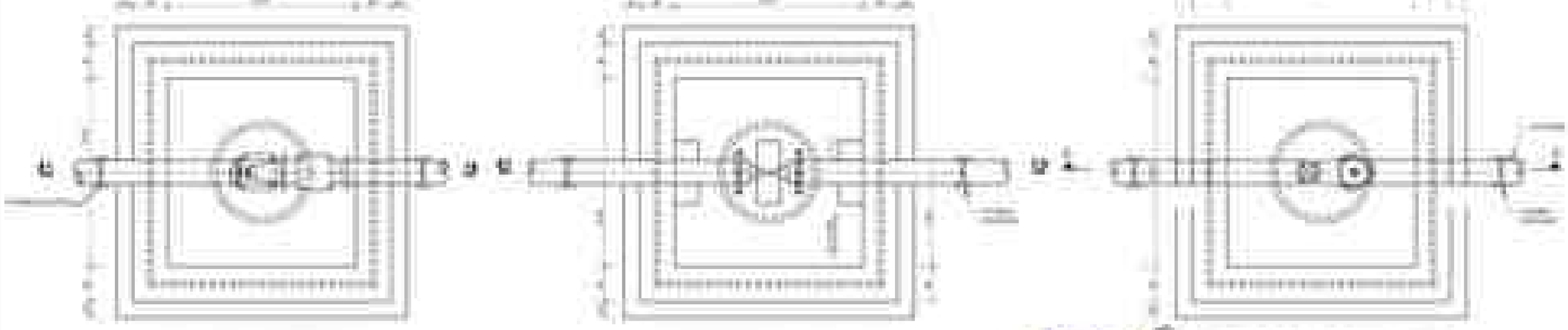


PLAN
90° BEND

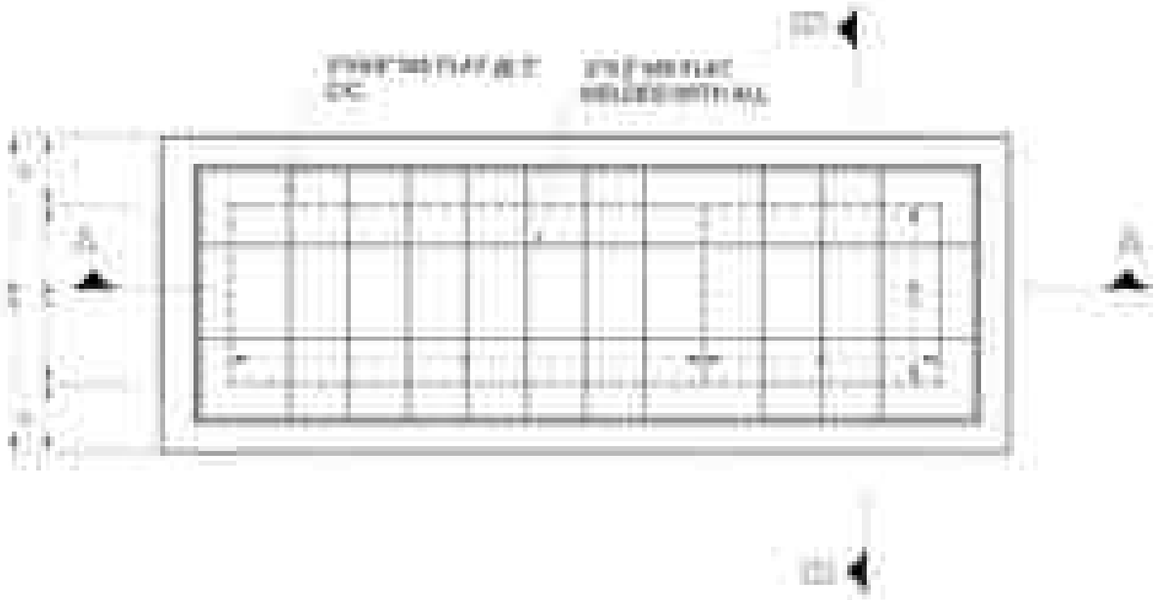
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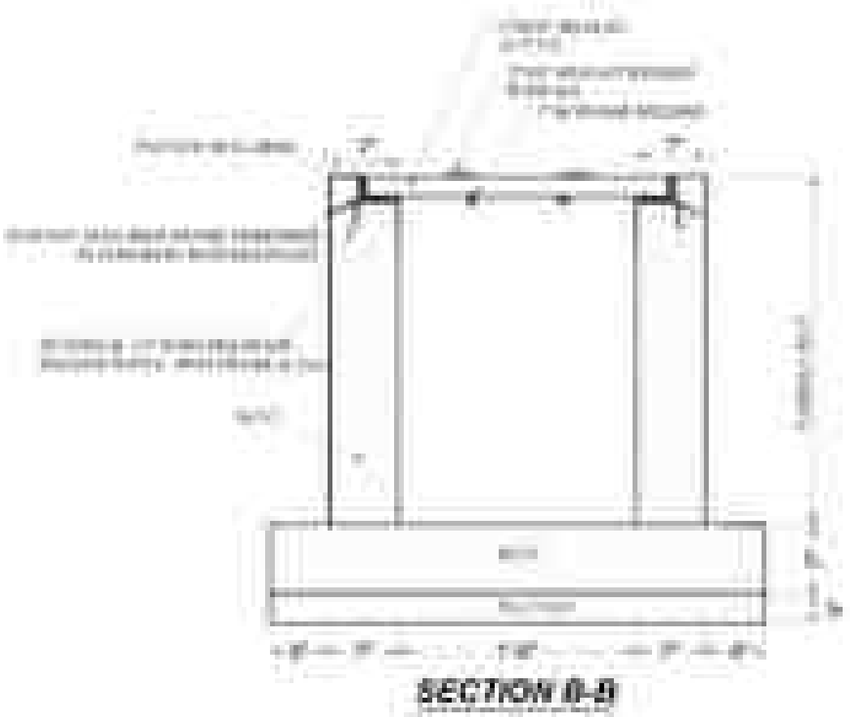




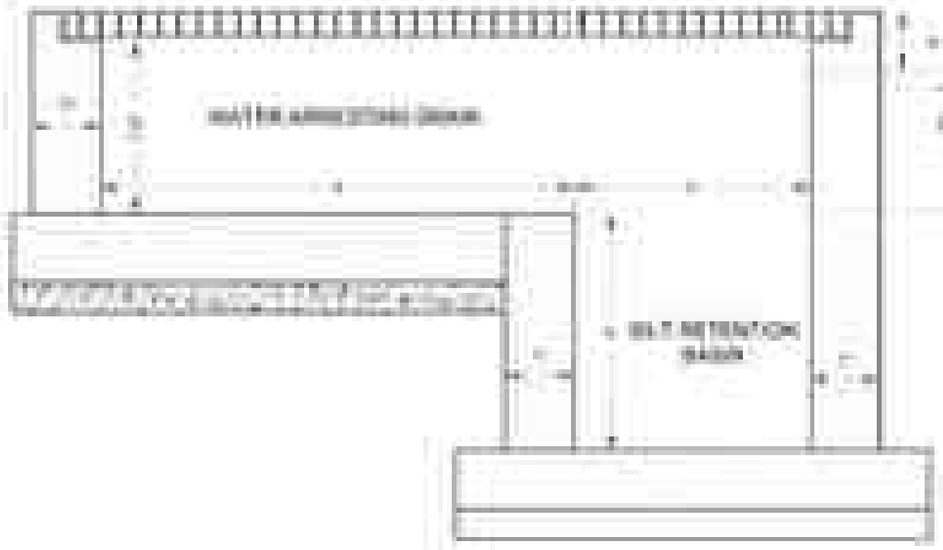


A3

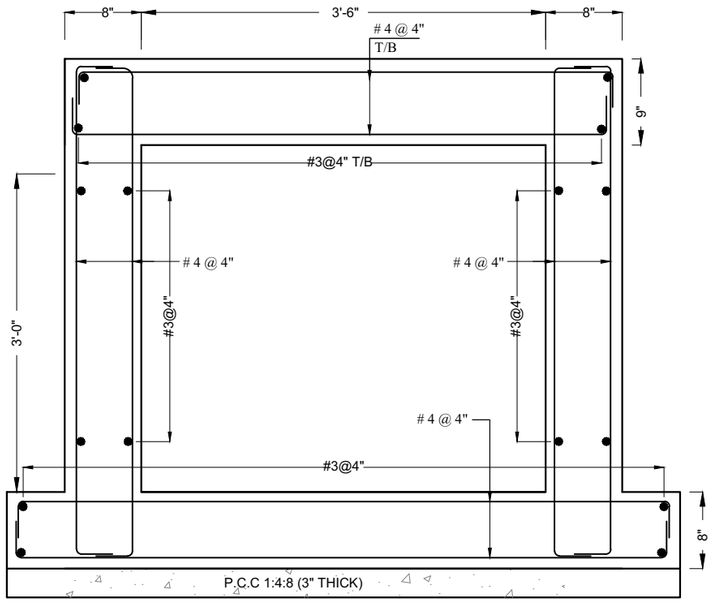




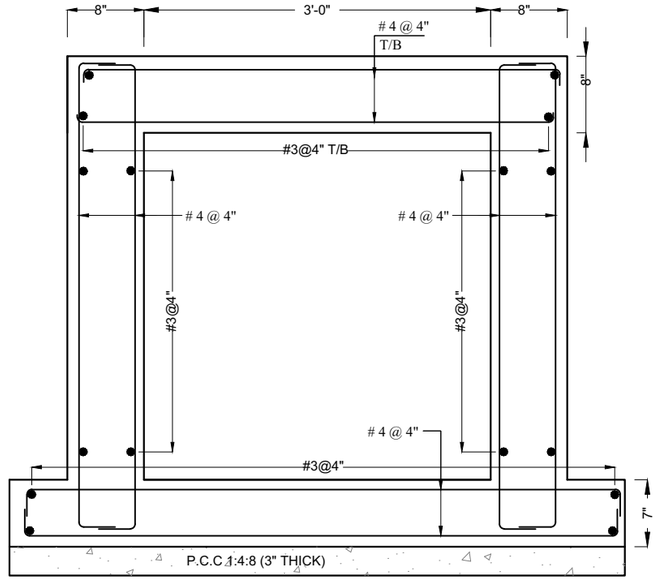
SECTION B-B



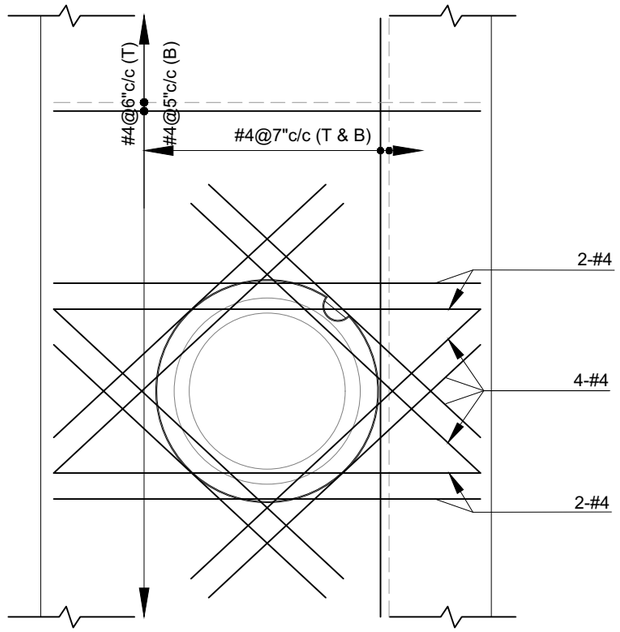
SECTION A-A



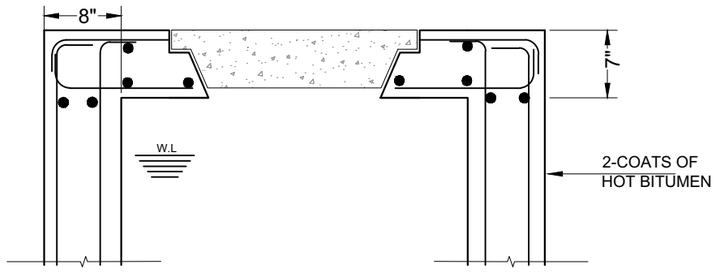
DRAIN SECTION 3'-6"x 3'-0"



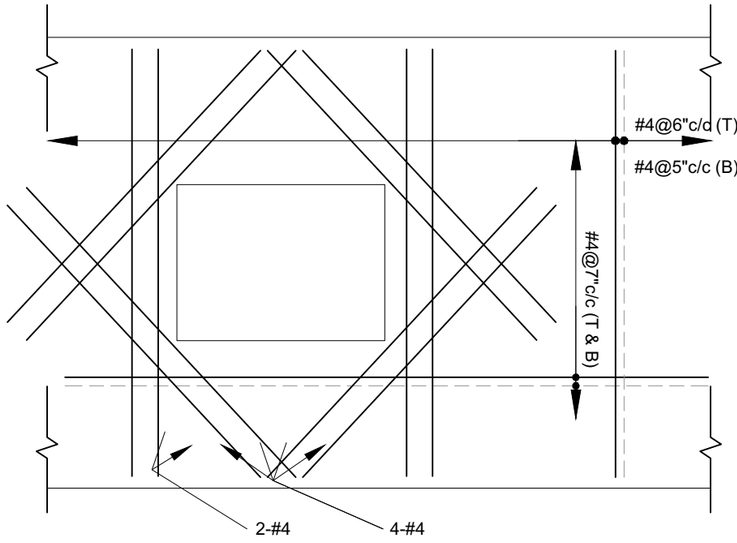
REINFORCEMENT DETAIL
3'-0" x 3'-0"



REINFORCEMENT LAYOUT
PLAN AT MANHOLE



CROSS SECTION AT MANHOLE CENTER



REINFORCEMENT LAYOUT
PLAN AT GRATING



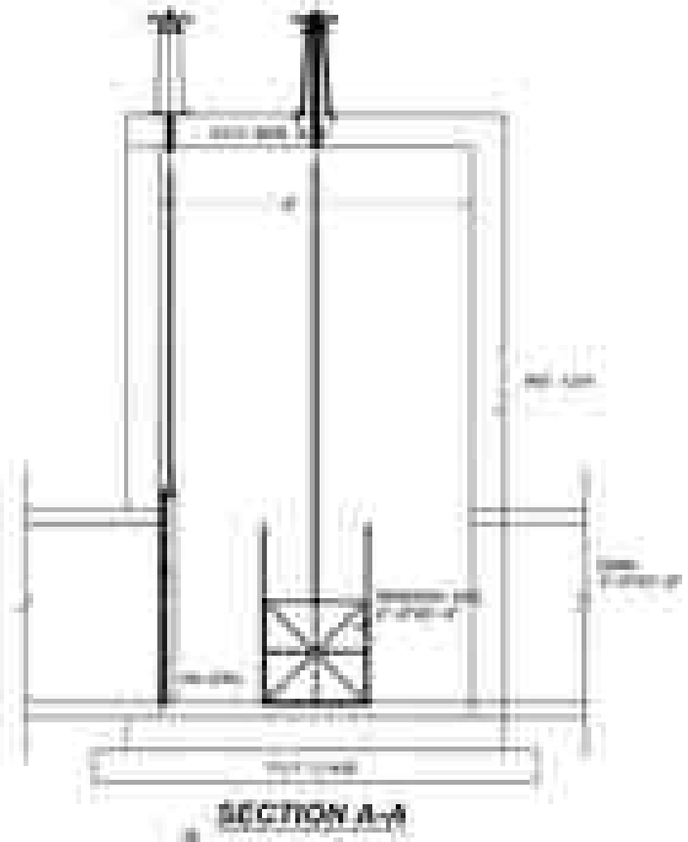
CLIENT:
LOCAL GOVERNMENT & COMMUNITY DEVELOPMENT DEPARTMENT

CONSULTANT:

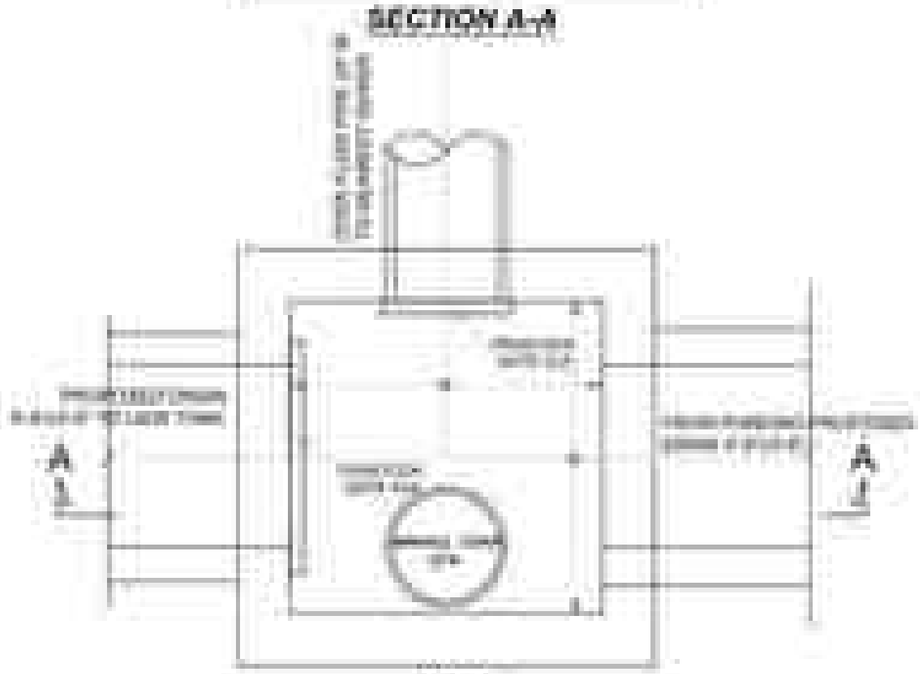
PROJECT:
PUNJAB INCLUSIVE CITIES PROGRAM:
STORM WATER FACILITIES
IN HAROONABAD CITY

ISSUE	DESCRIPTION	DATE	REV.	DRN.	REC.	APRD.
00	PC1 - DRAWINGS	MAR, 2026				

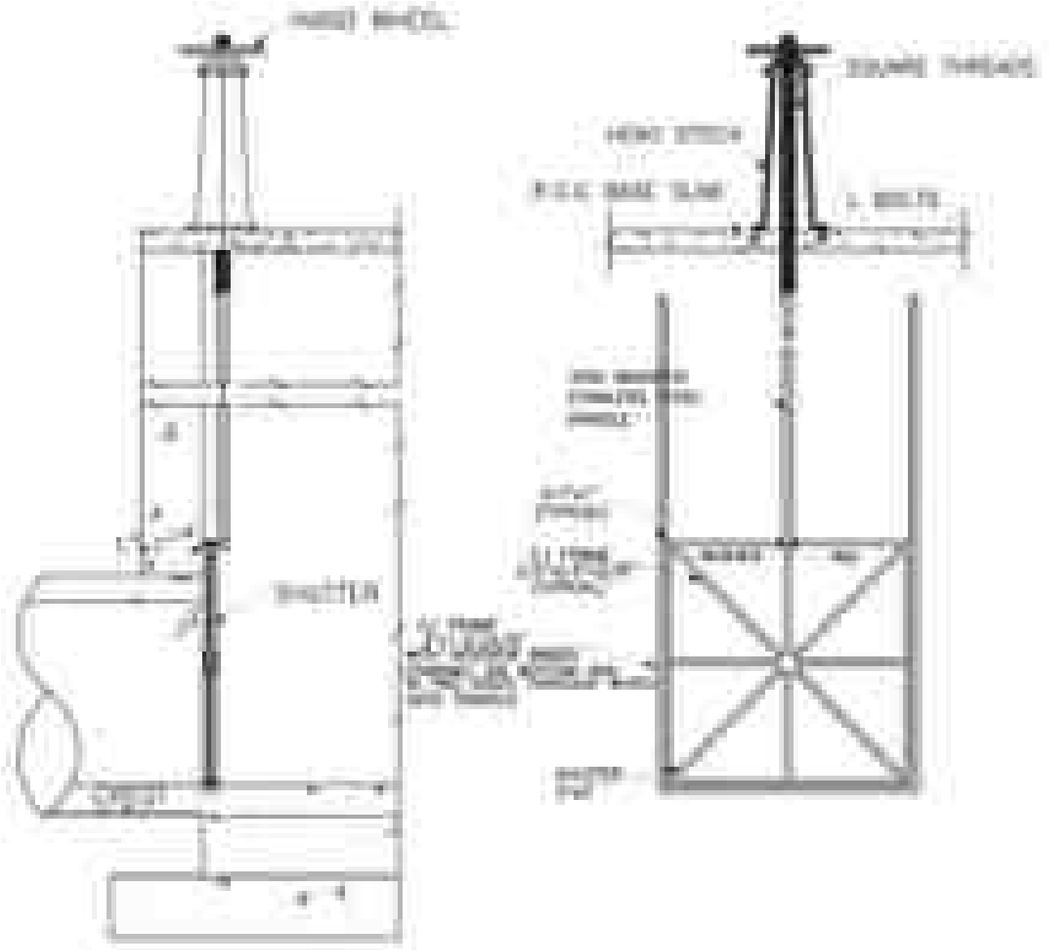
DRAWING TITLE: SECTIONAL & REINFORCEMENT DETAIL OF DRAINS
SCALE: 3/8"=1'
DRAWING NO: PMDFC/SWD/HRD/14/15
SHEET: (1 OF 1)
ACTUAL SHEET SIZE: A3



SECTION A-A

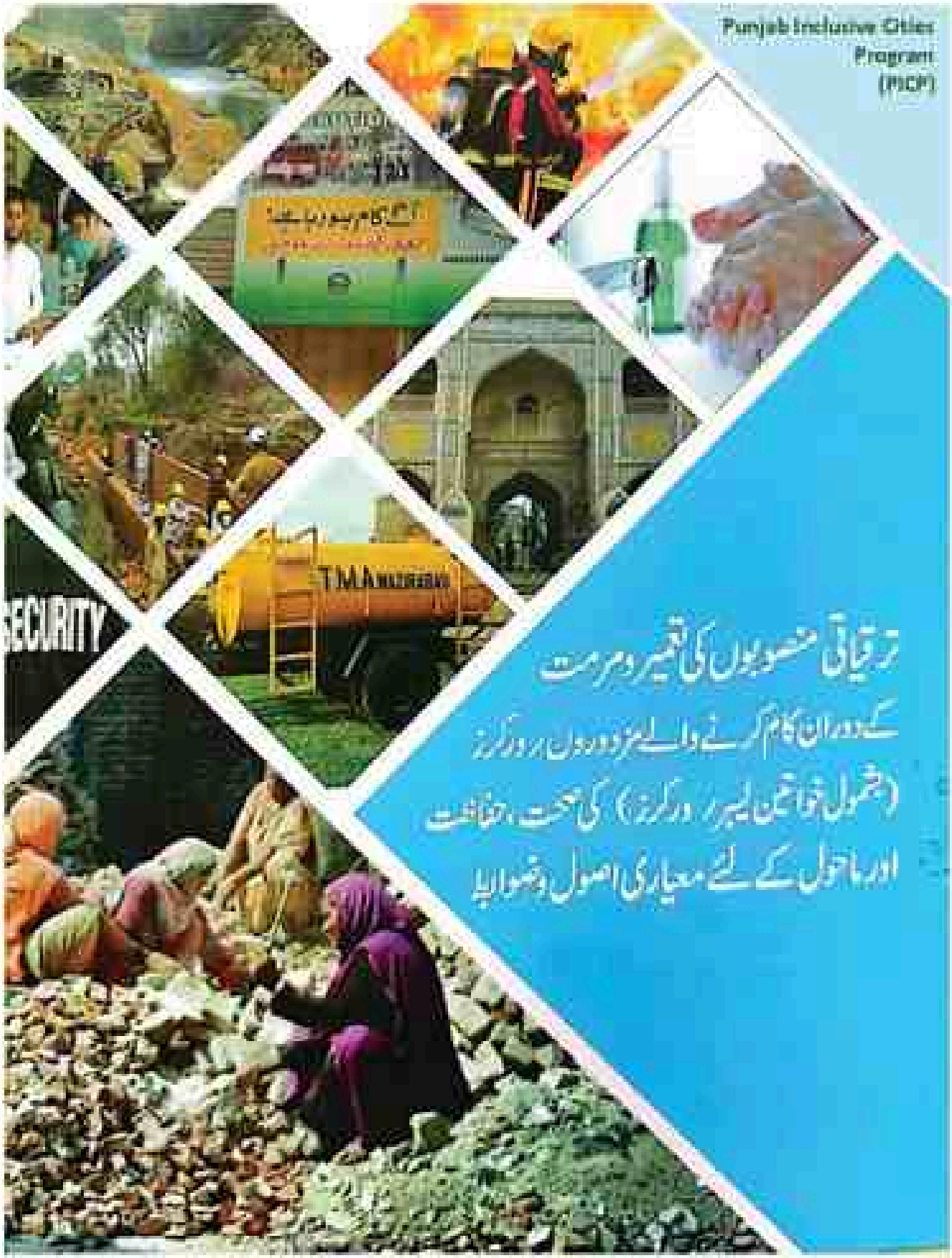


PLAN



PENSTOCK GATE DETAIL

A3


Punjab Inclusive Cities Program (PICP)
ترقیاتی منصوبوں کی تعمیر و مرمت
کے دوران کام کرنے والے مزدوروں (ورکرز)
(بشمول خواتین لیبر ورکرز) کی صحت، حفاظت
اور ماحول کے لئے معیاری اصول و ضوابط
SECURITY

حق اشاعت

جملہ حقوق محفوظ ہیں۔

اس اشاعت کا کوئی بھی حصہ پی ایم ڈی ایف سی (PMDFC) کی پیشگی اجازت کے بغیر کسی بھی شکل میں الیکٹرانکس، مکینیکل، فوٹو کاپی، ریکارڈنگ یا کسی اور طرح سے دوبارہ بنایا یا منتقل نہیں کیا جا سکتا۔

(۱) لیبر کیمپس کے لئے معیاری اصول و ضوابط

سرگرمیاں

۱. مزدور / لیبر کیلئے عارضی کیمپ / رہائش گاہ کے انتظام و قیام کے لئے جگہ کا انتخاب

مسائل



- مقامی آبادی کے وسائل پر اضافی بوجھ
- مقامی آبادی سے تنازعات کا خطرہ
- سماجی، مذہبی اور سیکیورٹی کے مسائل۔

حفاظتی اقدامات

ٹھیکیدار لیبر کیمپس کے قیام کے وقت مندرجہ ذیل باتوں کا خیال رکھے گا:

- کیمپس ایسی جگہوں پر لگائے جائیں جو ماحولیاتی، مذہبی، سماجی اور ثقافتی نقطہ نظر سے قابل قبول ہوں۔
- مقامی آبادی کے ساتھ کسی تنازعہ سے بچنے کے لیے آبادی سے دور جگہ کا انتخاب کیا جائے
- لیبر کیمپ کی جگہ اور سہولیات سے متعلق ایک تفصیلی نقشہ تیار کر کے متعلقہ میونسپل کمیٹی / کارپوریشن میں جمع کرایا جائے۔
- دیگر متعلقہ اداروں جیسے محکمہ صحت، بلدیہ وغیرہ کو لیبر کیمپ کے مقام اور مدت کے بارے مطلع کیا جائے تاکہ کسی ناگہانی صورتحال سے بچا جا سکے۔
- لیبر کیمپس کے قیام کیلئے عارضی جگہ زمین کا حصول زمین کے مالک کی مرضی، طے کردہ کرایہ اور باقاعدہ تحریری معاہدے کی صورت میں کیا جائے۔
- لیبر کیمپس سے متعلقہ بنیادی سہولتوں جیسے پینے کا پانی اور نکاسی آب کے انتظامات سے ماحولیاتی آلودگی میں اضافہ نہ ہو







سرگرمیاں

۲. لیبر کیمپ میں ہونے والی سرگرمیاں

مسائل

- مناسب انفراسٹرکچر کی کمی
- بنیادی ضروریات اور سہولیات جیسے پانی اور بجلی کی فراہمی و صفائی ستھرائی کی سہولیات اور نکاسی آب کی فراہمی

حفاظتی اقدامات

ٹھیکیدار کیمپ سائٹس پر مندرجہ ذیل باتوں کا خیال رکھے گا

- ہوادار اور صاف ستھری رہائش گاہ
- عارضی کمروں کیلئے ایسے میٹریل کا استعمال جو جلد آگ نہ پکڑیں۔
- نہانے دھونے اور پانی پینے کیلئے صاف اور مناسب پانی کی فراہمی۔
- تمام مزدوروں کیلئے مناسب بیگ کی موجودگی اور کھلونا سہولیاتی معیار۔
- صاف ستھرے واش رومز اور نکاسی آب کا مناسب انتظام۔
- خواتین لیبر کیلئے پردے اور پرائیویسی کا انتظام اور الگ کمروں کا قیام مزید براں خواتین لیبر کی موجودگی کی صورت میں انکے لیے علیحدہ خواتین واش رومز کا انتظام۔
- تمام لاقوائی معیار کے مطابق ہر دس افراد کیلئے مظہر یونٹ کی سہولت کی تعداد ایک ہے۔
- اگر لیبر کیمپ طویل مدت کیلئے لگایا جانا ہو تو بارشوں، سیلاب کے پانی سے بچنے کیلئے مناسب انتظامات کا ہونا اور نکاسی آب کی فراہمی بے حد ضروری ہے۔
- نوائٹس اور عارضی رہائش گاہوں میں بجلی کی فراہمی کو یقینی بنایا جائے۔

سرگرمیاں

۳. لیبر کیمپ سے پیدا ہونے والا سالڈ ویسٹ



مسائل

- تعفن اور بو
- صحت کے لیے نقصان
- ماحولیات کے لیے نقصان
- مقامی آبادی کے لیے نقصان
- بیماریاں پیدا کرنے والے بیکٹیریا اور مچھروں کا ذریعہ

حفاظتی اقدامات

- روزمرہ پیدا ہونے والے کوڑا کرکٹ اور کچرے کے کوڑا کرکٹ کے لیے الگ الگ کوڑا دانوں کا انتظام
- میونسپل کمیٹی یا کارپوریشن کی جانب سے منتخب کردہ جگہ پر روزانہ کی بنیاد پر کوڑے کو اٹھانے اور تلف کرنے کا مناسب انتظام۔
- عارضی یا بطلس سے پیدا شدہ فضلے اور لیکچ ویسٹ کو حفظان صحت کے اصولوں کے مطابق ٹھکانے لگانے کا انتظام۔
- فضلے کو ٹھکانے لگانے کے لیے رہائش گاہ سے کم از کم 500 میٹر دور جگہ کا انتخاب کیا جائے جس کے ارد گرد لوگوں کی رہائش نہ ہو۔
- عارضی یا بطلس سے پیدا شدہ فضلے کو ٹھکانے لگانے کے لیے منتخب کردہ جگہ کے ارد گرد باڑ لگائی جائے یا درخت لگائے جائیں تاکہ کچرے اور دھول مٹی رہائشی داخل نہ ہوں اور گھر اور جگہ کی پیدائش ہو۔

سرگرمیاں



1. کھانا پکانے کے لیے ایندھن کی فراہمی

مسائل

- گیس اور دیگر ایندھن سے پھٹنے والے چولہوں کے پھٹنے کا اندیشہ
- ایندھن کے لیے لکڑی کے حصول کے لیے درختوں کی کٹائی

حفاظتی اقدامات

ٹیکنیکل کیمپ سائٹس پر درج ذیل سہولیات مہیا کریں گے

- کیمپ کیمپس میں کھانا پکانے، کمروں کو گرم، کھلے تالاب سردیوں میں نہانے اور دھونے کے لیے گرم پانی کے لیے ایندھن کی لکڑی یا دیگر یا بیرگیس استعمال کرنے کی حوصلہ شکنی کریں اور ایندھن کیلئے درختوں کی کٹائی نہ کریں۔
- درختوں اور اردگرد جنگلات کی حفاظت کیلئے متبادل ایندھن کا انتظام کیا جائے۔
- کھانا پکانے کے لیے قدرتی گیس یا مٹی کے تیل سے محفوظ چولہے استعمال کیے جائیں۔





سرگرمیاں

۵۔جانوروں ،پرندوں کا شکار خرید و فروخت

مسائل

- جنگلی حیات کو لاحقہ خطرات
- ماحولیاتی و سماجی کو لاحقہ خطرات

حفاظتی اقدامات

- لیبر حقوق کی فراہمی کے لیے کوشاں رہے گا اگر موجود کسی بھی قسم کی جنگلی حیات کو نقصان پہنچا ان کے گھونسلوں ،رہنے کے ٹھکانوں میں کوئی مداخلت کرنا ،شکار کرنا یا جانوروں ،پرندوں کو قید کرنا اور خرید و فروخت کرنا بالجبر واقع لاحق (پروٹیکشن ،پریزرویشن ،کنزرویشن اینڈ مینجمنٹ) ایکٹ 1974 کے مطابق ممنوع اور قابل تعزیر جرم ہے۔





سرگرمیاں

۶۔حفظان صحت کے اصول

مسائل

- حفظان صحت کے بنیادی اصولوں پر عملدرآمد کرنے کی صورت میں مختلف بیماریاں مثلاً کرونا وائرس ،ٹائیفائیڈ ،ایچ آئی وی ایڈز اور دیگر انفیکشنز کے پھیلنے کا خطرہ

حفاظتی اقدامات

ٹھیکیدار لیبر کیمپس میں درج ذیل انتظامات مہیا کرے گا:

- لیبر کیمپس میں صحت و صفائی کی مناسب سہولیات کی فراہمی
- بیرونی علاقوں سے آنے والے مزدوروں کی صحت کی ابتدائی سکریننگ

- چوبیس گھنٹے لیبر کیمپوں میں پرفسٹ ایڈ باکس کی سہولت موجود ہو۔ کیمپ مقامات میں ابتدائی طبی امداد سے متعلق دوائیں کا موجود ہونا یقینی بنایا جائے۔ اور طویل المدتی کیمپ کی صورت میں کسی ڈاکٹر یا نرس کا کیمپ میں موجود ہونا چاہیئے۔
- کسی ایمرجنسی کے دوران مزدوروں کے لیے ایمبولینس کی سہولت فراہم کی جائے اور ایمرجنسی نمبر 1122 یا 15 پر کال کرنے کے لیے ٹیلیفون یا موبائل کی سہولت مہیا کی جائے۔
- حفظان صحت کے بہترین اصولوں، صفائی ستھرائی اور صحت کی دیکھ بھال کے اور کیلئے مزدوروں کو تربیت فراہم کی جائے جس میں تمام مزدوروں کی شرکت کو یقینی بنایا جائے۔
- جنسی طور پر منتقل ہونے والی بیماریوں اور ایڈز وغیرہ کے بارے میں مزدوروں کو مکمل معلومات فراہم کی جائیں اور ان بیماریوں سے بچنے کے لیے حفاظتی اصول اپنانے پر زور دیا جائے۔
- مچھروں اور دیگر کیڑے مکوڑے پیدا ہونے سے روکنے کیلئے حفاظتی سپرے لازمی کروائے جائیں۔
- گرمی سے بچنے کے لیے اضافی سرگرمیاں یقینی بنائی جائیں اور بار بار ہاتھ دھونے پر زور دیا جائے اور علامات ظاہر ہونے پر فوری طور پر دیگر مزدوروں سے آئسولیشن کے مکمل اصولوں پر سختی سے عمل کیا جائے۔
- لیبر کیمپس کے اندر مناسب مقامات پر حفظان صحت کے اصولوں سے متعلق ہدایات اور طریقے اپنے کیلئے بیانات اور تربیتی پروگرام کا اہتمام کیا جائے۔
- قریبی ڈسپنسری، ہیلتھ سینٹر، ہسپتال کے ایڈریس وغیرہ واضح مقامات پر آویزاں کیے جائیں۔









سرگرمیاں

۲۔ سکیورٹی اور حفاظت کی سہولیات

مسائل

- سکیورٹی کے مسائل
- چوری کا خطرہ
- دہشت گردی کا خطرہ
- آگ لگنے کے خطرات

حفاظتی اقدامات

- کیمپ کے گرد حفاظتی باڑ کی فراہمی
- حفاظتی اہلکار (پولیس یا نجی سکیورٹی گارڈز، وارڈن وغیرہ) کی تعیناتی
- کیمپ میں موجود افراد کی صحیح تعداد اور آمد و رفت کا حساب کتاب رکھنے کے لیے رجسٹر میں اندراج۔
- آگ سے بچاؤ کے لیے لیمپ جلانے میں ایسا کوئی مٹیریل استعمال نہ کیا جائے جس سے آگ لگنے کا اندیشہ ہو۔
- بارش، طوفان، سیلاب وغیرہ سے بچنے کے لیے اس بات کو یقینی بنایا جائے کہ کیمپ عارضی اور عارضی کمرے بارش کا پانی گزرنے کے لیے موزوں ہیں۔
- لیمپ کیمپس میں آگ بجھانے والا آلات موجود ہوں جن پر آگ بجھانے کی آخری معیاد کی تاریخ درج ہو اور سکیورٹی گارڈ یا لیمپ وغیرہ میں سے تعینات افراد کو آگ بجھانے والے آلات استعمال کرنے کی تربیت دی جائے۔
- لیمپ کیمپ میں واضح مقامات پر ہنگامی ایمرجنسی ٹیلیفون نمبرز لکھے ہوں۔
- تھانہ یا لیمپ کے ساتھ ہاٹ لائن میسنجر میں ایمرجنسی کی صورت میں ہر ایک مزدور کو اپنی ذمہ داریوں اور تربیت سے آگاہ کرے اور اپنی تفصیل متعلقہ کنسلٹنٹ اور میونسپل کمیٹی کے کارپوریشن کو فراہم کرے۔ اور کسی بھی قسم کی واقعات ایک رجسٹر میں درج کرے۔



سرگرمیاں

۸۔ حفظانِ صحت کے اصولوں پر مبنی خوراک (Food Safety)



مسائل

- غذا پکانے کا طریقہ
- پینے کا پانی

حفاظتی اقدامات

- عورتوں کو صاف ستھرے ماحول میں کھانے کی فراہمی کو یقینی بنایا جائے۔

سرگرمیاں

۹۔ صنفی و سماجی میل جول



مسائل

- مذہبی عبادات میں رکاوٹ
- سماجی تعلقات میں دشواری
- سماجی رسم و رواج اور ثقافتی عبادات میں شدت پسندی یا انتہا پسندی جھگڑا وغیرہ

حفاظتی اقدامات

- عورتوں اور لیبر گروپ کے مذہب اور طریقے کے مطابق غذائی عبادات کی سہولیات فراہم کرنا۔
- خواتین لیبر کی موجودگی کی صورت میں ان کے لیے علیحدہ وضو خانہ اور پردے کا انتظام کیا جائے۔
- تمام عورتوں کی غذائی رسم و رواج پر عمل کرنے کی دانستگی سے قطع نظر غیر حفظانِ صحت عادات کی حوصلہ شکنی کی جائے۔
- عورتوں کو تعمیراتی کام کے دوران نماز میں شرکت کرنے یا دیگر عبادات کی اجازت دی جائے اور اس سلسلے میں مذہبی اور سیکیورٹی امور کے ذمہ دار مقامی حکام کو تعمیراتی کاموں کے آغاز سے پہلے باضابطہ طور پر آگاہ کیا جائے تاکہ صحت عامہ، معاشرتی اور حفاظتی امور پر موثر نگرانی برقرار رکھ سکے۔



سرگرمیاں

10. تعمیراتی کام ختم ہونے کے بعد کی ذمہ داریاں

مسائل

- خالتو سامان اور کوڑا کرکٹ کی گندگی

حفاظتی اقدامات

- کیمپ سائٹ کو اصل حالت میں بحال کیا جائے۔
- تعمیراتی کام کے مکمل ہونے پر فریم اور باڑ لگنے والے دروازوں سمیت لیبر کیمپ میں تمام تنصیبات کو ایسے ختم کیا جائے کہ وہاں کا ماحول کیا رہے۔
- کام ختم ہونے کے ساتھ لیبر کیمپ کو مرحلہ وار ختم کیا جائے (پورے کام کی تکمیل کا انتظار نہ کریں)
- لیبر کیمپ کو منہدم کرنے کے دوران شور اور کسی بھی قسم کی آلودگی مثلاً گرد و غبار، آبی آلودگی وغیرہ پھیلانے سے گریز کریں۔
- منہدم شدہ ملبے کو دوبارہ استعمال کرنے اور دوبارہ قابل استعمال کرنے کیلئے کسی لوکل ڈیلر/ٹھیکیدار کی خدمات حاصل کریں۔
- کوڑا کرکٹ اور دوبارہ قابل استعمال سامان کو متعلقہ میونسپل کمیٹی سکاریپ ڈیلر/ٹھیکیدار کی جانب سے مقرر کردہ مقام پر مناسب طریقے سے منتقل کیا جائے۔
- لیبر کیمپ کی زمین واپس کرنے کے مالک کے ساتھ طے شدہ معاہدے کے مطابق کام کریں اور کسی بھی قسم کے اختلاف یا جھگڑے سے گریز کریں، اور آخر میں جگہ کو متعلقہ منصوب کے مطابق اسکے حوالے کیا جائے۔
- لیبر اور دوسروں سے آخری کام یا مراعات کے جھگڑے دور سے ہی نمٹا دیے جائیں۔





(2) تعمیراتی جگہوں (Construction sites) پر مزدوروں / لیبر کی صحت اور ماحولیات کے رہنما اصول اور حفاظتی اقدامات



سرگرمیاں

۱. تمام قسم کے تعمیراتی سرگرمیاں اور کام

مسائل

- ٹریفک اور چوٹیں وغیرہ
- نامناسب دیکھ بھال اور بروقت امداد نہ ملنے کی باعث ہلاکت
- دہشت گردی اور سیکیورٹی سے متعلق خطرات

حفاظتی اقدامات

- تمام مزدوروں / لیبر سے متعلقہ بین الاقوامی معیار کے مطابق مناسب حفاظتی اور قانونی ضمانتوں کی فراہمی کروائی جائے۔
- کام کی جگہ پر اور گرد و نواح کے علاقوں میں موجود دہشت گردی اور سیکیورٹی کے خطرات کے مطابق حکمت عملی کی بروقت تیاری اور ایک محفوظ و صحت مند ماحول مہیا کیا جائے۔
- مزدوروں / لیبر کیلئے ذاتی حفاظت کے سامان (PPE) کی فراہمی مثلاً حفاظتی جوتے، ہیلمٹ، ماسک، دستانے، حفاظتی لباس، دھاتی چشمے اور کان کی حفاظت کے سامان وغیرہ کی فراہمی
- تمام مزدوروں / لیبر کو ذاتی حفاظت کے سازوسامان کے بارے میں مکمل آگاہی اور استعمال کے طریقے کار کے بارے تربیت کا انتظام۔
- اگر تعمیراتی کام ایک ماہ سے زائد عرصہ کیلئے جاری رہنا ہو تو تمام مدت کے لیے صحت و صفائی اور تربیت یافتہ ماحولیات کی تعیناتی کی جائے جو مزدوروں کی صحت و صفائی اور ماحولیات کے امور کی نگرانی کرے اور انھیں تربیت و آگاہی فراہم کرے۔
- تعمیراتی کاموں کے دوران کسی چوٹ لگنے / انجرج کی صورت میں مزدور / لیبر کے علاج معالجے کی سہولت مہیا کرنا اور بروقت ہسپتال / ڈسپنسری / لیبر و بچاؤ / ٹھیکیدار کی ذمہ داری ہے۔
- مزید برآں دوران تعمیر تعمیراتی کام کی وجہ سے لگنے والی چوٹ / انجرج کے نتیجے میں ہلاکت ہو جانے کی وجہ سے مزدور / لیبر کی انشورنس اور اس کی بروقت ادائیگی کو یقینی بنایا جائے۔
- ایمرجنسی رابطہ نمبر جیسا کہ ریسکیو 1122، 15 اور دیگر قریبی ہسپتالوں / ڈسپنسری / لیبر کے لیبر تعمیراتی جگہوں پر واضح درج ہونے چاہئیں اور کال کیلئے سہولت فراہم کی جائے۔
- شہری ترقی کے تعمیراتی منصوبہ جات کے آغاز سے قبل صحت، مذہبی امور اور شہری تحفظ / سیکیورٹی فراہم کرنے والے مقامی اداروں کو آگاہ رکھا جائے اور اس سلسلے میں متعلقہ میونسپل کمیٹی / کارپوریشن کے تعاون سے موثر حکمت عملی تشکیل دی جائے۔



سرگرمیاں

۱۔تمام قسم کی تعمیراتی سرگرمیاں اور کنسٹرکشن کے کام

مسائل

- 15 سال سے کم عمر بچوں کی صحت اور تعلیم کا نقصان
- 18 سال اور اس سے کم عمر بچوں کی صحت کا نقصان
- حاملہ مزدور عورتوں کی صحت سے متعلق خطرات

حفاظتی اقدامات

- وفاقی و صوبائی کنسٹرکشن آن ایمپلائمنٹ آف چلڈرن ایکٹ 2016 کے مطابق 15 سال سے کم عمر بچوں کو مزدوری یا کسی سرگرمی کے لیے [illegible] نہیں رکھا جا سکتا۔
- ویسٹ پاکستان میٹرنٹی بینیفٹ آرڈیننس 1958 کے مطابق حاملہ خواتین یا کسی خواتین جنہوں نے چھ ہفتے قبل بچے کو جنم دیا ہو، کو مزدوری یا کسی سرگرمی کے لیے کام پر نہیں رکھا جا سکتا۔
- وفاقی و صوبائی کنسٹرکشن آن ایمپلائمنٹ آف چلڈرن ایکٹ 2016 کے مطابق 18 سال اور اس سے کم عمر کے بچوں کو محنت مزدوری کے [illegible] کے لیے نہیں رکھا جا سکتا ان میں صحت کو نقصان پہنچنے یا چوٹ لگنے یا کسی کیمیائی زہریلے مادے سے نقصان پہنچنے یا جہاں بڑی ہونے کا اندیشہ







سرگرمیاں

۳۔ دوران تعمیر حادثات کا پیش آنا



مسائل

- فوری طبی امداد کی کمی
- اور گرد کے علاقوں میں ابتدائی طبی سہولیات اور صحت عامہ کا فقدان

حفاظتی اقدامات

- تعمیراتی جگہ پر فرسٹ ایڈ باکس کی موجودگی کو یقینی بنایا جائے اور فرسٹ ایڈ باکس میں تمام ضروری ادویات اور طبی امداد کا ضروری سامان موجود ہو۔
- تعمیراتی کاموں کے دوران پیش آنے والے حادثات بیماریوں اور واقعات کا مکمل ریکارڈ رکھا جائے۔ اسی طرح حادثات کی نوعیت وہ جزبات کا مکمل ریکارڈ موجود ہو۔
- مزدوروں کی صحت و تکنیکی سے متعلق ممکنہ خطرات کی بروقت نشاندہی کی جائے خاص کر وہ خطرات جو جان لیوا ثابت ہو سکتے ہیں۔ اور ضروری حفاظتی اقدامات روا رکھے جائیں۔
- تعمیراتی کاموں سے متعلق مشینری چلانے والے ڈرائیوروں کو دوران ڈرائیونگ قواعد و ضوابط پر سختی سے عملدرآمد کرانے کے لئے آگاہی فراہم کی جائے۔
- تعمیراتی حادثوں اور سڑکوں کے ساتھ ساتھ روشنی کا معقول انتظام ہو۔







سرگرمیاں

1. تعمیراتی مقامات پر پانی اور صفائی ستھرائی کی سہولیات اور سالڈ ویسٹ مینجمنٹ

مسائل

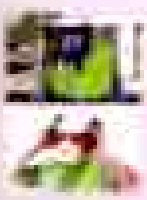
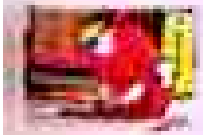
- صحت کو خطرہ
- اردگرد علاقے کے لوگوں کے لئے ناگواری کا باعث
- مچھروں اور دیگر بیکٹیریا کی افزائش نسل کا ذریعہ

حفاظتی اقدامات

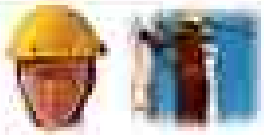
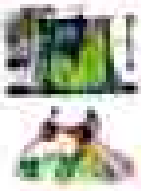
- تعمیراتی جگہوں پر تمام مزدوروں کے لئے پینے کے لئے صاف ستھرا پانی مہیا کیا جائے۔
- اگر تقریباً 25 مزدور ایک مہینے کے لئے سارا دن کام کر رہے ہوں تو ان کے لیے تعمیراتی جگہوں پر پورٹ ایبل ٹوائلٹ کا انتظام کیا جائے جو ڈرینیج سسٹم سے منسلک ہوں اور مقامی ڈرینیج سسٹم کی غیر موجودگی میں مقامی ندی نالوں وغیرہ سے کم از کم 50 میٹر کے فاصلے پر ہوں۔ مزید برآں پورٹ ایبل ٹوائلٹس کی صفائی ستھرائی کو دن کی بنیاد پر یقینی بنایا جائے۔
- تعمیراتی کاموں کے دوران کھدائی سے حاصل شدہ گارا، مٹی، ریت، کنکریٹ وغیرہ کو تعمیراتی جگہ پر ایک دن سے زائد مدت کے لئے اکٹھا نہ کیا جائے اور روزانہ کی بنیاد پر متعلقہ میونسپل کمیٹی کے کارپوریشن کی جانب سے مقرر کردہ جگہ پر مناسب طریقے سے ٹھکانے لگایا جائے۔



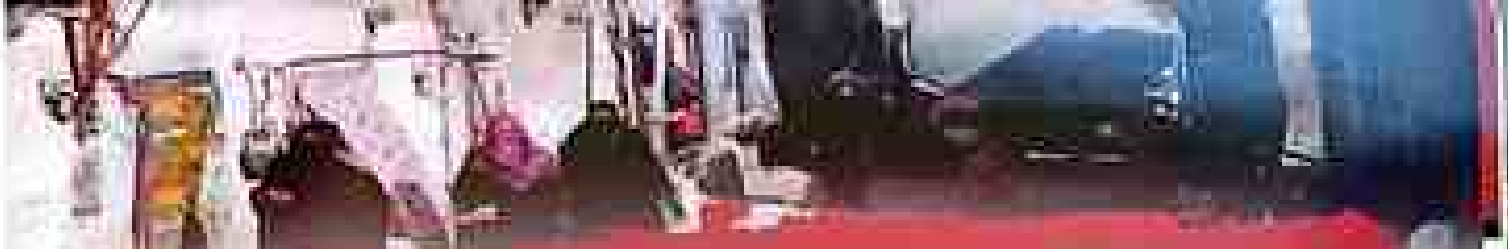
تعمیراتی کاموں کے دوران خطرات/حادثات سے بچنے کیلئے سامان برائے ذاتی حفاظت کا خلاصہ

مقصد	تعمیراتی کام	تجویز کردہ سامان برائے ذاتی حفاظت	تصویریں
آنکھوں اور چہرے کی حفاظت/تحفظ		حفاظتی چشمے	
سر کی حفاظت/تحفظ		اوپر واقع اشیاء سے نقصان سے بچاؤ کیلئے حفاظتی ہیلمٹ کے استعمال	
سماعت کی حفاظت/تحفظ		سماعت کی حفاظت کے لئے ایئر پلگ جیسے کان پلگ یا ایئر پلگ	
پاؤں کی حفاظت/تحفظ		پھسلنے والی سطحوں، تیزاب اور کیمیائی مادوں سے پاؤں کی حفاظت کیلئے حفاظتی جوتے یا بوٹ	
ہاتھوں کی حفاظت/تحفظ		جسمانی چوٹ کیلئے نقصان دہ مادوں جیسے کیمیکل سے ہاتھوں کی حفاظت کیلئے دستانے، لیٹیکس موصل دستانے یا چمڑے کے دستانے	
تحفظ تنفس		ایک جگہ سے دوسری جگہ لے جانے والے یا ایک ہی جگہ پر کام کرنے والوں کی فراہمی تعمیراتی جگہ پر کام کرنے والوں کیلئے ہوا صاف کرنے کیلئے ماسک جس میں ہوا صاف کرنے کیلئے کیمیائی مواد ہو، ہوا کو صاف کرنے کیلئے ماسک جس میں ہوا صاف کرنے کیلئے کیمیائی مواد ہو، ہوا کو صاف کرنے کیلئے	
جسم/ٹانگوں کی حفاظت/تحفظ		مناسب تحفظ کیلئے لیٹیکس موصل کپڑے، اپرن وغیرہ	
کام کرنے والے علاقوں میں حفاظت		حفاظتی جالیاں، رکاوٹیں، رسے کے گھیرے وغیرہ	
کام کرنے والے علاقوں میں حفاظت		ہیلمٹ، حفاظتی جالیاں، رسے کے گھیرے وغیرہ	

Summary of Recommended Personal Protective Equipment According to Hazard

Objective:	Workplace Hazards	Suggested PPE	Pictures
Eye and face protection	Flying particles, molten metal, liquid chemicals, gases or vapors, light radiation.	Safety Glasses with side-shields, protective shades, etc.	
Head protection	Falling objects, inadequate height clearance, and overhead power cords.	Plastic Helmets with top and side impact protection.	
Hearing protection	Noise, ultra-sound.	Hearing protectors (ear plugs or ear muffs).	
Foot protection	Falling or rolling objects, pointed objects. Corrosive or hot liquids.	Safety shoes and boots for protection against moving & falling objects, liquids and chemicals.	
Hand protection	Hazardous materials, cuts or lacerations, vibrations, extreme temperatures.	Gloves made of rubber or synthetic materials (Neoprene), leather, steel, insulating materials, etc.	
Respiratory protection	Dust, fogs, fumes, mists, gases, smokes, vapors.	Facemasks with appropriate filters for dust removal and air purification (chemicals, mists, vapors and gases). Single or multi-gas personal monitors, if available.	
	Oxygen deficiency	Portable or supplied air (Hood	
Body/leg protection	Extreme temperatures, hazardous materials, biological agents, cutting and	Insulating clothing, body suits, aprons etc.	
Working at *height	Rehabilitation Projects	Helmet, Safety glasses,	
	New Construction Projects	Anchor, belt, lanyard,	

*On ground, use of PPE's is required for any height of 4 ft or more. Ref: OSHA standards



(3) مقامی آبادی، ورکنگ اداروں اور رہائشیوں کی صحت، ماحولیات اور حفاظت سے متعلق رہنما اصول و حفاظتی تدابیر



سرگرمیاں

۱. تعمیراتی کاموں کے لئے منتخب کردہ مقام / جگہ پر کام کا آغاز

مسائل

- مقامی آبادی و رہائشیوں کیلئے تعمیراتی کام کی وجہ آگاہی
- تعمیراتی کاموں کے شروع ہونے سے رہائشی عورتوں کے پردے اور پرائیویسی کے مسائل
- مقامی آبادی کے ثقافتی، سماجی، مذہبی اور شاہراہ پر تعمیراتی مقامات کے کاروبار کو نقصان



حفاظتی اقدامات

ٹھیکیدار کو چاہئے کہ:

- حفاظت، سوشل کمپلی کے ماہر/ہیلتھ اینڈ سوشل ٹوکل پرسن (ز) کا انتخاب کرے اور متعلقہ ریجنل آفس میں موجود ڈپٹی پروگرام آفیسر (انوائرنمنٹ اینڈ سوشل سیف گارڈز) کی موجودگی میں مقامی آبادی اور رہائشیوں اور دکانداروں کو تعمیراتی کام کے آغاز سے قبل تعمیراتی کام کی نوعیت، دورانیہ، صحت اور تکمیل کی متوقع مدت کے بارے میں مکمل آگاہی فراہم کرے۔
- تعمیراتی کام کے دوران پیش آنے والے ممکنہ حادثات اور ماحولیاتی مسائل اور ان کے متعلق حفاظتی اقدامات کے بارے میں مقامی رہائشیوں اور دکانداروں کو کام کے آغاز سے قبل مکمل آگاہی دی جائے۔
- تعمیراتی کام کے آغاز سے پہلے مقامی رہائشیوں اور دکانداروں کو تعمیراتی کاموں کی وجہ سے حادثاتی اور ماحولیاتی مسائل کی نشاندہی، رہنمائیات، تجاویز کیلئے متعلقہ ذمہ دار افسران کے بارے میں مکمل آگاہی فراہم کی جائے۔



(a) ٹھیکیدار کا موبائل رابطہ نمبر

(b) متعلقہ ہیلتھ کمپلی کا ریجنل آفس کے ٹوکل پرسن (ز) کے رابطہ نمبر

(c) متعلقہ (PHCP) کے آفس میں تعینات ڈپٹی پروگرام آفیسر (ESSS) کے رابطہ نمبر

- تعمیراتی کام کے آغاز سے پہلے تعمیراتی مقام/جگہ کو فنیشنگ کی مدد سے باقی علاقے سے الگ کر دیا جائے۔



تعمیراتی جگہ پر ہر واضح جگہ پر نصب کر دیے جائیں۔ جن پر درج ذیل پیغامات / معلومات لکھے ہوں:

(a) تعمیراتی کام کی نوعیت

(b) ٹریفک میں رکاوٹ کی صورت میں متبادل راستے کا نشان اور عارضی رکاوٹ کا پیغام

(c) ایمرجنسی اور شکایت کیلئے رابطہ نمبرز

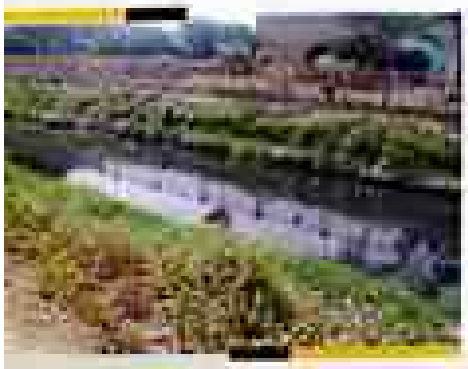
(d) PMDFC کی جانب سے جاری کردہ دیگر انتظامی یا حفاظتی پیغامات پر مبنی پوسٹرز۔

تعمیراتی کام کی جگہ کے اردگرد 100 میٹر تک کی حدود میں موجود ثقافتی، مذہبی، ورثہ، تاریخی عمارتوں اور حساس مقامات جیسے قبرستان، مساجد، مندر، گرجا گھروں وغیرہ کو کسی قسم کا نقصان نہ پہنچایا جائے اور ان کی حدود میں کوڑا کرکٹ، ملبے یا گندا پانی پھینکنے سے گریز کیا جائے۔ مزید برآں کھدائی کے دوران کسی ممکنہ آثارِ قدیمہ ملنے کی صورت میں متعلقہ مقامی محکمے سے رجوع کیا جائے اور کھدائی کا کام بند کر کے تعمیراتی کام روک دیا جائے۔

سرگرمیاں

2- کھدائی کی جگہ اور اس سے متعلقہ کام اور نالوں کی صفائی اور اس سے حاصل شدہ پھل وغیرہ

مسائل



- کھدائی سے حاصل شدہ مٹی، ملبہ (Debris) سے برساتیوں کی آمد و رفت اور ٹریفک میں رکاوٹ
- متاثرہ برساتیوں کیلئے ناگواری کا باعث
- گھروں اور دیگر عمارتوں کو پھیلنے والے جراثیم کی وجہ سے خطرناک کا ذریعہ
- کھدائی کی جگہ پر گرنے اور حادثات کے خطرات

حفاظتی اقدامات

- تعمیر کے دوران کھدائی کے تمام مقامات کے اردگرد حفاظتی ٹیپ یا باڑ لگائی جائے اور کھدائی کی جگہ کو عارضی طور پر بند کر دیا جائے جس کے باہر اس جگہ سے دور رہنے کیلئے واضح ہدایات لکھے ہوں۔
- کھدائی سے حاصل شدہ مٹی، کنکر، پتھر وغیرہ کو ایک دن سے زیادہ اس جگہ پر موجود نہ رہنے دیا جائے بلکہ روزانہ کی بنیاد پر متعلقہ میونسپل کمیٹی کے کارپوریشن کی منتخب کردہ جگہ پر محفوظ طریقے سے اٹھانے لگایا جائے۔
- بالوں کی صفائی سے حاصل شدہ مواد ریت وغیرہ کو ایک دن سے زیادہ اس جگہ پر موجود نہ رہنے دیا جائے بلکہ روزانہ کی بنیاد پر اٹھوایا جائے اور مواد کو ایک جگہ سے دوسری جگہ منتقل کے دوران ٹریکٹر ٹرالی کو ترپال کی مدد سے ڈھانپ کر لے جایا جائے۔

سرگرمیاں

3-تعمیراتی مشینری، تعمیراتی مٹیریل اور تعمیراتی کاموں کی وجہ سے عارضی بندش

مسائل

- ٹریفک میں رکاوٹ۔

حفاظتی اقدامات

- ٹریفک میں ممکنہ رکاوٹ کے پیش نظر متبادل راستے کا انتخاب اور اس کی نشاندہی کیلئے ہدایات واضح درج کیے جائیں۔
- ٹریفک کونز (cones) کی مدد سے رکاوٹ والی جگہ کو الگ کر دیا جائے تاکہ حادثات سے بچا جا سکے۔
- ٹریفک میں زیادہ دیر تک مسلسل رکاوٹ کی صورت میں مقامی ٹریفک پولیس کو آگاہ کیا جائے اور ان کے ساتھ مل کر ٹریفک مینجمنٹ پلان ترتیب دیا جائے جس کو واضح مقام پر نصب کیا جائے اور مقامی آبادی اور گاڑیوں کو اس کے بارے میں مکمل آگاہی دی جائے۔





سرگرمیاں

4-تعمیراتی کاموں کی وجہ سے راستوں میں عارضی رکاوٹ اور زمین کا عارضی حصول

مسائل

- روزمرہ معمولات اور کاموں میں رکاوٹ
- رہائشی خواتین کیلئے آنے جانے میں رکاوٹ
- دکانداروں کے دکانوں کے آگے رکاوٹیں اور گاہکوں کیلئے مشکلات
- مستقل و عارضی متاثر ہونے والے چھوٹے بڑے مستقل دکانداروں کا کاروبار کم ہو جانے کی وجہ سے مالی نقصان

حفاظتی اقدامات

- تعمیراتی علاقے میں اور گرد و موجود تمام چھوٹی بڑی دکانوں، حویلیوں، عارضی خواجہ فروشوں اور گھروں کا مکمل سروے (تعداد اور مالی حیثیت وغیرہ) اور ان پر متحدہ سماجی اور ماحولیاتی اثرات کا جائزہ لے کر ایک تفصیلی رپورٹ اور متعلقہ پلان میونسپل کمیٹی مکار پوریشن کے دفتر میں موجود ہونی چاہیئے۔ جو کہ ڈوکل پر سٹر متعلقہ علاقائی آفس میں موجود ڈیلی پروگرام آفیسر (ESSs) کے ساتھ تعمیراتی کاموں کی مالیت کا اندازہ لگانے وقت تیار کی جائیگی۔ اس رپورٹ اور پلان میں موجود سماجی اور ماحولیاتی مسائل کے حل کیلئے مختص رقم اور ان کا صحیح طریقے سے استعمال ٹھیکیدار کے کنٹریکٹ کا حصہ ہوگا۔
- رہائشیوں کیلئے آنے جانے اور دکانوں، گھروں تک رسائی کے لیے متبادل راستے مہیا کرنا ٹھیکیدار کی ذمہ داری ہے۔
- دکانوں، تھڑوں، حویلیوں وغیرہ کے باہر کسی بھی قسم کے نقصان یا توڑ پھوڑ کی صورت میں ٹھیکیدار طے شدہ ضوابط کے مطابق اس کی قیمت متاثرہ لوگوں کو ادا کرے گا۔
- لیبر/مزدور کو ترجیح دی جائے کہ وہ وارڈ کے رہائشی عورتوں اور بچوں کے آنے جانے میں کوئی رکاوٹ نہ بنیں اور رہائشیوں کے ساتھ بلا ضرورت کوئی میل جول نہ رکھیں۔
- تعمیراتی کیمپ لگانے، تعمیراتی کام کرنے یا مشینری اور تعمیراتی سامان رکھنے کے لیئے عارضی طور پر حاصل کی گئی زمین کا کرایہ مالک مکان کو وقت پر ادا کیا جائے گا۔ اور تحریری معاہدے کی صورت میں ٹھیکیدار تمام تر ضوابط کا پابند ہوگا۔
- تعمیراتی کاموں کیلئے کیمپ وغیرہ لگانے کے لیئے عارضی زمین حاصل کرنے کے لئے مقامی رہائشیوں سے مشاورت اور دنوں کے حساب سے کرایہ اور اس کا مکمل طریقہ کار وضع کر کے باقاعدہ لکھا جائے گا۔ اور خلاف ورزی کی صورت میں ٹھیکیدار ذمہ دار ہوگا۔



سرگرمیاں

5. تعمیراتی کام اور عیوی مشیری کا استعمال

مسائل

- شور شرابہ
- پانی کی آلودگی
- ہوائی آلودگی
- دیگر ماحولیاتی مسائل

حفاظتی اقدامات

- تعمیراتی علاقے میں موجود ہسپتالوں، سکولوں، کالجوں وغیرہ اور رہائشی گھروں، دکانوں کی تمام تعمیرات کی رپورٹ متعلقہ میونسپل کمیٹی کے دفتر میں موجود ہونی چاہیے جو کہ ٹھیکیدار کے تحریک کا حصہ ہوگی۔ اور ٹھیکیدار ان تعمیرات کے مطابق ایسا پلان ترتیب دے گا جس سے ارد گرد علاقوں اور باشندوں اور دکانداروں کو کم سے کم پریشانی کا سامنا کرنا پڑے۔ شور زیادہ شور پیدا کرنے والے کام دن کے اس حصے میں کیے جائیں جب ہسپتالوں اور سکولوں، کالجوں وغیرہ کے معمول اوقات کار نہ ہوں اور ایسے کام جن کی وجہ سے راستوں کی عارضی بندش ضروری ہو، رات کو کیے جائیں جب راہگیروں کی آمد و رفت نہ ہو۔
- تعمیراتی کاموں کے دوران پیدا شدہ فاضل پانی یا پھر فیکل تو ائلٹس کا پانی، فضلہ وغیرہ کا محفوظ اور مناسب طریقے سے ٹھکانے لگانے کا بندوبست کیا جائے اور فاضل پانی کو پینے کے صاف پانی کے ساتھ شامل ہونے سے بچانے کا ہر ممکن قدم اٹھایا جائے۔
- دھول مٹی کی وجہ سے ہونے والی تمام کام جن کی وجہ سے راہگیروں کو پانی یا سورج وغیرہ میں عارضی بندش کا سامنا کرنا پڑ سکتا ہو۔ ایسے تمام کاموں کے آغاز سے پہلے راہگیروں کو پیشگی اطلاع دی جائے اور متبادل انتظامات کا خاطر خواہ انتظام کیا جائے۔
- تعمیراتی کاموں کی وجہ سے درختوں کی کٹائی سے ہر حال میں گریز کیا جائے اور اگر بصورت حال میں ایک درخت کی کٹائی کے متبادل کے طور پر چار درخت لگانا ضروری ہیں۔
- تعمیراتی جگہ پر پیدا ہونے والے کوڑا کرکٹ کو ٹھکانے لگانے کیلئے ڈسٹ بن لگائے جائیں اور ان کو روزانہ کی بنیاد پر متعلقہ میونسپل کمیٹی کی طرف سے مقرر کردہ مقام پر ٹھکانے لگایا جائے۔
- کوڑا کرکٹ اور فاضل پانی اور گرد و نواح کی فصلوں اور ندی نالوں میں پھینکنے سے گریز کریں۔
- گرد و غبار اور ہوائی آلودگی کی صورت میں پانی کا باقاعدہ چھڑکاؤ کریں۔
- تعمیراتی کام کی مدت اور نوعیت کے مطابق کام کے آغاز سے پہلے، کام کے دوران اور کام کے بعد ضروری آلودگی، ہوائی آلودگی اور آبی آلودگی کے ٹھوس بیانات حاصل کر کے ان کی جانچ پڑتال کرانا ٹھیکیدار کی ذمہ داری ہے۔ اس سلسلے میں ریجنل آفس میں موجود ڈپٹی پروگرام آفیسر (ESS) سے مزید رہنمائی حاصل کریں۔
- تعمیراتی کام مکمل ہو جانے کے بعد علاقے کی مقامی مقررہ اور ماحولیاتی خوبصورتی کا خاص خیال رکھیں اور پہلے سے بہتر حالت میں چھوڑیں۔

ترقیاتی منصوبوں کی تعمیر و مرمت کے دوران کام کرنے والے
مزدوروں، ورکرز، پروفیشنل خواتین ایمپلائیز، ورکرز کی صحت، حفاظت
اور صاحبِ حال کے لئے مختلف اصول و ضوابط درج ذیل پالیسیز
قوانین اور مولیکیولیشنز کا تجزیہ کر کے تجویز کئے گئے ہیں۔

- The Punjab Occupational Health & Safety Act, 2019
- General Environment, Health & Safety (EHS) Guidelines by International Finance Corporation (IFC), World Bank
- International Labour Standards of International Labour Organization (ILO)
- Punjab Tehsil/Town Municipal Administration (Works) Rules 2003 (Amendments 2016)
- The Punjab Restriction on Employment of Children Act, 2016
- The West Pakistan Maternity Benefit Ordinance, 1958
- Punjab Wildlife (Protection, Preservation, Conservation and Management) Act, 1974



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PUNJAB
INCLUSIVE CITIES PROGRAM

INITIAL ENVIRONMENTAL EXAMINATION (IEE)

Sub-Project:

STORMWATER DRAINAGE FACILITIES
at
CITY HAROONABAD

MUNICIPAL COMMITTEE HAROONABAD

LG & CD DEPARTMENT
GOVT. OF PUNJAB





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ACRONYMS

DPO	Deputy Program Officer
CO	Chief Officer
CTS	Complaints Tracking System
DPO	Deputy Program Officer
EHS	Environment Health & Safety
EIA	Environmental Impact Assessment
EMMP	Environmental Management and Monitoring Plan
EPD	Environment Protection Department
ESFPs	Environmental & Social Focal Persons
ESM	Environmental & Social Management
ESMF	Environmental & Social Management Framework
ESMP	Environmental & Social Management Plan
ESMMP	Environmental & Social Management and Monitoring Plan
ESSs	Environmental & Social Safeguards
GoP	Government of the Punjab
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
IEE	Initial Environmental Examination
LG&CD	Local Government & Community Development
LESCO	Lahore Electric Supply Company
MC	Municipal Corporation/Committee
UGST	Underground Stormwater Tank
MO-I	Municipal Officer Infrastructure
MO-P	Municipal Officer Planning
NOC	No Objection Certificate
OHS	Occupational Health & Safety
OPs	Operational Policies
PAPs	Project Affected Persons
PC-I	Planning Commission Form-I
PCP	Punjab Cities Program
PCRs	Physical Cultural Resources
PD	Project Director
PDO	Program Development Objectives
PEPA	Punjab Environment Protection Act
PHED	Public Health Engineering Department
PMDFC	Punjab Municipal Development Fund Company
PMU	Project Management Unit
PPEs	Personal Protective Equipment
PO	Program Officer
RoW	Right of Way
RPF	Resettlement Policy Framework
SMP	Social Management Plan
SOPs	Standard Operating Procedures
SPOs	Senior Program Officer
STIs	Site Transmission Infections
TORs	Terms of References
WB	World Bank

EXECUTIVE SUMMARY

This initial Environmental Examination (IEE) has been prepared for Stormwater Facility in City Haroonabad which is being funded by the World Bank through the Punjab Municipal Development Fund Company and to be implemented by the Municipal Committee Haroonabad and supervised by consultants appointed by PMDFC.

PROJECT BACKGROUND

The project is being financed by World Bank funding under Punjab Inclusive Cities Program. 20% co-financing is being done by Government of Punjab (GoP) out of their own resources. The Program Development Objective is to provide inclusive and sustainable water supply, sanitation, and hygiene (WASH) services in selected cities of Punjab.

The primary development objective of the Punjab Inclusive Cities Program (PICP) is to provide inclusive, sustainable, and safely managed Water, Sanitation, and Hygiene (WASH) services, while strengthening the institutional and financial performance of selected urban local governments in the Punjab province.

The program focuses on urban development and improvement of municipal services infrastructure for the following sectors:

- Water Supply and Filtration Plants
- Solid Waste Management
- Sewerage and Wastewater Treatment Plants
- Stormwater Drainage

TITLE OF THE SUB-PROJECT:

"STORMWATER DRAINAGE FACILITIES IN HAROONABAD CITY UNDER PUNJAB CITIES PROGRAM (PICP)"

LOCATION OF THE SUB-PROJECT:

Haroonabad is a city located in the Bahawalnagar District of southern Punjab, serving as the administrative headquarters of Haroonabad Tehsil. It is recognized as the 92nd largest city in Pakistan and is positioned at approximately 29.609722° N, 73.137778° E (29°36′35″ N, 73°8′16″ E), with an elevation of about 178 meters (584 feet) above sea level[1]. Geographically, Haroonabad lies near the fringe of the Cholistan Desert and close to the border with India[2]. The Sutlej River flows to the north of the tehsil, and the area is irrigated through canal systems originating from the river, including the Hakra Branch and 6R Canal. The city is located roughly 50 km south of Bahawalnagar and about 555 km by road from Islamabad.

[1] https://en.wikipedia.org/wiki/Haroonabad,_Punjab
[2] https://bahawalnagar.punjab.gov.pk/geography

THE PROPONENT

MC Haroonabad is the proponent of project and the Chief Officer (CO) of MC Haroonabad intends to get NOC for the said sub-project as the proponent by submitting the IEE for the compliance of section 12 of Punjab Environment Protection Act, 2012 following IEE/EIA Regulations, 2022.

NAME OF ORGANIZATION PREPARING IEE REPORT

Punjab Municipal Development Fund Company (PMDFC)
184, Scotch Corner, Upper Mall Scheme, Lahore.

SUB PROJECT EXECUTION AND IMPLEMENTATION AGENCIES

Sponsoring	Government of the Punjab (through World Bank Funding)
Concerned Provincial Department	Local Government and Community Development Department, Govt. of the Punjab
Technical Assistance	Punjab Municipal Development Fund Company (PMDFC)
Execution/Proponent	Municipal Committee, Haroonabad
Monitoring and Supervision	• WATSON Unit (MO WATSON and E&S focal person) of Municipal Committee, Haroonabad • PMDFC head office and regional office • Construction Supervision Consultants
Operation and Maintenance	Municipal Committee, Haroonabad
Consultant	PMDFC

BRIEF OUTLINE OF THE PROPOSAL

The subject project is the construction of underground stormwater reservoir tank with drainage system in city Haroonabad. The land for the UGST construction is state-owned land currently under the possession of MC Haroonabad, while the ownership rests with PHATA. Furthermore, PHATA has delegated the operation and maintenance (O&M) responsibilities of the land to MC Haroonabad. NOC has been obtained from the PHATA for utilizing the land for UGST. The area required for the proposed stormwater tank is 2.5-3 kanals with 1290 ft force mains of 450 mm (outer dia).

The project falls under the category of urban stormwater drainage infrastructure and has been designed as a climate-resilient intervention to improve the city's capacity to manage runoff generated during heavy rainfall events. The proposed system will facilitate rapid collection and temporary storage of stormwater from the identified catchment areas and ensure its safe disposal, thereby reducing the duration and extent of urban flooding.

The subject project involves the Inlet Drains, RCC Drains, Linear Storage 5’ x 7’x 150’ ft, underground stormwater reservoir tank, Pumping Station, Lorry Hydrants and force main. The worked-out capacity of tank is 1.50 million gallons for the collection of the stormwater whereas the drains are of 3.5' x 3.5’, 2200 ft and 3.0' x 3.0', 2750 ft. in length. The force main discharge is 4 cusecs/sec. Purpose of this development is to overcome the situation of flooding during seasonal heavy rainfall, Poor drainage infrastructure.

The proposed technology is based on a combination of gravity flow and mechanical pumping. Stormwater generated within the catchment areas will be collected through gully gratings and stormwater inlets and conveyed through RCC stormwater drains to a linear storage structure and Underground Stormwater Storage Tank (UGST). The UGST will function as a temporary storage facility during peak rainfall events. A recharge well has also been incorporated into the design to promote groundwater recharge. During heavy rainfall events, when storage capacity is exceeded, surplus stormwater will be pumped through a force main and discharged into the designated irrigation channel. The proposed system therefore provides an end-to-end solution for stormwater management within the project area.

Project Components:

In order to reduce the ponding time and to provide better environment the instant project have been proposed to be drained off through underground storage tank, by constructing storm inlet drains which include

Sr. No.	Item Description
1	RCC Stormwater drain • 3.0' x 3.0', 2750 ft. • 3.5' x 3.5’, 2200 ft. RCC Linear Storage 5’ x 7’x 150’
2	RCC Storm Water Storage Tank • 01 Million Gallon • Bypass Arrangement
3	Pump house & Pumping Machinery
4	Force Main (OD 450 mm HDPE), 1290 ft.
5	Electrical Works

Further detail has been provided in Chapter-3.

MAJOR IMPACTS

Anticipated impacts of the sub-project and to overcome these localized social & environmental impacts; a mitigation plan has been prepared and given in Table below:

Table 1- 1:Anticipated Impacts & Mitigation Measures for Sensitive Receptors

Construction Activities	Sensitive Receptors	Anticipated Impacts & Mitigation Measures
• Construction of stormwater drains of various sizes • Construction of underground storage tank (UGST) • Providing Gully Grating • Laying of Force main • Discharge of overflow in 4-R distributary.	• 01 mosque named Selfiya Masjid is present approx 10 meters away from UGST PHATA Park proposed site (in front of park). • 01 school named Direction School is present within 15 meter periphery of UGST site, in front of park. • 02 Schools named Daisy Public school and Govt Girls High school are present 10 meters on the force main route . • Shops ramps & electric poles are present on the Chaman road as shown in layout map A-B and onwards connecting to Tank site. • On Quaid e Azam road as shown in layout map B-C, storm water drain exists which will be desilted/rehabilitated and connected to the proposed network.	**Anticipated Impacts** Anticipated negative impacts are fugitive air quality, construction waste and traffic disruption and expected dismantling of poles or existing sewer which may be shifted. They will be temporarily impacted due to disturbance in traffic. There would be no direct impact on any infrastructure/building. Accessibility of shopkeepers/household would be temporarily disturbed which will be mitigated. **Mitigation Measures** • Construction of flash inlet drains along with the road alignment can avoid dismantling of shops ramps & electric poles on the Chaman road. On contrary, ARAP will be prepared. • Provision of dust masks to workers; • Use of well-maintained machinery and equipment for construction purposes. Furthermore, noise causing machinery will not be used during working hours; • Vehicles carrying construction materials and the construction material storage areas will be covered with tarpaulin. • Traffic management plan will develop to minimize disruption during construction and maintenance activities, work will schedule during non-peak hour if possible; • Inclusion of further access routes to facilitate the accessibility of vehicles and pedestrians to and from the proposed sub-Project site; • Excavated areas will be cordon off properly and shops/house will be provided with temporary wooden logs/sheets for accessibility to their premises.

		• Dismantled ramps/soiling will be restored by the Contractor as there is minimum impact as per construction scope and Inlet drains will covered with RCC Slabs along with Gully grating to receive storm water. • Sign boards, awareness sessions will be held and GRM has been developed to mitigate the possible impacts to the receptors.

E & S MONITORING PLAN

An ESMMP has been prepared to address all the major environmental & social issues during the pre-construction, construction and operational phases of the project. Targets to be achieved and mitigation measures to meet those targets have also been detailed in the ESMMP. The ESMMP should be carefully implemented in view of mitigation measures and coordinated with the design and construction program of the project to ensure that Best Management Practices are implemented at the appropriate stage and that adequate resources are properly allocated to achieve the desired results.

During design phase, the proposed mitigation measures will be implemented by Design Consultant (DC) and PMDFC whereas Construction Contractor (CC) and Supervision Consultant (SC) and MC Haroonabad will properly mitigate the identified impact of construction phase. The implementing agency for the operation phase of the project will be Punjab Municipal Development Fund Company (PMDFC) and MC Haroonabad.

GRIEVANCE REDRESS MECHANISM (GRM)

The MC Haroonabad is the first tier of GRM which offers the fastest and most accessible mechanism for the resolution of grievances. The GRM will be notified and displayed at project sites. PMDFC will act as a 2nd tier for GRM. GRM shall be responsible to manage and run the GRM effectively and convene the regular meetings to streamline the GRM.

STAKEHOLDER CONSULTATIONS

Stakeholder consultations were carried out during the preparation of IEE. Interviews were undertaken with stakeholders including residents of the area, shopkeepers, local vendors and regular/frequent street users to discuss the present ponding conditions of the storm water and the construction of storm water facilities. Meetings were held with MC Haroonabad Officials and locals. During the consultation sessions, key environmental and social issues were discussed. All the respondents were in favor of the initiation of the sub-project for the resolution of the ponding of stormwater issue and construction of storm water.

E&S SCREENING CATEGORY OF THE PROJECT:

According to the ESCF guidelines of PICP, sub-projects of the program may have adverse social and environmental impacts which are categorized as:

Environmental Categories:

E1:	Sub-projects which may have significant/irreversible environmental impacts (E-1 project will be further screened according to EIA/IEE Regulation 2022 of Punjab Environmental Protection Act 2012)
E2:	Sub-projects which may have some negative but localized and temporary environmental and social impacts
E3:	Sub-projects which may have negligible environmental impacts

Social Categories:

S1:	More than 40 households involved-sub-project where negative impacts of serious nature are expected
S2:	1-40 household involved-sub-projects where social impacts of moderate nature may be expected
S3:	No involuntary resettlement and APs are involved-no negative social impacts are expected.

According to Punjab Environmental Protection (Review of IEE/EIA) Regulations 2022, the proposed project falls under Category-F (Water management, dams, irrigation and flood protection) (2) Irrigation and Drainage Projects of Schedule I) & according to screening of ESCF Categorization project falls under E-1 & S-2 category, which requires IEE before commencement of construction.

CONCLUSIONS & RECOMMENDATIONS

The proposed Stormwater Facilities in Haroonabad City will provide an effective solution to the recurring issues of urban flooding and waterlogging in the identified ponding areas. The environmental and social impacts of the project are expected to be temporary, localized, and manageable through the implementation of the proposed mitigation measures and ESMMP. No significant impacts on flora, fauna, natural habitats, private land, or livelihoods are anticipated. Therefore, the project is considered environmentally and socially feasible and is recommended for implementation to improve stormwater management and enhance the quality of life in Haroonabad City.

SECTION-1 INTRODUCTION

1.1. Background

The Punjab Inclusive Cities Program (PICP) aims to improve water, sanitation, and hygiene (WASH) services, enhance climate resilience, and strengthen urban institutions across selected cities of Punjab. The program builds upon the successful experience of the Punjab Cities Program (PCP) and supports improved urban governance, service delivery, and financial sustainability of local governments.

Urban flooding and stormwater ponding have become major challenges in Punjab cities due to rapid urbanization, flat topography, and inadequate drainage infrastructure. During rainfall events, stormwater accumulates in low-lying areas, causing traffic disruptions, environmental concerns, and damage to public and private property. To address these issues, PICP has initiated the **"Preparation of Feasibility Studies and Design of Rainwater Underground Storage Facilities in 14 Cities of Punjab."**

Under this initiative, PMDFC has proposed the construction of a stormwater drainage system and Underground Stormwater Storage Tank (UGST) in Haroonabad to collect, store, and safely dispose of stormwater from critical ponding areas, thereby improving drainage efficiency, and enhancing urban resilience.

1.2. Purpose of the IEE Report

The main objective & purpose of this Initial Environmental Examination (IEE) is to identify the baseline environmental, physical and the socio-economic conditions and the potential impacts along with formulation of suitable mitigation measures of an environment friendly implementation of the proposed project. The objectives are as follow:

- To assess and establish the existing environmental and socio-economic conditions of the area.
- To assess and establish the potential environmental and socio-economic impacts of the project activities and identify the issue of concern.
- To implement and execute environmental safeguards.
- To propose mitigation and monitoring measures that can be incorporated into the operation of the project to remove or reduce any damaging effects as far as possible.
- Categorization of the significant impacts requiring further consideration.
- To describe the Environmental & Social Management and Monitoring Plan for the project.
- To prepare an IEE Report as per the guidelines for submittal to EPD, Punjab.

1.3. Sub-Project Proponent

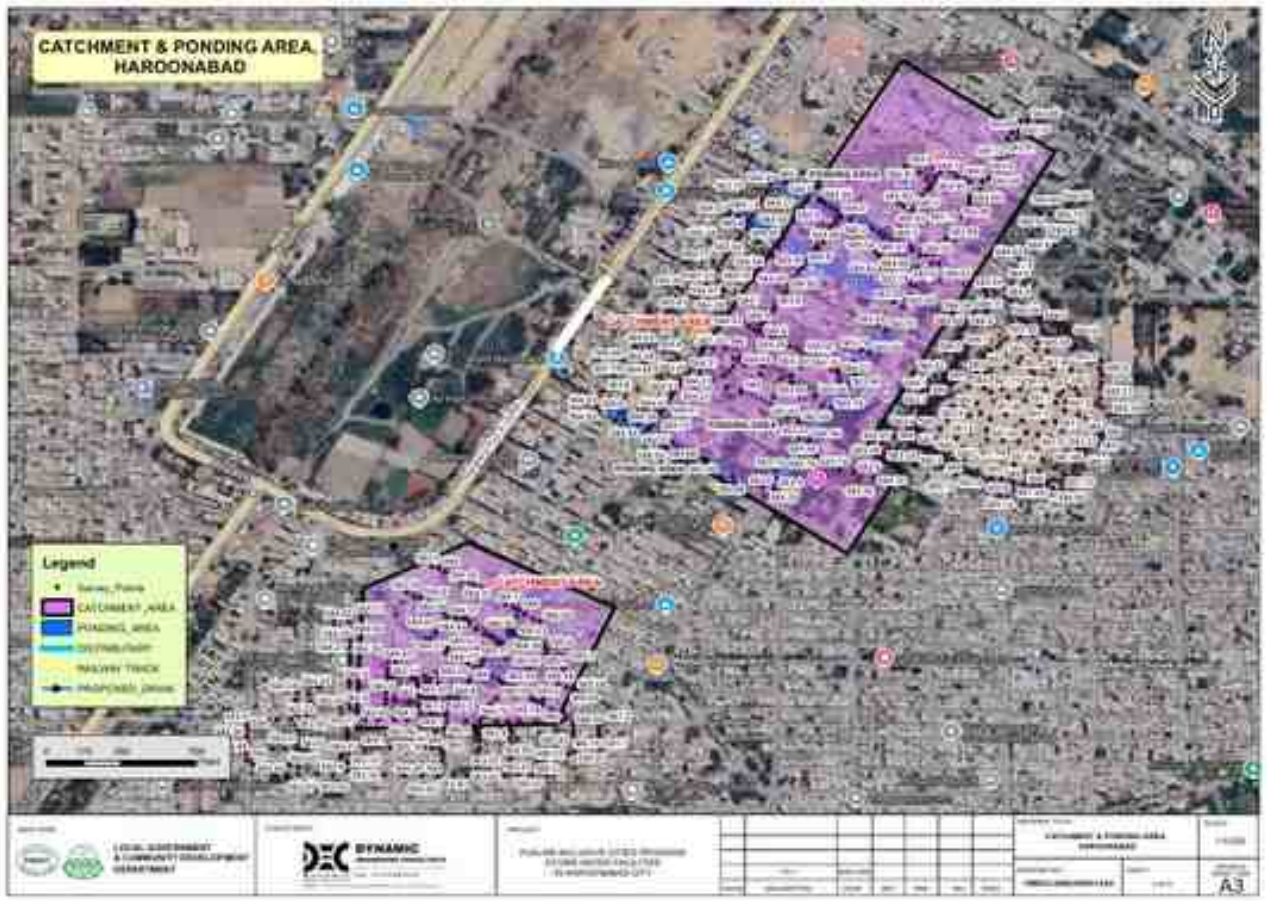
MC Haroonabad is the proponent of project and the Chief Officer (CO) of MC Haroonabad intends to get NOC for the said sub-project as the proponent by submitting the IEE for the compliance of section-12 of Punjab Environment Protection Act, 2012 and IEE/EIA Regulations, 2022. PMDFC providing technical support in this project.

1.4. Sub Project

Under PICP, Storm water drainage facilities are to carter the critical ponding areas of the city. Haroonabad is one of those 14 cities where stormwater is accumulated and remain stagnant for hours. There flooding prolongs is caused during monsoon season, which normally extends from 1st July to end of September every year. At times, rainfall can surprisingly rise up to 100 mm as per MET office data. As a result, due to the limited capacity of the existing drainage network, runoff accumulates in identified depression points and remains stagnant for extended periods. Apropos to above, some of the chronic depression areas as Baldia Colony.

This above-mentioned area is the most affected areas. These above-mentioned areas are considered the most affected areas. The location of these ponding areas of Haroonabad City, identified as critical and significantly important sore points with respect to inadequate drainage arrangements. In several areas, rainwater tends to remain on the surface for hours after rainfall. Due to the seriousness of this drainage issue, underground storage tank at the most severely affected location is designed. During rain events, water from ponding areas would be diverted into these tanks, helping keep roads and streets clear for normal traffic and movement. The stored stormwater would then be pumped out for disposal or reuse, allowing the tanks to be ready for the next rainfall. After reviewing various options to address stormwater accumulation in the worst affected areas, this approach has been identified as the most technically sound and practically viable solution. Catchment & ponding area is shown in Figure 1.

Catchment & ponding area of Haroonabad



1.5. Details of Consultant

The Initial Environmental Examination (IEE) for the proposed **Stormwater Facilities in Haroonabad City** has been prepared by the **Punjab Municipal Development Fund Company (PMDFC)** under the Punjab Inclusive Cities Program (PICP). PMDFC is providing technical assistance to Municipal Committee Haroonabad and is responsible for environmental and social assessment, stakeholder consultations, and compliance with applicable regulatory requirements. A multidisciplinary team was formulated to conduct the study. The team comprises the following persons.

Ms. Rukhsana	:	Senior Program Officer, ESM Wing PMDFC
M. Amjad	:	Engineering Wing PMDFC
Asif Gillani	:	Program Officer Environment, PMDFC
Ms. Saadia Pervaiz	:	Deputy Program Officer Environment PMDFC
Hassan Siddique	:	Deputy Program Officer, Social PMDFC
M. Waleed	:	Topographic & Design Expert, Dynamic Consultants

1.6. Brief Description of Nature, Size, Location and Cost of the Sub-Project

<table>
<tr><td>Name of the Sub-Project</td><td>Feasibility Studies and Design of Stormwater Drainage Facilities in Haroonabad Under Punjab Cities Inclusive Program (PICP)</td></tr>
<tr><td>Scope of Work</td><td>The scope of work includes:
<table>
<tr><th>Sr. No.</th><th>Item Description</th></tr>
<tr><td>1</td><td>RCC Stormwater drain
• 3.0' x 3.0', 2750 ft.
• 3.5' x 3.5’, 2200 ft. RCC
Linear Storage 5’ x 7’x 150’</td></tr>
<tr><td>2</td><td>RCC Storm Water Storage Tank
• 01 Million Gallon
• Bypass Arrangement</td></tr>
<tr><td>3</td><td>Pump house & Pumping Machinery</td></tr>
<tr><td>4</td><td>Force Main (OD 450 mm HDPE), 1290 ft.</td></tr>
<tr><td>5</td><td>Electrical Works</td></tr>
</table></td></tr>
<tr><td>Location of Project</td><td>Urban flooding has become a recurring concern across many cities in Punjab, and Haroonabad is no exception. The problem is most visible in low-lying localities where the drainage infrastructure has not kept pace with the demands of a growing urban population. Heavy rainfall events overwhelm the existing combined sewerage network, which was never designed to carry the volume of stormwater that accumulates during an intense rain event. In Haroonabad after rain the water collects in low-lying streets and open areas, remaining stagnant for a long time. This prolonged inundation disrupts the daily routines of residents, hampers traffic movement, and creates serious public health concerns.
So, keeping in view the above considerations, some of the chronic depression areas are as below:
I) Baldia Colony
These above-mentioned areas are considered the most affected areas. The location of these ponding areas of Haroonabad City, identified as critical and significantly important sore points with respect to inadequate drainage arrangements.</td></tr>
<tr><td>Nature & importance of the Project</td><td>The nature of project is Stormwater Drainage Facilities in Haroonabad City
If the stormwater is not properly drained, it would cause inconvenience, damage, flooding and health risks. It contains pollutants originating from rain, the air or the watershed areas. The most common source of pollutants could be from overflowing sewage (during rain) from the manholes and mixed with</td></tr>
</table>

	stormwater, which contains disease causing organisms. Also, if the stormwater is allowed to remain stagnant in urban areas, it would be mosquito habitat, a source of some diseases.
Type & Category	According to Punjab Environmental Protection (Review of IEE/EIA) Regulations 2022, the proposed project falls under **Category F** (Water management, dams, irrigation and flood protection) of Schedule I, & according to screening of ESCF Categorization project falls under **E-1 & S-2** category, which requires IEE before commencement of construction.
Cost of the Project	**-**
IEE Implementation Cost	**-**
Project Duration	Approximately 08 months
Major Work Activities	• Construction of stormwater drains of various sizes • Construction of underground storage tank • Laying of stormwater drains • Providing of Gully Grating • Laying of Force main • Linear Storage
Sponsoring	Government of the Punjab (Through World Bank Funding)
Executing Agency & Project Proponent	MC Haroonabad
Monitoring Agency	PMDFC

1.7. Structure of the Report

This IEE Report has been prepared following the Punjab Environmental Protection Department (EPD) Guidelines for Environmental Assessment. The format of the Report consists of the following sections:

Section 1: Introduction

Section 2: Legislative, Regulatory and Institutional Framework

Section 3: Description of the Project

Section 4: Description of the Environment

Section 5: Screening of Potential Environmental Impacts and Mitigation Measures

Section 6: Environmental management and monitoring program

Section 7: Stakeholders Consultation

Section 8: GRM

Section 9: Conclusion

SECTION-2 POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

This section provides an overview of the policy framework and national legislation that applies to the proposed project. The project is expected to comply with all national/provincial legislation regulations, EPA guidelines, World Bank Operational Policies and guidelines which are relevant and applicable to the sub-project.

2.1. Regulations for Environmental Assessment, Punjab EPA

Under Section 12 (and subsequent amendment) of the PEPA (1997), a project falling under any category specified in Schedule I of the IEE/EIA Regulations 2022 requires the proponent of the project to file an IEE with the concerned provincial EPA. Projects falling under any category specified in Schedule II require the proponent to file an EIA with the provincial agency, which is responsible for its review and accordance of approval or re- quest any additional information deemed necessary.

The sub-project is categorized in the category-F Water management, dams, irrigation and flood protection) of Schedule-I for IEE, of PEPA, Regulations, 2022, requiring Initial Environmental Examination (IEE).

2.2. World Bank Environment and Social Core Principles for PforR

Table 2- 1: World Bank Policy Core Principles and Applicability on Sub-project

Core Principles	Applicability
Core Principle 1 Environmental and social management procedures and processes are designed to (a) avoid, minimize, or mitigate against ad- verse impacts; (b) promote environmental and social sustainability in program design; and (c) promote informed decision making relating to a program's environmental and social effects.	IEE prepared under the light of this Principle in order to mitigate negative impacts envisaged in this project. ESMMP implementation and monitoring arrangements of IEE will help in achieving environmental and social sustainability.
Core Principle 2 Environmental and social management procedures and processes are designed to avoid, minimize, and mitigate against adverse effects on natural habitats and physical cultural resources resulting from the program	ESMMP prepared to mitigate all minor impacts anticipated during the course of the project.
Core Principle 3 Program procedures ensure adequate measures to protect public and worker safety against the potential risks associated with (a) construction and/or operations of facilities or other operational practices developed or pro- moted under the Program and (b) exposure to toxic chemicals, hazardous wastes, and otherwise dangerous materials	All the mitigation measures have been incorporated in the ESMMP address risks associated with workers and community health and safety. Contractor will ensure compliance with these attributes.

Core Principle 4 Land acquisition and loss of access to natural resources are managed in a way that avoids or minimizes displacement, and affected people are assisted in improving, or at least restoring, their livelihoods and living standards	This core principle doesn't trigger in this project as no land acquisition is required for the construction of stormwater reservoir tank.
Core Principle 6 Avoid exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial disputes.	No indigenous/Vulnerable groups exist along with ROW of the project. This principle doesn't trigger in this project.

2.3.Summary of Relevant Strategies, Policies, Acts and Legislation

The summary of major relevant strategies, policies, acts and legislation from environmental perspective are briefly described in Tables 2-2 & 2-3 below:

Table 2- 2National Policies, Strategies and Legislation Relevant to the Project

Policy/Act	Relevance to the Project
National Environmental Policy, 2005	Provides the overall framework for environmental protection, sustainable development, pollution control, and natural resource management during project implementation.
National Climate Change Policy, 2021	Supports climate adaptation measures and promotes resilient infrastructure to address urban flooding and climate-related risks.
Punjab Climate Change Policy and Action Plan, 2024	Encourages climate-resilient urban infrastructure and improved stormwater management systems to reduce flood vulnerability.
Punjab Environmental Protection Act, 2012	Governs environmental assessment requirements and mandates Environmental approval under Section 12 prior to project implementation.
Punjab Environmental Protection (Review of IEE/EIA) Regulations, 2022	Defines the environmental assessment requirements and classifies the proposed stormwater project under Schedule-I requiring an IEE.
Environmental and Social Compliance Framework (ESCF), PICP	Provides environmental and social screening, categorization, mitigation, monitoring, and compliance procedures for PICP sub-projects.
Punjab Environmental Quality Standards (PEQS), 2016	Establishes standards for air quality, noise, wastewater, and other environmental parameters applicable during construction and operation.
Punjab Occupational Safety and Health Act, 2019	Requires implementation of occupational health and safety measures for workers involved in project activities.

Policy/Act	Relevance to the Project
Antiquities Act, 1975 (Amended 2012)	Requires protection of cultural heritage resources and implementation of chance-find procedures during excavation works.

Table 2- 3 International Agreements and Commitments Relevant to the Project

Convention / Framework	Relevance to the Project
United Nations Sustainable Development Goals (SDGs)	The project contributes to **SDG 6 (Clean Water and Sanitation)**, **SDG 11 (Sustainable Cities and Communities)**, and **SDG 13 (Climate Action)** through improved stormwater management and climate resilience.
Paris Climate Agreement	Supports climate adaptation and resilience-building initiatives by reducing the vulnerability of urban areas to flooding and extreme weather events.
Convention on Biological Diversity (CBD)	Promotes protection of biodiversity and natural resources; however, the project is located within an urban area and is not expected to impact sensitive habitats.
UNESCO Convention Concerning the Protection of World Cultural and Natural Heritage, 1972	Requires protection of cultural and historical resources; applicable through implementation of chance-find procedures during excavation activities.
World Bank Environmental and Social Framework (ESF) and EHS Guidelines	Provides environmental, social, health, and safety requirements for project planning, implementation, stakeholder engagement, and environmental compliance under PICP.

2.4.World Bank Environmental, Health and Social Guidelines

The principal World Bank publications that contain environmental and social guidelines are listed below.

- Environment, Health, and Safety (EHS) Guidelines prepared by International Finance Corporation and World Bank in 2007
- Pollution Prevention and Abatement Handbook 1998: Towards Cleaner Production
- Environmental Assessment Sourcebook, Volume I: Policies, Procedures, and Cross-Sectoral Issues.
- Social Analysis Sourcebook
- WB Committee on disability-inclusive development
- WB guidelines on labour influx
- WB Group Gender Strategy

2.5. Punjab Environmental Protection (Review of IEE and EIA) Regulations, 2022

These regulations clearly define the categories of the projects requiring an IEE or EIA, review fees by EPD, filing process of the environmental reports, public participation, decisions by EPD, conditions of approval, compliance reports and monitoring of the environmental parameters etc. According to Punjab Environmental Protection (Review of IEE and EIA) Regulations 2022, the proposed project falls under Category-F (Water management, dams, irrigation and flood protection) of Schedule I, which requires IEE before commencement of construction.

SECTION-3 DESCRIPTION OF THE PROJECT

3.1.Type And Category of Project

According to Punjab Environmental Protection (Review of IEE/EIA) Regulations 2022, the proposed project falls under **Category-F** (Water management, dams, irrigation and flood protection) of Schedule I, & according to screening of ESCF Categorization project falls under **E-1 & S-2** category, which requires IEE before commencement of construction.

3.2.Objectives of Sub-Project

The Sub-Project comprises to study possible plans to drain of storm water accumulated at low level city areas during heavy rains and recommend best technical option to cater storm water. The objectives of the Sub-Project are:

i. To reduce urban flooding and minimize ponding in low lying areas of Haroonabad.
ii. To improve stormwater drainage efficiency and reduce surface water stagnation.
iii. To reduce the ponding time and surface runoff.
iv. To protect public and private infrastructure from damage caused by flooding.
v. To ensure uninterrupted mobility and reduce traffic disruption during rainfall events.
vi. To enhance overall environmental conditions and urban livability in the project area.

3.3.Alternatives considered realistically (in detailed) and reason for their rejection

Before carrying out any Project, it is imperative to evaluate different alternatives to arrive at the best possible option. In the light of the views of the stakeholders and other objective evidence, the possible alternatives to the project could be:

3.3.1. No Project Option

This option is mostly applicable in situations where the proposed project area is in ecologically sensitive areas. The land in which the proposed project is to be constructed is in a stable environment and state land with encumbrances free with no litigation therefore will not be affected by this development activity.

From the analysis above, it becomes apparent that the 'No Project Alternative' is not the appropriate alternative for the proponent and the Government. Sub-Project doesn't pose any threat to any ecologically sensitive area. Sub-Project is feasible, viable and urgent to cater storm water urban flooding. It will help in reducing aquifer extraction, aquifer recharge, storage of rainwater for horticulture watering and ultimately reduces operational costs of MC.

3.3.2. Alternate Sites

No feasible site alternatives have been considered for the UGST, as the selected site is owned by MC and is the only practical option to effectively manage stormwater within the project catchment area.

The "no-build" alternative would result in the continuation of existing conditions, including the ongoing deterioration of environmental quality, inadequate drainage services, and increased public health risks due to stormwater ponding. Without implementation of the project, the area would continue to experience waterlogging, stagnant water accumulation, and associated foul odors, leading to adverse environmental and social impacts

3.3.3. Layout Alternatives

The selection of layout types depends upon various factors including topography, geology and geotechnical conditions prevailing at the available site. Different layout plans were developed by considering environmental and safety factors. The site conditions were weighed up methodically for selecting best suiting layout types. Different layout plans were studied and the current plan i.e., attached with this report is the environmentally and economically most feasible plan for the proposed sub-project.

3.3.4. Conclusion

Best alternatives for site with new layout alternatives were studied to arrive at the most economical and environmentally feasible option. If the project is not implemented, then all positive impacts related to the proposed project will be lost. So, the best option is to 'build as proposed' by mitigating its potential negative impacts.

3.4.Location and Site Layout of the project

In Haroonabad, stormwater tank is being proposed at Park near PHATA Housing Colony (near Salfiya Mosque) with project coordinates.

The connecting drains to the tank will be laid at Chaman Road as shown in layout map A-B and onwards connecting to Tank and on Quaid e Azam road B-C. Linear Storage is proposed at Saddique Akbar Chowk (identified as ponding areas). The ultimate disposal point is the 4-R distributary. Layout map is given below:

Geographical Coordinates

Geographical Coordinates of the UGST Site are as follows:

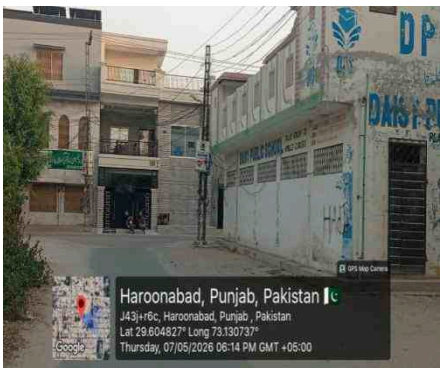
Lat: 29.605515, Long: 73. 130992

Land Documents and E&S Screening Checklist is attached as **Annex-A**





UGST Site at Park near PHATA Housing Colony



Force main Alignment



Linear Storage at Saddique Akabar Chowk

3.5.Land use on the site

The proposed land parcel is located in the vicinity of the MC/TMA office and consists of a vacant green plot. The identified land is currently being utilized for public park. 05 kanals land area is under possession of MC and is the Government/ state land owned by PHATA. MC has obtained the NOC from PHATA for utilization the land for UGST. (attached in **Annex-A**). All the land parcel will be utilized in Sub-Project UGST construction purposes. UGST site will be restored after construction with native plants. The land along the alignments and in the surroundings of the sub-project is residential with some shops and schools.

3.6.Vegetation features of the site

10 trees are present on the boundary alignment of proposed USGT site which can be avoided during construction designing of UGST. However, tree sapling will be planted in operational phase on appropriate places. Mainly grasses and shrubs are present on proposed UGST site which will be restored after construction as before. However, compensatory trees with every tree cut compensated with 10 tree saplings of indigenous species. MC will be responsible for the afforestation as suitable location.

3.7. Schedule of Implementation

The duration of construction will be eight (08) months approximately which may vary according to the specification of client. There will be a symmetrical process.

3.8.Description of the Sub-Project

3.8.1. Stormwater Collection System

For the collection and transport of stormwater, drains will be provided. The drains have the benefit that these can be constructed at lesser slope than the sewers to carry same amount of water. The calculations have been done for sizes of drains/sewers. As regard the drains to collect and transport stormwater from ponding area, their worked-out sizes are given hereunder.

Sr. No.	Item Description
1	RCC Stormwater drain • 3.0' x 3.0', 2750 ft. • 3.5' x 3.5', 2200 ft. RCC Linear Storage 5' x 7'x 150'
2	RCC Storm Water Storage Tank • 01 Million Gallons • Bypass Arrangement
3	Pump house & Pumping Machinery
4	Force Main (OD 450 mm HDPE), 1290 ft.
5	Electrical Works

3.8.2. System Components

For the collection and transport of stormwater, drains will be provided. The drains have the benefit that these can be constructed at lesser slope than the sewers to carry same amount of water. The calculations have been done for sizes of drains/sewers.

The functional components of the tanks are as under:

- The rain water in the tank will be collected through intercepting drains and gully gratings constructed with provision to trap the silt by lowering the invert level.
- Rain water from the ponding area shall be conveyed through collecting drains towards the underground storm water storage tank.
- A Linear Drain of 150 ft. length will be provided before the tank of 7' width and 5' depth.
- A screen will be installed at the entrance point of tank to trap the solid partials.
- The proposed capacity of the stormwater storage tank for Baldiya colony ponding area is 1.0 MG (million gallon).
- The underground stormwater storage tank will be of RCC material, and will be restored its original green conditions.
- The Horizontal Centrifugal pumps will be installed in the pump house to pump the collected stormwater from tank through Force main for final disposal into irrigation minor.
- In order to limit ponding depth at 5-year return period rainfall, 04 cusecs water has been proposed to be pumped out from the storage tank and disposed in the 4-R Distributary to receive next rainfall.
- A lorry hydrant will be provided to fill the water tank of MC to use the water for gardening or horticulture purpose in order to save the extraction of ground water.

3.8.3. Cost of Sub-Project

The estimated cost of sub project given.

3.8.4. Process and Technology

The proposed system is based on a combination of gravity drainage, temporary storage, groundwater recharge, and mechanical pumping. Stormwater generated during rainfall events will be collected through stormwater inlets and RCC drains and conveyed towards the proposed Underground Stormwater Storage Tank (UGST) and linear storage facility. The runoff generated from Baldiya Colony, and adjoining catchments will be intercepted through the proposed drainage network and directed to the storage facilities. The UGST will temporarily store stormwater during peak rainfall events. During high-intensity rainfall events, excess stormwater will be discharged through the designated overflow arrangement into the nearby 4R Distributary, thereby reducing flooding, waterlogging, and associated public inconvenience within the project area.

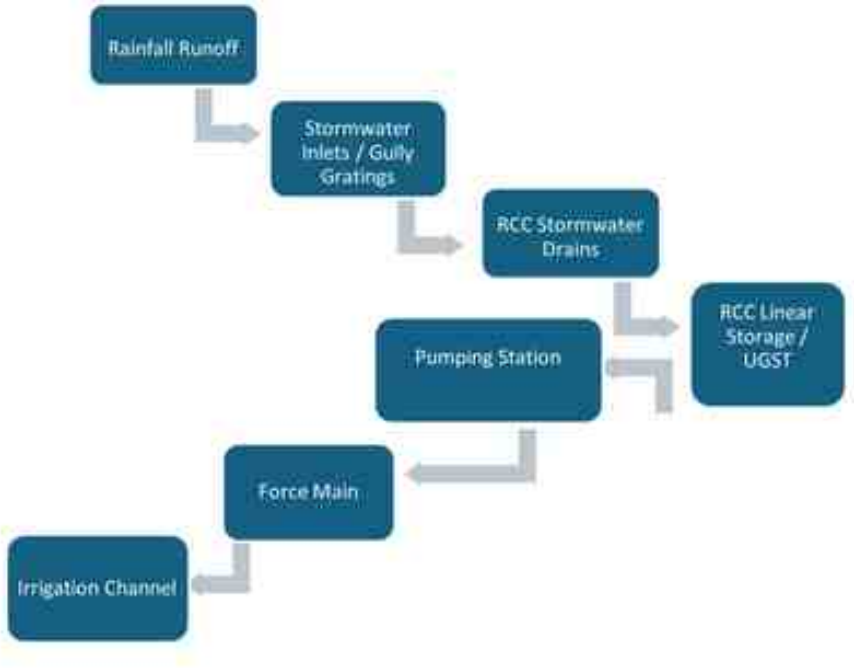


Figure 1:Process Flow Diagram

3.8.5. Raw Materials

Major construction materials required for the project include:

- Cement
- Sand
- Crushed Aggregate
- Reinforcement Steel
- RCC Pipes and Concrete Structures
- HDPE Pipes (450 mm dia., 1290 ft.)
- Bricks and Masonry Materials
- Pumps and Motors
- Electrical Cables and Control Panels
- Water for Construction Activities

3.8.6. Expected Outputs and Benefits

The proposed project is expected to:

- Reduce urban flooding and stormwater ponding in critical areas.
- Improve stormwater collection, conveyance, and disposal.
- Enhance traffic flow and public mobility during rainfall events.
- Protect public and private infrastructure from flood damage.

Provide a source of stored stormwater that will be utilized by MC Haroonabad for horticulture, landscaping, and other municipal purposes.

3.9. Restoration and Rehabilitation Plans

There will be dismantling of ramps/soiling for the construction of inlet drains. During the construction phase, good construction practices would be implemented by the Contractor and supervised by Consultant/PMDFC. Contractor will be responsible for the restoration of affected infrastructure of the community. Contractor will submit restoration plan to the Consultant/PMDFC.

SECTION 4 DESCRIPTION OF ENVIRONMENT

This section describes the baseline conditions for the Physical, biological, socio-economic aspects of the environment of the project site. The data were collected regarding the physical environment, biological environment and social aspects of the study area by reviewing the secondary data from research articles, publications, Govt. Departments studies and related reports and primary data was collected from the field visit, survey and with the consultation of stockholders (MPA Haroonabad/Vital Tea Owner) and MC Haroonabad.



Consultation meeting with MPA Haroonabad/Vital Tea Owner



Consultation with MC Haroonabad

4.1. Description of Tehsil Haroonabad:

Haroonabad is a city located in the Bahawalnagar District of southern Punjab, serving as the administrative headquarters of Haroonabad Tehsil. It is recognized as the 92nd largest city in Pakistan and is positioned at approximately 29.609722° N, 73.137778° E (29°36′35″ N, 73°8′16″ E), with an elevation of about 178 meters (584 feet) above sea level[3]. Geographically, Haroonabad lies near the fringe of the Cholistan Desert and close to the border with India[4]. The Sutlej River flows to the north of the tehsil, and the area is irrigated through

[3] https://en.wikipedia.org/wiki/Haroonabad,_Punjab
[4] https://bahawalnagar.punjab.gov.pk/geography

canal systems originating from the river, including the Hakra Branch and 6R Canal. The city is located roughly 50 km south of Bahawalnagar and about 555 km by road from Islamabad.

Key Profile Points:

- **Location:** Situated in the Bahawalnagar District, at an elevation of roughly 179 meters (587 feet) above sea level.
- **Origins:** The town's history is relatively modern, laid out as a mandi (market) town under the Satluj Valley Project during the 1920s.
- **Old Name:** Before colonization, the site was known as Toba Badru Wala, named after a natural pond used by early cattle farmers and the native Joiya Badru tribe**.**
- **Population**: As of the latest national census, the Haroonabad Tehsil has a population of 615,476 residents.
- **Density & Area:** The tehsil covers an area of approximately 1,295 square kilometers, with a population density of roughly 475 people per square kilometer.
- **Governance:** Administered as a Municipal Council, it oversees civic planning and development in the surrounding union councils.
- **Agriculture:** The local economy is deeply rooted in agriculture, heavily supported by the canal networks of the Satluj Valley Project. It serves as a major collection and distribution point for crops like cotton, wheat, and sugarcane.
- **Demographic Diversity:** Historically, the region has been a mosaic of cultures and castes, including Seraiki Jats, Baloch, Meghwals, and native Punjabi communities.
- **Climate:** Haroonabad experiences an extreme arid to semi-arid climate. It is characterized by exceptionally hot, dry summers and cool, dry winters. The region typically receives scarce rainfall, with much of the surrounding landscape featuring a mix of canal-irrigated plains and the nearby Cholistan desert.

4.2. Baseline Physical Environment

4.2.1. Geography

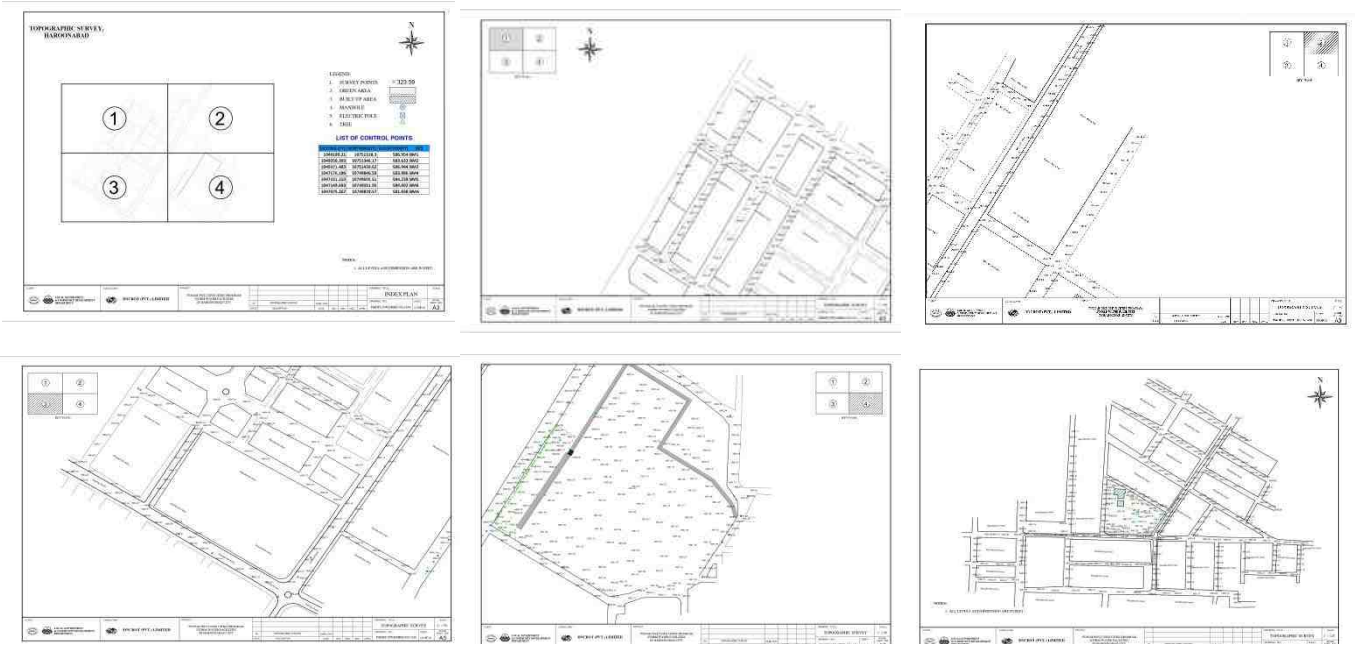
Haroonabad Tehsil covers an area of 1,295 km² and comprises 26 Union Councils, which are mostly villages. Faqirwali is the only notable sub-urban town besides Haroonabad itself. Haroonabad Tehsil is bordered by Bahawalnagar Tehsil to the northeast, Chishtian Tehsil to the northwest, Fort Abbas Tehsil to the south, and Yazman Tehsil of Bahawalpur District to the southwest. It also shares international boundaries with Rai singh

nagar Tehsil to the northeast and Anup garh Tehsil to the southeast, both in Sri Ganganagar District, Rajasthan, India[5]. Haroonabad is spread over an urban area of 11.85 square kilometers.

4.2.2. Topography

The topography of Haroonabad is characterized by a flat, alluvial plain with an average elevation of approximately 161 meters (528 feet) above sea level. The landscape relies on the Hakra River and a network of canals for agriculture. The area is primarily a smooth, unbroken plain formed by centuries of alluvial deposits. There are no major hills, mountains, or significant natural undulations in the region.

The existing drainage system and topography of the catchment and surrounding areas up to final disposal points of the stormwater has been critically studied to check the draining of accumulated water through gravity by utilizing existing, (after improvement) or proposed new drains.



Topography of the study area

4.2.3. Soil

The proposed project site for the construction of storm water reservoir tank is plain area with no trees/vegetation in the surroundings. The soil composition of Haroonabad is predominantly fertile alluvial soil deposited by the Sutlej River system and canal irrigation networks. The region mainly contains loamy and sandy-loam soils, which are highly suitable for agriculture and support the cultivation of crops such as cotton, wheat, sugarcane, maize, and vegetables. In some areas, clayey soil is also found, particularly in low-lying

[5] Planning report Bahawalnagar 2008" (PDF). Punjab Municipal Development Fund Company: Punjab Municipal Services Improvement Project (PMSIP). 2008.

fields where water retention is higher. Due to the arid climate and intensive irrigation practices, certain patches may experience salinity and waterlogging issues, affecting soil productivity. [6]

Development of the proposed storm water reservoir facility will reduce the chances of urban flooding in the area. Further, there will be no such damage caused to the soil and geology by the proposed project.

4.2.4. Climate and Hydrology

4.2.4.1. Climate

Haroonabad experiences a subtropical continental climate marked by extremely hot summers, relatively mild winters, and generally low annual rainfall. By late April, temperatures typically rise to around 40°C–43°C (104–107°F), with nighttime temperatures ranging between 25°C and 29°C. The peak summer period (May–July) is especially intense, with daytime temperatures frequently exceeding 40°C.

Rainfall

The average annual rainfall in Haroonabad is approximately 160 mm. The region receives relatively low precipitation throughout the year. Most of the rainfall occurs during the monsoon season. This seasonal rain plays an important role in supporting agricultural activities. Farmers largely depend on monsoon showers for crop growth. The rainfall helps irrigate fields in addition to canal water supply. It also contributes to improving soil moisture levels. During the monsoon, the area experiences short periods of moderate rainfall. These rains provide relief from the intense summer heat. Generally, rainfall is vital for sustaining the local farming economy.[7]

Flood never hit the city Haroonabad only Heavy rainfalls cause urban flooding. In this area 225mm rainfall was recorded in the city Haroonabad.

4.2.4.2. Hydrology and Water Resources

Historically, the region was an arid or semi-desert area often known by its native term "Toba" (a natural pond for rainwater). It mainly relies on canal-based sources and tube wells for its potable water supply. Two primary sources are available for supplying drinking water:

- The Hakra Canal on the eastern side of the city
- The 3R Canal on the northern side

Shallow tube wells can be installed along both canals to meet the city's water demand. Currently, different areas receive water through existing supply schemes connected to the Hakra and 3R canals. [8]

[6] Khalid, S., & Gilani, A. H. (2010). Distinctive cultural and geographical legacy of Bahawalpur. *Pakistaniaat:*

[7] https://www.timeanddate.com/weather/@1181073/climate

[8] Punjab Cities Programm (PCP)-2019-2025 (Punjab Muncipal Development Fund Company (PMDFC)

Surface Water

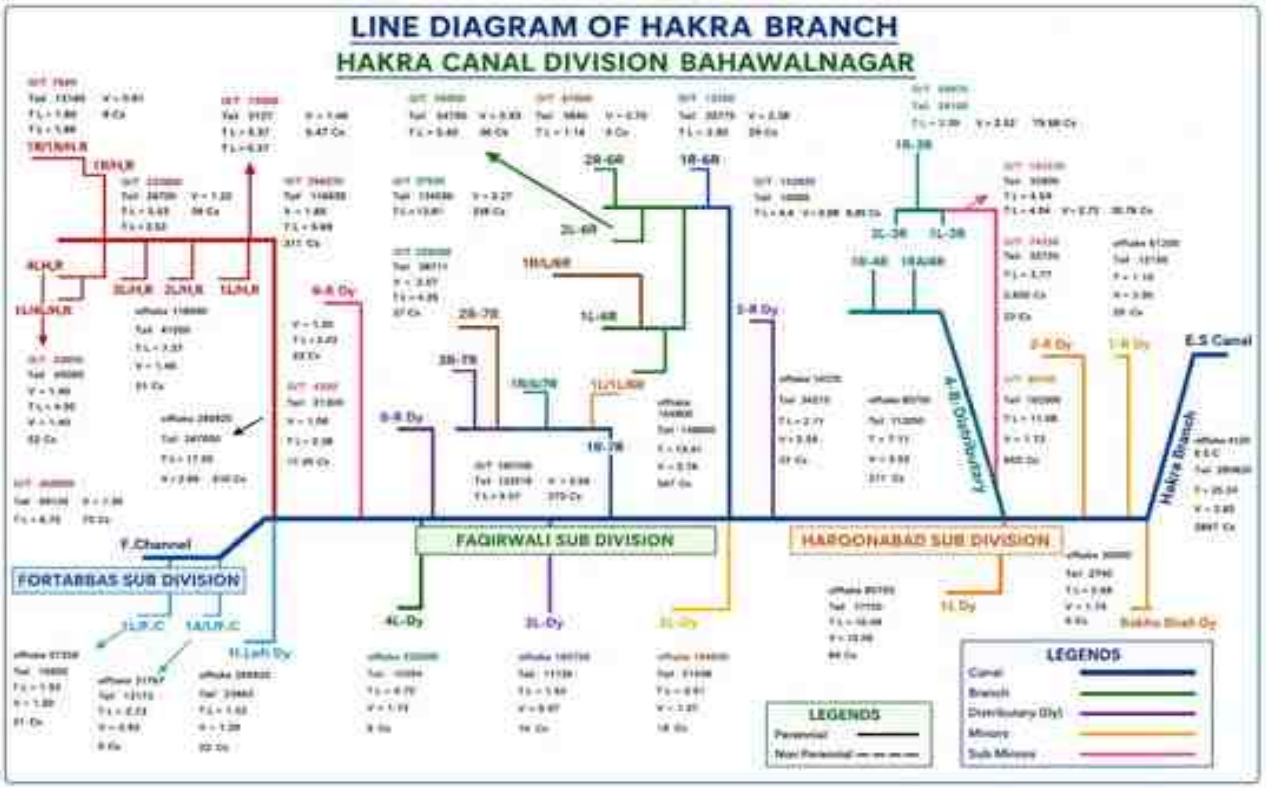
There is no surface water body including rivers, streams, or lakes present within the 200 meters radius of the project site. Sutlej River is present at the distance of 25 km from the city. 4R-Distributary will be used as final disposal point of force main. This distributary is linked to the main Hakra branch. So, 4-R distributary is linked with force main component of the Sub-Project. The details of the canal are below:

The ultimate disposal point named 4R distributary from Hakra branch has:

- Design discharge capacity of 110.97 cusec
- Bed level 510.75
- Bed width 20
- FSD 2,90
- N.S.L 509.70
- Free board 1.50
- Slope 0.175
- Bank top level 515.50

The 4R Distributary can handle hydraulic load of 04 cusec without causing back-flow flooding reported.

Line Diagram of Hakra Canal



Further, no alteration of surface water hydrology due to the proposed project activities.

Groundwater[9]

Groundwater in the Haroonabad region (southern Punjab) is characterized by high salinity, making much of it brackish and generally unsuitable for direct drinking. Because fresh canal water is limited, the area relies heavily on tube wells and urban wastewater for agriculture, which has led to shallow and heavily contaminated groundwater tables.

The water table in the area varies significantly but is often quite shallow, ranging from less than 1 m to about 25m depending on the season and proximity to the Hakra Branch Canal.

The shallow water table of the area starts at the depth of 07-15 ft as per geotechnical report whereas the proposed underground storm water reservoir tank will be constructed at the depth of 16 ft. Dewatering will be done before constructing the tank.

4.3. Baseline Biological Environment

4.3.1. Ecological Resources [10]

Haroonabad has a biological and ecological environment shaped mainly by its semi-arid climate and extensive agricultural activities. The region supports a variety of crops, roadside vegetation, and local wildlife adapted to hot and dry conditions. Canal irrigation systems play an important role in maintaining soil fertility and supporting the area's ecological balance.

4.3.1.1. Flora & Fauna

The region supports a variety of flora and fauna adapted to hot and dry conditions. Agricultural fields dominate the surrounding environment, where crops such as wheat, cotton, sugarcane, and vegetables are extensively cultivated. Trees such as neem, eucalyptus, kikar, and shisham are commonly found along roadsides, canals, and agricultural lands, providing shade and ecological balance. The canal irrigation system, including the Hakra and 3R canals, supports local biodiversity and enhances soil fertility.[11]

Common wildlife in the area includes birds (grey partridge, hoopoe, Indian peafowl, common myna, and various birds of prey such as shikras and black-winged kites.), mammals (Jackals, wild hares, desert cats, and mongooses. Bordering areas toward the Cholistan desert support populations of Chinkara (Indian gazelle)), reptiles (desert-adapted snakes, like the Indian cobra, as well as several species of lizards.), and domestic livestock. Seasonal migratory birds may also be observed near water bodies during winter. However, increasing urbanization, water scarcity, and improper waste disposal pose challenges to the ecological balance of the region. Sustainable environmental management, afforestation, and improved waste management practices are essential for preserving the biological and ecological environment of Haroonabad.[12]

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[9] https://www.researchgate.net/figure/Groundwater-quality-below-agricultural-fields-in-Haroonabad-irrigated-with-and-without_tbl4_237287715

[10] Saeed, A., Javed, M., Fazal, S., Ahsan, J., Khan, M. A., & Hassan, A. (2021). Study of ecosystem and.

[11] Arshad M, Rao A-U-R (1994) Flora of Cholistan desert (systematic list of trees, shrubs and herbs). J Eco Tax Bot 18:615–625

[12] Anwer, Z., Shabbir, S., Iram, T., Tariq, S., & Murad, H. (2020). Ethnobotanical study of wild flora of haroonabad, district bahawalnagar, punjab, Pakistan. Eur. J. Biol, 5, 41-62.

10 trees are present on the boundary alignment of proposed USGT site which can be avoided during construction designing of UGST.

However, tree sapling will be planted in operational phase on appropriate places.

4.3.2. Protected Areas

Thus, Haroonabad currently lacks formal protected-area status and so the proposed project site is free from any protected area**.**

4.3.3. Rare or Endangered Species

There are no game reserves, protected lands/areas, endangered or rare species or buffer zones in the area in the range of 100 meters from the project site.

4.3.4. Wildlife corridors

No peer-reviewed or governmental source naming or describing "wildlife corridors" in Haroonabad was reported or found.

4.4. Baseline of Socio-Economic Environment

The project economic benefits will be in the form of:

- Reduction in public expenditure on repair and maintenance of roads damaged due to stormwater ponding during rainfall events.
- Minimization of financial losses to residents and shopkeepers by preventing water intrusion into houses and commercial properties.
- Significant decrease in urban flooding and surface water accumulation, improving overall drainage efficiency in the city.
- Reuse of stored stormwater from underground tanks for horticultural and landscaping purposes, reducing dependence on groundwater abstraction and helping destress the aquifer.
- Overall improvement in environmental conditions through reduced water stagnation, improved sanitation and enhanced urban aesthetics.
- Social benefits are usually intangible and not easily quantifiable. However, following are considerable benefits that would be socially acceptable
- Reduced public anxiety and inconvenience from stormwater ponding and flooding.
- Time savings for commuters and daily urban activities.
- Uninterrupted traffic movement during rainfall events.
- Improved public health through better sanitation and reduced risk of waterborne and vector-borne diseases.
- Enhanced urban environment and overall living conditions.

- Strengthened municipal services and urban infrastructure.
- Reduced foul odors and cleaner public spaces during monsoon seasons.
- Generation of temporary and indirect employment opportunities during construction and maintenance phases.
- Reduced damage of the roads due to ponding shall be controlled and condition of the roads shall be improved

The environment positive impacts of the project include:

- Reduced soil and pavement degradation caused by prolonged waterlogging and infiltration.
- Controlled runoff management, reducing uncontrolled discharge into surrounding agricultural land and open areas.
- Improved resilience to climate variability through enhanced stormwater handling capacity during high-intensity rainfall events.
- Support for water reuse from underground storage tanks for non-potable uses such as horticulture, reducing pressure on freshwater resources.
- Contribution to climate adaptation through better urban drainage planning and reduced vulnerability to extreme rainfall events.
- Reduction in surface water stagnation and urban flooding
- Reduction in breeding grounds for mosquitoes and other disease vectors linked to stagnant water.

4.5.Existing Socially Sensitive Receptors

As identified during the survey, 38 privately owned structures, comprising household and shop access ramps, will be directly and partially affected by the proposed drainage installation. These impacts will be limited to the portions of ramps extending into the construction corridor and will not result in the displacement of any household or business. Appropriate compensation and assistance will be provided to the affected persons in accordance with the approved ARAP before construction begins. No notified Physical Cultural Resources (PCRs) have been identified within the sub-project area. Religious sites, educational institutions, and other socially sensitive receptors located within 100 m of the proposed works will experience only temporary and indirect construction-related impacts. Access disruptions are expected to remain limited to approximately three to four days. The contractor will provide safe alternative access, promptly restore affected ramps, and, where feasible, undertake works near sensitive receptors during off-peak or night-time hours in consultation with the concerned stakeholders. Whereas, there is already alternate routes available for accessibility. The list of the socially sensitive receptors summarized and is presented in Table 4-1 below.

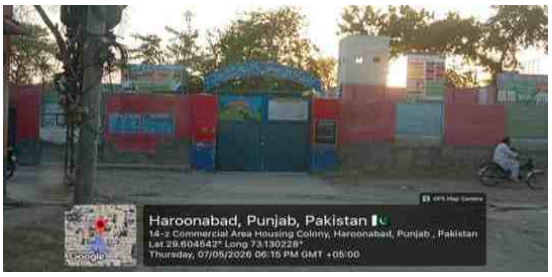
(*Source*: Data collected during field survey)

Table 4- 1:Details of Social Sensitive Receptors

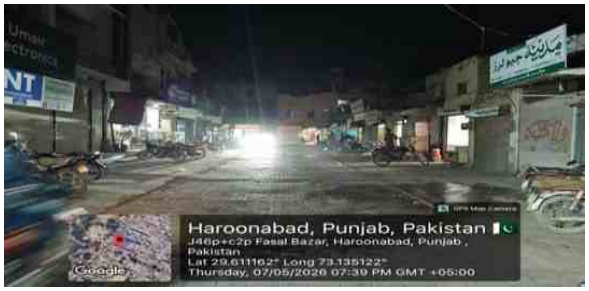
Places of Religious Importance	Recreational/Public	Educational Institutes	Hospital
01 mosque named Selfiya Masjid is present approx 10 meters away from UGST PHATA Park proposed site (in front of park).	Shops ramps & electric poles are present on the Chaman road as shown in layout map A-B and onwards connecting to Tank site. On Quaid e Azam road as shown in layout map B-C, storm water drain exists which will be desilted/rehabilitated and connected to the proposed network.	01 school named Direction School is present within 15-meter periphery of UGST site, in front of park. 02 Schools named Daisy Public school and Govt Girls High school are present 10 meters on the force main route.	No Clinic/hospital is present in the subject project area.

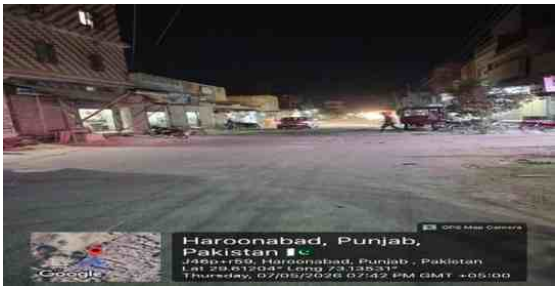


Daisy Public School



Govt Girls High School





Shops along the drainage routes

During the construction phase, mobility of the locals will be impacted along with site. Environment Health & Safety (EHS) and mobility issues will be mitigated by adopting good engineering practices. All these indirect, temporary & site-specific impacts have been envisaged which will be mitigated accordingly. Alternate access routes will be marked to facilitate commuting during the implementation of the sub-project. Anticipated impacts of the sub-project and to overcome these localized social & environmental impacts; a mitigation plan has been prepared and given in Chapter 5 & 6.

SECTION 5 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

5.1. At Design Phase

Following parameters have been considered at design stage to assess potential environmental and social impacts and mitigation measures will be implemented during construction phase.

5.1.1. Land Acquisition

The land along the alignment of the sub-project is populated. The land of the sub-project is under the possession of executing body. The major land use of the area is commercial followed by residential usage. No land acquisition is required for the construction of storm water facilitation system. It was also confirmed during the public consultation that no Anti-Encroachment Drive (AED) has taken place in the sub-project area. State land has been acquired for the construction of UGST and inlet drains will be constructed within RoW of the existing road and covered storm water drains with gully gratings will cater storm water leading to UGST.

5.1.2. Flora

During the field visit, all the storm water inlet drains as well as UGST site has been assessed for trees that needs to be cut. 10 trees are present on the boundary alignment of proposed UGST site which can be avoided during construction of UGST. Mainly grasses and shrubs are present on the UGST land which will be removed and restored afterwards.

Mitigation Measures:

- Every tree cut will be compensated with 10 tree saplings of indigenous species.
- Compensatory trees will be planted by MC at suitable location (in case of tree cutting involved)

5.1.3. Assessment of damages to public infrastructure

During the walk-through survey of all the storm water inlet drains as well as UGST sites have been assessed for the damages to public infrastructure that may occur during the excavation of drain and UGST. There would be minimum damage to the ramps/soiling of the houses/shops as all the drains would be constructed with RoW of the existing road towards metaled road.

Mitigation Measures:

- All the damages to the ramps of shops/houses will be restored by the Contractor.
- Wooden logs/sheets would be provided to the shops/houses for crossing and accessibility to their premises.
- All the excavated areas would be cordon off with safety drain/green mesh.

5.1.4. 4-R Distributary

In order to discharge surplus rainwater of 04 cusec into the surface water resource, 4-R Distributary from Hakra branch design full supply level and free board data has been attained from the Irrigation Department so that there would be no back-flow/erosion in heavy rainfalls. Data has been made part of the Screening Checklist.

5.1.5. Stakeholders Consultations

For the successful implementation of the Sub-Project, local community and technical staff of MC/Irrigation department officials have been consulted to achieve objectives of the Sub-Projects.

5.2. Construction phase

5.2.1. Health and Safety of Workers

The health and safety issues are associated with the operation of construction machinery and equipment which may cause minor and severe injuries to workers. Labor might get injuries if not provided with PPEs.

Mitigation Measures:

- Protected fencing will be fixed around the construction site. Unauthorized access to the construction area will not be allowed.
- Personnel injuries risks can be mitigated through the provision of appropriate training and emergency response procedures.
- The contractor will ensure better working conditions for its employees.
- The construction site office will have first-aid kits.

5.2.2. Construction Waste

There would be negative impact if construction waste gets scattered on the construction site and cause hindrance in mobility of pedestrians as well as disturbance in traffic flow.

Mitigation Measures:

- There would supply and demand balance of materials required so that materials don't stockpile on the site.
- Materials might be get stacked at designated area.
- Construction waste should be disposed off properly after closure of daily construction activities.

5.2.3. Hindrance in Traffic Mobility

In case construction waste would be sprawled unattended on the construction site, there would be traffic jam and hindrance in mobility of pedestrians may be caused.

Mitigation Measures:

- Construction waste should be properly managed onsite.
- Traffic flow should be ensured.
- Flagmen may be deputed on the route.

5.2.4. Site Safety

Accidents may be occurred due to the mess on the construction sites due to labor/materials miscalculations.

Mitigation Measures:

- Construction Site should be cordon off with safety tape
- Labor should wear reflective vests/helmets
- Safety signs/cautions should be installed onsite.

5.2.5. Damage to Public Infrastructure

In case of any damage to any public infrastructure, public nuisance can halt construction activities.

Mitigation Measures:

- Constructor will restore/compensate the damage as per assessment of MC officials.
- Contractor will pay the amount directly to the affectee.

5.2.6. Potential Environmental Enhancement Measures

Following potential environmental enhancement measures have been considered in designing of this Sub-Project.

✓ Reducing aquifer extraction as MC extract ground water for horticulture practices

✓ UGST will be constructed to store rainwater for utilization in horticulture practices rather aquifer extraction.

✓ RCC structures will be constructed having shelf-life of 50 years.

✓ Pumping station will be solar powered to reduce utilization of non-renewable energy sources.

✓ Rainwater which causes urban flooding will be stored and capitalized for different purposes.

✓ Accumulation of rainwater causes different disease which will be reduced through this intervention.

SECTION-6 ENVIRONMENT AND SOCIAL MANAGEMENT AND MONITORING PROGRAM

6.1 General

This chapter presents the Environmental and Social Management and Monitoring Plan (ESMMP) for the proposed project. It outlines the key environmental and social issues, proposed mitigation measures, implementation responsibilities, monitoring requirements, and capacity-building arrangements to ensure effective management of project impacts. The chapter also provides the estimated budget required for implementation of environmental and social mitigation and monitoring measures throughout the project lifecycle.

6.2 Objectives of the Environmental Management Plan

The Environmental Management Plan (EMP) will help PMDFC to address the future likely negative impacts of the proposed Project, enhance the Project's overall benefits and introduce standards of good environmental practice. The primary objectives of the EMP are:

- Define the responsibilities of the Project Proponent and other role players during the design, construction and the operational phases;
- Facilitate the implementation of the mitigation measures by providing technical details of each Project impact, and proposing an implementation schedule of the proposed mitigation measures;
- Develop a monitoring mechanism and identify monitoring parameters to ensure that all the proposed mitigation measures are completely and effectively implemented;
- Identify training requirements at various levels and provide a plan for the implementation of training sessions;
- Identify the resources required to implement the EMP and outline corresponding financing arrangements.

6.3 Specific Implementation Responsibilities

The implementation and supervision responsibilities for environmental and social management during the design, construction, and operation phases of the project are summarized below.

Table 6- 1ESMMP implementation Procedure

Project Phase	Responsible Organization	Key Responsibilities
Design / Pre-Construction Phase	PMDFC, MC WATSAN Unit and E&S Haroonabad	Ensure incorporation of ESMMP requirements into project design and contract documents; obtain

	Focal Person	environmental approvals and NOCs; conduct stakeholder consultations; establish and disclose the Grievance Redress Mechanism (GRM); and ensure compliance with applicable environmental and social requirements.
Construction Phase	Contractor, MC Haroonabad (WATSAN Unit & E&S Focal Person), Construction Supervision Consultant and PMDFC ESM Team	Implement all mitigation measures, OHS requirements, traffic management, waste management, and community safety measures; maintain records of environmental and social compliance; receive and address public complaints through the GRM; and monitor compliance with the ESMMP and PEQS during construction activities.
Operation Phase	MC Haroonabad (WATSAN Unit, MO Infrastructure, E&S Focal Person) with support from PMDFC	Operate and maintain stormwater facilities; undertake periodic inspection, monitoring, and desilting activities; address public complaints through the GRM; monitor environmental performance; and ensure the long-term sustainability and effective functioning of the stormwater drainage system.

Table 6- 2: Environment & Social Management Plan (Design Phase)

Sr. No.	Aspect	Design Responsibility	Implementation Responsibility
1	**Design Aspects**		
	The following Design Considerations have been integrated: 1. Storm water inlet drains alignment to avoid ARAP. 2. Construction of stormwater drains of various sizes 3. Construction of underground storage tank 4. Providing Gully Grating 5. Laying of Force main 6. Outlet of force main in 4-R distributary	Design Consultants	MC Haroonabad
2	Permits, NOCs, Clearances		
	Necessary consents, permits, and clearances shall be obtained before the start of civil works. As this project in going to be on MC Haroonabad land and on existing system so not permits are required from any other organization. NOC will be attained from Irrigation, EPA and PHATA before the commencement of the construction activities.	PMDFC and MC	MC Haroonabad
3	Land Acquisition and Resettlement Issues		
	• This component of sub-project will be executed at MC owned ROW. • The contractor's temporary facilities will preferably be established on government owned land, otherwise, such lands/buildings will be obtained on a rental or lease basis. • No AED has been carried out on the proposed project site. No AED certificate issued by Administrator has been attached as Annexure D.	MC Haroonabad	MC Haroonabad
4	Preparation of Labor Management Procedures		
	EHS SOPS for labor workers/Including women workers have been prepared and approved (prior to project appraisal) and will be implemented effectively throughout the project period by making	ESFPS	MC Haroonabad

Sr. No.	Aspect	Design Responsibility	Implementation Responsibility
	them part of contractor's term of reference and bid documents. In case of injury, temporary or permanent disability, or death of workers or community members resulting from project activities, compensation shall be provided in accordance with the applicable labour laws, rules and regulations of the Government of Punjab.		

Table 6- 3: Environmental Management Plan (Pre-Construction Phase)

Sr. No.	Pre-Construction Phase		Implementation	Supervision
1	Contractors Terms of Reference			
	• The MC Haroonabad shall ensure that IEE shall be made part of contractor terms of reference and part of the bid documents. • This ESMMP will be used by the contractor to be guided on the structure and control of potential environmental and social issues that are required to be managed to avoid or mitigated adverse consequences.	Contract award to completion phase	MC Haroonabad	Regional Office PMDFC ESM Team PMDFC E&S
2	Grievance Redress Mechanism			
	• Grievance Redress Mechanism has been developed under PICP • MC Haroonabad with the technical assistance of PMDFC team shall share project details to public, relevant stakeholders and to receive complaints • Display contact details of ESFPs and E&S Supervision consultants for public to lodge their complaints/concerns to the contractor at the entrance and main points of the site • Provide sign boards for pedestrians to inform nature and duration of construction works. Provide alternative access road for residents. • Develop and establish contractor's own procedure for receiving, documenting and addressing complaints from the affected public and nearby communities that is fully in line with and guided by the project's GRM	Throughout the cycle of project	MC Haroonabad Contractor	Regional Office PMDFC ESM Team PMDFC E&S Supervision Consultants

Table 6- 4: Environmental Management Plan (Construction Phase)

Sr. No.	Aspect	Project Impact	Mitigation Measures	Monitoring Indicators	Monitoring Frequency	Responsibility
1	Improper construction techniques and monitoring	Public inconvenience, traffic jams, unmanaged excavated material, and dust problem due to excavation	• The supervisory / monitoring staff should be experienced and qualified enough to handle the excavated material and its disposal in designated places without harming local environment. Also, additional training may be provided. Supervision and training for the contractor's staff shall also be required.	Visual / Pictures	Daily Site Visit during construction phase	• ESFPs • Construction Supervision Consultant
2	Poor Construction Material	To overcome health and hygiene problems in the service area.	• Selection of construction material safe for human use. • Choose appropriate pipe material and sizes that fulfil the requirement of the area.	Visual / Pictures / Test Reports	Daily/Weekly Site Visit during construction phase	• ESFPs • Construction Supervision Consultant
3	Dismantling, Excavation for laying of storm water drains, UGST & Forcemain	a) Environmental Issues: • Dust which may affect visibility • Noise from machineries/ • equipment • Construction waste may be generated due these activities	• Excavated waste will be reused to restore the road. • Updated and tuned machinery will be used to control noise. • Water sprinkling will be carried out at	Visual / Pictures	• Daily site visit during Construction phase • Fortnightly/Weekly • Once during the construction phase	• ESFPs • Construction Supervision Consultant

Sr. No.	Aspect	Project Impact	Mitigation Measures	Monitoring Indicators	Monitoring Frequency	Responsibility
		• Safety hazards to labor • Worse House Keeping b) Social Issues: • Excavated waste and • construction activity may cause • disturbance in mobility • Temporary blockage of road may restrict mobility • Conflict with public and public complaints	consecutive intervals as per instruction • Avoiding construction activities during nights. • Removal of excess matter/ debris from the site immediately. • Provide PPEs to labor • Provide appropriate signage near the construction, activities to sensitize the communities and minimize accidents. • Public must be informed about project major activities, duration of scheme, time and schedule, anticipated impacts and their proposed Mitigation Measures. The contact Nos. of focal person of Grievance Redress Committee will be displayed at different locations and residents will also be informed about it.			
4	Labor Camp (if established by Contractor)	• Health impacts due to absence of housing and sanitation facilities	• Contractor will ensure provision of appropriate housing, water supply,	Visual / Pictures	• Daily site visit during Construction phase	• ESFPs • Construction Supervision

Sr. No.	Aspect	Project Impact	Mitigation Measures	Monitoring Indicators	Monitoring Frequency	Responsibility
		in labor camp. • Security of labor • Unhygienic conditions	and sanitation facilities to labor. However local labor will be hired as skilled labor from outstation is not the requirement of this project. • Contractor will hire house on rent to avoid campsite issues. • In case of construction of camp site, following measures will be adopted by the contractor: • Good housekeeping will be ensured inside campsite • Labor will be provided with quality food. • Better heating & cooling facilities will be provided by the Contractor as per season accordingly. • Better accommodation will be ensured by the Contractor. • It's better to accommodate labor in Containers Camps/houses with all		• Fortnightly/Weekly • Once during the construction phase	Consultant • DPO

Sr. No.	Aspect	Project Impact	Mitigation Measures	Monitoring Indicators	Monitoring Frequency	Responsibility
			amenities.			
5	Providing and Fixing of Slabs	• Accidental Falls	• It will be ensured to perform the activity during sunlight hours • Area will be completely cordoned off and prohibited for children • Awareness signage will be displayed at prominent places • Local community will be informed well before time to adopt precautionary measures • It will be ensured to complete the activity in minimum possible time duration • It will ensure to address any concerns or complaints promptly to maintain transparency.	Visual / Pictures	• Daily site visit during Construction phase • Fortnightly/Weekly • Once during the construction phase	• ESFPs • Construction Supervision Consultant • DPO ESSs
6	Site Safety Issues	• Accidents	• Contractor will ensure site safety using safety cautions (night vision), boards, flagmen, cordon tapes etc. for smooth flow of traffic during the construction phase of the Sub-Project.	Visual / Pictures	• Daily site visit during Construction phase • Fortnightly/Weekly • Once during the construction phase	• ESFPs • Construction Supervision Consultant • DPO ESSs

Sr. No.	Aspect	Project Impact	Mitigation Measures	Monitoring Indicators	Monitoring Frequency	Responsibility
7	Occupational Health & Safety	• Injuries to workers	• Contractor will follow HSE SOPs for all activities on the site. • Workers will be trained and guided to follow SOPs and will be provided with necessary PPEs (Safety Helmets, Safety Shoes, Gloves, Chemical Masks etc.) wherever required. • First aid will be provided onsite • Careful monitoring will also be carried out.	Visual / Pictures	• Daily site visit during Construction phase • Fortnightly/Weekly • Once during the construction phase	• ESFPs • Construction Supervision Consultant • DPO ESSs
8	Damage to Public Infrastructure	• Accidents/Incidents • Structural Loss • Social Conflicts	• Contractor will ensure no damage to public utilities or structures. • Contractor will provide compensation in case of any damage may occur to the private property	Visual / Pictures	• Daily site visit during Construction phase • Fortnightly/Weekly • Once during the construction phase	• ESFPs • Construction Supervision Consultant • DPO ESSs
9	Sexual Harassment-Labor Influx-Child Labor	• Social Conflicts	• Contractor will give behavioral training to the workforce. • Contractor will hire local labor • Child labor will not be allowed for any activity	Visual/ Pictures/Reported/Complains by public during visit	• Daily site visit during Construction phase • Fortnightly/Weekly • Once during the construction phase	• ESFPs • Construction Supervision Consultant • DPO ESSs

Sr. No.	Aspect	Project Impact	Mitigation Measures	Monitoring Indicators	Monitoring Frequency	Responsibility
10	Noise and vibration	Disturbances to residents in the form of increased noise levels and vibration due to movement of construction machinery	• Selection of up to-date and well-maintained plant or equipment with reduced noise levels. • Providing the construction workers with suitable hearing protection like ear cap, or earmuffs. • Preferably, restricting construction vehicle movements during nighttime. • Use Silenced equipment's. • Machinery with low noise level or machinery with noise shielding and absorption should be used. • Vehicles and equipment used will be fitted, as applicable, with silencers and properly maintained.	Visual / Pictures	Daily / Weekly during construction phase	• ESFPs • Construction Supervision Consultant • DPO ESSs

Table 6- 5: Environmental Management Plan (Operational Phase)

Sr. No.	Aspect	Project Impact	Mitigation Measures	Monitoring Indicators	Monitoring Frequency	Responsibility
1	Overall environmental impacts	To reduce overall negative impact of the project on the environment and conserve natural resources.	• Should take all possible measures to ensure that operation of the project does not harm any component of the environment.	Visual / Pictures	Monthly during operation phase	MC Haroonabad & PMDFC Staff
2	Desilting of Drains	• Traffic/pedestrians hindrance • Smell/odor • Vector borne diseases sites in case of silt piles	• Desilted material will be disposed off within 24 hours at MC designated site. • Silt will be removed through sucker bucket machines and to avoid mobility of the local community, alternate routes will be provided in the main roads while local community will be informed well before time about this activity. • In case of sensitive receptors i.e. schools/ colleges and Mosques sites, desilting activity will be scheduled as per the timings of institutions and prayers. • It will be ensured to engage with the community and keep them informed about the purpose and duration of the project. • Safe transportation of silt material will be ensured from the de-	Visual / Pictures	Monthly during operation phase	MC Haroonabad & PMDFC Staff

Sr. No.	Aspect	Project Impact	Mitigation Measures	Monitoring Indicators	Monitoring Frequency	Responsibility
			siltation site to disposal site by covering with the trapline and using PPEs by the workers handling the overall activity. • It will ensure to address any concerns or complaints promptly to maintain transparency. Implementation of safety protocols to ensure the safety of workers and the public. This may include barriers, warning signs, and proper training for workers.			
4	Surface water Monitoring at 4-R Distributary	• Contamination of surface water due to mixing of sewer	• Regular monitoring of surface water will be conducted.	Visual / Pictures	Monthly during operation phase	MC Haroonabad & PMDFC Staff
5	Breeding Ground for Disease Vector	• Due to overflow of manholes, there may be the possibility of stagnant water which acts as breeding grounds for disease vectors.	• Regular checks for any spots which may serve as breeding grounds and spray of insecticides if any such spots are found.	Visual / Pictures	Monthly during operation phase	MC Haroonabad & PMDFC Staff

6.1. IEE Implementation Cost

For an effective implementation of environmental mitigation measures, it is very important to provide sufficient funds for implementation of environmental mitigation measures, monitoring and training. The total cost of these items has been worked out and provided as below during construction:

Table 6- 6: IEE Implementation Cost for Proposed Sub-Project

IEE Implementation cost			
Duration of Project: 08 months			
Item	**Quantity**	**Tentative Cost/Item- Rs./-**	**Total Cost**
A-PPEs			
Face Masks (3 PLY) - box	50		
Safety Hard Helmets (MSA)	30		
Safety Shoes	30 pairs		
Hand Gloves	30 pairs		
Reflective Safety Vest (Orange)	30		
Safety Goggles	30		
B-Community Health and Safety			
First Aid Box Complete	03		
Safety Signs Boards	30		
Safety Tapes	30		
Portable Delineator with chain			
Emergency Portable Flood Lights	05		
Pole hanging waste bins	20		
DCP Fire Extinguisher	02		
Hiring of Environmental Specialist (for 08 months)	01		
C- Environment Quality Testing*			
Ambient Air Quality, Noise and Surface/Ground Water Quality - 03 sampling events – 06 samples per event (Total 18 samples)			
Total (PKR)-A+B+C			
Grand Total			

* C- Sampling will be carried out by an EPA-certified laboratory recommended by the SPO E&SM.

6.2. Environmental Management Team

A multidisciplinary team was formulated to conduct the study. The team comprises the following persons.

Ms. Rukhsana Shahid	**Senior Program Officer, ESM Wing, PMDFC**
M. Amjad	Engineering Wing PMDFC
Asif Gillani	Program Officer Environment, PMDFC
Ms. Saadia Pervaiz	Deputy Program Officer Environment PMDFC
Hassan Siddique	Deputy Program Officer, Social PMDFC
M. Waleed	Topographic & Design Expert, Dynamic Consultants

6.3. Monitoring Program

Monitoring will be carried out to ensure that the mitigation plans are regularly and effectively implemented. It will be performed at two levels. At the PMDFC, the environmental team will do IEE compliance monitoring to ensure that the mitigation plans are being effectively implemented. At the Contractor's level, their Environmental Manager will fill out the Environmental & Social monitoring checklist on a weekly basis.

6.4 Monitoring Reporting Structure

The Contractor will submit a weekly compliance monitoring checklist and PMDFC ESM Wing will submit quarterly and annual monitoring reports as well as a final report of the sub-project based on safeguard implementation status. The monitoring reports will also include the process and outcome of consultations with the Project Affected Persons (PAPs), if any. The distribution of periodic reports is given below in Table 6-7:

Table 6- 7: Distribution of Periodic Reports

Sr. No	Distribution of Periodic Reports	Prepared by	Reviewed by
1	Weekly	Contractor	Supervisory Consultants
2	Quarterly	Supervisory consultant	PMDFC SPO ESSs
3	Final	Supervisory consultant	PMDFC SPO ESSs

6.5 Capacity Building

A comprehensive capacity building program will be followed to strengthen the technical and institutional capacities of the executing agency (MC Haroonabad), contractors, and laborers. The capacity building plan for the proposed sub-project is presented in Table 6-8.

Table 6- 8: Capacity Building Plan for Proposed Sub-Project

S. No	Components	Audience	Level	Modality	Frequency	Responsibility
1	ESCF Site-Specific Requirements and E&S Management and Mitigation Plan	MO-I MO-P and MC field staff[13]	Training	Briefing Presentations Mock Activities	Before execution of sub-project and time-to-time instructions	PMDFC ESM team

[13] For ESFPs and MC field staff, PMDFC will organize time to time trainings and a training/ capacity building program has been designed in this regard.

2	ESMMP Implementation and Monitoring Plan	MO-I MO-P MC field staff	Training	Briefing Presentations Mock Activities		
		Contractor	Awareness and sensitization	Briefing	At the time of Contract signing and before execution	DPO-ESM ESFPs
		Labor	Awareness and sensitization	Briefing	Before execution and time to time during execution	DPO-ESM ESFPs
4	EHS SOPs for Labor/Workers (including women workers, if any)	Contractor	Awareness and sensitization	Briefing and Illustrations	Before execution and time to time during execution	DPO-ESM ESFPs
		Labor/ workers	Awareness and sensitization on SOPs Training on the Use of PPEs	Presentations Illustrations Mock Activities Resource material	Before execution and time to time during execution	DPO-ESM ESFPs
5	GRM	Contractor	Awareness and sensitization	Briefing	Before execution and time to time during execution	DPO-ESM ESFPs
		Labor/ workers	Awareness and sensitization	Briefing and resource material	Before execution and time to time during execution	DPO-ESM ESFPs

SECTION-7 STAKEHOLDER CONSULTATION

Timely and inclusive stakeholder engagement is a key requirement of the World Bank Environmental and Social Framework (ESF) and is essential for an effective environmental and social assessment. It supports informed decision-making by integrating stakeholder inputs into project design, ensuring environmental compliance and enhancing social acceptability. Early and continuous consultation with stakeholders also helps identify potential risks and impacts, promote transparency, and strengthen the overall sustainability of the project.

7.1. Objectives

The main goals of engaging stakeholders in a stormwater facility project include:

- **Information Sharing:** To disseminate information among stakeholders regarding the proposed project expansion and its expected impacts on the physical and socio-economic environment.

- **Disclosure of Project Design:** To identify and understand stakeholders' concerns about different aspects of the project, including the potential impacts of construction activities and its operation phase
- **Assess the perception:** To evaluate the perceptions of the affected communities and MC Haroonabad regarding the social impacts of the proposed project.
- **Mitigation of Potential Impact:** To reduce potential conflicts by early identification of contentious issues and engaging stakeholders in consultations to reach mutually acceptable solutions.

7.2. Key Stakeholder

For the preparation of this IEE, two main stakeholder groups were identified: (i) MC Haroonabad, Punjab Irrigation Department, and EPA as primary/internal stakeholders, and (ii) the local community, which plays a key role in project implementation, identified as secondary/external stakeholders.

1. Municipal Committee & Associated Line Agencies
2. Local community

7.2.1. Methodology for Stakeholder Consultation

- **Focus Group Discussions (FGDs):** Small group meetings conducted to facilitate in-depth discussions on project initiation, potential impacts, and sustainability from environmental and social perspectives.
- **Individual Consultations / In-depth Interviews:** Initiating interaction with stakeholders of the proposed sub-project to provide opportunities for the general public to share their perceptions, concerns, and valuable suggestions. These consultations also include sharing project information such as route maps, inlets, underground storage tanks (UGST), and outlet drains.

7.2.2. Stakeholders Consultation

Public consultation visits were conducted at various site locations within the proposed sub-project areas on 07-05-2026. Stakeholders were briefed on the details of the sub-projects, including their potential positive and negative impacts along with proposed mitigation measures. Overall, participants appreciated the initiative and shared their comments, concerns, and suggestions to maximize social and physical benefits from the sub-project. Random sampling and focus group discussion methods were used as tools for stakeholder consultation. Details of the consultation sessions, including location, date, number of participants, and suggestions, are provided in Table 7-1 below.

Table 7- 1: Details of Consultation with Government Department

SR. NO.	PLACE	DATE	NUMBER OF PARTICIPANTS	CONCERNS	RESPONSES	SUGGESTIONS

1	MC, Office WATSAN Haroonabad	07-05-2026	08	The staff expressed concern regarding the timely execution and completion of the sub-projects. • They pointed out that all waterlogging-prone areas should be included in the project coverage, as these issues affect almost the entire MC area. • They also suggested that local people should be given employment opportunities as labor during the construction phase of the project to ensure their participation in the project benefits. •It was suggested that the land required for the construction of UGST and allied drainage network should preferably be government-owned to avoid land acquisition issues and ensure smooth implementation of the project.	• They were assured that the sub-project would be completed on time and all activities would be effectively supervised. • In response, the PMDFC and MC team conducted detailed planning and finalized the drainage routes and UGST locations after a comprehensive physical survey of the area. •They were also informed that the contract documents would include a provision requiring that maximum employment opportunities for both skilled and unskilled labor be offered to local people. • The CO MC was briefed that the project should utilize state-owned land and that any involvement of land acquisition should be avoided to ensure smooth and timely implementation.	• They suggested that the sub-project is highly beneficial for resolving damaged and blocked drains causing stagnant rainwater and disease spread, and emphasized prioritizing Strom water drainage improvement. • The CO MC recommended effective control and management of traffic, dust and noise during the construction phase to minimize impacts on nearby residents.
Note: At the conclusion of the focus group discussion with MC Haroonabad, participants expressed satisfaction with the proposed sub-project addressing monsoon waterlogging in Haroonabad city. They emphasized selecting suitable design routes and prioritizing government-owned land for smooth implementation. Overall, the discussion concluded with strong support for timely execution, expecting improved drainage and effective reduction of seasonal water accumulation during Monsoon.						

Table 7-1- 1:Details of Stakeholder Consultations FGDs with Local Community

SR. NO.	PLACE	DATE	NUMBER OF PARTICIPANTS	CONCERNS	RESPONSES	SUGGESTIONS
1	UGST Drainage aliment	07-05-2026	10	• The participants were generally concerned with the storm water stagnation as they	The proposed drainage system is being designed to cater the storm water which will ultimately	• They suggested that the implementation of the sub-project should be fast and completion of the

SR. NO.	PLACE	DATE	NUMBER OF PARTICIPANTS	CONCERNS	RESPONSES	SUGGESTIONS
				were of the opinion that during the rains, they face severe ponding issues. • The participants raised the issue of damages to their properties/houses. • The participants raised their concerns regarding the quality of work being done in past.	resolve the issue of water stagnation and loss to the property. • They were assured that there will be a monitoring consultant during the execution phase of the project to ensure quality of work. Furthermore, the Grievance Redressal Committee (GRC) will be convened to resolve any issues highlighted by the locals.	work be within timelines to avoid delays and public discomforts.

SR. NO.	PLACE	DATE	NUMBER OF PARTICIPANTS	CONCERNS	RESPONSES	SUGGESTIONS
2	UGST Drainage aliment	07-05-2026	08	• They raised concerns that the proposed area experiences severe waterlogging, causing significant difficulties in daily commuting and adversely affecting business activities. • They raised concerns regarding debris management and the implementation of safety measures during project execution.	• They were conveyed that the government has initiated this project precisely to address these issues, so that the local community is facilitated and there is minimal disruption to daily life, including business activities, schools, mosques, and commuting. • They were informed that all safety protocols would be incorporated into the contract, and the concerned contractor would be regularly monitored to ensure implementation of the IPP and compliance with required safety measures.	• Ensure effective implementation of safety protocols, debris management, and regular monitoring of construction activities to minimize risks and public inconvenience. • Prioritize timely completion of the project while maintaining proper traffic management to reduce disruption to daily commuting and local business activities.

SR. NO.	PLACE	DATE	NUMBER OF PARTICIPANTS	CONCERNS	RESPONSES	SUGGESTIONS
Note: The Focus Group Discussions (FGDs) reflected active participation of the local community, indicating strong interest and engagement in the project execution phase. Participants generally expressed support for the proposed interventions, recognizing their importance in addressing chronic waterlogging and improving local living conditions. The community emphasized the need for timely completion, effective traffic management, safety measures, and proper debris handling during construction. Overall, the discussions concluded with positive community acceptance and a willingness to cooperate for smooth and successful project implementation.						

Table 7-1- 2: Detail of consultation with induvial stakeholders

SR	PLACE	DATE	NO OF PARTICIPANTS	CONCERNS	RESPONCE	SUGGESTION
1	MPA Haroonabad	07-05-2026	04	• Respondent raised concerns about waterlogging in the city's commercial areas, noting that it causes significant difficulties for residents in their daily commute and disrupts business activities. • The respondent further raised concerns regarding the timely completion of the project and the proper management of solid waste after construction activities. • During the construction phase of the project, temporary blockage of streets and roads may occur, which	• The respondent was briefed by PMDFC that after the completion of the UGST, the situation of waterlogging in the city would be significantly improved. • The respondent was briefed that construction activities would be regularly monitored and the project would be completed within the stipulated timeframe. It was also assured that debris and construction waste would be properly managed during and after the execution of works. • He was informed that the concerned contractor would ensure uninterrupted access for daily	• MPA emphasized the importance of timely completion of the project to minimize public inconvenience. • He highlighted the need to ensure smooth daily commuting through effective traffic management during construction. • He suggested that special consideration was requested for safe mobility of elders, children, women, person with disability and access during prayer times.

				could lead to traffic disruptions and difficulties for students commuting to school.	commuters by maintaining proper traffic management arrangements and providing alternative routes where necessary to minimize inconvenience during the construction phase.	
2	Local residents	07-05-2026	01	• He highlighted that residents of stormwater-affected areas face significant problems when rainwater remains stagnant for three to four days, causing difficulties in daily activities, mobility, and public health conditions. • He expressed concern regarding debris management and disruptions to daily commuting during the construction phase of the project.	• He was briefed that the waterlogging issue would be significantly reduced after the development of the stormwater facility, leading to improved drainage conditions and elimination of persistent water accumulation problems. • He was briefed that the concerned contractor would ensure proper collection and management of debris on a daily basis and would also provide alternative arrangements for traffic management to maintain smooth commuting during the construction phase.	• The community suggested that debris should be properly collected and managed on a daily basis during construction to avoid inconvenience. • They recommended ensuring effective traffic management and provision of alternative routes to maintain smooth daily commuting. • They also suggested timely completion of the project with minimal disturbance to residents and local activities.
3	Local resident	07-05-2026	01	• They raised concern that residents in waterlogging-prone areas are unable to commute properly, and local businesses suffer	• They briefed that the waterlogging issue would be resolved once the drainage system is developed. • They were informed that the	•Ensure timely completion of the project with proper monitoring and supervision of construction activities. • Maintain effective

				losses during the rainy season due access issues. • They raised concerns that debris often remains unattended for several days, creating obstacles and difficulties in their daily commuting. • They raised concerns regarding how to lodge complaints in case of non-compliance of work and where to contact for reporting such issues.	problem of water accumulation in their area would be resolved, as the UGST system would quickly drain stormwater, keeping the area clean and free from waterlogging. • They were informed that They were informed that the project has established a Grievance Redress Mechanism (GRM) and complaint management system at the MC level, where all complaints will be addressed and, if necessary, referred to the next appropriate forum for resolution.	debris removal and traffic management to minimize disruption to daily commuting. • Strengthen drainage performance to fully resolve stormwater ponding and improve local environmental conditions.

4	Local resident	07-05-2026	01	• They raised concerns regarding inconvenience during the project execution period, particularly difficulties in accessing businesses, schools, mosques, and daily commuting routes. • They inquired about the expected timeline for the completion of the project.	• They were informed that the concerned contractor would be supervised and held responsible for proper debris collection and disposal, and for providing alternative temporary passages to ensure smooth commuting during the construction phase. • They were briefed that the project has a defined timeline and will be completed within the stipulated timeframe.	
Note: Based on the Focus Group Discussions (FGDs), participants appreciated the proposed sub-project and highlighted the need for improved stormwater drainage facilities in Haroonabad city. They shared that local residents regularly face severe waterlogging during the monsoon season, causing disruptions in daily movement, business activities, and public health concerns. Overall, the discussions reflected strong support for the timely implementation of the project to improve drainage conditions and reduce stormwater-related issues.						

7.2.3. Information Disclosure

The social and environmental team conducted public consultations with all categories of stakeholders. During the consultations, participants were briefed on the key components of the Initial Environmental Examination (IEE) for the sub-project. The team assured stakeholders that all concerns and suggestions would be properly documented and addressed. Various mitigation measures have been incorporated into the IEE to minimize construction-related impacts. Appropriate measures will be implemented to control noise and air pollution during the construction phase. In case of any complaints or grievances during construction, a well-defined Grievance Redress Mechanism (GRM) will be established and made operational. Stakeholders were also informed about the purpose, importance, and benefits of the GRM. As part of disclosure requirements, the English version of the IEE will be uploaded on the PMDFC and World Bank websites, while hard copies will be made available at the site office for public access.

7.2.4. Future Stakeholder Consultation Plan

The Stakeholder consultation is a continuous process that will be carried out throughout the entire life cycle of the sub-project. The initial step of this process is consultation during the planning stage. The next step involves consultations during the construction phase, which will be conducted periodically by the supervisory consultant to obtain stakeholder feedback on project activities and address related complaints.

Pictorial View of the Consultation with Department and Community



Proposed UGST Haroonabad: social environment assessment and stakeholder consultation



Consultation with MPA Haroonabad



Consultation with MOI WATSAN

	
Public Consultation with local community	**Public Consultation at proposed Linear Storage**

SECTION-8 GRIEVAENCE REDRESS MECHANISM (GRM)

In order to receive and facilitate the resolution of affected people concerns, compliments, and grievance about the project's environmental and social performance an Environmental Grievance Redress Mechanism (GRM) has been established. Culturally appropriate, and easily accessible to all segments of the community without any cost or risk of retaliation.

A Grievance Redress Mechanism (GRM) application titled "Baldia Shikayaat" has been developed for the registration and redressal of citizens' grievances. Citizens may lodge complaints through the online application regarding municipal services as well as issues arising from infrastructure subprojects. A dedicated feature has specifically been incorporated for lodging grievances related to infrastructure development schemes.

All grievances concerning environmental and social issues shall be forwarded to the Municipal Officer (WATSAN), designated as the focal person for Environmental and Social (E&S) matters. The focal person shall be responsible for processing and resolving complaints within the stipulated timeframe. In addition, a Grievance Redress Committee (GRC) has been formally notified to review and resolve grievances related to infrastructure development projects in a transparent and impartial manner.
The GRM shall remain accessible to all community members, including women, senior citizens, persons with disabilities, laborers/workers, and other vulnerable and marginalized groups.

8.1. GRM AT SUB-PROJECT SITE

Grievance Redress Mechanism (GRM) is to provide a robust system of procedures and processes that provides for transparent and rapid resolution of concerns and complaints identified at the local level. In case of any complaint, E&S expert of supervision consultant team will act as focal person of GRC who may be contacted at site and his contact details will be provided at project site.

8.1.1. 1st Tier of GRC (Grievance Redress Committee) – MC Haroonabad

The MC Haroonabad will be the first tier of GRM which will offer the fastest and most accessible mechanism for the resolution of grievances. The GRC will be notified before the start of the implementation of sub-project. The staff of the environment and social safeguards will be designated as the key officers for grievance redressal. GRC shall be responsible to manage and run the GRM effectively and convene the regular meetings to streamline the GRM.

The Grievance Redress Committee (GRC) along with their designations is presented in the table 8-1 below:

Table 8- 1:GRC Members and Designation

Sr. No	Members of GRC	Designation

1	Administrator	Chairman
2	Chief Officer	Member
3	Municipal Officer (I&S)	Member
4	Municipal Officer (Planning)	Member
5	Complaint Cell In charge	Member/Secretary

8.1.2. 2nd Tier of GRC –LG&CDD/PMDFC Level

PMDFC will act as a 2nd tier for GRC.

8.2. Types of Grievances

The following are some of the environmental and social issues could be subject for grievance from the affected people.

ENVIRONMENTAL ISSUES	SOCIAL ISSUES	EHS/OHS ISSUES
• Noise Pollution • Air Pollution • Fugitive Dust • Water Pollution • Sewerage • Solid Waste Management • House Keeping • Cutting of Trees • Borrow Areas Management • Protection of Wildlife • Campsite Management	• Accidental Insurance for labor • Non-Provision of PPEs to labor as per nature of their jobs • Loss of any public infrastructure • Protection of sensitive receptors • Compensation for any economic losses • Traffic Management • Labor grievance redressal • Gender discrimination • Security Arrangements • Impacts on livelihood • Irregular Traffic Movement • Obstruction in access • Child Labor • Unsafe conditions for the community (Community Health and Safety, CHS)	• First Aid • Fire Safety • Workplace Safety • Tools Box Talks • Provision of PPEs • Unaware by the Use of PPEs • Work at Height Safety • Excavation Safety • Heavy Machinery Issues

SECTION-9 CONCLUSION AND RECOMMENDATIONS

9.1. Conclusion

The present report presents the Initial Environmental Examination (IEE) of the Stormwater Facilities in city Haroonabad with the provision of stormwater tank at Park near PHATA Housing Colony (near Salfiya mosque) with the drainage system. During the preparation of IEE report for the proposed developmental project, it is observed and established that the negative environmental impacts are temporary and low to moderate nature. No depletion, deterioration or exploitation of local natural resources is expected to be caused by the proposed project activities. It is accordingly recommended that the Environmental Approval for the project may be issued by the Punjab Environmental Protection Agency, subjected to the payment of requisite scrutiny fee by the proponent of the project. The project does not pose any serious negative environmental impacts. Adequate mitigation measures have been proposed to address negative impacts arising from the project.

9.2. Recommendations

The Initial Environmental Examination (IEE) as well as survey results are finally evaluated to recommend the following:

- Adherence to the Environmental Management & Monitoring Plan (EMMP) as proposed in this report is mandatory.
- During the construction phase of this project, all the required PPEs should be provided to the workers.
- Maximumly Avoid dismantling of any infrastructure or any settlement.
- Proper housekeeping in and around the site must be given consideration.
- The fire safety precautions must be considered to prevent or reduce the likelihood of fire.
- Proper indication of exit points must be there for emergency situation.
- Proper safety and information sign boards must be placed at required places where work is being done.
- Adequate training of labor/workers must be done to deal with the emergency situations.

ANNEXURES

Annexure-A:

ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST- HAROONABAD

Instructions:
The purpose of this E&S Screening Checklists is to identify potential "Negative" impacts of environmental and social attributes to identify and enhance the existing environmental & social benefits. Use the "remarks" section to discuss any anticipated mitigation measures. A properly structured checklist should have at minimum: Yes / No / N/A / Remarks columns, with the Remarks column being mandatory when the answer is "Yes."

1. Environmental and Social Focal Persons (ESFPs)/MO WATSAN and E&S Expert[14] nominated by the MCs for PICP environmental and social management, and Deputy Program Officers-Environmental and Social Management deputed by PMDFC in regional offices will use this checklist in field for environmental and social screening and categorization of each sub-project proposed to be executed under the Program. The filled checklist, duly signed by the DPO-ESM and endorsed by PO-ESM, will be attached with the main document[15] of sub-projects at planning stage.
2. To ensure that social dimensions are adequately considered, Involuntary Resettlement Screening Checklist will also be used.

Name of ESFP/DPO:	1. **Mr. Muhammad Shahid** (MO-I&S) - (Head of WATSAN Unit/ Focal Person) 2. **Mr. Hafiz M. Muzzamil** (Field Assistant-EPA) **-** (Environment & Social Management Officer in WATSAN Unit) 3. **Mr. Asif Gillani** (Program Officer Environment-PMDFC) 4. **Hassan Ali Raza** (Deputy Program Officer Social-PMDFC) 5. **Saadia Pervaiz (**Deputy Program Officer Environment-PMDFC)
Name of MC:	**Municipal Committee Haroonabad**
Sub-Project Title:	Feasibility studies and design of rainwater underground storage facilities in 14 cities of Punjab under Punjab Inclusive Cities Program (PICP) ***"Storm water facilities in Haroonabad city"***
Sub- Project Categorization:	**E-1 ✓** **S-1** **E-2** **S-2 ✓** **E-3** **S-3**
	The project has been assigned Screening Categories E-1 and S-2. As per the Punjab Environmental Protection (Review of IEE and EIA) Regulations, 2000, and based on the screening of the project components, the proposed project falls under Category F (Water Management, Dams, Irrigation, and Flood Protection) of Schedule I. which require the preparation and approval of an Initial Environmental Examination (IEE) prior to the commencement of construction activities**.**
Date of Screening:	**Thursday, 7th May, 2026** **1st Revision: 10th July, 2026** **2nd Revision: 6th September, 2026**

[14] In all MCs, MO (WATSAN) will be E&S focal person and will be responsible for overall E&S compliance and E&S expert hired for WATSAN unit will be responsible for the implementation of E&S activities as per the program guidelines.

[15] It is meant as PC-I and/or engineering estimates of sub-project

Anticipated Project Activities	1. Proposed RCC Drains (3.0' x 3.0') - 2750 ft. 2. Proposed RCC Drains (3.5' x 3.5') - 2200 ft. 3. RCC Stormwater Storage Tank (150 x 100 x 16.25) – 01 Million Gallons 4. Linear storage tank (150 x 7 x 5 ft) 5. Pumping Machinery and Panel Room 6. Force Main (OD 450 mm HDPE), 1290 ft. 7. Electric Works, Bypass Arrangements
Estimated Cost of Sub-Projects	**-**
Completion Time/Duration	08 Months

Screening Questions	Yes	No	Remarks
A. Project Siting - Is the Sub-Project area adjacent to or within any of the following?			
Environmentally Sensitive Areas?			
Legally protected Area		No	No legally protected area is reported within the sub project area
Any surface water body (river, canal, stream, lake, wetland) within 200 meters of the proposed sub project	Yes		The 4-R Distributary is located within a 200-meter radius of the proposed scheme components and is connected to the main Hakra Branch. Overflow of UGST will be discharged in this canal.
Buffer zone of protected area		No	No buffer zone of the protected area is reported within the sub project area. Sub project area falls under urban area of Haroonabad city.
Mangroves Forest		No	No mangrove forest has been reported within the sub project area.
Man-made forest /game reserve, orchid /crops or any other area of environmental importance		No	No forest/game reserve, orchid/crops, or any other area of environmental importance has been observed/reported within the sub project siting.
Location of the project in flood-prone area?		No	As discussed with the Irrigation Department, the proposed scheme components are not located in a flood-prone area. Historical records of the past years show that flooding has never affected the city Haroonabad. However, heavy rainfall events caused localized urban flooding. In Haroonabad, a maximum rainfall of 79.1 mm has been recorded over the last five years. The sub-project will serve a catchment area of 60 acres within the city.

Screening Questions	Yes	No	Remarks
Is the sub-project located in an area with a shallow groundwater table?	Yes		The shallow groundwater table has been reported at a depth of approximately 12–16 ft.
Socially sensitive /important areas/communities'/ people?			
Physical Cultural Resources (PCRs) and or any site of cultural/religious importance (Graveyard, Shrine, Masjid, Church, Gurdwara, Temple, Fort, archeological/historical site and etc.,) within 100 m of the proposed subproject.	Yes		The Selfiya Masjid approx. 10 meters away from UGST PHATA Park proposed site (in front of park)
Sensitive receptors (Schools, colleges, Shrine, Mosque, Church, hospitals and clinics) within 100 meters of the proposed sub project	Yes		Following sensitive receptors exist within proposed sub-project area: 1- 01 school named Direction School present within 15 meters periphery of UGST site, in front of park 2- 02 Schools named Daisy Public school and Govt Girls High school are present 10 meters on the force main route. No direct impacts on these sensitive receptors are anticipated. However, temporary disruptions to pedestrian and traffic movement may occur.
Any settlement/houses within 100 meters of the sub-project components?	Yes		Storm water inlet drains are proposed in commercial cum residential vicinity and distance b/w road edge and building line of existing infrastructures is approx. 10 meters. UGST site is proposed in PHATA colony park in a residential colony.
Any demographic or socio-economic aspects of the sub-project area that are already vulnerable (e.g., high incidence of marginalized populations, rural-urban migrants, illegal settlements, squatters, ethnic minorities, people with disabilities, people in old age, socially isolated segments[16] of the society and women or children)?		No	During reconnaissance survey no demographic or socio-economic impacts are envisaged from the proposed sub-project construction scope/activities. However, if any impacts are identified during the detailed ARAP survey, compensation will be included and paid to APs as per RPF of ESCF.

[16] Due to caste, creed, religion or gender e.g. transgender

Screening Questions	Yes	No	Remarks
Already existing infrastructure/public amenities including Poles and transmission lines Transmission lines, roads, railway line, sewerage, gas, water supply, or storm water drainage pipelines, recreational facilities, commercial activities, commercial activities or educational or health services. which may be required to dismantle or may be affected temporarily by any means?	Yes		Ramps and electric poles along the drain alignment may require dismantling and relocation. On Quaid-e-Azam Road, an existing storm water drain is available which will be desilted, rehabilitated, and connected to the proposed network. Anticipated risks and impacts during construction are livelihood disruptions, asset damage, and disruption to access of buildings.
B. Potential Environmental Impacts - Will the Sub-Project cause…			
Disturbance or disruption to habitats and biodiversity, including those within environmentally sensitive or protected areas and the surrounding ecosystem?		No	There will not be any disruption to habitats/biodiversity of the surrounding ecosystem/environment due to urban nature of the sub project area.
Cutting of trees?		No	Ten trees are located along the boundary wall of the proposed UGST site, which may be preserved through careful design during the construction phase. Tree plantation cost will be added in the BOQs for cluster plantation at appropriate places.
Generation of wastewater during construction or operation?		No	No contractor or labor camp construction is envisaged due to the small scale of the sub-project. Local unskilled labor will be engaged for construction activities. If labor camp will be required to be established; house on rent will be recommended and labor camp E & S protocols will be ensured.
Pollution of surface water/ground water due to wastewater discharge from construction site or due to direct/indirect disposal of wastewater (from worker-based camps and chemicals used in construction)?		No	No significant pollution of surface or groundwater is anticipated as no labor camp will be established and local labor will be engaged for construction activities. Any fuel or chemical residues generated during construction will be properly managed in accordance with the ESMP and good construction practices to prevent contamination.

Screening Questions	Yes	No	Remarks
Alteration of surface water hydrology of waterways resulting in increased sediment in streams/rivers or due to increased soil erosion at construction site?		No	No alteration in surface water hydrology envisaged as per scope of work of Sub-Project.
Serious contamination of soil due to construction and operation activities?		No	No soil contamination risks involved during construction activities of sub-project.
Aggravation of solid waste problems in the area?	Yes		Improper management of construction waste may result in temporary solid waste issues during the construction phase. To mitigate these impacts, the contractor will implement a Solid Waste Management Plan (SWMP) in accordance with the Environmental and Social Management and Monitoring Plan (ESMMP). The Municipal Committee (MC) will designate an appropriate site for the temporary storage and disposal of construction waste. These impacts will be temporary, limited to the construction period, and reversible. Regular monitoring will be carried out to ensure compliance with the approved waste management measures. An operational Grievance Redress Mechanism (GRM) will be established at the project site to receive and address complaints from affected communities. In addition, all solid waste generated from labor camps, where applicable, will be managed in accordance with the mitigation measures specified in the ESMMP.
Generation of hazardous waste?		No	No hazardous materials will be generated during the construction activities of Sub-Project. Contractor will park the machinery at the designated place. Machinery parking area will be provided with concrete platform for oil & grease changing activities to prevent soil contamination. Fuel for construction machinery will be obtained from authorized fuel filling pumping station.
Increased air pollution due to sub-project construction and operation?	Yes		Exhaust emissions from construction machinery may lead to deterioration of ambient air quality. Fugitive dust is also expected during construction and excavation activities; however, this will be mitigated through water

Screening Questions	Yes	No	Remarks
			sprinkling system. In addition, ambient air quality monitoring will be conducted.
Noise and vibration due to sub-project construction or operation?	Yes		All stationary noise producing equipment will be installed with acoustic enclosures. Timings of noise construction activities will be regulated near sensitive receptors. Furthermore, regular monitoring of noise levels will be adopted and continuous monitoring will be proposed during the construction stage as a mitigation measure.
Creation of breeding habitats for diseases such as those transmitted by mosquitoes and rodents due to solid/liquid?	Yes		Temporary excavated areas may provide breeding grounds for mosquitoes. The concern MC will mitigate this issue by anti-breeding mosquitoes' sprays on prominent places of sub-project area.
Use of chemicals?	Yes		UGST structure will be coated with Bitumen on the same day it is supplied No storage of chemicals is envisaged.
Is the ultimate disposal point (e.g., river, larger Nullah) capable of handling the increased hydraulic load without causing back-flow flooding?	Yes		The ultimate disposal points of UGST overflow, named 4R distributary from Hakra branch, has design discharge capacity of 110.97 cusec, Bed level 510.75, FSD 2,90, Free board 1.50, Bank top level 515.50, Bed width 20, N.S.L 509.70, Slope 0.175 can handle hydraulic load of 04 cusec without causing back-flow flooding reported.
Will the Sub Project (including drainage design) alter natural hydrology or flood flow patterns, potentially increasing flood risk within or downstream of the project area?		No	No, any, potentially increasing flood risk within or downstream of the project area. The sub project will not alter the natural hydrology or flow pattern.
Risk of cross-connections, leakage, or mixing between storm-water and sewerage systems?		No	There is no risk of mixing stormwater and sewage wastewater, as separate sewer lines are already in place in the city. To prevent any such issues in the future, the MC

Screening Questions	Yes	No	Remarks
			will implement necessary administrative measures.
C: Potential Social/OHS Impacts - Will the Sub-Project cause…			
Impairment of historical/cultural areas; disfiguration of landscape or potential loss/damage to Physical Cultural Resources (PCRs)?		No	Chance Find Procedure has been incorporated in the IEE document and will be implemented in case of finding of any PCR during excavation activities.
Displacement or involuntary resettlement of people? (physical displacement and/or economic displacement) (If "Yes", please also fill Involuntary Resettlement Screening Checklist)		No	During the ARAP survey, 38 male Affected Persons (APs) were identified whose household and shop access ramps will be partially cut/removed to facilitate the installation of the drainage line. In accordance with the World Bank requirements and the approved RPF, APs will be provided with the applicable compensation prior to commencement of construction activities.
Disproportionate impacts on the poor, women and children and or other vulnerable groups [17]?		Not	During the ARAP survey, no disproportionate impacts on poor people, women, or children were anticipated as a result of the project activities. Furthermore, no vulnerable persons were identified among the Affected Persons (APs).
Impediments in movements of people/transport and animals?	Yes		Temporary disruption to pedestrian and vehicular movement may occur during construction phase in the commercial area. These impacts will be minimized through phased construction, traffic management measures, public notification, and provision of safe temporary access to shops and houses.
Large labor influx during sub-project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)?		No	No significant labor influx is anticipated, as the sub-project is small in scale. The majority of the workforce will be hired locally from the surrounding communities,

[17] Women, Children, Women headed households, People in old age, people having disabilities, socially isolated community groups and or people living below the poverty line.

Screening Questions	Yes	No	Remarks
			which will support local employment opportunities while avoiding any additional burden on existing social infrastructure and public services, including water supply and sanitation systems.
Social conflicts if workers from other areas are hired.		No	The contractor will be bound to hire the locals for unskilled work during construction and hence such conflict is not anticipated however, training programs will be conducted for both labor force and local community in order to minimize the conflicts.
Is there a risk that community members may illegally or informally connect sewerage /Stormwater drainage?		No	There is no possibility of mixing sewage and stormwater by the community. In case of any such occurrence, the MC will adopt appropriate administrative measures.
Risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during project construction and operation?	Yes		Workers may get exposed to dust and noise during construction activities. However, the exposure levels are likely for a short time. Workers will be provided with requisite PPEs to minimize such exposure and associated harmful occupational health effects. In addition, a regular monitoring schedule will be implemented to ensure compliance with occupational health and safety requirements. In case of injury, temporary or permanent disability, or death of workers or community members resulting from project activities, compensation shall be provided in accordance with the applicable labour laws, rules and regulations of the Government of Punjab.
Expose workers to sewage, sludge, toxic gases, or biological pathogens during construction or operation?		No	No impact envisaged as storm water drainage construction activities will be executed.
Is involves confined space activities (e.g., manholes, pumping stations, sewers, treatment units) posing risks of asphyxiation, toxic gas exposure, or physical injury?		No	Inlet drains will be constructed in the congested commercial areas. Any associated occupational health and safety risks will be mitigated

Screening Questions	Yes	No	Remarks
			through the implementation of good construction practices and appropriate safety measures.
Will workers operate heavy machinery or equipment that may pose safety risks?	Yes		OHS measures will be adopted to mitigate risks/hazards.
Will the sub-project involve work at heights or near electrical installations?	Yes		Subsurface height safety protocols will be ensured during the construction of UGST.
Risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as fuel, and other chemicals during construction and operation?	Yes		Risks for Community Health and Safety are envisaged and HSE SOPs/Contractor's Guidelines will be followed.
Community safety risks due to both accidental and natural causes, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation, and decommissioning.	Yes		Safety risks to community are anticipated and HSE SOPS will be followed by the contractor.
Any impact on sensitive receptors ((Schools, colleges, Shrine, Mosque, Church, hospitals and clinics)	Yes		Temporary impacts are envisaged regarding disturbance in movement of pedestrian and traffic flow as construction activities will be executed within RoW.
Any impact of negative nature on already existing infrastructure including public amenities	Yes		Ramps along the drain alignment may require dismantling if excavation is carried out adjacent to the existing building line. However, impacts are expected to be minimal if the drains are constructed along the roadside within the available right of way.

Prepared By:	Endorsed By:	Reviewed By:
Name: M. Shahid Nawaz	Name: Hafiz M Muzammil	Name: Asif Gillani
Designation: MO(I&S)	Designation: Field Assistant	Designation: PO Environment
Organization: MC, HND.	Organization: Environment Protection department	Organization: PMDFC
Signature:	Signature	Signature:
Date: 07.05.2026	Date: 07-05-2026.	Date: 07/05/2026

Municipal Officer (I&S)
Municipal Committee
Haroonabad

Field Assistant
(Environment) B/Nagar

INVOLUNTARY RESETTLEMENT SCREENING CHECKLIST

Name of City/MC/LG: MC Haroonabad District Bhawalnager

Sub-Project Title: Storm water facilities in Haroonabad

Date of Screening: 07-05-2026

1st Revision: 07-10-2026

2nd Revision: 07-10-2026

Screening Questions	Yes	No	Remarks
Does the project require land for the construction of a sub-project? Please specify Yes or No. If yes, indicate whether the land required is state-owned or privately owned[18].	Yes		The proposed piece of land is state-owned land currently under the possession of MC Haroonabad, while the ownership vests with PHATA. Furthermore, PHATA has delegated the operation and maintenance (O&M) responsibilities of the land to MC Haroonabad. MC will attain NOC from the PHATA for utilizing of land for UGST.
Has any Anti-encroachment drive (AED been conducted at the proposed location by the government1? Yes/No (Give the details in remarks column)		No	At all locations where project components have been proposed, AED have not been carried area since November 2024. The Municipal Committee (MC) Administrator will issue a certificate confirming that no anti-encroachment drive has been conducted in the proposed sub-project area to date.
Provide the geographic coordinates (latitude and longitude) of the proposed land required for the subproject.	Yes		Lat: 29.605515 Long: 73. 130992
Is the proposed land under any legal dispute or litigation?		No	The proposed land is free from any known legal disputes, encumbrances, or ongoing litigation.
PRIVATE LAND			
Type of land being acquired from the categories below: Private, Residential, Commercial, Agricultural, Others (specify in "remarks").		No	

[18] private land acquisition is not allowed except for last-mile connectivity (PAD-PICP)

Name of owner/owners and type of ownership document if available		No	
Land (Quantify and describe types of land being acquired in "remarks column".		No	
Describe any structures constructed on land and physical assets; a) Crops and vegetables (specify types and cropping area in "remarks). b) Trees (specify number and types in "remarks"). c) Houses (specify number and types in "remarks) d) Any commercial structure (specify number and types in "remarks) e) Others (specify number and types in "remarks)		No	
Will any people be displaced from the land when acquired? Yes/No		No	
Total Number of Affected Persons (APs) Male Female		No	
Titled landowners		No	
Tenants and sharecroppers		No	
Leaseholders		No	
Wage laborers		No	
Vulnerable APs (e.g. women headed households, minors and aged, orphans, disabled persons, and those below the poverty line). Specify the number and vulnerability in "remarks".		No	
Others (Specify)			
B. State land/ Government/LG owned land			
Land (Quantify and describe types of land being acquired in "remarks column".	Yes		05 kanals is under possession of MC and is the Government/ state land owned by PHATA.
Is the Right of Way (RoW) for the proposed subproject under the ownership of the MC/ULG or any other government agency, and are any No Objection Certificates (NOCs) or formal approvals required for its use? If yes, mention the detail in the remarks.	Yes		The proposed land has been identified by the MC and LAC/AC. The ownership of the land rests with PHATA, while its possession is with MC Haroonabad under O&M arrangements. The LAC/AC Haroonabad has confirmed that the No Objection Certificate (NOC) will be obtained from PHATA for the execution of the UGST construction.

Status and Current Use of State-Owned Land (Give details in remarks column)	Yes		The identified land is currently being utilized for public park.
Encroachers/squatters (specify in remarks column)		No	The site is free from encroachers or squatters. The Municipal Committee (MC) Administrator will issue a certificate confirming that no anti-encroachment drive has been conducted in the proposed sub-project area to date.
Describe any structures constructed on land and physical assets; a) Crops and vegetables (specify types and cropping area in "remarks). b) Trees (specify number and types in "remarks"). c) Houses (specify number and types in "remarks) d) Any commercial structure (specify number and types in "remarks) e) Others (specify number and types in "remarks)		No	
Total Number of Affected Persons (APs) Male Female	Yes		During the ARAP survey, 38 male Affected Persons (APs) were identified whose household and shop access ramps will be partially cut/removed to facilitate the installation of the drainage line. In accordance with the World Bank requirements and the approved RPF, APs will be provided with the applicable compensation prior to commencement of construction activities.
Vulnerable APs (e.g. women headed households, minors and aged, orphans, disabled persons, and those below the poverty line). Specify the number and vulnerability in "remarks".		No	During the ARAP survey, no vulnerable persons were identified among the Affected Persons (APs).
Others (specify in "remarks")		No	

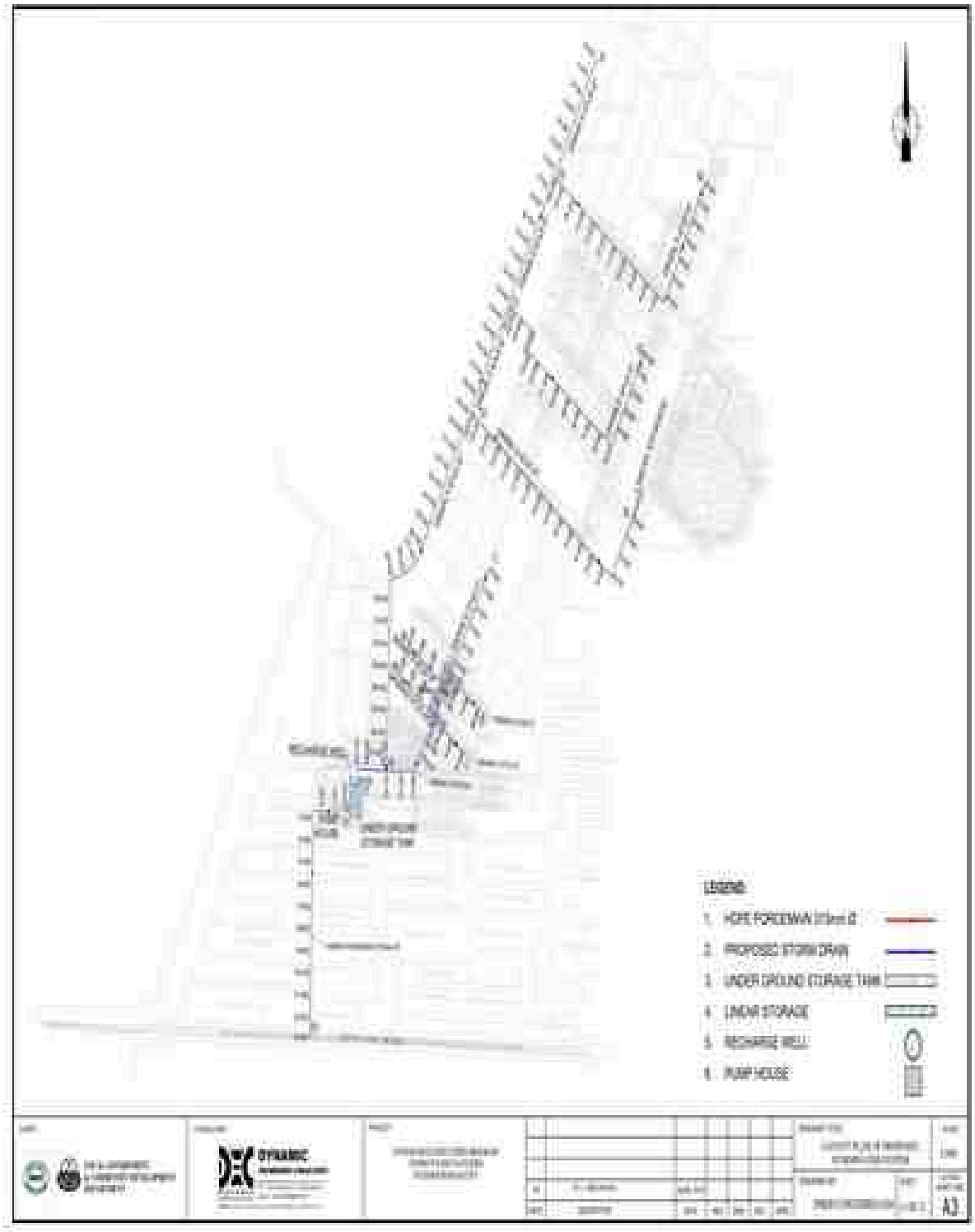
Prepared By:	Endorsed By:	Reviewed By:
Name: N. Shahid Nawaz	Name: Hafiz M. Muzammil	Name: Qamar-uz-Zaman Baloch
Designation: MO (E&S)	Designation: Field Assistant	Designation: Program Officer Social Safeguard
Organization: MC, HNB	Organization: Environment Protection department	Organization: PMDFC
Signature:	Signature	Signature:
Date: 07-05-2026	Date: 07-05-2026	Date: 07/05/2026

Municipal Officer (E&S)
Municipal Committee
Haroonabad

Field Assistant
(Environment) B/Nagar

Sub-Project Layout




LEGEND
1. HDPE PIPE/MAIN
2. PROPOSED STORM DRAIN
3. UNDER GROUND STORAGE TANK
4. LINEAR STORAGE
5. RECHARGE WELL
6. PUMP HOUSE
A3

Sub-Project Glimpses



Fig 01: Stakeholder consultation with Vital Tea Owner/MPA Haroonaba



Fig 02: Meeting with WATSAN officials



Fig 03: Focus Group Discussion along-with proposed storm drain alignment

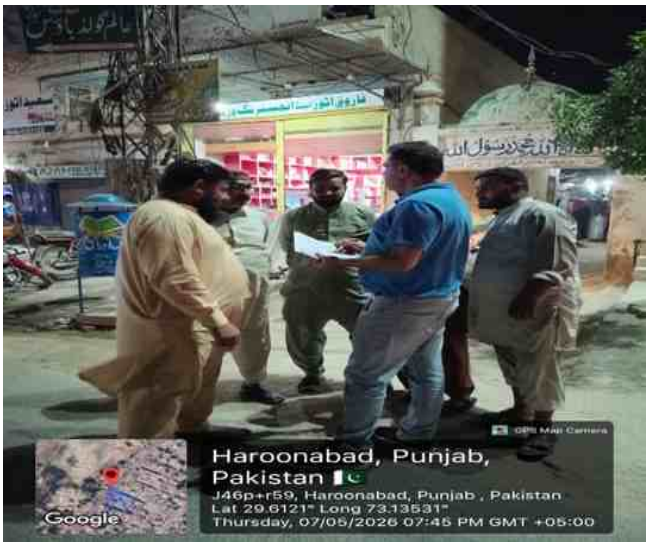
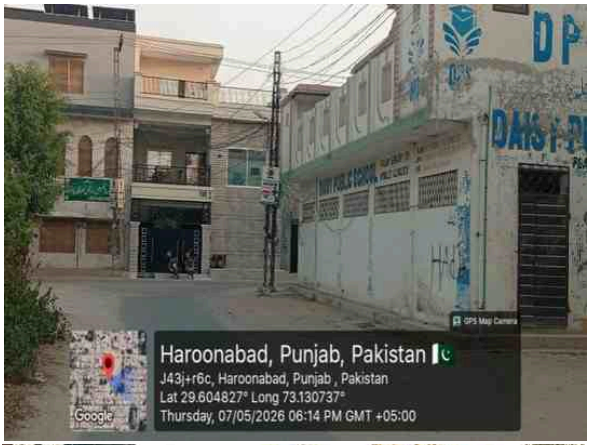


Fig 04: Focus Group Discussion along-with proposed storm drain alignment



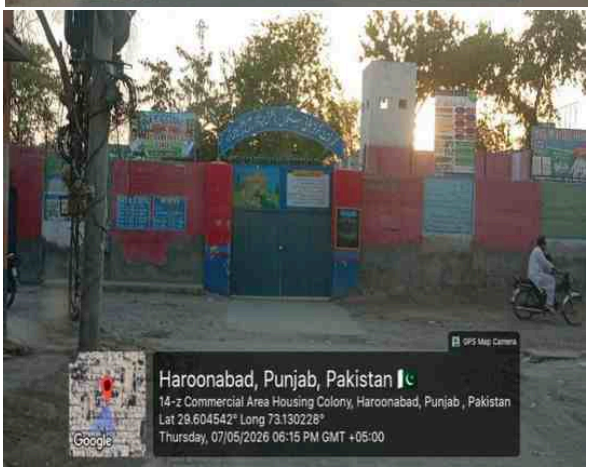


Fig 05: Force main alignment proposed on RoW

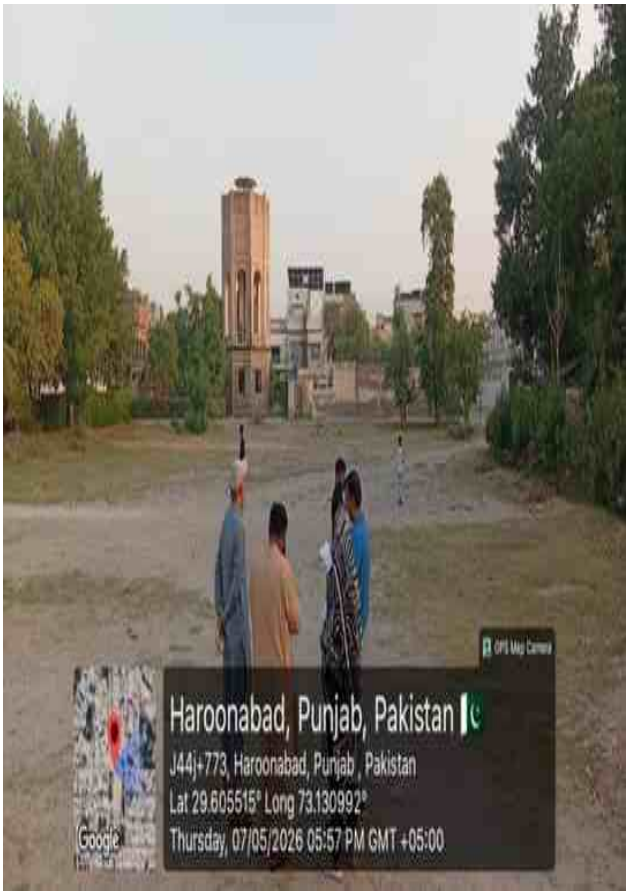


Fig 06: Proposed underground water storage tank site

Land Documents

بلدیہ مستحکم بنجاب مستحکم

OFFICE OF THE MUNICIPAL COMMITTEE HAROONABAD

No: GB/MC/HND/2937
Dated: 17/07/2026.

Email: mchnd01@gmail.com
Phone #: 063-2250883

To,

The Programe Officer,
PMDFC Faisalabad Region.

Subject:- **NOC FOR CONSTRUCTION OF UNDERGROUND TANK AND ALLIED STRUCTURE FOR STORAGE STORM WATER.**

It is submitted that the Haroonabad city is included in the "Punjab Inclusive Cities Program" (PICP). The NOC request was sent to Director, PHATA, Bahawalpur vide letter No. GB/MC/HND/2872 dated 07-05-2026 for provision of NOC for construction of underground and allied structure for storage storm water Infront of Jamia Masjid Saffia Z block. The office of Director, PHATA region Bahawalpur replied vide Memo No. 466 dated 12-06-2026 the area of housing colony was established during the year 1975-76 and all the services i.e. roads, streets, sewer system, water supply, electrification etc were completed in the year 1979. After the completion of all developments works the services of said scheme was handed over to the MC Haroonabad on 30-11-1980 for operation and maintenance services. As mentioned above the housing colony area is handed over of this office and MC is providing all services since 1980 to the inhabitants said society so there for no need of NOC from PHATA. This project is purely for public welfare and improvement of sewer, water supply, drainage services for Haroonabad. This office has competency to issue NOC for UGST.

Therefore, No Objection Certificate (NOC) is issued for construction of UGST at Saffia Masjid Ground under PICP Programme.

Chief Officer
Municipal Committee
Haroonabad

CC:-

The Administrator, Municipal Committee Haroonabad.

Annexure-B:

Chance Find Procedures

- **Purpose of the chance find procedure**

The chance find procedure is a project-specific procedure that outlines actions required if previously unknown heritage resources, particularly archaeological resources, are encountered during project construction or operation. A Chance Find Procedure, as described in IFC Performance Standard 8 and EBRD Performance Requirement 8 and law on Cultural Heritage of Georgia, is a process that prevents chance finds from being disturbed until an assessment by a competent specialist is made and actions consistent with the requirements are implemented.

- **Scope of the chance find procedure**

This procedure is applicable to all activities conducted by the personnel, including contractors, that have the potential to uncover a heritage item/site. The procedure details the actions to be taken when a previously unidentified and potential heritage item/site is found during construction activities. Procedure outlines the roles and responsibilities and the response times required from both project staff, and any relevant heritage authority.

- **Induction/Training**

All personnel, especially those working on earth movements and excavations, are to be inducted on the identification of potential heritage items/sites and the relevant actions for them with regards to this procedure during the Project induction and regular toolbox talks.

- **Chance find procedure**

If any person discovers a physical cultural resource, such as (but not limited to) archaeological sites, historical sites, remains and objects, or a cemetery and/or individual graves during excavation or construction, the following steps shall be taken:

1. Stop all works in the vicinity of the find, until a solution is found for the preservation of these artefacts, or advice from the relevant authorities is obtained;

2. Immediately notify a foreman. The foreman will then notify the Construction Manager and the Environment Officer (EO)/Environmental Manager (EM);

3. Record details in Incident Report and take photos of the find;

4. Delineate the discovered site or area; secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be arranged until the responsible local authorities take over;

5. Preliminary evaluation of the findings by archaeologists. The archaeologist must make a rapid assessment of the site or find to determine its importance. Based on this assessment the appropriate strategy can be implemented. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage such as aesthetic, historic, scientific or research, social and economic values of the find;

6. Sites of minor significance (such as isolated or unclear features, and isolated finds) should be recorded immediately by the archaeologist, thus causing a minimum disruption to the work schedule of the Contractor. The results of all archaeological work must be reported to the Ministry/Agency, once completed.

7. In case of significant find the Agency/Ministry (Agency for Protection of National Heritage or Archaeological Research Centre, hereinafter referred to as Heritage team) should be informed immediately and in writing within 7 days from the find (reference: law on heritage protection).

8. The onsite archaeologist provides the Heritage team with photos, other information as relevant for identification and assessment of the significance of heritage items.

9. The Ministry must investigate the fact within 2 weeks from the date of notification and provide response in writing.

10. Decisions on how to handle the finding shall be taken by the responsible authorities. This could include changes in the layout (such as when finding an irremovable remain of cultural or archaeological importance) conservation, preservation, restoration and salvage;

11. Construction works could resume only after permission is granted from the responsible authorities.

12. In case no response received within the 2 weeks period mentioned above, this is considered as authorisation to proceed with suspended construction works.

- **Management options for archaeological site**

Site avoidance. If the boundaries of the site have been delineated attempt must be made to redesign the proposed development to avoid the site. (The fastest and most cost-effective management option)

Mitigation. If it is not feasible to avoid the site through redesign, it will be necessary to sample it using data collection program prior to its loss. This could include surface collection and/or excavation. (The most expensive and time-consuming management option.)

Site Protection. It may be possible to protect the site through the installation of barriers during the time of the development and/or possibly for a longer term. This could include the erection of high visibility fencing around the site or covering the site area with a geotextile and then capping it with fill. The exact prescription would be site- specific.

- **Management of replicable and non-replicable heritage**

Different approaches for the finds apply to replicable and non-replicable heritage.

Replicable heritage

Where tangible cultural heritage that is replicable23 and not critical is encountered, mitigation measures will be applied.

The mitigation hierarchy is as follows:

- Avoidance;
- Minimization of adverse impacts and implementation of restoration measures, in situ;
- Restoration of the functionality of the cultural heritage, in a different location; Permanent removal of historical and archaeological artefacts and structures;
- Compensation of loss - where minimization of adverse impacts and restoration not feasible.
- Permanent removal of historical and archaeological artefacts and structures;
- Compensation of loss - where minimization of adverse impacts and restoration not feasible.

Non-replicable heritage

Most cultural heritage is best protected by in situ preservation, since removal is likely to result in irreparable damage or even destruction of the cultural heritage.

Nonreplicable cultural heritage 24 must not be removed unless all of the following conditions are met:

- There are no technically or financially feasible alternatives to removal;
- The overall benefits of the project conclusively outweigh the anticipated cultural heritage loss from removal; and

Any removal of cultural heritage must be conducted using the best available technique advised by relevant authority and supervised by archaeologist.

Annexure-C:

NO AED Certificate



بلدیہ مستحکم بنجاب مستحکم

OFFICE OF THE
MUNICIPAL COMMITTEE
HAROONABAD
No: GB/MC/HND/2988
Dated: 13/08/2026.

Email: mchnd01@gmail.com
Phone #: 063-2250883

PUNJAB INCLUSIVE CITIES PROGRAM (PICP) CERTIFICATION OF NON-CONDUCT OF ANTI-ENCROACHMENT DRIVE.

This is to certify that no anti-encroachment drive, demolition, or eviction activity has been undertaken on the land parcels covering proposed footprint and direct area of influence of the proposed storm water drain, underground Storage Reservoir Tank, force man and any other component of sub-project within the jurisdiction of MC Haroonabad since November 2024 to the present date. It is further certified that no such anti-encroachment drive, demolition, or displacement activity will be carried out on these land parcels.

This is certificate is issued to support the official requirements of the Punjab Inclusive Cities Program (PICP) and is valid as of the date of issuance.

Assistant Commissioner /Administrator
Municipal Committee Haroonabad

CamScanner

Annexure-D:

WATSAN Unit Notification

بلدیہ مستحکم پنجاب مستحکم

Email: mchn801@gmail.com
Phone #: 063-2250883

OFFICE OF THE MUNICIPAL COMMITTEE HAROONABAD
No.GB/MC/HND/2788
Dated: 09/03/2026.

OFFICE ORDER

With the refence of the letter No. PS(SLGB)/General/2025 dated 04-03-2026. The following officials of Municipal Committee Haroonabad are hereby assigned the additional charge of the vacant posts under WATSAN Unit with immediate effect, in additional to their own duties, till further Orders:

Sr.#	Name of Official	Working as	Additional Charge in WATSAN Unit in MC
1.	Waseem Iqbal	Building Inspector, Municipal Committee Haroonabad	**Additional Charge** Geographic Information System (GIS) Officer in WATSAN Unit
2.	Muhammad Faisal	Computer Operator, Municipal Committee Haroonabad	**Additional Charge** IT/MIS Officer in WATSAN Unit
3.	Muhammad Saeed	Environment Inspector, E&SM Official, Environment Protection Department, Tehsil Haroonabad	**Additional Charge** Environment & Social Management Officer in WATSAN Unit
4.	Maqsood Ahmed	Accountant, Municipal Committee Haroonabad	**Additional Charge** Accountant in WATSAN Unit

Chief Officer
Municipal Committee
Haroonabad

CC:

1. Administrator, Municipal Committee Haroonabad
2. Municipal Officer (WATSAN/ Services), Municipal Committee Haroonabad
3. Officers/ Official Concerned.
4. District Environment Protection Officer, Department, Bahawalnagar.

ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST- HAROONABAD

Instructions:
The purpose of this E&S Screening Checklists is to identify potential "Negative" impacts of environmental and social attributes to identify and enhance the existing environmental & social benefits. Use the "remarks" section to discuss any anticipated mitigation measures. A properly structured checklist should have at minimum: Yes / No / N/A / Remarks columns, with the Remarks column being mandatory when the answer is "Yes."

1. Environmental and Social Focal Persons (ESFPs)/MO WATSAN and E&S Expert[1] nominated by the MCs for PICP environmental and social management, and Deputy Program Officers-Environmental and Social Management deputed by PMDFC in regional offices will use this checklist in field for environmental and social screening and categorization of each sub-project proposed to be executed under the Program. The filled checklist, duly signed by the DPO-ESM and endorsed by PO-ESM, will be attached with the main document[2] of sub-projects at planning stage.
2. To ensure that social dimensions are adequately considered, Involuntary Resettlement Screening Checklist will also be used.

Name of ESFP/DPO:	1. **Mr. Muhammad Shahid** (MO-I&S) - (Head of WATSAN Unit/ Focal Person) 2. **Mr. Hafiz M. Muzzamil** (Field Assistant-EPA) **-** (Environment & Social Management Officer in WATSAN Unit) 3. **Mr. Asif Gillani** (Program Officer Environment-PMDFC) 4. **Hassan Ali Raza** (Deputy Program Officer Social-PMDFC) 5. **Saadia Pervaiz (**Deputy Program Officer Environment-PMDFC)
Name of MC:	**Municipal Committee Haroonabad**
Sub-Project Title:	Feasibility studies and design of rainwater underground storage facilities in 14 cities of Punjab under Punjab Inclusive Cities Program (PICP) ***"Storm water facilities in Haroonabad city"***
Sub- Project Categorization:	**E-1 ✓** **S-1** **E-2** **S-2 ✓** **E-3** **S-3**
	The project has been assigned Screening Categories E-1 and S-2. As per the Punjab Environmental Protection (Review of IEE and EIA) Regulations, 2000, and based on the screening of the project components, the proposed project falls under Category F (Water Management, Dams, Irrigation, and Flood Protection) of Schedule I. which require the preparation and approval of an Initial Environmental Examination (IEE) prior to the commencement of construction activities**.**
Date of Screening:	**Thursday, 7th May, 2026** **1st Revision: 10th July, 2026** **2nd Revision: 6th September, 2026**
Anticipated Project Activities	1. Proposed RCC Drains (3.0' x 3.0') - 2750 ft. 2. Proposed RCC Drains (3.5' x 3.5') - 2200 ft. 3. RCC Stormwater Storage Tank (150 x 100 x 16.25) – 01 Million Gallons 4. Linear storage tank (150 x 7 x 5 ft) 5. Pumping Machinery and Panel Room

[1] In all MCs, MO (WATSAN) will be E&S focal person and will be responsible for overall E&S compliance and E&S expert hired for WATSAN unit will be responsible for the implementation of E&S activities as per the program guidelines.
[2] It is meant as PC-I and/or engineering estimates of sub-project

	6. Force Main (OD 450 mm HDPE), 1290 ft. 7. Electric Works, Bypass Arrangements
Estimated Cost of Sub-Projects	-
Completion Time/Duration	08 Months

Screening Questions	Yes	No	Remarks
A. Project Siting - Is the Sub-Project area adjacent to or within any of the following?			
Environmentally Sensitive Areas?			
Legally protected Area		No	No legally protected area is reported within the sub project area
Any surface water body (river, canal, stream, lake, wetland) within 200 meters of the proposed sub project	Yes		The 4-R Distributary is located within a 200-meter radius of the proposed scheme components and is connected to the main Hakra Branch. Overflow of UGST will be discharged in this canal.
Buffer zone of protected area		No	No buffer zone of the protected area is reported within the sub project area. Sub project area falls under urban area of Haroonabad city.
Mangroves Forest		No	No mangrove forest has been reported within the sub project area.
Man-made forest /game reserve, orchid /crops or any other area of environmental importance		No	No forest/game reserve, orchid/crops, or any other area of environmental importance has been observed/reported within the sub project siting.
Location of the project in flood-prone area?		No	As discussed with the Irrigation Department, the proposed scheme components are not located in a flood-prone area. Historical records of the past years show that flooding has never affected the city Haroonabad. However, heavy rainfall events caused localized urban flooding. In Haroonabad, a maximum rainfall of 79.1 mm has been recorded over the last five years. The sub-project will serve a catchment area of 60 acres within the city.
Is the sub-project located in an area with a shallow groundwater table?	Yes		The shallow groundwater table has been reported at a depth of approximately 12–16 ft.
Socially sensitive /important areas/communities'/ people?			
Physical Cultural Resources (PCRs) and or any site of cultural/religious importance (Graveyard, Shrine, Masjid, Church, Gurdwara, Temple, Fort, archeological/historical site and etc.,) within 100 m of the proposed subproject.	Yes		The Selfiya Masjid approx. 10 meters away from UGST PHATA Park proposed site (in front of park)

Screening Questions	Yes	No	Remarks
Sensitive receptors (Schools, colleges, Shrine, Mosque, Church, hospitals and clinics) within 100 meters of the proposed sub project	Yes		Following sensitive receptors exist within proposed sub-project area: 1- 01 school named Direction School present within 15 meters periphery of UGST site, in front of park 2- 02 Schools named Daisy Public school and Govt Girls High school are present 10 meters on the force main route. No direct impacts on these sensitive receptors are anticipated. However, temporary disruptions to pedestrian and traffic movement may occur.
Any settlement/houses within 100 meters of the sub-project components?	Yes		Storm water inlet drains are proposed in commercial cum residential vicinity and distance b/w road edge and building line of existing infrastructures is approx. 10 meters. UGST site is proposed in PHATA colony park in a residential colony.
Any demographic or socio-economic aspects of the sub-project area that are already vulnerable (e.g., high incidence of marginalized populations, rural-urban migrants, illegal settlements, squatters, ethnic minorities, people with disabilities, people in old age, socially isolated segments[3] of the society and women or children)?		No	During reconnaissance survey no demographic or socio-economic impacts are envisaged from the proposed sub-project construction scope/activities. However, if any impacts are identified during the detailed ARAP survey, compensation will be included and paid to APs as per RPF of ESCF.
Already existing infrastructure/public amenities including Poles and transmission lines Transmission lines, roads, railway line, sewerage, gas, water supply, or storm water drainage pipelines, recreational facilities, commercial activities, commercial activities or educational or health services. which may be required to dismantle or may be affected temporarily by any means?	Yes		Ramps and electric poles along the drain alignment may require dismantling and relocation. On Quaid-e-Azam Road, an existing storm water drain is available which will be desilted, rehabilitated, and connected to the proposed network. Anticipated risks and impacts during construction are livelihood disruptions, asset damage, and disruption to access of buildings.
B. Potential Environmental Impacts - Will the Sub-Project cause…			
Disturbance or disruption to habitats and biodiversity, including those within		No	There will not be any disruption to habitats/biodiversity of the

[3] Due to caste, creed, religion or gender e.g. transgender

Screening Questions	Yes	No	Remarks
environmentally sensitive or protected areas and the surrounding ecosystem?			surrounding ecosystem/environment due to urban nature of the sub project area.
Cutting of trees?		No	Ten trees are located along the boundary wall of the proposed UGST site, which may be preserved through careful design during the construction phase. Tree plantation cost will be added in the BOQs for cluster plantation at appropriate places.
Generation of wastewater during construction or operation?		No	No contractor or labor camp construction is envisaged due to the small scale of the sub-project. Local unskilled labor will be engaged for construction activities. If labor camp will be required to be established; house on rent will be recommended and labor camp E & S protocols will be ensured.
Pollution of surface water/ground water due to wastewater discharge from construction site or due to direct/indirect disposal of wastewater (from worker-based camps and chemicals used in construction)?		No	No significant pollution of surface or groundwater is anticipated as no labor camp will be established and local labor will be engaged for construction activities. Any fuel or chemical residues generated during construction will be properly managed in accordance with the ESMP and good construction practices to prevent contamination.
Alteration of surface water hydrology of waterways resulting in increased sediment in streams/rivers or due to increased soil erosion at construction site?		No	No alteration in surface water hydrology envisaged as per scope of work of Sub-Project.
Serious contamination of soil due to construction and operation activities?		No	No soil contamination risks involved during construction activities of sub-project.
Aggravation of solid waste problems in the area?	Yes		Improper management of construction waste may result in temporary solid waste issues during the construction phase. To mitigate these impacts, the contractor will implement a Solid Waste Management Plan (SWMP) in accordance with the Environmental and Social Management and Monitoring Plan (ESMMP). The Municipal Committee (MC) will designate an appropriate site for the temporary storage and disposal of construction waste. These impacts will be temporary, limited to the construction period, and reversible. Regular monitoring will be carried out to

Screening Questions	Yes	No	Remarks
			ensure compliance with the approved waste management measures. An operational Grievance Redress Mechanism (GRM) will be established at the project site to receive and address complaints from affected communities. In addition, all solid waste generated from labor camps, where applicable, will be managed in accordance with the mitigation measures specified in the ESMMP.
Generation of hazardous waste?		No	No hazardous materials will be generated during the construction activities of Sub-Project. Contractor will park the machinery at the designated place. Machinery parking area will be provided with concrete platform for oil & grease changing activities to prevent soil contamination. Fuel for construction machinery will be obtained from authorized fuel filling pumping station.
Increased air pollution due to sub-project construction and operation?	Yes		Exhaust emissions from construction machinery may lead to deterioration of ambient air quality. Fugitive dust is also expected during construction and excavation activities; however, this will be mitigated through water sprinkling system. In addition, ambient air quality monitoring will be conducted.
Noise and vibration due to sub-project construction or operation?	Yes		All stationary noise producing equipment will be installed with acoustic enclosures. Timings of noise construction activities will be regulated near sensitive receptors. Furthermore, regular monitoring of noise levels will be adopted and continuous monitoring will be proposed during the construction stage as a mitigation measure.
Creation of breeding habitats for diseases such as those transmitted by mosquitoes and rodents due to solid/liquid?	Yes		Temporary excavated areas may provide breeding grounds for mosquitoes. The concern MC will mitigate this issue by anti-breeding mosquitoes' sprays on prominent places of sub-project area.
Use of chemicals?	Yes		UGST structure will be coated with Bitumen on the same day it is

Screening Questions	Yes	No	Remarks
			supplied No storage of chemicals is envisaged.
Is the ultimate disposal point (e.g., river, larger Nullah) capable of handling the increased hydraulic load without causing back-flow flooding?	Yes		The ultimate disposal points of UGST overflow, named 4R distributary from Hakra branch, has design discharge capacity of 110.97 cusec, Bed level 510.75, FSD 2,90, Free board 1.50, Bank top level 515.50, Bed width 20, N.S.L 509.70, Slope 0.175 can handle hydraulic load of 04 cusec without causing back-flow flooding reported.
Will the Sub Project (including drainage design) alter natural hydrology or flood flow patterns, potentially increasing flood risk within or downstream of the project area?		No	No, any, potentially increasing flood risk within or downstream of the project area. The sub project will not alter the natural hydrology or flow pattern.
Risk of cross-connections, leakage, or mixing between storm-water and sewerage systems?		No	There is no risk of mixing stormwater and sewage wastewater, as separate sewer lines are already in place in the city. To prevent any such issues in the future, the MC will implement necessary administrative measures.
C: Potential Social/OHS Impacts - Will the Sub-Project cause…			
Impairment of historical/cultural areas; disfiguration of landscape or potential loss/damage to Physical Cultural Resources (PCRs)?		No	Chance Find Procedure has been incorporated in the IEE document and will be implemented in case of finding of any PCR during excavation activities.
Displacement or involuntary resettlement of people? (physical displacement and/or economic displacement) (If "Yes", please also fill Involuntary Resettlement Screening Checklist)		No	During the ARAP survey, 38 male Affected Persons (APs) were identified whose household and shop access ramps will be partially cut/removed to facilitate the installation of the drainage line. In accordance with the World Bank requirements and the approved RPF, APs will be provided with the applicable compensation prior to commencement of construction activities.
Disproportionate impacts on the poor, women and children and or other vulnerable groups [4]?		Not	During the ARAP survey, no disproportionate impacts on poor people, women, or children were

[4] Women, Children, Women headed households, People in old age, people having disabilities, socially isolated community groups and or people living below the poverty line.

Screening Questions	Yes	No	Remarks
			anticipated as a result of the project activities. Furthermore, no vulnerable persons were identified among the Affected Persons (APs).
Impediments in movements of people/transport and animals?	Yes		Temporary disruption to pedestrian and vehicular movement may occur during construction phase in the commercial area. These impacts will be minimized through phased construction, traffic management measures, public notification, and provision of safe temporary access to shops and houses.
Large labor influx during sub-project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)?		No	No significant labor influx is anticipated, as the sub-project is small in scale. The majority of the workforce will be hired locally from the surrounding communities, which will support local employment opportunities while avoiding any additional burden on existing social infrastructure and public services, including water supply and sanitation systems.
Social conflicts if workers from other areas are hired.		No	The contractor will be bound to hire the locals for unskilled work during construction and hence such conflict is not anticipated however, training programs will be conducted for both labor force and local community in order to minimize the conflicts.
Is there a risk that community members may illegally or informally connect sewerage /Stormwater drainage?		No	There is no possibility of mixing sewage and stormwater by the community. In case of any such occurrence, the MC will adopt appropriate administrative measures.
Risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during project construction and operation?	Yes		Workers may get exposed to dust and noise during construction activities. However, the exposure levels are likely for a short time. Workers will be provided with requisite PPEs to minimize such exposure and associated harmful occupational health effects. In addition, a regular monitoring schedule will be implemented to ensure compliance with occupational health and safety requirements. In case of injury, temporary or permanent disability, or death of workers or

Screening Questions	Yes	No	Remarks
			community members resulting from project activities, compensation shall be provided in accordance with the applicable labour laws, rules and regulations of the Government of Punjab.
Expose workers to sewage, sludge, toxic gases, or biological pathogens during construction or operation?		No	No impact envisaged as storm water drainage construction activities will be executed.
Is involves confined space activities (e.g., manholes, pumping stations, sewers, treatment units) posing risks of asphyxiation, toxic gas exposure, or physical injury?		No	Inlet drains will be constructed in the congested commercial areas. Any associated occupational health and safety risks will be mitigated through the implementation of good construction practices and appropriate safety measures.
Will workers operate heavy machinery or equipment that may pose safety risks?	Yes		OHS measures will be adopted to mitigate risks/hazards.
Will the sub-project involve work at heights or near electrical installations?	Yes		Subsurface height safety protocols will be ensured during the construction of UGST.
Risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as fuel, and other chemicals during construction and operation?	Yes		Risks for Community Health and Safety are envisaged and HSE SOPs/Contractor's Guidelines will be followed.
Community safety risks due to both accidental and natural causes, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation, and decommissioning.	Yes		Safety risks to community are anticipated and HSE SOPS will be followed by the contractor.
Any impact on sensitive receptors ((Schools, colleges, Shrine, Mosque, Church, hospitals and clinics)	Yes		Temporary impacts are envisaged regarding disturbance in movement of pedestrian and traffic flow as construction activities will be executed within RoW.
Any impact of negative nature on already existing infrastructure including public amenities	Yes		Ramps along the drain alignment may require dismantling if excavation is carried out adjacent to the existing building line. However, impacts are expected to be minimal if the drains are constructed along the roadside within the available right of way.

Prepared By:	Endorsed By:	Reviewed By:
Name: M. Shahid Nawaz	Name: Hafiz M Muzammil	Name: Asif Gillani
Designation: MO(I&S)	Designation: Field Assistant	Designation: PO Environment
Organization: MC, HNB.	Organization: Environment Protection department	Organization: PMDFC
Signature:	Signature	Signature:
Date: 07.05.2026	Date: 07-05-2026.	Date: 07/05/2026

Municipal Officer (I&S)
Municipal Committee
Maqsoodabad

Field Assistant
(Environment) B/Nagar

INVOLUNTARY RESETTLEMENT SCREENING CHECKLIST

Name of City/MC/LG: MC Haroonabad District Bhawalnager

Sub-Project Title: Storm water facilities in Haroonabad

Date of Screening: 07-05-2026

1st Revision: 07-10-2026

2nd Revision: 07-10-2026

Screening Questions	Yes	No	Remarks
Does the project require land for the construction of a sub-project? Please specify Yes or No. If yes, indicate whether the land required is state-owned or privately owned[5].	Yes		The proposed piece of land is state-owned land currently under the possession of MC Haroonabad, while the ownership vests with PHATA. Furthermore, PHATA has delegated the operation and maintenance (O&M) responsibilities of the land to MC Haroonabad. MC will attain NOC from the PHATA for utilizing of land for UGST.
Has any Anti-encroachment drive (AED been conducted at the proposed location by the government1? Yes/No (Give the details in remarks column)		No	At all locations where project components have been proposed, AED have not been carried area since November 2024. The Municipal Committee (MC) Administrator will issue a certificate confirming that no anti-encroachment drive has been conducted in the proposed sub-project area to date.
Provide the geographic coordinates (latitude and longitude) of the proposed land required for the subproject.	Yes		Lat: 29.605515 Long: 73. 130992
Is the proposed land under any legal dispute or litigation?		No	The proposed land is free from any known legal disputes, encumbrances, or ongoing litigation.
PRIVATE LAND			
Type of land being acquired from the categories below: Private, Residential, Commercial, Agricultural, Others (specify in "remarks").		No	
Name of owner/owners and type of ownership document if available		No	
Land (Quantify and describe types of land being acquired in "remarks column".		No	

[5] private land acquisition is not allowed except for last-mile connectivity (PAD-PICP)

Describe any structures constructed on land and physical assets; a) Crops and vegetables (specify types and cropping area in "remarks). b) Trees (specify number and types in "remarks"). c) Houses (specify number and types in "remarks) d) Any commercial structure (specify number and types in "remarks) e) Others (specify number and types in "remarks)		No	
Will any people be displaced from the land when acquired? Yes/No		No	
Total Number of Affected Persons (APs) Male Female		No	
Titled landowners		No	
Tenants and sharecroppers		No	
Leaseholders		No	
Wage laborers		No	
Vulnerable APs (e.g. women headed households, minors and aged, orphans, disabled persons, and those below the poverty line). Specify the number and vulnerability in "remarks".		No	
Others (Specify)			
B. State land/ Government/LG owned land			
Land (Quantify and describe types of land being acquired in "remarks column".	Yes		05 kanals is under possession of MC and is the Government/ state land owned by PHATA.
Is the Right of Way (RoW) for the proposed subproject under the ownership of the MC/ULG or any other government agency, and are any No Objection Certificates (NOCs) or formal approvals required for its use? If yes, mention the detail in the remarks.	Yes		The proposed land has been identified by the MC and LAC/AC. The ownership of the land rests with PHATA, while its possession is with MC Haroonabad under O&M arrangements. The LAC/AC Haroonabad has confirmed that the No Objection Certificate (NOC) will be obtained from PHATA for the execution of the UGST construction.
Status and Current Use of State-Owned Land (Give details in remarks column)	Yes		The identified land is currently being utilized for public park.
Encroachers/squatters (specify in remarks column)		No	The site is free from encroachers or squatters. The Municipal Committee (MC) Administrator will issue a certificate confirming that no anti-encroachment drive

			has been conducted in the proposed sub-project area to date.
Describe any structures constructed on land and physical assets; a) Crops and vegetables (specify types and cropping area in "remarks). b) Trees (specify number and types in "remarks"). c) Houses (specify number and types in "remarks) d) Any commercial structure (specify number and types in "remarks) e) Others (specify number and types in "remarks)		No	
Total Number of Affected Persons (APs) Male Female	Yes		During the ARAP survey, 38 male Affected Persons (APs) were identified whose household and shop access ramps will be partially cut/removed to facilitate the installation of the drainage line. In accordance with the World Bank requirements and the approved RPF, APs will be provided with the applicable compensation prior to commencement of construction activities.
Vulnerable APs (e.g. women headed households, minors and aged, orphans, disabled persons, and those below the poverty line). Specify the number and vulnerability in "remarks".		No	During the ARAP survey, no vulnerable persons were identified among the Affected Persons (APs).
Others (specify in "remarks")		No	

Prepared By:	Endorsed By:	Reviewed By:
Name: N.Shahid Nawaz	Name: Hafiz M.Muzamil	Name: Qamar-uz-Zaman Bodla
Designation: MO (E&S)	Designation: Field Assistant	Designation: Program Officer Social Safeguards
Organization: MC, HNB	Organization: Environment Protection department	Organization: PMDPL
Signature:	Signature	Signature:
Date: 07-05-2026	Date: 07-05-2026	Date: 07/05/2026

Municipal Officer (E&S)
Municipal Committee
Maoonabad

Field Assistant
(Environment) BiNagar

Sub-Project Layout



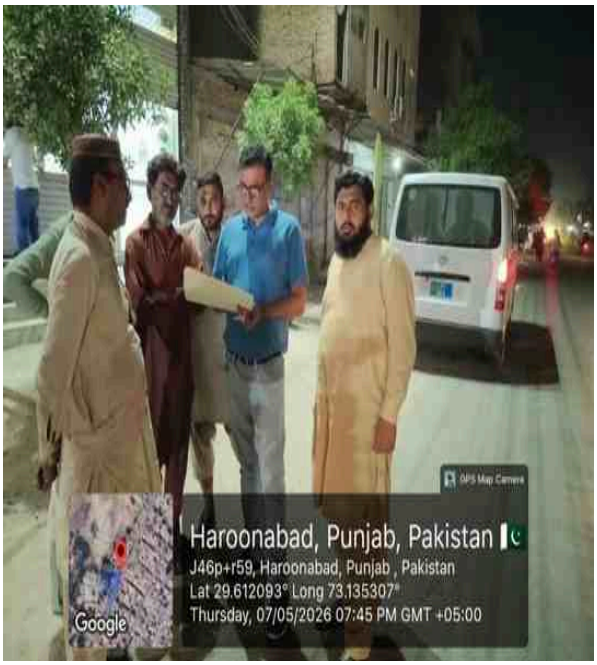
Sub-Project Glimpses



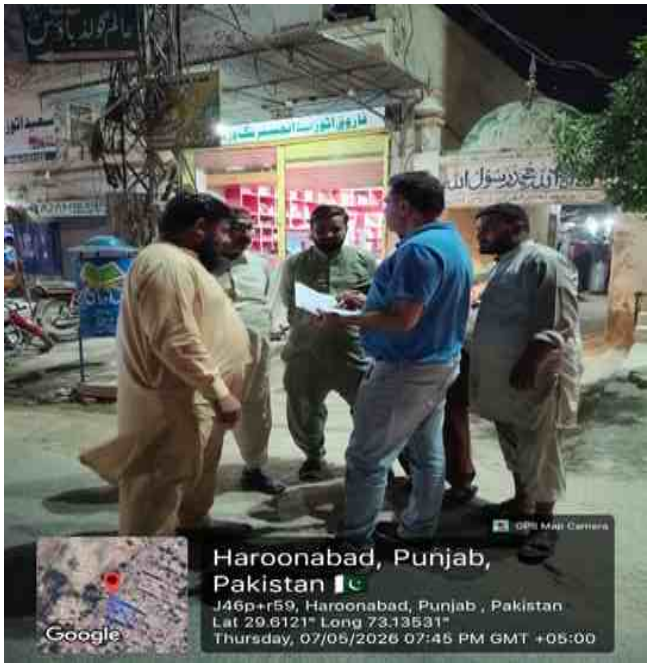
Stakeholder consultation with Vital Tea Owner/MPA Haroonabad



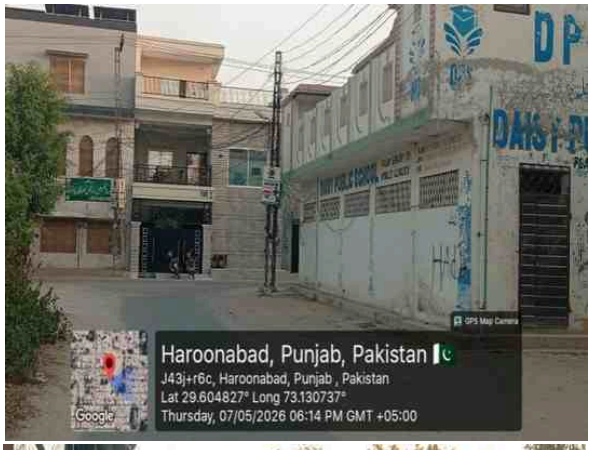
Meeting with WATSAN officials

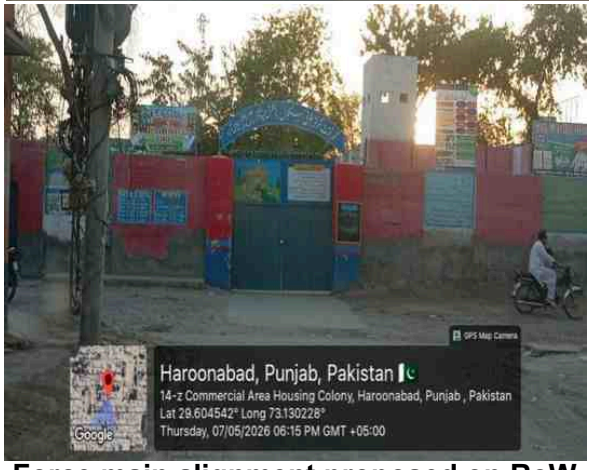


Focus Group Discussion along-with proposed storm drain alignment



Focus Group Discussion along-with proposed storm drain alignment

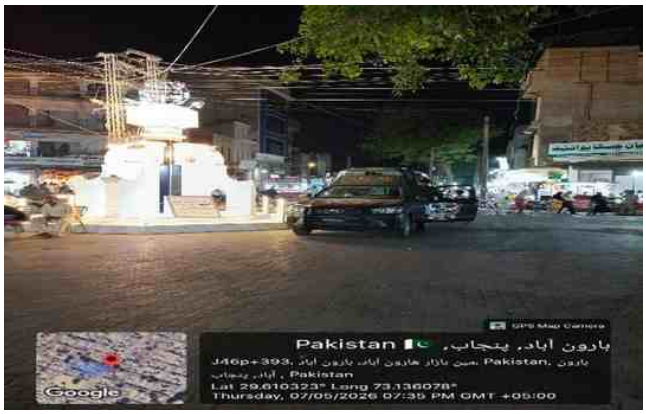




Force main alignment proposed on RoW



Proposed underground water storage tank site



Linear Storage site at Saddique Akbar Chowk

Land Documents

بلدیہ مستحکم پنجاب مستحکم

OFFICE OF THE MUNICIPAL COMMITTEE HAROONABAD

Email: mchnd01@gmail.com

No: GB/MC/HND/ 2872
Dated: 07 / 05 /2026.

To,

The Director,
Punjab Housing & Town Planning Authority (PHATA),
Bahawalnagar .

Subject: - REQUEST FOR PROVISION OF NOC FOR CONSTRUCTION OF UNDERGROUNDTANK AND ALLIED STRUCTURE FOR STORAGE STORMWATER.

It is submitted that the city Haroonabad is included in the "Punjab Inclusive Cities Programme"(PICP).The said programme is funded by the World Bank.The Programme isincluded the Water Supply, Sewerage System and storage/usage of storm water.In this regard the Design consultants of the programme has furnished the PC-I for construction of storm water channels, storage tank, recharge well and other allied structures.

As per topography survey the site proposed for construction falls within the jurisdiction of Municipal Committee Haroonabad. This office intends to use the same for construction of above subjected underground structures.

In this regard you are hereby requested to please issue No Objection Certificate for utilization of above said land for the best public interest and to save the localities from the storm water.

Chief Officer
Municipal Committee
Haroonabad

C.C.

1. The Administrator, MC Haroonabad
2. The Municipal Officer, MC Haroonabad

NO AED Certificate

بلدیہ مستحکم پنجاب مستحکم

OFFICE OF THE
MUNICIPAL COMMITTEE
HAROONABAD
No: GB/MC/HND/2988
Dated: 13/08/2026.

Email: mchnd01@gmail.com
Phone #: 063-2250883

PUNJAB INCLUSIVE CITIES PROGRAM (PICP) CERTIFICATION OF NON-CONDUCT OF ANTI-ENCROACHMENT DRIVE.

This is to certify that no anti-encroachment drive, demolition, or eviction activity has been undertaken on the land parcels covering proposed footprint and direct area of influence of the proposed storm water drain, underground Storage Reservoir Tank, force man and any other component of sub-project within the jurisdiction of MC Haroonabad since November 2024 to the present date. It is further certified that no such anti-encroachment drive, demolition, or displacement activity will be carried out on these land parcels.

This is certificate is issued to support the official requirements of the Punjab Inclusive Cities Program (PICP) and is valid as of the date of issuance.

Assistant Commissioner /Administrator
Municipal Committee Haroonabad

CamScanner

WATSAN Unit Notification

بلدیہ مستحکم پنجاب مستحکم

Email: mchnd01@gmail.com
Phone #: 063-2250883

OFFICE OF THE MUNICIPAL COMMITTEE HAROONABAD

No.GB/MC/HND/2788
Dated: 09/03/2026.

OFFICE ORDER

With the refence of the letter No. PS(SLGB)/General/2025 dated 04-03-2026. The following officials of Municipal Committee Haroonabad are hereby assigned the additional charge of the vacant posts under WATSAN Unit with immediate effect, in additional to their own duties, till further Orders:

Sr.#	Name of Official	Working as	Additional Charge in WATSAN Unit in MC
1.	Waseem Iqbal	Building Inspector, Municipal Committee Haroonabad	**Additional Charge** Geographic Information System (GIS) Officer in WATSAN Unit
2.	Muhammad Faisal	Computer Operator, Municipal Committee Haroonabad	**Additional Charge** IT/MIS Officer in WATSAN Unit
3.	Muhammad Saeed	Environment Inspector, E&SM Official, Environment Protection Department, Tehsil Haroonabad	**Additional Charge** Environment & Social Management Officer in WATSAN Unit
4.	Maqsood Ahmed	Accountant, Municipal Committee Haroonabad	**Additional Charge** Accountant in WATSAN Unit

Chief Officer
Municipal Committee
Haroonabad

CC:

1. Administrator, Municipal Committee Haroonabad
2. Municipal Officer (WATSAN/ Services), Municipal Committee Haroonabad
3. Officers/ Official Concerned.
4. District Environment Protection Officer, Department, Bahawalnagar.



TYPICAL BARRICATION AND SAFETY ARRANGEMENT FOR DEEP EXCAVATION

(FOR ILLUSTRATIVE PURPOSES ONLY)