



Local Government & Community Development Department

Punjab Cities Program Construction of SWM Parking Area in Burewala City

PC-I

Estimated Cost Million PKR. 30.930

October 2022

Municipal Committee Burewala



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Punjab Cities Program

PC-I Form for Construction of SWM Parking Area in Burewala City

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PC-I FORM
for
Construction of SWM Parking Area in Burewala City

Project Serial Number

Sector : **Local Government & Community Development Department**
Sub Sector: **Social**

1. Name of the project	Punjab Cities Program Construction of Parking Area in Burewala city											
2.Location	<p>Burewala is situated on the old Dehli Multan Road in the North-East of Vehari city at a distance of 35 kilometers. Sutlej River flows in the south of Burewala city at an average distance of 30 Km.</p> <p>The city is located at about 240 Kilometers to the south-west of Lahore on Lahore-Pakpattan-Lodhran Railway track. It has 30o-10' North latitude and 72o- 41' East longitude and elevation of 146 meters above mean sea level.</p> <p>Location map of the city is attached in Annexure-A</p>											
3. Authorities responsible for												
i- Sponsoring	Government of the Punjab (through World Bank funding)											
ii- Execution	Municipal Committee Burewala											
iii- Operation and Maintenance	Municipal Committee Burewala											
iv-Concerned Provincial Department	Local Government and Community Development Department Punjab											
4a.Plan Provision												
i. If the project is included in medium term/five year plan, specify actual allocation	<p>Punjab Cities Program (PCP) is a World Bank funded Program with a total cost of USD 236.00 million and comprises of below mentioned components.</p> <table border="1"> <tr> <td>Total loan from World Bank</td> <td>USD 200.00 million</td> </tr> <tr> <td>Component-1 Infrastructure development (PforR)</td> <td>USD 180.00 million</td> </tr> <tr> <td>Component-2 Technical Assistance</td> <td>USD 20.00 million</td> </tr> <tr> <td>MCs share (20% of PforR component) equivalent to:</td> <td>USD 36.00 million</td> </tr> <tr> <td>Total Program cost</td> <td>USD 236.00 million</td> </tr> </table>		Total loan from World Bank	USD 200.00 million	Component-1 Infrastructure development (PforR)	USD 180.00 million	Component-2 Technical Assistance	USD 20.00 million	MCs share (20% of PforR component) equivalent to:	USD 36.00 million	Total Program cost	USD 236.00 million
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	Component-2 i-e Technical Assistance component of Program costing USD 20.00 million is meant for management cost of the Program and capacity building of MCs & Government Departments and is included in the medium term/ five-year plan and has been funded with allocation of PKR 1329.90 million as foreign component.
ii- If not included in the current plan, what warrants its inclusion and how it is now proposed to be accommodated	Not applicable
iii If the project is proposed to be financed out of block provision indicate.	The Project is being financed by World Bank as Donor along with 20% co-financing from the Program Units and is not proposed to be financed out of block allocation.
4b- Provision in the current year PSDP/ADP	PKR. 1329.90.00 million
5. Project objectives and its relationship with sector objectives	<p><u>Sector Objectives</u> The sector objectives include:</p> <ol style="list-style-type: none"> 1. Provision of efficient and effective municipality services to the masses. 2. Community development through improving basic infrastructure. 3. Clean and green environment for better living standards. 4. Effective use of land through master planning of urban areas. 5. Social uplifting and cohesion through provision of public open spaces and play grounds. 6. Ease in mobility and communication. 7. Cost efficient Solid Waste Management through waste to energy initiatives. 8. Capacity building of Local Governments. 9. Efficient Road network to make areas easily accessible <p><u>Objectives of the Project</u> The Punjab Cities Program aims at improvement of infrastructure of municipal services such as roads, cross roads, street lights, parks and parking shed for SWM machinery for improved communication and recreational facilities.</p> <p>Scope of the work for this particular project includes the construction of Parking shed for SWM Machinery.</p>

	<p>The Project has the following objectives;</p> <ol style="list-style-type: none"> 1. Provision of suitable parking area for the MC Vehicles. 2. Making MC self-sufficient in small repairs to the machinery & Equipment possessed by MC 3. Provision of a washing facilities for the vehicles 4. Effective protection to the vehicles against the solar radiation and Ultraviolet rays, rain, hail, wind, and dust. 5. Slowing down the deterioration of vehicles, therefore reducing the cost of maintenance. 6. Enhancement of the security of vehicles during non-working hours. 7. Better watch and ward of MC machinery and equipment and reduction of losses due to theft of equipment and spares. 8. Provision of better solid waste management service by protection of the machinery and equipment. <p>Hence, the objectives of the project are in line with the sector objectives at serial No-1, 2, 3 & 7 and the project forms integral part of the concerned sector.</p>
6. Description, justification, technical parameters and technology transfer aspects	
i. Present Condition	<p>As per PLGA-12019 Urban Local Governments (ULGs) are basically and wholly responsible for delivery of the municipal services with a service delivery level which should satisfy the consumers and citizen. Unfortunately, the prevalent conditions of the service delivery are not encouraging in the city.</p> <p>The major reason of unsatisfactory service delivery is the lack of proper maintenance of the municipal infrastructure in all sectors causing consumer dissatisfaction at one end and degradation of the infrastructure on the other end apart from very low revenue recovery as the consumers are reluctant to pay because of deteriorated service delivery.</p> <p>MC Burewala has some machinery and equipment which is already being used for collection and disposal of the solid waste. Under Punjab Cities Program modern, efficient and cost-effective machinery and equipment has been provided to MC Burewala for provision of better solid waste management facilities to the people of Burewala.</p> <p>At present, there is no appropriate parking space available with MC for the existing and newly procured machinery and equipment and dire need for parking area facility is being felt. Currently the solid waste machinery is being parked under open sky in various spaces available with MC. Absence of permanent parking space can cause machinery</p>

	deterioration and compromise its safety that will lead to non-sustainability of solid waste management.																		
ii. Description of the subproject-	The project comprises of construction of Parking Area for solid waste management and other machinery and equipment possessed by MC over an area of 7.32 Kanals in the city. Detail of the components of Parking Area have been given in the table below.																		
iii Detail of civil works, equipment & machinery and other physical facilities	<p>The detail of Parking Shed for SWM Machinery to be constructed in the city, is given below:</p> <p>Location: Vehari Bazar Chowk near Children Park</p> <table border="1"> <thead> <tr> <th>S. N.</th><th>Detail of works</th></tr> </thead> <tbody> <tr> <td>1</td><td>Sheds for vehicles with trusses and Aluzinc sheeting at the top</td></tr> <tr> <td>2</td><td>Office room with toilet</td></tr> <tr> <td>3</td><td>Sitting room with toilet</td></tr> <tr> <td>4</td><td>Workshop with toilet & tool room</td></tr> <tr> <td>5</td><td>Parking aprons</td></tr> <tr> <td>6</td><td>Generator pad</td></tr> <tr> <td>7</td><td>Water supply and drainage system</td></tr> <tr> <td>8</td><td>Boundary wall and entrance gate</td></tr> </tbody> </table>	S. N.	Detail of works	1	Sheds for vehicles with trusses and Aluzinc sheeting at the top	2	Office room with toilet	3	Sitting room with toilet	4	Workshop with toilet & tool room	5	Parking aprons	6	Generator pad	7	Water supply and drainage system	8	Boundary wall and entrance gate
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8	Boundary wall and entrance gate																		
iv Indicate governess issues of the sector relevant to the project and strategy to resolve them	<ul style="list-style-type: none"> MC Burewala is facing acute shortage of staff. The smooth sailing of the Punjab Cities Program can only be assured when the required staff is available with Unit. The Repair and maintenance of the municipal services in not up to the mark in such Unit. Trainings will be imparted by PMDFC to the officers as well as the field staff under the Program but practicing the interventions and method/procedures learnt in these trainings is the actual requirement in which MCs are lacking at present. Hence inculcating the mind set for good repair and maintenance is the major requirement for improving the service delivery level. 																		

7- Capital Cost of Project	The summary of the works included in the project is given below;	<table><tr><th>S. No</th><th>Item of works</th><th>Cost (PKR million)</th></tr><tr><td>1</td><td>Office Building</td><td>1.383</td></tr><tr><td>2</td><td>Sitting Room</td><td>1.101</td></tr><tr><td>3</td><td>Workshop</td><td>2.897</td></tr><tr><td>4</td><td>Parking Shed (Size 90' X 32')</td><td>8.351</td></tr><tr><td>5</td><td>Washing Pit</td><td>0.519</td></tr><tr><td>6</td><td>Generator Pad</td><td>0.153</td></tr><tr><td>7</td><td>Pump Pad</td><td>0.015</td></tr><tr><td>8</td><td>Septic Tank</td><td>0.304</td></tr><tr><td>9</td><td>External Civil Work</td><td>10.937</td></tr><tr><td>10</td><td>External Plumbing Work</td><td>0.847</td></tr><tr><td>11</td><td>External Electrical Work</td><td>2.272</td></tr><tr><td>12</td><td>Environmental Haelth & Safety Cost</td><td>0.112</td></tr><tr><td></td><td>Total cost</td><td>28.906</td></tr><tr><td></td><td>Contingencies @2%</td><td>0.578</td></tr><tr><td></td><td>Punjab Sales Tax @5%</td><td>1.445</td></tr><tr><td></td><td>Grand Total</td><td>30.930</td></tr></table>	S. No	Item of works	Cost (PKR million)	1	Office Building	1.383	2	Sitting Room	1.101	3	Workshop	2.897	4	Parking Shed (Size 90' X 32')	8.351	5	Washing Pit	0.519	6	Generator Pad	0.153	7	Pump Pad	0.015	8	Septic Tank	0.304	9	External Civil Work	10.937	10	External Plumbing Work	0.847	11	External Electrical Work	2.272	12	Environmental Haelth & Safety Cost	0.112		Total cost	28.906		Contingencies @2%	0.578		Punjab Sales Tax @5%	1.445		Grand Total	30.930
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		See Annexure-B for details																																																			
		i- Indicate date of estimation of the project cost	The project estimates have been framed during the month of October, 2022																																																		
ii- Basis of determining the estimates be provided.	<p>The cost estimates have been framed on the basis of bill of quantities actually required at site and unit rates from the Market Rate System (MRS) issued by the Government of Punjab (District Vehari 2nd Bi-Annual of year 2022).</p> <p>For items not available in the MRS, the same have been analyzed as per prevailing market rates.</p>																																																				

iii- Provide year wise estimation of physical activities	Physical phasing of the project is included in the following table:			
	S. #	Item of works	Year 2022-2023	
	1	Sheds for vehicles with trusses and Aluzinc sheeting at the top	100%	
	2	Office room with toilet	100%	
	3	Sitting room with toilet	100%	
	4	Workshop with toilet & tool room	100%	
	5	Parking aprons	100%	
	6	Generator pad	100%	
	7	Water supply and drainage system	100%	
iv- Phasing of capital cost on the basis of each item of work.	Phasing of capital cost of the project is included in the following table: (All figures are in million rupees)			
	S. #	Items of Shed	Total cost (Million Rs)	Year 2022-2023 (Million Rs)
	1	Office Building	1.383	1.383
	2	Sitting Room	1.101	1.101
	3	Workshop	2.897	2.897
	4	Parking Shed (Size 90' X 32')	8.351	8.351
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	11	External Electrical Work	2.272	2.272
	12	Environmental Haelth & Safety Cost	0.112	0.112
		PST Contingencies	2.023	2.023
		Grand Total	30.930	30.930
	8-Annual recurrent cost after completion of the project and source of financing	Cost in Million = Rs. 0.589 (See details in Annexure-1)		
9- Demand & Supply Analysis	Existing supply level			
i- Existing Capacity of services	• There is no existing parking facility for the SWM machinery. Resultantly the vehicles are parked at open spaces with no protection.			

	<ul style="list-style-type: none">• MC Burewala is unable to protect the solid waste transportation and other MC vehicles because of non-availability of appropriate parking area.												
ii- Projected Demand for 10 years	<p>The Parking area is required to park and protect the solid waste transportation and other MC vehicles.</p> <ul style="list-style-type: none">•The influence and value of parking spaces in planning for livable communities is very essential. Parking space is more than a necessary element of larger residential or commercial uses; it merits consideration as a distinct land use that affects travel behavior and the environment. The provision of parking lots reduces the congestion on streets and roads and improves traffic flow. District Burewala lacks parking space for the SWM Machinery which are therefore parked in open or rental spaces. The proposal is to construct a parking shed for SWM machinery to accommodate a total of 07 vehicles.•The municipal services require radical improvement to enhance the efficiency of the service to increase service delivery to a satisfactory level.•Many shortcomings, problems and bottlenecks have been observed in the present situation which could not be addressed by MC due to funding constraints and now have been proposed to be addressed by the construction of the municipal services infrastructure.												
iii- Capacity of other similar projects being implemented in public/private sector	No other project of this nature is being implemented in public as well as private sector because of funding constrains in the Unit.												
iv- Supply and Demand gaps	As explained above there is no parking area in Burewala City for solid waste transportation and other MC vehicles. So there is a large gap between the supply and demand.												
v-Designed capacity and output of the project	<p>1)-Table showing details of the parking area is given below:</p> <table><tr><th rowspan="2">Location</th><th rowspan="2">Components</th><th rowspan="2">No. of Sheds</th><th colspan="2">Area</th></tr><tr><th>Total area</th><th>Shed area & Nos.</th></tr><tr><td>Vehari Bazar Chowk near Cjildren Park</td><td>As listed in section-7</td><td>01</td><td>7.32 Kanals</td><td>1 No. = 90’x32’</td></tr></table> <p>2)-Parking shed is designed for 28-year life.</p> <p>3)-This Parking shed is designed for 07 vehicles of SWM Machinery.</p>	Location	Components	No. of Sheds	Area		Total area	Shed area & Nos.	Vehari Bazar Chowk near Cjildren Park	As listed in section-7	01	7.32 Kanals	1 No. = 90’x32’
Location	Components				No. of Sheds	Area							
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Vehari Bazar Chowk near Cjildren Park	As listed in section-7	01	7.32 Kanals	1 No. = 90’x32’									

10. Financial Plan Sources of financing <u>Debt</u> a) Indicate the local and foreign debt Loan	<p>Below given loan for the Punjab Cities Program has been funded by World Bank for 16 PCP cities in Punjab.</p> <table border="1"> <tr> <td>Total loan to Government of Pakistan/Punjab</td><td>USD 200 million</td></tr> <tr> <td>Component-1 for Infrastructure Development</td><td>USD 180 million</td></tr> <tr> <td>Component-2 for Investment Project Financing For capacity building of MCs & three Govt. organization and program management.</td><td>USD 20 million</td></tr> <tr> <td>20% share of Municipalities is equivalent to</td><td>USD 36 million</td></tr> <tr> <td>Total funds available for Infrastructure Development</td><td>USD 216 million</td></tr> <tr> <td colspan="2">This project will be funded under this financing.</td></tr> </table>	Total loan to Government of Pakistan/Punjab	USD 200 million	Component-1 for Infrastructure Development	USD 180 million	Component-2 for Investment Project Financing For capacity building of MCs & three Govt. organization and program management.	USD 20 million	20% share of Municipalities is equivalent to	USD 36 million	Total funds available for Infrastructure Development	USD 216 million	This project will be funded under this financing.	
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This project will be funded under this financing.													
b) Equity	<p>A. Loan/grant to MC The amount of loan converted to grant to MC Burewala will be Rs 24.744 million. The financing of the project will be as give n below:</p> <table border="1"> <tr> <td>Grant to MC Burewala from World Bank (80% of cost of PC-I)</td><td>PKR 24,744 million</td></tr> <tr> <td>20% Co-finance by MC</td><td>PKR 6.186 million</td></tr> <tr> <td>Total cost of project</td><td>PKR 30.930 million</td></tr> </table> <p>B. Project Cost =Rs. 30.930 million</p> <p>*The loan is from World Bank to Government of Pakistan/Punjab which will trickle down to MC Burewala as grant.</p>	Grant to MC Burewala from World Bank (80% of cost of PC-I)	PKR 24,744 million	20% Co-finance by MC	PKR 6.186 million	Total cost of project	PKR 30.930 million						
Grant to MC Burewala from World Bank (80% of cost of PC-I)	PKR 24,744 million												
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c) Grants	No grant is being given by Government of Punjab out of ADP funds. The World Bank loan to Government of Pakistan/Punjab will trickle down as grant to MC from Government of Punjab.												
d) Weighted cost of capital	Nil												
11-Project benefits and analysis													
i. Financial: Income to the project with assumption	<ul style="list-style-type: none"> No income will be generated from the project and hence the Financial Analysis is not required. It is a social sector project and the capital cost of the project is not intended to be recovered. MC will meet the cost of repair and maintenance out of its own resources. The project economic analysis is given as Annexure-C. 												

<p>ii. Social benefits to the target group</p>	<p>The completion of the project will result in:</p> <ul style="list-style-type: none"> • Provision of suitable parking area for the MC Vehicles. • Making MC self-sufficient in small repairs to the machinery & Equipment possessed by MC • Provision of a washing facilities for the vehicles • Effective protection to the vehicles against the solar radiation and Ultraviolet rays, rain, hail, wind, and dust. • Slowing down the deterioration of vehicles, therefore reducing the cost of maintenance. • Enhancement of the security of vehicles during non-working hours. • Better watch and ward of MC machinery and equipment and reduction of losses due to theft of equipment and spares. • Provision of better solid waste management service by protection of the machinery and equipment.
<p>iii.Environmental Impact negative/positive</p>	<p>Primary and secondary data has been collected and used to assess the environmental impacts of the proposed Parking Area. Site visit was conducted to the project area for the proposed works and to assess the baseline in order to evaluate whether there are any key receptors that will need to be considered during the project works to prevent any long term and irreversible impacts. The activities to be conducted under the project were screened for potential impacts at the design/pre-construction, construction and operation phases of the Parking Sheds. This ‘activity wise’ screening enabled to obtain a clear picture of the expected level of impacts resulting from the different activities and helped identify required mitigation measures to mitigate them to within acceptable limits as per the guidelines provided by the World Bank in the form of Environment and Social Management Framework. However, the impacts will be temporary and there will be no negative impacts after completion of the project, rather, during the operation phase of the Parking Sheds, mostly positive impacts are expected. To facilitate the selection of an optimal solution and for the inclusion of Safe Operating Procedures for Construction workers/labors; assessment indicators or an Environmental Screening Checklist has been developed which is attached as Annexure E (A) of this PC-1. The checklist focuses on Environmental Issues and social concerns and ensure that all environmental and social dimensions are adequately considered. Based on the remarks of the screening checklist, Environment and Social Management Plans (ESMPs) does not need to be prepared. However, the necessary cost for Environment Health and Safety of Workers has been incorporated in the PC-1. The Environment, Health and Safety SOPs for labor/workers are provided as Annexure E (B).</p>

iv. Quantifiable project outputs	The quantifiable project outputs have been given above in Sr. No-9 (V). The social benefits to the citizen have been described at Sr. No-11(ii).												
v. Unit cost analysis	<p>A) Capital Unit Cost</p> <p>The unit cost analysis is produced below;</p> <table border="1"> <tr> <td>Project capital cost</td><td>PKR 30.930 million</td></tr> <tr> <td>Population of the city in year 2023</td><td>264,746 persons</td></tr> <tr> <td>Unit capital cost per capita</td><td>PKR 116.83</td></tr> </table> <p>B)-Unit R&M cost:</p> <table border="1"> <tr> <td>Annual R&M cost</td><td>PKR 589,067</td></tr> <tr> <td>Population of the city in year 2023</td><td>264,746 persons</td></tr> <tr> <td>Unit R&M cost per capita</td><td>PKR 2.23</td></tr> </table>	Project capital cost	PKR 30.930 million	Population of the city in year 2023	264,746 persons	Unit capital cost per capita	PKR 116.83	Annual R&M cost	PKR 589,067	Population of the city in year 2023	264,746 persons	Unit R&M cost per capita	PKR 2.23
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vi. Employment generation (direct and indirect)	<p><u>Employment Analysis</u></p> <p>Direct Employment</p> <p>a) Planning and Design of projects</p> <p>The planning and design of the project has been entrusted to local consultants (JERS Consultancy) who have appointed staff and experts in Structural designing and related disciplines along with their support staff. The consultants will also appoint their staff for resident supervision of the project to verify and certify the items of works to be executed under this PC-I.</p> <p>b) Execution of the Project</p> <p>a) PMDFC</p> <p>PMDFC has the project monitoring and supervisory role and the company has enough experts and staff to complete this assignment. PMDFC has already deployed under mentioned staff for these projects:</p> <ul style="list-style-type: none"> • Civil Engineers • Accounts, administration and audit personnel • Urban planners • GIS experts • Support staff like computer operators, vehicle drivers, office boys and guards. • Procurement experts • Communication experts • Environmental and social experts • Contract management experts <p>b) Consultants</p> <p>PMDFC has employed consultants for detailed design and resident supervision of the projects who have deployed their staff for detailed design and resident supervision of the project.</p>												

	<p>c) Municipality MC Burewala has regular staff like engineers, sub engineers and other administrative & accounts keeping staff which will be responsible for execution of the project and contract management. No additional staff will be needed for execution of this project</p> <p>d) Contractor The contractor responsible for execution of the sub project will employ skilled and un-skilled labor on this work.</p> <p>Indirect Employment Indirect employment for production of material such as cement, steel, stone metal, bitumen, bricks etc. will be generated.</p>
vii. Impacts of delays on project cost and viability	<p>The impact of delay in project implementation will result in;</p> <ul style="list-style-type: none"> Increased project cost due to escalation in cost of material and labor. Deterioration of vehicles due to weathering effects Recurrent watch and ward problems for the delayed period
12-Implementation Schedule	
a) Indicate starting and completion date of the project	The project is anticipated to commence by November 2022 and to be completed by April 2023 with project implementation period of 06 months.
b) Item wise/year wise schedule in line chart	The Gantt chart has been attached at Annexure-D
13- Management Structure and manpower requirements	
i. Administrative arrangements for the implementation of the project	<p>ii. Planning & design of the project The project has been designed by the consultants employed by PMDFC and will also carry out the resident supervision of the project.</p> <p>iii. Preparation of cost estimation The cost estimates have been prepared by the design consultants by actual measurements and requirements at site. The execution of the items of works included in these estimates /PC-I will be certified by these consultants.</p> <p>iv. Execution of the project</p> <ul style="list-style-type: none"> The project will be executed by MC Burewala and supervised by the Consultants appointed by PMDFC in resident supervision mode. The technical staff & experts in PMDFC will oversee, co-ordinate and collaborate in the project planning, design and implementation through their experts in head office located in

	<p>Lahore and regional offices. The reporting of progress to LG & CDD & World bank and troubleshooting will also be responsibility of PMDFC.</p> <ul style="list-style-type: none"> • MO (I&S) of the MC has been designated as Project Manager /Engineer in Charge of the project. The supervision of the works will also be carried out by these municipal officers along with their support engineering staff. All supervisory staff is available with MC. • The procurement of works and goods will be done by Procurement Committee of Burewala Unit as per PPRA Rules. <p>v. Verification of quantities included in PC-Is and Resident Supervision of the works by consultants</p> <p>The works will be supervised by Supervision Consultants in resident supervision mode by assuring the quantity and quality of works. The consultants will verify the items of work and their quantities contained in the PC-Is and cost estimates initially and then the quantities and quality of works included in the contractor claims at the stage of payments. Payments will be made by the MC after these contractor claims have been entered in the measurement books by the Project Manager/Engineer in Charge and pre audited as per LG Works Rules.</p>
<p>ii)The manpower requirements by skills during execution and operation of the project and;</p> <p>The job description, qualification, experience, age and salary of each post</p>	<p>a) PMDFC experts and staff</p> <p>For rendering assistance in implementation of infrastructure projects in 16 MCs, PMDFC has the experts and staff in the required fields. In order to facilitate the Program Units, three regional offices have been established by PMDFC at Gujranwala, Faisalabad and Multan/Khanewal.</p> <p>b) Resident Supervision Consultants</p> <p>The project will be supervised by consultants. The tentative staff to be employed/deployed by the consultants for the certification of quantities of works and resident supervision of the project is given below:</p>

	S #	Personnel	Nos	Qualification
	1	Chief Resident Engineer/Team Leader	01	BSc;/BE in Civil engineering from HEC approved University with minimum 20 years' professional experience and 5 years' experience on similar assignment or MSC; Civil Engineering/Public Health Engineering/Environmental Engineering with Bachelor in Civil Engineering and minimum 15 years, experience, with 5 years on similar assignments on urban planning, designing and construction supervision assignment.
	2	Assistant Resident Engineer	01	Bachelor Degree in Civil engineering with minimum 8 years' experience in site supervision and execution for projects of similar nature
	3	Site Inspectors	01	DAE in Civil with minimum 10 years' experience in site supervision for projects of similar nature
<p>c) Contractor's Technical staff, skilled & non skilled labor</p> <p>The contractors will employ the supervisory technical staff and skilled & non skilled labor for execution of works. The works will be supervised by experienced Engineers and sub engineers and the number of slots for engineers and skilled and non-skilled will depend upon the type and quantity of work and its period of completion.</p> <p>d) Repair & maintenance of the project</p> <p>MC has its own regular staff which has been deployed for repair and maintenance of the municipal services infrastructure. However, it has been observed that the existing staff is not adequate to repair and maintain the services in a manner which can give good service delivery. Hence it is proposed to;</p> <ul style="list-style-type: none"> • Fill up the presently vacant slots • Recruit additional staff as per need of the infrastructure after obtaining the sanctions from the competent authorities. 				
14-Additional projects /decisions required to optimize the investment being undertaken	<p>1) Shortage & frequent transfers of Provincially appointed staff</p> <p>MC is facing shortage in provincially appointed and locally appointed cadres. This will seriously affect the pace of progress of the program and the implementation of the infrastructure projects may be delayed. Provincial Government should fill up the vacant staff immediately for optimizing the investments in MC.</p> <p>2) Repair & Maintenance (R&M) staff</p> <p>The R&M staff is also deficient and this is adversely affecting the service delivery level. Number of slots are vacant but MC is not</p>			

	<p>allowed to recruit the persons to fill these slots due to ban on recruitments.</p> <p>Further the sanctioned strength of the field staff is much lesser than the actual requirement because with the increase in population and extension of services, additionally required staff has not been sanctioned by the competent authorities.</p> <p>Both of the above issues need to be addressed for optimal utilization of the investments and giving targeted benefits to the resident population of these cities.</p>
15-Certificate	<p>Certified that the project proposal has been prepared on the basis of guidelines provided by the Planning Commission for the preparation of PC-I for social sectors projects.</p>

Prepared by	JERS Consultancy (Pvt) Ltd	Stamp & Signatures	
Checked by	Municipal officer (Infrastructure) MC Burewala	Stamp & Signatures	
	Chief Officer MC Burewala	Stamp & Signatures	
Forwarded by	Administrator MC Burewala	Stamp & Signatures	
Vetted by	Senior Program Officer (PMDFC)	Stamp & Signatures	

Annexure-1

Annual Recurrent Cost

Annual Recurrent Cost after Completion of the Project

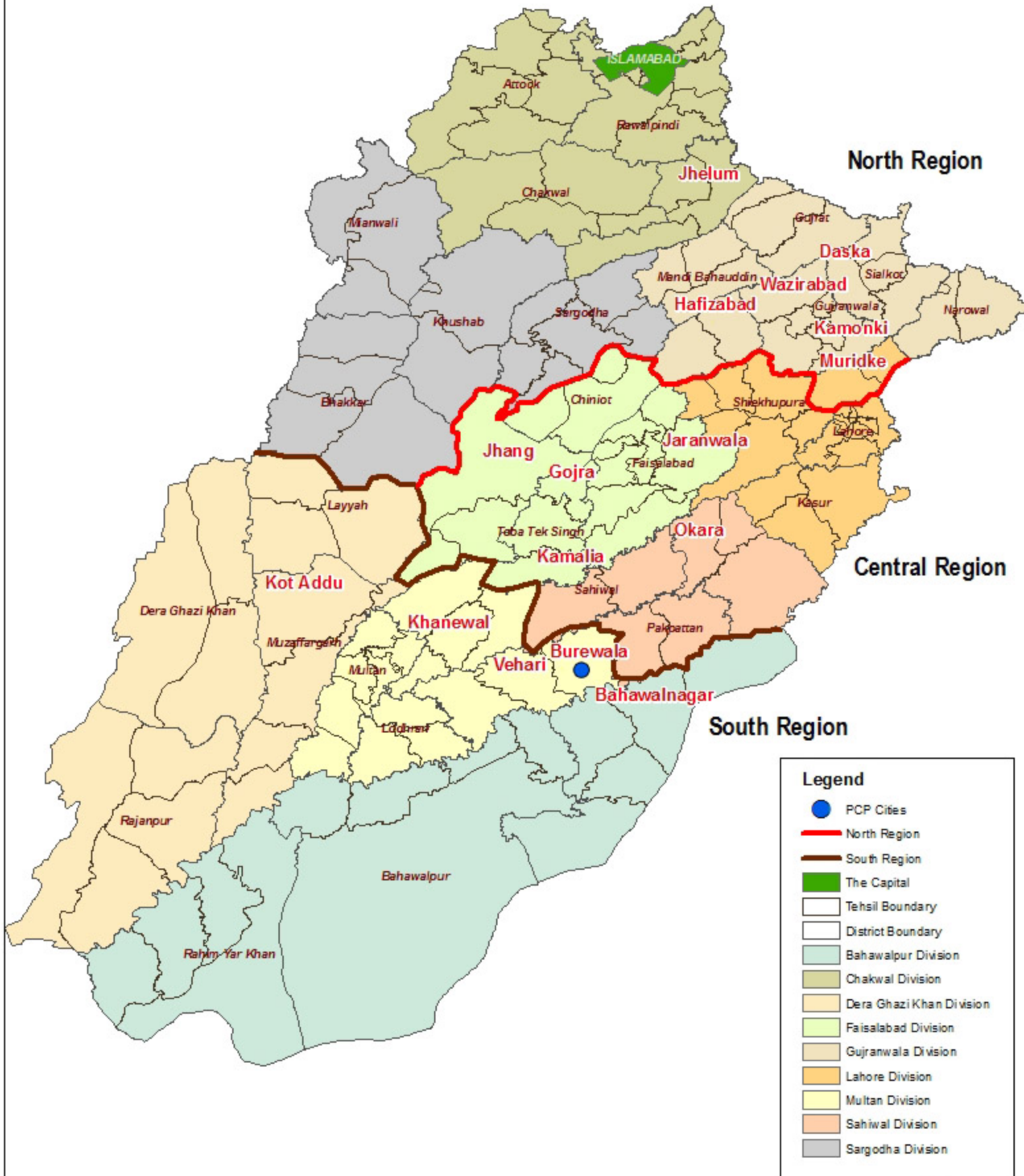
Cost Category	Cost Breakup	Cost per Annum
Annual Maintenance Cost of The Civil Works	1% of Project Cost = 0.01*(28,906,721)	289,067
Annual Manpower Cost of One Guard	Rs. 25000/month	300,000
Total cost per Annum (Million Rs.)		589,067

Annexure-A

Location Map

Location Map (Punjab Cities Program)

ANNEXURE - A



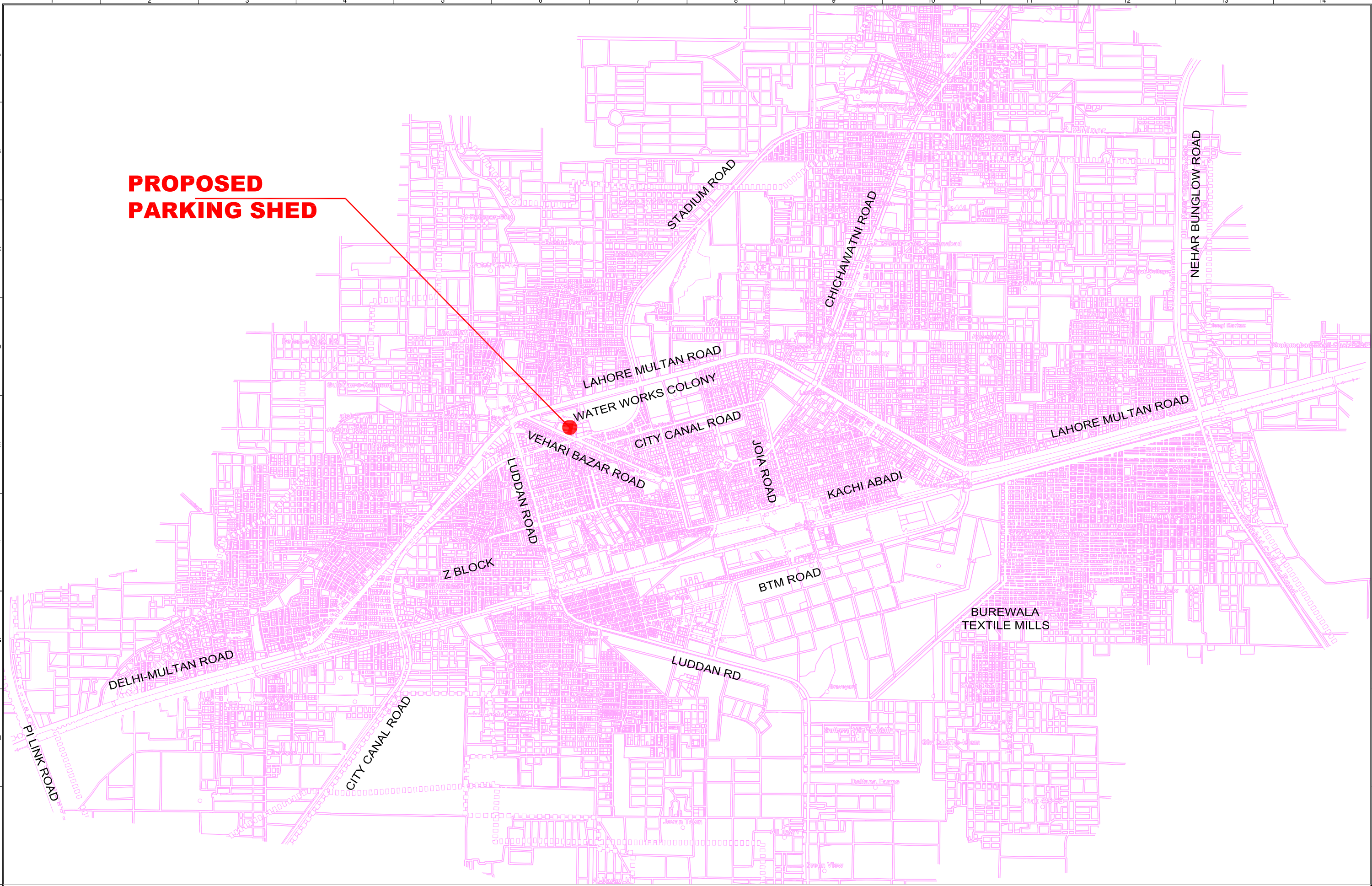
0 45 90 180
Kilometers



Local Government & Community Development Department, Government of The Punjab



PROPOSED
PARKING SHED



CLIENT:



PUNJAB MUNICIPAL DEVELOPMENT
FUND COMPANY
(PMDFC)

CONSULTANTS:



JERS CONSULTANCY (PVT) LTD
24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan)
Tel: +92 42 35113123, +92 42 35113124
Fax: +92 42 35113125
E-mail: Info@jers.com.pk, mail@jers.com.pk
Web: http://www.jers.com.pk

PROJECT:

PUNJAB CITIES PROGRAM (PCP)
DETAILED DESIGN OF INFRASTRUCTURE
SUB-PROJECTS AND RESIDENTS SUPERVISION IN
16 CITIES OF PUNJAB.

DRAWING TITLE:

**KEY PLAN
(BUREWALA CITY)**

REV.	DATE	DESCRIPTION

DRAWN BY:

Anjum

CHECKED BY:

HASEEB

DATE:

October, 2022

DRAWING NO:

PS-01

SCALE:

UNIT=FEET
1"=50'

SHEET:

-

JOB NO:

488-01

Annexure-B

Rough Cost Estimate



Punjab Municipal Development Fund Company

**Consultancy Services for Detailed Design of Infrastructure
sub-projects (Parking Sheds, Parks, Roads, Chowks, etc.)
and Resident Supervision in 16 Cities of Punjab**

Construction of SWM Parking Area

MC Burewala

Detailed Cost Estimate

October, 2022



JERS CONSULTANCY (PVT) LTD
(Formerly Jers Engineering Consultants)

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E-mail: info@jers.com.pk, mail@jers.com.pk

Web: <http://www.jers24pm.pk>



PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB		
DETAILED COST ESTIMATE		
SWM PARKING AREA (BUREWALA)		
SUMMARY		
Sr. No.	Description	Amount (Rs)
1	OFFICE BUILDING	
i	Civil Work	1,016,894
ii	Plumbing Work	230,747
iii	Electrical Work	135,922
2	SITTING ROOM	
i	Civil Work	905,774
ii	Plumbing Work	81,452
iii	Electrical Work	114,460
3	WORK SHOP	
i	Civil Work	2,309,382
ii	Plumbing Work	83,665
iii	Electrical Work	504,013
4	PARKING SHED (SIZE 90' x 32')	
i	Civil Work	8,080,030
iii	Electrical Work	271,260
5	WASHING PIT	519,733
6	GENERATOR PAD	163,693
7	PUMP PAD	15,360
8	SEPTIC TANK	304,222
9	EXTERNAL WORK (BOUNDARY WALL + TUFF PAVER + LAWN)	10,937,394
10	EXTERNAL PLUMBING WORK	847,715
11	EXTERNAL ELECTRICAL WORK	2,272,581
12	ENVIRONMENTAL HEALTH & SAFETY COST	112,425
	Total Amount (Rs)	28,906,721
	Contingencies @ 2%	578,134
	PRA Charges @ 5%	1,445,336
	Total Amount. Rs.	30,930,192

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE OFFICE BUILDING CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
		Excavation				
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	0.48	10,677.75	5,125
		Anti-Termite				
2	26/43	Spraying termite proofing by using liquid FMC/ Biflex/ Terminex Exin/ Ms Hextar or equivalent @ specified suspension concentrate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.	Sft	808.25	9.25	7,476
		Plain Cement Concrete				
3	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	0.64	28,929.30	18,515
		Brick work in Foundation				
4	7/4/i	Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:5	100 Cft	3.73	28,486.30	106,254
		Horizontal D.P.C				
5	6/36	Providing and laying damp proof course of cement concrete 1 : 2 : 4 (using cement, sand and shingle), including bitumen coating :-				
		(a) with one coat bitumen and one coat polythene sheet 500gauge				
		i) 1½" thick (40 mm)	100 Sft	0.58	8,629.95	5,005
		Vertical D.P.C				
6	6/38	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating:-				
		(a) with one coat of bitumen and one coat of polythene sheet 500 gauge:				
		ii) Ratio 1:3 ¾ " thick (20 mm)	100 Sft	0.78	6,236.05	4,864

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE OFFICE BUILDING CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Brick work in Super Structure				
7	7/5	Pacca brick work in ground floor:-				
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	6.15	30,670.10	188,621
		Concrete Work				
8	6/6	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.):-				
		Above foundation				
		(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:-				
		Type C (nominal mix 1: 2: 4)	P.Cft	169.00	556.50	94,049
		Steel Work.				
9	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	5.43	31,802.05	172,685
		Sand Filling				
10	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	6.24	2,823.30	17,617
		Brick ballast				
11	6/2	Dry rammed brick or stone ballast, 1½" to 2" (40 mm to 50 mm) gauge.	100 Cft	0.75	8,891.50	6,669
		Plain Cement Concrete				
12	6/5/f	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(f) Ratio 1: 2: 4	100 Cft	0.38	38,126.10	14,488

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE OFFICE BUILDING CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Porcelain Tile				
13	10/42/d	Providing and laying superb quality Porcelain glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick (1:3)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge.				
		d) (Non-Skid Chequered Tiles) 300mmx300mm	Per Sft	192.00	211.55	40,618
14	10/43/a	Providing and laying superb quality Porcelain glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge.				
		a) Full body Glazed Tile				
		(i) 400 mm x 400 mm	Per Sft	18.48	292.65	5,408
		Ceramic Tile				
15	10/24	Providing and laying superb quality Ceramic tile floors of Master brand of specified size, Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick (1;2) cement sand plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects and as approved and directed by the Engineer Incharge.				
		i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	Per Sft	35.00	239.90	8,397
16	10/25	Providing and laying superb quality Ceramic tiles dado of Master brand of specified size, Glossy/Matt/Texture skirting / dado of approved Color and Shade with adhesive bond over 1/2" thick (1:2)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects as approved and directed by the Engineer Incharge.				
		i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	Per Sft	168.00	292.65	49,165
		Slab Plaster				
17	11/10/b	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:- 1:3)	100 Sft	2.27	3,705.55	8,412

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE OFFICE BUILDING CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Cement Plaster				
18	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:- 3/4" (20 mm) thick	100 Sft	7.46	4,373.00	32,623
		Pointing				
19	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) height:- a) ratio 1:2	100 Sft	7.72	3,516.15	27,145
20	11/31	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	100 Sft	7.72	652.50	5,037
		Distempering				
21	11/23	Distempering:- iii) three coats	100 Sft	9.73	1,295.00	12,600
		Wooden Door				
22	12/50-i	Providing and fixing 1½" (40 mm) thick hollow flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1¼" (30 mm) thick and partial wood braces at about 3" (75 mm) apart and deodar wood lipping 1½"x3/8" (40 mmx10 mm) fixed with M.S. chowkat (frame) including chromium plated fittings, etc. complete in all respects (without sliding bolt or lock):- M.S. angle iron 1½"x1½"x¼", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x¼" (50 mm x 6 mm)	Per Sft	42.00	1,452.50	61,005
		Lock				
23	12/22	Providing and fixing, approved quality mortice lock.	Each	2.00	771.50	1,543
		Paint				
24	13/5/c	Painting new surface:- Preparing surface and painting of doors and windows any type (including edges):- i) priming coat. ii) Second coat	100 Sft 100 Sft	0.84 0.84	1,292.00 711.40	1,085 598

PUNJAB CITIES PROGRAM (PCP)						
DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS						
SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
OFFICE BUILDING						
CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Steel Window				
25	25/41/b	Providing and fixing steel windows with openable glazed panels, using beam section for frame 1½"x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for leaves ¾"x1"x¾"x1/8" (20x25x20x3 mm), T-section sashes 1"x1"x1/8" (25x25x3 mm), glass panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves, brass fittings, holdfast, duly painted, complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-				
		b) fixed with wire gauze, 22 SWG				
		v) glass pane 5 mm thick	Per Sft	52.00	1,082.25	56,277
		Roof Insulation				
26	9/5	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.	100 Sft	2.92	10,841.30	31,657
27	26/37/ii	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.				
		ii) 500 gauge (.005" thick)	Per Sft	292.00	7.85	2,292
		Khurras				
28	9/15	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	1.00	854.35	854
		Bottom Khuras				
29	9/16	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4½" (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	1.00	1,746.65	1,747
30	1/1 Rate Analysis	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.	Cft	242.81	119.70	29,064
		Total Rs.				1,016,894

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB							
OFFICE BUILDING							
CALCULATION OF QUANTITIES							
CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.						
	Office wall	1	59.00	2.50	2.50	368.75	Cft
	Toilet wall	1	18.50	2.50	2.50	115.63	Cft
					Total	484.38	Cft
					Total	0.48	%oCft
	Anti-Termite						
2	Spraying termite proofing by using liquid FMC/ Biflex/ Terminex Exin/ Ms Hextar or equivalent @ specified suspension concentrate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.						
	Office wall	1	59.00	7.50		442.50	Sft
	Toilet wall	1	18.50	7.50		138.75	Sft
	Floor	1	16.00	12.00		192.00	Sft
		1	7.00	5.00		35.00	Sft
					Total	808.25	Sft
	Plain Cement Concrete						
3	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(i) Ratio 1: 4: 8						
	Office wall	1	59.00	2.50	0.33	48.68	Cft
	Toilet wall	1	18.50	2.50	0.33	15.26	Cft
					Total	63.94	Cft
					Total	0.64	%Cft

<p align="center">PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB OFFICE BUILDING CALCULATION OF QUANTITIES CIVIL WORK</p>							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Brick work in Foundation						
4	Pacca brick work in foundation and plinth in:-						
	Cement, sand mortar:- Ratio 1:5						
	Office wall						
	Step - 1	1	59.00	1.875	0.25	27.66	Cft
	Step - 2	1	59.00	1.500	0.25	22.13	Cft
	Step - 3	1	59.00	1.125	0.25	16.59	Cft
	Step - 4	1	59.00	0.750	4.92	217.71	Cft
	Toilet wall						
	Step - 1	1	18.50	1.875	0.25	8.67	Cft
	Step - 2	1	18.50	1.500	0.25	6.94	Cft
	Step - 3	1	18.50	1.125	0.25	5.20	Cft
	Step - 4	1	18.50	0.750	4.92	68.27	Cft
					Total	373.16	Cft
					Total	3.73	%Cft
	Horizontal D.P.C						
5	Providing and laying damp proof course of cement concrete 1 : 2 : 4 (using cement, sand and shingle), including bitumen coating :-						
	(a) with one coat bitumen and one coat polythene sheet 500gauge						
	i) 1½" thick (40 mm)						
	Office wall	1	59.00	0.75		44.25	Sft
	Toilet wall	1	18.50	0.75		13.88	Sft
					Total	58.13	Sft
					Total	0.58	%Sft
	Vertical D.P.C						
6	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating:-						
	(a) with one coat of bitumen and one coat of polythene sheet 500 gauge:						
	ii) Ratio 1:3 ¾ " thick (20 mm)						
	Office wall	1	59.00		1.00	59.00	Sft
	Toilet wall	1	18.50		1.00	18.50	Sft
					Total	77.50	Sft
					Total	0.78	%Sft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB OFFICE BUILDING CALCULATION OF QUANTITIES CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Brick work in Super Structure						
7	Pacca brick work in ground floor:-						
	i) Cement, sand mortar:- Ratio 1:5						
	Office wall	1	59.00	0.75	10.50	464.63	Cft
	Toilet wall	1	18.50	0.75	10.50	145.69	Cft
	Parapet Wall	1	73.50	0.38	2.50	68.91	Cft
	Entrance step	2	4.00	1.00	0.75	6.00	Cft
	D/d Doors and Window						
	D-1	-1	3.50	0.75	7.00	(18.38)	Cft
	D-2	-1	2.50	0.75	7.00	(13.13)	Cft
	W-1	-2	6.00	0.75	4.00	(36.00)	Cft
	V-1	-1	2.00	0.70	2.00	(2.80)	Cft
					Total	614.92	Cft
					Total	6.15	%Cft
	Concrete Work						
8	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.):-						
	Above foundation						
	(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:-						
	Type C (nominal mix 1: 2: 4)						
	Top Slab	1	17.50	13.50	0.50	118.13	Cft
	Toilet Slab	1	6.50	8.50	0.50	27.63	Cft
	Sun shade	1	5.50	1.50	0.25	2.06	Cft
	Sun shade	2	8.00	1.50	0.25	6.00	Cft
	Sun shade	1	3.00	1.50	0.25	1.13	Cft
	Doors and window Lintels						
	D-1	1	4.50	0.75	0.75	2.53	Cft
	D-2	1	3.50	0.75	0.75	1.97	Cft
	W-1	2	7.00	0.75	0.75	7.88	Cft
	V-1	1	3.00	0.75	0.75	1.69	Cft
					Total	169.00	Cft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB OFFICE BUILDING CALCULATION OF QUANTITIES CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Steel Work.						
9	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-						
	Deformed bars (Grade-60)					169.00	Cft
	Top Slab & lintel @ 6.75 lbs / Cft		6.75		=	1,140.75	lbs/cft
				Total	=	1,140.75	lbs/cft
				Total	=	517.58	Kg.
				Add 5% Wastage.	=	25.88	Kg.
				Total	=	543	Kg
					Total	5.43	%kg
	Sand Filling						
10	Supplying and filling sand under floor; or plugging in wells.						
	Floor	1	12.00	16.00	2.75	528.00	Cft
	toilet	1	7.00	5.00	2.75	96.25	Cft
					Total	624.25	Cft
					Total	6.24	%Cft
	Brick ballast						
11	Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.						
	Floor	1	12.00	16.00	0.33	63.36	Cft
	toilet	1	7.00	5.00	0.33	11.55	Cft
					Total	74.91	Cft
					Total	0.75	%Cft
	P.C.C						
12	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):-						
	(f) Ratio 1: 2: 4						
	Floor	1	12.00	16.00	0.17	32.00	Cft
	toilet	1	7.00	5.00	0.17	5.83	Cft
					Total	0.38	%Cft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB OFFICE BUILDING CALCULATION OF QUANTITIES CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Porcelain Tile						
13	Providing and laying superb quality Porcelain glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick (1:3)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge.						
	d) (Non-Skid Chequered Tiles) 300mmx300mm	1	12.00	16.00		192.00	Sft
					Total	192.00	Sft
14	Providing and laying superb quality Porcelain glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge.						
	a) Full body Glazed Tile						
	(i) 400 mm x 400 mm	1	56.00		0.33	18.48	Sft
					Total	18.48	Sft
	Ceramic Tile						
15	Providing and laying superb quality Ceramic tile floors of Master brand of specified size, Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick (1:2) cement sand plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects and as approved and directed by the Engineer Incharge.						
	i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	1	7.00	5.00		35.00	Sft
					Total	35.00	Sft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB OFFICE BUILDING CALCULATION OF QUANTITIES CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
16	Providing and laying superb quality Ceramic tiles dado of Master brand of specified size, Glossy/Matt/Texture skirting / dado of approved Color and Shade with adhesive bond over 1/2" thick (1:2) cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects as approved and directed by the Engineer Incharge.						
	i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	2	7.00		7.00	98.00	Sft
		2	5.00		7.00	70.00	Sft
					Total	168.00	Sft
	Slab Plaster						
17	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:- 1:3)						
		1	12.00	16.00		192.00	Sft
		1	7.00	5.00		35.00	Sft
					Total	2.27	%Sft
	Cement Plaster						
18	Cement plaster 1:4 upto 20' (6.00 m) height:-						
	3/4" (20 mm) thick						
	Office Room						
		2	12.00		10.50	252.00	Sft
		2	16.00		10.50	336.00	Sft
	Toilet						
		2	7.00		10.50	147.00	Sft
		2	5.00		10.50	105.00	Sft
	D/d Doors and Window						
	D-1	-1	3.50		7.00	(24.50)	Sft
	D-2	-1	2.50		7.00	(17.50)	Sft
	W-1	-2	6.00		4.00	(48.00)	Sft
	V-1	-1	2.00		2.00	(4.00)	Sft
					Total	746.00	Sft
					Total	7.46	%Sft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB OFFICE BUILDING CALCULATION OF QUANTITIES CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Pointing						
19	Cement pointing struck joints, on walls, upto 20' (6.00 m) hieght:-						
	a) ratio 1:2						
	Outer Walls	1	73.50		10.50	771.75	Sft
					Total	771.75	Sft
					Total	7.72	%Sft
20	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.				Total	7.72	%Sft
	Distempering						
21	Distempering:-						
	iii) three coats						
	Office Room						
		2	12.00		10.50	252.00	Sft
		2	16.00		10.50	336.00	Sft
	Toilet						
		2	7.00		10.50	147.00	Sft
		2	5.00		10.50	105.00	Sft
	Slab	1	12.00	16.00		192.00	Sft
		1	7.00	5.00		35.00	Sft
	D/d Doors and Window						
	D-1	-1	3.50		7.00	(24.50)	Sft
	D-2	-1	2.50		7.00	(17.50)	Sft
	W-1	-2	6.00		4.00	(48.00)	Sft
	V-1	-1	2.00		2.00	(4.00)	Sft
					Total	973.00	Sft
					Total	9.73	%Sft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB OFFICE BUILDING CALCULATION OF QUANTITIES CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Wooden Door						
22	Providing and fixing 1½" (40 mm) thick hollow flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1¼" (30 mm) thick and partial wood braces at about 3" (75 mm) apart and deodar wood lipping 1½"x3/8" (40 mmx10 mm) fixed with M.S. chowkat (frame) including chromium plated fittings, etc. complete in all respects (without sliding bolt or lock):- M.S. angle iron 1½"x1½"x¼", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x¼" (50 mm x 6 mm)						
	D-1	1	3.50		7.00	24.50	Sft
	D-2	1	2.50		7.00	17.50	Sft
					Total	42.00	Sft
	Lock						
23	Providing and fixing, approved quality mortice lock.	2				2.00	Each
	Paint						
24	Painting new surface:- Preparing surface and painting of doors and windows any type (including edges):-						
	i) priming coat.						
	ii) Second coat				Total	0.84	Sft
	Steel Window						
25	Providing and fixing steel windows with openable glazed panels, using beam section for frame 1½"x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for leaves ¾"x1"x¾"x1/8" (20x25x20x3 mm), T-section sashes 1"x1"x1/8" (25x25x3 mm), glass panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves, brass fittings, holdfast, duly painted, complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-						
	b) fixed with wire gauze, 22 SWG						
	v) glass pane 5 mm thick						
	W-1	2	6.00		4.00	48.00	Sft
	V-1	1	2.00		2.00	4.00	Sft
					Total	52.00	Sft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB							
OFFICE BUILDING							
CALCULATION OF QUANTITIES							
CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Roof Insulation						
26	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.						
	Roof area	1	17.50	13.50		236.25	Sft
		1	6.50	8.50		55.25	Sft
					Total	291.50	Sft
					Total	2.92	%Sft
27	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.						
	ii) 500 gauge (.005" thick)				Total	292.00	Sft
	Khurras						
28	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	1				1.00	Each
	Bottom Khuras						
29	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4½" (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	1				1.00	Each

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE OFFICE BUILDING PLUMBING WORKS						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
		Indian W.C				
1	19-4-i	Providing and fitting glazed earthen ware water closet, squatter type (Orisa pattern), combined with foot rest.				
		i) white	Each	1.00	2,218.30	2,218
2	19-13-i	Providing and fitting plastic made low down flushing cistern 13.63 litre (3 gallons) capacity, including bracket set, copper connection, etc. complete.				
		i) white	Each	1.00	2,649.10	2,649
3	19-7-i	Providing and fitting glazed earthen ware wash hand basin 56x40 cm (22"x16") including bracket set, waste pipe and waste coupling, etc.				
		i) white, with pedestal	Each	1.00	5,169.95	5,170
4	19-30	Providing and fixing, chromium plated mixing valve, for wash hand basin, sink or shower.	Each	1.00	2,228.75	2,229
5	19-16	Providing and fixing, chromium plated soap dish.	Each	1.00	278.75	279
6	19-20	Providing and fixing looking glass 55x40 cm (22"x16") size	Each	1.00	638.15	638
7	19-27	Providing and fixing chromium plated bib cock:-				
		i) 2 cm (¾")	Each	1.00	1,015.00	1,015
8	19-28	Providing and fixing chromium plated tee stop cock 15mm (½").	Each	3.00	955.00	2,865
9	19-34-i	Providing and fixing, floor trap of cast iron, including concrete chamber all round, and C.I. grating:-				
		i) 10x5 cm (4"x2")	Each	1.00	627.75	628
10	19-36	Providing and fitting 10 cm (4") gully trap, including cement concrete, cost of PVC grating 15x15 cm (6"x6") and masonry chamber 30x30 cm (12"x12").	Each	1.00	1,084.60	1,085

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE OFFICE BUILDING PLUMBING WORKS						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
11	19-35-ii	Providing and fitting "P" trap:- ii) 10 cm (4") glazed.	Each	2.00	283.10	566
		PPRC Pipe				
12	23-47	Providing, laying, testing and commissioning of POLYPROPYLENE RANDOM COPOLYMER (PPRC)water supply pipe made of (Dadex/ Popular /Beta/ BBJ)with specified pressure rating PN (PRESSURE NOMINAL) and conforming to DIN8077-8078 code i/c cost of solvent, specials, making jharries complete in all respect as approved and directedby Engineer Incharge.(Internal / External Diameters mentioned).				
		b) PN-20 pipe				
		(ii) (3/4") 25 mm	Rft	22.00	66.50	1,463
		(iii) (1") 32 mm	Rft	16.50	106.90	1,764
		Valve				
13	23/46	Providing and fixing CP heavy duty brass Ball valve with CP handle of specified dia meter made of Faisal/ Sonex/ Master best quality or equivalent complete in all respect as approved and directed by the Engineer Incharge.				
		ii) 3/4" dia	Each	1.00	1,434.00	1,434
		iii) 1" dia	Each	1.00	1,674.00	1,674
		uPVC Pipe				
14	19-47	Providing, fixing, testing and commissioning of μ-PVC (Unplasticized polyvinyl Chloride)Nikasi /waste pipe make of dadex/Popular/Beta/BBJ plain/ socket ended conforming to code EN-1401 of specified SDR (Standard Dimension Ratio)including the cost of specials and Solvents complete in all respect as approved and directed by the Engineer Incharge				
		Type (SDR 41/SN-4)				
		(iii) 2"(60 mm)	Rft	20.00	88.45	1,769
		(v) 4"(110 mm)	Rft	80.00	217.25	17,380
		(vi) 6"(160 mm)	Rft	20.00	420.65	8,413

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
OFFICE BUILDING						
PLUMBING WORKS						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		HDPE Tank				
15	19/51	Providing and hoisting vertical /horizontal type storage tank of required capacity made of rotationally molded from (HDPE), double ply polyethelene of approved manufacturer i/c cost of making connection for inlet/outlet pipe, float valve i/c all cost of specials & labour complete in all respect as approved and directed by the Engineer Incharge.	P.Gln	1,500.00	106.60	159,900
		Total Rs. (A)				213,138
		Non-Schedule Item				
16	N.S	Providing and making Manhole 2'x2' internal size including 9" thick brick masonry (1:4), 1/2" th. Plastering (1:3) i/side, benching with PCC 1:2:4 4" th. with cement finish, including manhole cover, complete in all respects.	Each	1.00	17,608.51	17,609
		Total Rs. (B)				17,609
		Total Amount Rs. (A + B)				230,747

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
OFFICE BUILDING						
ELECTRICAL WORKS						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
		<u>Scheduled Items (A)</u>				
1	C-24/3-ii	Supply and erection of PVC pipe for wiring recessed in walls, including bends, inspection joints, boxes, pull boxes, hook, cutting and repair surface etc. completed with all specified. (20 mm i/d)	Rft.	375.00	81.70	30,638
2	C-24/3-iii	Supply and erection of PVC pipe for wiring recessed in walls, including bends, inspection joints, boxes, pull boxes, hook, cutting and repair surface etc. completed with all specified. (25 mm i/d)	Rft.	50.00	94.60	4,730
3	C-24/10a.i	Supply and erection of single core PVC insulated copper conductor cables, in prelaidd PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (3.029)	Rft.	1,125.00	25.70	28,913
4	C-24/10a.iii	Supply and erection of single core PVC insulated copper conductor cables, in prelaidd PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)	Rft.	150.00	40.75	6,113
5	C-24/10a.iv	Supply and erection of single core PVC insulated copper conductor cables, in prelaidd PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.036)	Rft.	500.00	53.80	26,900
6	C-24/14-i	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. (4"x4")	Each	12.00	270.50	3,246
7	C-24/14-ii	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. (7"x4")	Each	1.00	372.25	372

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
OFFICE BUILDING						
ELECTRICAL WORKS						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
8	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	12.00	87.35	1,048
9	C-24/36-i	Supply and erection of 3 pin switch and Plug combined, recessed type. (5Amps)	Each	4.00	112.00	448
10	C-24/36-ii	Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)	Each	5.00	149.80	749
11	C-24/43	Supply and erection of tube light, including rod, choke, starter with frame, flexible wire, including connection from ceiling rose, etc., complete				
		i) double rod (80 watts) with two chokes and 2 starters.	Each	6.00	2,164.65	12,988
12	C-24/102/a	Providing and fixing Copper winded Exhaust fan with louver and shutter made of Pak/Younas /G.F.C. i/c the cost of necessary cable and hardware for connection from ceiling rose complete as approved and directed by Engineer Incharge.				
		(a) Plastic body (ii) 12 " dia	Each	1.00	3,133.00	3,133
		Sub Total (A)				119,277
13	N.S	Supply, installation and commissioning of wall mounted mirror LED light 10 watt with tube rod and frame all necessary fixing accessories, complete in all respects	Each	1.00	1,215.00	1,215
14	N.S	Supply, installation and commissioning recessed 10W LED Down Light complete in all respects	Each	1.00	1,430.00	1,430
15	N.S	Supply, Installation, testing and commissioning of following size 56" steel body, complete with capacitor, hanging rod, canopy, blades, dimmers nuts and bolts complete in all respect.	Each	2.00	7,000.00	14,000
		Sub Total (B)				16,645
		Sub Total (A+B)				135,922

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE SITTING ROOM CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
		Excavation				
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	0.45	10,677.75	4,805
		Anti-Termite				
2	26/43	Spraying termite proofing by using liquid FMC/ Biflex/ Terminex Exin/ Ms Hextar or equivalent @ specified suspension concentrate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.	Sft	716.25	9.25	6,625
		Plain Cement Concrete				
3	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	0.59	28,929.30	17,068
		Brick work in Foundation				
4	7/4/i	Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:5	100 Cft	3.44	28,486.30	97,993
		Horizontal D.P.C				
5	6/36	Providing and laying damp proof course of cement concrete 1 : 2 : 4 (using cement, sand and shingle), including bitumen coating :-				
		(a) with one coat bitumen and one coat polythene sheet 500gauge				
		i) 1½" thick (40 mm)	100 Sft	0.54	8,629.95	4,660
		Vertical D.P.C				
6	6/38	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating:-				
		(a) with one coat of bitumen and one coat of polythene sheet 500 gauge:				
		ii) Ratio 1:3 ¾ " thick (20 mm)	100 Sft	0.72	6,236.05	4,490
		Brick work in Super Structure				
7	7/5	Pacca brick work in ground floor:-				
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	5.64	30,670.10	172,979
		Concrete Work				

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
SITTING ROOM						
CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
8	6/6	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.):-				
		Above foundation				
		(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:-				
		Type C (nominal mix 1: 2: 4)	P.Cft	142.50	556.50	79,301
		Steel Work.				
9	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	4.58	31,802.05	145,653
		Sand Filling				
10	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	4.95	2,823.30	13,975
		Brick ballast				
11	6/2	Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.	100 Cft	0.59	8,891.50	5,246

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
SITTING ROOM						
CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Plain Cement Concrete				
12	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		Ratio 1: 2: 4	100 Cft	0.30	38,126.10	11,438
		Porcelain Tile				
13	10/42/d	Providing and laying superb quality Porcelain glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick (1:3)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge.				
		d) (Non-Skid Chequered Tiles) 300mmx300mm	Per Sft	150.00	211.55	31,733
14	10/43/a	Providing and laying superb quality Porcelain glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge.				
		a) Full body Glazed Tile				
		(i) 400 mm x 400 mm	Per Sft	16.50	292.65	4,829
		Ceramic Tile				
15	10/24	Providing and laying superb quality Ceramic tile floors of Master brand of specified size, Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick (1;2) cement sand plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects and as approved and directed by the Engineer Incharge.				
		i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	Per Sft	30.00	239.90	7,197
16	10/25	Providing and laying superb quality Ceramic tiles dado of Master brand of specified size, Glossy/Matt/Texture skirting / dado of approved Color and Shade with adhesive bond over 1/2" thick (1:2)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects as approved and directed by the Engineer Incharge.				
		i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	Per Sft	154.00	292.65	45,068
		Slab Plaster				
17	11/10/b	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:- 1:3)	100 Sft	1.80	3,705.55	6,670
		Cement Plaster				

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
SITTING ROOM						
CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
18	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:- 3/4" (20 mm) thick	100 Sft	6.62	4,373.00	28,949
		Pointing				
19	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) height:- a) ratio 1:2	100 Sft	7.30	3,516.15	25,668
20	11/31	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	100 Sft	7.30	652.50	4,763
		Distempering				
21	11/23	Distempering:- iii) three coats	100 Sft	8.42	1,295.00	10,904
		Wooden Door				
22	12/50-i	Providing and fixing 1½" (40 mm) thick hollow flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1¼" (30 mm) thick and partial wood braces at about 3" (75 mm) apart and deodar wood lipping 1½"x3/8" (40 mmx10 mm) fixed with M.S. chowkat (frame) including chromium plated fittings, etc. complete in all respects (without sliding bolt or lock):- M.S. angle iron 1½"x1½"x¼", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x¼" (50 mm x 6 mm)	Per Sft	42.00	1,452.50	61,005

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
SITTING ROOM						
CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Lock				
23	12/22	Providing and fixing, approved quality mortice lock.	Each	2.00	771.50	1,543
		Paint				
24	13/5/c	Painting new surface:- Preparing surface and painting of doors and windows any type (including edges):-				
		i) priming coat.	100 Sft	0.84	1,292.00	1,085
		ii) Second coat	100 Sft	0.84	711.40	598
		Steel Window				
25	25/41/b	Providing and fixing steel windows with openable glazed panels, using beam section for frame 1½"x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for leaves ¾"x1"x¾"x1/8" (20x25x20x3 mm), T-section sashes 1"x1"x1/8" (25x25x3 mm), glass panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves, brass fittings, holdfast, duly painted, complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-				
		b) fixed with wire gauze, 22 SWG				
		v) glass pane 5 mm thick	Per Sft	52.00	1,082.25	56,277
		Roof Insulation				
26	9/35	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.	100 Sft	2.39	10,841.30	25,911
27	26/37/ii	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.				
		ii) 500 gauge (.005" thick)	Per Sft	239.00	7.85	1,876
		Khurras				
28	9/15	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	1.00	854.35	854
		Bottom Khuras				
29	9/16	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4½" (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	1.00	1,746.65	1,747
30	1/1 Rate Analysis	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.	Cft	207.71	119.70	24,863
		Total Rs.				905,774

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB							
SITTING ROOM							
CALCULATION OF QUANTITIES							
CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.						
	Room wall	1	53.00	2.50	2.50	331.25	Cft
	Toilet wall	1	18.50	2.50	2.50	115.63	Cft
					Total	446.88	Cft
					Total	0.45	%oCft
	Anti-Termite						
2	Spraying termite proofing by using liquid FMC/ Biflex/ Terminex Exin/ Ms Hextar or equivalent @ specified suspension concentrate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.						
	Room wall	1	53.00	7.50		397.50	Sft
	Toilet wall	1	18.50	7.50		138.75	Sft
	Floor	1	15.00	10.00		150.00	Sft
		1	6.00	5.00		30.00	Sft
					Total	716.25	Sft
	Plain Cement Concrete						
3	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(i) Ratio 1: 4: 8						
	Room wall	1	53.00	2.50	0.33	43.73	Cft
	Toilet wall	1	18.50	2.50	0.33	15.26	Cft
					Total	58.99	Cft
					Total	0.59	%Cft

<p align="center">PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB SITTING ROOM CALCULATION OF QUANTITIES CIVIL WORK</p>							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Brick work in Foundation						
4	Pacca brick work in foundation and plinth in:-						
	Cement, sand mortar:- Ratio 1:5						
	Room wall						
	Step - 1	1	53.00	1.875	0.25	24.84	Cft
	Step - 2	1	53.00	1.500	0.25	19.88	Cft
	Step - 3	1	53.00	1.125	0.25	14.91	Cft
	Step - 4	1	53.00	0.750	4.92	195.57	Cft
	Toilet wall						
	Step - 1	1	18.50	1.875	0.25	8.67	Cft
	Step - 2	1	18.50	1.500	0.25	6.94	Cft
	Step - 3	1	18.50	1.125	0.25	5.20	Cft
	Step - 4	1	18.50	0.750	4.92	68.27	Cft
					Total	344.27	Cft
					Total	3.44	%Cft
	Horizontal D.P.C						
5	Providing and laying damp proof course of cement concrete 1 : 2 : 4 (using cement, sand and shingle), including bitumen coating :-						
	(a) with one coat bitumen and one coat polythene sheet 500gauge						
	i) 1½" thick (40 mm)						
	Room wall	1	53.00	0.75		39.75	Sft
	Toilet wall	1	18.50	0.75		13.88	Sft
					Total	53.63	Sft
					Total	0.54	%Sft
	Vertical D.P.C						
6	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating:-						
	(a) with one coat of bitumen and one coat of polythene sheet 500 gauge:						
	ii) Ratio 1:3 ¾ " thick (20 mm)						
	Room wall	1	53.00		1.00	53.00	Sft
	Toilet wall	1	18.50		1.00	18.50	Sft
					Total	71.50	Sft
					Total	0.72	%Sft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB SITTING ROOM CALCULATION OF QUANTITIES CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Brick work in Super Structure						
7	Pacca brick work in ground floor:-						
	i) Cement, sand mortar:- Ratio 1:5						
	Room wall	1	53.00	0.75	10.50	417.38	Cft
	Toilet wall	1	18.50	0.75	10.50	145.69	Cft
	Parapet Wall	1	69.50	0.38	2.50	65.16	Cft
	Entrance step	2	4.00	1.00	0.75	6.00	Cft
	D/d Doors and Window						
	D-1	-1	3.50	0.75	7.00	(18.38)	Cft
	D-2	-1	2.50	0.75	7.00	(13.13)	Cft
	W-1	-2	6.00	0.75	4.00	(36.00)	Cft
	V-1	-1	2.00	0.70	2.00	(2.80)	Cft
					Total	563.92	Cft
					Total	5.64	%Cft
	Concrete Work						
8	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.):-						
	Above foundation						
	(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:-						
	Type C (nominal mix 1: 2: 4)						
	Top Slab	1	16.50	11.50	0.50	94.88	Cft
	Toilet Slab	1	7.50	6.50	0.50	24.38	Cft
	Sun shade	1	5.50	1.50	0.25	2.06	Cft
	Sun shade	2	8.00	1.50	0.25	6.00	Cft
	Sun shade	1	3.00	1.50	0.25	1.13	Cft
	Doors and window Lintels						
	D-1	1	4.50	0.75	0.75	2.53	Cft
	D-2	1	3.50	0.75	0.75	1.97	Cft
	W-1	2	7.00	0.75	0.75	7.88	Cft
	V-1	1	3.00	0.75	0.75	1.69	Cft
					Total	142.50	Cft

<p align="center">PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB SITTING ROOM CALCULATION OF QUANTITIES CIVIL WORK</p>							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Steel Work.						
9	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-						
	Deformed bars (Grade-60)					142.50	Cft
	Top Slab & lintel @ 6.75 lbs / Cft		6.75		=	961.88	lbs/cft
				Total	=	961.88	lbs/cft
				Total	=	436.42	Kg.
				Add 5% Wastage.	=	21.82	Kg.
				Total	=	458	Kg
					Total	4.58	%kg
	Sand Filling						
10	Supplying and filling sand under floor; or plugging in wells.						
	Floor	1	15.00	10.00	2.75	412.50	Cft
	toilet	1	6.00	5.00	2.75	82.50	Cft
					Total	495.00	Cft
					Total	4.95	%Cft
	Brick ballast						
11	Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.						
	Floor	1	15.00	10.00	0.33	49.50	Cft
	toilet	1	6.00	5.00	0.33	9.90	Cft
					Total	59.40	Cft
					Total	0.59	%Cft
	P.C.C						
12	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):-						
	Ratio 1: 2: 4						
	Floor	1	15.00	10.00	0.17	25.00	Cft
	toilet	1	6.00	5.00	0.17	5.00	Cft
					Total	0.30	%Cft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB							
SITTING ROOM							
CALCULATION OF QUANTITIES							
CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Porcelain Tile						
13	Providing and laying superb quality Porcelain glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick (1:3)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge.						
	d) (Non-Skid Chequered Tiles) 300mmx300mm	1	15.00	10.00		150.00	Sft
					Total	150.00	Sft
14	Providing and laying superb quality Porcelain glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge.						
	a) Full body Glazed Tile						
	(i) 400 mm x 400 mm	1	50.00		0.33	16.50	Sft
					Total	16.50	Sft
	Ceramic Tile						
15	Providing and laying superb quality Ceramic tile floors of Master brand of specified size, Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick (1;2) cement sand plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects and as approved and directed by the Engineer Incharge.						
	i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	1	6.00	5.00		30.00	Sft
					Total	30.00	Sft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB							
SITTING ROOM							
CALCULATION OF QUANTITIES							
CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
16	Providing and laying superb quality Ceramic tiles dado of Master brand of specified size, Glossy/Matt/Texture skirting / dado of approved Color and Shade with adhesive bond over 1/2" thick (1:2) cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects as approved and directed by the Engineer Incharge.						
	i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	2	6.00		7.00	84.00	Sft
		2	5.00		7.00	70.00	Sft
					Total	154.00	Sft
	Slab Plaster						
17	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:- 1:3)						
		1	15.00	10.00		150.00	Sft
		1	6.00	5.00		30.00	Sft
					Total	1.80	%Sft
	Cement Plaster						
18	Cement plaster 1:4 upto 20' (6.00 m) height:-						
	3/4" (20 mm) thick						
	Sitting Room						
		2	15.00		10.50	315.00	Sft
		2	10.00		10.50	210.00	Sft
	Toilet						
		2	6.00		10.50	126.00	Sft
		2	5.00		10.50	105.00	Sft
	D/d Doors and Window						
	D-1	-1	3.50		7.00	(24.50)	Sft
	D-2	-1	2.50		7.00	(17.50)	Sft
	W-1	-2	6.00		4.00	(48.00)	Sft
	V-1	-1	2.00		2.00	(4.00)	Sft
					Total	662.00	Sft
					Total	6.62	%Sft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB SITTING ROOM CALCULATION OF QUANTITIES CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Pointing						
19	Cement pointing struck joints, on walls, upto 20' (6.00 m) hieght:-						
	a) ratio 1:2						
	Outer Walls	1	69.50		10.50	729.75	Sft
					Total	729.75	Sft
					Total	7.30	%Sft
20	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.				Total	7.30	%Sft
	Distempering						
21	Distempering:-						
	iii) three coats						
	Sitting Room						
		2	15.00		10.50	315.00	Sft
		2	10.00		10.50	210.00	Sft
	Toilet						
		2	6.00		10.50	126.00	Sft
		2	5.00		10.50	105.00	Sft
	Slab	1	15.00	10.00		150.00	Sft
		1	6.00	5.00		30.00	Sft
	D/d Doors and Window						
	D-1	-1	3.50		7.00	(24.50)	Sft
	D-2	-1	2.50		7.00	(17.50)	Sft
	W-1	-2	6.00		4.00	(48.00)	Sft
	V-1	-1	2.00		2.00	(4.00)	Sft
					Total	842.00	Sft
					Total	8.42	%Sft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB							
SITTING ROOM							
CALCULATION OF QUANTITIES							
CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Wooden Door						
22	Providing and fixing 1½" (40 mm) thick hollow flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1¼" (30 mm) thick and partial wood braces at about 3" (75 mm) apart and deodar wood lipping 1½"x3/8" (40 mmx10 mm) fixed with M.S. chowkat (frame) including chromium plated fittings, etc. complete in all respects (without sliding bolt or lock):- M.S. angle iron 1½"x1½"x¼", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x¼" (50 mm x 6 mm)						
	D-1	1	3.50		7.00	24.50	Sft
	D-2	1	2.50		7.00	17.50	Sft
					Total	42.00	Sft
	Lock						
23	Providing and fixing, approved quality mortice lock.	2				2.00	Each
	Paint						
24	Painting new surface:- Preparing surface and painting of doors and windows any type (including edges):-						
	i) priming coat.						
	ii) Second coat				Total	0.84	Sft
	Steel Window						
25	Providing and fixing steel windows with openable glazed panels, using beam section for frame 1½"x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for leaves ¾"x1"x¾"x1/8" (20x25x20x3 mm), T-section sashes 1"x1"x1/8" (25x25x3 mm), glass panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves, brass fittings, holdfast, duly painted, complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-						
	b) fixed with wire gauze, 22 SWG						
	v) glass pane 5 mm thick						
	W-1	2	6.00		4.00	48.00	Sft
	V-1	1	2.00		2.00	4.00	Sft
					Total	52.00	Sft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB							
SITTING ROOM							
CALCULATION OF QUANTITIES							
CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Roof Insulation						
26	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.						
	Roof area	1	16.50	11.50		189.75	Sft
		1	7.50	6.50		48.75	Sft
					Total	238.50	Sft
					Total	2.39	%Sft
27	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.						
	ii) 500 gauge (.005" thick)				Total	239.00	Sft
	Khurras						
28	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	1				1.00	Each
	Bottom Khuras						
29	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4½" (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	1				1.00	Each

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE SITTING ROOM PLUMBING WORKS						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
		Indian W.C				
1	19-4-i	Providing and fitting glazed earthen ware water closet, squatter type (Orisa pattern), combined with foot rest.				
		i) white	Each	1.00	2,218.30	2,218
2	19-13-i	Providing and fitting plastic made low down flushing cistern 13.63 litre (3 gallons) capacity, including bracket set, copper connection, etc. complete.				
		i) white	Each	1.00	2,649.10	2,649
3	19-7-i	Providing and fitting glazed earthen ware wash hand basin 56x40 cm (22"x16") including bracket set, waste pipe and waste coupling, etc.				
		i) white, with pedestal	Each	1.00	5,169.95	5,170
4	19-30	Providing and fixing, chromium plated mixing valve, for wash hand basin, sink or shower.	Each	1.00	2,228.75	2,229
5	19-15	Providing and fixing, chromium plated soap dish.	Each	2.00	278.75	558
6	19-20	Providing and fixing looking glass 55x40 cm (22"x16") size	Each	1.00	638.15	638
7	19-27	Providing and fixing chromium plated bib cock:-				
		i) 2 cm (¾")	Each	1.00	1,015.00	1,015
8	19-28	Providing and fixing chromium plated tee stop cock 15mm (½").	Each	3.00	955.00	2,865
9	19-34-i	Providing and fixing, floor trap of cast iron, including concrete chamber all round, and C.I. grating:-				
		i) 10x5 cm (4"x2")	Each	1.00	627.75	628
10	19-36	Providing and fitting 10 cm (4") gully trap, including cement concrete, cost of PVC grating 15x15 cm (6"x6") and masonry chamber 30x30 cm (12"x12").	Each	1.00	1,084.60	1,085
11	19-35-ii	Providing and fitting "P" trap:-				
		ii) 10 cm (4") glazed.	Each	2.00	283.10	566

PUNJAB CITIES PROGRAM (PCP)						
DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS						
SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
SITTING ROOM						
PLUMBING WORKS						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		PPRC Pipe				
12	23-47	Providing, laying, testing and commissioning of POLYPROPYLENE RANDOM COPOLYMER (PPRC)water supply pipe made of (Dadex/ Popular /Beta/ BBJ)with specified pressure rating PN (PRESSURE NOMINAL) and conforming to DIN8077-8078 code i/c cost of solvent, specials, making jharries complete in all respect as approved and directedby Engineer Incharge.(Internal / External Diameters mentioned).				
		b) PN-20 pipe				
		(ii) (3/4") 25 mm	Rft	22.00	66.50	1,463
		(iii) (1") 32 mm	Rft	33.00	106.90	3,528
		Valve				
13	23/46	Providing and fixing CP heavy duty brass Ball valve with CP handle of specified dia meter made of Faisal/ Sonex/ Master best quality or equivalent complete in all respect as approved and directed by the Engineer Incharge.				
		ii) 3/4" dia	Each	1.00	1,434.00	1,434
		iii) 1" dia	Each	1.00	1,674.00	1,674
		uPVC Pipe				
14	19-47	Providing, fixing, testing and commissioning of μ-PVC (Unplasticized polyvinyl Chloride)Nikasi /waste pipe make of dadex/Popular/Beta/BBJ plain/ socket ended conforming to code EN-1401 of specified SDR (Standard Dimension Ratio)including the cost of specials and Solvents complete in all respect as approved and directed by the Engineer Incharge				
		Type (SDR 41/SN-4)				
		(iii) 2"(60 mm)	Rft	20.00	88.45	1,769
		(v) 4"(110 mm)	Rft	60.00	217.25	13,035

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
SITTING ROOM						
PLUMBING WORKS						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		HDPE Tank				
15	19/51	Providing and hoisting vertical /horizontal type storage tank of required capacity made of rotationally molded from (HDPE), double ply polyethelene of approved manufacturer i/c cost of making connection for inlet/outlet pipe, float valve i/c all cost of specials & labour complete in all respect as approved and directed by the Engineer Incharge.	P.Gln	200.00	106.60	21,320
		Total Rs. (A)				63,843
		Non-Schedule Item				
16	N.S	Providing and making Manhole 2'x2' internal size including 9" thick brick masonry (1:4), 1/2" th. Plastering (1:3) i/side, benching with PCC 1:2:4 4" th. with cement finish, including manhole cover, complete in all respects.	Each	1.00	17,608.51	17,609
		Total Rs. (B)				17,609
		Total Amount Rs. (A + B)				81,452

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE SITTING ROOM ELECTRICAL WORKS						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
		<u>Scheduled Items (A)</u>				
1	C-24/3-ii	Supply and erection of PVC pipe for wiring recessed in walls, including bends, inspection joints, boxes, pull boxes, hook, cutting and repair surface etc. completed with all specified. (20 mm i/d)	Rft.	300.00	81.70	24,510
2	C-24/3-iii	Supply and erection of PVC pipe for wiring recessed in walls, including bends, inspection joints, boxes, pull boxes, hook, cutting and repair surface etc. completed with all specified. (25 mm i/d)	Rft.	75.00	94.60	7,095
3	C-24/10a.i	Supply and erection of single core PVC insulated copper conductor cables, in prelaidd PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (3.029)	Rft.	900.00	25.70	23,130
4	C-24/10a.iii	Supply and erection of single core PVC insulated copper conductor cables, in prelaidd PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)	Rft.	250.00	40.75	10,188
5	C-24/10a.iv	Supply and erection of single core PVC insulated copper conductor cables, in prelaidd PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.036)	Rft.	500.00	53.80	26,900
6	C-24/14-i	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. (4"x4")	Each	10.00	270.50	2,705
7	C-24/14-ii	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. (7"x4")	Each	1.00	372.25	372

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE SITTING ROOM ELECTRICAL WORKS						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
8	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	8.00	87.35	699
9	C-24/36-i	Supply and erection of 3 pin switch and Plug combined, recessed type. (5Amps)	Each	4.00	112.00	448
10	C-24/36-ii	Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)	Each	5.00	149.80	749
11	C-24/43	Supply and erection of tube light, including rod, choke, starter with frame, flexible wire, including connection from ceiling rose, etc., complete				
		ii) single rod (40 watts) with one choke and one starter.	Each	4.00	1,221.70	4,887
12	C-24/102/a	Providing and fixing Copper winded Exhaust fan with louver and shutter made of Pak/Younas /G.F.C. i/c the cost of necessary cable and hardware for connection from ceiling rose complete as approved and directed by Engineer Incharge.				
		(a) Plastic body (ii) 12 " dia	Each	1.00	3,133.00	3,133
		Sub Total (A)				104,815
13	N.S	Supply, installation and commissioning of wall mounted mirror LED light 10 watt with tube rod and frame all necessary fixing accessories, complete in all respects	Each	1.00	1,215.00	1,215
14	N.S	Supply, installation and commissioning recessed 10W LED Down Light complete in all respects	Each	1.00	1,430.00	1,430
15	N.S	Supply, Installation, testing and commissioning of following size 56" steel body, complete with capacitor, hanging rod, canopy, blades, dimmers nuts and bolts complete in all respect.	Each	1.00	7,000.00	7,000
		Sub Total (B)				9,645
		Sub Total (A+B)				114,460

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE WORK SHOP CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
		Excavation				
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	1.22	10,677.75	13,027
		Anti-Termite				
2	26/43	Spraying termite proofing by using liquid FMC/ Biflex/ Terminex Exin/ Ms Hextar or equivalent @ specified suspension concentrate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.	Sft	1,714.14	9.25	15,856
		Plain Cement Concrete				
3	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	1.11	28,929.30	32,112
		Brick work in Foundation				
4	7/4/i	Pacca brick work in foundation and plinth in:-				
		Cement, sand mortar:- Ratio 1:5	100 Cft	3.03	28,486.30	86,313
		Horizontal D.P.C				
5	6/36	Providing and laying damp proof course of cement concrete 1 : 2 : 4 (using cement, sand and shingle), including bitumen coating :-				
		(a) with one coat bitumen and one coat polythene sheet 500gauge				
		i) 1½" thick (40 mm)	100 Sft	0.47	8,629.95	4,056
		Vertical D.P.C				
6	6/37	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating:-				
		(a) with one coat of bitumen and one coat of polythene sheet 500 gauge:				
		ii) Ratio 1:3 ¾ " thick (20 mm)	100 Sft	0.63	6,236.05	3,929

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE WORK SHOP CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Brick work in Super Structure				
7	7/5	Pacca brick work in ground floor:-				
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	5.17	30,670.10	158,564
		Concrete Work				
8	6/6	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.):-				
		In Foundation				
		(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-				
		(3) Type C (nominal mix 1: 2: 4)	P.Cft	192.50	457.75	88,117
		Above foundation				
		(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:-				
		Type C (nominal mix 1: 2: 4)	P.Cft	153.88	556.50	85,631
		Steel Work.				
9	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	11.55	31,802.05	367,314
		Sand Filling				
10	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	14.34	2,823.30	40,486

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
WORK SHOP						
CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Brick ballast				
11	6/2	Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.	100 Cft	0.46	8,891.50	4,090
		Plain Cement Concrete				
12	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		Ratio 1: 2: 4	100 Cft	0.11	38,126.10	4,194
		Sub Base Course				
13	18/3/a/ (i) + 1/1	Providing and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Pit run or bed run gravel from Sakhi Sarwar quarry to site, actual compacted depth shall be considered for payment)	100Cft	1.42	20,872.80	29,639
		Water Bound Macadam				
14	18/4/a + 1/1	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from Sakhi Sarwar quarry to site, actual compacted depth shall be considered for payment)	100Cft	1.42	26,681.68	37,888
		Tuff Paver				
15	10/41	Providing and laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope. complete in all respect. (50% Grey / 50% Coloured)				
		For Tool Room b) 60-mm thick	Per Sft	74.00	156.15	11,555
		For Work shop c) 80-mm thick	Per Sft	429.00	194.65	83,505

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE WORK SHOP CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Ceramic Tile				
16	10/24	Providing and laying superb quality Ceramic tile floors of Master brand of specified size, Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick (1:2) cement sand plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects and as approved and directed by the Engineer Incharge.				
		i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	Per Sft	64.00	239.90	15,354
17	10/25	Providing and laying superb quality Ceramic tiles dado of Master brand of specified size, Glossy/Matt/Texture skirting / dado of approved Color and Shade with adhesive bond over 1/2" thick (1:2) cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects as approved and directed by the Engineer Incharge.				
		i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	Per Sft	224.00	292.75	65,576
		Slab Plaster				
18	11/10/b	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:- 1:3)	100 Sft	1.38	3,705.55	5,114
		Cement Plaster				
19	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:-				
		3/4" (20 mm) thick	100 Sft	6.36	4,373.00	27,812
		Pointing				
20	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) height:-				
		a) ratio 1:2	100 Sft	8.40	3,516.15	29,536
21	11/31	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	100 Sft	8.40	652.50	5,481
		Distempering				
22	11/23	Distempering:-				
		iii) three coats	100 Sft	7.74	1,295.00	10,023

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
WORK SHOP						
CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Wooden Door				
23	12/49-i	Providing and fixing 1½" (40 mm) thick hollow flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1¼" (30 mm) thick and partial wood braces at about 3" (75 mm) apart and deodar wood lipping 1½"x3/8" (40 mmx10 mm) fixed with M.S. chowkat (frame) including chromium plated fittings, etc. complete in all respects (without sliding bolt or lock):- M.S. angle iron 1½"x1½"x¼", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x¼" (50 mm x 6 mm)	Per Sft	42.00	1,452.50	61,005
		Lock				
24	12/22	Providing and fixing, approved quality mortice lock.	Each	2.00	771.50	1,543
		Paint				
25	13/5/c	Painting new surface:- Preparing surface and painting of doors and windows any type (including edges):-				
		i) priming coat.	100 Sft	0.84	1,292.00	1,085
		ii)Two coat	100 Sft	0.84	711.40	598
		Steel Window				
26	25/41/b	Providing and fixing steel windows with openable glazed panels, using beam section for frame 1½"x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for leaves ¾"x1"x¾"x1/8" (20x25x20x3 mm), T-section sashes 1"x1"x1/8" (25x25x3 mm), glass panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves, brass fittings, holdfast, duly painted, complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-				
		b) fixed with wire gauze, 22 SWG				
		v) glass pane 5 mm thick	Per Sft	20.00	1,082.25	21,645

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE WORK SHOP CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Roof Insulation				
27	9/5	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.	100 Sft	1.90	10,841.30	20,598
28	26/37/ii	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.				
		ii) 500 gauge (.005" thick)	Per Sft	190.00	7.85	1,492
		Khurras				
29	9/15	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	1.00	854.35	854
		Bottom Khuras				
30	9/16	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4½" (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	1.00	1,746.65	1,747
31	1/1 Rate Analysis	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.	Cft	314.49	119.70	37,644
		Parking Shed				
32	N.S	Providing, laying and fixing in position shed as per drawings, manufacturer's specifications and as directed by Engineer Incharge. This item includes Aluzinc corrugated sheet of 0.5 to 0.6 mm thick fixed with rivet and bolts over Purlins and truss frame of 50X50X4.75 mm with approved Colour/ paint supported with Steel Hexagonal / round shaped Columns size 200 to 300 mm diameter fitted with J-Type bolt having length 450 to 500 mm and not less than 38mm diameter. This item includes all kind of leads, lifts, fitting charges etc. complete in all respect excluding Cost of substructure i.e. foundation. Approval of manufacturer must be sought prior to placing order.	Sft	520.00	1,800.00	936,000
		Total Rs.				2,309,382

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB							
WORK SHOP							
CALCULATION OF QUANTITIES							
CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.						
	Tool Room wall	1	43.00	2.50	2.50	268.75	Cft
	Toilet wall	1	25.50	2.50	2.50	159.38	Cft
	Columns	6	7.50	6.00	4.58	1,236.60	Cft
					Total	1,664.73	Cft
					Total	1.66	%oCft
	Anti-Termite						
2	Spraying termite proofing by using liquid FMC/ Biflex/ Terminex Exin/ Ms Hextar or equivalent @ specified suspension concentrate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate w						
	Tool Room wall	1	43.00	7.50		322.50	Sft
	Toilet wall	1	25.50	7.50		191.25	Sft
	Floor	1	8.00	8.00		64.00	Sft
		1	8.00	12.00		96.00	Sft
		1	20.00	26.00		520.00	Sft
	Columns	6	27.00	4.58		741.96	Sft
		6	7.50	6.00		270.00	Sft
					Total	2,205.71	Sft
	Plain Cement Concrete						
3	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(i) Ratio 1: 4: 8						
	Tool Room wall	1	43.00	2.50	0.33	35.48	Cft
	Toilet wall	1	25.50	2.50	0.33	21.04	Cft
	Columns	6	7.50	6.00	0.33	89.10	Cft
					Total	145.61	Cft
					Total	1.46	%Cft

<p align="center">PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB WORK SHOP CALCULATION OF QUANTITIES CIVIL WORK</p>							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Brick work in Foundation						
4	Pacca brick work in foundation and plinth in:-						
	Cement, sand mortar:- Ratio 1:5						
	Tool Room wall						
	Step - 1	1	43.00	1.875	0.25	20.16	Cft
	Step - 2	1	43.00	1.500	0.25	16.13	Cft
	Step - 3	1	43.00	1.125	0.25	12.09	Cft
	Step - 4	1	43.00	0.750	4.92	158.67	Cft
	Toilet wall						
	Step - 1	1	25.50	1.875	0.25	11.95	Cft
	Step - 2	1	25.50	1.500	0.25	9.56	Cft
	Step - 3	1	25.50	1.125	0.25	7.17	Cft
	Step - 4	1	25.50	0.750	4.92	94.10	Cft
					Total	329.83	Cft
					Total	3.30	%Cft
	Horizontal D.P.C						
5	Providing and laying damp proof course of cement concrete 1 : 2 : 4 (using cement, sand and shingle), including bitumen coating :-						
	(a) with one coat bitumen and one coat polythene sheet 500gauge						
	i) 1½" thick (40 mm)						
	Tool Room wall	1	43.00	0.75		32.25	Sft
	Toilet wall	1	25.50	0.75		19.13	Sft
					Total	51.38	Sft
					Total	0.51	%Sft
	Vertical D.P.C						
6	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating:-						
	(a) with one coat of bitumen and one coat of polythene sheet 500 gauge:						
	ii) Ratio 1:3 ¾ " thick (20 mm)						
	Tool Room wall	1	43.00		1.00	43.00	Sft
	Toilet wall	1	25.50		1.00	25.50	Sft
					Total	68.50	Sft
					Total	0.69	%Sft
	Brick work in Super Structure						
7	Pacca brick work in ground floor:-						
	i) Cement, sand mortar:- Ratio 1:5						

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB							
WORK SHOP							
CALCULATION OF QUANTITIES							
CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Tool Room wall	1	43.00	0.75	10.50	338.63	Cft
	Toilet wall	1	25.50	0.75	10.50	200.81	Cft
	Parapet Wall	1	63.50	0.38	2.50	59.53	Cft
	Entrance step	2	4.00	1.00	0.75	6.00	Cft
	D/d Doors and Window						
	D-1	-1	3.50	0.75	7.00	(18.38)	Cft
	D-2	-1	2.50	0.75	7.00	(13.13)	Cft
	W-1	-1	4.00	0.75	4.00	(12.00)	Cft
	V-1	-1	2.00	0.70	2.00	(2.80)	Cft
					Total	558.67	Cft
					Total	5.59	%Cft
	Concrete Work						
8	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 fin						
	In Foundation						
	(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal sh						
	Columns	6	7.00	5.50	1.25	288.75	Cft
					Total	288.75	Cft
	Above foundation						
	(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:-						
	Type C (nominal mix 1: 2: 4)						
	Top Slab	1	215.00	1.00	0.50	107.50	Cft
	Sun shade	1	3.00	1.50	0.25	1.13	Cft
	Columns	6	1.25	1.50	6.50	73.13	Cft
	Doors and window Lintels						
	D-1	1	4.50	0.75	0.75	2.53	Cft
	D-2	1	3.50	0.75	0.75	1.97	Cft

<p align="center">PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB WORK SHOP CALCULATION OF QUANTITIES CIVIL WORK</p>							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	W-1	1	5.00	0.75	0.75	2.81	Cft
	V-1	1	3.00	0.75	0.75	1.69	Cft
					Total	190.75	Cft
	Steel Work.						
9	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust						
	Deformed bars (Grade-60)					479.50	Cft
	Top Slab, lintel & Columns @ 7 lbs / Cft		7.00		=	3,356.50	lbs/cft
				Total	=	3,356.50	lbs/cft
				Total	=	1,522.91	Kg.
				Add 5% Wastage.	=	76.15	Kg.
				Total	=	1,599	Kg
					Total	15.99	%kg
	Sand Filling						
10	Supplying and filling sand under floor; or plugging in wells.						
	Tool Floor	1	8.00	12.00	2.50	240.00	Cft
	Toilet	1	8.00	8.00	2.75	176.00	Cft
	Work Shop Area	1	20.00	26.00	2.50	1,300.00	Cft
					Total	1,716.00	Cft
					Total	17.16	%Cft
	Brick ballast						
11	Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.						
	Tool Floor	1	8.00	12.00	0.33	31.68	Cft
	Toilet	1	8.00	8.00	0.33	21.12	Cft
					Total	52.80	Cft
					Total	0.53	%Cft
	P.C.C						
12	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	Ratio 1: 2: 4						

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB							
WORK SHOP							
CALCULATION OF QUANTITIES							
CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Toilet	1	8.00	8.00	0.17	10.67	Cft
					Total	0.11	%Cft
	Sub Base Course						
13	Providing and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Pit run or bed run gravel from Sakhi Sarwar quarry to site, actual compacted depth shall be considered for payment)						
	Work Shop Area	1	20.00	26.00	0.33	171.60	Cft
					Total	1.72	%Cft
	Water Bound Macadam						
14	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO						
	Work Shop Area	1	20.00	26.00	0.33	171.60	Cft
					Total	1.72	%Cft
15	Providing and laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope. complete in all respect. (50% Grey / 50% Coloured)						
	For Tool Room b) 60-mm thick						
	Tool Floor	1	8.00	12.00		96.00	Sft
	Work Shop Area	1	20.00	26.00		520.00	Sft
	Ceramic Tile						

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB							
WORK SHOP							
CALCULATION OF QUANTITIES							
CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
16	Providing and laying superb quality Ceramic tile floors of Master brand of specified size, Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick (1:2) cement sand plaster i/c the cost of sealer for fini						
	i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	1	8.00	8.00		64.00	Sft
					Total	64.00	Sft
17	Providing and laying superb quality Ceramic tiles dado of Master brand of specified size, Glossy/Matt/Texture skirting / dado of approved Color and Shade with adhesive bond over 1/2" thick (1:2) cement plaster i/c the cost of sealer for finishing the joints						
	i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	2	8.00		7.00	112.00	Sft
		2	8.00		7.00	112.00	Sft
					Total	224.00	Sft
	Slab Plaster						
18	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:- 1:3)						
		1	8.00	12.00		96.00	Sft
		1	8.00	8.00		64.00	Sft
					Total	1.60	%Sft
	Cement Plaster						
19	Cement plaster 1:4 upto 20' (6.00 m) height:-						
	3/4" (20 mm) thick						
	Tool Room wall						
		2	8.00		10.50	168.00	Sft
		2	12.00		10.50	252.00	Sft
	Toilet						
		2	8.00		10.50	168.00	Sft
		2	8.00		10.50	168.00	Sft
	D/d Doors and Window						
	D-1	-1	3.50		7.00	(24.50)	Sft
	D-2	-1	2.50		7.00	(17.50)	Sft
	W-1	-1	4.00		4.00	(16.00)	Sft
	V-1	-1	2.00		2.00	(4.00)	Sft

<p align="center">PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB WORK SHOP CALCULATION OF QUANTITIES CIVIL WORK</p>							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
					Total	694.00	Sft
					Total	6.94	%Sft
	Pointing						
20	Cement pointing struck joints, on walls, upto 20' (6.00 m) hieght:-						
	a) ratio 1:2						
	Outer Walls	1	63.50		10.50	666.75	Sft
					Total	666.75	Sft
					Total	6.67	%Sft
21	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.						
					Total	6.67	%Sft
	Distempering						
22	Distempering:-						
	iii) three coats						
	Tool Room wall						
		2	8.00		10.50	168.00	Sft
		2	12.00		10.50	252.00	Sft
	Toilet						
		2	8.00		10.50	168.00	Sft
		2	8.00		10.50	168.00	Sft
	Slab	1	8.00	12.00		96.00	Sft
		1	8.00	8.00		64.00	Sft
	D/d Doors and Window						
	D-1	-1	3.50		7.00	(24.50)	Sft
	D-2	-1	2.50		7.00	(17.50)	Sft
	W-1	-1	4.00		4.00	(16.00)	Sft
	V-1	-1	2.00		2.00	(4.00)	Sft
					Total	854.00	Sft
					Total	8.54	%Sft
	Wooden Door						

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB							
WORK SHOP							
CALCULATION OF QUANTITIES							
CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
23	Providing and fixing 1½" (40 mm) thick hollow flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1¼" (30 mm) thick and partial wood braces at about 3" (75 mm) apart and deodar wood lipping 1½"x3/8" (40 mmx10 mm)						
	D-1	1	3.50		7.00	24.50	Sft
	D-2	1	2.50		7.00	17.50	Sft
					Total	42.00	Sft
	Lock						
24	Providing and fixing, approved quality mortice lock.	2				2.00	Each
	Paint						
25	Painting new surface:- Preparing surface and painting of doors and windows any type (including edges):-						
	i) priming coat.						
	ii)Two coat				Total	0.84	Sft
	Steel Window						
26	Providing and fixing steel windows with openable glazed panels, using beam section for frame 1½"x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for leaves ¾"x1"x¾"x1/8" (20x25x20x3 mm), T-section sashes 1"x1"x1/8" (25x25x3 mm), glass panes, wooden screed for gla						
	b) fixed with wire gauze, 22 SWG						
	v) glass pane 5 mm thick						
	W-1	1	4.00		4.00	16.00	Sft
	V-1	1	2.00		2.00	4.00	Sft
					Total	20.00	Sft
	Roof Insulation						

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB							
WORK SHOP							
CALCULATION OF QUANTITIES							
CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
27	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.						
	Roof area	1	215.00	1.00		215.00	Sft
					Total	215.00	Sft
					Total	2.15	%Sft
28	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.						
	ii) 500 gauge (.005" thick)						
					Total	215.00	Sft
	Khurras						
29	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	1				1.00	Each
	Bottom Khurras						
30	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4½" (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	1				1.00	Each
	Parking Shed						
31	Providing, laying and fixing in position shed as per drawings, manufacturer's specifications and as directed by Engineer Incharge. This item includes Aluzinc corrugated sheet of 0.5 to 0.6 mm thick fixed with rivet and bolts over Purlins and truss frame o	1	20.00	26.00		520.00	Sft
					Total	520.00	Sft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE WORK SHOP PLUMBING WORKS						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
		Indian W.C				
1	19-4-i	Providing and fitting glazed earthen ware water closet, squatter type (Orisa pattern), combined with foot rest.				
		i) white	Each	1.00	2,218.30	2,218
2	19-13-i	Providing and fitting plastic made low down flushing cistern 13.63 litre (3 gallons) capacity, including bracket set, copper connection, etc. complete.				
		i) white	Each	1.00	2,649.10	2,649
3	19-7-i	Providing and fitting glazed earthen ware wash hand basin 56x40 cm (22"x16") including bracket set, waste pipe and waste coupling, etc.				
		i) white, with pedestal	Each	1.00	5,169.95	5,170
5	19-30	Providing and fixing, chromium plated mixing valve, for wash hand basin, sink or shower.	Each	1.00	2,228.75	2,229
6	19-15	Providing and fixing, chromium plated soap dish.	Each	1.00	278.75	279
7	19-20	Providing and fixing looking glass 55x40 cm (22"x16") size	Each	1.00	638.15	638
8	19-27	Providing and fixing chromium plated bib cock:-				
		i) 2 cm (¾")	Each	1.00	1,015.00	1,015
9	19-28	Providing and fixing chromium plated tee stop cock 15mm (½").	Each	3.00	955.00	2,865
10	19-34-i	Providing and fixing, floor trap of cast iron, including concrete chamber all round, and C.I. grating:-				
		i) 10x5 cm (4"x2")	Each	1.00	627.75	628
11	19-36	Providing and fitting 10 cm (4") gully trap, including cement concrete, cost of PVC grating 15x15 cm (6"x6") and masonry chamber 30x30 cm (12"x12").	Each	1.00	1,084.60	1,085

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE WORK SHOP PLUMBING WORKS						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
12	19-35-ii	Providing and fitting "P" trap:- ii) 10 cm (4") glazed.	Each	2.00	283.10	566
		PPRC Pipe				
13	23-47	Providing, laying, testing and commissioning of POLYPROPYLENE RANDOM COPOLYMER (PPRC)water supply pipe made of (Dadex/ Popular /Beta/ BBJ)with specified pressure rating PN (PRESSURE NOMINAL) and conforming to DIN8077-8078 code i/c cost of solvent, specials, making jharries complete in all respect as approved and directedby Engineer Incharge.(Internal / External Diameters mentioned).				
		b) PN-20 pipe				
		(ii) (3/4") 25 mm	Rft	33.00	66.50	2,195
		(iii) (1") 32 mm	Rft	33.00	106.90	3,528
		Valve				
14	23/46	Providing and fixing CP heavy duty brass Ball valve with CP handle of specified dia meter made of Faisal/ Sonex/ Master best quality or equivalent complete in all respect as approved and directed by the Engineer Incharge.				
		ii) 3/4" dia	Each	1.00	1,434.00	1,434
		iii) 1" dia	Each	1.00	1,674.00	1,674
		uPVC Pipe				
15	19-47	Providing, fixing, testing and commissioning of μ-PVC (Unplasticized polyvinyl Chloride)Nikasi /waste pipe make of dadex/Popular/Beta/BBJ plain/ socket ended conforming to code EN-1401 of specified SDR (Standard Dimension Ratio)including the cost of specials and Solvents complete in all respect as approved and directed by the Engineer Incharge				
		Type (SDR 41/SN-4)				
		(iii) 2"(60 mm)	Rft	10.00	88.45	885
		(v) 4"(110 mm)	Rft	50.00	217.25	10,863
		(vi) 6"(160 mm)	Rft	10.00	420.65	4,207

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
WORK SHOP						
PLUMBING WORKS						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		HDPE Tank				
16	19/51	Providing and hoisting vertical /horizontal type storage tank of required capacity made of rotationally molded from (HDPE), double ply polyethelene of approved manufacturer i/c cost of making connection for inlet/outlet pipe, float valve i/c all cost of specials & labour complete in all respect as approved and directed by the Engineer Incharge.	P.Gln	200.00	106.60	21,320
		Total Rs. (A)				65,445
		Non-Schedule Item				
17	N.S	Providing and making Manhole 2'x2' internal size including 9" thick brick masonry (1:4), 1/2" th. Plastering (1:3) i/side, benching with PCC 1:2:4 4" th. with cement finish, including manhole cover, complete in all respects.	Each	1.00	18,219.61	18,220
		Total Rs. (B)				18,220
		Total Amount Rs. (A + B)				83,665

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
WORK SHOP						
ELECTRICAL WORKS						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
		<u>Scheduled Items (A)</u>				
1	C-24/3-ii	Supply and erection of PVC pipe for wiring recessed in walls, including bends, inspection joints, boxes, pull boxes, hook, cutting and repair surface etc. completed with all specified. (20 mm i/d)	Rft.	1,050.00	81.70	85,785
2	C-24/3-iii	Supply and erection of PVC pipe for wiring recessed in walls, including bends, inspection joints, boxes, pull boxes, hook, cutting and repair surface etc. completed with all specified. (25 mm i/d)	Rft.	150.00	94.60	14,190
3	C-24/10a.i	Supply and erection of single core PVC insulated copper conductor cables, in prelaidd PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (3.029)	Rft.	3,000.00	25.70	77,100
4	C-24/10a.iii	Supply and erection of single core PVC insulated copper conductor cables, in prelaidd PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)	Rft.	900.00	40.75	36,675
5	C-24/10a.iv	Supply and erection of single core PVC insulated copper conductor cables, in prelaidd PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.036)	Rft.	600.00	53.80	32,280
6	C-24/14-i	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. (4"x4")	Each	8.00	270.50	2,164
7	C-24/14-ii	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. (7"x4")	Each	1.00	372.25	372

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
WORK SHOP						
ELECTRICAL WORKS						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
8	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	10.00	87.35	874
9	C-24/36-i	Supply and erection of 3 pin switch and Plug combined, recessed type. (5Amps)	Each	4.00	112.00	448
10	C-24/36-ii	Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)	Each	8.00	149.80	1,198
11	C-24/43	Supply and erection of tube light, including rod, choke, starter with frame, flexible wire, including connection from ceiling rose, etc., complete				
		ii) single rod (40 watts) with one choke and one starter.	Each	4	1,221.70	4,887
12	C-24/102/a	Providing and fixing Copper winded Exhaust fan with louver and shutter made of Pak/Younas /G.F.C. i/c the cost of necessary cable and hardware for connection from ceiling rose complete as approved and directed by Engineer Incharge.				
		(a) Plastic body (ii) 12 " dia	Each	1.00	3,133.00	3,133
		Sub Total (A)				278,588
13	N.S	Supply, installation and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respects	Each	6.00	35,035.00	210,210
	N.S	Supply, installation and commissioning of wall mounted mirror LED light 10 watt with tube rod and frame all necessary fixing accessories, complete in all respects	Each	1.00	1,215.00	1,215
14	N.S	Supply, Installation, testing and commissioning of following size 56" ceiling fan, complete with capacitor, hanging rod, canopy, blades, dimmers nuts and bolts complete in all respect.	Each	2.00	7,000.00	14,000
		Sub Total (B)				225,425
		Sub Total (A+B)				504,013

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
PARKING SHED (SIZE 90' x 32')						
CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
		Excavation				
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	2.34	10,677.75	24,986
		Anti-Termite				
2	26/43	Spraying termite proofing by using liquid FMC/Biflex/TerminexExin/Ms Hextar or equivalent @ specified suspension concentrate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.	Sft	4,562.48	9.25	42,203
		Plain Cement Concrete				
3	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	1.68	28,929.30	48,601
		Concrete Work				
4	6/6	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.):-				
		In Foundation				
		(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-				
		(2) Type C (nominal mix 1: 2: 4)	P.Cft	560.00	457.75	256,340
		Above foundation				

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
PARKING SHED (SIZE 90' x 32')						
CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		(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)	P.Cft	132.00	612.30	80,824
		Steel Work.				
5	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	39.56	31,802.05	1,258,089
		Sand Filling				
6	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	28.80	2,823.30	81,311
		Sub Base Course				
7	18/3/a/ (i) + 1/1	Providing and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Pit run or bed run gravel from Sakhi Sarwar quarry to site, actual compacted depth shall be considered for payment)	100Cft	9.50	20,872.80	198,292

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
PARKING SHED (SIZE 90' x 32')						
CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Water Bound Macadam				
8	18/4/a + 1/1	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from Sakhi Sarwar quarry to site, actual compacted depth shall be considered for payment)	100Cft	9.50	26,681.68	253,476
		Tuff Paver				
9	10/41	Providing and laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope. complete in all respect. (50% Grey / 50% Coloured)				
		c) 80-mm thick	Per Sft	2,880.00	194.65	560,592
10	1/1 Rate Analysis	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.	Cft	762.89	119.70	91,316
		Parking Shed				
11	N.S	Providing, laying and fixing in position shed as per drawings, manufacturer's specifications and as directed by Engineer Incharge. This item includes Aluzinc corrugated sheet of 0.5 to 0.6 mm thick fixed with rivet and bolts over Purlins and truss frame of 50X50X4.75 mm with approved Colour/ paint supported with Steel Hexagonal / round shaped Columns size 200 to 300 mm diameter fitted with J-Type bolt having length 450 to 500 mm and not less than 38mm diameter. This item includes all kind of leads, lifts, fitting charges etc. complete in all respect excluding Cost of substructure i.e. foundation. Approval of manufacturer must be sought prior to placing order.	Sft	2,880.00	1,800.00	5,184,000
		Total Rs.				8,080,030

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB PARKING SHED (SIZE 90' x 32') CALCULATION OF QUANTITIES CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.						
	Columns	8	8.50	7.50	4.58	2,335.80	Cft
					Total	2,335.80	Cft
					Total	2.34	%oCft
	Anti-Termite						
2	Spraying termite proofing by using liquid FMC/Biflex/TerminexExin/Ms Hextar or equivalent @ specified suspension concentrate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.						
	Floor	1	90.00	32.00		2,880.00	Sft
	Columns	8	32.00	4.58		1,172.48	Sft
		8	8.50	7.50		510.00	Sft
					Total	4,562.48	Sft
	Plain Cement Concrete						
3	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(i) Ratio 1: 4: 8						
	Columns	8	8.50	7.50	0.33	168.30	Cft
					Total	168.30	Cft
					Total	1.68	%Cft

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Concrete Work						
4	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.):-						
	In Foundation						
	(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-						
	Columns	8	8.00	7.00	1.25	560.00	Cft
					Total	560.00	Cft
	Above foundation						
	(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)						
	Columns	8	1.50	2.00	5.50	132.00	Cft
					Total	132.00	Cft
	Steel Work.						
5	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-						
	Deformed bars (Grade-60)					692.00	Cft
	Columns @ 12 lbs / Cft		12.00		=	8,304	lbs/cft
				Total	=	8,304	lbs/cft
				Total	=	3,768	Kg.
				Add 5% Wastage.	=	188	Kg.
				Total	=	3,956	Kg
					Total	39.56	%kg
	Sand Filling						
6	Supplying and filling sand under floor; or plugging in wells.						
	Shed	1	90.00	32.00	1.00	2,880.00	Cft
					Total	2,880.00	Cft

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
					Total	28.80	%Cft
	Sub Base Course						
7	Providing and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Pit run or bed run gravel from Sakhi Sarwar quarry to site, actual compacted depth shall be considered for payment)						
	Shed	1	90.00	32.00	0.33	950.40	Cft
					Total	9.50	%Cft
	Water Bound Macadam						
8	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from Sakhi Sarwar quarry to site, actual compacted depth shall be considered for payment)						
	Shed	1	90.00	32.00	0.33	950.40	Cft
					Total	9.50	%Cft
9	Providing and laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope. complete in all respect. (50% Grey / 50% Coloured)						
	c) 80-mm thick						
	Shed	1	90.00	32.00		2,880	Sft

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Parking Shed						
10	Providing, laying and fixing in position shed as per drawings, manufacturer's specifications and as directed by Engineer Incharge. This item includes Aluzinc corrugated sheet of 0.5 to 0.6 mm thick fixed with rivet and bolts over Purlins and truss frame of 50X50X4.75 mm with approved Colour/ paint supported with Steel Hexagonal / round shaped Columns size 200 to 300 mm diameter fitted with J-Type bolt having length 450 to 500 mm and not less than 38mm diameter. This item includes all kind of leads, lifts, fitting charges etc. complete in all respect excluding Cost of substructure i.e. foundation. Approval of manufacturer must be sought prior to placing order.	1	90.00	32.00		2,880	Sft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE PARKING SHED (SIZE 72' x 32') ELECTRICAL WORKS						
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
		<u>Scheduled Items (A)</u>				
1	C-24/3-iii	Supply and erection of PVC pipe for wiring recessed in walls, including bends, inspection joints, boxes, pull boxes, hook, cutting and repair surface etc. completed with all specified. (25 mm i/d)	Rft.	300.00	94.60	28,380
2	C-24/10a.iii	Supply and erection of single core PVC insulated copper conductor cables, in prelaidd PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)	Rft.	750.00	40.75	30,563
3	C-24/14-i	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. (4"x4")	Each	1.00	270.50	271
4	C-24/14-ii	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. (7"x4")	Each	2.00	372.25	745
5	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	6.00	87.35	524
		Sub Total (A)				61,050
6	N.S	Supply, installation and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respects	Each	6.00	35,035	210,210
		Sub Total (B)				210,210
		Total (A+B)				271,260

<p align="center">PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE WASHING PIT CIVIL WORK</p>						
Sr. No.	2nd BI-Annual-2022 (Jul to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Excavation				
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	0.96	10,677.75	10,251
		Sand Filling				
2	7/30	Supplying and filling sand under floor; or plugging in wells.	100Cft	1.12	2,823.30	3,162
		Plain Cement Concrete				
3	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(c) Ratio 1: 1½: 3	100 Cft	0.57	43,826.10	24,981
		(f) Ratio 1: 2: 4	100 Cft	0.15	38,126.10	5,719
		(i) Ratio 1: 4: 8	100 Cft	1.12	28,929.30	32,401
		Brick work in Foundation				
4	7/4/i	Pacca brick work in foundation and plinth in:-				
		Cement, sand mortar:- Ratio 1:4	100 Cft	11.04	29,441.50	325,034
		Plaster				
5	11/8/b	Cement plaster 1:3 upto 20' (6.00 m) height:-				
		b) ½" (13 mm) thick	100 Sft	3.32	3,420.40	11,356
		Mosaic flooring				
6	10/22/a	1½"(40 mm) thick mosaic flooring, consisting of ½"(13 mm) mosaic topping of one part of cement and marble powder in the ratio of 3:1 and two parts of marble chips, laid over 1"(25 mm) thick floor of 1:2:4 cement concrete, including rubbing and polishing complete with finishing :-				
		(a) using grey cement	100 Sft	0.88	19,568.55	17,220
		Mosaic dado or skirting				
7	10/37	Mosaic dado or skirting with one part of cement and marble powder in the ratio of 3:1 and two parts of marble chips, laid over ½"(13 mm) thick cement plaster 1:3, including rubbing and polishing, complete with finishing:				
		(a) using grey cement:				
		ii) ½"(13 mm) thick	100 Sft	3.32	20,961.80	69,593
8	1/1 Rate Analysis	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.	Cft	167.22	119.70	20,016
		Total Amount Rs.				519,733

<p align="center">PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB WASHING PIT CALCULATION OF QUANTITIES CIVIL WORK</p>							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.						
	Washing Pit	1	35.00	9.67	2.83	958.93	Cft
					Total	0.96	%Cft
2	Supplying and filling sand under floor; or plugging in wells.	1	35.00	9.67	0.33	111.69	Cft
					Total	1.12	%Cft
	Plain Cement Concrete						
3	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(c) Ratio 1: 1½: 3	2	35.00	3.25	0.25	56.88	Cft
					Total	0.57	%Cft
	(f) Ratio 1: 2: 4	1	35.00	2.50	0.17	14.58	Cft
					Total	0.15	%Cft
	(i) Ratio 1: 4: 8						
	Washing Pit	1	35.00	9.67	0.33	111.69	Cft
					Total	1.12	%Cft
	Brick work in Foundation						
4	Pacca brick work in foundation and plinth in:-						
	Cement, sand mortar:- Ratio 1:4						
	Washing Pit						
	Step - 1	1	9.00	1.875	0.50	8.44	Cft
	Step - 2	1	9.00	1.500	0.50	6.75	Cft
	Step - 3	1	9.00	1.125	5.50	55.69	Cft
	Side walls	2	19.00	3.250	6.00	741.00	Cft
		2	15.00	3.250	3.00	292.50	Cft
					Total	1,104.38	Cft
					Total	11.04	%Cft

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Plaster						
5	Cement plaster 1:3 upto 20' (6.00 m) height:-						
	b) ½" (13 mm) thick						
	Wall	1	2.50		5.50	13.75	Sft
	Side Wall	2	19.00		6.00	228.00	Sft
		2	15.00		3.00	90.00	Sft
					Total	331.75	Sft
					Total	3.32	%Sft
	Mosaic flooring						
6	1½"(40 mm) thick mosaic flooring, consisting of ½"(13 mm) mosaic topping of one part of cement and marble powder in the ratio of 3:1 and two parts of marble chips, laid over 1"(25 mm) thick floor of 1:2:4 cement concrete, including rubbing and polishing complete with finishing :-						
	(a) using grey cement	1	35.00	2.50		87.50	Sft
					Total	0.88	%Sft
	Mosaic dado or skirting						
7	Mosaic dado or skirting with one part of cement and marble powder in the ratio of 3:1 and two parts of marble chips, laid over ½"(13 mm) thick cement plaster 1:3, including rubbing and polishing, complete with finishing:						
		1	2.50		5.50	13.75	Sft
		2	19.00		6.00	228.00	Sft
		2	15.00		3.00	90.00	Sft
					Total	331.75	Sft
					Total	3.32	%Sft

PUNJAB CITIES PROGRAM (PCP)						
DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS						
SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
GENERATOR PAD						
CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (Jul to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Excavation				
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	0.08	10,677.75	854
		Plain Cement Concrete				
2	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	0.17	28,929.30	4,918
		Concrete Work				
3	6/6	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.):-				
		In Foundation				
		(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-				
		(3) Type C (nominal mix 1: 2: 4)	P.Cft	80.00	457.75	36,620
		Steel Work.				
4	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	3.05	31,802.05	96,996
		Thermopore Sheet				
5	6/35	Providing and fixing thermopore (foamed polythene) sheet in horizontal and vertical expansion joints:				
		a) 1" (25 mm) thick thermopore sheet	Sft	34.58	18.10	626
		Heavy Steel Work				
6	25/10	Fabrication of heavy steel work, with angle, tees, flat iron round iron and sheet iron for making trusses, girders, tanks, etc., including cutting, drilling, rebitting, handling, assembling and fixing, but excluding erection in position.	100Kg	0.45	32,495.30	14,675
7	25/11	Erection and fitting in position iron trusses, staging of water tanks, etc.	100Kg	0.45	1,277.25	577
8	1/1 Rate Analysis	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.	Cft	70.40	119.70	8,427
		Total Amount Rs.				163,693

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB GENERATOR PAD CALCULATION OF QUANTITIES CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.						
	Generator Pad	1	8.84	5.84	1.50	77.44	Cft
					Total	77.44	Cft
					Total	0.08	%oCft
	Plain Cement Concrete						
2	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(i) Ratio 1: 4: 8						
	Generator Pad	1	8.84	5.84	0.33	17.04	Cft
					Total	17.04	Cft
					Total	0.17	%Cft
	Concrete Work						
3	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.):-						
	In Foundation						
	(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-						
		1	8.00	5.00	2.00	80.00	Cft
					Total	80.00	Cft

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Steel Work.						
4	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-						
	Deformed bars (Grade-60)					80.00	Cft
	Pad @ 8 lbs / Cft		8.00		=	640.00	lbs/cft
				Total	=	640.00	lbs/cft
				Total	=	290.38	Kg.
			Add 5% Wastage.		=	14.52	Kg.
				Total	=	305	Kg
					Total	3.05	%kg
	Thermopore Sheet						
5	Providing and fixing thermopore (foamed polythene) sheet in horizontal and vertical expansion joints:						
	a) 1" (25 mm) thick thermopore sheet	1	26.00		1.33	34.58	Sft
	Heavy Steel Work						
6	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.						
	Angle Iron 1-1/2" x 1-1/2"x3/8"	1	26.00	0.25	0.03	0.20	Cft
	Steel Density 490lbs/cft					99.53	lbs
						45.16	Kg
					Total	0.45	%Kg
7	Erection and fitting in position iron trusses, staging of water tanks, etc.				Total	0.45	%Kg

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE PUMP PAD CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (Jul to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Excavation				
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	0.01	10,677.75	107
		Plain Cement Concrete				
2	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	0.03	28,929.30	868
		Concrete Work				
3	6/6	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.):				
		In Foundation				
		(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-				
		(3) Type C (nominal mix 1: 2: 4)	P.Cft	8.00	457.75	3,662
		Steel Work.				
4	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	0.30	31,802.05	9,541
5	1/1 Rate Analysis	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.	Cft	9.88	119.70	1,183
		Total Amount Rs.				15,360

<p align="center">PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB</p>							
PUMP PAD							
CALCULATION OF QUANTITIES							
CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.						
	Pump Pad	1	2.50	2.50	1.00	6.25	Cft
					Total	0.01	%oCft
	Plain Cement Concrete						
2	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(i) Ratio 1: 4: 8						
	Pump Pad	1	2.50	2.50	0.50	3.13	Cft
					Total	3.13	Cft
					Total	0.03	%Cft
	Concrete Work						
3	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.):-						
	In Foundation						
	(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-						
		1	2.00	2.00	2.00	8.00	Cft
					Total	8.00	Cft
	Steel Work.						
4	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-						
	Deformed bars (Grade-60)					8.00	Cft
	Pad @ 8 lbs / Cft		8.00		=	64.00	lbs/cft
				Total	=	64.00	lbs/cft
				Total	=	29.04	Kg.
				Add 5% Wastage.	=	1.45	Kg.
				Total	=	30	Kg
				Total		0.30	%kg

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE SEPTIC TANK CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (Jul to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Excavation				
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	0.71	10,677.75	7,581
		Plain Cement Concrete				
2	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(f) Ratio 1: 2: 4	100 Cft	0.34	38,126.10	12,963
		(i) Ratio 1: 4: 8	100 Cft	0.55	28,929.30	15,911
		Brick work				
3	7/7/i	Pacca brick work other than building upto 10ft. (3 m)				
		Ratio 1:3	100 Cft	4.21	31,959.10	134,548
		Concrete Work				
4	6/6	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:-				
		Type C (nominal mix 1: 2: 4)	P.Cft	50.63	556.50	28,173

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE SEPTIC TANK CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (Jul to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Steel Work.				
5	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	1.27	31,802.05	40,249
		Cement Pointing				
6	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hieght:-				
		a) ratio 1:2	100Sft	5.19	3,516.15	18,249
		RCC Manhole Cover				
7	21/15/A	Providing and fixing 6" thick R.C.C. manhole cover with tee shaped C.I. frame of 22" I/d (frame weighing 37.324 Kg. or one maund as per Standard Drawing STD/PD No. 6, of 1977, complete in all respect.	Each	2.00	11,561.15	23,122
		Angle Iron Step				
8	21/13	Providing and fixing 1¼"x1¼"x3/16" (31x31x5 mm) angle iron step, in manhole chambers, including carriage and setting the same in work to correct lines and levels.	Each	14.00	590.90	8,273
9	1/1 Rate Analysis	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.	Cft	126.59	119.70	15,153
		Total Amount Rs.				304,222

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB SEPTIC TANK CALCULATION OF QUANTITIES CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.						
	Septic tank	1	13.50	7.50	7.00	708.75	Cft
					Total	708.75	Cft
					Total	0.71	%Cft
	Plain Cement Concrete						
2	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(f) Ratio 1: 2: 4	3	3.75	6.00	0.50	33.75	Cft
					Total	33.75	Cft
					Total	0.34	%Cft
	(i) Ratio 1: 4: 8						
	Septic tank	3	3.75	6.00	0.33	22.50	Cft
	Outer Wall	1	39.00	2.00	0.33	26.00	Cft
	Baffle wall	2	6.00	1.50	0.33	6.00	Cft
					Total	54.50	Cft
					Total	0.55	%Cft
	Brick work						
3	Pacca brick work other than building upto 10ft. (3 m)						
	Ratio 1:3						
	Outer wall	1	39.00	1.88	0.50	36.56	Cft
		1	39.00	1.50	0.50	29.25	Cft
		1	39.00	1.13	0.50	21.94	Cft
		1	39.00	0.75	9.00	263.25	Cft
	Baffle wall	2	6.00	1.13	0.50	6.75	Cft
		2	6.00	0.75	7.00	63.00	Cft
					Total	420.75	Cft
					Total	4.21	%Cft

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Concrete Work						
4	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:-						
	Type C (nominal mix 1: 2: 4)	1	13.50	7.50	0.50	50.63	Cft
	Steel Work.						
5	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-						
	Deformed bars (Grade-60)		2.50 kg/cft			126.56	Kg
					Total	1.27	%Kg
	Cement Pointing						
6	Cement pointing struck joints, on walls, upto 20' (6.00 m) height:-						
	a) ratio 1:2	1	39.00		9.00	351.00	Sft
		4	6.00		7.00	168.00	Sft
					Total	519.00	Sft
					Total	5.19	%Sft
	RCC Manhole Cover						
7	Providing and fixing 6" thick R.C.C. manhole cover with tee shaped C.I. frame of 22" I/d (frame weighing 37.324 Kg. or one maund as per Standard Drawing STD/PD No. 6, of 1977, complete in all respect.	2				2.00	Nos.
	Angle Iron Step						
8	Providing and fixing 1¼"x1¼"x3/16" (31x31x5 mm) angle iron step, in manhole chambers, including carriage and setting the same in work to correct lines and levels.	14				14.00	Nos.

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE EXTERNAL WORK CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (Jul to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Boundary Wall				
		Excavation				
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	1.68	10,677.75	17,939
		Anti-Termite				
2	26/43	Spraying termite proofing by using liquid FMC/ Biflex/ Terminex Exin/ Ms Hextar or equivalent @ specified suspension concentrate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.	Sft	2,043.00	9.25	18,898
		Plain Cement Concrete				
3	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	2.22	28,929.30	64,223
		Brick work in Foundation				
4	7/4/i	Pacca brick work in foundation and plinth in:-				
		Cement, sand mortar:- Ratio 1:5	100 Cft	9.74	28,486.30	277,457
		Horizontal D.P.C				
5	6/36	Providing and laying damp proof course of cement concrete 1 : 2 : 4 (using cement, sand and shingle), including bitumen coating :-				
		(a) with one coat bitumen and one coat polythene sheet 500gauge				
		i) 1½" thick (40 mm)	100 Sft	1.95	8,629.95	16,828

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE EXTERNAL WORK CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (Jul to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Vertical D.P.C				
6	6/38	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating:-				
		(a) with one coat of bitumen and one coat of polythene sheet 500 gauge:				
		ii) Ratio 1:3 ¾ " thick (20 mm)	100 Sft	2.48	6,236.05	15,465
		Brick work in Super Structure				
7	7/5	Pacca brick work in ground floor:-				
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	14.73	30,670.10	451,771
		Concrete Work				
8	6/6	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.):-				
		In Foundation				
		(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-				
		(3) Type C (nominal mix 1: 2: 4)	P.Cft	36.75	457.75	16,822
		Above foundation				
		(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:-				
		Type C (nominal mix 1: 2: 4)	P.Cft	52.36	556.50	29,138
		Steel Work.				
9	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	5.09	31,802.05	161,872

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE EXTERNAL WORK CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (Jul to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Cement Plaster				
10	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:- 3/4" (20 mm) thick	100 Sft	18.55	4,373.00	81,119
		Pointing				
11	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) height:- a) ratio 1:2	100 Sft	18.55	3,516.15	65,225
12	11/31	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	100 Sft	18.55	652.50	12,104
		Distempering				
13	11/23	Distempering:- iii) three coats	100 Sft	52.00	1,295.00	67,340
		Main Gate				
14	25/30	Making and fixing steel grated doors, complete with locking arrangement, angle iron frame 2"x2"x3/8" (50x50x10 mm) and 3/4" (20 mm) square bars 4" (100 mm) centre to centre.	Sft	120.00	1,929.40	231,528
		Painting new surface:-				
15	13/5/d	d) Preparing surface and painting guard bars, gates of iron bars, gratings, railing (including standards, braces, etc.) and in similar open work:- i) priming coat. ii) each subsequent coat of paint.	100 Sft 100 Sft	2.40 2.40	824.15 490.55	1,978 1,177
		Razor Wire				
16	26/46	Providing and fixing anti climb high security galvanized razor cut wire having double sharp four U-shaped pointed 0.5 mm thick (22mmx15 mm barbs) spaced @ 33 mm c/c clad over 2.5 mm dia high tensile Core wire making coil fencing of specified diameter @ 4" c/c fixed on 2'-3" high M/S angle iron post 1 1/2"x1 1/2"x3/16" embeded in base of PCC (1:2:4) (4"x4"x9") @ 4' apart i/c the cost of 2 No. bars 3/8" dia welded horizontally with angle iron posts , binding wire, painting of posts, etc. complete in all respects as approved and directed by the Engineer incharge. (ii) 18 " diameter	Rft	650.00	500.15	325,098
17	1/1 Rate Analysis	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.	Cft	288.81	119.70	34,569
		Total Rs. "A"				1,890,551

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
EXTERNAL WORK						
CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (Jul to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Tuff Paver				
		Jungle Clearance				
18	3/47/a	Jungle clearance and removing within 100 ft				
		a) light	1000 Sft.	8.80	253.95	2,235
		Dismantling Brick Soling				
19	4/29	Dismantling brick or flagged flooring without concrete foundation	100 Sft.	100.00	863.50	86,350
		Borrow Earth				
20	3/5/i + 3/17	Earthwork in ordinary soil for embankment including ploughing and mixing with blade grade or disc harrow or other suitable equipment and compaction by mechanical means at optimum moisture content and dressing to designed section, complete in all respects:- 90% to 95% maximum modified dry density as determined according to AASHTO T-180 method-D including Transportation of earth.	1000Cft	25.00	17,222.30	430,558
		Sub Base Course				
21	18/3/a/ (i) + 1/1	Providing and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Pit run or bed run gravel from Sakhi Sawar quarry to site, actual compacted depth shall be considered for payment)	100Cft	79.86	20,872.80	1,666,902
		Water Bound Macadam				
22	18/4/a + 1/1	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from Sakhi Sarwar quarry to site, actual compacted depth shall be considered for payment)	100Cft	79.86	26,681.68	2,130,799

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE						
EXTERNAL WORK						
CIVIL WORK						
Sr. No.	2nd BI-Annual-2022 (Jul to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Tuff Paver				
23	10/41	Providing and laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope. complete in all respect. (50% Grey / 50% Coloured)				
		c) 80-mm thick	Per Sft	24,200.00	194.65	4,710,530
24	3/32	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).	100 Sft	11.50	1,693.10	19,471
		Total Rs. "B"				9,046,844
		Total Rs. "A+B"				10,937,394

PUNJAB CITIES PROGRAM (PCP)							
DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS							
SUPERVISION IN 16 CITIES OF PUNJAB							
EXTERNAL WORK							
CALCULATION OF QUANTITIES							
CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.						
	Boundary wall	1	250.00	2.50	2.50	1,562.50	Cft
	Columns	3	4.00	4.00	2.50	120.00	Cft
					Total	1,682.50	Cft
					Total	1.68	%Cft
	Anti-Termite						
2	Spraying termite proofing by using liquid FMC/ Biflex/ Terminex Exin/ Ms Hextar or equivalent @ specified suspension concentrate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.						
	Boundary wall	1	250.00	7.50		1,875.00	Sft
	Columns	3	16.00	2.50		120.00	Sft
		3	4.00	4.00		48.00	Sft
					Total	2,043.00	Sft
	Plain Cement Concrete						
3	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(i) Ratio 1: 4: 8						
	Boundary wall	1	250.00	2.50	0.33	206.25	Cft
	Columns	3	4.00	4.00	0.33	15.84	Cft
					Total	222.09	Cft

PUNJAB CITIES PROGRAM (PCP)							
DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS							
SUPERVISION IN 16 CITIES OF PUNJAB							
EXTERNAL WORK							
CALCULATION OF QUANTITIES							
CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
						Total	2.22 %Cft
	Brick work in Foundation						
4	Pacca brick work in foundation and plinth in:-						
	Cement, sand mortar:- Ratio 1:5						
	Boundary wall						
	Step - 1	1	250.00	1.875	0.25	117.19	Cft
	Step - 2	1	250.00	1.500	0.25	93.75	Cft
	Step - 3	1	250.00	1.125	0.25	70.31	Cft
	Step - 4	1	226.38	0.750	3.42	580.65	Cft
	Columns						
	Step - 1	21	1.13	1.13	3.42	90.90	Cft
	Gate Columns	3	6.50	0.38	2.84	20.77	Cft
						Total	973.57 Cft
						Total	9.74 %Cft
	Horizontal D.P.C						
5	Providing and laying damp proof course of cement concrete 1 : 2 : 4 (using cement, sand and shingle), including bitumen coating :-						
	(a) with one coat bitumen and one coat polythene sheet 500gauge						
	i) 1½" thick (40 mm)						
	Boundary wall	1	224.00	0.75		168.00	Sft
	Columns	21	1.13	1.13		26.58	Sft
						Total	194.58 Sft
						Total	1.95 %Sft
	Vertical D.P.C						
6	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating:-						
	(a) with one coat of bitumen and one coat of polythene sheet 500 gauge:						
	ii) Ratio 1:3 ¾ " thick (20 mm)						
	Boundary wall	1	224.00		1.00	224.00	Sft
	Columns	21	1.13		1.00	23.63	Sft
						Total	247.63 Sft
						Total	2.48 %Sft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB							
EXTERNAL WORK							
CALCULATION OF QUANTITIES							
CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Brick work in Super Structure						
7	Pacca brick work in ground floor:-						
	i) Cement, sand mortar:- Ratio 1:5						
	Boundary wall	1	200.38	0.75	8.00	1,202.25	Cft
	Columns	21	1.13	1.13	8.00	212.63	Cft
	Gate Columns	3	6.50	0.38	8.00	58.50	Cft
					Total	1,473.38	Cft
					Total	14.73	%Cft
	Concrete Work						
8	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.):-						
	In Foundation						
	(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-						
	Gate Columns	3	3.50	3.50	1.00	36.75	Cft
					Total	36.75	Cft
	Above foundation						
	(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:-						
	Type C (nominal mix 1: 2: 4)						
	Gate Columns	3	1.25	1.25	11.17	52.36	Cft
					Total	52.36	Cft

<p align="center">PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB</p>							
EXTERNAL WORK							
CALCULATION OF QUANTITIES							
CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Steel Work.						
9	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-						
	Deformed bars (Grade-60)					89.11	Cft
	Columns @ 12 lbs / Cft		12.00		=	1,069.31	lbs/cft
				Total	=	1,069.31	lbs/cft
				Total	=	485.17	Kg.
				Add 5% Wastage.	=	24.26	Kg.
				Total	=	509	Kg
					Total	5.09	%kg
	Cement Plaster						
10	Cement plaster 1:4 upto 20' (6.00 m) height:-						
	3/4" (20 mm) thick						
	Boundary wall	1	200.38		8.00	1,603.00	Sft
	Columns	21	1.50		8.00	252.00	Sft
					Total	1,855.00	Sft
					Total	18.55	%Sft
	Pointing						
11	Cement pointing struck joints, on walls, upto 20' (6.00 m) height:-						
	a) ratio 1:2						
	Outer Walls	1	200.38		8.00	1,603.00	Sft
	Columns	21	1.50		8.00	252.00	Sft
					Total	1,855.00	Sft
					Total	18.55	%Sft
12	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.						
					Total	18.55	%Sft
	Distempering						
13	Distempering:-						
	iii) three coats						
	Boundary wall	1	650.00		8.00	5,200.00	Sft
					Total	5,200.00	Sft
					Total	52.00	%Sft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB							
EXTERNAL WORK							
CALCULATION OF QUANTITIES							
CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Main Gate						
14	Making and fixing steel grated doors, complete with locking arrangement, angle iron frame 2"x2"x3/8" (50x50x10 mm) and 3/4" (20 mm) square bars 4" (100 mm) centre to centre.	1	20.00		6.00	120.00	Sft
	Painting new surface:-						
15	d) Preparing surface and painting guard bars, gates of iron bars, gratings, railing (including standards, braces, etc.) and in similar open work:-						
	i) priming coat.					2.40	%Sft
	ii) each subsequent coat of paint.					2.40	%Sft
	Razor Wire						
16	Providing and fixing anti climb high security galvanized razor cut wire having double sharp four U-shaped pointed 0.5 mm thick (22mmx15 mm barbs) spaced @ 33 mm c/c clad over 2.5 mm dia high tensile Core wire making coil fencing of specified diameter @ 4" c/c fixed on 2'-3" high M/S angle iron post 1 1/2"x1 1/2"x3/16" embedded in base of PCC (1:2:4) (4"x4"x9") @ 4' apart i/c the cost of 2 No. bars 3/8" dia welded horizontally with angle iron posts , binding wire, painting of posts, etc. complete in all respects as pproved and directed by the Engineer incharge.						
	(ii) 18 " diameter	1	650.00			650.00	Rft
	Jungle Clearance						
17	Jungle clearance and removing within 100 ft						
	a) light	1	8,800.00			8,800.00	Rft
					Total	8,800.00	Sft
					Total	8.80	%Sft
	Dismantling Brick Soling						
18	Dismantling brick or flagged flooring without concrete foundation	1	10,000.00			10,000.00	Rft
					Total	10,000.00	Sft
					Total	100.00	%Sft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB							
EXTERNAL WORK							
CALCULATION OF QUANTITIES							
CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Borrow Earth						
19	Earthwork in ordinary soil for embankment including ploughing and mixing with blade grade or disc harrow or other suitable equipment and compaction by mechanical means at optimum moisture content and dressing to designed section, complete in all respects:- 90% to 95% maximum modified dry density as determined according to AASHTO T-180 method-D including Transportation of earth.						
			Area				
	Total Area	1	25,000	1.00	1.00	25,000	Cft
					Total	25,000	Cft
					Total	25.00	%Cft
	Sub Base Course						
20	Providing and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Pit run or bed run gravel from Sakhi Sarwar quarry to site, actual compacted depth shall be considered for payment)						
		1	24,200	1.00	0.33	7,986.00	Cft
					Total	79.86	%Cft
	Water Bound Macadam						
21	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from Sakhi Sarwar quarry to site, actual compacted depth shall be considered for payment)						
		1	24,200	1.00	0.33	7,986.00	Cft
					Total	79.86	%Cft
	Tuff Paver						
22	Providing and laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope. complete in all respect. (50% Grey / 50% Coloured)						
	c) 80-mm thick	1	24,200	1.00		24,200	Sft
23	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).	1	1,150	1.00		1,150	Sft
					Total	11.50	%Sft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE EXTERNAL WORKS PLUMBING WORKS						
Sr. No.	2nd BI-Annual-2022 (Jul to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Excavation				
1	3/44	Excavation of trenches in all kinds of soil, except cutting rock, for watersupply pipelines upto 5 ft. (1.5 m) 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 respects.	1000Cft	4.25	7,622.75	32,416
		PPRC Pipe				
2	23-47	Providing, laying, testing and commissioning of POLYPROPYLENE RANDOM COPOLYMER (PPRC) water supply pipe made of (Dadex/ Popular /Beta/ BBJ)with specified pressure rating PN (PRESSURE NOMINAL) and conforming to DIN8077-8078 code i/c cost of solvent, specials, making jharries complete in all respect as approved and directedby Engineer Incharge.(Internal / External Diameters mentioned).				
		b) PN-20 pipe				
		(vi)(2") 63 mm	Rft	385.00	377.95	145,511
		Valve				
3	23/46	Providing and fixing CP heavy duty brass Ball valve with CP handle of specified dia meter made of Faisal/ Sonex/ Master best quality or equivalent complete in all respect as approved and directed by the Engineer Incharge.				
		vi) 2" dia	Each	2.00	2,550.00	5,100
		uPVC Pipe				
4	19/47	Providing, fixing, testing and commissioning of μ-PVC (Unplasticized polyvinyl Chloride)Nikasi /waste pipe make of dadex/Popular/Beta/BBJ plain/ socket ended conforming to code EN-1401 of specified SDR (Standard Dimension Ratio)including the cost of specials and Solvents complete in all respect as approved and directed by the Engineer Incharge				
		Type (SDR 41/SN-4)				
		(vi) 6"(160 mm)	Rft	560.00	420.65	235,564

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE EXTERNAL WORKS PLUMBING WORKS						
Sr. No.	2nd BI-Annual-2022 (Jul to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
5	N.S	Providing and making Manhole 2'x2' internal size including 9" thick brick masonry (1:4), 1/2" th. Plastering (1:3) i/side, benching with PCC 1:2:4 4" th. with cement finish, including manhole cover, complete in all respects.	Each	9.00	17,608.51	158,477
		Ejector Pump				
6	23/45/ii	P/F Ejector Pump of specified Suction and Delivery heads, coupled with Single Phase Seimen Electric Motor of required rating for water supply i/c the cost of connection charges, necessary wire, PVC pipes etc complete in all respect as approved and directed by the Engineer Incharge.				
		ii) G-IV (2-1/2"x2") with 2.5 HP Electric Motor, 38-Mtr Suction and 38 M delivery head	Each	1.00	17,905.90	17,906
		Boring				
7	23/1	Boring for tubewell in all types of soil except shingle and rock, from ground level to 100 ft. (30 m) depth, including sinking and withdrawing of casing pipe, complete:-				
		c) 5" (125 mm) i/d	Rft	100.00	581.05	58,105
8	23/2	Boring for tubewell in all types of soil except shingle, gravel & rock, from a depth of 100.1 ft. to 200 ft. (30 to 60 m) below ground level, including sinking and withdrawing of casing pipe, complete:-				
		a) 5" (125 mm) i/d	Rft	100.00	973.80	97,380
9	23/16	Providing and installing P.V.C. blind pipe, B.S.S. Class `B', in tubewell bore hole, including sockets and solvents and jointing with strainer, etc. complete.				
		b) 4" i/d (100 mm)	Rft	50.00	483.60	24,180
10	23/17	Providing and installing P.V.C. blind pipe, B.S.S. Class `D', in tubewell bore hole, including sockets and solvents and jointing with strainer, etc. complete.				
		b) 1 1/2" i/d (40 mm)	Rft	200.00	158.25	31,650
		c) 2" i/d (50 mm)	Rft	70.00	230.00	16,100

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE EXTERNAL WORKS PLUMBING WORKS						
Sr. No.	2nd BI-Annual-2022 (Jul to Dec) Vehari	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
11	23/11	Providing and installing, P.V.C. strainer B.S.S. Class 'B', in tubewell bore hole, including sockets and solvents, etc. complete:-				
		a) 3" i/d (75 mm)	Rft	30.00	174.70	5,241
12	23/14	Providing and installing P.V.C. Bail/End plug, in tubewell bore hole:-				
		a) B.S.S. Class `B'				
		i) 3" i/d (75 mm)	Rft	1.00	86.25	86
		Booster Pump				
13	N.S	Providing, installing, Fixing and commissioning of reciprocating pump with a capacity of 30 USGPM against a total head of 90 ft Cast Iron, Cylinder & Piston Rod in S.S., Crank Shaft in super finish S.G. Iron, Gland Nut in Brass and abrasion proof silently working Valves fitted on easily Feat accessible S.S., ABS or Cast Iron Valve Plate with Brass Seats, All Gaskets are in Rubber and Rocker Rail in Galvanized Mild Steel with Insulation Bushes complete system installed upto satisfaction of engineer in charge, complete in all respects	Each	1.00	20,000	20,000
		Total Rs				847,715

PUNJAB CITIES PROGRAM (PCP)							
DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS							
SUPERVISION IN 16 CITIES OF PUNJAB							
DETAILED COST ESTIMATE							
EXTERNAL WORKS							
PLUMBING WORKS							
Sr. No.	Description	No	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation of trenches in all kinds of soil, except cutting rock, for watersupply pipelines upto 5 ft. (1.5 m) 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 respects.						
	Water supply Pipe+Drainage pipe	1	945.00	1.50	3.00	4,252.50	Cft
					Total	4.25	%oCft
	PPRC Pipe						
2	Providing, laying, testing and commissioning of POLYPROPYLENE RANDOM COPOLYMER (PPRC) water supply pipe made of (Dadex/ Popular /Beta/ BBJ)with specified pressure rating PN (PRESSURE NOMINAL) and conforming to DIN8077-8078 code i/c cost of solvent, specials, making jharries complete in all respect as approved and directedby Engineer Incharge.(Internal / External Diameters mentioned).						
	b) PN-20 pipe						
	(vi)(2") 63 mm	1	385.00			385.00	Rft
	Valve						
3	Providing and fixing CP heavy duty brass Ball valve with CP handle of specified dia meter made of Faisal/ Sonex/ Master best quality or equivalent complete in all respect as approved and directed by the Engineer Incharge.						
	vi) 2" dia	2				2.00	Nos.
	uPVC Pipe						
4	Providing, fixing, testing and commissioning of µ-PVC (Unplasticized polyvinyl Chloride)Nikasi /waste pipe make of dadex/Popular/Beta/BBJ plain/ socket ended conforming to code EN-1401 of specified SDR (Standard Dimension Ratio)including the cost of specials and Solvents complete in all respect as approved and directed by the Engineer Incharge						
	Type (SDR 41/SN-4)						
	(vi) 6"(160 mm)	1	560.00			560.00	Rft
5	Providing and making Manhole 2'x2' internal size including 9" thick brick masonry (1:4), 1/2" th. Plastering (1:3) i/side, benching with PCC 1:2:4 4" th. with cement finish, including manhole cover, complete in all respects.	9				9.00	Nos.

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE EXTERNAL ELECTRICAL WORKS						
Sr. No.	2nd BI-Annual-2022 (Jul to Dec) Vehari	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
		Scheduled Items (A)				
		Excavation				
1	3/21	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	%oCft	4.84	10,677.75	51,702
		RCC Foundation for Poles				
2	6/6	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)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-				
		(2) Type B (nominal mix 1: 1½: 3)	Cft	264.00	513.65	135,604
		Steel Work				
3	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		(c) Deformed bars (Grade-60)	100Kg	6.60	31,802.05	209,894
4	24/13b.iii	Supply and erection of 3 core PVC insulated copper conductor cables, in prelaidd PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)	Rft.	160.00	105.15	16,824

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE EXTERNAL ELECTRICAL WORKS						
Sr. No.	2nd BI-Annual-2022 (Jul to Dec) Vehari	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
5	24/6	Supply and erection PVC pipe for recessed wiring (main and sub-main) purpose, including bends, specials, etc. in floor, wall or trenches:-				
		i) 50 mm i/d	Rft	800.00	185.85	148,680
6	24/12	Supply and erection of single core PVC insulated, PVC sheathed copper conductor, 660/1100 volts grade cable, in prelaid G.I. pipe/M.S. conduits/PVC pipe/G.I. wire/trenches, etc (rate for cable only):-				
		ii) 6 mm sq (7/0.044")	Rft	200.00	117.70	23,540
		iv) 16 mm sq (7/0.064")	Rft	100.00	173.95	17,395
7	24/13	Supply and erection of copper conductor cables for service connection, in prelaid pipe/G.I. wire / trenches, etc. (rate for cable only):-				
		a) PVC insulated, PVC sheathed twin core, 250/440 volts.				
		v) 7/1.12 mm (7/0.044")	Rft	400.00	160.20	64,080
		b) PVC insulated, PVC sheathed 3 core 660/1100 volt non armoured cable:-				
		v) 7/1.12 mm (7/0.044")	Rft	100.00	246.85	24,685
		c) PVC insulated, PVC sheathed 4 core, 660/1100 volt non armoured cable:-				
		v) 6 mm (7/0.044")	Rft	50.00	318.50	15,925
		vi) 10 mm (7/0.052")	Rft	350.00	523.85	183,348
		vii) 16 mm (7/0.064")	Rft	30.00	642.90	19,287
8	24/68	Supplying, installation testing and commissioning of Octagonal shape electric street light pole, made of hot dipped 4.5 mm thick (7 SWG) galvanized steel ,tapered from 225 mm at bottom to 100 mm at top, with 1500 mmx60 mm dia. arm for luminaire installation, duly G.I. welded with 470x470x20 mm base plate with the help of 4 no triangular stiffeners 100x350x20 mm of GI sheet, with built in junction box with shutter, i/c the cost of nuts & J-rag bolts, duly fixed in prelaid concrete foundation, foundation will be paid additionally as approved and directed by the Engineer Incharge.				
		a) Single Arm				
		(i) 10 mtr height	Each	2.00	106,236.85	212,474
		b) Double Arm				
		(i) 10 mtr height	Each	2.00	109,878.85	219,758

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE EXTERNAL ELECTRICAL WORKS						
Sr. No.	2nd BI-Annual-2022 (Jul to Dec) Vehari	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
9	24/69/c	Supplying, installation and commissioning of LED Cobra-head Luminaries of specified wattage and lumens conforming to IP 65, Philips/Osram/Thorn with corrosion resistant die casted aluminum housing, silicon gas kit, thermally hardened glass complete with LED drivers, surge protection i/c the cost of all accessories/components required for proper operation, fully flexible for future upgradation and easy replacements for maintenance purposes, bucket elevator charges as approved and directed by the Engineer Incharge.				
		c) 120 Lm/Watt				
		(v) 90 Watt with 10800 Lumens	Each	6.00	51,675.00	310,050
10	24/77	Supply and erection of electric energy meter, including meter testing fee, etc.				
		b) three phase, 4 wires:				
		iii) 3x80 Amp, 400 volts	Each	1.00	14,659.25	14,659
11	24/86	Suppling, Installation and commissioning of MCB (Miniature Circuit Breaker) of specified rating made of LEGRAND FRANCE/ GE U.S.A / SCHNEIDER GERMANY /SIEMEN GERMAN/TERASAKI JAPAN/ ABB SWITZERLAND in prelaid DBs and Panels i/c the cost of screws,necessary wire complete in all respect as approved and directed by the Engineer Incharge.				
		a) Single Pole				
		(ii) 6-40 Amp (6 KA)				
		DB-Office/Pump	Each	6.00	1,101.75	6,611
		DB-WS/Sitting/Ext L	Each	9.00	1,101.75	9,916
		b) Double Pole				
		(ii) 6-40 Amp (6 KA)	Each			
		DB-WS/Sitting/Ext L	Each	3.00	3,351.75	10,055
		c) Triple Pole				
		(iii) 6-63 Amp (10 KA)	Each			
		DB-Office/Pump	Each	2.00	8,433.00	16,866
		DB-WS/Sitting/Ext L	Each	1.00	8,433.00	8,433
		MPB	Each	3.00	8,433.00	25,299

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE EXTERNAL ELECTRICAL WORKS						
Sr. No.	2nd BI-Annual-2022 (Jul to Dec) Vehari	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
12	24/88	Supplying, Installation and commissioning of MCCB (Moulded Case Circuit Breaker) of specified rating made of LEGRAND FRANCE/ GE U.S.A / SCHNEIDER GERMANY / TERASAKI JAPAN/ABB SWITZERL(with adjustable Thermal-Magnetic Trip) in prelaidd DBs and Panels i/c the cost of screws, necessary wire complete in all respect as approved and directed by the Engineer Incharge				
		a) Tripple Pole With Adjustable Thermal-Magnetic Trip /Electronic Trip (60-100%)				
		(i) 25-100 Amp(25 KA)				
		MPB	Each	1.00	26,853.00	26,853
13	24/90	P/F wall mounted DB (Distribution Board) made with 16SWG Sheet (Recessded/Surface mounted Type), Powder coated Paint, i/c the cost of Lock, Indication lights,Thimble, Copper Comb, Wiring, Netural & Earth Bar, Door Earthing, Digital Voltmeter, Digital Ammeter,Volt Selector Switch,Ammeter selector switch,Current Transformers and Controles Complete in all respect as approved and directed by the Engineer Incharge (Breakers will be Paid Separately).				
		(a) 6" deep				
		(i) 20~60A (18"x24"x6")				
		DB-Office/Pump	Cft	1.50	18,634.45	27,952
		DB-WS/Sitting/Ext L	Cft	1.50	18,634.45	27,952
		MPB	Cft	1.50	18,634.45	27,952
14	24/105/iii	Supply, insatllation, commissioning and testing of oil cooled type, Step down Power Transformer of specified rating,11/0.415 kV, 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 11000/415/240 V impedance 6.25% or 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, as approved and directed by the Engineer Incharge				
		(i) 25 KVA	Each	1.00	329,487.70	329,488
15	24/70	Earthing of iron clad/aluminum switches, etc. with G.I. wire No. 8 SWG in G.I. pipe 15 mm (½") dia, recessed or on surface of wall and floor, complete with 1.5 metre long G.I. pipe, 50 mm (2") dia with reducing socket 4 to 5 metre below ground level, and 2 metre away from building plinth.				
			Job	3.00	9,592.45	28,777

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
DETAILED COST ESTIMATE EXTERNAL ELECTRICAL WORKS						
Sr. No.	2nd BI-Annual-2022 (Jul to Dec) Vehari	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
16	24/72	Bonding to earth with wire on surface, including cost of wire, clamps, thimbles, etc.				
		a) G.I. wire:				
		i) 8 SWG	Per Rft	100.00	23.25	2,325
		Sub Total Scheduled Items: (A)				2,216,381
Non Schedule		Part-B				
17	N.S.	Supply, installation, testing, and comissioning of following equipment to be installed in already made DB Box for motor including cost of all necessary accessories i.e: contactors, relay, indication lights, with ON/OFF push button complete in all respects.				
		i) Direct of Line (DOL) Starter for 3kW Motor	Set	1.00	56,200	56,200
		Total Cost (Part B)			Rs.	56,200
		Grand Total (Part A + Part B)			Rs.	2,272,581

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB					
DETAILED COST ESTIMATE					
ENVIRONMENTAL HEALTH SAFETY BUDGET					
Sr No	Description	Unit	Quantity	Unit Rate (Rs.)	Amount Rs.
	Labor Safety				
1	Face Masks (3 PLY)	Nos	10.00	700.00	7,000
2	Safety Gum Shoes	Nos	15.00	1,350.00	20,250
3	Hand Gloves	Nos	15.00	245.00	3,675
4	First Aid Box (Including essential Medicine)	Nos	1.00	5,000.00	5,000
5	Safety Hard Helmets MSA	Nos	15.00	2,000.00	30,000
6	Safety Goggles	Nos	15.00	550.00	8,250
7	Reflective Safety Vests	Nos	15.00	550.00	8,250
				Sub Total	82,425
	Working Site Safety				
1	Reflective Safety Signs Boards	Nos	2.00	10,000.00	20,000
2	Reflective Safety Barricading Tape	Nos	2.00	1,500.00	3,000
3	Fire Extinguishers DCP	Nos	1.00	7,000.00	7,000
				Sub Total	30,000
	Total Amount (Rs)				112,425

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB EARTH WORK LEAD CHART							
Rate Analysis							
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Lead	Unit.	Qty	Rate (Rs)	Amount (Rs)
1	3/5/i	Earthwork in ordinary soil for embankments lead upto 100 ft. (30 m), including ploughing and mixing with blade grade or disc harrow or other suitable equipment, and compaction by mechanical means at optimum moisture content and dressing to designed section, complete in all respects:- i) 95% to 100% maximum modified AASHO dry density.	1	1000Cft	1	9,527.90	9,527.90
2	3/17a.b.c	Carriage					
		upto ¼ mile (400 m).	1	1000 Cft	1	4,248.00	4,248.00
		for every 330 ft. (100 m) additional lead or part thereof, beyond ¼ mile (400 m) upto one mile. (1.6 Km.)	12	1000 Cft	1	47.50	570.00
		for every ¼ mile (400 m) additional lead or part thereof, beyond one mile (1.6 Km.) upto 5 mile (8 Km).	8.5	1000 Cft	1	338.40	2,876.40
		for every ½ mile (800 m) additional lead or part thereof, beyond 5 miles (8 Km).	0	1000 Cft	1	320.35	-
		Total Amount I,000 (Rs.).					17,222.30
		Total Amount Per Cft					17.22

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB							
Rate Analysis							
Description							
Providing and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Pit run or bed run gravel from Sakhi Sarwar quarry to site, actual compacted depth shall be considered for payment)							
Crush Stone							250 km
Sr. No.	2nd BI-Annual-2022 (Jul to Dec) Vehari	Description	Unit	Lead (Km)	Qty	Rate (Rs)	Amount (Rs)
1		Material					
	18-3 a(i)	Pit run or bed run gravel.	100 Cft	1	1	6,513.00	6,513.00
2		Carriage					
	1/1	1st KM	100 Cft	1	1.2	299.40	359.28
		2nd KM	100 Cft	1	1.2	145.25	174.30
		3rd KM	100 Cft	1	1.2	116.85	140.22
		4th KM	100 Cft	1	1.2	85.30	102.36
		5th KM	100 Cft	1	1.2	80.20	96.24
		6th KM	100 Cft	1	1.2	79.00	94.80
		7th KM	100 Cft	1	1.2	74.25	89.10
		8th KM	100 Cft	1	1.2	73.50	88.20
		9th KM	100 Cft	1	1.2	69.55	83.46
		10th KM	100 Cft	1	1.2	65.70	78.84
		From 11 km to 200 km	100 Cft	190.00	1.2	57.25	13,053.00
		From 201 km to 250 km	100 Cft	50	1.2	3.25	195.00
		Total.					20,872.80
		Total Amount per 100 Cft					20,872.80
		Total cast for Per Cft					208.73

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB							
Rate Analysis							
Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from Sakhi Sarwar quarry to site, actual compacted depth shall be considered for payment)							
							250 km
Sr. No.	2nd BI-Annual-2022 (Jul to Dec) Vehari	Description	Unit	Lead (Km)	Qty	Rate (Rs)	Amount (Rs.)
1	18/4(a)	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from Sakhi Sarwar quarry to site, actual compacted depth shall be considered for payment)	100 Cft		1	11,887.55	11,887.55
2	1/1	Carriage of 100 cft of all materials like stone aggregate spawl kanker lime surkhi etc or 150 cft of timber by truck or by any other means owned by the contractor.					
		1st KM	100 Cft	1	1.22	299.40	365.27
		2nd KM	100 Cft	1	1.22	145.25	177.21
		3rd KM	100 Cft	1	1.22	116.85	142.56
		4th KM	100 Cft	1	1.22	85.30	104.07
		5th KM	100 Cft	1	1.22	80.20	97.84
		6th KM	100 Cft	1	1.22	79.00	96.38
		7th KM	100 Cft	1	1.22	74.25	90.59
		8th KM	100 Cft	1	1.22	73.50	89.67
		9th KM	100 Cft	1	1.22	69.55	84.85
		10th KM	100 Cft	1	1.22	65.70	80.15
		From 11 km to 200 km	100 Cft	190.00	1.22	57.25	13,270.55
		From 201 km to 250 km	100 Cft	50	1.2	3.25	195.00
		Total.					26,681.68
		Total Amount per 100 Cft					26,681.68
		Total cast for Per Cft					266.82

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
RATE ANALYSIS						
Description						
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.						
						250 km
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	Unit	Lead (Km)	Rate (Rs)	Amount (Rs)
1	1/1	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.				
		1st KM	100 Cft	1	299.40	299.40
		2nd KM	100 Cft	1	145.25	145.25
		3rd KM	100 Cft	1	116.85	116.85
		4th KM	100 Cft	1	85.30	85.30
		5th KM	100 Cft	1	80.20	80.20
		6th KM	100 Cft	1	79.00	79.00
		7th KM	100 Cft	1	74.25	74.25
		8th KM	100 Cft	1	73.50	73.50
		9th KM	100 Cft	1	69.55	69.55
		10th KM	100 Cft	1	65.70	65.70
		From 11 km to 200 km	100 Cft	190	57.25	10,877.50
		From 201 km to 250 km	100 Cft	50	1.20	3.25
		Total.				11,969.75
		Total Amount per 100 Cft				11,969.75
		Total Cost for Per Cft				119.70

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB										
Rate Analysis										
Manhole Construction 2 x 2 Ft									Unit	Each
Sr. No.	2nd BI-Annual-2022 (July to Dec) Vehari	Description	No.	Length	Width	Height	Qty	Unit	Rate (Rs)	Amount (Rs)
1		Excavation.								
	3-42-i	(0 to 7 feet depth)	1	3.50	3.50	3.00	36.75	1000 Cft	11,740.40	431.46
2	6-3-b	Cement concrete brick or stone ballast (1:4:8)	1	3.50	3.50	0.33	4.04	100 Cft	24,738.85	1,000.07
3	6-5-f	Base slab	1	3.50	3.50	0.25	3.06	100 Cft	38,126.10	1,167.61
4	6-6-(a)(i)	Top ring Beam Ratio 1:2:4	1	3.500	3.50	0.33	4.04	100 Cft	457.75	1,850.45
5	6/12 (c)	Steel work		3.00 kg per cft			14.15	kg	31,802.05	4,499.59
6	7-7-i	Brick Work Ratio 1:3								
		Step - 1	1	11.00	0.75	2.00	16.50	100 Cft	31,959.10	5,273.25
7	11-8-c	3/4" thick Plaster Ratio 1:3 (External)	1	11.00		2.00	22.00	100 Sft	4,583.75	1,008.43
8	11-18-a	Cement pointing struck joints, on walls (1:2) (Internal)	1	8.00		2.00	16.00	100 Sft	3,516.15	562.58
9	13-9-i	Bitumen Coating on External Plaster	1	11.00		2.00	22.00	100 Sft	2,148.00	472.56
10	19-40-ii	Supply and fitting of cast iron manhole cover ii) 45 cm (18") dia	1				1.00	Each	1,342.50	1,342.50
									Grand Total.	17,609

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB									
RATE ANALYSIS									
Description									
Supply, installation and commissioning of wall mounted mirror LED light 10 watt with tube rod and frame all necessary fixing accessories, complete in all respects									
								Unit.	Each
Sr. No.	Ref	Detail			Unit Rate (British System) per Each				
					Qty	Rate Per Unit		Amount (Rs.)	
		<u>Material</u>							
1	MR	Mirror Light			1.00	No	850	No.	850.00
								Total.	850.00
2		Carriage & Installation Charges	5	%					42.50
								Total.	892.50
		GST 17% on item No. 1	17	%					144.50
		Contractor's Profit on item No. (1&2)	20	%					178.50
		Total							1,215.50
		<u>ITEM RATES</u>							
		Composite rate Per Each						Rs.	1,215.00

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB									
RATE ANALYSIS									
Description									
Supply, installation and commissioning recessed 10W LED Down Light complete in all respects.									
								Unit.	Each
Sr. No.	Ref	Detail	Unit Rate (British System) per Each						
			Qty		Rate Per Unit		Amount (Rs.)		
		<u>Material</u>							
1	MR	LED Down Light	1.00	No.	1,000	No.	1,000.00		
							Total.	1,000.00	
2		Carriage & Installation Charges	5	%					50.00
							Total.	1,050.00	
		GST 17% on item No. 1	17	%					170.00
		Contractor's Profit on item No. (1&2)	20	%					210.00
		Total							1,430.00
		<u>ITEM RATES</u>							
		Composite rate Per Each					Rs.	1,430.00	

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB									
RATE ANALYSIS									
Description									
Supply, installation and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respects									
								Unit.	Each
Sr. No.	Ref	Detail	Unit Rate (British System) per Each						
			Qty		Rate Per Unit		Amount (Rs.)		
		<u>Material</u>							
1	MR	Highbay Light	1.00	No.	24,500	No.		24,500	
							Total.	24,500	
2		Carriage & Installation Charges	5	%				1,225	
							Total.	25,725	
		GST 17% on item No. 1	17	%				4,165	
		Contractor's Profit on item No. (1&2)	20	%				5,145	
		Total						35,035	
		<u>ITEM RATES</u>							
		Composite rate Per Each					Rs.	35,035	

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB									
RATE ANALYSIS									
Description									
Supply, installation, testing, and comissioning of following equipment to be installed in already made DB Box for motor including cost of all necessary accessories i.e: contactors, relay, indication lights, with ON/OFF push button complete in all respects.									
								Unit.	Each
Sr. No.	Ref	Detail			Unit Rate (British System) per Each				
					Qty	Rate Per Unit		Amount (Rs.)	
		<u>Material</u>							
1	MR	i) Direct of Line (DOL) Starter for 3kW Motor			1.00	No.	39,300	No.	39,300
								Total.	39,300
2		Carriage & Installation Charges	5	%					1,965
								Total.	41,265
		GST 17% on item No. 1	17	%					6,681
		Contractor's Profit on item No. (1&2)	20	%					8,253
		Total							56,199
		<u>ITEM RATES</u>							
		Composite rate Per Each						Rs.	56,200

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB									
RATE ANALYSIS									
Description									
Supply, installation, testing, and comissioning of following equipment to be installed in already made DB Box for motor including cost of all necessary accessories i.e: contactors, relay, indication lights, with ON/OFF push button complete in all respects.									
								Unit.	Each
Sr. No.	Ref	Detail	Unit Rate (British System) per Each						
			Qty		Rate Per Unit		Amount (Rs.)		
		<u>Material</u>							
1	MR	ii) Automatic Star Delta Starter ASDS for 7.5kW Motor	1.00	No.	51,900	No.		51,900	
							Total.	51,900	
2		Carriage & Installation Charges	5	%				2,595	
							Total.	54,495	
		GST 17% on item No. 1	17	%				8,823	
		Contractor's Profit on item No. (1&2)	20	%				10,899	
		Total						74,217	
		<u>ITEM RATES</u>							
		Composite rate Per Each					Rs.	74,220	

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB									
RATE ANALYSIS									
Description									
Providing, laying and fixing in position shed as per drawings, manufacturer's specifications and as directed by Engineer Incharge. This item includes Aluzinc corrugated sheet of 0.5 to 0.6 mm thick fixed with rivet and bolts over Purlins and truss frame of 50X50X4.75 mm with approved Colour/ paint supported with Steel Hexagonal / round shaped Columns size 200 to 300 mm diameter fitted with J-Type bolt having length 450 to 500 mm and not less than 38mm diameter. This item includes all kind of leads, lifts, fitting charges etc. complete in all respect excluding Cost of substructure i.e. foundation. Approval of manufacturer must be sought prior to placing order.									
								Unit.	Per Sft
Sr. No.	Ref	Detail	Unit Rate (British System) per Sft						
			Qty		Rate Per Unit		Amount (Rs.)		
		Area 1920 Sft							
		Material							
1	MR	Supply of PEB Shed (32' x 60')	1	Sft	2,421,927	Sft		2,421,927	
		GST	17	%				411,728	
							Total.	2,833,655	
2	MR	Installation Charges						100,914	
		PST	16	%				16,146	
							Total.	117,061	
		Contractor's Profit on item No. (1&2)	20	%				504,568	
		Total						3,455,284	
		ITEM RATES							
		Composite rate 1920 Sft					Rs.	3,455,290	
		Composite rate Per Sft					Rs.	1,800	

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB									
RATE ANALYSIS									
Description									
Supply, Installation, testing and commissioning of following size 56" ceiling fan, complete with capacitor, hanging rod, canopy, blades, dimmers nuts and bolts complete in all respect.									
								Unit.	Each
Sr. No.	Ref	Detail			Unit Rate (British System) per Each				
					Qty	Rate Per Unit		Amount (Rs.)	
		<u>Material</u>							
1	MR	Ceiling Fan			1.00	No.	5,525	No.	5,525
								Total.	5,525
2		Carriage & Installation Charges	5	%					276.25
								Total.	5,801
		Contractor's Profit on item No. (1&2)	20	%					1,160
		Total							6,962
		<u>ITEM RATES</u>							
		Composite rate Per Each						Rs.	6,961
		Say						Rs.	7,000

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB										
RATE ANALYSIS										
Description										
Supply at site brand new 20KVA Prime Power Diesel Generator with fuel tank for 8 hour opration and Sound and Weather Proof canopy installed and commission at site on RCC PAD as per Manufacturer specifications to bear the Load of 20KVA DGSet complete in all respect, Loding and unloading on site to install on PAD and Control wires from ATS panel to DG Set for smooth operation including all necessary accessories required to complete this job as per enigneer incharge instructions.										
									Unit.	Each
Sr. No.	Ref	Detail	Unit Rate (British System) per Each							
			Qty		Rate Per Unit		Amount (Rs.)			
		<u>Material</u>				1 \$ = 225				
1	MR	Brand New KOHLER-SDMO France Diesel Generator Set, Model K22; 20 kVA Prime Power	1	No.	2,522,025	No.	2,522,025			
2	MR	Sound and Weather Proof Canopy	1	No.	245,000	No.	245,000			
								Total.	2,767,025	
3		Transportation & Installation Charges	5	%						138,351
								Total.	2,905,376	
		GST 17% on item No. (1&2)	17	%						470,394
		Contractor's Profit on item No. (1,2&3)	20	%						581,075
		Total								3,956,846
		<u>ITEM RATES</u>								
		Composite rate Per Each						Rs.	3,956,850	



WAHDAT INDUSTRIAL SERVICES (PRIVATE) LIMITED

Address: 189/190 – Commercial Area, Airline Society, Khayaban-e-Jinnah, Lahore

Date: April 26th, 2022

Client: M/s Jers Consultancy

Reference No: PEBS-22-069

Project Name: Parking Shed

Dear Sir,

Thank you for giving us the opportunity to submit our proposal for the above-mentioned project.

PEBS proposal is based on the drawings and data provided by you and is in accordance with PEBS standard design practices and terms & conditions of sale.

PEBS scope of work covers design, fabrication, supply and installation of Pre-Engineered Building in strict accordance to the standards and specifications of PEBS, unless otherwise stated in the proposal.

PEBS intends to comply with your project requirement however kindly refer Section 9 of this proposal for exclusions, deviations and assumptions which are applicable to this offer.

Prices are valid for a period of 3 days from the date of this quote.

We are keen to secure this project and start new business relations with your esteemed company.

We assure you of superior quality of our buildings and best after sale services.

Sincerely

Director



WAHDAT INDUSTRIAL SERVICES (PRIVATE) LIMITED

Address: 189/190 – Commercial Area, Airline Society, Khayaban-e-Jinnah, Lahore

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WAHDAT INDUSTRIAL SERVICES (PRIVATE) LIMITED

Address: 189/190 – Commercial Area, Airline Society, Khayaban-e-Jinnah, Lahore

Section No.1: Building Parameters

Sr.	Building Description		
1	Frame Type		Mono-Slope
2	Number of interior Columns		-
3	Width (m)		9.753 O/O of Steel Line
4	Length (m)		18.287 27.431 36.574 45.718 O/O of Steel Line
5	Clear Height (m)		6.096
6	Roof Slope (Rise: Run)		As per design
7	Bay Spacing (m)		As per design
8	Width Module		-
9	Base Condition	Exterior Column	Pinned
		Interior Column	Pinned
10	Bracing Types	At Roof	Cable Bracing
		At Wall	
11	Type of Eave		Eave Gutters & Downspouts
12	Type of Gable		Gable Trim
13	Fillet Weld of Built up Sections		Single Side Welding for all Built up Sections

Sr.	Wall Conditions	
1	Front Side Wall	Open
2	Back Side Wall	Open
3	Left End Wall	Open
4	Right End Wall	Open

WAHDAT INDUSTRIAL SERVICES (PRIVATE) LIMITED

Address: 189/190 – Commercial Area, Airline Society, Khayaban-e-Jinnah, Lahore

Item	Roof and Wall Cladding	
Roof Cladding	Outer Sheet	0.5mm (Nominal) Pre-Painted Aluzinc Sheets (Imported)
	Insulation	Not Applicable
	Inner Sheet	Not Applicable
Wall Cladding	Outer Sheet	Not Applicable
	Insulation	Not Applicable
	Inner Sheet	Not Applicable

Exclusions

- All kind of works not offered in our scope of supplies & services.
- Any civil works including but not limited to RCC Screed, Brick Masonry, Excavation, Foundation Works, D.P.C, Flooring, and Plastering is not included in our scope.
- Doors, window, false ceiling, Glasswork, Fascia etc.
- Anchor bolts fixing, Foundations, Electrification and Plumbing etc.
- Electricity and water at site during erection

WAHDAT INDUSTRIAL SERVICES (PRIVATE) LIMITED

Address: 189/190 – Commercial Area, Airline Society, Khayaban-e-Jinnah, Lahore

Section No.2 Building Loads

Sr.	Design Load	Value
1	Design Live Load on Roof (kN/m ²)	0.57
2	Design Live Load on Frame (kN/m ²)	0.57
3	Co-lateral Load (kN/m ²)	0.00
4	Wind Speed (km/hr)	135
5	Wind Exposure Category	B
6	Seismic Zone	2B (as per UBC 1997)
7	Rainfall Intensity (mm/hr)	150 mm/hr.
8	Solar Loading (kN/m ²)	0.00

Section No.3 Applicable Codes

Loads applied on buildings and tolerances for fabrication and erection are in accordance with:

The 2010 edition of the Low Rise Building Systems
 Manual By Metal Building Manufacturers Association, Inc.
 (MBMA) 1300 Summer Ave., Cleveland, Ohio 44115, USA

Hot rolled sections and built up sections are designed in accordance with:

The 2005 edition of the Manual of Steel Construction,
 By American Institute of Steel Construction, Inc. (AISC)
 1 East Wacker Drive, Suite 3100, Chicago, Illinois 606012001,

Cold formed members are designed in accordance with:

The 2001 Edition of Cold Formed Steel design
 Manual By American Iron and Steel Institute (AISI) 1000
 16th Street, NW, Washington, DC 20036, USA

Welding and its inspection / testing for Steel Structure Fabrication will be in accordance with:

The latest Edition of Structural Welding Code - Steel (AWS D1.1: 2008)
 By American Welding Society (AWS)
 550 NW LeJeune Road, Miami, FL 33126, USA

WAHDAT INDUSTRIAL SERVICES (PRIVATE) LIMITED

Address: 189/190 – Commercial Area, Airline Society, Khayaban-e-Jinnah, Lahore

Section No.4: Material Specifications

Sr.	Building Component		Material Specification	Strength
1	Built-up Section		ASTM A-36	Fy:25.00 kN/cm ²
2	Hot Rolled Sections	I-Sections Channels		
3	Cold Formed Secondary Members	Purlins Girts	ASTM A653M Grade 340 Class 1 Z275	Fy:34.0 kN/cm ²
4	Sheeting Panels	Roof Wall	PPGL as per ASTM A792M Grade 345B Class 1 AZM150	Fy:34.0 kN/cm ²
5	Diagonal "X" Bracing	Bracing Cable	ASTM A475 Extra High Strength Class A	Pu: 120kN
		Bracing Rods	ASTM A36M (or Equivalent)	Fy:25.0 kN/cm ²
		Flange Braces	ASTM A36 (or Equivalent)	Fy: 25 kN/cm ²
6	Sag Rods		ASTM A36M (or Equivalent)	Fy:25.0 kN/cm ²
7	Base and Gable Angles		ASTM A653M Grade 340 Class 1 Z275	Fy:34.0 kN/cm ²
8	Anchor Bolts		ASTM A36M (or Equivalent)	Fy:25.0 kN/cm ²
9	High Strength Bolts		ASTM A325 Type 1 (Hot-dip Galvanized)	Fy:66.0 kN/cm ²

Material Finish

- All primary members will be cleaned and then painted **with single coat of red oxide primer (DFT 30-40 microns)** and then painted with **final enamel paint. (70-80 microns)**
- All secondary members will be made of pre-galvanized coil.



WAHDAT INDUSTRIAL SERVICES (PRIVATE) LIMITED

Address: 189/190 – Commercial Area, Airline Society, Khayaban-e-Jinnah, Lahore

Section No.5: Approval Drawings

Approval drawings under this agreement will be submitted in 2 weeks from the date of receipt of the following:

- Signed Contract
- Advance Payment

Client must sign and return the Approval drawings to PEBS within 1 week of receipt of these drawings.

Variation requested by client after submission of Approval drawings will result in change in contract price and delivery period. Such change must be mutually agreed in writing as Variation Order.

Section No.6 Delivery Schedule

PEBS will design, fabricate and dispatch the material to Job site in 08-10 weeks. However, this period will begin from the latest date of receipt and acceptance of the following:

- Signed Contact
- Advance Payment
- Receipt of Signed Approval Drawings from client
- In case of any variation, Clients written acceptance for variation in price and delivery period.

Delivery period mentioned above is dependent on client fulfilling all its obligation in a timely manner, including the return of approval drawings and adhering to agreed payment schedule.

Erection of the Building will start after the arrival of first dispatch material at job site. **Erection schedule will be established at the finalization stage.**

WAHDAT INDUSTRIAL SERVICES (PRIVATE) LIMITED

Address: 189/190 – Commercial Area, Airline Society, Khayaban-e-Jinnah, Lahore

Section No. 7: Prices

Sr. #	Description	Price (PKR)
1	Supply of PEB Shed (32' x 60')	2,421,927/-
2	Supply of PEB Shed (32' x 90')	3,632,891/-
3	Supply of PEB Shed (32' x 120')	4,843,855/-
4	Supply of PEB Shed (32' x 150')	6,054,818/-
Total Supply Amount (Exclusive of GST)		16,953,491/-
GST @ 17%		2,882,094/-
Total Amount (Inclusive of GST)		19,835,585/-

1	Installation Services (32' x 60')	100,914/-
2	Installation Services (32' x 90')	151,371/-
3	Installation Services (32' x 120')	201,827/-
4	Installation Services (32' x 150')	252,283/-
Total Installation Services Amount (Exclusive of PST)		706,395/-
PST 16%		113,023/-
Total Amount Inclusive of PST)		819,419/-

The Supply amount is subjected to sales tax on supplies. Applicable percentage (17%) will be added to our bill and sales tax invoice will be provided of the same upon receipt by Wahdat Industrial Services (Pvt) Ltd.

The Supply amount is subjected to 4% income tax under section 153(1)(a)(Income tax Ordinance). Client shall provide withholding challans of the same.

The Installation services amount is subjected to sales tax on services. Applicable percentage (16%) will be added to our bill and sales tax invoice will be provided of the same upon receipt by Ittefaq Building Solutions (Pvt) Ltd.

The Installation services amount is subjected to 8% income tax under section 153(1)(B)(Income tax Ordinance 2001). Client shall provide withholding challans of the same.



WAHDAT INDUSTRIAL SERVICES (PRIVATE) LIMITED

Address: 189/190 – Commercial Area, Airline Society, Khayaban-e-Jinnah, Lahore

Section No.8 Payment Terms

Supply Payment

- **50% - Advance on Signing of Contract or Receipt of PO**
- **25% - Before Dispatch of Building Framing**
- **25% - Before Dispatch of Building Sheeting**

Installation Services Payment

- **50% - Before Installation Services**
- **50% - After completion of Installation Services**

Section No.9: Deviations, Exclusions and Assumptions

Manufacturing and supply will be initiated only after receipt of complete engineering package duly approved by the Client.

Both parties agreed that the price quoted in this quotation is based on a lump sum basis calculated according to the building descriptions as well as the required loading and codes shown above and not as a re-measurable basis. Hence, the project weight given at the quotation stage is only indicative and no claim will be entertained in case of a reduction in the building weight after the final design or the shipment. However, should there be any revision to the scope of the work after signing of the contract which may result in an increase or decrease in the contract value.



WAHDAT INDUSTRIAL SERVICES (PRIVATE) LIMITED

Address: 189/190 – Commercial Area, Airline Society, Khayaban-e-Jinnah, Lahore

Section No. 10 Standard Terms and Conditions

- **Changes / Revisions**

Any change or revision to the above stated scope of supply may lead to a variation in the price and the delivery period. A change must not hold payment for work completed as per original contract.

- **Additional Works**

For any additional work (which is not included in our scope of work) cost will be charged separately from given price

- **Escalation clause**

Prices are quoted as per prevailing market conditions: any change in material price can affect the quoted price after expiry of quotation validity period.

- **Proposal Validity**

Prices are valid for a period of 3 days from the date of this quote.

If the job (project) is not “Finalized by the client” within 3 days from the date of entering this order, it will be subject to delivery change and price change in accordance with the prevailing delivery schedules and prices at the end of above noted period.

- **Termination of Agreement**

If clients terminate the agreement after payment of advance and submission of approval drawings by PEBS then PEBS have right to keep the advance payment to cover the expenses that occurred during that period and client will have no claim on that payment.



URFA ELECTRIC (SMC) PVT LTD.
 NTN# . 5381194 , SRTN# 3277876163771

**HOUSE NO E279/1, STREET NO 2,
 RIFFLE RANGE ROAD WALTON ROAD
 LAHORE CANTT.
 WWW.OPPLE.COM
 Email: OPPL.ECOTEK@GMAIL.COM
 Mobile : 0301-8440368, 0332-3877786**

QUOTATION

QTN-01544-1

Customer Name **JERS CONSULTANCY PVT LTD**

Date 05-08-2022

Contact JERS CONSULTANCY PVT LTD

Mobile No MR ASAD: 03004315935

Sr	Description	Quantity	Rate	Amount
1	140053331 LED-HML455A-D0.2*40-6500K-Knight	Nos 1	Rs 4,000.00	Rs 4,000.00
2	503002016210 LED-E1-T5 batten-870mm-10.5W-4000K	Nos 1	Rs 850.00	Rs 850.00
3	540001136310 LEDDownlight RC-US R150-12W-6500-WH-SASA - PF >.95	Nos 1	Rs 1,000.00	Rs 1,000.00
4	540001136310 WITH BACK BOX LEDDownlight RC-US R150-12W-6500-WH-SASA - PF >.95	Nos 1	Rs 1,500.00	Rs 1,500.00
5	545001007410 LEDHighbay-P4 110W-5700-60+100D-GY-GP	Nos 1	Rs 24,500.00	Rs 24,500.00

Total Rs 31,850.00

Grand Total Rs 31,850.00

Rounded Total **Rs 31,850.00**

In Words PKR Thirty One Thousand, Eight Hundred And Fifty only.

Terms & Conditions:

PRICE: Ex-Warehouse

PAYMENT: 100% Advance payment.

DELIVERY: Subject to availability of stock otherwise 7-8 weeks from the date of confirmed PO/Advance.

TAXES & DUTIES:	Quoted Price Ex-clusive of GST 17% , Incom Tax 4.5% not be deducted , exemption certificate available.
DUTIES:	As per Govt. rules and regulations, In case of any change in the terrif from Govt. of Pakistan that will be applicable accordingly.
VALIDITY:	20 days.
WARRANTY:	2 Year Warranty against any manufacturing defect.
OTHER:	Force majour clause is applicable, partial payment and partial payment is allowed.

RIZWAN HUSSAIN

Cell: +92 301 8440368



JUBILEE CORPORATION

Switchgear • Automation • Instrumentation • Controls

Technology Driven Quality Service

First Floor, Fakhri Trade Centre, Shahrah-e-Liaquat, P.O. Box: 677,
Karachi-74200 Pakistan. UAN: 021 111 000 520
Tel: +92 21 3260 2200-07 (8 lines), Fax: +92 21 3260 2211
Web: www.jubileecorporation.com
Email: jubilee.corp@cyber.net.pk

Dated: Wednesday, 10 August 2022
Messrs: JERS CONSULTANT
To: Mr. Asad Malik
SUB: Quotation for switchgear components
REF: PS/10082022

SR NO.	DESCRIPTION	RATING	MODEL	MAKE	ORIGIN	QTY	U/P	TOTAL
3KW DOL STARTER COMPONENTS BASED ON TERASAKI								
1	MCCB TP ADJ	12.5A TO 20A, 30KA	S125NJ	TERASAKI	JAPAN	1	25,000	25,000
2	MAGNETIC CONTACTOR TP	18A @AC3	TC-18b	TERASAKI	KOREA	1	6,300	6,300
3	THERMAL OVERLOAD RELAY	6-18A	TK32a	TERASAKI	KOREA	1	8,000	8,000
							39,300	
							Errors & Omissions Expected (E&OE)	
7.5 KW STAR DELTA STARTER COMPONENTS BASED ON TERASAKI								
1	MCCB TP	20-32A, 30KA	S125NJ	TERASAKI	JAPAN	1	25,000	25,000
2	MAGNETIC CONTACTOR TP (MAIN)	18A @AC3	TC-18b	TERASAKI	KOREA	1	6,300	6,300
3	MAGNETIC CONTACTOR TP (DELTA)	18A @AC3	TC-18b	TERASAKI	KOREA	1	6,300	6,300
4	MAGNETIC CONTACTOR TP (STAR)	18A @AC3	TC-18b	TERASAKI	KOREA	1	6,300	6,300
5	THERMAL OVERLOAD RELAY	6-18A	TK32a	TERASAKI	KOREA	1	8,000	8,000
							51,900	
							Errors & Omissions Expected (E&OE)	

TERMS & CONDITIONS

Price Validity:

7 days from the date of offer submission. For further extension in validity, our confirmation in writing is necessary.

Our prices are calculated on current date of currency parity against PKR. In the event of any change in international currency rates / currency devaluation by government until final supply of order, rate difference will be on customer account.

Prices are calculated on present custom duties and government taxes. Any change in government regulation or duties and taxes at the time of import of material or during execution of order against customer's confirmed Purchase order will be on customer account.

Delivery Period:

Mostly from ready stocks. Remaining about 12-14 weeks from the date of confirmed purchase order and advance payment, whichever is later.

Any changes / revision / addition in purchase order after confirmation, delivery date will reset accordingly.

Force Majeure:

Our offer is subject to usual Force Majeure clause.

General Sales Tax:

General Sales Tax will be charged on the offered prices adhering to the law of Government of Pakistan. [Note: Sales Tax @ 17% will charge to you if you are a registered person (under Sales Tax Act, 1990). If you are unregistered person (as per law) then additional 3% will charge as further tax.]

Our supplies are excluded from SWHT under SRO 897 of 2013 (Point (c)) issued by FBR on October 4, 2013 as the commercial importers who paid value addition tax on such goods at the time of import as prescribed under Chapter X of the Sales Tax Special Procedure Rules, 2007 are excluded from the provision of these rules and the Sales Tax Special (Withholding) Rules, 2007 shall not be applicable on such supplies.

Payment Terms:

100% advance payment along with confirm purchase order with Sales Tax.

Income Tax:

Our supplies are exempted from WHT u/s 153(5) of the Income Tax Ordinance, 2001 as all taxes are duly paid at import stage u/s 148 against the supplies made to you by us.

Warranty:

One-year warranty against any manufacturing defects. Our liability excludes natural wear & tear, defects arising after transfer of risk owing transport risks, installation, operation, maintenance contrary to manuals and instructions, mishandling or negligence on part of the customer.

Upon receipt of customer's intimation, we shall within adequate time repair or replace, at our option, the defective part, to bring the product in working condition.

ADIL SHER
DEPUTY MANAGER PROJECTS

MANSOOR PASHA
GM PROJECTS



**JERS CONSULTANCY
(PVT.) LTD.**

**PROPOSAL FOR 20 kVA & 30 kVA
KOHLER-SDMO FRANCE
BRANDED DGSETS**

Greaves Pakistan (Pvt) Ltd
HEAD OFFICE

Modern Motor House, Beaumont Road,
Karachi-75530, Pakistan
UAN: 021-111-354-111

Branch Offices

LAHORE

3, Sunder Das Road,
Lahore.
UAN: (042) 111-354-111
Tel: (042) 36362241-2

Islamabad

1st Floor, Razia Sharif Plaza,
Blue Area, Islamabad.
UAN: (051)-111-354-111 Ext: 5117
Tel: (051) 2344543-7

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S. No.	CONTENTS	
1.	Kohler SDMO Dealer Ship Certificate	Annex-A
2.	Executive Summary	Annex-B
3.	Price Summary	Annex-C
4.	Terms and condition	Annex-D
5.	Data Sheet Of Generators	

TO WHOM IT MAY CONCERN**Subject : SALE AUTHORIZATION FOR 2022**

We undersigned SDMO INDUSTRIES, 270 rue Kérervern, 29490 Guipavas, FRANCE,

Hereby confirm that the company GREAVES PAKISTAN (Pvt) Limited having its principal place of business at Modern Motors House, Beaumont Road, Post Box 4908, Karachi 75530, PAKISTAN, is authorized on its behalf to sell, install and maintain the KOHLER-SDMO branded products in the territory of PAKISTAN.

This agreement is valid for one year from the date of signature of this authorization and might be renewed for a one-year period with the written agreement of SDMO Industries.

Each party shall be entitled to terminate this agreement at any moment by giving a 3 (Three) month notice by registered mail.

Neither party shall be required to compensate the other solely by virtue of termination of this agreement.

The sale of our products to GREAVES PAKISTAN (Pvt) Limited is subject to our General Conditions of Sale in force on the date of the order of which GREAVES PAKISTAN (Pvt) Limited has been informed.

This authorization cancels and replaces any previous contracts, correspondence or exchanges of any nature which have the same or similar purpose.

Made in Brest on November 30, 2021.

Olivier ANDRIEU
Director Sales Distribution, PS EMEA

**SDMO Industries**

Headquarters / Siège social : 270 rue de Kérervern – 29490 Guipavas Tel. + 33 (0)2 98 41 41 41

SDMO Industries CS 40047 – 29801 Brest Cedex 9 – France

SDMO Industries – SAS au capital de 17 066 520 € - R.C.S. Brest 450 48 202 985 – N° TVA Intracommunautaire : FR60548202985

www.kohler-sdmo.com



GREAVES PAKISTAN (PVT.) LIMITED

Razia Sharif Plaza, 1st Floor, 90-Jinnah Avenue, Blue Area,
Islamabad, Pakistan



Ref # GFG/LHR/0596/TI
NTN # 0698508-4

AUG 11, 2022

M/s. Jers Consultancy (Pvt.) Limited
24 Civic Center Street,
Township Commercial Area,
Lahore – Pakistan

Kind Atten. : Mr. Asad Khalid

SUBJECT : PROPOSAL FOR KOHLER-SDMO 20 kVA & 30 kVA PRIME
RATINGDIESEL GENERATORS

Dear Sir,

We are pleased to submit our competitive proposal formulated for subject mentioned rating along with salient features of our branded **Diesel GenSet – KOHLER-SDMO (Made in France)** for your review and kind consideration.

We **Greaves Pakistan** is one of the leading names in the business hub of Pakistan, We are authorized dealer of Kohler-SDMO DG Sets (100 Years Old) which has achieved an enormous success throughout the world complying with ISO 9001 quality standards. A strong and committed team from Greaves Pakistan ensures that the offered package gives you best value for your investment.

Greaves Pakistan has its head office in **Karachi**, offices located at **Islamabad, Lahore, Faisalabad, Multan, Hyderabad and Peshawar**. Our trained and qualified Engineers are available to provide complete backup support after sales services at your door step 24/7 any time. A complete range of spare parts are kept in order to meet any emergency requirement both during and after the warranty period.

We are also leading business oriented company in Cement Industry-Cherat Cement, CNG-Comp Air, Air conditioning-York, and UPS-ETN Power.

Sincerely,

Engr. Tahir Imran
Deputy Manager Sales
Power Generation Division
Contact: 0336-5366494
tahir.imran@gfg.com.pk



**KOHLER-SDMO FRANCE (FOREIGN COUPLED)
BRANDED DIESEL GENERATING SET
20 kVA Prime & 30 kVA Prime**

Technical Description

Kohler-SDMO: Powered with Kohler France Engine & Leroy Somer Alternator commercially branded as Kohler.

Complete Machine Manufactured & Shipped from France factory

Diesel Generator 1500 RPM, 400 Volts, 0.8 P.F, 50 HZ

Salient Features:

- IP23 Protection
- Class H Insulation
- Automatic Voltage Regulator
- Emergency Push Button
- User O&M Manual
- First Oil Filled
- First Coolant Filled.
- Engine Sump Oil Drain Tap
- Engine Coolant Drain
- Control Systems
- One Set Instruction Manual And Electrical Wiring Diagram
- Automatic Engine Shutdown Protections
- Batteries

PRICE SUMMARY SHEET

(Seller's Scope of Supply)

20kVA & 30 kVA PRIME RATING

DG SETS

IMPORTED ITEMS:

Sr.	Description of Stores	Qty.	Unit Price (\$)	Total Price (\$)
1.	Brand New KOHLER-SDMO France Diesel Generator Set, Model K22; 20 kVA Prime Power and 22 kVA Standby Power @ 50 Hz, 0.8 PF, 400 V, 1500 RPM (as per specifications attached) Kohler Made in France Engine <i>(Complete Machine Manufactured & Shipped from France Factory)</i>	1 No.	11,209/- \$	11,209/- \$
2.	Brand New KOHLER-SDMO France Diesel Generator Set, Model K33; 30 kVA Prime Power and 33 kVA Standby Power @ 50 Hz, 0.8 PF, 400 V, 1500 RPM (as per specifications attached) Kohler Made in France Engine <i>(Complete Machine Manufactured & Shipped from France Factory)</i>	1 No.	11,628/- \$	11,628/- \$
TOTAL AMOUNT (Excluding GST) – FOR Karachi Rate				22,837/- \$

LOCAL EQUIPMENT & WORKS:

Sr.	Description of stores.	Qty.	Unit Price	Total Price
1.	Supply of sound and weather proof canopy approximate size of provided drawing is 14 SWG base frame and 14/16 swg structure fabricated of Mild steel with less than 85 dba at 3 mtrs in open area – 20 kVA DG	1 No.	245,000	245,000
2.	Supply of sound and weather proof canopy approximate size of provided drawing is 14 SWG base frame and 14/16 swg structure fabricated of Mild steel with less than 85 dba at 3 mtrs in open area – 30 kVA DG	1 No.	265,000	265,000
3.	Charges for Transportation of Power Generating Sets from Karachi till site on ground (including loading, unloading)	2 JOB	75,000	150,000
TOTAL AMOUNT (Excluding GST/PST)				660,000
ADD 17% GST ON SUPPLIES				86,700
ADD 16% PST ON SERVICES				24,000
TOTAL AMOUNT (Including GST/PST)				770,700

GENERAL TERMS & CONDITIONS

VALIDITY	1 week only from quotation date, thereafter, subject to our re-confirmation.
AVAILABILITY	<p>Lead Time: 30 kVA: Available ex stock subject to prior sale</p> <p>20 kVA: 4-5 Months. Please confirm at the time of award of order.</p> <p>Local Items: 04 Weeks after issuance of PO & approval of technical submittal.</p>
PAYMENT TERMS	100% of advance payment with confirmed purchase order.
WARRANTY	<p>1 year warranty or 1000hrs* after Delivery/Commissioning whichever comes first.</p> <p><u>(Standard KOHLER SDMO Warranty Certificate will govern)</u></p> <p><small>*For manufacturing default only</small></p>
FORCE MAJEURE	This offer is subject to standard force majeure conditions
PRICING	<p>Our prices are based on current exchange rates (1\$ = PKR 220/-) and will be revised if there are any escalation in exchange rates. Please note that the quoted rate for 30 kVA DG Set is subject to revision for more than 1% downward fluctuation in dollar price.</p> <p>Any further duties (including regulatory duty) and taxes, imposed after the date of quotation or agreement, will be borne by the customer</p>
CUSTOMER RESPONSIBILITY	Any other work which has not been quoted specifically in the seller's scope of Supply/Work.
TAXES	The subject DG Set is imported and will be supplied to you without any value addition. Advance Income Tax has already been paid at the import stage U/S 148 of the Income Tax Ordinance 2001, this is in compliance to circular No.5 of 2002 dated 11 th April, 2002 issued by CBR. Hence tax under section 153 shall not be deducted from the payment of the cost of Generators (imported) under clause 47 (A) of Part IV of the second schedule to the income tax ordinance 2001, therefore income tax deduction is also not applicable on it.

5 GREAVES PAKISTAN (PVT) LTD. 3 – SUNDAR DAS ROAD, LAHORE UAN: 111-354-111 Ext: 4302 – Mobile: 0336-5366494

<p>L/C TERMS</p>	<p>Establishment of 100% Irrevocable Letter of Credit at sight is required either by the Supplier or Client against PRINCIPLE PROFORMA INVOICE which will be provided from KOHLER-SDMO FRANCE. All charges pertaining to LC establishment and confirmation will be borne by the customer.</p>
-------------------------	---

Buy Online



Deluxe

Price from **5,525 Rs**

☐ 1 color available

Buy Online



Jazz

Price from **5,795 Rs**

☐ ☐ 2 colors available

Buy Online



Classic Super

Price from **5,895 Rs**

☐ 1 color available

Buy Online



Classic

Price from **5,895 Rs**

☐ 1 color available

Buy Online



Hilux

Price from **5,975 Rs**

☐ ☐ 2 colors available

Out of stock



Classic Gold

Price from **5,995 Rs**

☐ 1 color available

ANNEXURE C

ECONOMIC BENEFITS

Economic Benefits

The construction of parking shed can be beneficial for the community in multiple ways. The Economic benefits of a parking shed are given below:

- A safe yard is provided for SWM vehicles in mechanized form.
- Parking shed helps to save a lot of energy. Car parking shade can be very beneficial to save a lot of energy by protecting it from the heat sun. The shades can allow maintaining a cooler environment for the vehicles and also reduces the amount of energy required to cool down from the heat of the sun.
- The parking shed helps in prevention of vehicles from rusting, sunlight, weather conditions, etc.
- In-house workshops are provided for the repairing and maintenance of vehicles.
- The parking shed provides safety to SWM vehicles.
- The parking shed helps in prevention from heating up of engines.

Annexure-D

Gant Chart

**TENTATIVE PROJECT IMPLEMENTATION SCHEDULE FOR CONSTRUCTION OF PARKING SHED FOR SWM MACHINERY
YEAR (2022-2023)**

Sr.No	Activity Name	NOV-22				DEC -22				JAN -23				FEB-23				MAR-23				APR-23			
1	Construction of Boundary Wall & Gate																								
2	Building & Allied Structures																								
3	Parking Sheds																								
4	Workshop & Washing area																								
5	Walkways & Pathways																								

Annexure-E

E&S Checklist and SOPs

ENVIRONMENTAL & SOCIAL SCREENING CHECKLIST

Instructions:

Environmental and Social Focal Persons (ESFPs)¹ nominated by the MCs for PCP environmental and social management, will use this checklist in field for environmental and social screening and categorization of each and every sub-project proposed to be executed under the Program.

Deputy Program Officers-Environmental and Social Management deputed by PMDFC in regional offices will technically assist and support the ESFPs/MCs in filling in of this Checklist

It is to be attached with the main document² of sub-projects at planning stage and will be duly signed by the relevant ESFP and endorsed by the respective DPO-ESM

This checklist focuses on environmental issues and social concerns. To ensure that social dimensions are adequately considered, Involuntary Resettlement Screening Checklist will also be used

(iii) The purpose of this E&S Screening Checklists is to identify potential "Negative" impacts of environmental and social attributes or to enhance the existing environmental & social benefits. Use the "remarks" section to discuss any anticipated mitigation measures.

Name of ESFP: *Alla h. Ditta*

Name of MC: *Busewala*

Sub-Project Sector: *Dev Solid waste management*

Sub-Project Title: *Development of Parking Area for SWM machinery & equipment at officers colony.*

Sub- Project Categorization:

E-1

S-1

E-2

S-2

E-3 ✓

S-3 ✓

Date of Screening:

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		✓	
Any surface water body (river, canal, stream, lake, wetland) within 250 meter of the proposed sub project ³		✓	
Estuarine		✓	

¹ In all MCs, ESFPs are notified by Local government; MO (I&S) are focal persons for environmental sector and MO(P) are focal persons for social sectors.

² It is meant as PC-I and/or engineering estimates of sub-project

³ Ibid

Screening Questions	Yes	No	Remarks
Special area for protecting biodiversity		✓	
Buffer zone of protected area		✓	
Mangroves Forest		✓	
Man-made forest /game reserve, orchid /crops or any other area of environmental importance		✓	
Socially sensitive /important areas/communities/ people?			
PCRs and or any site of cultural/religious importance (Graveyard, Shrine, Mosque, Church, <i>Gordhwarah</i> , Temple, Fort, archeological/historical site) within 100 m of the proposed subproject ¹		✓	<i>one mosque was observed outside premises (no impact envisaged)</i>
Sensitive receptors (Schools, colleges, hospitals and clinics) within 100 meter of the proposed sub project ²		✓	
Any graveyard of local community (Muslims or Christians)		✓	
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 ⁶ of the society and women or children)?		✓	
Already existing infrastructure ⁷ (including public amenities) which may be required to dismantle or may be affected temporarily by any means?		✓	
B. Potential Environmental Impacts			
Will the Sub-Project cause...			
1. Disturbance to habitats/biodiversity of environmentally sensitive or protected areas?		✓	
2. Cutting of trees?		✓	
3. Disruption to habitats/biodiversity of surrounding ecosystem/environment?		✓	
4. Generation of wastewater during construction or operation?		✓	
5. Pollution of surface water/ground water due to wastewater discharge from construction site or due to direct/indirect disposal of waste water?		✓	

¹ According to Environmental Assessment Guidelines adopted by Punjab EPA

² Ibid

⁶ due to caste, creed, religion or gender e.g. transgender

⁷ Sewerage /Drainage system, Water supply lines, tube-wells, WAPDA/Telephone transmission lines/electric poles, Railway tracks, Gas pipelines, Roads, Shops/Plazas, Banks, Industry, Disposal stations etc.

Screening Questions	Yes	No	Remarks
6. Alteration of surface water hydrology of waterways resulting in increased sediment in streams/rivers or due to increased soil erosion at construction site?		✓	
7. Deterioration of surface water quality due to silt runoff and sanitary wastes from worker-based camps and chemicals used in construction?		✓	
8. Over pumping of ground water, leading to salinization and ground subsidence?		✓	
9. Serious contamination of soil due to construction works?		✓	
10. Aggravation of solid waste problems in the area?		✓	
11. Generation of hazardous waste?		✓	
12. Increased air pollution due to sub-project construction and operation?		✓	
13. Noise and vibration due to sub-project construction or operation?		✓	
14. Creation of temporary breeding habitats for diseases such as those transmitted by mosquitoes and rodents due to solid/liquid?		✓	
15. Use of chemicals during construction?		✓	
C: Potential Social Impacts Will the Sub-Project cause...			
1. Impairment of historical/cultural areas; disfigurement of landscape or potential loss/damage to Physical Cultural Resources (PCRs)?			
2. Displacement or involuntary resettlement of people? (physical displacement and/or economic displacement) (If "Yes", please also fill Involuntary Resettlement Screening Checklist)		✓	
3. Disproportionate impacts on the poor, women and children and or other vulnerable groups ⁸ (mentioned above)?		✓	
4. Temporary impediments in movements of people/transport and animals?		✓	

⁸ 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
5. Large population influx during sub-project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)?		✓	
6. Social conflicts if workers from other areas are hired?		✓	
7. Risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during project construction and operation?		✓	
8. Risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel and other chemicals during construction and operation?		✓	
9. 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?		✓	
10. Any impact on sensitive receptors (mentioned above)		✓	
11. Any impact of negative nature on already existing infrastructure including public amenities		✓	

Prepared By: Sub-Engineer / Add MO (I & S)

Name: Allah Ditta

Signature: 

Date: 12-02-2021

DEPUTY MUNICIPAL OFFICER (I & S)
Municipal Corporation
Burewala

Endorsed By: DPO - ESM

Name: UMAR FAIROOQ

Signature: 

Date: 12/02/2021

PUBLIC CONSULTATION FORM

1- Title of the sub-project

Development of parking area for SWM machinery & Equipments -

2- Location of the sub-project

Officers colony (MC Burewala)

3- Name of the person interviewed

CNIC # 36601-0316915-5

Mr. M. Shafiq


4- Occupation of the person

Tubewell operator (Night shift).

5- Remarks regarding the proposed sub-project

Mr. Shafiq appreciate the MC Burewala's initiative for development of parking sites, and shares his views that new machinery will positively impact the cleaning activities in city.

Signature of interviewer


12/2/2021.

Signature of person interviewed



PUBLIC CONSULTATION FORM

1- Title of the sub-project

Development of Parking area for SWM machinery & Equipment

2- Location of the sub-project

Officers colony (MC Burewala)

3- Name of the person interviewed

CNIC # 36601-1997116-9

Ms. M Ali Azzal

4- Occupation of the person

Tubewell operator (Day shift).

5- Remarks regarding the proposed sub-project

Ms. Ali Azzal Supports the decision of MC Burewala for development of parking areas, he suggested that keeping in view the safety & security of equipments proper street lights shall be installed.

Signature of interviewer


12/2/2021.

Signature of person interviewed



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

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، فوٹوکاپی، ریکارڈنگ یا کسی اور طرح سے دوبارہ بنایا یا منتقل نہیں کیا جاسکتا۔



پیش لفظ

لوکل گورنمنٹ اینڈ کمیونٹی ڈویلپمنٹ ڈیپارٹمنٹ اور پنجاب میونسپل ڈویلپمنٹ فنڈ کمپنی (PMDFC) نے ورلڈ بینک کے اشتراک سے پنجاب سٹیٹس پروگرام (PCP) کا کامیابی سے اجرا کر دیا ہے۔ اس منصوبے کے تحت صوبہ پنجاب کے 16 چھوٹے شہروں (MCs) بشمول بہاولنگر، بورویالا، خانیوال، کوٹ ادو، وہاڑی، گوجرہ، جھنگ، کمالیہ، اوکاڑا، ڈسکہ، حافظ آباد، جہلم، کاموکی، مریدکے اور ملتان کی ترقیاتی کاموں پر کامیابی سے کام جاری ہے۔ ان ترقیاتی منصوبوں میں ویسٹ مینجمنٹ، پانی کی فراہمی، نکاسی آب، سڑکیں، سڑکوں کی مرمت، کمیونٹی پارکس کی بحالی اور قدرتی آفات کی روک تھام کے منصوبہ جات شامل ہیں۔

پنجاب سٹیٹس پروگرام (PCP) کے منصوبہ جات کی تکمیل کے دوران سماجی اور ماحولیاتی مسائل کی جانچ پڑتال اور اس کے حل کے لئے انوائرنمنٹل اینڈ سوشل سیف گارڈز (ESSs) ٹیم نے انوائرنمنٹل اینڈ سوشل مینجمنٹ فریم ورک (ESMF) بنایا ہے۔ مختلف منصوبہ جات اسی فریم ورک کی رو سے پایہ تکمیل تک پہنچ رہے ہیں۔

تعمیراتی اور ترقیاتی کاموں کی تکمیل میں تعمیراتی جگہوں پر کام کرنے والے مزدوروں رلیبر (بشمول خواتین) کی صحت اور کام کرنے کے دوران حفاظت بہت اہمیت رکھتی ہے۔ اس اہم مسئلہ کو ملحوظ خاطر رکھتے ہوئے، پی ایم ڈی ایف سی کے زیر اہتمام پنجاب سٹیٹس پروگرام کی انوائرنمنٹ اینڈ سوشل مینجمنٹ ٹیم نے "ترقیاتی منصوبوں کی تعمیر و مرمت کے دوران کام کرنے والے مزدوروں، ورکرز (بشمول خواتین رلیبر ورکرز) کی صحت، حفاظت اور ماحول کیلئے بنیادی اصول و ضوابط" مرتب کیے ہیں تاکہ متعلقہ میونسپل کمیٹیز/کارپوریشنز (MCs) کے عہدیداران اور ٹھیکیداران کو آگاہی فراہم کی جائے۔



اغراض و مقاصد

۱۔ مجوزہ معیاری اصول و ضوابط پنجاب سیٹیز پروگرام (PCP) کے تحت پنجاب میونسپل ڈویلپمنٹ فنڈ کمپنی (PMDFC) کے ماہرین ماحولیات نے پروگرام ڈائریکٹر (PCP) اور ڈپٹی پروگرام ڈائریکٹر (PCP) کی زیر نگرانی تشکیل دیئے ہیں۔

۲۔ شہری ترقی کے ترقیاتی منصوبہ جات کی تعمیر و مرمت میں مزدور/ورکرز بنیادی کردار ادا کرتے ہیں۔ ان (SOPs) کا بنیادی مقصد مزدور/ورکرز (بشمول خواتین لیبر/ورکرز) کو تعمیراتی جگہوں (Construction sites) اور لیبر کیمپس میں ماحولیاتی اور سماجی تحفظ فراہم کرنا اور صحت، ماحولیات اور کسی خطرناک صورتحال سے بچنے کے لئے حفاظت فراہم کرنا ہے۔

۳۔ یہ SOPs (PCP) پنجاب سیٹیز پروگرام کے تحت 16 شہروں کی میونسپل کمیٹیز/کارپوریشنز میں تعمیر و مرمت کے تمام پراجیکٹس پر لاگو ہوں گے۔

۴۔ یہ SOPs مزدوروں/کام کرنے والوں/دیہاڑی دار (بشمول خواتین) پر بلا تخصیص لاگو ہوں گے۔

۵۔ ان SOPs کو موثر اور یقینی بنانے کے لئے انھیں ٹھیکیداروں کے کنٹریکٹ کا حصہ بنانا اور ان پر عمل درآمد کرنا میونسپل کمیٹیز/کارپوریشنز کی ذمہ داری ہے۔ جسے پی ایم ڈی ایف سی کی متعلقہ پروگرام ٹیم یقینی بنائے گی۔

پیغام



پاکستان کی ترقی میں تعمیراتی کاموں کے دوران کام کرنے والا مزدور طبقہ نہایت اہمیت کا حامل ہے اور انکے صحت و تندرستی سے متعلق مسائل کا مؤثر حل انتہائی ضروری ہے۔ "ترقیاتی منصوبوں کی تعمیر و مرمت کے دوران کام کرنے والے مزدوروں / ورکرز (بشمول خواتین لیبر ورکرز) کی صحت، حفاظت اور ماحول کیلئے بنیادی اصول و ضوابط" کی اشاعت و ترویج اور ان پر بروقت عمل درآمد بے حد ضروری ہے جس سے اس طبقے کے بنیادی حقوق کا تحفظ یقینی بنایا جاسکے گا اور اس طرح اس طبقے کی کارکردگی میں بھی بہتری نظر آئے گی۔ ان اصولوں کے تحت ہر ٹھیکیدار کو ورکرز کی صحت اور حفاظت کی ذمہ داری دی گئی ہے۔ مزدور تعمیراتی کاموں کے دوران خطرات کے مطابق ذاتی حفاظتی سامان بھی استعمال کریں گے جس سے دوران کام حادثات میں بھی نمایاں کمی نظر آئے گی۔ ماحولیات اور صحت کے اصولوں کو مد نظر رکھتے ہوئے ہر سطح پر ہم اس بات کو یقینی بنانے کی کوشش کریں گے کہ ہماری پالیسیاں اور طرز عمل فعال ہوں۔ ماحولیات، صحت اور حفاظت (EHS) کے اصولوں کو اپنانے میں کسی بھی قسم کا سمجھوتہ نہیں کیا جائے گا۔ میں امید کرتا ہوں کہ ان اصول و ضوابط کی روشنی میں مزدور / ورکرز (بشمول خواتین لیبر) کے حقوق کی پاسداری کو ایک نیا رخ ملے گا اور حکومتی عہدیداران اور ٹھیکیداران بھی اپنی ذمہ داریوں کا احساس کریں گے۔ اور اس سلسلے میں پی ایم ڈی ایف سی اور پنجاب سیٹیز پروگرام کی انوائرنمنٹ اینڈ سوشل سیف گارڈز (ESSs) ٹیم بلاشبہ مبارکباد کی مستحق ہے اور یہ توقع کی جاسکتی ہے کہ وہ مستقبل میں ان قواعد و ضوابط کی نگرانی کے لئے بھرپور اقدامات کریں گے۔

محمد عامر نذیر

پروگرام ڈائریکٹر
پنجاب سیٹیز پروگرام (PCP)



زیر نگرانی

عاشق چوہدری

سینئر پروگرام آفیسر (انفراسٹرکچر)
پنجاب سیٹیز پروگرام (PCP)

افتخار رسول

ڈپٹی پروگرام ڈائریکٹر
پنجاب سیٹیز پروگرام (PCP)

تکنیکی ٹیم

رضوانہ انجم

پروگرام آفیسر (انوائرنمنٹ اینڈ سوشل سیف گارڈز)
پنجاب سیٹیز پروگرام (PCP)

کنزی ندیم

ریسرچ اینالسٹ
پنجاب سیٹیز پروگرام (PCP)

تہمینہ کرن

ڈپٹی پروگرام آفیسر (ESSs)
پنجاب سیٹیز پروگرام (PCP)



(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 خدشہ
- ◆ سماجی، مذہبی، اور سیوریج 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 لئے 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 مقامی ادارے جیسے صحت، سیوریج وغیرہ کو لیبر کیمپ کے مقام اور مدت کے بارے میں مطلع کیا جائے تاکہ کسی ناگہانی صورتحال سے بچا جاسکے۔
- ◆ 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 ملحقہ بنیادی سہولتوں جیسے پینے کا پانی اور نکاسی آب کے انتظامات سے ماحولیاتی آلودگی میں اضافہ نہ ہو





سرگرمیاں

۲۔ لیبر کیمپ میں مہیا کی جانے والی سہولیات

مسائل

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

حفاظتی اقدامات

تھیکیدار کیمپ سائٹس پر درج 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 جگہ کی موجودگی اور محفوظ ماحولیاتی 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 اُنکے لیے علیحدہ ٹوائلٹس
- ◆ رواش رومز کا انتظام۔
- ◆ بین الاقوامی معیار کے مطابق ہر دس افراد کیلئے مطلوبہ ٹوائلٹ 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۔
- ◆ ٹوائلٹس اور عارضی رہائش گاہوں میں بجلی کی فراہمی کو یقینی بنایا جائے۔

سرگرمیاں

۳۔ لیبر کیمپ سے پیدا ہونے والا سالت اور لیکوئڈ ویسٹ

مسائل

- ◆ تغفن اور بدبو
- ◆ صحت کے لئے نقصان
- ◆ ماحولیات کے لئے نقصان
- ◆ مقامی آبادی کے لئے نقصان
- ◆ بیماریاں پیدا کرنے والے بیکٹیریا اور مچھروں کا ذریعہ



انوائرنمنٹ اینڈ سوشل سیف گارڈ ٹیم

پی ایم ڈی ایف سی

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حفاظتی اقدامات

- ♦ روزمرہ پیدا ہونے والے کوڑا کرکٹ اور بچن کے کوڑا کرکٹ کے لیے الگ الگ کوڑا دانوں کا انتظام
- ♦ میونسپل کمیٹی رکارپوریشن کی جانب سے منتخب کردہ جگہ پر روزانہ کی بنیاد پر کوڑے کو اٹھانے اور تلف کرنے کا مناسب انتظام۔
- ♦ عارضی ٹوائلٹس سے پیدا شدہ فضلے اور لیکویڈ 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 ٹوائلٹس سے پیدا شدہ فضلے کو ٹھکانے لگانے کے لیے منتخب کردہ جگہ کے ارد گرد باڑا لگائی جائے یا درخت لگا دے جائیں تاکہ بچے اور دیگر رہائشی داخل نہ ہوں اور مجھڑ اور بد بو بھی پیدا نہ ہو۔

سرگرمیاں

۴. کھانا پکانے کے لیے ایندھن کی فراہمی

مسائل

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

حفاظتی اقدامات

ٹھیکیدار کیمپ سائٹس پر درج ذیل سہولیات مہیا کرے گا۔

- ♦ لیبر کیمپس میں کھانا پکانے، کمروں کے گرم رکھنے نیز سردیوں میں نہانے اور دھونے کے لیے گرم پانی کے لیے ایندھن کی لکڑی یا دیگر بایو گیس استعمال کرنے کی حوصلہ شکنی کریں اور ایندھن کیلئے درختوں کی کٹائی نہ کریں۔
- ♦ درختوں اور ارد گرد جنگلات کی حفاظت کیلئے مزدوروں/لیبر کو آگاہی دی جائے۔
- ♦ کھانا پکانے کے لیے قدرتی گیس یا مٹی کے تیل کے محفوظ چولہے استعمال کیے جائیں۔





سرگرمیاں

۵۔ جانوروں / پرندوں کا شکار خرید و فروخت

مسائل

- ♦ جنگلی حیات کو خطرات
- ♦ ماحولیاتی وسائل کو خطرات

حفاظتی اقدامات

♦ لیبر / مزدوروں کو گاہی فراہم کی جائے کیونکہ ارد گرد موجود کسی بھی قسم کی جنگلی حیات کو نقصان پہنچانا، ان کے گھونسلوں / پناہ گاہوں میں کوئی مداخلت کرنا، شکار کرنا یا جانوروں / پرندوں کو قید کرنا اور خرید و فروخت کرنا، پنجاب وائلڈ لائف (پروٹیکشن، پریزرویشن، کنزرویشن اینڈ منیجمنٹ ایکٹ 1974) کے مطابق ممنوع اور سرقابل تعزیر جرم ہے۔

سرگرمیاں

۶۔ حفظان صحت کے اصول

مسائل

♦ حفظان صحت کے رہنما اصولوں پر عملدرآمد کرنے کی صورت میں مختلف بیماریاں مثلاً کرونا وائرس، لیبر / مزدوروں کی ایچ آئی وی ایڈز اور دیگر انفیکشنز کے پھیلنے کا خطرہ

حفاظتی اقدامات

تھیکیدار لیبر کیمپس میں درج ذیل انتظامات مہیا کرے گا:

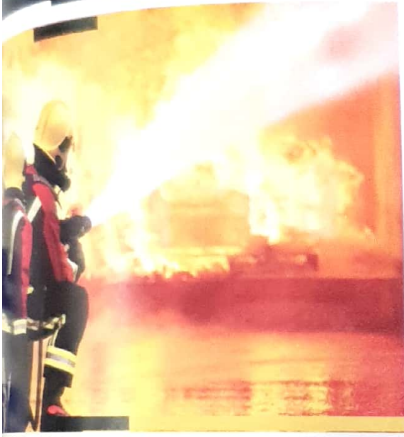
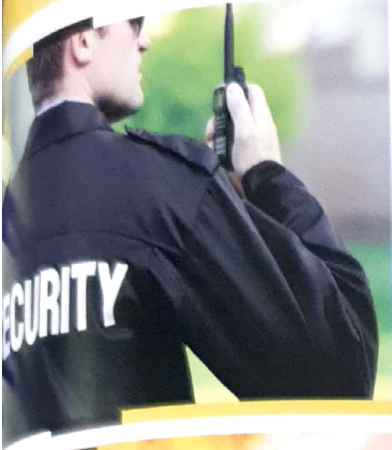
- ♦ لیبر کیمپس میں صحت و صفائی کی مناسب سہولیات کی فراہمی
- ♦ بیرونی علاقوں سے آنے والے مزدوروں کی صحت کی ابتدائی سکریننگ

پی ایم ڈی ایف سی

۹

انوائرنمنٹ اینڈ سوشل سیف گارڈز

- ◆ چوبیس گھنٹے لیبر کیمپس میں پرفرسٹ ایڈکس کی سہولت موجود ہو۔ کیمپ سائنس میں ابتدائی طبی امداد سے متعلقہ دواؤں کا موجود ہونا یقینی بنایا جائے۔ اور طویل المدتی کیمپ کی صورت میں کسی ڈپنسر رڈاکٹر کیمپ میں موجود ہونا چاہئے۔
- ◆ کسی ایمرجنسی کے دوران مزدوروں کے لیے ایمرجنسی کی سہولت فراہم کی جائے اور ایمرجنسی سروسز 1122 یا 15 پر کال کرنے کے لیے ٹیلیفون ریمو بائل کی سہولت مہیا کی جائے۔
- ◆ حفظان صحت کے بہترین اصولوں، صفائی ستھرائی اور صحت کی دیکھ بھال کے امور کیلئے مزدوروں/لیبر 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۔
- ◆ چھڑوں اور دیگر بیکٹیریا کو پیدا ہونے سے روکنے کیلئے حفاظتی سپرے لازمی کرائے جائیں۔
- ◆ کرونا سے بچنے کے لیے ابتدائی سکریننگ یقینی بنائیں اور بار بار ہاتھ دھونے پر زور دیں 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 متعلقہ پیغامات اور طریقے ڈسپلے کیے جائیں اور تربیتی پروگرام کا اہتمام کیا جائے۔
- ◆ قریبی ڈسپینسری/ہیلتھ کلینک/ہسپتال کے رابطہ نمبر وغیرہ واضح مقامات پر آویزاں کئے جائیں۔



سرگرمیاں

۷. سیورٹی اور حفاظت کی سہولیات

مسائل

- ◆ سیورٹی کے مسائل
- ◆ چوری کا خطرہ
- ◆ دہشت گردی کا خطرہ
- ◆ آگ لگنے کے خطرات

حفاظتی اقدامات

- ◆ کیپ کے گرد حفاظتی باڑی فراہمی
- ◆ حفاظتی اہلکار (پولیس یا نجی سیورٹی گارڈ/ہوم گارڈ وغیرہ) کی تعیناتی
- ◆ کیپ میں موجود افراد کی صحیح تعداد اور آمدورفت کا حساب کتاب رکھنے کے لیے رجسٹر میں اندراج۔
- ◆ آگ سے بچاؤ کے لیے لیبر کیپ بنانے میں ایسا کوئی میٹریل استعمال نہ کیا جائے جس سے آگ لگنے کا اندیشہ ہو۔
- ◆ بارش، طوفان، سیلاب وغیرہ سے بچنے کیلئے اس بات کو یقینی بنایا جائے کہ کیپ سائٹ اور عارضی کمرے/ہائش گاہیں محفوظ رہیں۔
- ◆ لیبر کیپس میں آگ بجھانے والے آلات موجود ہوں جن پر انکی آخری معیاد کی تاریخ درج ہو۔ اور سیورٹی گارڈ یا لیبر وغیرہ میں سے نمائندہ افراد کو آگ بجھانے والے آلہ استعمال کرنے کی تربیت دی جائے۔
- ◆ لیبر کیپ میں واضح مقامات پر ہنگامی ایمر جنسی رابطہ نمبر نمایاں درج ہوں۔
- ◆ ٹھیکیدار، لیبر کے ساتھ ماہانہ میٹنگز میں ایمر جنسی کی صورت میں ہر ایک مزدور کو اسکی ذمہ داریوں اور تربیت سے آگاہ کرے اور اسکی تفصیلات کنسلٹنٹ اور میونسپل کمیٹی/کارپوریشن کو فراہم کرے۔ اور کسی بھی قسم کی شکایات ایک رجسٹر میں درج کرے۔



سرگرمیاں

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

مسائل

◆ نوڈ پوائزنگ کا خدشہ

◆ بیماری کا ڈر

حفاظتی اقدامات

◆ مزدوروں کو صاف ستھرے اور تازہ کھانے کی فراہمی کو یقینی بنایا جائے۔

سرگرمیاں

۹. مذہبی و سماجی میل جول

مسائل

◆ مذہبی عبادات میں رکاوٹ

◆ سماجی تعلقات میں دشواری

◆ سماجی، ثقافتی اور مذہبی خیالات میں شدت پسندی یا لڑائی جھگڑا وغیرہ

حفاظتی اقدامات

◆ مزدوروں/لیبر کو ان کے مذہب اور فرقے کے مطابق مذہبی عبادات کی سہولیات فراہم کرنا۔

◆ خواتین لیبر کی موجودگی کی صورت میں ان کے لیے علیحدہ وضو، نماز اور پردے کا اہتمام کیا جائے۔

◆ تمام مزدوروں کی مذہبی، ثقافتی یا فرقے کی وابستگی سے قطع نظر غیر متعصبانہ اور برابری کا سلوک کیا جائے۔

◆ مزدوروں کو تعمیراتی کام کے دوران نماز میں شرکت کرنے یا دیگر عبادات کی اجازت دی جائے اور اس سلسلے میں مذہبی اور سکیورٹی 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 رہ سکے۔

سرگرمیاں

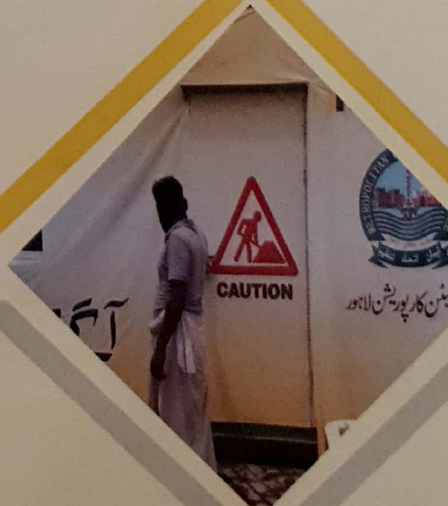
10. تعمیراتی کام ختم ہونے کے بعد کی ذمہ داریاں

مسائل

♦ فالتو سامان اور کوڑا کرکٹ کی گندگی

حفاظتی اقدامات

- ♦ کیپ سائٹ کو اصل حالت میں بحال کیا جائے۔
- ♦ تعمیراتی کام کے مکمل ہونے پر فریم اور باڑ لگنے والے دروازوں سمیت لیبر کیپ میں قائم تمام سہولیات کو ایسے ختم کیا جائے کہ وہاں کا کوئی کام نہ رہے۔
- ♦ کام کم ہونے کے ساتھ لیبر کیپ کو مرحلہ وار ختم کیا جائے (پورے کام کی تکمیل کا انتظار نہ کریں)
- ♦ لیبر کیپ کو مسمار کرنے کے دوران شور اور کسی بھی قسم کی آلودگی مثلاً گرد و غبار، آبی آلودگی وغیرہ پھیلانے سے گریز کریں۔
- ♦ مسمار شدہ ملبہ کو دوبارہ استعمال کرنے اور دوبارہ قابل استعمال کرنے کیلئے کسی لوکل ڈیلر/ٹھیکیدار کی خدمات حاصل کریں۔
- ♦ کوڑا کرکٹ اور دوبارہ ناقابل استعمال سامان کو متعلقہ میونسپل کمیٹی رکارپوریشن کی جانب سے مقرر کردہ مقام پر مناسب طریقے سے تلف کیا جائے۔
- ♦ لیبر کیپ کی زمین رجبہ کے مالک کے ساتھ طے شدہ معاہدے کے مطابق کام کریں اور کسی بھی قسم کے اختلاف یا جھگڑے سے گریز کریں۔
- ♦ جگہ کو متفقہ منصوبہ کے مطابق اسکے حوالے کیا جائے۔
- ♦ لیبر مزدوروں سے آئندہ کام یا مراعات کے جھوٹے وعدے ہرگز نہ کیے جائیں۔



انوائٹمنٹ اینڈ سوشل سیف گارڈز

پی ایم ڈی ایف سی

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سرگرمیاں

۱۔ تمام قسم کے تعمیراتی سرگرمیاں اور کام

مسائل

- انجریز اور چوٹیں وغیرہ
- نامناسب دیکھ بھال اور بروقت امداد نہ ملنے کا باعث ہلاکت
- دہشت گردی اور سیوریج سے متعلق خطرات

حفاظتی اقدامات

- تمام مزدوروں / لیبر سے مقامی / بین الاقوامی معیار کے مطابق مناسب حفاظتی اور قانونی ضوابط کی پیروی کروائی جائے۔
- کام کی جگہ پر ارد گرد کے علاقوں میں موجود دہشت گردی اور سیوریج 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 (PPEs) کی فراہمی مثلاً حفاظتی جوتے، ہیلیمٹ، ماسک، دستاں، حفاظتی لباس، چشمے، چہرے اور کان کی حفاظت کے سامان وغیرہ کی فراہمی
- تمام مزدوروں / لیبر کو ذاتی حفاظت کے ساز و سامان کے بارے میں مکمل آگاہی اور استعمال کے طریقے کار کے بارے میں تربیت کا انتظام۔
- اگر تعمیراتی کام ایک ماہ سے زائد عرصہ کیلئے جاری رہنا ہو تو تمام مدت کے لیے صحت، صفائی اور تربیت یافتہ ماحولیات کی تعیناتی کی جائے جو مزدوروں کی صحت، صفائی اور ماحولیات کے امور کی نگرانی کرے اور انہیں تربیت و آگاہی فراہم کرے۔
- تعمیراتی کاموں کے دوران کسی چوٹ لگنے / انجریز کی صورت میں مزدور / لیبر کے علاج معالجے کی سہولت مہیا کرنا اور بروقت ہسپتال / ڈسپنسری وغیرہ پہنچانا ٹھیکیدار کی ذمہ داری ہے۔
- مزید برآں دوران تعمیراتی کام کی وجہ سے لگنے والی چوٹ / انجریز 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 مثلاً ریسکیو 1122 یا 15 اور دیگر قریبی ہسپتالوں / ڈسپنسری وغیرہ کے نمبر تعمیراتی جگہوں پر واضح درج ہونے چاہیں اور کال کی سہولت فراہم کی جائے۔
- شہری ترقی کے تعمیراتی منصوبہ جات کے آغاز سے قبل صحت، مذہبی امور اور شہری تحفظ / سیوریج 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

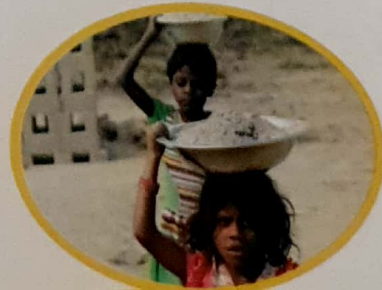
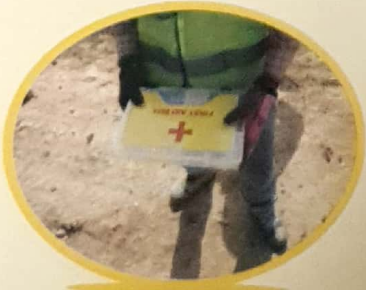
۲۔ تمام قسم کی تعمیراتی سرگرمیاں اور کنسٹرکشن کے کام

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 متعلقہ خطرات

حفاظتی اقدامات

- ◆ دی پنجاب ریسٹرکشن آن ایمپلائمنٹ آف چلڈرن ایکٹ 2016 کے مطابق 15 سال سے کم عمر بچوں کو مزدوری یا کسی سرگرمی کے لیے کام پر نہیں رکھا جاسکتا۔
- ◆ ویسٹ پاکستان میٹرنٹی بانیٹ آرڈیننس 1958 کے مطابق حاملہ خواتین یا ایسی خواتین جنہوں نے چھ ہفتے قبل بچے کو جنم دیا ہو، کو مزدوری یا کسی سرگرمی کے لیے کام پر نہیں رکھا جاسکتا۔
- ◆ دی پنجاب ریسٹرکشن آن ایمپلائمنٹ آف چلڈرن ایکٹ 2016 کے مطابق 18 سال اور اس سے کم عمر کے بچوں کو محنت مزدوری کے ایسے کام کے لیے نہیں رکھا جاسکتا جن میں صحت کو نقصان پہنچنے یا چوٹ لگنے یا کسی کیمیائی زہریلے مادے سے نقصان پہنچنے یا جہاں ہڈی ٹوٹنے کا اندیشہ ہو۔





سرگرمیاں

۳. دوران تعمیر حادثات کا پیش آنا

مسائل

◆ فوری طبی امداد کی کمی

◆ ارد گرد کے علاقوں میں ابتدائی طبی سہولیات اور صحت عامہ کا فقدان

حفاظتی اقدامات

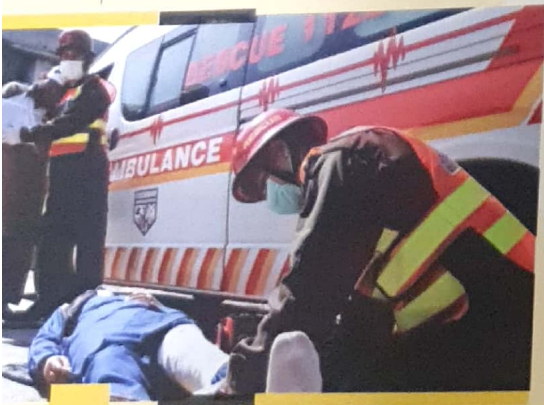
◆ تعمیراتی جگہ پر فرسٹ ایڈ باکس کی موجودگی کہ یقینی بنایا جائے اور فرسٹ ایڈ باکس میں تمام ضروری ادویات اور طبی امداد کا ضروری سامان موجود ہو۔

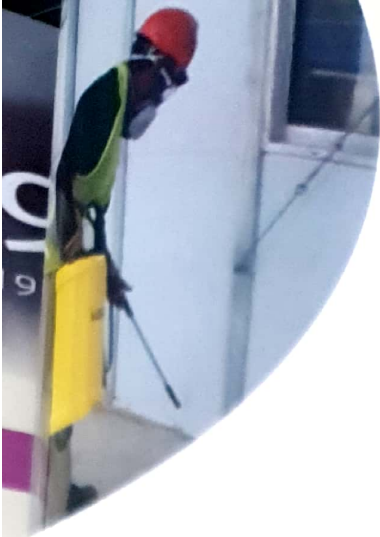
◆ تعمیراتی کاموں کے دوران پیش آنے والے حادثات بیماریوں اور واقعات کا مکمل ریکارڈ رکھا جائے۔ اسی طرح حادثات کی نوعیت و وجوہات کا مکمل ریکارڈ موجود ہو۔

◆ مزدوروں کی صحت و سیورٹی سے متعلق ممکنہ خطرات کی بروقت نشاندہی کی جائے خاص کر وہ خطرات جو جان لیوا ثابت ہو سکتے ہیں۔ اور ضروری حفاظتی اقدامات بروقت کئے 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 علاقوں اور سڑکوں کے ساتھ ساتھ روشنی کا معقول انتظام ہو۔





سرگرمیاں

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

مسائل

- ♦ صحت کو خطرہ
- ♦ ارد گرد علاقے کے لوگوں کے لئے ناگواری کا باعث
- ♦ مجھروں اور دیگر بیکٹیریا کی افزائش نسل کا ذریعہ

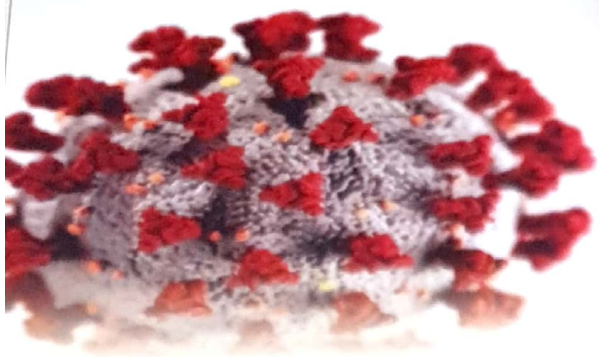
حفاظتی اقدامات

- ♦ تعمیراتی جگہوں پر تمام مزدوروں کے لئے پینے کے لئے صاف ستھرا پانی مہیا کیا جائے۔
- ♦ اگر تقریباً 25 مزدور ایک مہینہ کے لئے سارا دن کام کر رہے ہوں تو ان کے لئے تعمیراتی جگہوں پر پورٹ ایبل ٹوائلٹ کا انتظام کیا جائے جو مقامی ڈرنیج سسٹم سے ملحق ہوں اور مقامی ڈرنیج سسٹم کی غیر موجودگی میں مقامی ندی نالوں وغیرہ سے کم از کم 6 میٹر کے فاصلے پر ہوں۔ مزید برآں پورٹ ایبل ٹوائلٹس کی صفائی ستھرائی کو روزانہ 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 کھلانہ نہ دیا جائے۔ اور روزانہ کی بنیاد پر متعلقہ میونسپل کمیٹی رکارپوریشن کی جانب سے مقرر کردہ جگہ پر مناسب طریقے سے ٹھکانے لگایا جائے۔

پی ایم ڈی ایف سی

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انوائٹمنٹ اینڈ سوشل سیف گارڈز



COVID-19

CORONAVIRUS DISEASE 2019

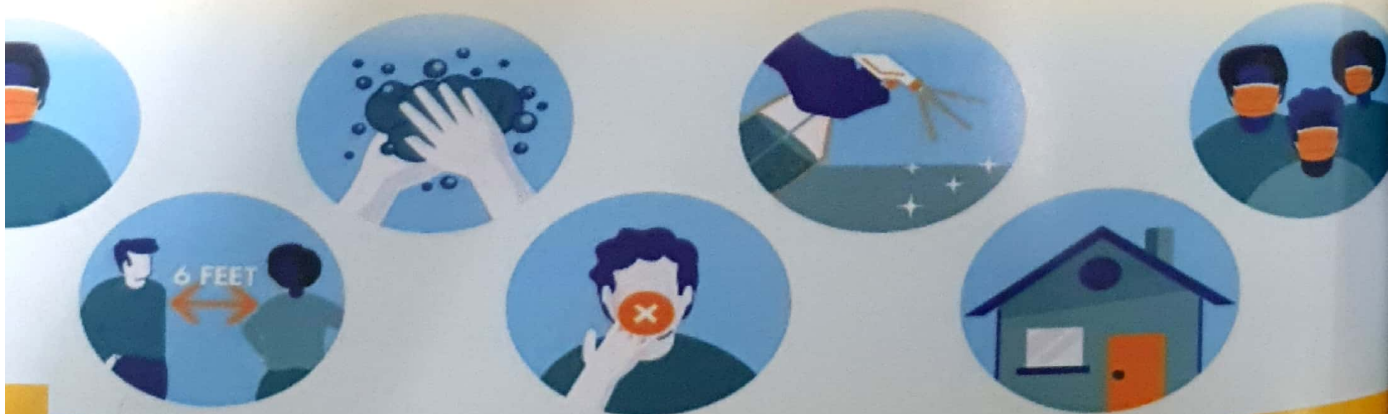
سرگرمیاں

کرونا وائرس کی وبا کے دوران حفاظتی تدابیر

حفاظتی اقدامات

گورنمنٹ آف پنجاب اور ورلڈ بینک کی ہدایات کے مطابق کرونا کی وبا کے دوران درج ذیل حفاظتی اقدامات کی پابندی کروانا کنٹریکٹر کی ذمہ داری ہے :

- ◆ کرونا وائرس کی وبا کے دنوں میں کنسٹرکشن سائٹ پر ہاتھ دھونے کیلئے پانی (پورٹ ایبل ہینڈ واشنگ کی سہولت) اور صابن مہیا کیا جائے اور لیبر کو بار بار صابن سے ہاتھ دھونے کی تلقین کی جائے۔
- ◆ لیبر کیمپس میں اور کنسٹرکشن سائٹ پر سوشل ڈسٹینسنگ (6m کا فاصلہ) کے اصولوں کو مدنظر رکھا جائے۔
- ◆ کرونا وائرس کی وبا کے دوران اس بات کا خاص خیال رکھا جائے کہ اگر کنسٹرکشن سائٹ پر آبادی میں وبا پھیلی ہوئی ہے تو آبادی اور مقامی لوگوں سے دور رہیں اور کسی قسم کا میل جول نہ رکھیں۔ اسی طرح اگر کوئی مزدور وبا کے علاقے سے روزانہ کی بنیاد پر آ رہا ہے تو اسے باقی لوگوں/مزدوروں سے میل جول سے دور رکھا جائے۔
- ◆ اگر کسی مریض میں وائرس کی علامات (خشک کھانسی، نزلہ، زکام، بخار وغیرہ) پائی جائیں تو اسے فوراً دوسرے مزدوروں سے آئسولیٹ کر دیا جائے اور ٹیسٹ کروانے کیلئے کہا جائے۔
- ◆ وبا کے دوران کنسٹرکشن سائٹ پر دیگر PPEs کے ساتھ ساتھ مزدوروں کو ماسک لازمی استعمال کرایا جائے۔



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

تعمیراتی کام	مقصد
اڑنے والے ذرات کا استعمال جیسے پکھلی ہوئی دھات مائع کیمیکل، گیسیں، اور بخارات، روشنی کی شعاعیں۔	آنکھوں اور چہرے کی حفاظت / تحفظ
ایسے تمام کام جن میں گرنے کا خطرہ ہو، بلندی پر کام کرنا، تعمیراتی کام کو سنبھالنے اور دوسری جگہ پر منتقل کرنے والے کام۔	سر کی حفاظت / تحفظ
کھدائی / شور پیدا کرنے والے کام یا بھاری مشینری استعمال کرنے کی وجہ سے شور۔	سماعت کی حفاظت / تحفظ
تمام تعمیراتی کام جن میں چیزوں کا گرنا یا گھمانا، نوکیلی اشیاء شامل ہوں۔ گلانے والا یا گرم مائع، کچرے کے ڈھیر سے کچرا اٹھانا۔	پاؤں کی حفاظت / تحفظ
جسمانی صحت کیلئے نقصان دہ سامان جیسے کچرے کو سنبھالنا، ایسے کام جس میں کاٹ یا گہرے زخم لگنے کا اندیشہ ہو، ارتعاش، بہت زیادہ درجہ حرارت۔	ہاتھوں کی حفاظت / تحفظ
دھول، دھند، شعلے، گیسیں، دھواں، بخارات	تحفظ تنفس
آکسیجن کی کمی	جسم / ٹانگوں کی حفاظت / تحفظ
تمام کام جن میں شدید درجہ حرارت، نقصان دہ مواد، حیاتیاتی ایجنٹ، چھوٹے یا گہرے زخم لگنے کا اندیشہ ہو	اونچائی پر کام کرتے ہوئے حفاظت
تمام تعمیراتی کام جو 4 فٹ یا اس سے زیادہ کی اونچائی پر کے جانے ہوں بشمول سٹریٹ لائٹس وغیرہ	اونچائی پر کام کرتے ہوئے حفاظت
تمام تعمیراتی کام جو 4 فٹ یا اس سے زائد اونچائی پر مسلسل ایک دن کیلئے کیے جانے ہوں	

تجویز کردہ سامان برائے ذاتی حفاظت

تصویریں

حفاظتی عینکیں

اوپر اور اطراف سے نقصان سے بچاؤ کیلئے پلاسٹک کے ہیلمٹ

سماعت کی حفاظت کے آلہ جات جیسے کن پوش یا ایئر پلگ

ملنے اور گرنے والی اشیاء، مائع اور کیمیائی مواد سے بچاؤ کیلئے حفاظتی جوتے یا بوٹ

ربڑ یا مصنوعی مواد (نیوروپین)، چمڑا، سٹیل، غیر موصل مواد سے بنے گلوں

ایک جگہ سے دوسری جگہ لے جانے والے یا ایک ہی جگہ پڑے مواد کی فراہمی تعمیراتی جگہ پر بچاؤ کا سامان












چہرے کے ماسک جن میں دھول ہٹانے اور ہوا کو صاف رکھنے کیلئے (کیمیائی مواد، دھند، بخارات اور گیسوں سے) مناسب فلٹر لگے ہوں

مناسب میٹرل سے بنے غیر موصل کپڑے، ایپرن وغیرہ

ہیلمٹ، حفاظتی عینکیں، کے گلوں اور ربڑ کے بوٹ

اینٹکر، بیلٹ، رسی، کنیکٹر، سہلے، ہارڈ جگہ اور ایک ساتھی فرد

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 (fixed	
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,	

*In general, use of PPEs is required for any height of 4 ft or more. Ref: OSHA standards

پی ایم ڈی ایف سی

وائٹمنٹ اینڈ سوشل سیف گارڈز ٹیم

(3) مقامی آبادی روکنداروں اور رہائشیوں کی صحت، ماحولیات اور سماجیات سے متعلق رہنما اصول و حفاظتی تدابیر

سرگرمیاں

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

مسائل

- ♦ مقامی آبادی رہائشیوں کیلئے تعمیراتی کام کی عدم آگاہی
- ♦ لیبر/مزدوروں کے داخلے سے رہائشی عورتوں کے پردے اور پرائیویسی کے مسائل
- ♦ مقامی آبادی کے ثقافتی، سماجی، مذہبی ورثہ اور تاریخی مقامات/عمارتوں کو نقصان

حفاظتی اقدامات

تھیکیدار کو چاہئے کہ:

- ♦ متعلقہ میونسپل کمٹی کے انوائزمنٹ اینڈ سوشل فوکل پرسن (ز) منتخب کردہ اور متعلقہ ریجنل آفس میں موجود ڈپٹی پروگرام آفیسر (انوائزمنٹ اینڈ سوشل سیف گارڈز) کی موجودگی میں مقامی آبادی رہائشیوں اور دکانداروں کو تعمیراتی کام کے آغاز سے قبل تعمیراتی کام کی نوعیت، غرض و مقصد اور تکمیل کی معینہ مدت کے بارے میں مکمل آگاہی فراہم کرے۔
- ♦ تعمیراتی کام کے دوران پیش آنے والے ممکنہ سماجی اور ماحولیاتی مسائل اور ان کے مطابق حفاظتی اقدامات کے بارے میں مقامی رہائشیوں/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 سماجی اور ماحولیاتی مسائل کی تصاعدی شکایات/تجاویز کیلئے مندرجہ ذیل رابطہ نمبرز کے بارے میں مکمل آگاہی فراہم کی جائے۔

(a) تھیکیدار کا موبائل/ٹیلیفون نمبر

(b) متعلقہ میونسپل کمٹی کے کارپوریشن کے فوکل پرسن (ز) کے رابطہ نمبرز

(c) متعلقہ (PCP) ریجنل آفس میں تعینات ڈپٹی پروگرام آفیسر (ESSs) کے رابطہ نمبرز

♦ تعمیراتی کام کے آغاز سے پہلے تعمیراتی مقام/جگہ کو فیتہ کی مدد سے باقی علاقہ سے الگ کر دیا جائے۔

انوائزمنٹ اینڈ سوشل سیف گارڈز

پی ایم ڈی ایف سی

۲۱



تعمیراتی جگہ پر واضح بورڈ نصب کر دیئے جائیں، جن پر درج ذیل پیغامات و احکامات لکھے ہوں:

(a) تعمیراتی کام کی نوعیت

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

(c) ایمر جنسی اور شکایت کیلئے رابطہ نمبرز

(d) (PMDFC) کی جانب سے جاری کردہ سماجی و ماحولیاتی پیغامات پر مبنی پوسٹرز۔

تعمیراتی کام کی جگہ کے ارد گرد 100 میٹر تک کی حدود میں موجود ثقافتی، سماجی، مذہبی ورثہ، تاریخی عمارتوں اور مذہبی مقامات جیسے قبرستان، مساجد، مندر، گرجا گھروں وغیرہ کو کسی قسم کا نقصان نہ پہنچایا جائے اور ان کی حدود میں کوڑا کرکٹ ڈالنے یا فالتو پانی چھوڑنے سے گریز کیا جائے۔ مزید برآں کھدائی کے دوران کسی نئے 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 خالوں کی صفائی اور اس سے حاصل شدہ بھل وغیرہ

مسائل



کھدائی سے حاصل شدہ مٹی رکنکر کے ڈھیر (Debris) سے رہائشیوں کی آمد و رفت اور ٹریفک میں رکاوٹ
مقامی رہائشیوں کیلئے ناگواری کا باعث
مچھروں اور دیگر بیماریاں پھیلانے والے جراثیم کی افزائش کا ذریعہ
کھدائی کی جگہ پر گرنے اور حادثات کے خطرات

حفاظتی اقدامات

- ◆ تعمیر کے دوران کھدائی کے تمام مقامات کے ارد گرد حفاظتی ٹیپ رپٹی لگائی جائے اور کھدائی کی جگہ کو عارضی طور پر بند کر دیا جائے جس کے باہر اس جگہ سے دور رہنے کیلئے واضح پیغامات لکھے ہوں۔
- ◆ کھدائی سے حاصل شدہ مٹی رکنکر پتھر وغیرہ کو ایک دن سے زیادہ اس جگہ پر موجود نہ رہنے دیا جائے بلکہ روزانہ کی بنیاد پر متعلقہ میڈیکل کمیٹی رکارپوریشن کی منتخب کردہ جگہ پر محفوظ طریقے سے ٹھکانے لگایا جائے۔
- ◆ نالوں کی صفائی سے حاصل شدہ بھل ریت وغیرہ کو ایک دن سے زیادہ اس جگہ پر موجود نہ رہنے دیا جائے بلکہ روزانہ کی بنیاد پر اٹھوایا جائے اور بھل ایک جگہ سے دوسری جگہ منتقلی 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 پیغامات واضح درج کیے جائیں۔
- ◆ ٹریفک کونز (cones) کی مدد سے رکاوٹ والی جگہ کو الگ کر دیا جائے تاکہ حادثات سے بچا جاسکے۔
- ◆ ٹریفک میں زیادہ دنوں تک مسلسل رکاوٹ کی صورت میں مقامی ٹریفک پولیس کو آگاہ کیا جائے اور ان کے ساتھ مل کر ٹریفک مینجمنٹ پلان کو تشکیل دیا جائے جس کو واضح مقام پر نصب کیا جائے اور مقامی آبادی رہائشیوں کو اس کے بارے میں مکمل آگاہی دی جائے۔



پی ایم ڈی ایف سی

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انوائٹ مینٹ اینڈ سوشل سرف گارڈ ٹیم

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 سائز لگا کر بیچنے والے چھوٹے بڑے مستقل دکانداروں کا گاہک کم ہو جانے کی وجہ سے مالی نقصان

حفاظتی اقدامات

- تعمیراتی علاقے میں ارد گرد موجود تمام چھوٹی بڑی دکانوں، ٹھیلوں، عارضی خوانچہ فروشوں اور گھروں کا مکمل سروے (تعداد اور مالی حیثیت وغیرہ) اور ان پر ممکنہ سماجی اور ماحولیاتی اثرات کا جائزہ لے کر ایک تفصیلی رپورٹ اور متعلقہ پلان میونسپل کمیٹی رکارپوریشن کے دفتر میں موجود ہونی چاہئے جو کہ فوکل پرسنز، متعلقہ علاقائی آفس میں موجود ڈپٹی پروگرام آفیسر (ESSs) کے ساتھ تعمیراتی کاموں کی مالیت کا اندازہ لگائے وقت تیار کیا 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 حصہ ہوگا۔
- رہائشیوں کیلئے آنے جانے اور دکانوں/گھروں تک رسائی کے لیے متبادل راستے مہیا کرنا ٹھیکیدار کی ذمہ داری ہے۔
- دکانوں/تھڑوں/ٹھیلوں 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 تربیت دی جائے کہ وہ ارد گرد رہائشی عورتوں اور بچوں کے آنے جانے میں کوئی رکاوٹ نہ بنیں اور رہائشیوں کے ساتھ بلا ضرورت کو میل جول نہ رکھیں۔
- تعمیراتی ٹیمپ لگانے، تعمیراتی کام کرنے یا مشینری اور تعمیراتی سامان رکھنے کے لیے 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 قواعد و ضوابط کا پابند ہوگا۔
- تعمیراتی کاموں کی ٹیمپ وغیرہ لگانے کے لیے 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

۵. تعمیراتی کام اور ہیوی مشینری کا استعمال

مسائل

- ◆ شورغل
- ◆ پانی کی آلودگی
- ◆ ہوائی آلودگی
- ◆ دیگر ماحولیاتی مسائل

حفاظتی اقدامات

◆ تعمیراتی علاقے میں موجود ہسپتالوں، سکولوں، رکالوں وغیرہ اور رہائشی گھروں، دکانوں کی تمام تفصیلات کی رپورٹ متعلقہ میونسپل کمیٹی کے دفتر میں موجود ہونی چاہئے جو کہ ٹھیکیدار کے کنٹریکٹ کا حصہ ہوگی۔ اور ٹھیکیدار ان تفصیلات کے مطابق ایسا پلان ترتیب دے گا جس سے ارد گردی عمارتوں پر رہائشیوں اور دکانداروں کو کم سے کم پریشانی کا سامنا کرنا پڑے مثلاً زیادہ شور پیدا کرنے والے کام دن کے اس حصے میں کئے جائیں جب ہسپتالوں، اور سکولوں، رکالوں وغیرہ کے مصروف اوقات کار نہ ہوں اور ایسے کام جن کی وجہ سے راستوں کی عارضی بندش ضروری ہوں وہ رات کو کیئے جائیں جب رہائشیوں کی آمد و رفت نہ ہو۔

◆ تعمیراتی کاموں کے دوران پیدا شدہ فاضل پانی یا پورٹیل ٹوائلٹس 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۔

◆ وائٹرپلائ کی سکیموں یا ایسی تمام کام جن کی وجہ سے رہائشیوں کو پانی یا سیوریج وغیرہ میں عارضی بندش کا سامنا کرنا پڑ سکتا ہو، ایسے تمام کاموں کے آغاز سے پہلے رہائشیوں کو پیشگی اطلاع دی جائے اور متبادل انتظامات کا خطر خواہ انتظام کیا جائے۔

◆ تعمیراتی کاموں کی وجہ سے درختوں کی کٹائی سے ہر حال میں گریز کیا جائے اور ناگزیر صورت 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 ارد گرد موجود 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 پانی کی آلودگی، ہوائی آلودگی اور آبی آلودگی کے نمونہ جات حاصل کر کے ان کی جانچ پڑتال کرنا 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 صفائی ستھرائی اور ماحولیاتی خوبصورتی کا خاص خیال رکھیں اور پہلے سے بہتر حالت میں چھوڑیں۔

* سپریم کورٹ آف پاکستان کے سو موٹو کیس نمبر 25 برطانوی 2009ء حوالہ نمبر ”کنٹکٹ آف ٹریڈ فیڈرل ڈوائیڈ ٹیک پراجیکٹ لاہور“ تعمیراتی کاموں کے دوران ہر ایک درخت کی کٹائی کے متبادل چار درخت لگانے کا حکم ہے۔

انوائٹمنٹ اینڈ سوشل سیف گارڈز ٹیم

پی ایم ڈی ایف سی

۲۵

ترقیاتی منصوبوں کی تعمیر و مرمت کے دوران کام کرنے والے
سردوروں، ورکروں، (بشمول خواتین لیبر) ورکروں کی صحت، حفاظت
اور ماحول کے لئے معیاری اصول و ضوابط درج ذیل پالیسیز،
قوانین اور نوٹیفیکیشنز کا تجزیہ کر کے تجویز کئے گئے ہیں۔

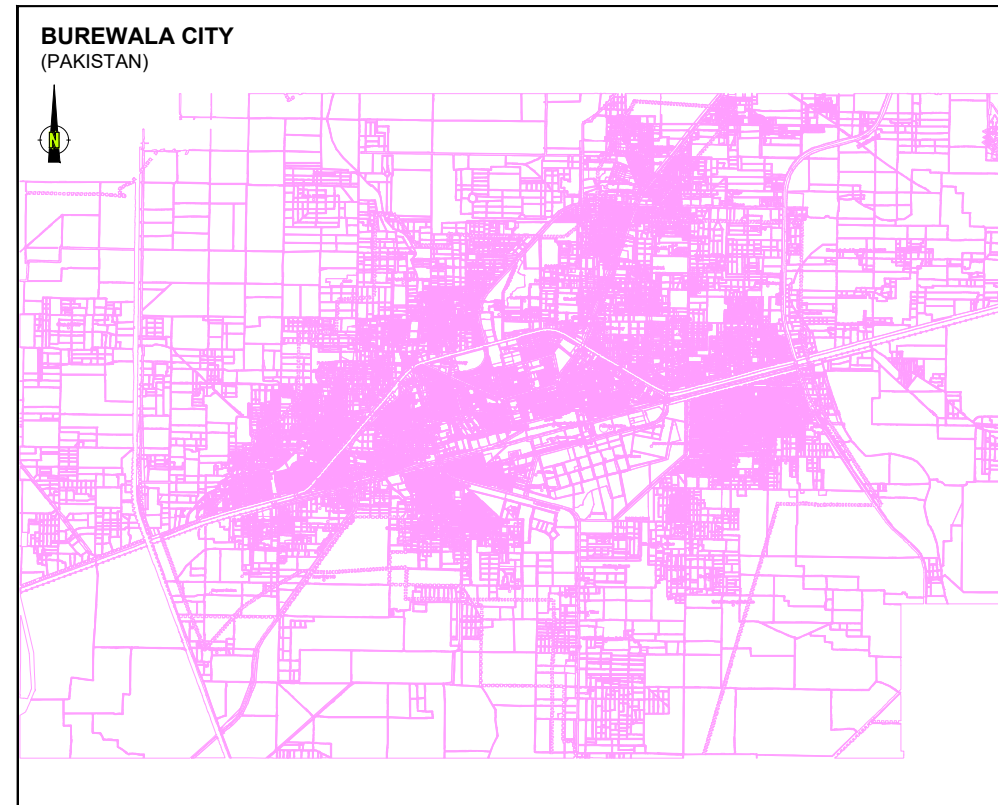
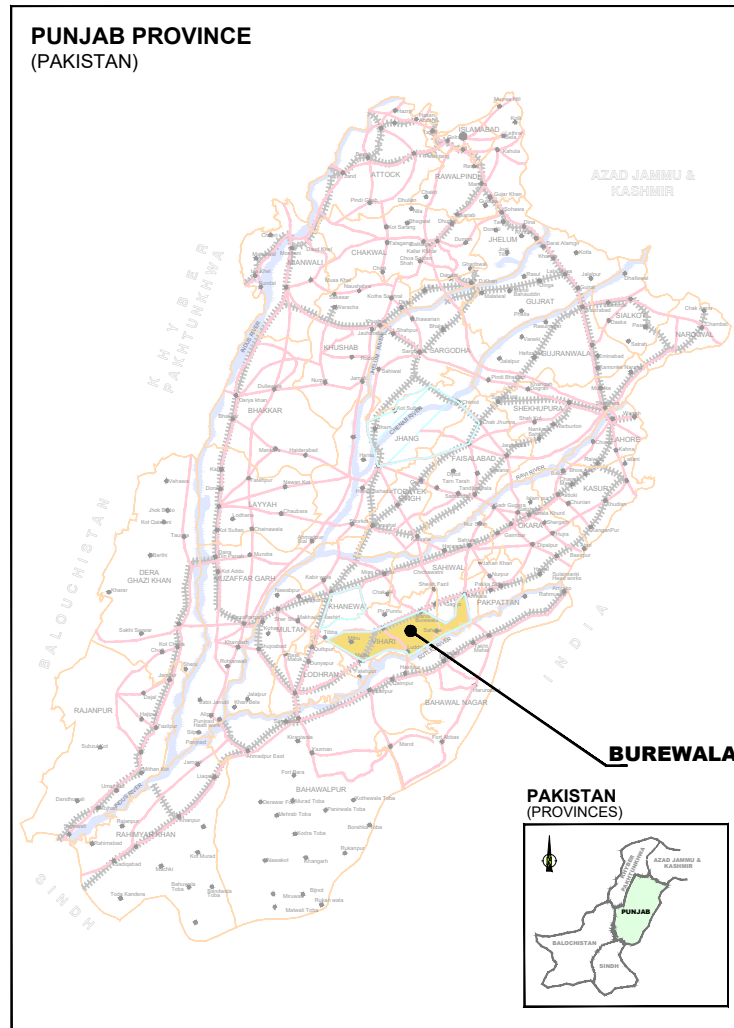
- ◆ The Punjab Occupational Health & Safety Act, 2019
- ◆ General Environment, Health & Safety (EHS) Guidelines by International Finance Corporation (IFC), World Bank
- ◆ International Labour Standards of International Labour Organization (ILO)
- ◆ Punjab Tehsil/Town Municipal Administration (Works) Rules 2003 (Amendments 2016)
- ◆ The Punjab Restriction on Employment of Children Act, 2016
- ◆ The West Pakistan Maternity Benefit Ordinance, 1958
- ◆ ESF/Safeguards Interim Note: COVID-19 Considerations in Construction / Civil Works Projects - World Bank Guidelines
- ◆ Health & safety SOPs for Construction Workers/Sector for COVID 19
- ◆ Punjab Wildlife (Protection, Preservation, Conservation and Management) Act, 1974



Annexure-F

Project Drawings

PUNJAB CITIES PROGRAM (PCP) **DETAILED DESIGN OF INFRASTRUCTURE** **SUB-PROJECTS AND RESIDENTS SUPERVISION IN** **16 CITIES OF PUNJAB, PAKISTAN**



DESIGN DRAWINGS OF **SWM PAKRING AREA** **MC BUREWALA** **PUNJAB, PAKISTAN**

OCTOBER, 2022

CLIENT:



PUNJAB MUNICIPAL DEVELOPMENT
FUND COMPANY
(PMDFC)

CONSULTANT:



JERS CONSULTANCY (PVT) LTD

24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan)

Tel: +92 42 35113123, +92 42 35113124

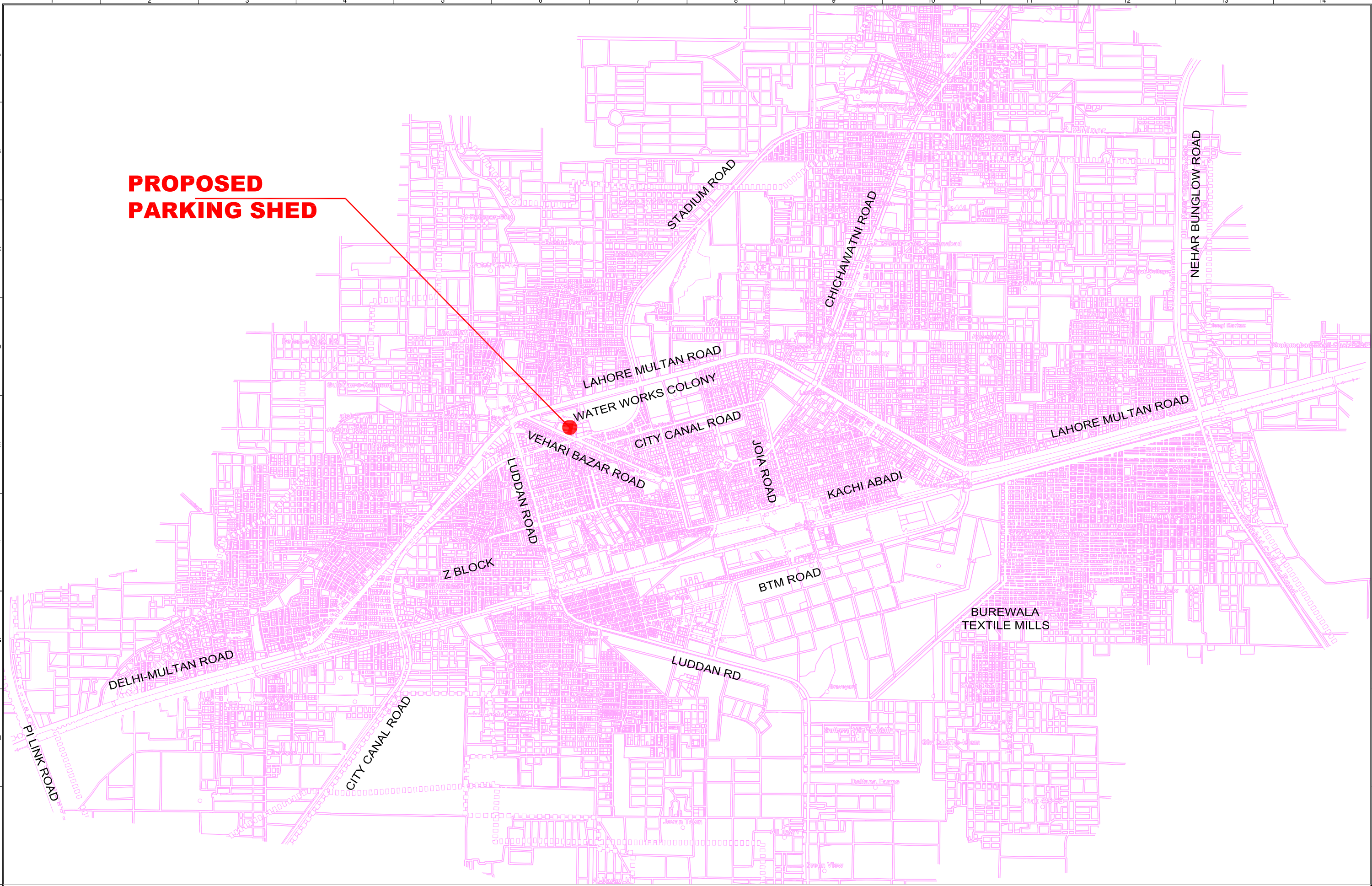
Fax: +92 42 35113125

E-mail: info@jers.com.pk, mail@jers.com.pk

Web: <http://www.jers.com.pk>

[illegible]

PROPOSED
PARKING SHED



CLIENT:



PUNJAB MUNICIPAL DEVELOPMENT
FUND COMPANY
(PMDFC)

CONSULTANTS:



JERS CONSULTANCY (PVT) LTD
24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan)
Tel: +92 42 35113123, +92 42 35113124
Fax: +92 42 35113125
E-mail: Info@jers.com.pk, mail@jers.com.pk
Web: http://www.jers.com.pk

PROJECT:

PUNJAB CITIES PROGRAM (PCP)
DETAILED DESIGN OF INFRASTRUCTURE
SUB-PROJECTS AND RESIDENTS SUPERVISION IN
16 CITIES OF PUNJAB.

DRAWING TITLE:

**KEY PLAN
(BUREWALA CITY)**

REV.	DATE	DESCRIPTION

DRAWN BY:

Anjum

CHECKED BY:

HASEEB

DATE:

October, 2022

DRAWING NO:

PS-01

SCALE:

UNIT=FEET
1"=50'


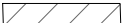















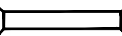




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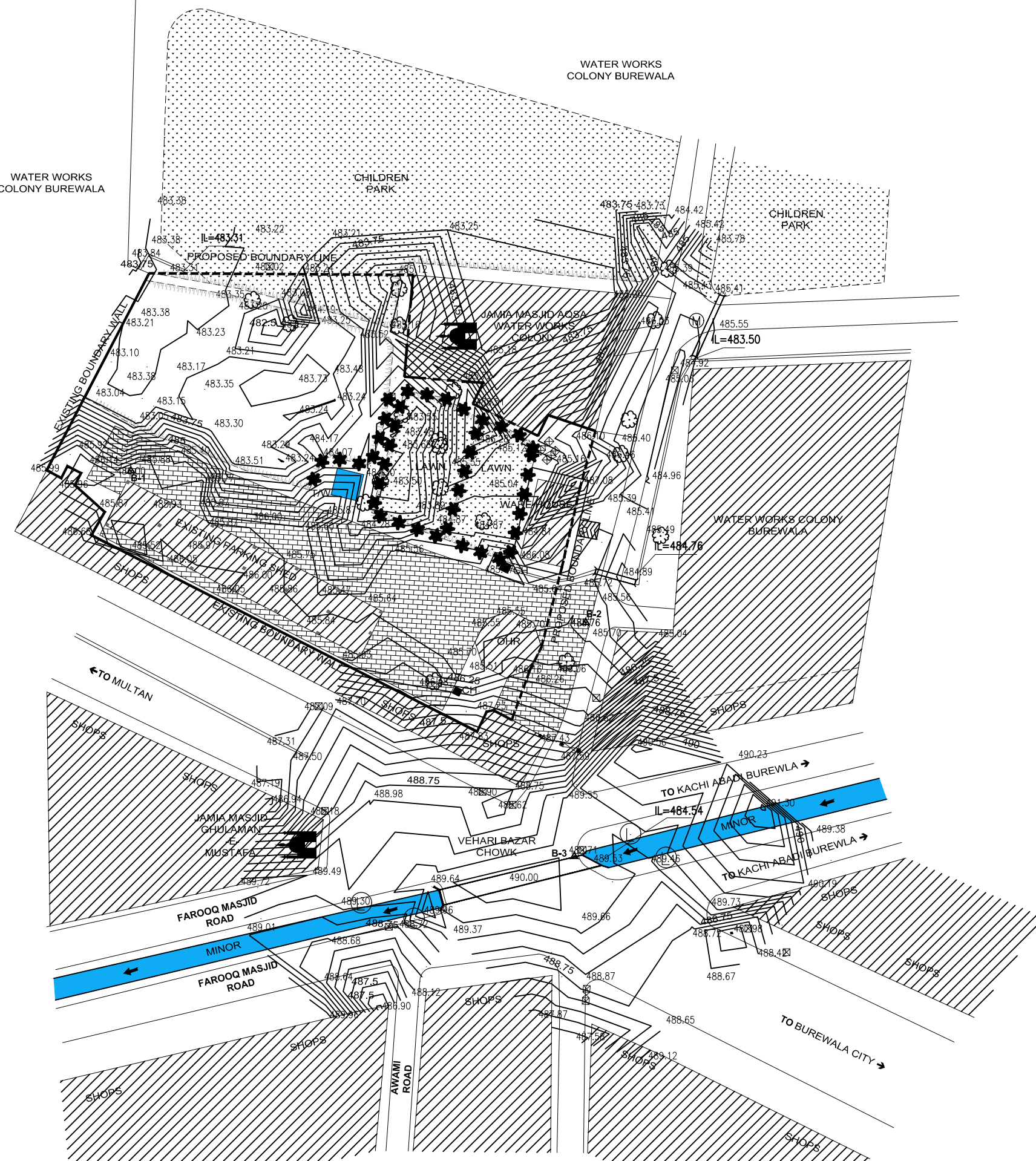
-

JOB NO:

488-01

LEGEND:

MOSQUE	
BUILDING	
GREEN AREA	
EXISTING BOUNDARY LINE	
PROPOSED BOUNDARY LINE	
DRAIN/ WATERCOURSE	
ROAD/STREET	
KATCHA TRACK	
SOLING	
BENCH MARK	
TELEPHONE POLE	
LIGHT POLE	
ELECTRIC POLE	
TRANSFORMER	
MANHOLE	
CHAMBOR	
TUBEWELL	
CULVERT	
TREE	
PLANTS	
MINOR	
SPOT LEVEL	486.00
INVERT LEVEL	IL=484.54
CONTOURS	487.5
GATE	



CLIENT:



PUNJAB MUNICIPAL DEVELOPMENT
FUND COMPANY
(PMDFC)

CONSULTANTS:



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24-Civic Center, Quid-e-Azam Town, Township, Lahore (Pakistan)
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Web: http://www.jers.com.pk

PROJECT:

PUNJAB CITIES PROGRAM (PCP)
DETAILED DESIGN OF INFRASTRUCTURE
SUB-PROJECTS AND RESIDENTS SUPERVISION IN
16 CITIES OF PUNJAB. 199

DRAWING TITLE:

**TOPOGRAPHIC SURVEY
(BUREWALA CITY)**

REV.	DATE	DESCRIPTION
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DRAWN BY:

Anjum

CHECKED BY:

HASEEB

DATE:

October, 2022

DRAWING NO:

PS-02

SCALE:

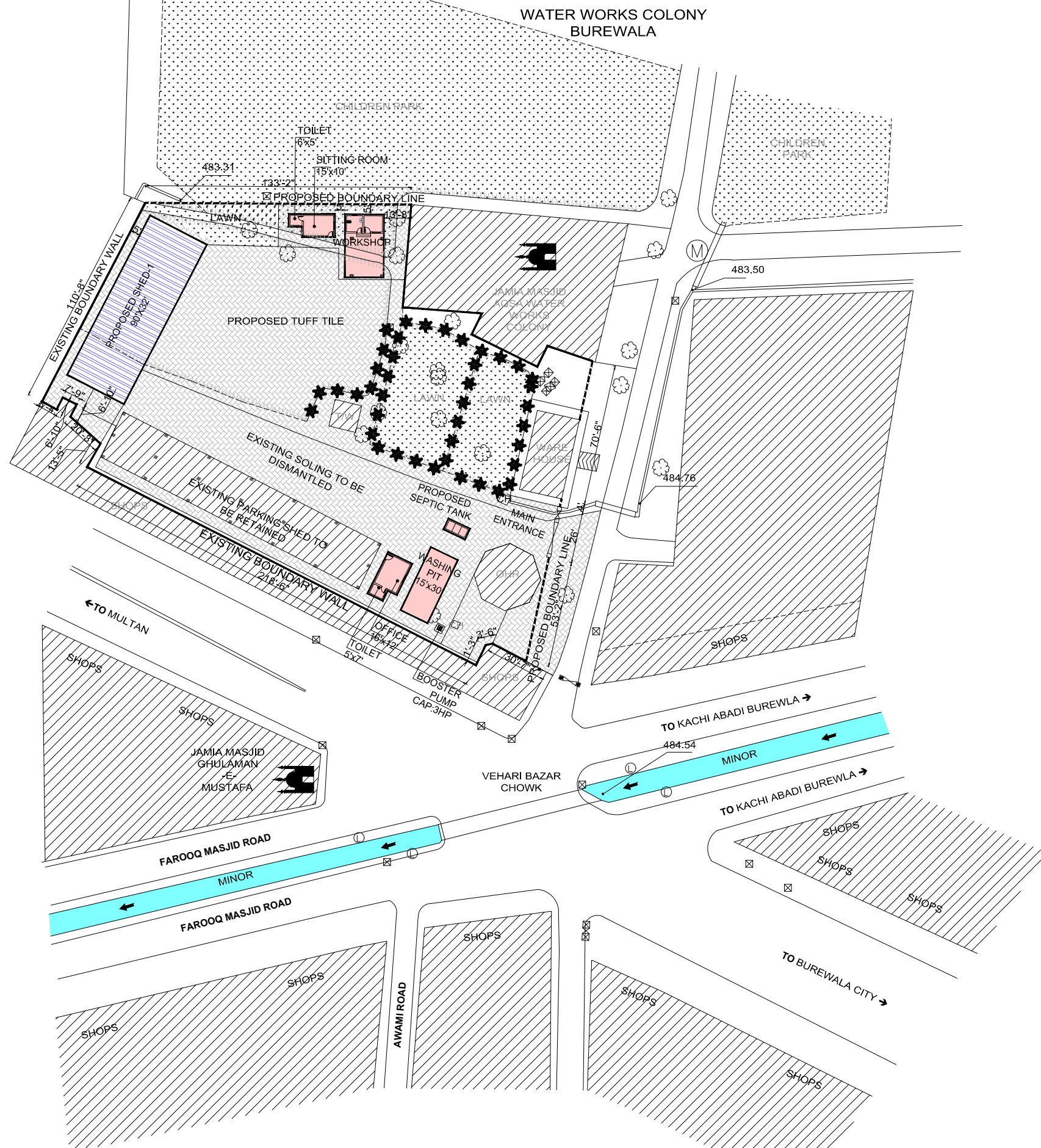
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SHEET:

-

JOB NO:

488-01



LEGEND:	
EXISTING STRUCTURES	
GREEN AREA	
TUFF TILE	
PROPOSED STRUCTURES	
PROPOSED PARKING SHED	
KACHA TRACK	
SURVEY BOUNDARY LINE	
PROPOSED BOUNDARY WALL	
EXISTING TREES	

- NOTES:**
- 1-TOTAL SWM PARKING AREA = 7.32 KANALS
 - 2-TOTAL SW MACHINERY IN BUREWALA = 7
 - 3-PROPOSED PARKING CAPACITY OF SW MACHINERY IN JHANG PARKING AREA = 7

CLIENT:
 **PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)**

CONSULTANTS:
 **JERS CONSULTANCY (PVT) LTD**
24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan)
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E-mail: info@jers.com.pk, mail@jers.com.pk
Web: http://www.jers.com.pk

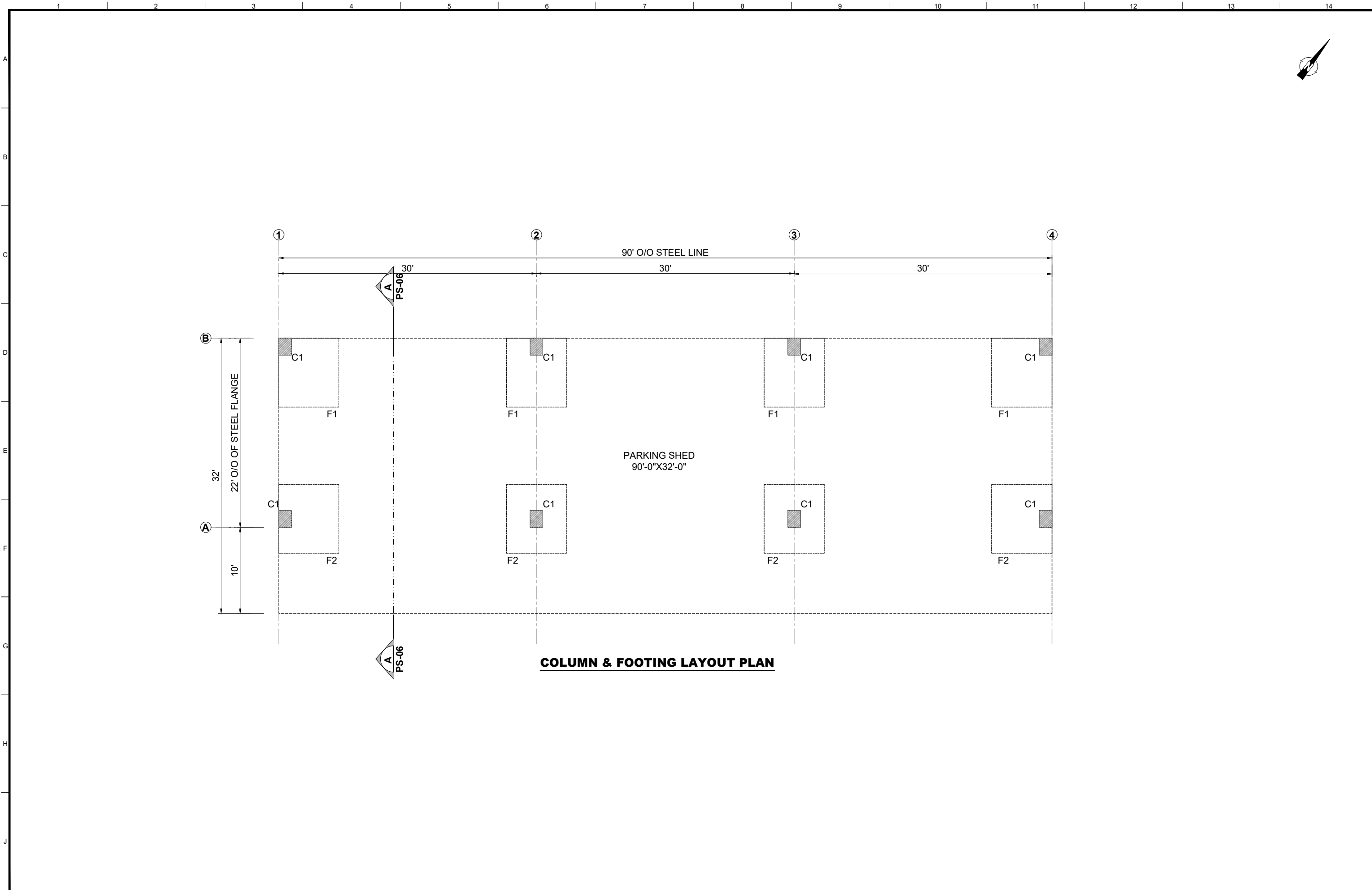
PROJECT:
PUNJAB CITIES PROGRAM (PCP)
DETAILED DESIGN OF INFRASTRUCTURE
SUB-PROJECTS AND RESIDENTS SUPERVISION IN
16 CITIES OF PUNJAB. 200

DRAWING TITLE:
PROPOSED SITE PLAN LAYOUT (BUREWALA)

REV.	DATE	DESCRIPTION
1	10/10/2022	ISSUED FOR TENDER
2	10/10/2022	ISSUED FOR TENDER
3	10/10/2022	ISSUED FOR TENDER
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6	10/10/2022	ISSUED FOR TENDER
7	10/10/2022	ISSUED FOR TENDER
8	10/10/2022	ISSUED FOR TENDER
9	10/10/2022	ISSUED FOR TENDER
10	10/10/2022	ISSUED FOR TENDER
11	10/10/2022	ISSUED FOR TENDER
12	10/10/2022	ISSUED FOR TENDER
13	10/10/2022	ISSUED FOR TENDER
14	10/10/2022	ISSUED FOR TENDER


DRAWN BY: Anjum	DRAWING NO: PS-03
CHECKED BY: HASEEB	SCALE: UNIT=FEET 1"=50'
DATE: October, 2022	SHEET: - JOB NO: 488-01

PARKING SHED




COLUMN & FOOTING LAYOUT PLAN

CLIENT:

**PUNJAB MUNICIPAL DEVELOPMENT
FUND COMPANY
(PMDFC)**

CONSULTANTS:

**JERS CONSULTANCY (PVT) LTD**
24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan)
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Fax: +92 42 35113125
E-mail: info@jers.com.pk, mail@jers.com.pk
Web: http://www.jers.com.pk

PROJECT:

PUNJAB CITIES PROGRAM (PCP)
DETAILED DESIGN OF INFRASTRUCTURE
SUB-PROJECTS AND RESIDENTS SUPERVISION IN
16 CITIES OF PUNJAB. 202

DRAWING TITLE:

**GROUND FLOOR PLAN
PARKING SHED - 1
(BUREWALA CITY)**

REV.	DATE	DESCRIPTION
-	-	-

DRAWN BY:
Munir

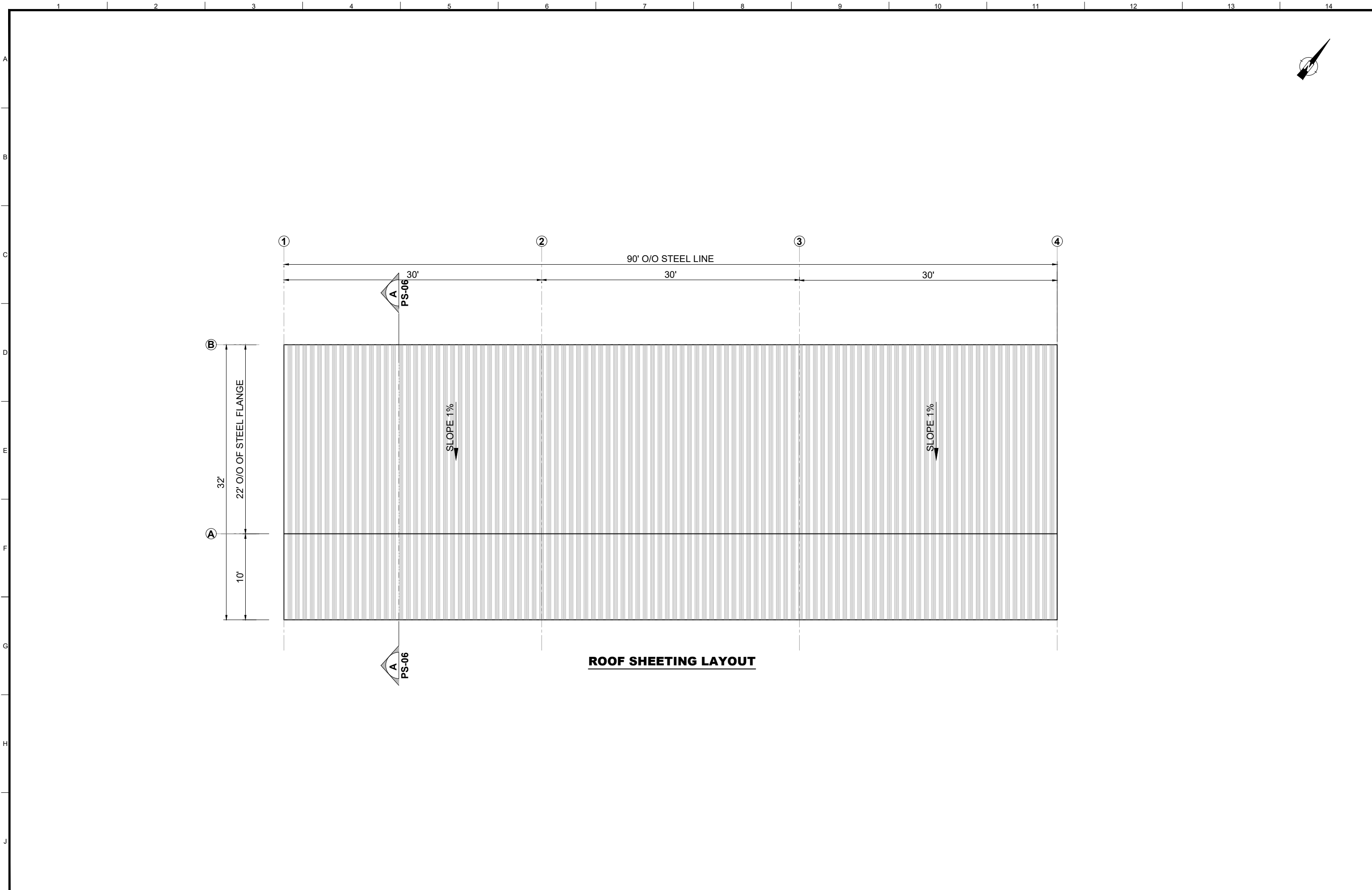
CHECKED BY:
Sadat Waleed

DATE:
August,2022

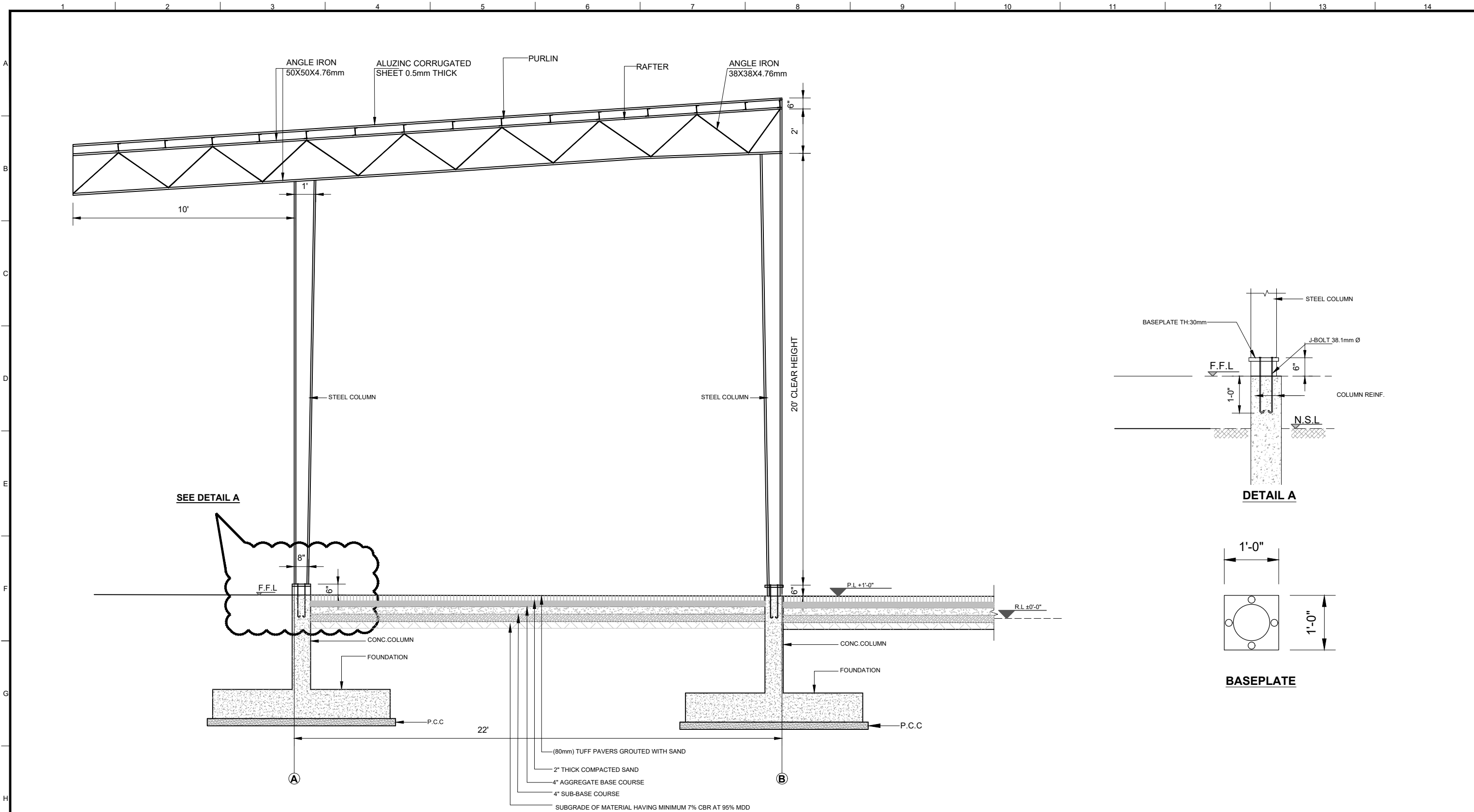
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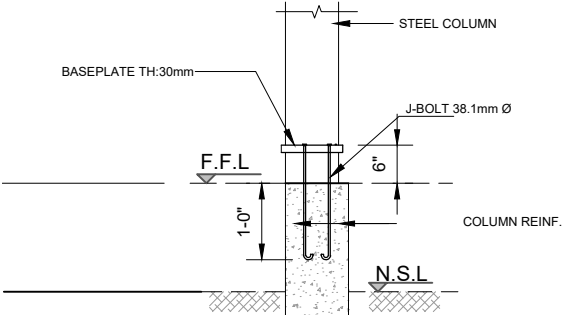
SHEET:
1 OF 1
JOB NO:
488-01



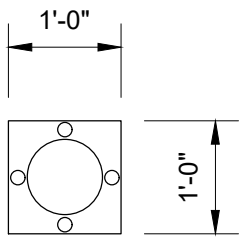
ROOF SHEETING LAYOUT





RIGID FRAME SECTIONAL ELEVATION A-A

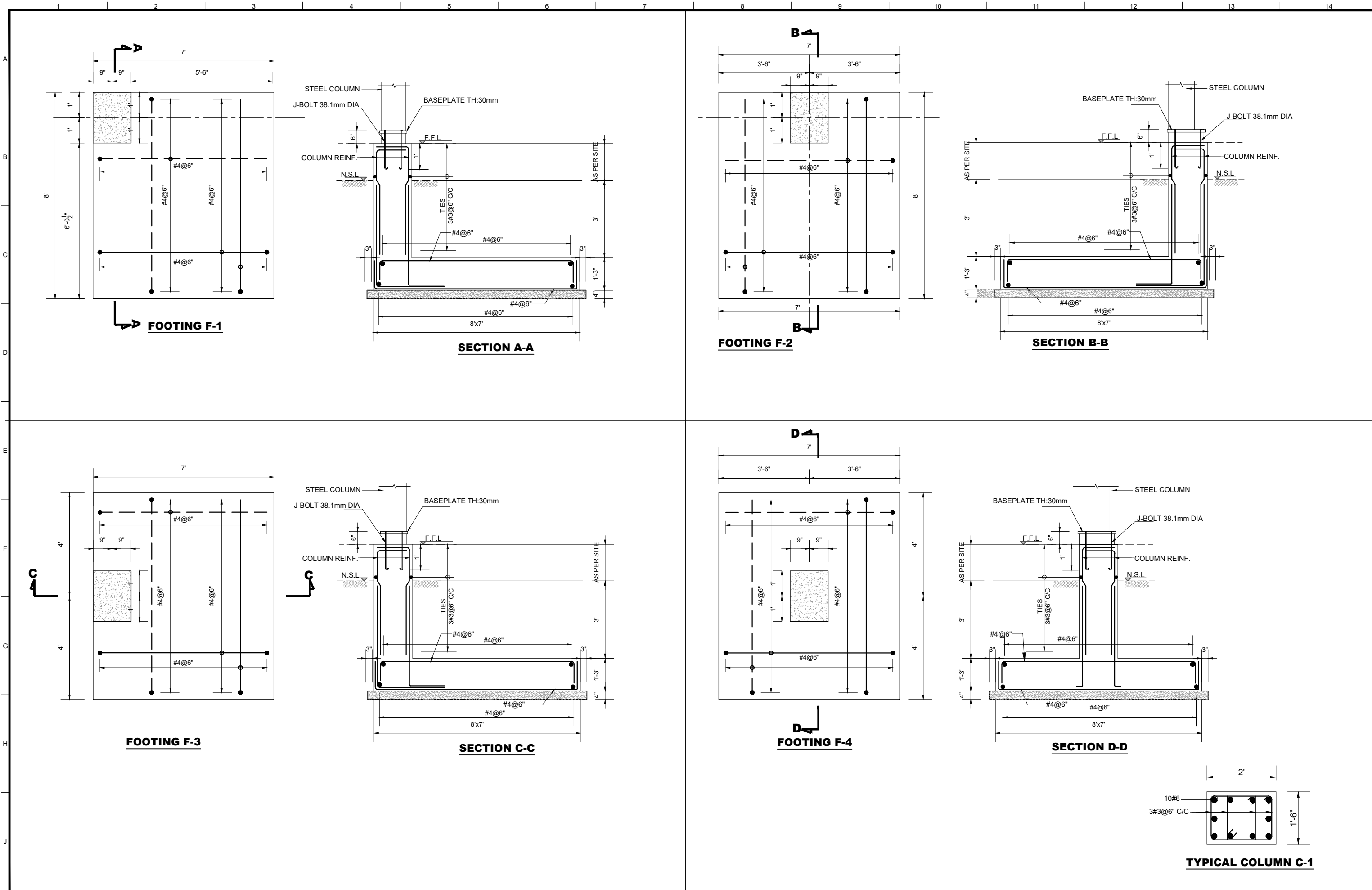


DETAIL A

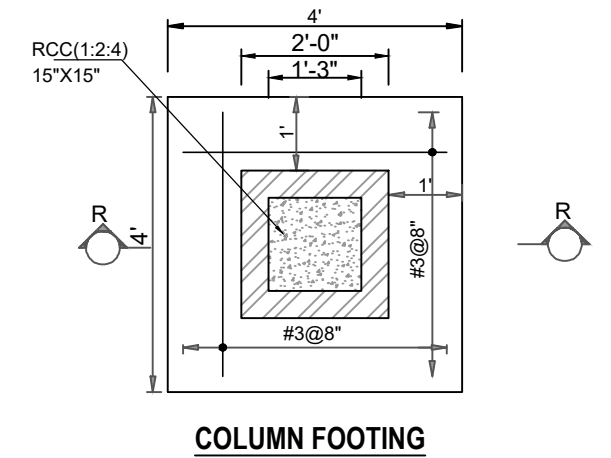
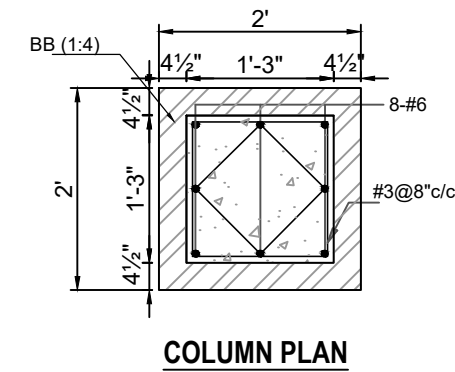
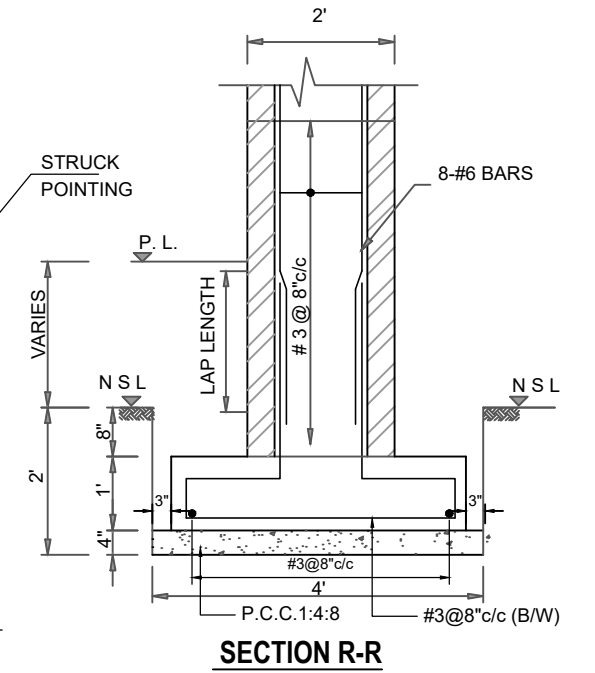
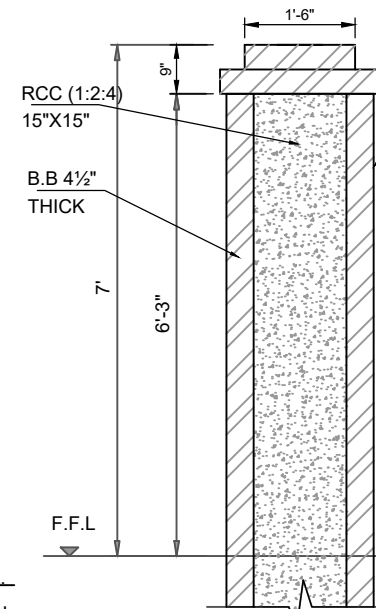
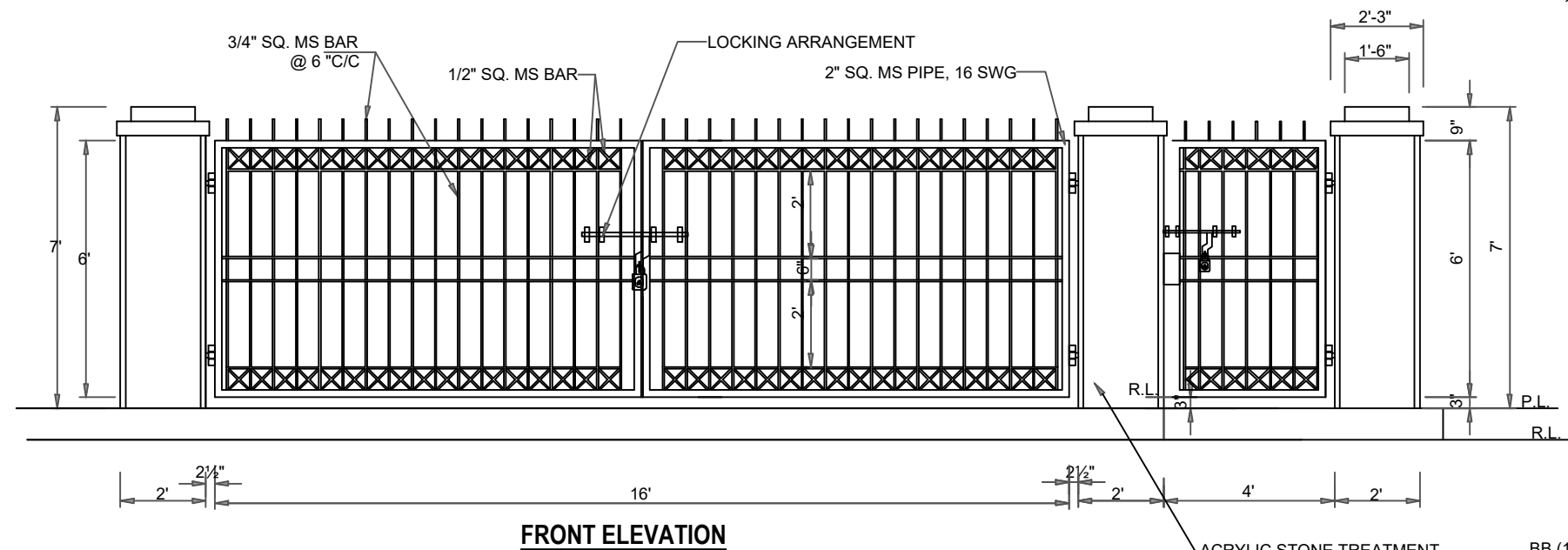


BASEPLATE

CLIENT:										CONSULTANTS:										PROJECT:										DRAWING TITLE:																				DRAWN BY:										DRAWING NO:																																																	
<div></div> <div>PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)</div>										<div></div> <div>JERS CONSULTANCY (PVT) LTD 24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan) Tel: +92 42 35113123, +92 42 35113124 Fax: +92 42 35113125 E-mail: info@jers.com.pk, mail@jers.com.pk Web: http://www.jers.com.pk</div>										<div>PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB. 204</div>										<div>RIGID FRAME ELEVATION PARKING SHED - 1 (BUREWALA CITY)</div>																				Munir										PS-06																																																	
																																																		CHECKED BY:																				Sadat Waleed										SCALE:										SHEET:																			
																																																												DATE:										August,2022										UNIT=FEET 1"=50'										1 OF 1																			
																																																																																JOB NO:										488-01																			
																																								REV.										DATE										DESCRIPTION																																																	

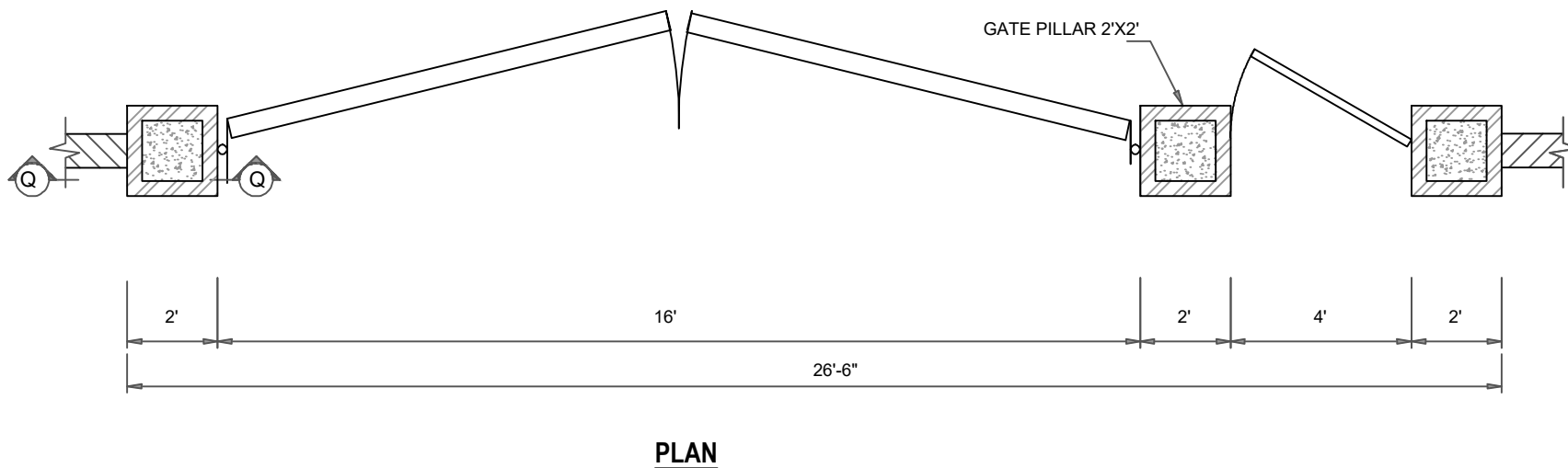


CLIENT:		CONSULTANTS:		PROJECT:		DRAWING TITLE:		DRAWN BY:		DRAWING NO:	
<div><div>HELP BUILD</div><div>PMDFC</div><div>HEALTHY CITIES</div></div> <div>PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)</div>		<div><div>JA</div><div>JERS CONSULTANCY (PVT) LTD</div><div>24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan)</div><div>Tel: +92 42 35113123, +92 42 35113124</div><div>Fax: +92 42 35113125</div><div>E-mail: info@jers.com.pk, mail@jers.com.pk</div><div>Web: http://www.jers.com.pk</div></div>		PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB. 205		FOOTING DETAILS PARKING SHED - 1 (BUREWALA CITY)		Munir		PS-07	
								CHECKED BY:		SCALE:	
								Sadat Waleed		UNIT=FEET	
								DATE:		1"=40'	
								August,2022		SHEET:	
										1 OF 1	
										JOB NO:	
										488-01	
REV.		DATE		DESCRIPTION							



NOTES

1. FOUNDATION HAS BEEN DESIGNED WITH A BEARING CAPACITY OF 0.75 TON/SFT. AT A DEPTH OF 3 FEET FROM N.S.L.
2. USE CONCRETE HAVING MINIMUM CUBE STRENGTH OF 3,000 PSI (NOMINAL MIX 1:2:4) FOR ALL CONCRETE WORKS.
3. USE DEFORMED STEEL HAVING MINIMUM YIELD STRENGTH OF 60,000 PSI.
4. ALL STEEL STRUCTURAL SURFACES TO BE TREATED WITH ONE COAT OF PRIMER (RED OXIDE) AND TWO COATS OF ENAMEL PAINT OF APPROVED BRAND & SPECIFICATIONS. THE COST OF PAINTING SHOULD BE INCLUDED IN CONTRACTOR'S APPROVED/BID RATE.
5. HORIZONTAL DPC IS OF CEMENT CONCRETE (1:2:4), 2" THICK WITH ONE COAT OF BITUMEN AND A LAYER OF POLYTHENE SHEET OF 500 GAUGE.



CLIENT:



**PUNJAB MUNICIPAL DEVELOPMENT
FUND COMPANY
(PMDFC)**

CONSULTANTS:



JERS CONSULTANCY (PVT) LTD
24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan)
Tel: +92 42 35113123, +92 42 35113124
Fax: +92 42 35113125
E-mail: info@jers.com.pk, mail@jers.com.pk
Web: http://www.jers.com.pk

PROJECT:

PUNJAB CITIES PROGRAM (PCP)
DETAILED DESIGN OF INFRASTRUCTURE
SUB-PROJECTS AND RESIDENTS SUPERVISION IN
16 CITIES OF PUNJAB. 208

DRAWING TITLE:

**PROPOSED ENTERANCE GATE
(BUREWALA CITY)**

REV.	DATE	DESCRIPTION
1	10/01/2022	ISSUED FOR TENDER
2	10/01/2022	ISSUED FOR TENDER
3	10/01/2022	ISSUED FOR TENDER
4	10/01/2022	ISSUED FOR TENDER
5	10/01/2022	ISSUED FOR TENDER
6	10/01/2022	ISSUED FOR TENDER
7	10/01/2022	ISSUED FOR TENDER
8	10/01/2022	ISSUED FOR TENDER
9	10/01/2022	ISSUED FOR TENDER
10	10/01/2022	ISSUED FOR TENDER
11	10/01/2022	ISSUED FOR TENDER
12	10/01/2022	ISSUED FOR TENDER
13	10/01/2022	ISSUED FOR TENDER
14	10/01/2022	ISSUED FOR TENDER

DRAWN BY:

Asif

CHECKED BY:

Sadat Waleed

DATE:

Oct, 2022

DRAWING NO:

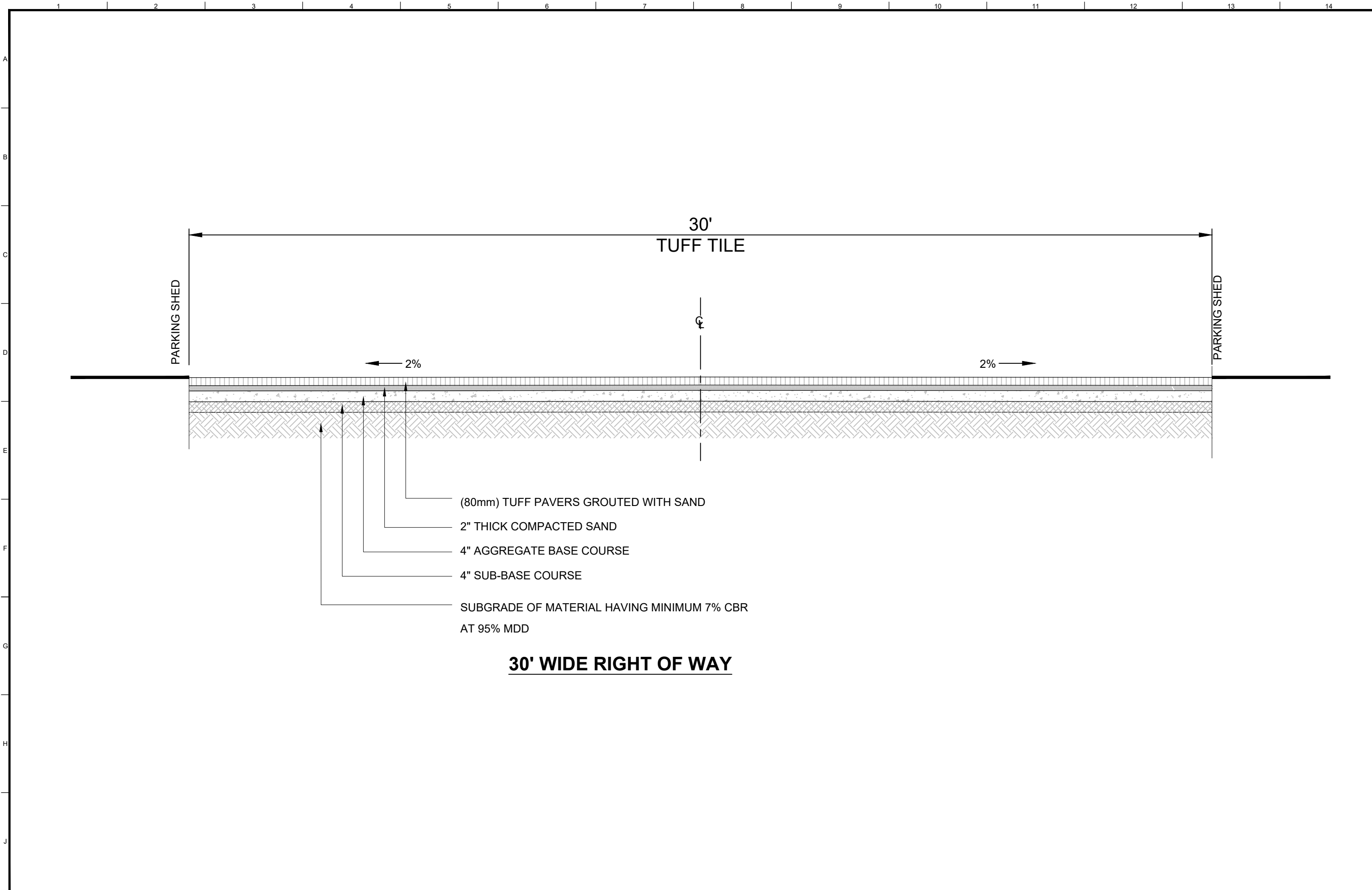
PS-10

SCALE:



UNIT=FEET

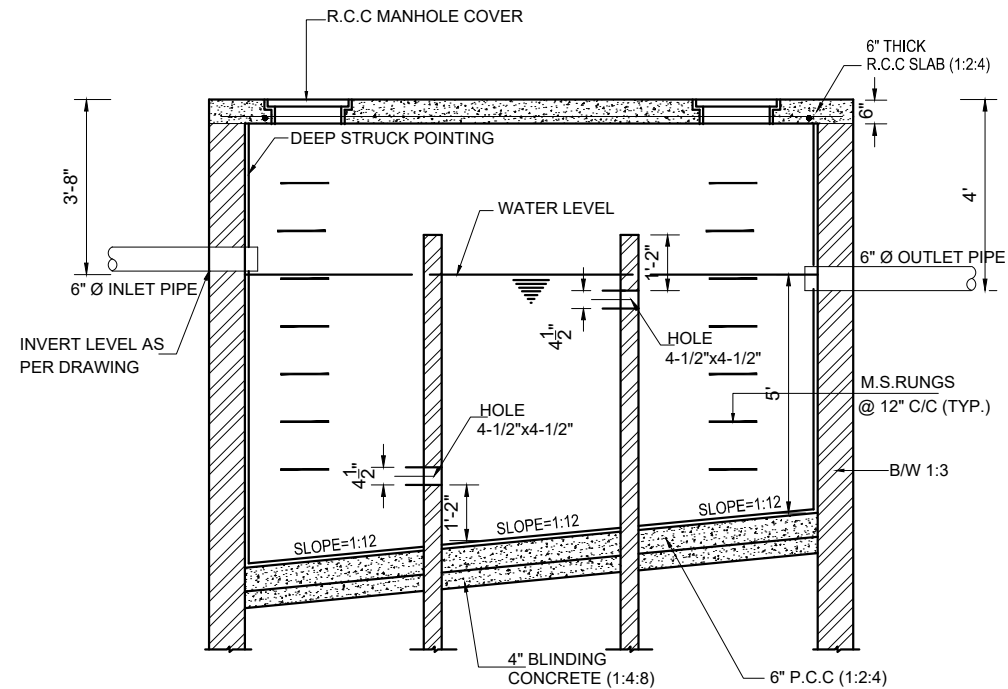
SHEET:

JOB NO:
488-01

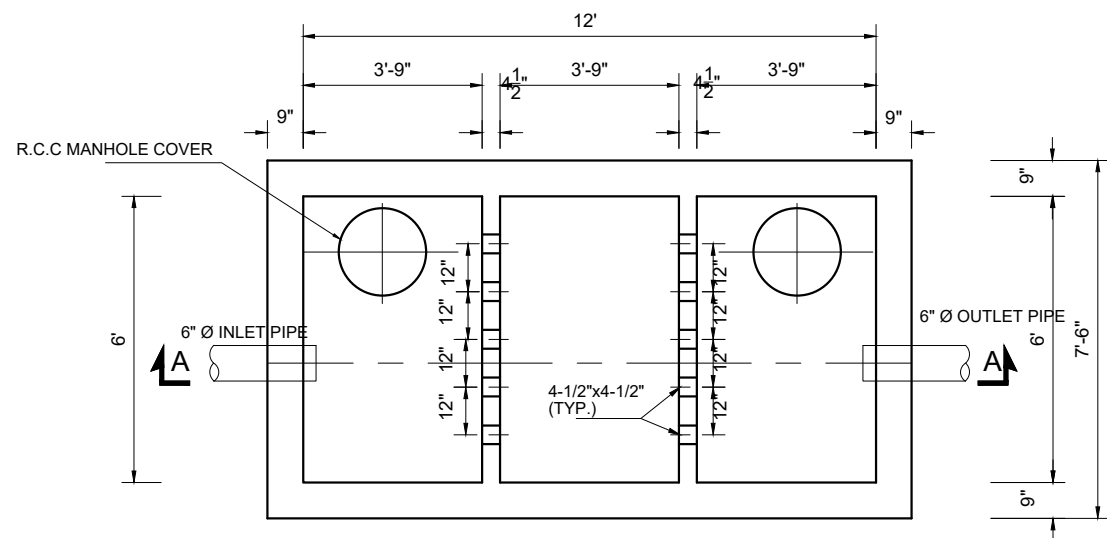


30' WIDE RIGHT OF WAY

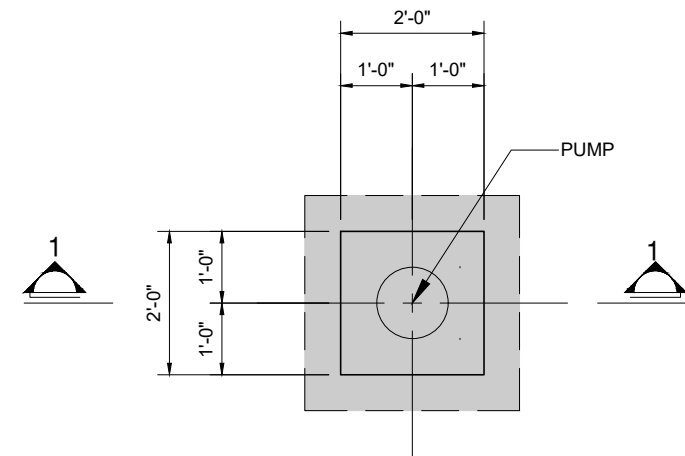
CLIENT:  PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)			CONSULTANTS:  JERS CONSULTANCY (PVT) LTD 24-Civic Center, Quid-e-Azam Town, Township, Lahore (Pakistan) Tel: +92 42 35113123, +92 42 35113124 Fax: +92 42 35113125 E-mail: info@jers.com.pk, mail@jers.com.pk Web: http://www.jers.com.pk			PROJECT: PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB. 209			DRAWING TITLE: TYPICAL ROAD CROSS SECTION (BUREWALA CITY)			DRAWN BY: Munir		DRAWING NO: PS-11	
												CHECKED BY: Sadat Waleed		SCALE: UNIT=FEET 3/8"=1'-0"	
												DATE: Oct,2022		SHEET: 1 OF 1	
												JOB NO: 488-01			
												REV.		DATE	
														DESCRIPTION	



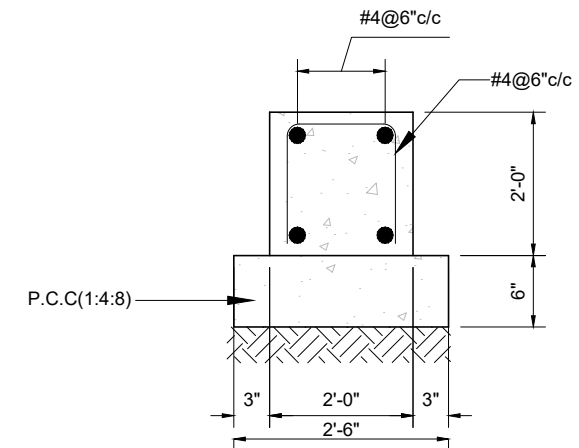
SECTION A-A



**SEPTIC TANK PLAN
12-0" x 6'-0"**



PUMP FOUNDATION PLAN



SECTION 1-1

CLIENT:



**PUNJAB MUNICIPAL DEVELOPMENT
FUND COMPANY
(PMDFC)**

CONSULTANTS:



JERS CONSULTANCY (PVT) LTD
24-Civic Center, Quid-e-Azam Town, Township, Lahore (Pakistan)
Tel: +92 42 35113123, +92 42 35113124
Fax: +92 42 35113125
E-mail: info@jers.com.pk, mail@jers.com.pk
Web: http://www.jers.com.pk

PROJECT:

**PUNJAB CITIES PROGRAM (PCP)
DETAILED DESIGN OF INFRASTRUCTURE
SUB-PROJECTS AND RESIDENTS SUPERVISION IN
16 CITIES OF PUNJAB. 210**

DRAWING TITLE:

**PUMP PAD FOUNDATION &
SEPTIC TANK DETAIL
(BUREWALA CITY)**

REV.	DATE	DESCRIPTION
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

DRAWN BY:

Munir

CHECKED BY:

Sadat Waleed

DATE:

Oct,2022

DRAWING NO:

PS-12

SCALE:

UNIT=FEET
1/4"=1'-0"

SHEET:

1 OF 1

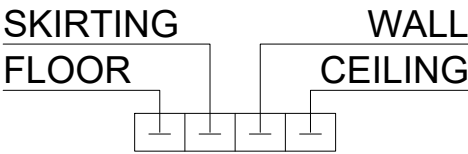
JOB NO:

488-01

ARCHITECTURAL DRAWING

SCHEDULE OF INTERNAL FINISHES

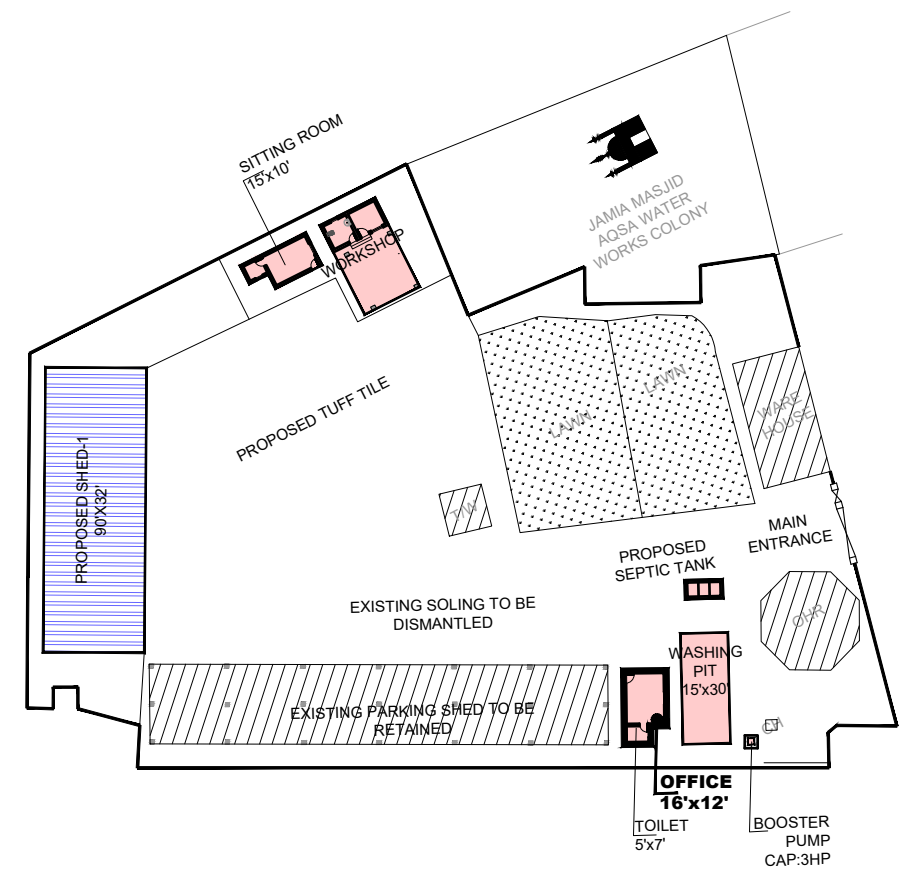
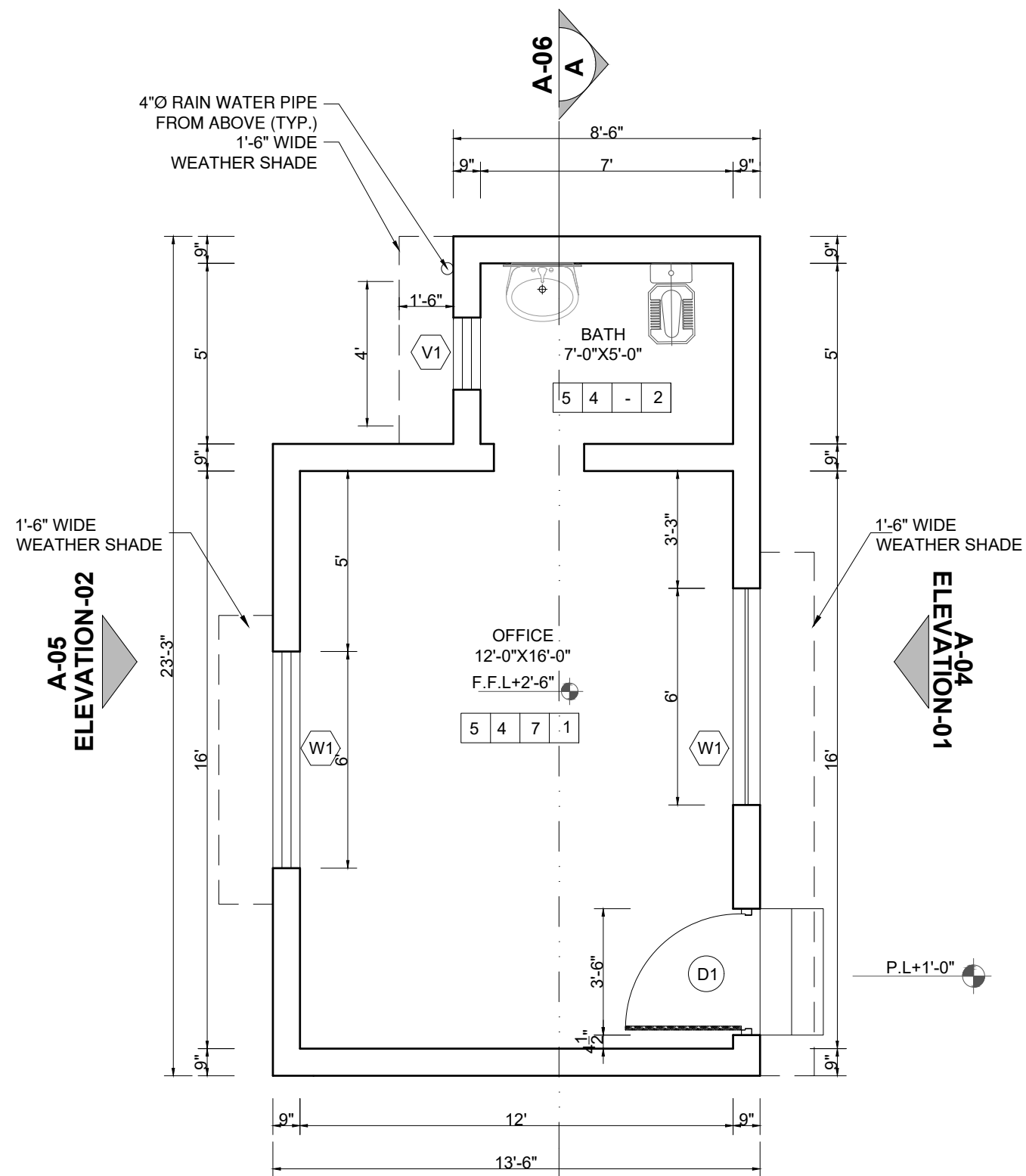
LEGEND

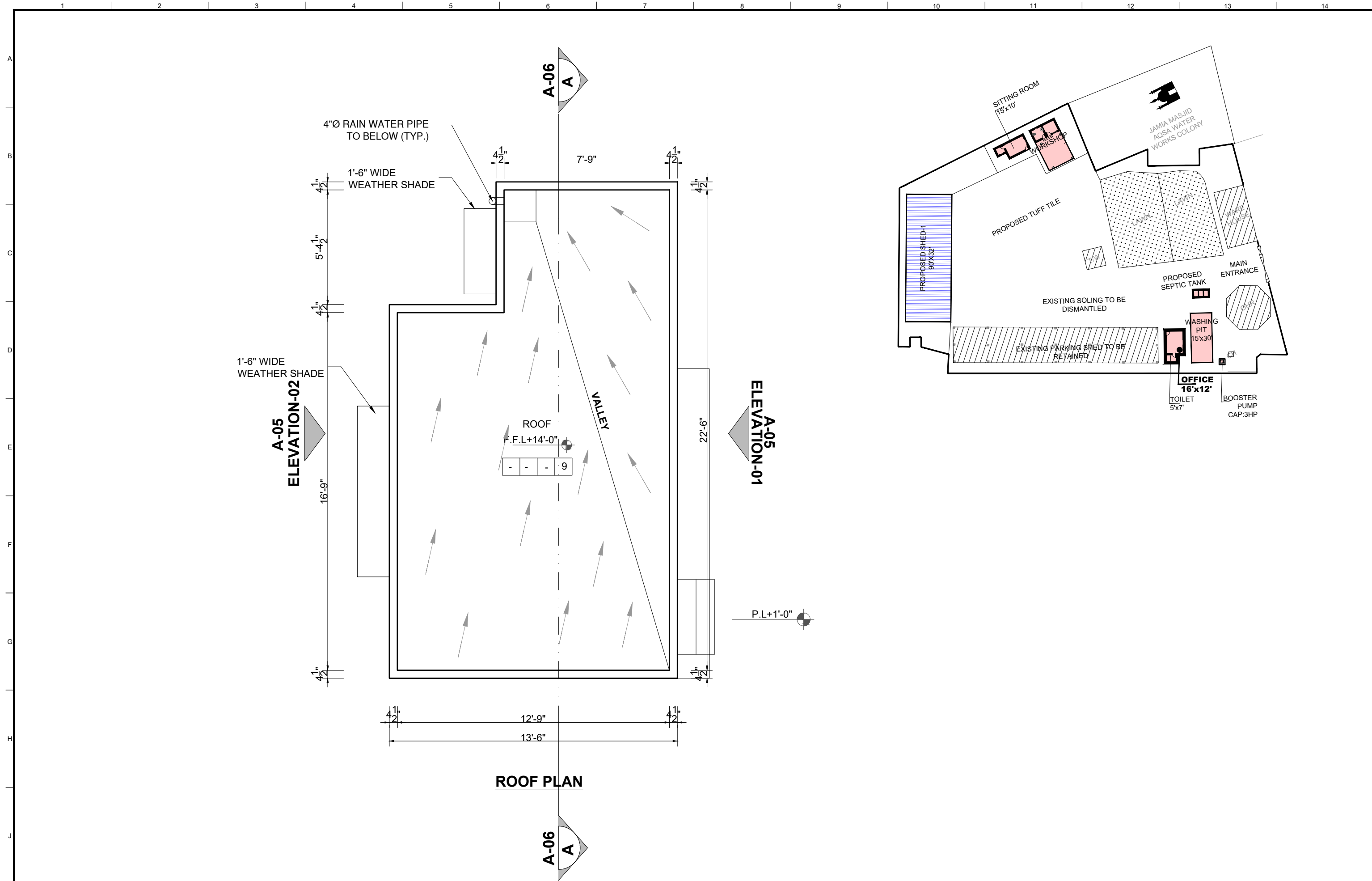




- 1 PORCELAIN TILES OF APPROVED SIZE PATTERN AND COLOR
- 2 CERAMIC TILES OF APPROVED SIZE PATTERN AND COLOR
7'-0" HIGH WITH VENILE EMULSION PAINT TILL CEILING.
(MATT FINISH ON FLOOR & GLAZZED ON WALL)
- 3 PORCELAIN SLABS FOR TREADS & RISER OF APPROVED COLOR & PATTERN
- 4 DISTAMPER ON C.S PLASTER (APPROVED MAKE & SHADE)
- 5 DISTAMPER PAINT
- 6 P.C.C TUFF PAVERS 80mm THICK HAVING 7000 PSI GRADING STRENGTH OVER 2" THICK SAND
- 7 4" HIGH PORCELAIN TILES SKIRTING

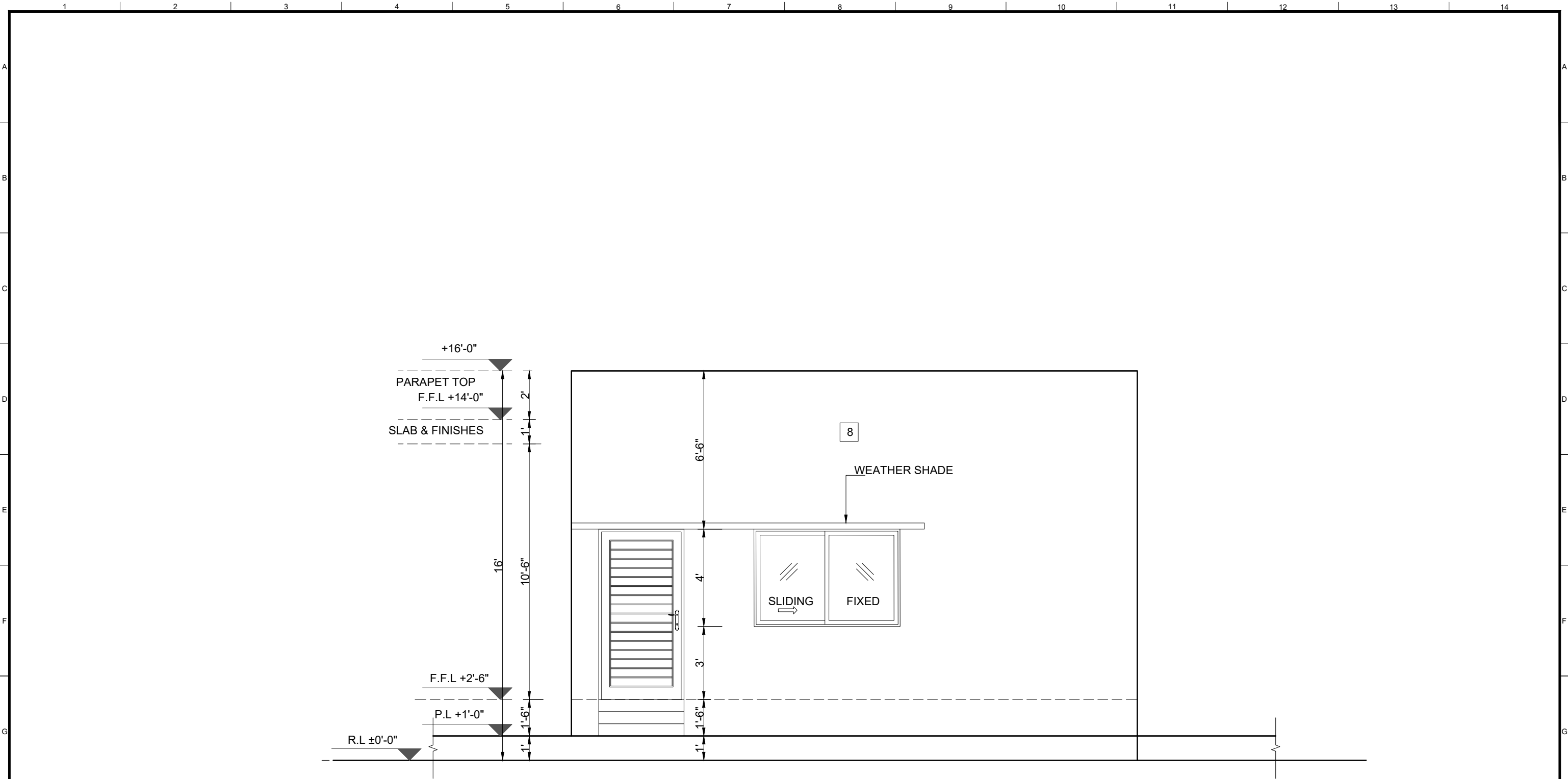
SCHEDULE OF EXTERNAL FINISHES

- 8 DEEP STRUCK POINTING
- 9 9"X4½"X1½" TH. TILES





CLIENT:			CONSULTANTS:			PROJECT:			DRAWING TITLE:						DRAWN BY:		DRAWING NO:			
<div></div> <div>PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)</div>			<div></div> <div>JERS CONSULTANCY (PVT) LTD</div> <div>24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan)</div> <div>Tel: +92 42 35113123, +92 42 35113124</div> <div>Fax: +92 42 35113125</div> <div>E-mail: info@jers.com.pk, mail@jers.com.pk</div> <div>Web: http://www.jers.com.pk</div>			<div>PUNJAB CITIES PROGRAM (PCP)</div> <div>DETAILED DESIGN OF INFRASTRUCTURE</div> <div>SUB-PROJECTS AND RESIDENTS SUPERVISION IN</div> <div>16 CITIES OF PUNJAB. 214</div>			<div>ROOF LAYOUT PLAN</div> <div>OFFICE BLOCK</div> <div>(BUREWALA CITY)</div>						Munir		A-03			
															CHECKED BY:					
															Sadat Waleed		SCALE:		SHEET:	
															DATE:		UNIT=FEET		1 OF 1	
															OCT,2022		1/4"=1'-0"		JOB NO:	
					488-01															
			REV.			DATE			DESCRIPTION											



ELEVATION-01

CLIENT:

HELP BUILD

PMDFC

HEALTHY CITIES

PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)

CONSULTANTS:

JERS CONSULTANCY (PVT) LTD

24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan)

Tel: +92 42 35113123, +92 42 35113124

Fax: +92 42 35113125

E-mail: info@jers.com.pk, mail@jers.com.pk

Web: http://www.jers.com.pk

PROJECT:

PUNJAB CITIES PROGRAM (PCP)

DETAILED DESIGN OF INFRASTRUCTURE

SUB-PROJECTS AND RESIDENTS SUPERVISION IN

16 CITIES OF PUNJAB. 215

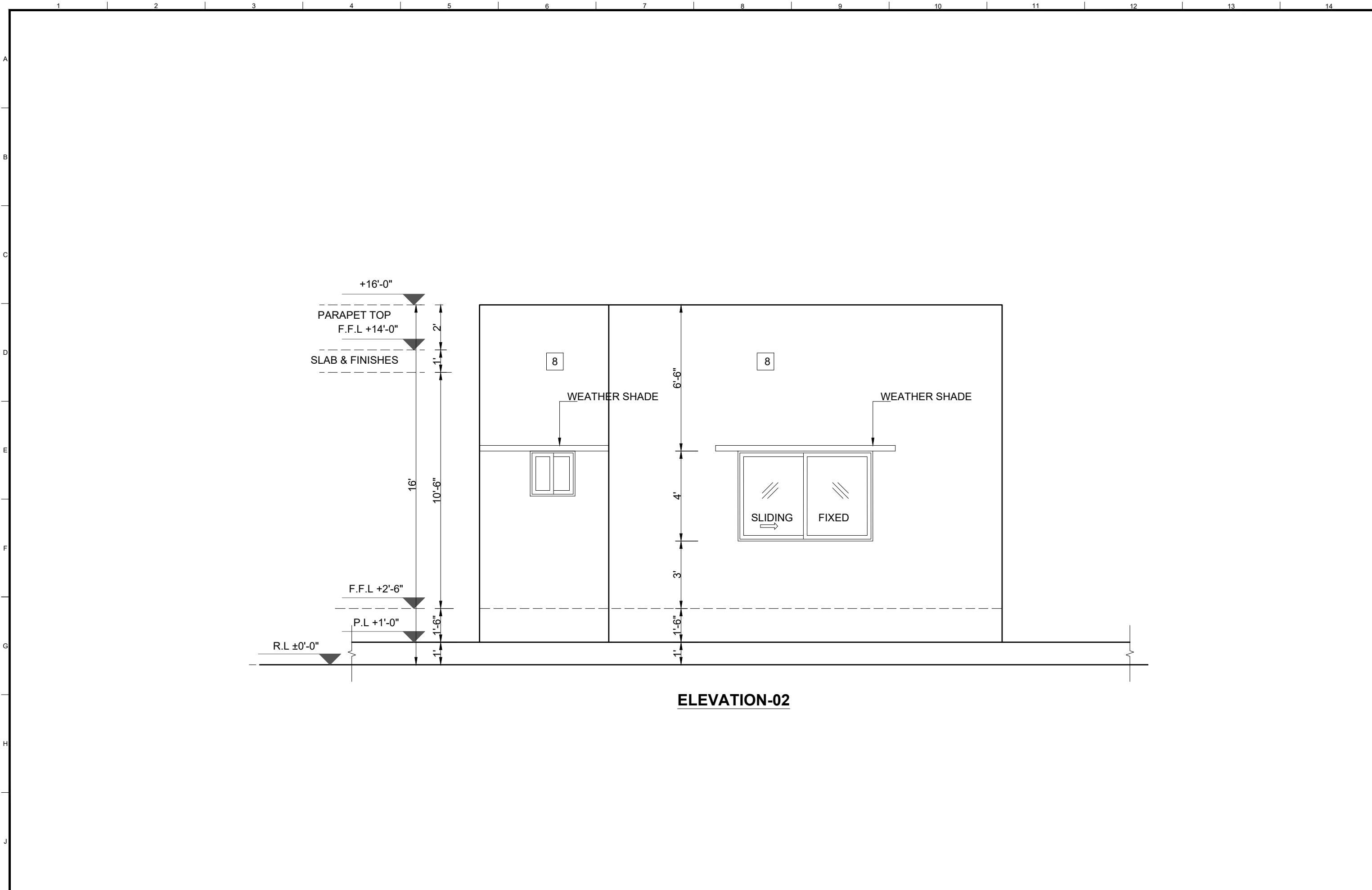
DRAWING TITLE:

ELEVATION-01



OFFICE BLOCK

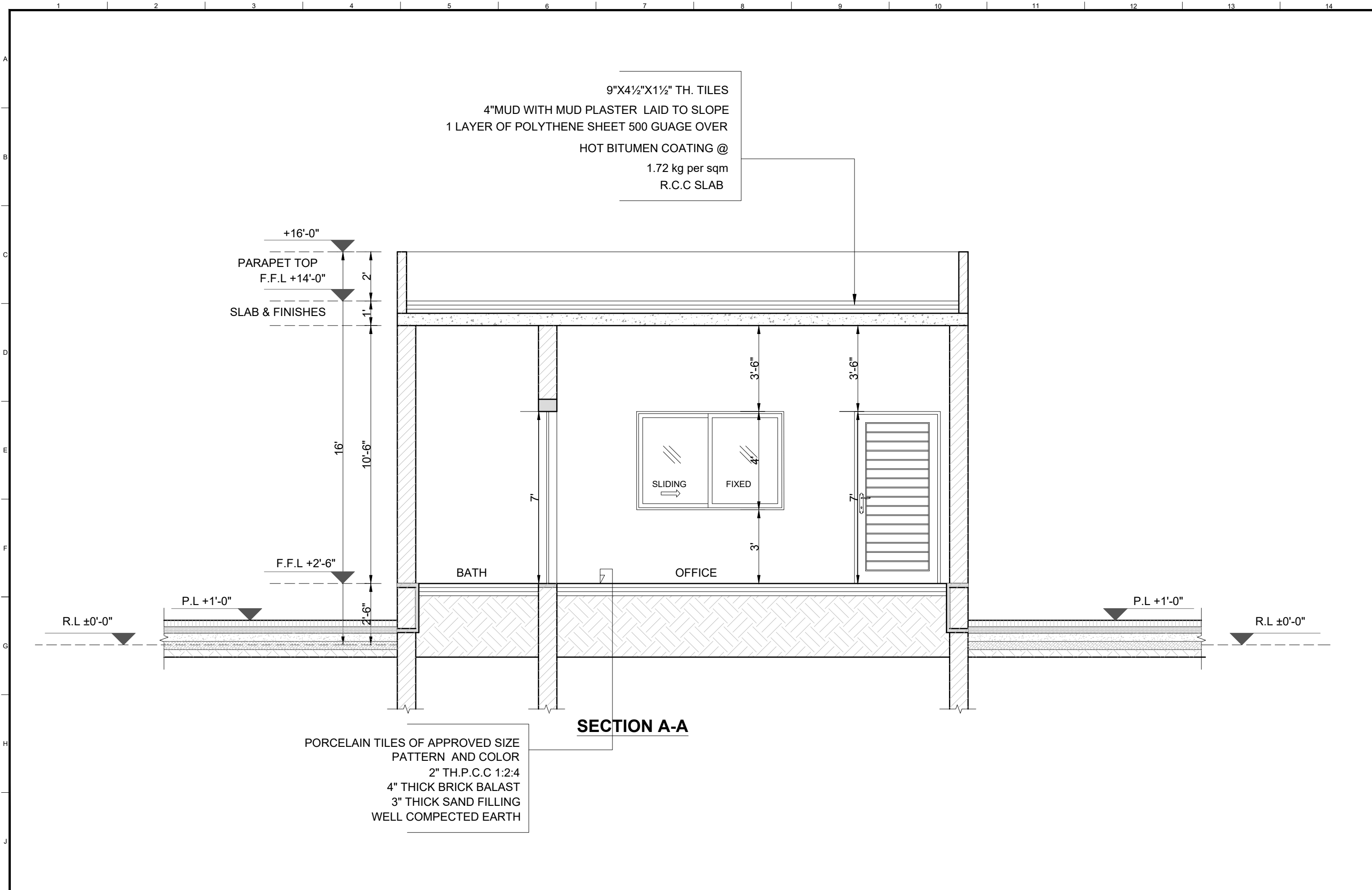
(BUREWALA CITY)

</



ELEVATION-02

CLIENT:  PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)	CONSULTANTS:  JERS CONSULTANCY (PVT) LTD <small>24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan) Tel: +92 42 35113123, +92 42 35113124 Fax: +92 42 35113125 E-mail: info@jers.com.pk, mail@jers.com.pk Web: http://www.jers.com.pk</small>	PROJECT: PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB. 216	DRAWING TITLE: ELEVATION-02 OFFICE BLOCK (BUREWALA CITY)				DRAWN BY: Munir	DRAWING NO: A-05			
									CHECKED BY: Sadat Waleed	SCALE: UNIT=FEET 1/4"=1'-0"	SHEET: 1 OF 1 JOB NO: 488-01
				REV.	DATE	DESCRIPTION	OCT,2022				



SECTION A-A



SIZE=3'-6"x7'-0"
QUANTITY= 01 NOS. HOLLOW
FLUSH DOOR WITH COMMERCIAL
PLY(3 PLY)



SIZE=2'-6"x7'-0"
QUANTITY= 01 NOS. HOLLOW
FLUSH DOOR WITH COMMERCIAL
PLY(3 PLY)



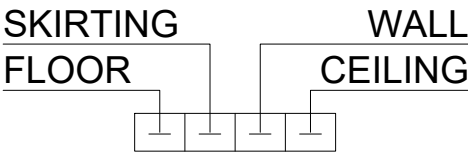
SIZE=6'-0"x4'-0"
QUANTITY= 02 NOS.
STEEL SLIDING WINDOW,
FIXED WITH 5MM THICK GLASS
INCLUDING WIRE GAUZE



SIZE=2'-0"x2'-0"
QUANTITY= 01 NOS.
STEEL SLIDING WINDOW,
FIXED WITH 5MM THICK GLASS
INCLUDING WIRE GAUZE

SCHEDULE OF INTERNAL FINISHES

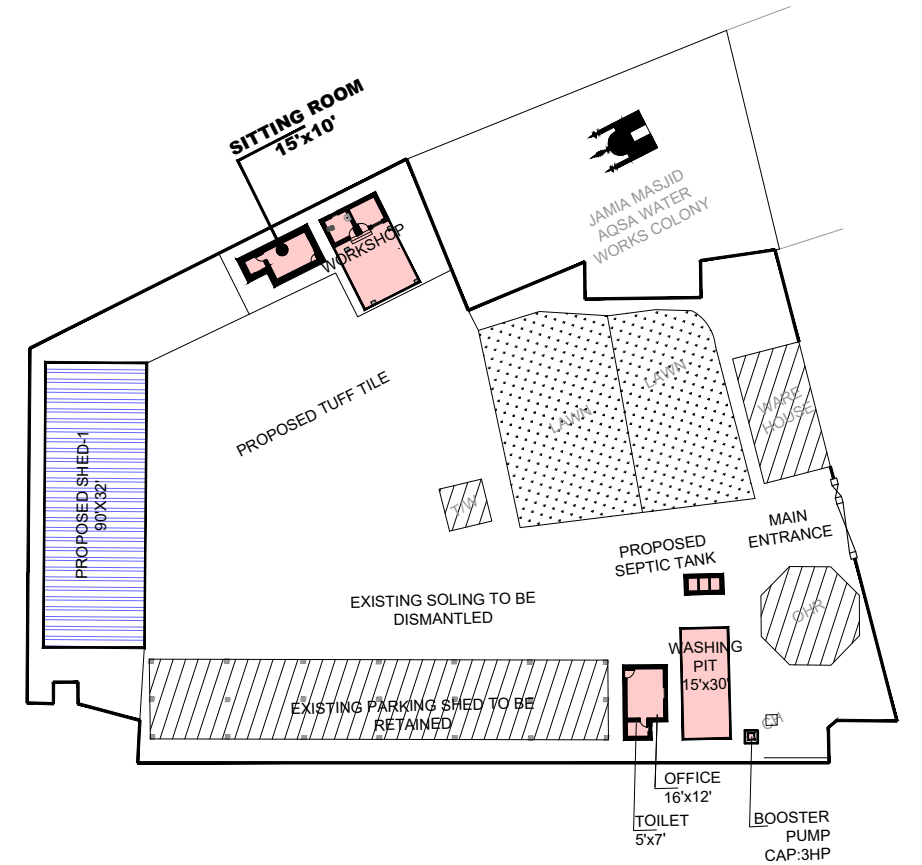
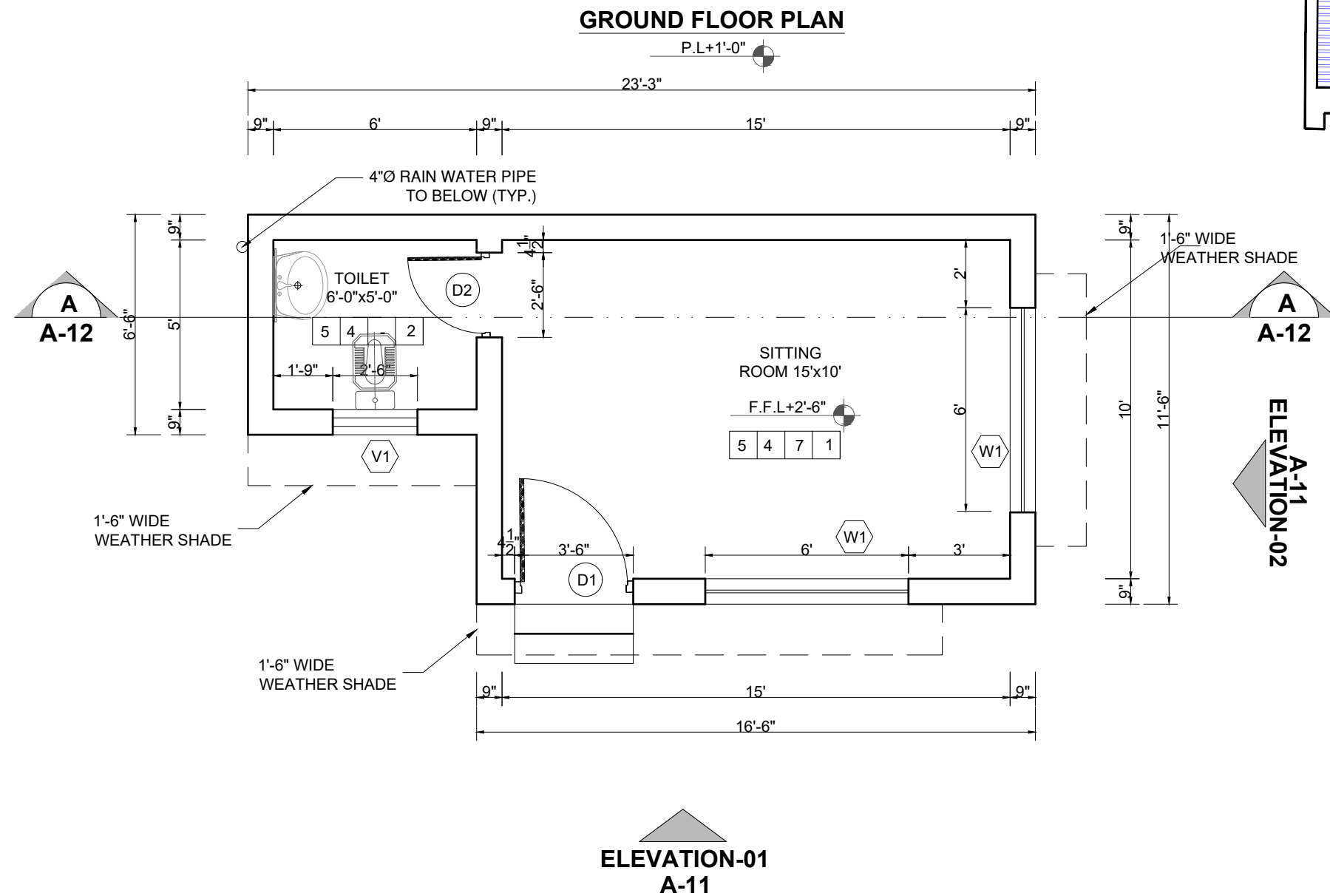
LEGEND



- 1 PORCELAIN TILES OF APPROVED SIZE PATTERN AND COLOR
- 2 CERAMIC TILES OF APPROVED SIZE PATTERN AND COLOR
7'-0" HIGH WITH VENILE EMULSION PAINT TILL CEILING.
(MATT FINISH ON FLOOR & GLAZZED ON WALL)
- 3 PORCELAIN SLABS FOR TREADS & RISER OF APPROVED COLOR & PATTERN
- 4 DISTAMPER ON C.S PLASTER (APPROVED MAKE & SHADE)
- 5 DISTAMPER PAINT
- 6 P.C.C TUFF PAVERS 80mm THICK HAVING 7000 PSI GRADING STRENGTH OVER 2" THICK SAND
- 7 4" HIGH PORCELAIN TILES SKIRTING

SCHEDULE OF EXTERNAL FINISHES

- 8 DEEP STRUCK POINTING
- 9 9"X4½"X1½" TH. TILES



CLIENT:



**PUNJAB MUNICIPAL DEVELOPMENT
FUND COMPANY
(PMDFC)**

CONSULTANTS:



JERS CONSULTANCY (PVT) LTD
24-Civic Center, Quid-e-Azam Town, Township, Lahore (Pakistan)
Tel: +92 42 35113123, +92 42 35113124
Fax: +92 42 35113125
E-mail: info@jers.com.pk, mail@jers.com.pk
Web: http://www.jers.com.pk

PROJECT:

PUNJAB CITIES PROGRAM (PCP)
DETAILED DESIGN OF INFRASTRUCTURE
SUB-PROJECTS AND RESIDENTS SUPERVISION IN
16 CITIES OF PUNJAB. 220

DRAWING TITLE:

**GROUND FLOOR LAYOUT PLAN
SITTING AREA
(BUREWALA CITY)**

REV.	DATE	DESCRIPTION

DRAWN BY:

Munir

CHECKED BY:

Sadat Waleed

DATE:

OCT,2022

DRAWING NO:

A-09

SCALE:

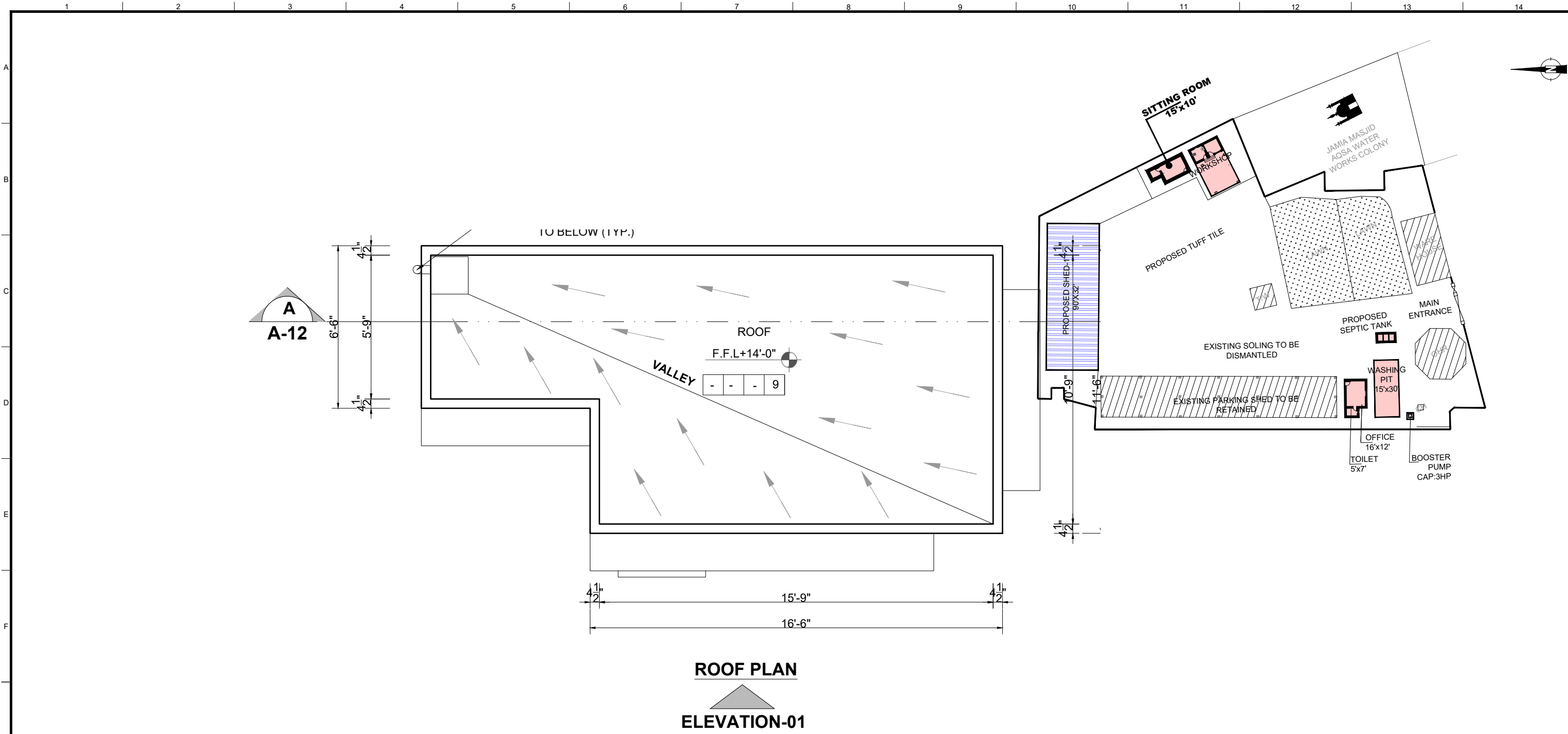
UNIT=FEET
3/16"=1'-0"

SHEET:

1 OF 1

JOB NO:

488-01



CLIENT:

HELP BUILD

PMDFC

HEALTHY CITIES

PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY

(PMDFC)

CONSULTANTS:

JERS CONSULTANCY (PVT) LTD

24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan)

Tel: +92 42 35113123, +92 42 35113124

Fax: +92 42 35113125

E-mail: info@jers.com.pk, mail@jers.com.pk

Web: http://www.jers.com.pk

PROJECT:

PUNJAB CITIES PROGRAM (PCP)

DETAILED DESIGN OF INFRASTRUCTURE

SUB-PROJECTS AND RESIDENTS SUPERVISION IN

16 CITIES OF PUNJAB.

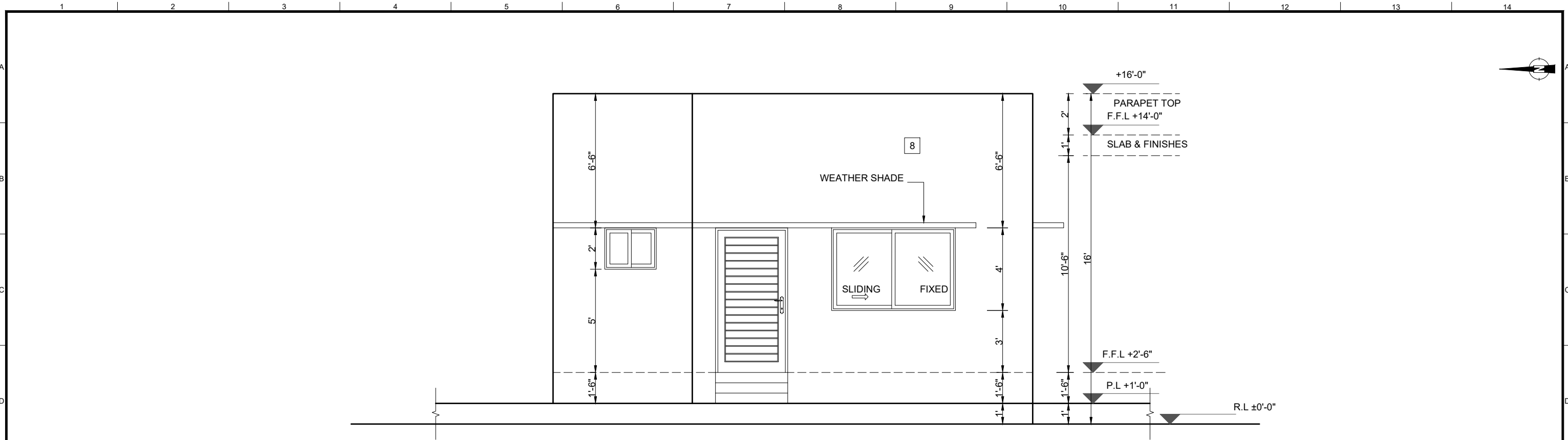
221

DRAWING TITLE:

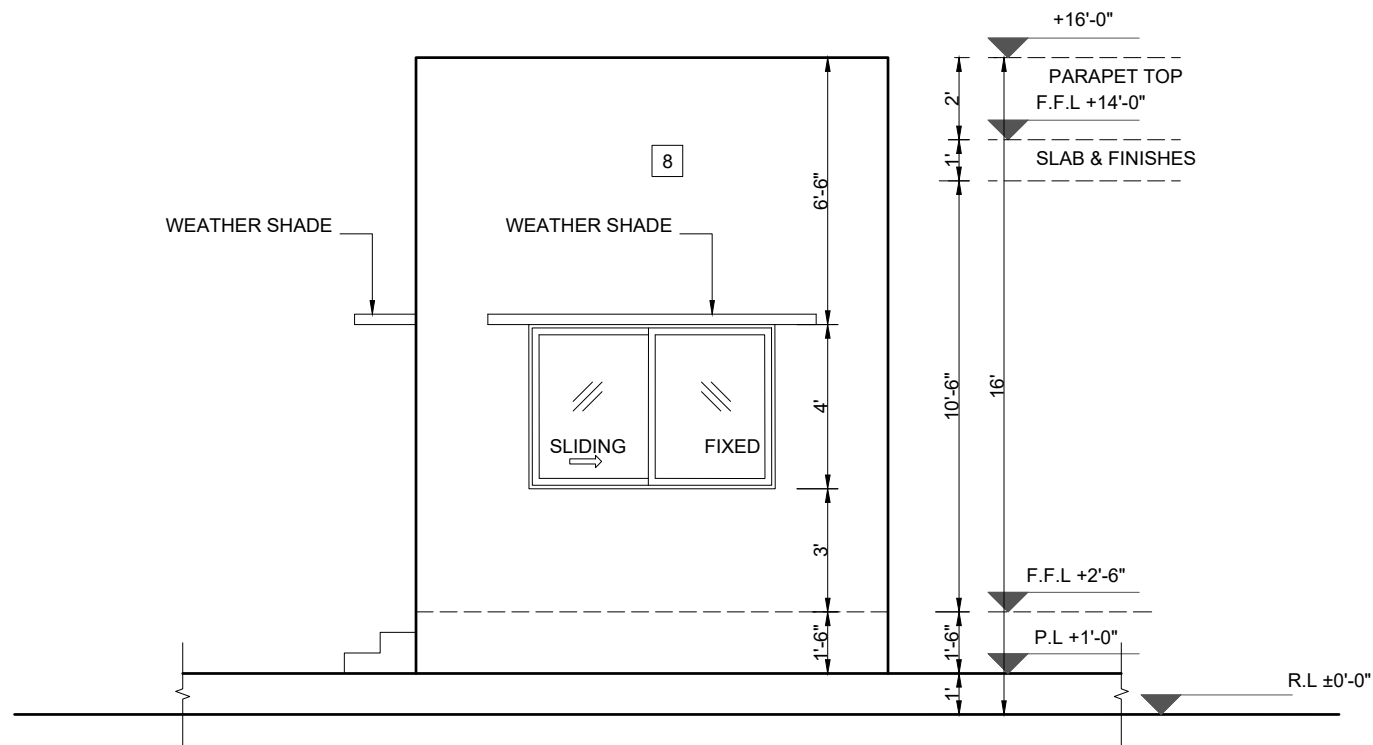
ROOF LAYOUT PLAN

SITTING AREA

(BUREWALA CITY)

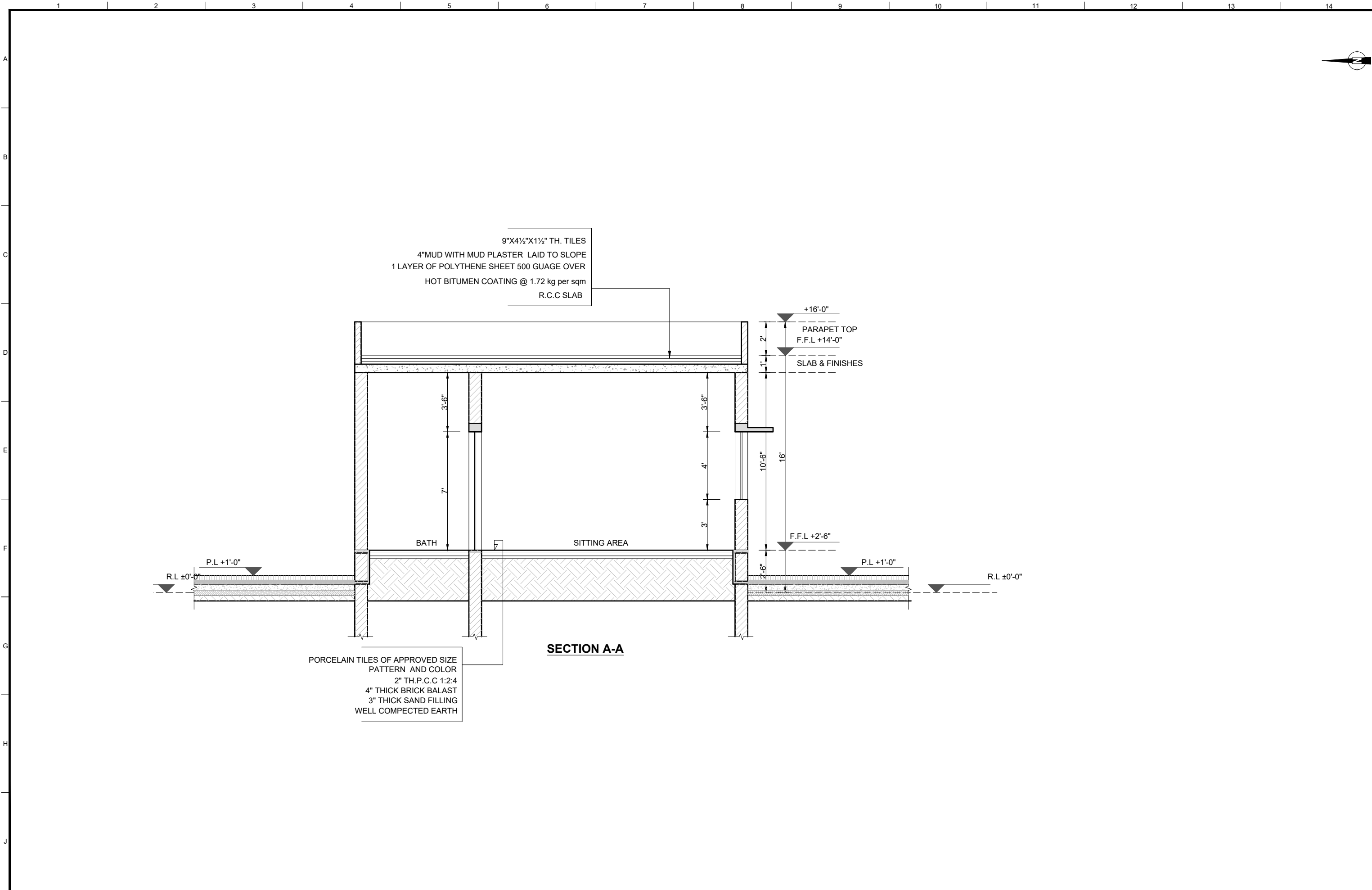


ELEVATION-01

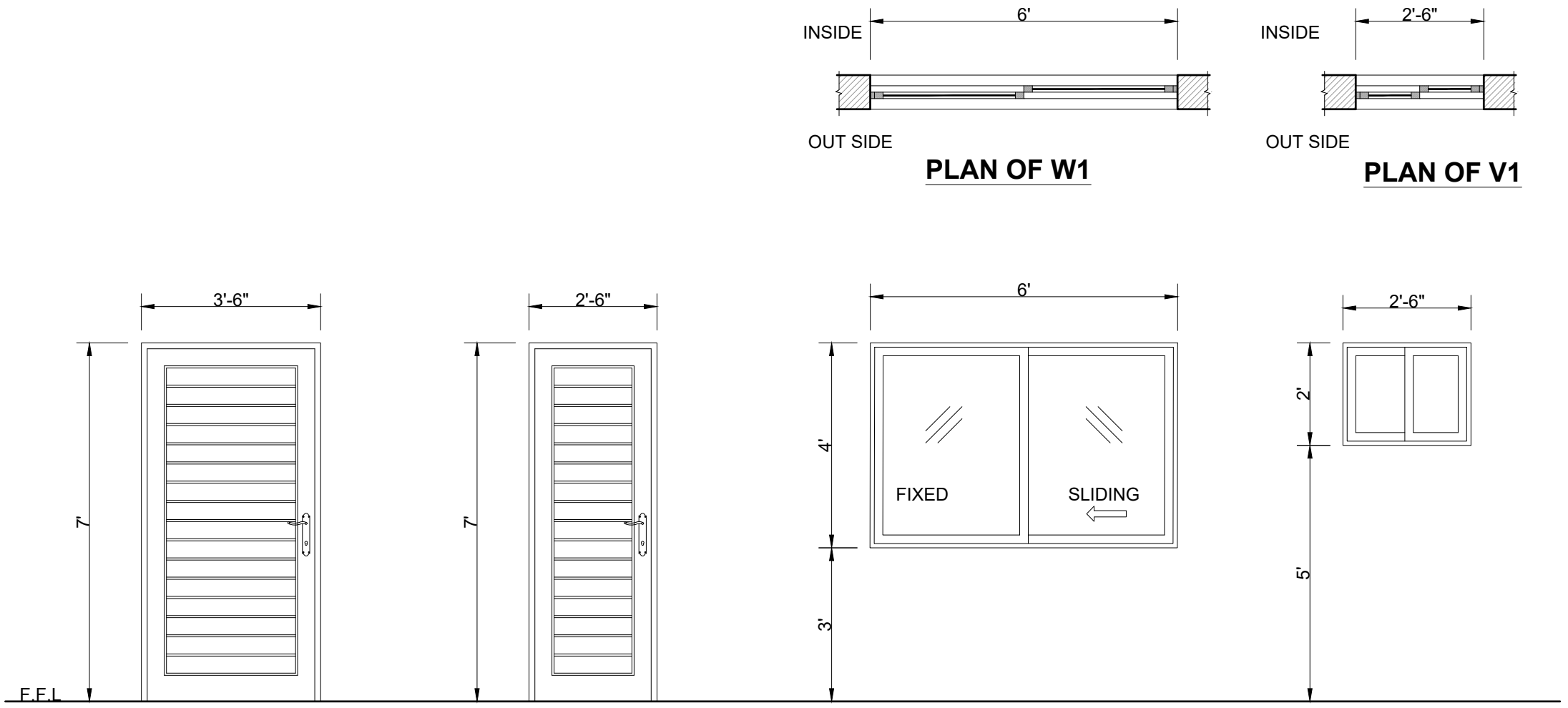


ELEVATION-02

CLIENT:			CONSULTANTS:			PROJECT:			DRAWING TITLE:						DRAWN BY:		DRAWING NO:								
<div><div><div>HELP BUILD</div><div>PMDFC</div><div>HEALTHY CITIES</div></div><div>PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)</div></div>			<div><div><div>JERS CONSULTANCY (PVT) LTD</div><div>24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan) Tel: +92 42 35113123, +92 42 35113124 Fax: +92 42 35113125 E-mail: info@jers.com.pk, mail@jers.com.pk Web: http://www.jers.com.pk</div></div></div>			<div><div>PUNJAB CITIES PROGRAM (PCP)</div><div>DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB. 222</div></div>			<div><div>ELEVATION-01 & 02 SITTING AREA (BUREWALA CITY)</div></div>						Munir		A-11								
															CHECKED BY:										
																		Sadat Waleed		DATE:		SCALE:		SHEET:	
																						UNIT=FEET 3/16"=1'-0"		1 OF 1	
						REV.			DATE			DESCRIPTION			OCT,2022		JOB NO: 488-01								



CLIENT:		CONSULTANTS:		PROJECT:		DRAWING TITLE:		DRAWN BY:		DRAWING NO:	
<div><div>HELP BUILD</div><div>PMDFC</div><div>HEALTHY CITIES</div></div> <div>PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)</div>		<div><div>JA</div><div>JERS CONSULTANCY (PVT) LTD</div><div>24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan) Tel: +92 42 35113123, +92 42 35113124 Fax: +92 42 35113125 E-mail: info@jers.com.pk, mail@jers.com.pk Web: http://www.jers.com.pk</div></div>		<div>PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB. 223</div>		<div>SECTION A-A SITTING AREA (BUREWALA CITY)</div>		Munir		A-12	
								CHECKED BY:		SCALE:	
								Sadat Waleed		UNIT=FEET 3/16"=1'-0"	
								DATE:		SHEET:	
								OCT,2022		1 OF 1	
										JOB NO:	
										488-01	
REV.		DATE		DESCRIPTION							



ELEVATION OF D1

SIZE=3'-6"x7'-0"
QUANTITY= 01 NOS. HOLLOW
FLUSH DOOR WITH COMMERCIAL
PLY(3 PLY)

ELEVATION OF D2

SIZE=2'-6"x7'-0"
QUANTITY= 01 NOS. HOLLOW
FLUSH DOOR WITH COMMERCIAL
PLY(3 PLY)

ELEVATION OF W1

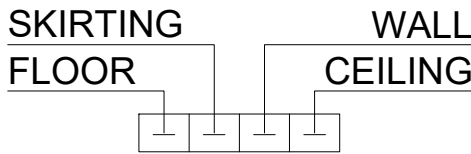
SIZE=6'-0"x4'-0"
QUANTITY= 02 NOS.
STEEL SLIDING WINDOW,
FIXED WITH 5MM THICK GLASS
INCLUDING WIRE GAUZE

ELEVATION OF V1

SIZE=2'-6"x2'-0"
QUANTITY= 01 NOS.
STEEL SLIDING WINDOW,
FIXED WITH 5MM THICK GLASS
INCLUDING WIRE GAUZE

SCHEDULE OF INTERNAL FINISHES

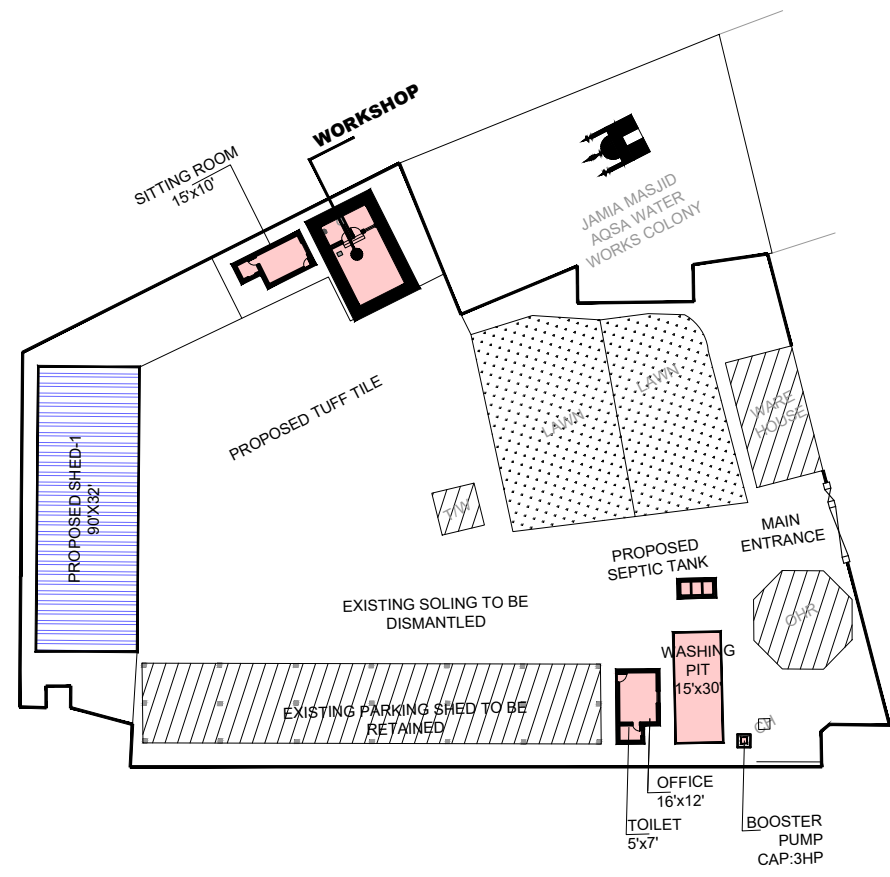
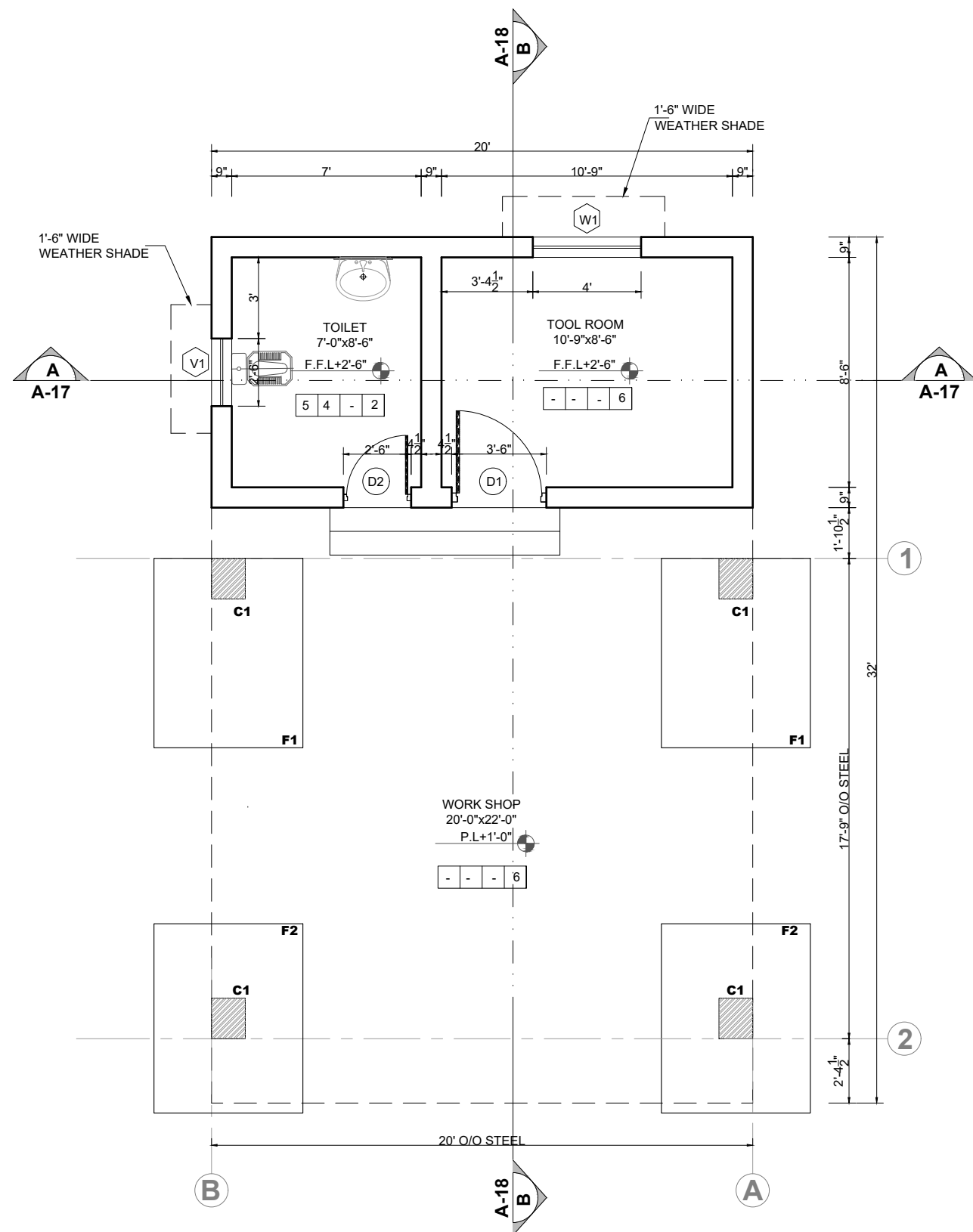
LEGEND



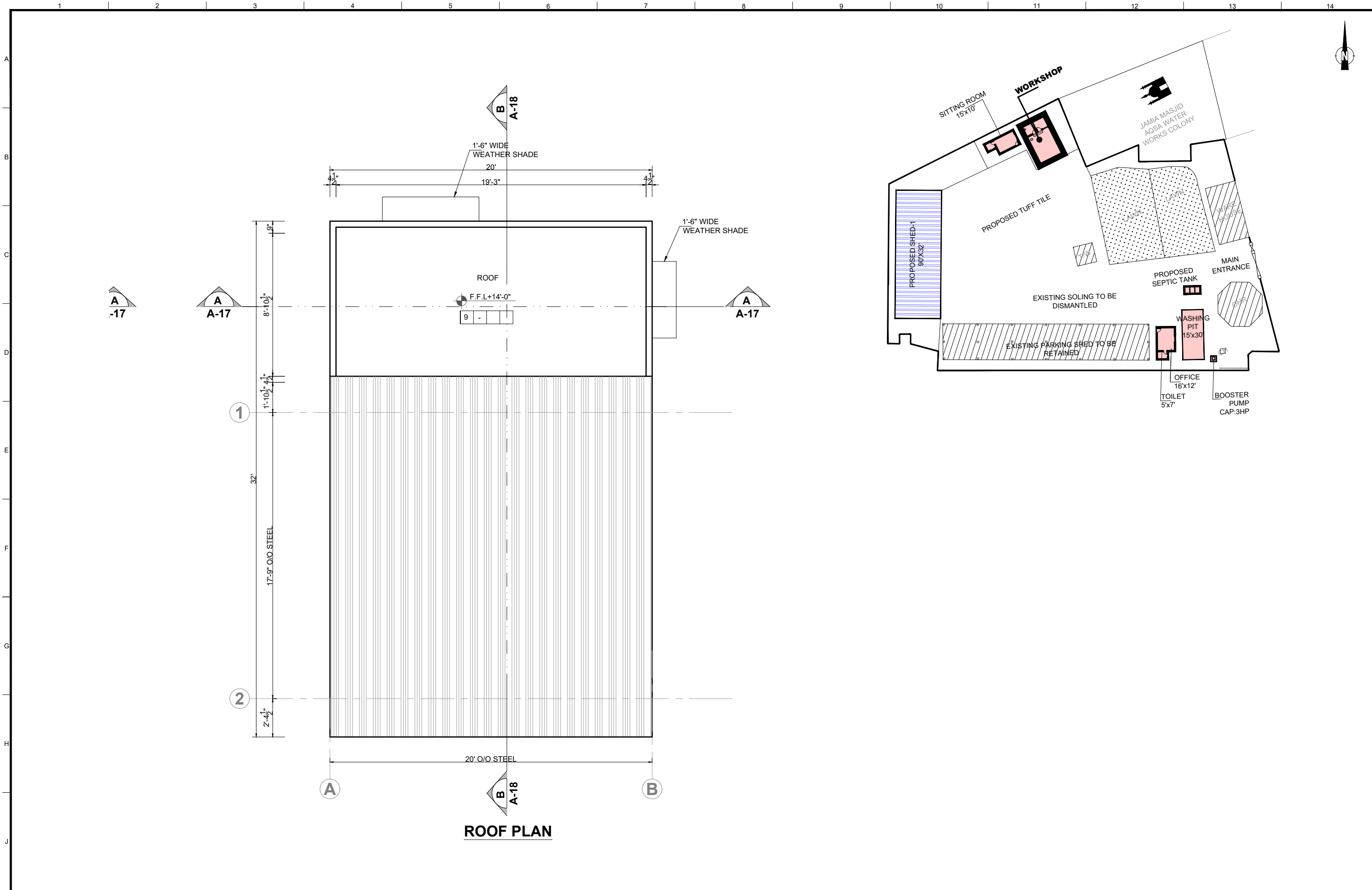
- 1 PORCELAIN TILES OF APPROVED SIZE PATTERN AND COLOR
- 2 CERAMIC TILES OF APPROVED SIZE PATTERN AND COLOR
7'-0" HIGH WITH VENILE EMULSION PAINT TILL CEILING.
(MATT FINISH ON FLOOR & GLAZZED ON WALL)
- 3 PORCELAIN SLABS FOR TREADS & RISER OF APPROVED COLOR & PATTERN
- 4 DISTAMPER ON C.S PLASTER (APPROVED MAKE & SHADE)
- 5 DISTAMPER PAINT
- 6 P.C.C TUFF PAVERS 80mm THICK HAVING 7000 PSI GRADING STRENGTH OVER 2" THICK SAND
- 7 4" HIGH PORCELAIN TILES SKIRTING

SCHEDULE OF EXTERNAL FINISHES

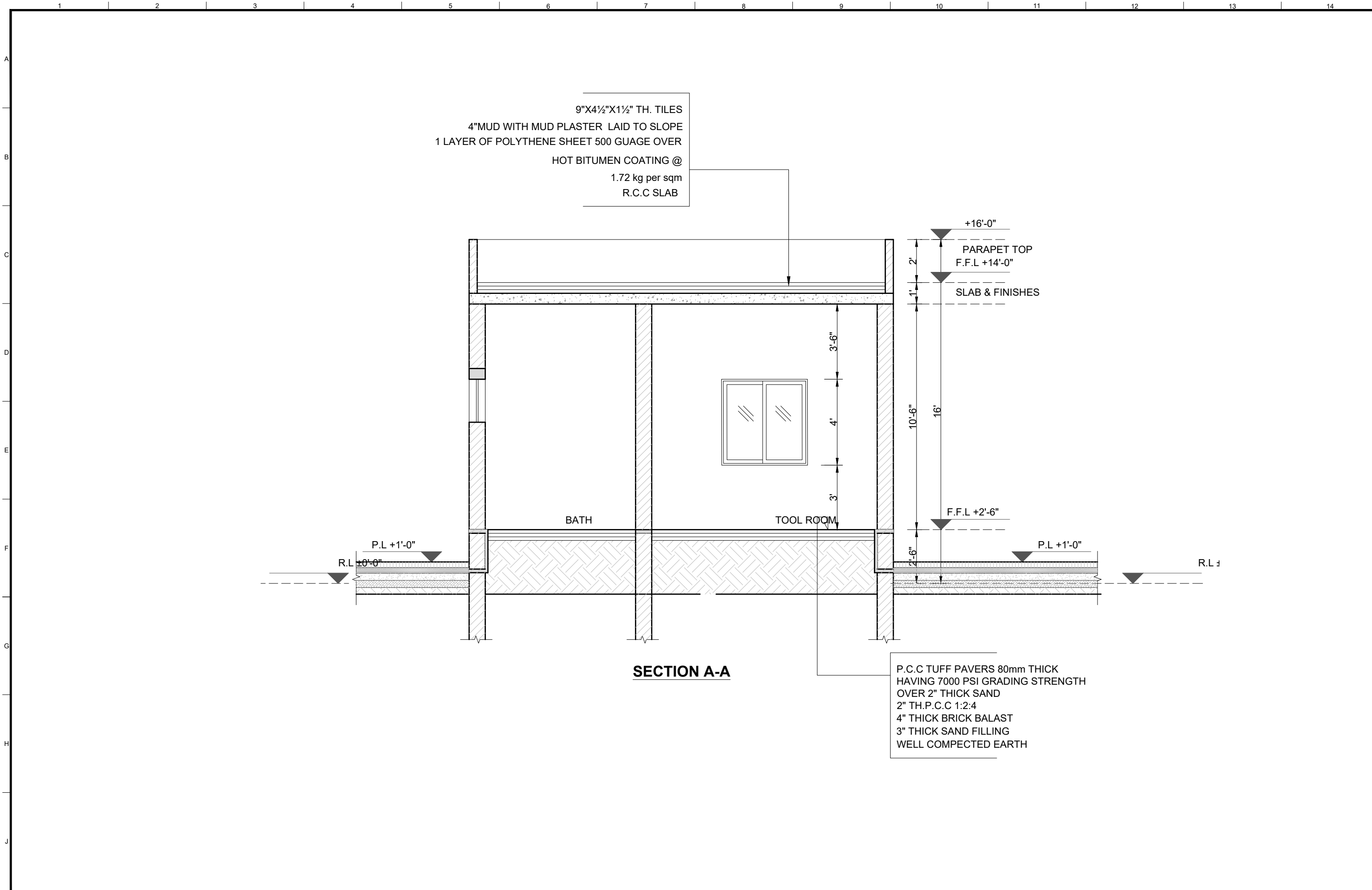
- 8 DEEP STRUCK POINTING
- 9 9"X4½"X1½" TH. TILES



GROUND FLOOR PLAN

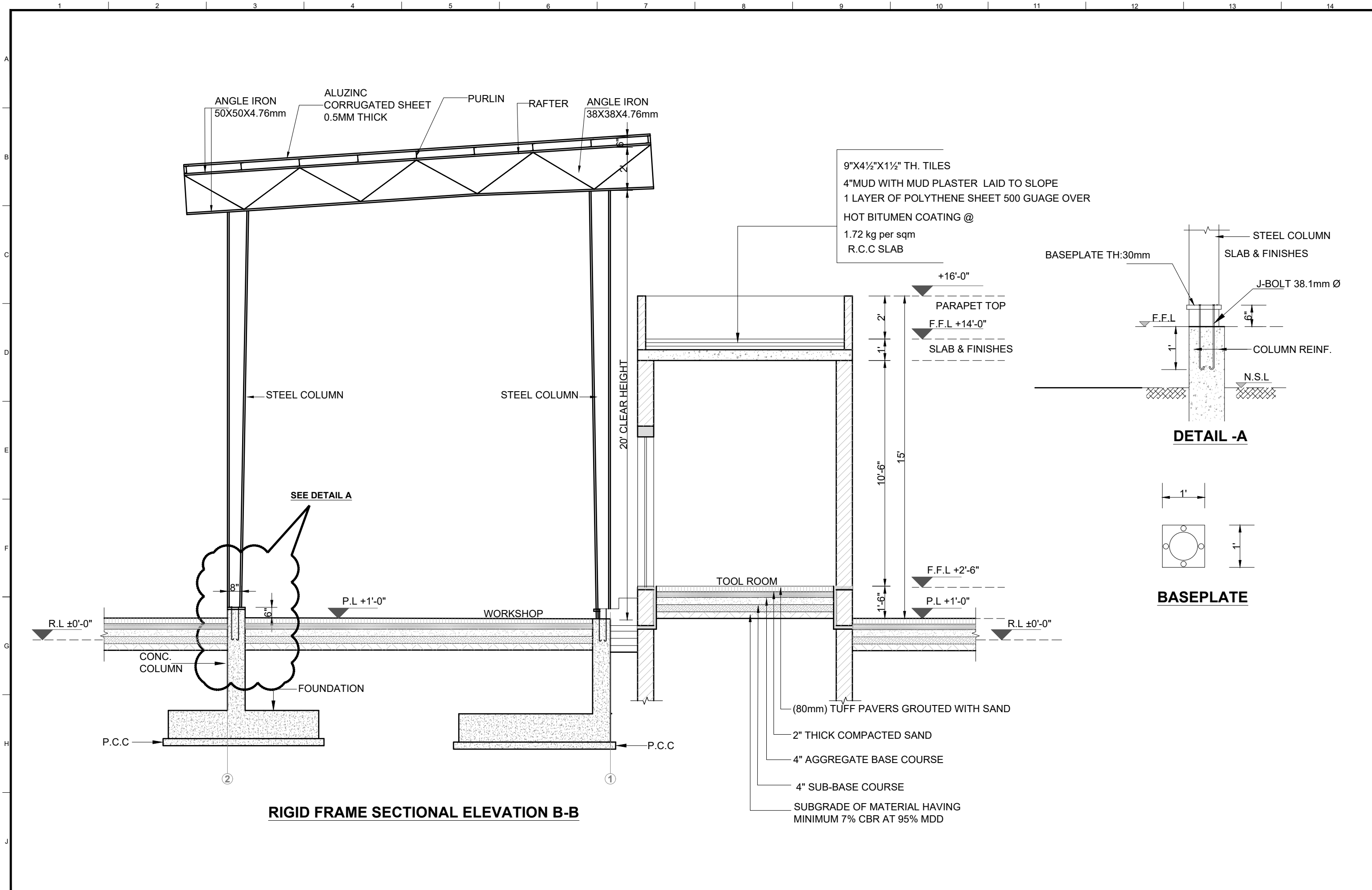


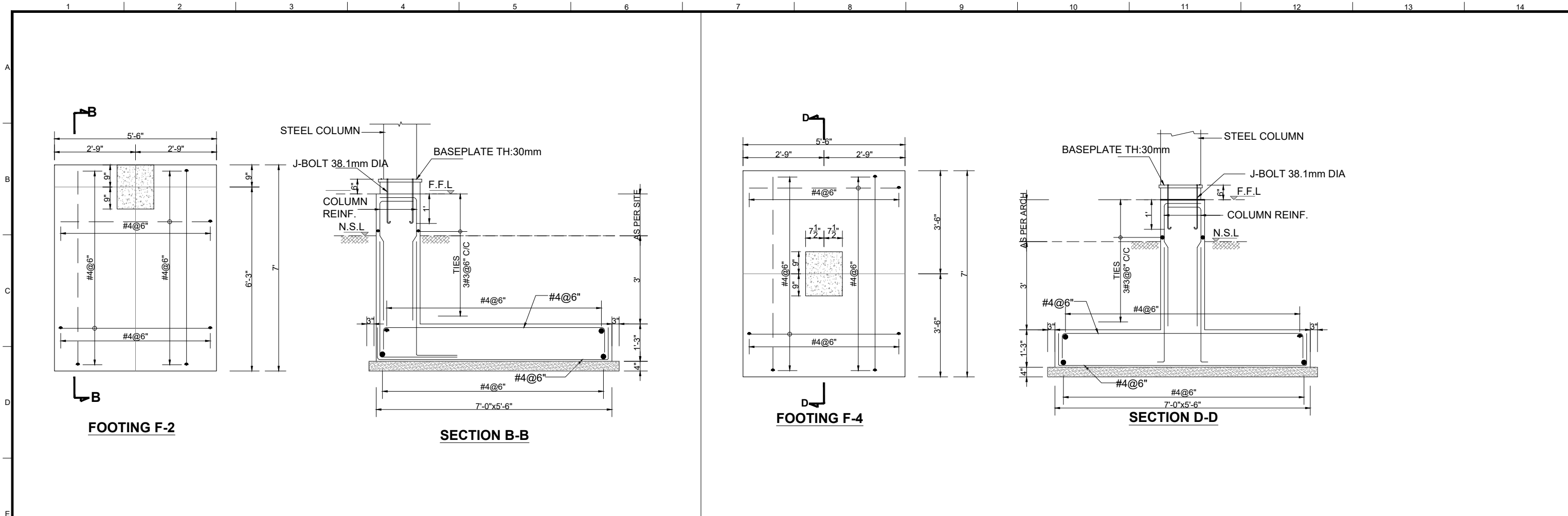
CLIENT:										CONSULTANTS:										PROJECT:										DRAWING TITLE:																DRAWN BY:			DRAWING NO:		
<div><div><div>HELP BUILD</div><div>PMDFC</div><div>HEALTHY CITIES</div></div><div>PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)</div></div>										<div><div><div>TAT</div><div>JERS CONSULTANCY (PVT) LTD</div><div>24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan)</div><div>Tel: +92 42 35113123, +92 42 35113124</div><div>Fax: +92 42 35113125</div><div>E-mail: info@jers.com.pk, mail@jers.com.pk</div><div>Web: http://www.jers.com.pk</div></div></div>										<div><div>PUNJAB CITIES PROGRAM (PCP)</div><div>DETAILED DESIGN OF INFRASTRUCTURE</div><div>SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB.</div><div>227</div></div>										<div><div>ROOF PLAN</div><div>WORKSHOP</div><div>(BUREWALA CITY)</div></div>										Munir			A-16								
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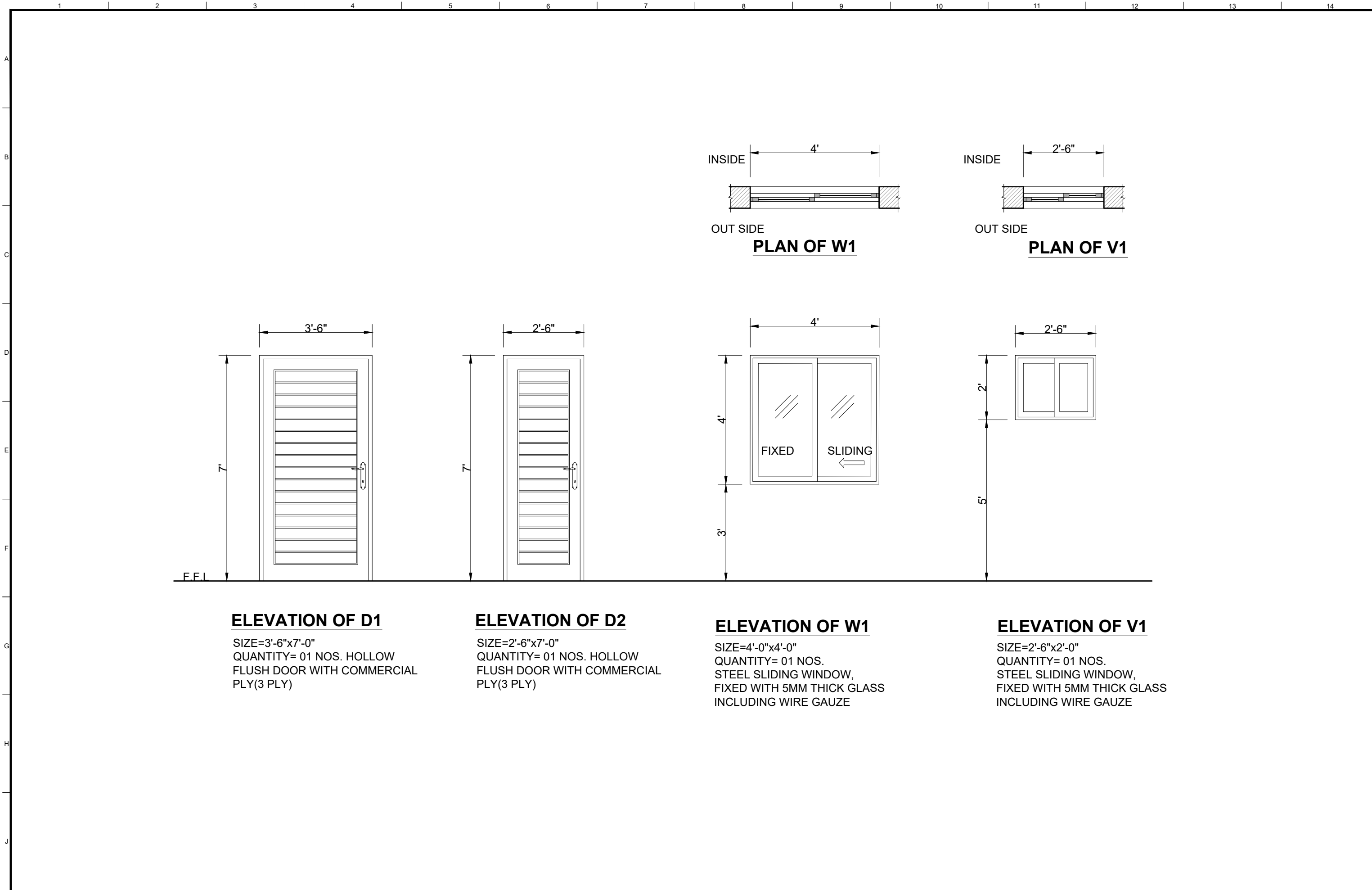
SECTION A-A

CLIENT:	CONSULTANTS:	PROJECT:	DRAWING TITLE:																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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CLIENT:	 PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)	 JERS CONSULTANCY (PVT) LTD 24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan) Tel: +92 42 35113123, +92 42 35113124 Fax: +92 42 35113125 E-mail: info@jers.com.pk, mail@jers.com.pk Web: http://www.jers.com.pk	PROJECT: PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB. 230	DRAWING TITLE: FOUNDATION DETAIL WORKSHOP (BUREWALA CITY)				DRAWN BY: Munir	DRAWING NO: A-19		
									CHECKED BY: Sadat Waleed	SCALE: UNIT=FEET 1/2"=1'-0"	SHEET: 1 OF 1 JOB NO: 488-01
					REV.	DATE	DESCRIPTION		DATE: Oct,2022		



ELEVATION OF D1

SIZE=3'-6"x7'-0"
QUANTITY= 01 NOS. HOLLOW
FLUSH DOOR WITH COMMERCIAL
PLY(3 PLY)

ELEVATION OF D2

SIZE=2'-6"x7'-0"
QUANTITY= 01 NOS. HOLLOW
FLUSH DOOR WITH COMMERCIAL
PLY(3 PLY)

ELEVATION OF W1

SIZE=4'-0"x4'-0"
QUANTITY= 01 NOS.
STEEL SLIDING WINDOW,
FIXED WITH 5MM THICK GLASS
INCLUDING WIRE GAUZE

ELEVATION OF V1

SIZE=2'-6"x2'-0"
QUANTITY= 01 NOS.
STEEL SLIDING WINDOW,
FIXED WITH 5MM THICK GLASS
INCLUDING WIRE GAUZE

CLIENT:



**PUNJAB MUNICIPAL DEVELOPMENT
FUND COMPANY
(PMDFC)**

CONSULTANTS:



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PROJECT:

PUNJAB CITIES PROGRAM (PCP)
DETAILED DESIGN OF INFRASTRUCTURE
SUB-PROJECTS AND RESIDENTS SUPERVISION IN
16 CITIES OF PUNJAB. 231

DRAWING TITLE:

**DOOR WINDOW SCHEDULE
WORKSHOP
(BUREWALA CITY)**

REV.	DATE	DESCRIPTION

DRAWN BY: Munir
CHECKED BY: Sadat Waleed
DATE: Oct,2022

DRAWING NO:

A-20

SCALE: UNIT=FEET 3/8"=1'-0"	SHEET: 1 OF 1 JOB NO: 488-01
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PLUMBING DRAWING

LEGEND & NOTES:

WATER SUPPLY

LEGEND

COLD WATER PIPE (C.W)	
HOT WATER PIPE (H.W)	
HOT WATER RETURN PIPE (H.W.R)	
GAS SUPPLY PIPE	
ISOLATION VAVLE	

NOTES

1.

ALL WATER SUPPLY PIPE DIAMETERS MENTIONED ARE EXTERNAL DIAMETERS UNLESS OTHERWISE MENTIONED
2.

PROVIDE ISOLATION (GATE) VALVE ON ALL COLD & HOT WATER SUPPLY LINES AT THE INLET TO EACH TOILET. VALVES SHALL BE INSTALLED AT ACCESSIBLE LOCATIONS
3.

ALL WATER SUPPLY PIPES ARE POLYPROPYLENE RANDOM PIPE (PPR-PN 20) UNLESS OTHERWISE MENTIONED
4.

ALL WATER SUPPLY PIPES FITTINGS SUCH AS BENDS, TEES, SOCKETS, ARE PPR (PN 25) UNLESS OTHERWISE MENTIONED
5.

PROVIDE THERMAL INSULATION ON ALL HOT WATER & HOT WATER RETURN PIPES
6.

ALL WATER SUPPLY PIPES ARE SUSPENDED ALONG CEILING OR CONCEALED IN WALLS.
7.

ALL WATER SUPPLY PIPES WITHIN THE BUILDING SHALL RUN AT HIGH LEVEL UNLESS OTHERWISE SPECIFIED
8.

ALL WCs, WASH BASINS AND SINKS TO BE PROVIDED WITH T STOP COCKS
9.

CONTRACTOR SHALL VERIFY THE PUMPING FOR ALL PUMPS AS PER THE SITE CONDITION AND SHALL INFORM TO THE ENGINEER FOR ANY VARIATION
- 10

ALL PUMP SHALL BE PROVIDED WITH FLEXIBLE CONNECTOR AT SUCTION AND DISCHARGE
11.

PROVIDE ISOLATION / STOP COCKS AT ALL GAS CONNECTIONS BURNERS
12.

PROVIDE PRESSURE REDUCING VALVES (PRV) ON HOT & COLD WATER PIPES ABOVE FALSE CEILING IN EACH BATHROOM, KITCHEN, etc WITH INLET PRESSURE AT 120 PSI AND OUT PRESSURE UPTO 30 PSI.

SEWERAGE SYSTEM

LEGEND

WASTE WATER PIPE	
SOIL PIPE	
SEWER PIPE	
4"Ø FLOOR DAIN WITH P- TRAP	
GULLY TRAP	
MANHOLE (3'x3')	

NOTES

1.

ALL SOIL,WASTE,VENT & DRAINAGE PIPES DIAMETERS MENTIONED ARE NOMINAL DIAMETERS UNLESS OTHERWISE MENTIONED
2.

ALL SOIL, WASTE AND VENT PIPES ARE uPVC (UNPLASTICSED POLYVINYL CHLORIDE) CLASS B UNLESS OTHERWISE MENTIONED
3.

ALL MANHOLE COVERS SHALL BE OF HEAVY DUTY CAST IRON
4.

INVERT LEVELS WILL BE ADJUSTED AS PER SITE CONDITION
5.

ALL DIAMETERS MENTIONED ARE NOMINAL DIAMETERS
6.

ALL VERTICAL WC'S & URINALS WILL BE PROVIDED WITH MUSLIM SHOWER
7.

ALL RAIN WATER DISPOSAL PIPES SHALL BE OF uPVC CLASS-B & HORIZONTAL (ON LOWER FLOOR) SHALL BE uPVC CLASS D.
8.

THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS
9.

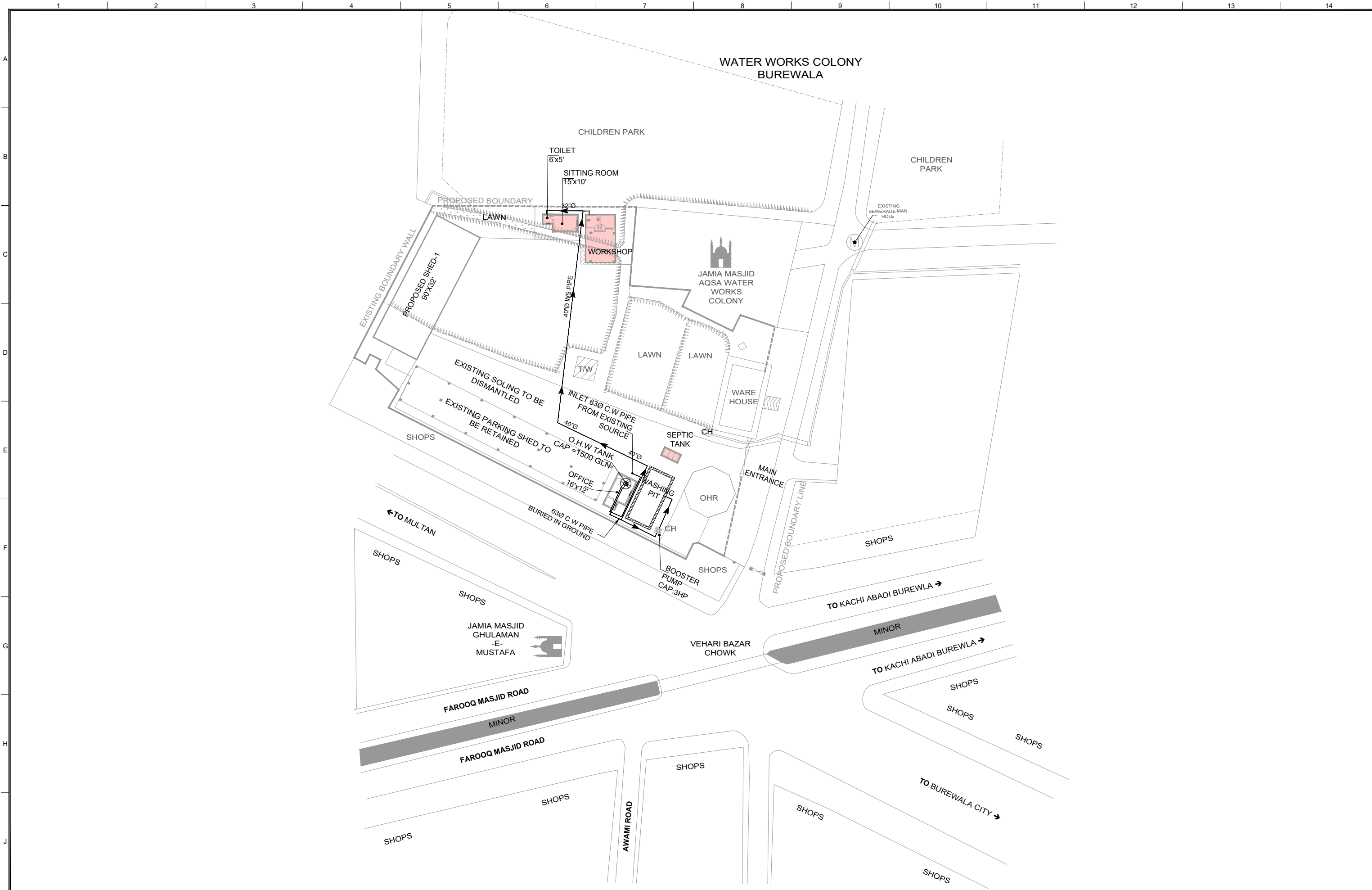
ALL SEWEAGE PIPING FROM FIXTURES TO MANHOLES AND GULLY TRAPS SHALL BE OF uPVC
10.



ALL CLEAN OUTS & FLOOR DRIANS SHALL BE COORDINATE WITH INTERIOR
11.

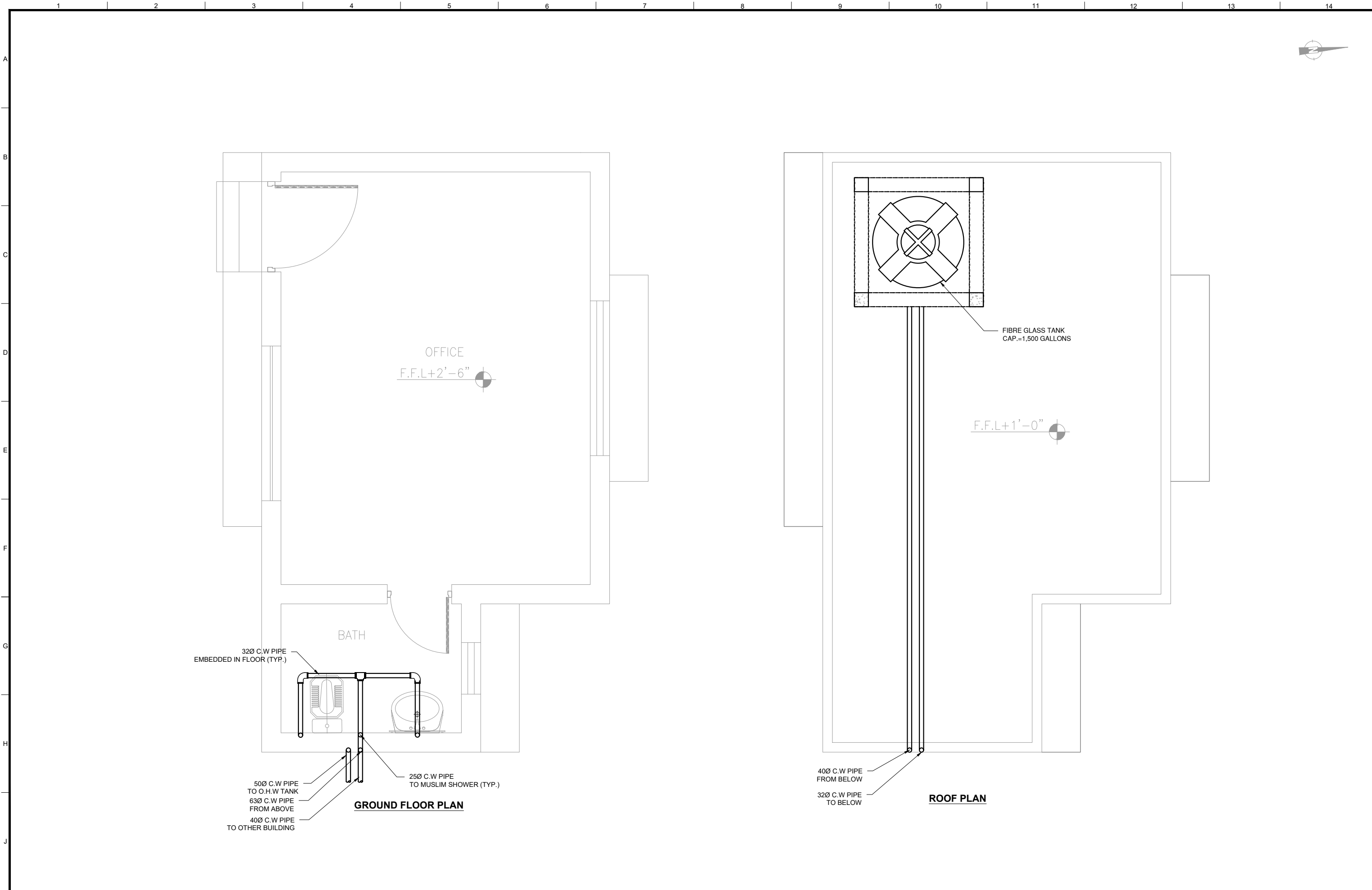
MINIMUM SLOPE OF SOIL AND WASTE PIPES ARE AS UNDER

PIPE DIA.	SLOPE
3"	1:50
4"	1:100
6"	1:150
9"	1:200

WATER SUPPLY DRAWING



CLIENT:										CONSULTANTS:										PROJECT:										DRAWING TITLE:										DRAWN BY:										DRAWING NO:																													
<div></div> <div>PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)</div>										<div></div> <div>JERS CONSULTANCY (PVT) LTD</div> <div>24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan)</div> <div>Tel: +92 42 35113123, +92 42 35113124</div> <div>Fax: +92 42 35113125</div> <div>E-mail: info@jers.com.pk, mail@jers.com.pk</div> <div>Web: http://www.jers.com.pk</div>										<div>PUNJAB CITIES PROGRAM (PCP)</div> <div>DETAILED DESIGN OF INFRASTRUCTURE</div> <div>SUB-PROJECTS AND RESIDENTS SUPERVISION IN</div> <div>16 CITIES OF PUNJAB. 235</div>										<div>PROPOSED WATER SUPPLY LAYOUT PLAN (BUREWALA)</div>										HANNAN										EW-01																													
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CLIENT:

HELP BUILD

PMDFC

HEALTHY CITIES

PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)

CONSULTANTS:

TAT

JERS CONSULTANCY (PVT) LTD

24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan)

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PROJECT:

PUNJAB CITIES PROGRAM (PCP)

DETAILED DESIGN OF INFRASTRUCTURE

SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB.

236

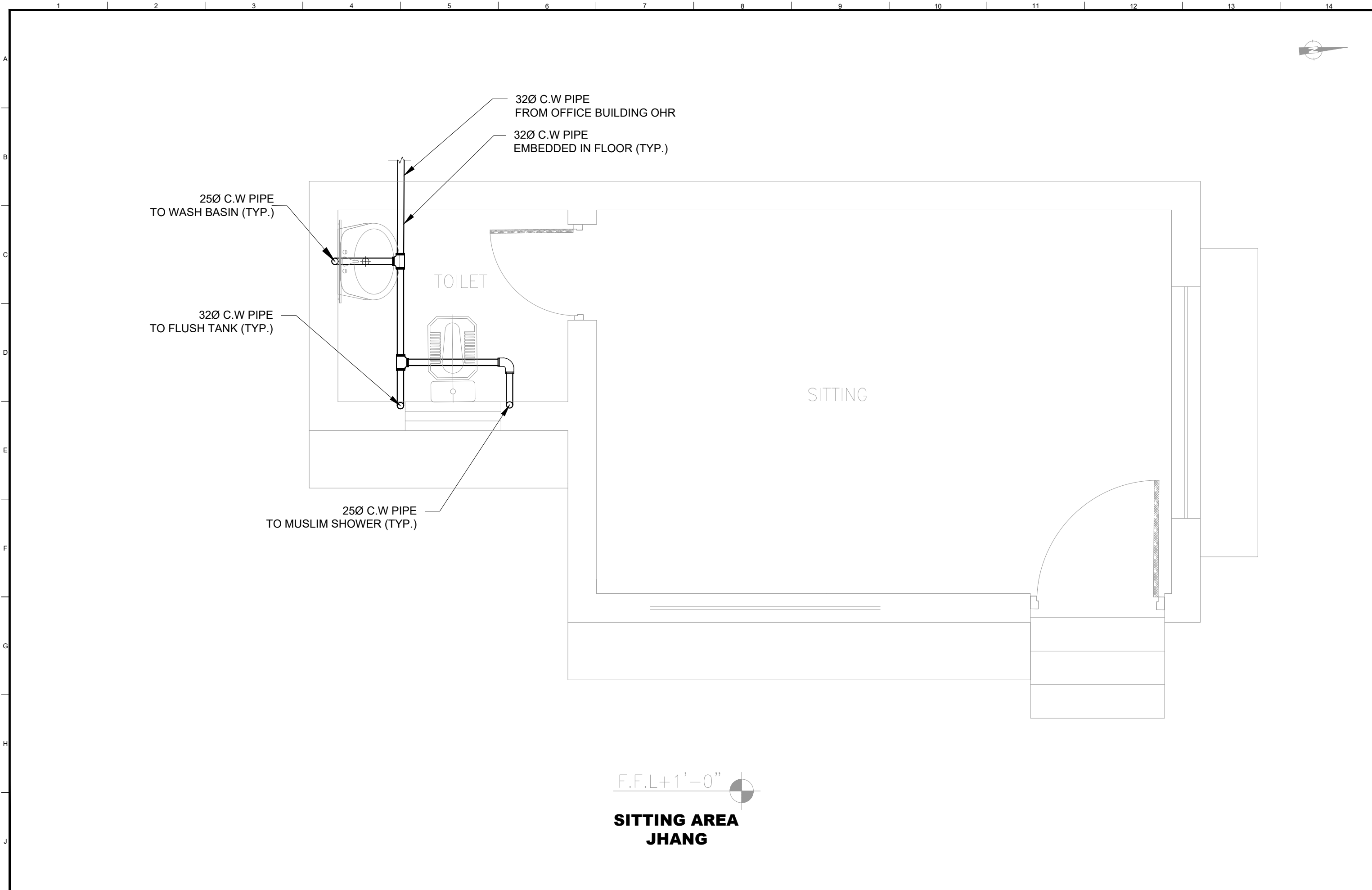
DRAWING TITLE:

WATER SUPPLY LAYOUT PLAN

OFFICE BLOCK



BUREWALA

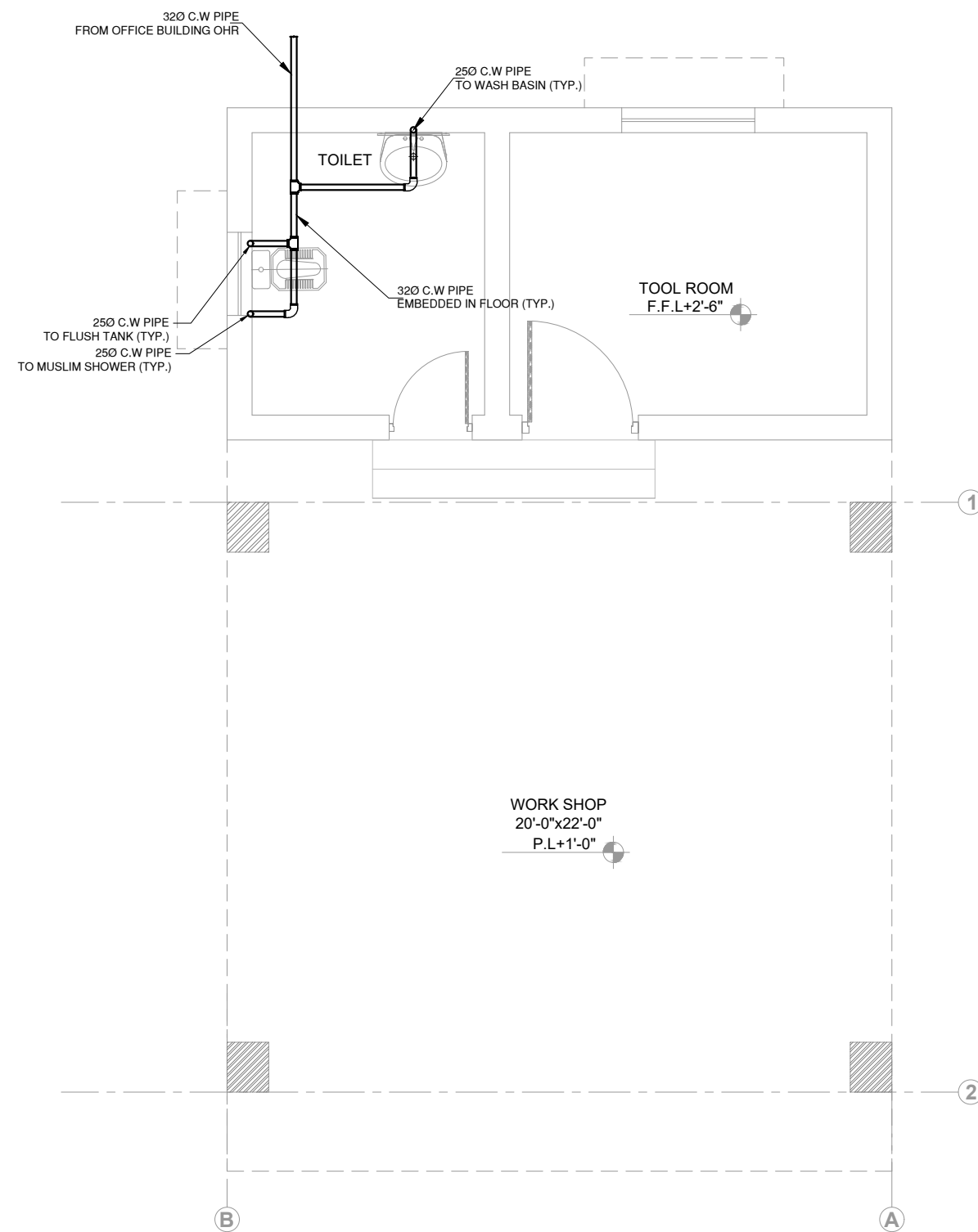
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F.F.L+1'-0"

**SITTING AREA
JHANG**

CLIENT:										CONSULTANTS:										PROJECT:										DRAWING TITLE:													DRAWN BY:			DRAWING NO:											
<div> PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)</div>										<div> JERS CONSULTANCY (PVT) LTD 24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan) Tel: +92 42 35113123, +92 42 35113124 Fax: +92 42 35113125 E-mail: info@jers.com.pk, mail@jers.com.pk Web: http://www.jers.com.pk</div>										PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB. 237										WATER SUPPLY GROUND FLOOR SITTING AREA BUREWALA													Hannan			W-02											
																																														CHECKED BY:			KHADIJA ARIF			SCALE:			SHEET:		
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																																														REV.			DATE			DESCRIPTION			Oct., 2022		



GROUND FLOOR PLAN

WORK SHOP JHANG

ROOF PLAN

**WORK SHOP
JHANG**

CLIENT:



**PUNJAB MUNICIPAL DEVELOPMENT
FUND COMPANY
(PMDFC)**

CONSULTANTS:	
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PROJECT:

PUNJAB CITIES PROGRAM (PCP)
DETAILED DESIGN OF INFRASTRUCTURE
SUB-PROJECTS AND RESIDENTS SUPERVISION IN
16 CITIES OF PUNJAB. 238

DRAWING TITLE:

GROUND FLOOR WATER SUPPLY LAYOUT WORKSHOP BUREWALA

-	-	-
REV.	DATE	DESCRIPTION

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Hannan

CHECKED BY:

	Khadija
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DATE:

Oct., 202

DRAWING NO:

W-03

SCALE:

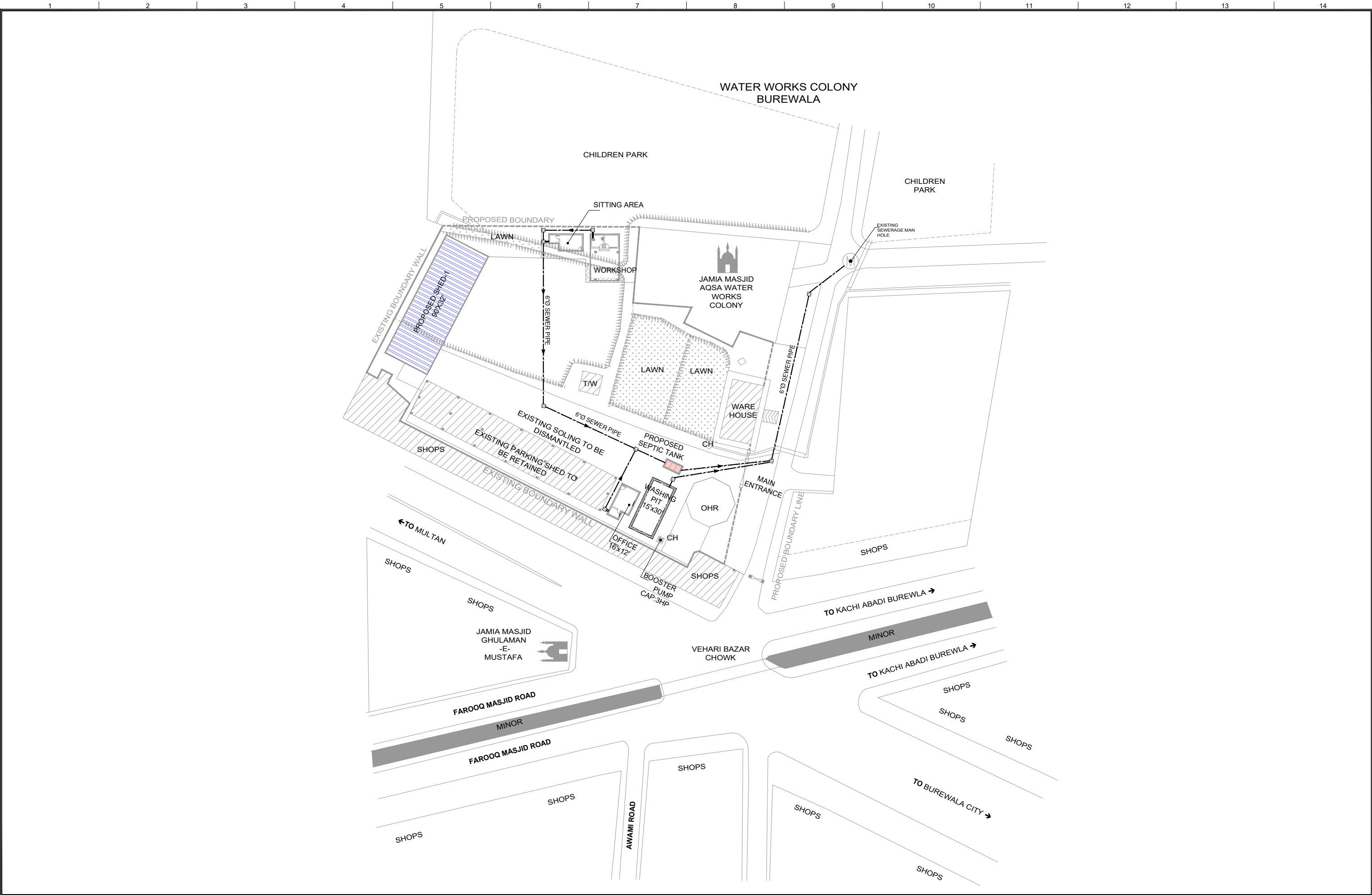
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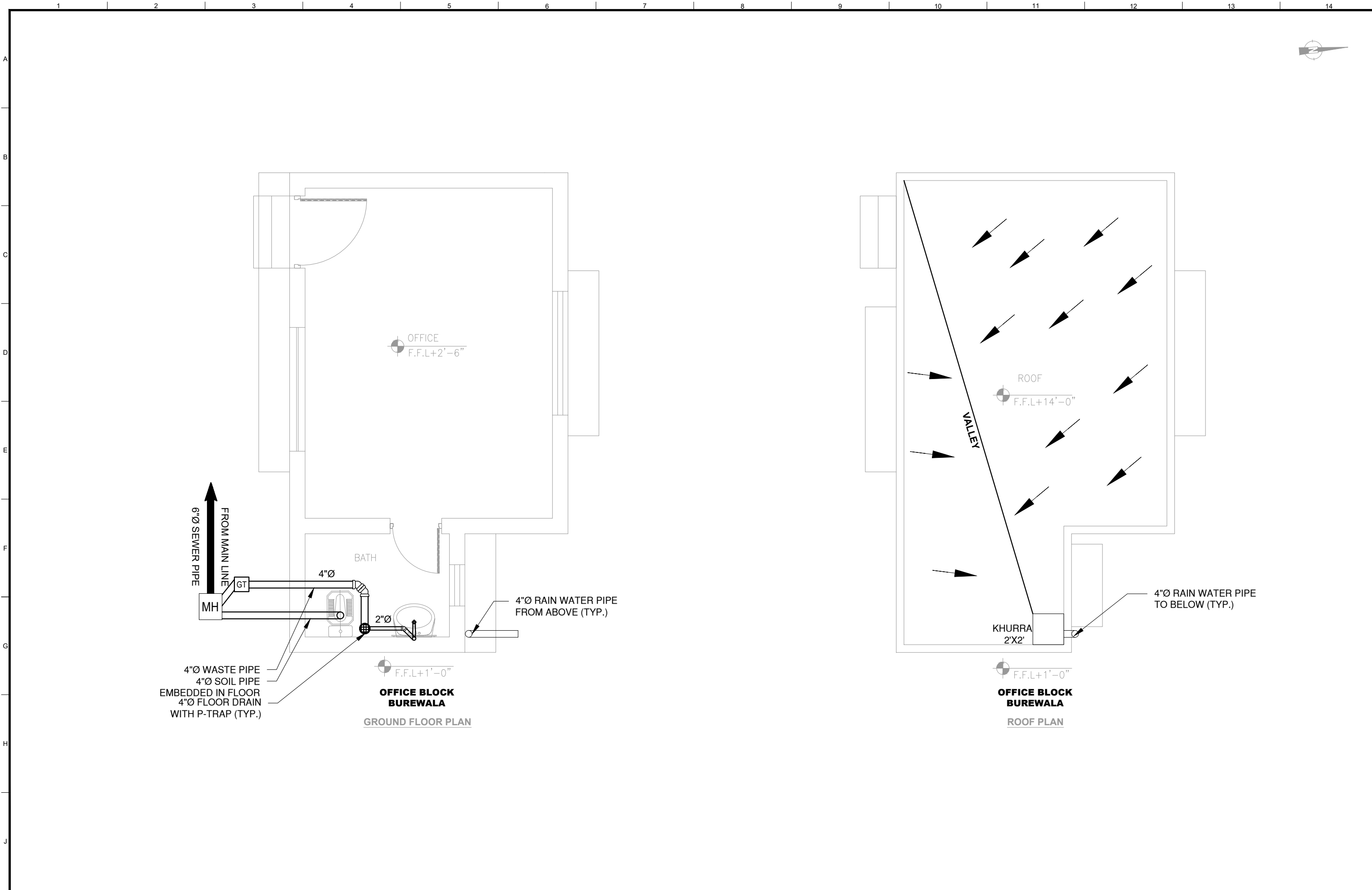
1 OF 1



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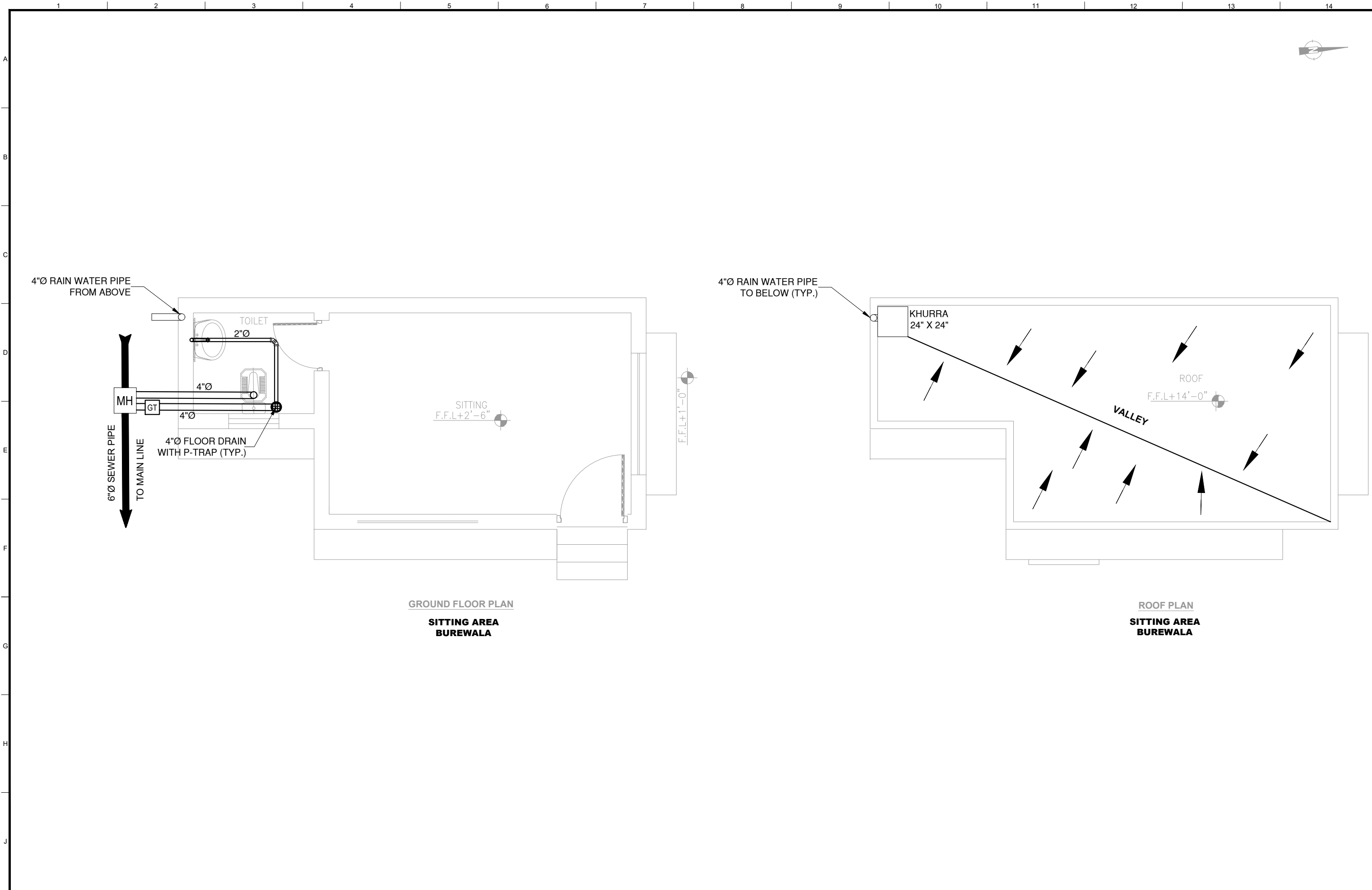
SEWAGE DRAWING





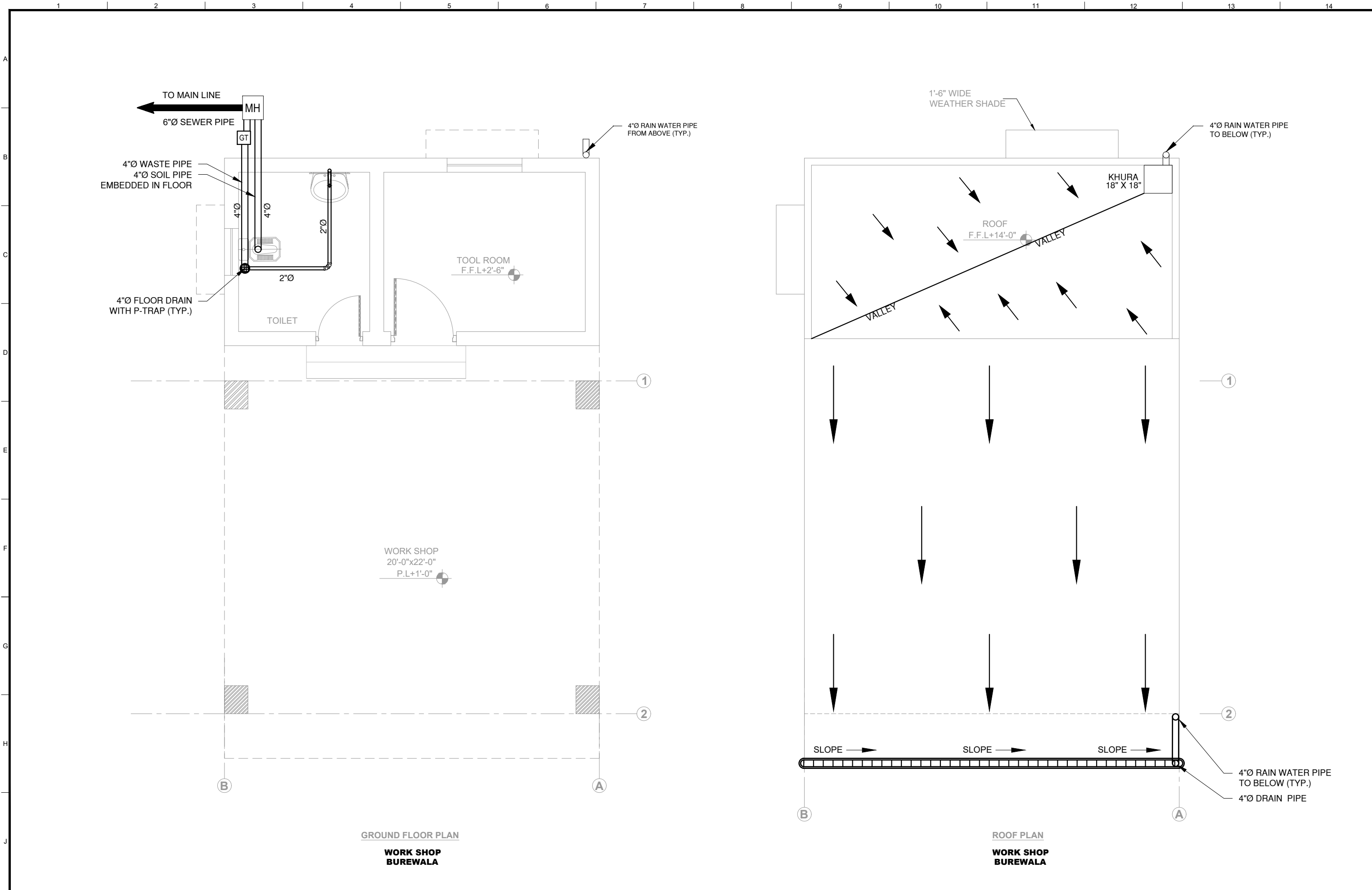
CLIENT:		CONSULTANTS:		PROJECT:		DRAWING TITLE:				DRAWN BY:		DRAWING NO:			
<div><div><div>HELP BUILD</div><div>PMDFC</div><div>HEALTHY CITIES</div></div><div>PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)</div></div>		<div><div><div>JA</div></div><div>JERS CONSULTANCY (PVT) LTD 24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan) Tel: +92 42 35113123, +92 42 35113124 Fax: +92 42 35113125 E-mail: info@jers.com.pk, mail@jers.com.pk Web: http://www.jers.com.pk</div></div>		<div><div>PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB.</div><div>240</div></div>		<div><div>PROPOSED EXTERNAL SEWER LAYOUT PLAN (BUREWALA)</div></div>						HANNAN		ES-01	
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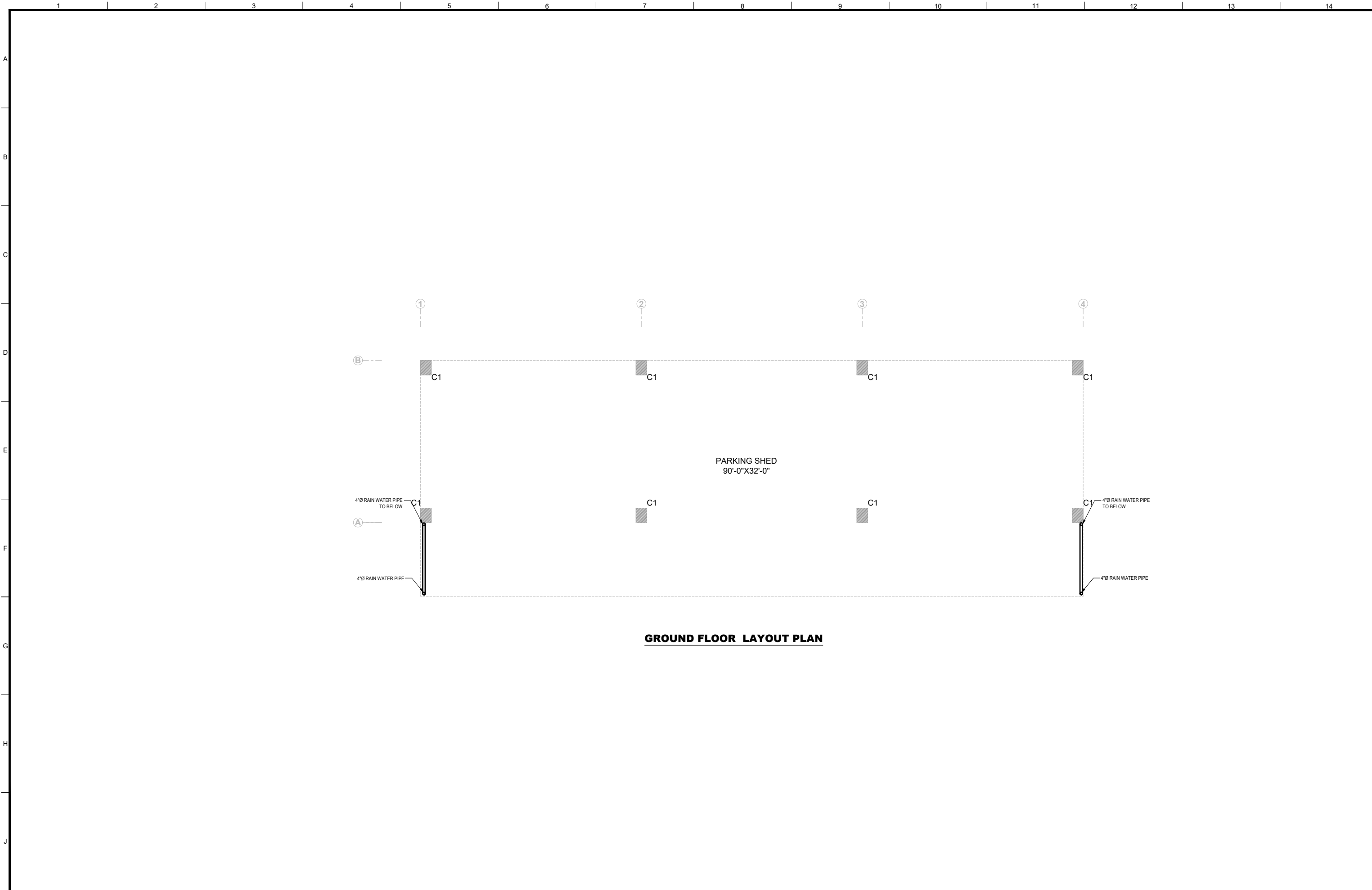


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<div> PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)</div>										<div> JERS CONSULTANCY (PVT) LTD 24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan) Tel: +92 42 35113123, +92 42 35113124 Fax: +92 42 35113125 E-mail: info@jers.com.pk, mail@jers.com.pk Web: http://www.jers.com.pk</div>										PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB. 241										SEWER SYSTEM GROUND & ROOF LAYOUT PLAN OFFICE BLOCK 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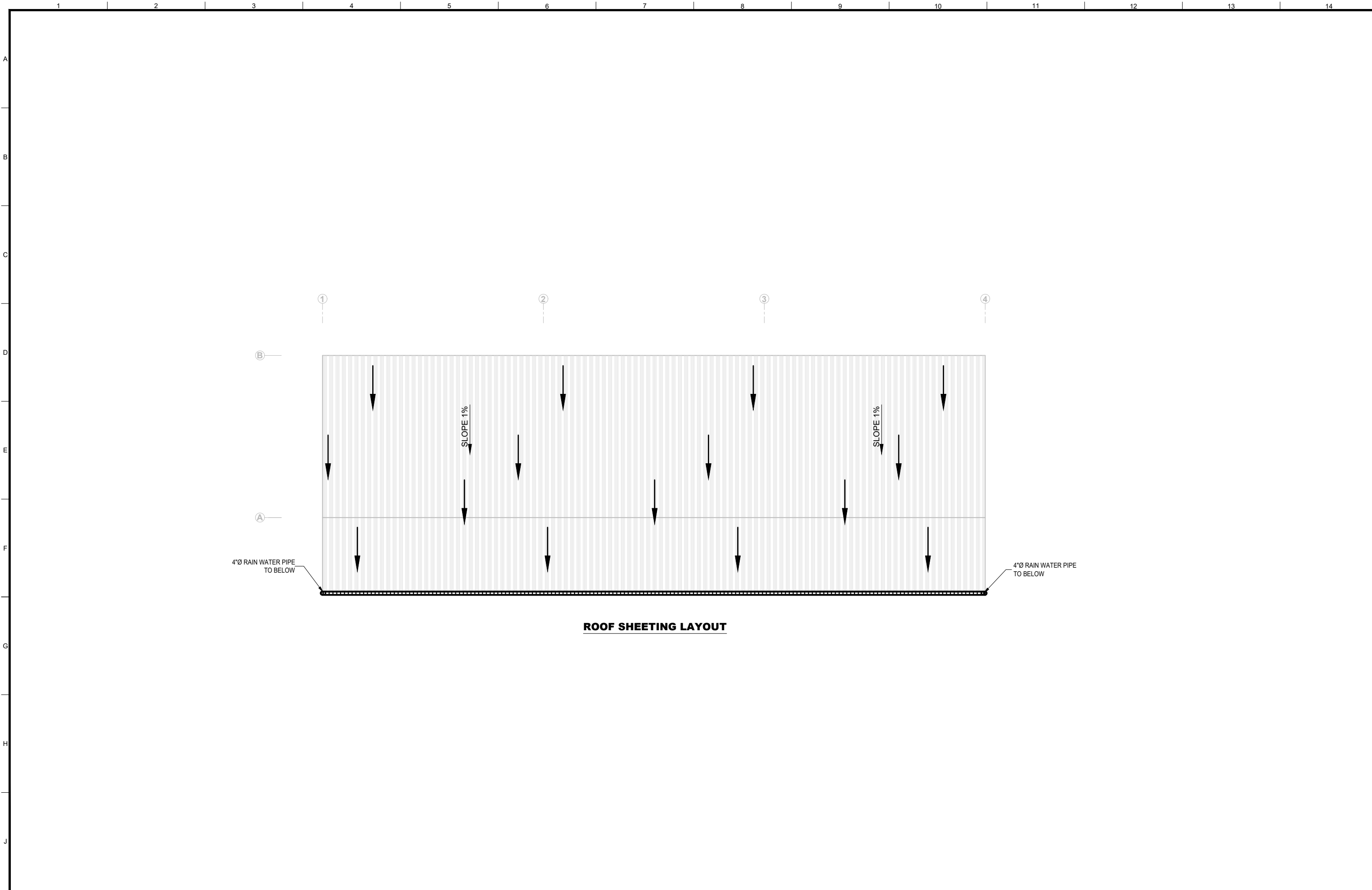
CLIENT:	 PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)	CONSULTANTS:	 JERS CONSULTANCY (PVT) LTD 24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan) Tel: +92 42 35113123, +92 42 35113124 Fax: +92 42 35113125 E-mail: info@jers.com.pk, mail@jers.com.pk Web: http://www.jers.com.pk	PROJECT:	PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB. 242	DRAWING TITLE:	SEWER SYSTEM GROUND FLOOR & ROOF PLAN SITTING AREA BUREWALA				DRAWN BY:	Hannan	DRAWING NO: S-02		
											CHECKED BY:	KHADIJA ARIF	SCALE:	SHEET:	
											DATE:	Oct,2022	UNIT=FEET 3/16"=1'-0"	JOB NO:	
								REV.	DATE	DESCRIPTION					





GROUND FLOOR LAYOUT PLAN

CLIENT:			CONSULTANTS:			PROJECT:			DRAWING TITLE:						DRAWN BY:		DRAWING NO:									
<div><div>HELP BUILD PMDFC HEALTHY CITIES</div><div>PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)</div></div>			<div><div>JAT</div><div>JERS CONSULTANCY (PVT) LTD</div><div>24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan) Tel: +92 42 35113123, +92 42 35113124 Fax: +92 42 35113125 E-mail: info@jers.com.pk, mail@jers.com.pk Web: http://www.jers.com.pk</div></div>			<div><div>PUNJAB CITIES PROGRAM (PCP)</div><div>DETAILED DESIGN OF INFRASTRUCTURE</div><div>SUB-PROJECTS AND RESIDENTS SUPERVISION IN</div><div>16 CITIES OF PUNJAB. 244</div></div>			<div><div>DRAINAGE LAYOUT</div><div>GROUND FLOOR PLAN</div><div>PARKING SHED-1</div><div>(BUREWALA)</div></div>						FATIMA ZAHRA		D-01									
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ROOF SHEETING LAYOUT

CLIENT:

HELP BUILD

PMDFC

HEALTHY CITIES

PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)

CONSULTANTS:

JA

JERS CONSULTANCY (PVT) LTD

24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan)
Tel: +92 42 35113123, +92 42 35113124
Fax: +92 42 35113125
E-mail: info@jers.com.pk, mail@jers.com.pk
Web: http://www.jers.com.pk

PROJECT:

PUNJAB CITIES PROGRAM (PCP)

DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB.

245

DRAWING TITLE:

DRAINAGE LAYOUT

ROOF PLAN

PARKING SHED-1

(BUREWALA)

REV.	DATE	DESCRIPTION

DRAWN BY:

FATIMA ZAHRA

CHECKED BY:

MUNIR

DATE:

July,2022

DRAWING NO:

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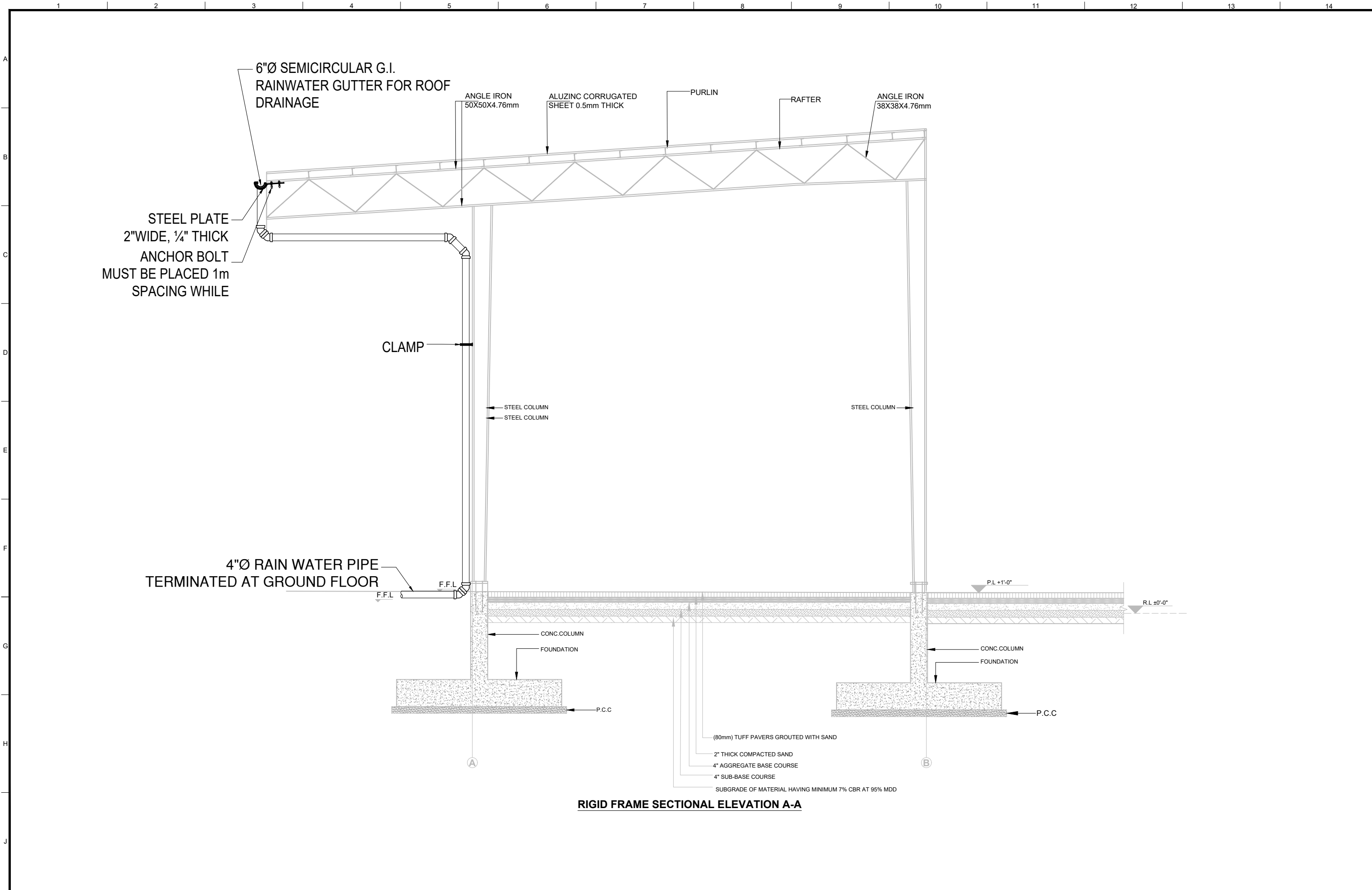
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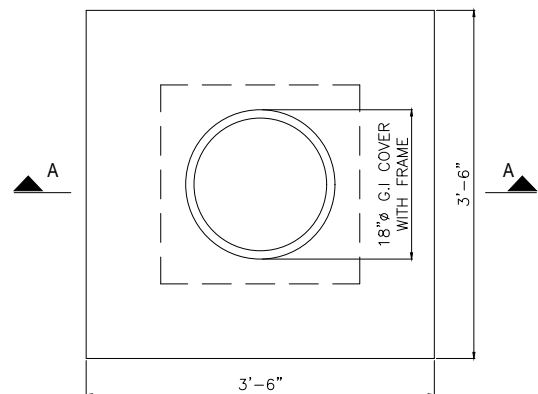
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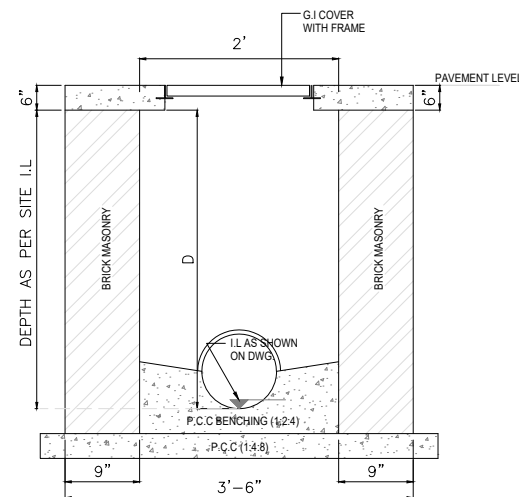


RIGID FRAME SECTIONAL ELEVATION A-A

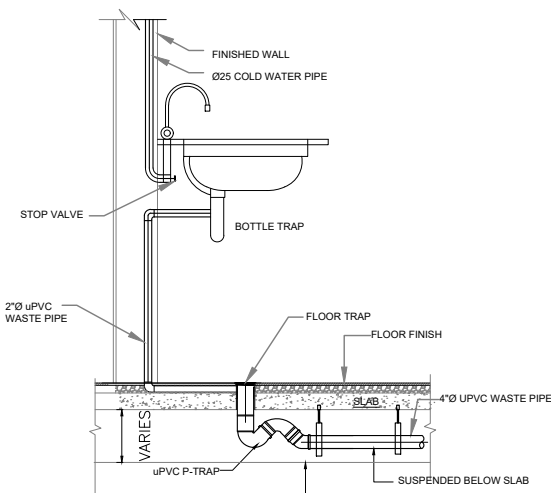
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<div><div><div>HELP BUILD</div><div>PMDFC</div><div>HEALTHY CITIES</div></div><div>PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)</div></div>										<div><div><div>JAT</div><div>JERS CONSULTANCY (PVT) LTD</div><div>24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan) Tel: +92 42 35113123, +92 42 35113124 Fax: +92 42 35113125 E-mail: info@jers.com.pk, mail@jers.com.pk Web: http://www.jers.com.pk</div></div></div>										<div>PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB. 246</div>										<div>DRAINAGE LAYOUT RIGID FRAME ELEVATION PARKING SHED-1 (BUREWALA)</div>																				FATIMA ZAHRA										D-03																																							
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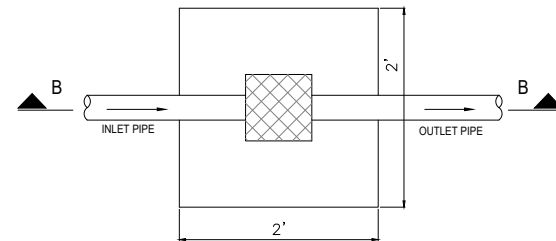
**PLAN
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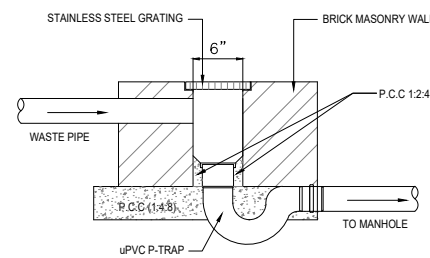
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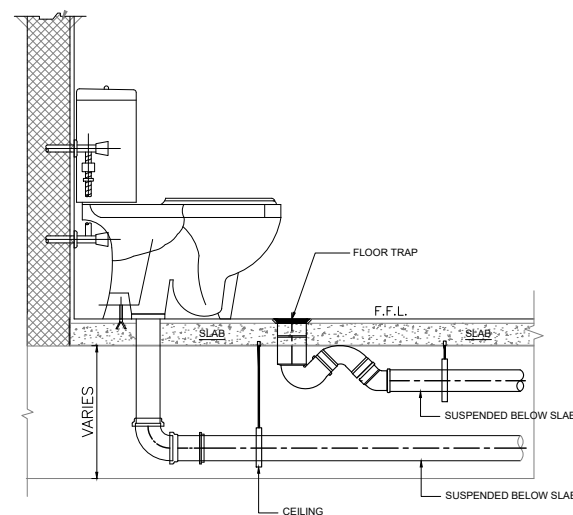
**DETAIL OF BASIN CONNECTION
WITH HANGING P-TRAP**



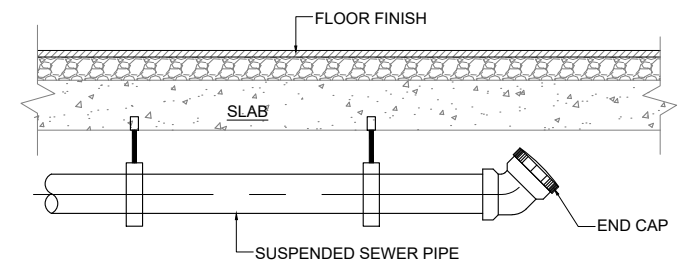
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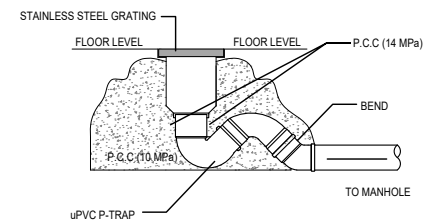
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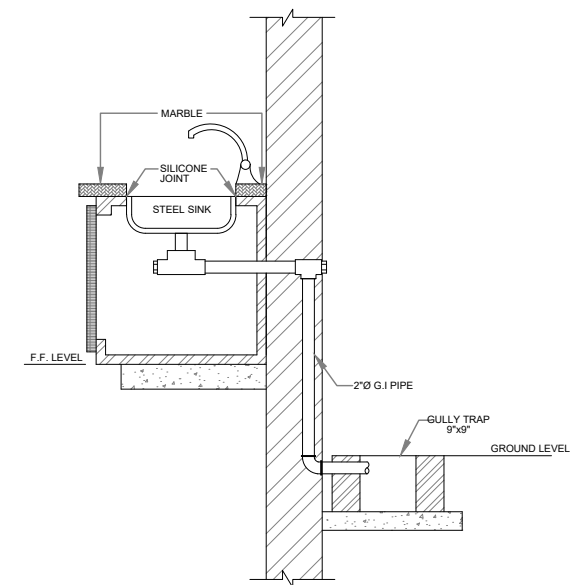
**DETAIL OF W.C.
WITH HANGING PIPING**

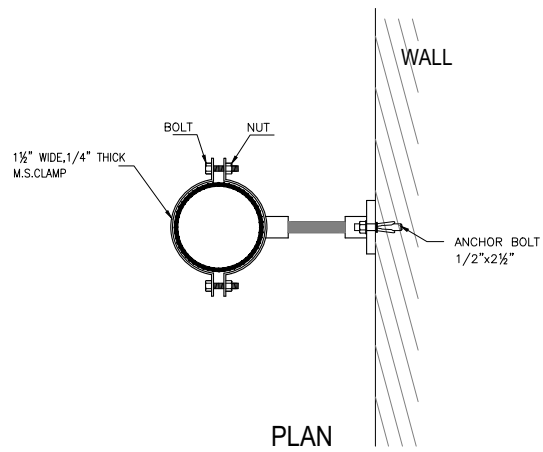
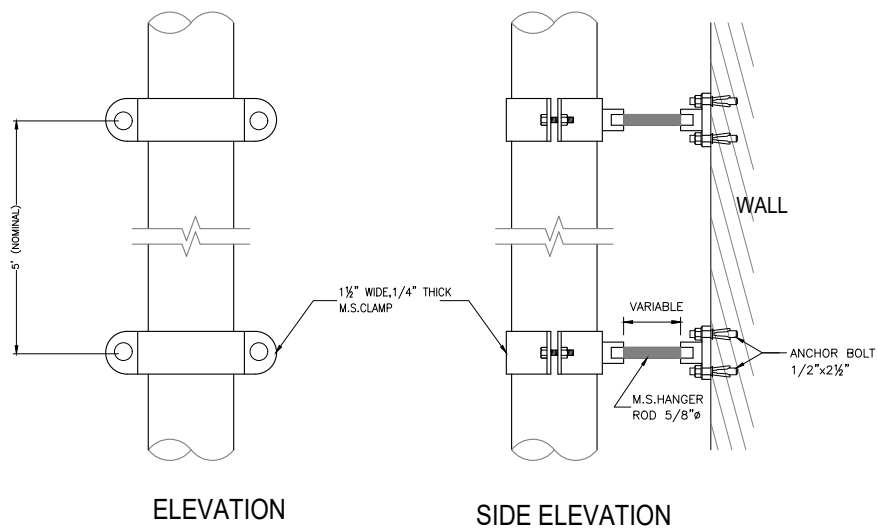


**CLEAN OUT DETAIL
AT START OF PIPE**

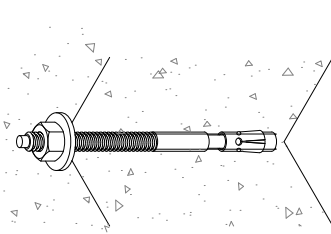


P-TRAP DETAIL

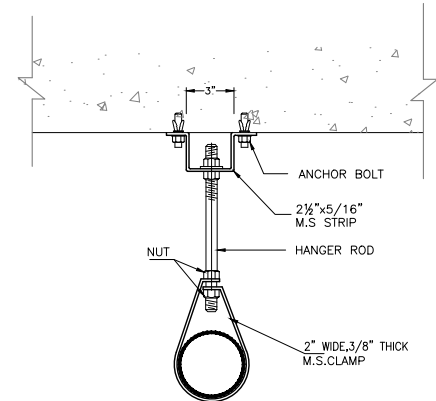
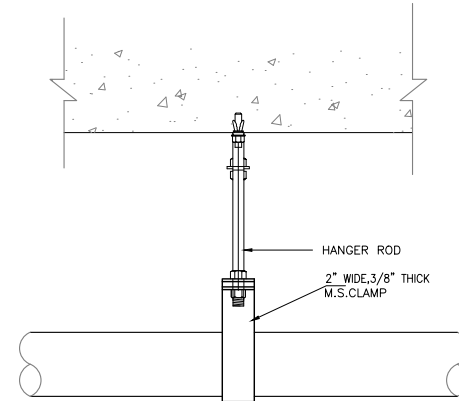
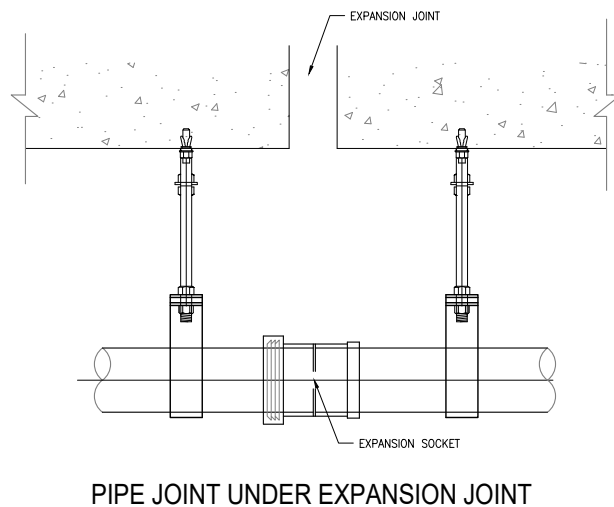




VERTICAL PIPE HANGERS
(UP TO 4"Ø PIPE)

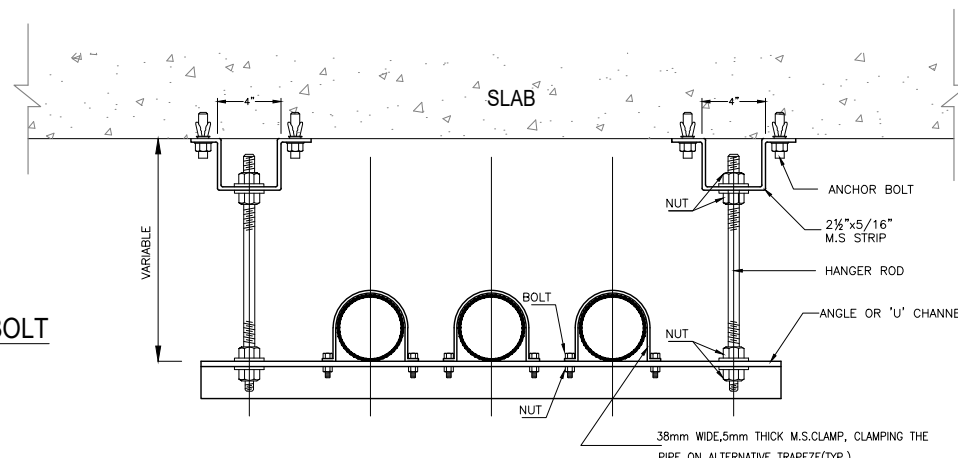


ANCHOR BOLT
SEISMICALLY RATED WEDGE ANCHOR BOLT



HORIZONTAL PIPE HANGER

PIPE SIZE	MAX. SPACING	HANGER ROD Ø	ANCHOR BOLT
3/4" — 2"	5'-0"	1/2"	1/2" x 2 1/2"
2 1/2" — 3"	6'-0"	5/8"	1/2" x 2 1/2"
4" — 6"	6'-0"	3/4"	5/8" x 3"



HORIZONTAL PIPE HANGER (TRAPEZE)

PIPE SUPPORT SCHEDULE					
PIPE SIZE	HANGER ROD Ø	ANGLE SIZE	U-CHANNEL	SPACING	ANCHOR BOLT
1/2 TO 3/4"	3/8"	1 1/2"x1 1/2"x3/16"	--	5'	1/2" x 2 1/2"
1" TO 1 1/4"	3/8"	2"x2"x1/4"	--	5'	1/2" x 2 1/2"
1 1/2" TO 2 1/2"	1/2"	2 1/2"x2 1/2"x1/4"	--	6'	1/2" x 2 1/2"
3" TO 4"	1/2"	2 1/2"x2 1/2"x3/8"	--	6'	5/8" x 3"
5"	3/4"	3"x3"x3/8"	--	6'	3/4" x 4"
6"	1"	--	3"x1 1/2"x1/4"	7'	3/4" x 4"
8"	1"	--	4"x1 1/4"x5/16"	7'	3/4" x 4"
10"	1"	--	4"x1 1/4"x5/16"	7'	3/4" x 4"
12"	1 1/4"	--	4"x1 1/4"x5/16"	7'	3/4" x 4"

CLIENT:



PUNJAB MUNICIPAL DEVELOPMENT
FUND COMPANY
(PMDFC)

CONSULTANTS:



JERS CONSULTANCY (PVT) LTD
24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan)
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PROJECT:

PUNJAB CITIES PROGRAM (PCP)
DETAILED DESIGN OF INFRASTRUCTURE
SUB-PROJECTS AND RESIDENTS SUPERVISION IN
16 CITIES OF PUNJAB. 248

DRAWING TITLE:

**MISCELLANEOUS DETAIL-02
(BUREWALA CITY)**

REV.

DATE

DESCRIPTION

DRAWN BY:

Hannan

CHECKED BY:

KHADIJA ARIF

DATE:

Oct, 2022

DRAWING NO:

M-02

SCALE:

UNIT=FEET









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




JOB NO:

488-01

ELECTRICAL DRAWING

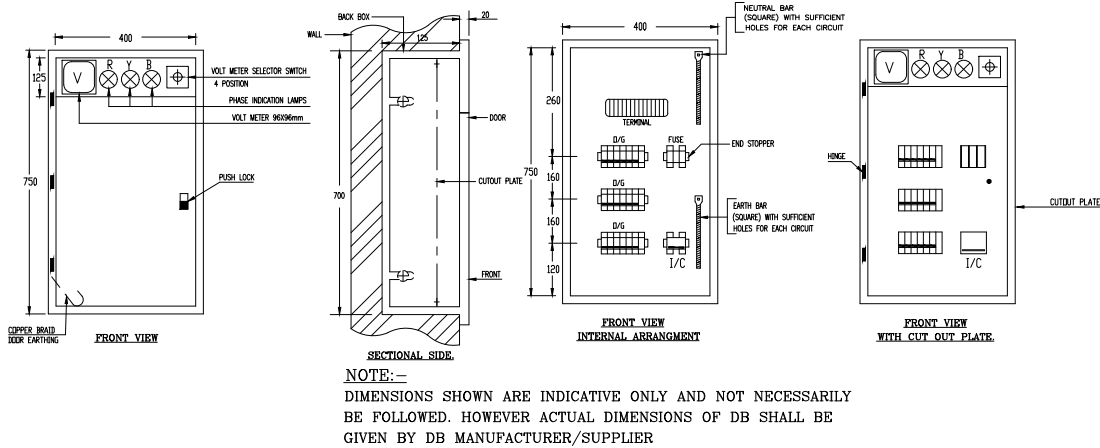
LEGEND

1 LIGHT FITTINGS & FIXTURES			
S.NO	SYMBOLS	DESCRIPTION	MOUNTING HEIGHT
1		WASHROOM MIRROR LIGHT 9 WATTS LED	6" ABOVE MIRROR
2		SURFACE MOUNTED TUBE LIGHT WITH 2x40 WATTS LED ROD	SURFACE MOUNTED
3		DOWN LIGHT 12 WATTS LED LAMP	SURFACE MOUNTED
4		HIGH BAY HANGING LIGHT 50 WATTS LED LAMP	HANGING OF STEEL STRUCTURE
5		100 WATTS LED FLOOD LIGHT ON 10M HIGH M.S POLE WITH FOUNDATION	ON GROUND
6		EXHAUST FAN	7'-0" ABOVE FFC
7		DISTRIBUTION BOARD	4'-0" FROM FFC
8		SURFACE MOUNTED TUBE LIGHT WITH 1x40 WATTS LED ROD	SURFACE MOUNTED

2 WIRING ACCESSORIES				
S.NO	SYMBOLS	DESCRIPTION	MAKE	MOUNTING HEIGHT
1		GANG TYPE SWITCH 10AMPS,INDICATES NUMBER OF SWITCHES ON GANG PLATE	---	AT WALL +3'-6" FROM F.F.L
2		16 AMP SWITCH SOCKET FOR SPLIT AC ON GANG PLATE	---	AT WALL 7'-6" FROM F.F.L NEAR AC
3		3 PIN COMBINED SWITCH SOCKET 15 AMPS ON M.S JUNCTION BOX	---	AT WALL +0'-9" FROM F.F.L
4		3 PIN COMBINED SWITCH SOCKET UNIVERSAL 13 AMP SOCKET ON M.S JUNCTION BOX	---	AT WALL +0'-9" FROM F.F.L
5		CEILING FAN POINT WITH 5/8" M.S HOOK	---	ROOF SUSPENDED
		2x3 PIN COMBINED SWITCH SOCKET UNIVERSAL 13AMP SOCKET	---	AT WALL +0'-9" FROM F.F.L

CAPACITY OF CONDUITS						
S.NO	CAPACITY OF CONDUITS			MAXIMUM NUMBER OF CABLES IN PVC CONDUITS SIZES		
	NOMINAL CONDUCTOR SIZE-mmSq	NO & DIA OF WIRES	OVER ALL DIAMETER	3/4" DIA (20mm DIA)	1" DIA (25mm DIA)	1-1/4" DIA (32mm DIA)
1						
2	1.5	1/1.38	3.1	10	18	30
3	2.5	1/1.78	3.5	8	14	23
4	2.5	7/0.67	3.8	7	12	20
5	4	7/0.85	4.3	5	9	15
6	10	7/1.04	4.9	4	7	12
7	16	7/1.35	6.2	2	4	7
8	16	7/1.78	7.3	-	3	5
9	25	7/2.14	9.0	-	2	3
10	35	19/1.53	10.3	-	-	2

TENTATIVE CONSTRUCTIONAL DETAIL OF:-
DISTRIBUTION BOARD (DB) RECESSED TYPE.



GENERAL NOTES:-

A LEGEND.

1 REFER TO LEGEND FOR THOSE SYMBOLS ONLY MENTIONED ON ALL LAYOUT PLANS. OTHER SYMBOLS SHOWN IN LEGEND BUT NOT ACTUALLY SHOWN ON LAYOUT DRAWINGS MAY PLEASE BE IGNORED.

B ELECTRICAL WORKS.

1 THE FOLLOWING NOTES SHALL IN GENERAL APPLY TO ALL ELECTRICAL DRAWINGS. THE INSTRUCTIONS IN THESE NOTES SHALL BE FOLLOWED UNLESS ALL ELECTRICAL WORKS PERTAINING TO WIRING OF ELECTRICAL SYSTEMS SHALL STRICTLY CONFORM TO I.E.E LATEST EDITION OF RULES & REGULATIONS.

2 ELECTRICAL DRAWINGS

ALL ELECTRICAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH BOQ, TECHNICAL SPECIFICATIONS AND IN CO-ORDINATION WITH ARCHITECTURAL, STRUCTURAL, PLUMBING AND HVAC DRAWINGS.

DIMENSIONS ON ELECTRICAL

3 LAYOUT PLANS

ALL DIMENSIONS IF SHOWN ON THE ELECTRICAL LAYOUT PLANS ARE APPROXIMATE. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO DO ALL NECESSARY CALCULATIONS TO ARRIVE AT THE ACTUAL DIMENSIONS/MEASUREMENTS IN CO-ORDINATION WITH ALL OTHER RELEVANT DRAWINGS OF OTHER SERVICES.

4 SHOP DRAWINGS

THE ELECTRICAL CONTRACTOR SHALL PREPARE ELECTRICAL SHOP DRAWINGS WITH ALL NECESSARY RELEVANT DETAILS. THE SHOP DRAWINGS SHALL BE SUBMITTED TO ENGINEER TENDER DRAWING BEFORE THE COMMENCEMENT OF ANY WORKS AT SITE.

5 CO-ORDINATION

THE ELECTRICAL CONTRACTOR SHALL DO ALL NECESSARY CO-ORDINATION OF ELECTRICAL WORKS AND ALLIED SYSTEMS WITH ALL OTHER SERVICES AT SITE.

6 BALANCING OF
ELECTRICAL LOADS

ELECTRICAL LOADS ON ALL 3 PHASES SHALL BE BALANCED ON THE ELECTRICAL WORKS AT THE TIME OF TESTING AND COMMISSIONING OF THE ELECTRICAL INSTALLATIONS.

7 ELECTRICAL WIRING.

ALL WIRING SHALL BE DONE IN PVC CONDUIT TO BE CONCEALED IN WALLS,SLABS,COLUMNS AND FLOORS OR AS SHOWN ON DRAWINGS.

8 THE WIRING SHOULD BE STARTED ONLY AFTER THE CONDUIT SYSTEM HAS BEEN COMPLETED AND ALL OUTLET BOXES ARE FIXED AT THEIR RESPECTIVE POSITIONS.

9 PVC CONDUITS.

ALL PVC CONDUIT SHALL BE OF 3/4" OR 1" DIA (DEPENDING UPON NUMBER OF WIRES) FROM SWITCH BOARD TO LIGHT POINTS & 1" DIA FROM DBs TO SWITCH BOARDS AND POWER SOCKETS OR AS SHOWN ON DRAWINGS.

10 LUBRICATION.

NO LUBRICATION EXCEPT AS RECOMMENDED BY MANUFACTURER SHALL BE USED FOR PULLING OF WIRES IN PVC CONDUITS. NO OIL OF ANY KIND SHALL BE USED.

11 COLOUR CODING

COLOUR CODING FOR WIRING SHALL BE AS FOLLOWS: RED,YELLOW AND BLUE FOR PHASES, BLACK FOR NEUTRAL AND GREEN / YELLOW FOR CPC (EARTH).

12 SIZE OF WIRES

FOLLOWING SIZES OF PVC INSULATED WIRES WITH COPPER CONDUCTORS SHALL BE USED FOR INTERNAL WIRING,UNLESS STATED OTHERWISE.

12.1 1.5mm sq PVC INSULATED WIRES SHALL BE USED FROM SWITCH BOARD TO LIGHT POINTS AND 5 Amps SOCKETS OR AS SPECIFIED IN B.O.Q

12.2 2.5mm sq PVC INSULATED WIRES SHALL BE USED FROM DB TO SWITCH BOARDS FOR LIGHTING CIRCUITS.

12.3 4mm sq OR 6mm sq PVC INSULATED WIRES OR AS SHOWN ON DRAWING/BOQ SHALL BE USED FOR WIRING FROM DB TO POWER SOCKETS

12.4 BACK BOXES

ALL BACK BOXES FOR SWITCHES & SOCKETS SHALL MADE OF POLYECARBUNATE SHEET 16SWG OR AS SPECIFIED IN BOQ WITH EARTH TERMINAL. SIZE OF BACK BOX SHALL CORRESPOND TO THE SIZE OF SWITCHES/SOCKETS.

13 EARTHING OF POINTS.

ALL ELECTRICAL AND POWER SOCKETS SHALL BE PROPERLY EARTHED WITH 2.5mm sq PVC INSULATED WIRES OF COLOUR GREEN-YELLOW.

14 CAPACITY OF CONDUITS.

THE NUMBER OF WIRES TO BE PULLED IN ANY CONDUIT FOR WIRING PURPOSES SHALL CONFORM TO I.E.E RULES & REGULATIONS

15 CONDUIT FOR LIGHT WIRING.

WIRING SHALL BE DONE IN 3/4" & 1" DIA PVC CONDUIT FOR LIGHT POINTS AND CIRCUIT WIRING ON NORMAL/ GENERATOR SUPPLY OR AS SPECIFIED IN BOQ OR AS SHOWN ON DRAWINGS.

DISTRIBUTION BOARDS

16 "LIGHT" & "POWER"

ALL DISTRIBUTION BOARDS SHOWN ON DRAWINGS SHALL BE CONCEALED IN WALL & INSTALLED AT 4FT (1000mm) F.F.L OR AS SHOWN IN LEGEND/DRAWINGS.

C TELEPHONE CONDUIT

1 PVC CONDUIT SHALL BE 1"(25mm) DIA FOR WIRING OF TELEPHONE POINTS,PVC CONDUIT SHALL BE BURIED IN FLOOR /SLAB & WALLS FROM TDBs TO TELEPHONE POINTS, OR AS SHOWN ON DRAWINGS./B.O.Q

D FIRE ALARM WIRING.

1 PVC CONDUIT SHALL BE 1"(25mm) DIA FOR WIRING OF FIRE ALARM POINTS,PVC CONDUIT SHALL BE BURIED IN FLOOR /SLAB & WALLS FROM FACP TO FIRE ALARM POINTS, OR AS SHOWN ON DRAWINGS./B.O.Q

2 FIRE ALARM JUNCTION BOX (FAJB).

G.I JUNCTION BOX 225x150x100mm 16 SWG WITH COVER CONCEALED IN WALL AT 225mmBELOW SLAB TO FACILITATE PULLING OF FIRE ALARM CABLES.

B CLOSE CIRCUIT TV (CCTV) WIRING.

1 PVC CONDUIT SHALL BE 1"(25mm) DIA FOR WIRING OF CCTV SYSTEM,PVC CONDUIT SHALL BE BURIED IN SLAB, WALLS & COLUMNS OR AS SHOWN ON DRAWING/BOQ

CLOSE CIRCUIT TV JUNCTION BOX (CCJB).

2 G.I JUNCTION BOX 225x150x100mm 16 SWG WITH COVER CONCEALED IN WALL AT 225BELOW SLAB TO FACILITATE PULLING OF CLOSE CIRCUIT TV CABLES.

F OTHER SYSTEMS.

1 25mm DIA PVC CONDUIT SHALL BE USED FOR WIRING OF ALL OTHER SYSTEMS UNLESS OTHERWISE MENTIONED ON PLANS OR AS SPECIFIED IN B.O.Q

G ELECTRICAL CONSULATANT.

1 ELECTRICAL CONTRACTOR TO CONSULT ELECTRICAL CONSULTANT/ENGINEER FOR ANY FURTHER CLARIFICATIONS. NO ASSUMPTIONS SHOULD BE MADE.

H ELECTRICAL TESTS.

CONTRACTOR SHALL CARRY OUT ALL ELECTRICAL TESTS AT HIS EXPENSE THROUGH LICENSED ELECTRICAL SUPERVISOR IN THE PRESENCE OF ENGINEER INCHARGE OR HIS REPRESENTATIVE.

CLIENT:



PUNJAB MUNICIPAL DEVELOPMENT
FUND COMPANY
(PMDFC)

CONSULTANTS:



JERS CONSULTANCY (PVT) LTD
24-Civic Center, Quid-e-Azam Town, Township, Lahore (Pakistan)
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Fax: +92 42 35113125
E-mail: info@jers.com.pk, mail@jers.com.pk
Web: http://www.jers.com.pk

PROJECT:

PUNJAB CITIES PROGRAM (PCP)
DETAILED DESIGN OF INFRASTRUCTURE
SUB-PROJECTS AND RESIDENTS SUPERVISION IN
16 CITIES OF PUNJAB. 250

DRAWING TITLE:

**LEGEND & NOTES
(JHANG CITY)**

REV.	DATE	DESCRIPTION

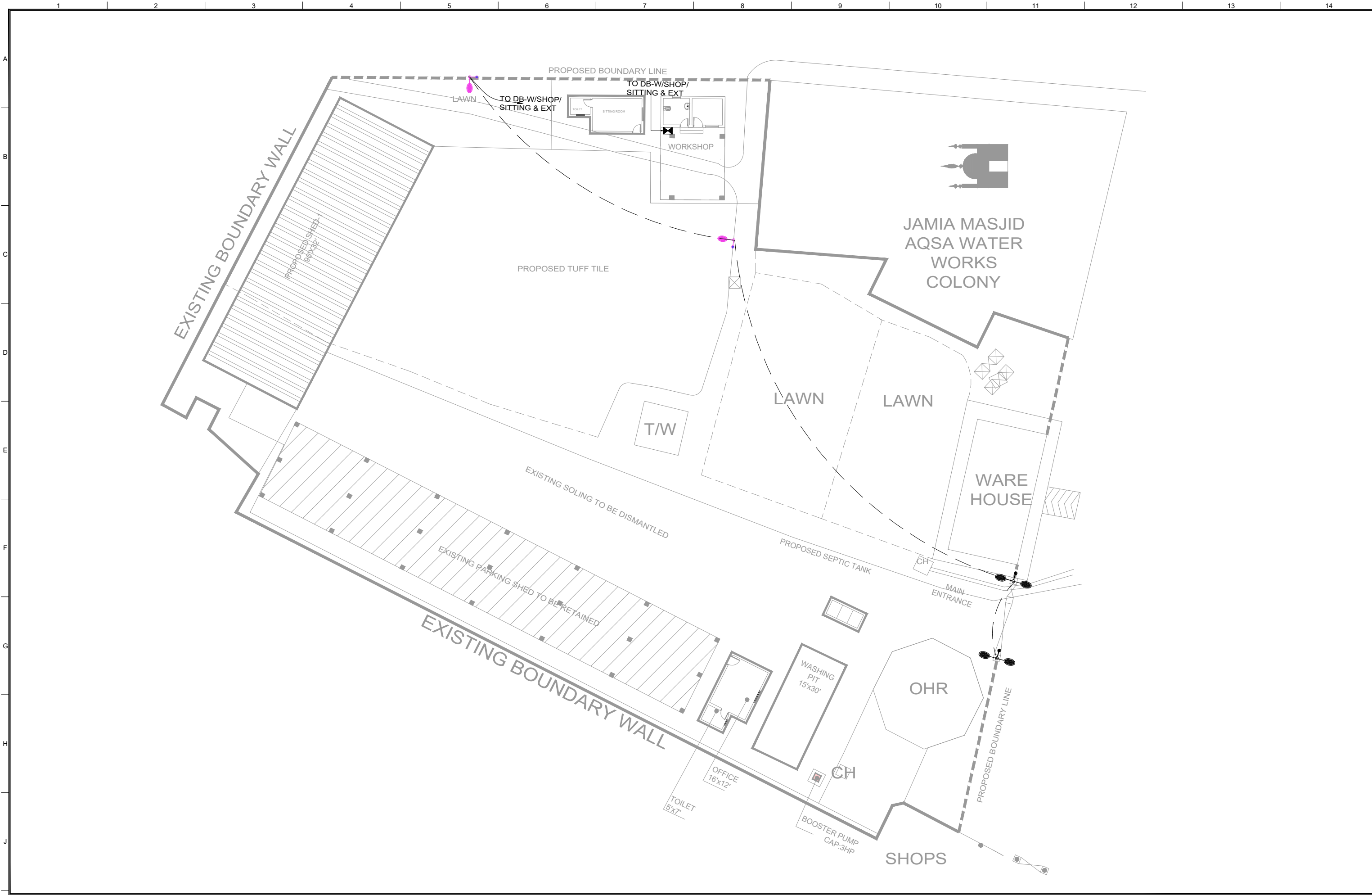
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CHECKED BY:	ASAD KHALID
DATE:	SEP,2022

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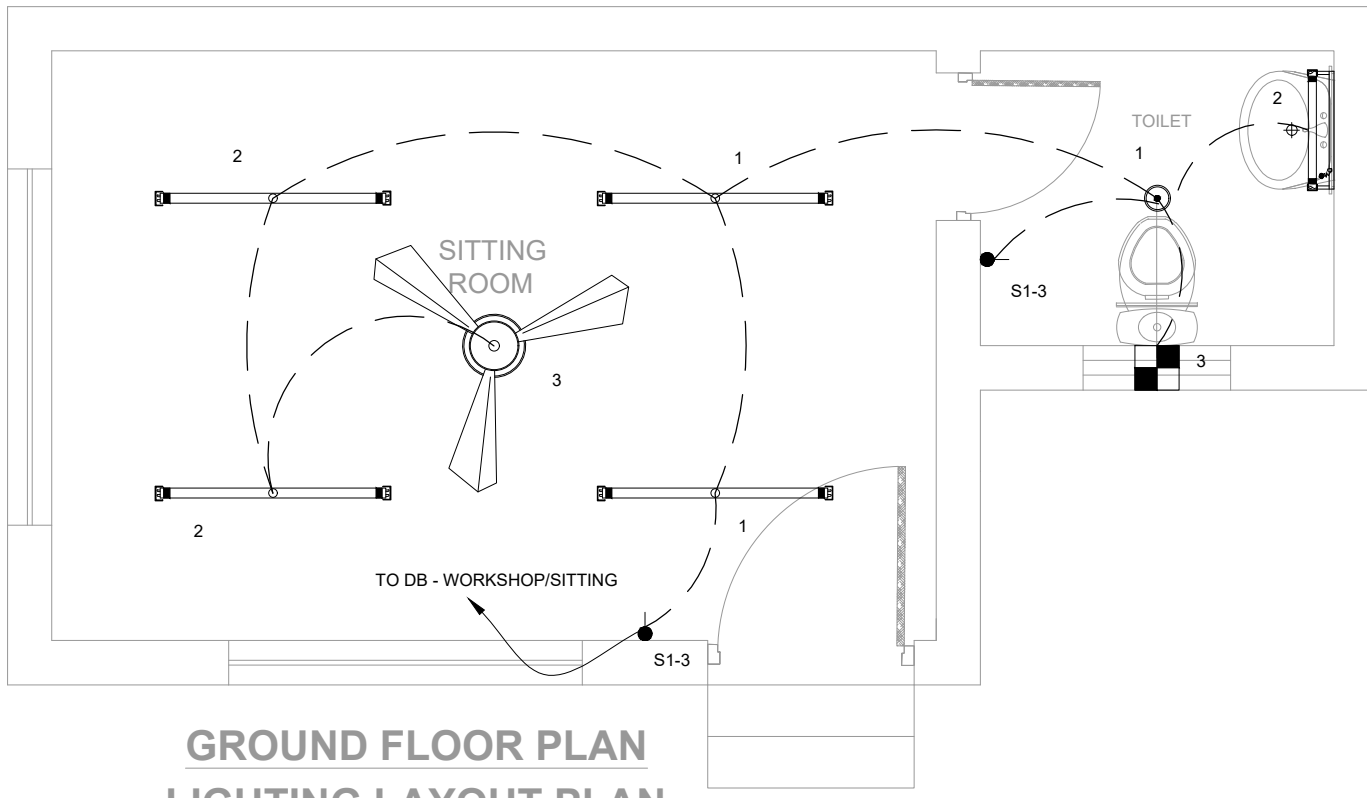
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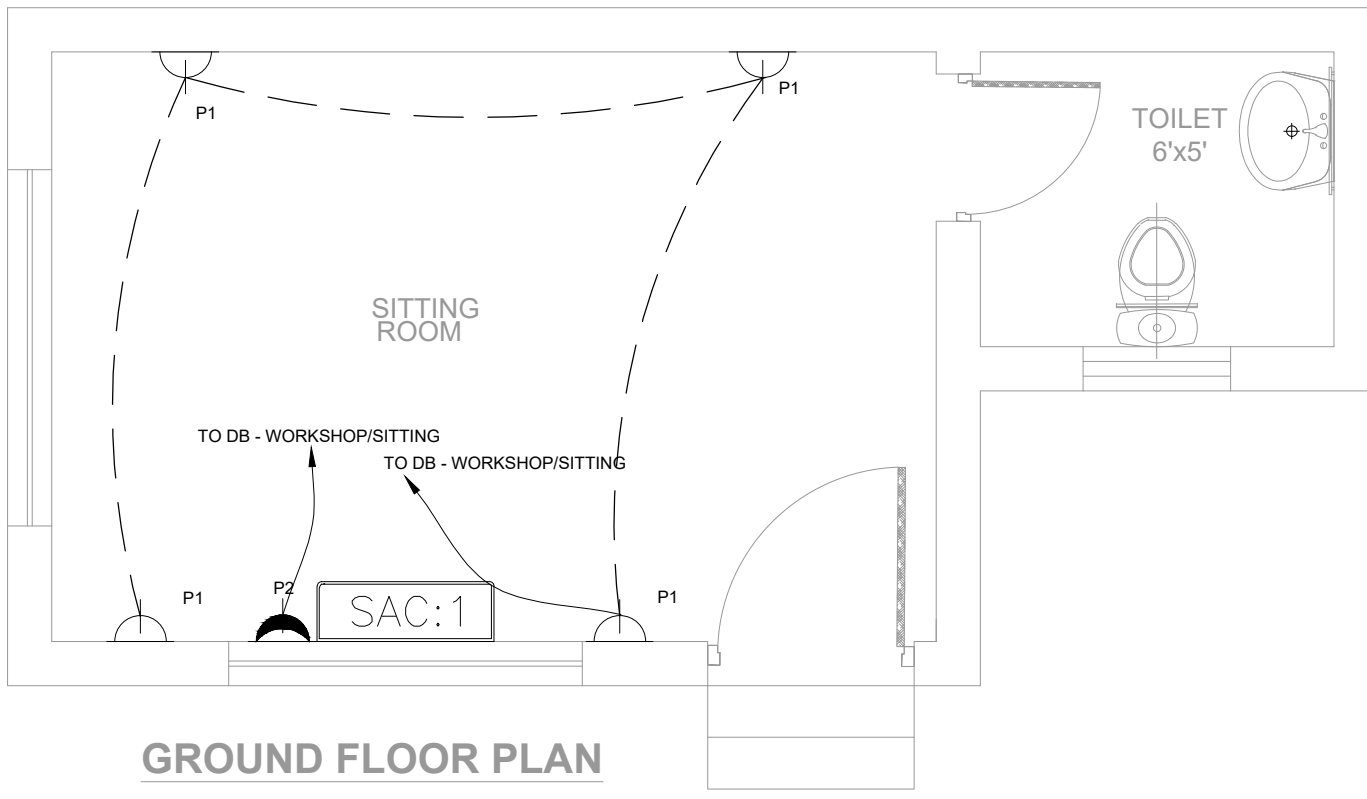
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1 OF 1
JOB NO:
488-01



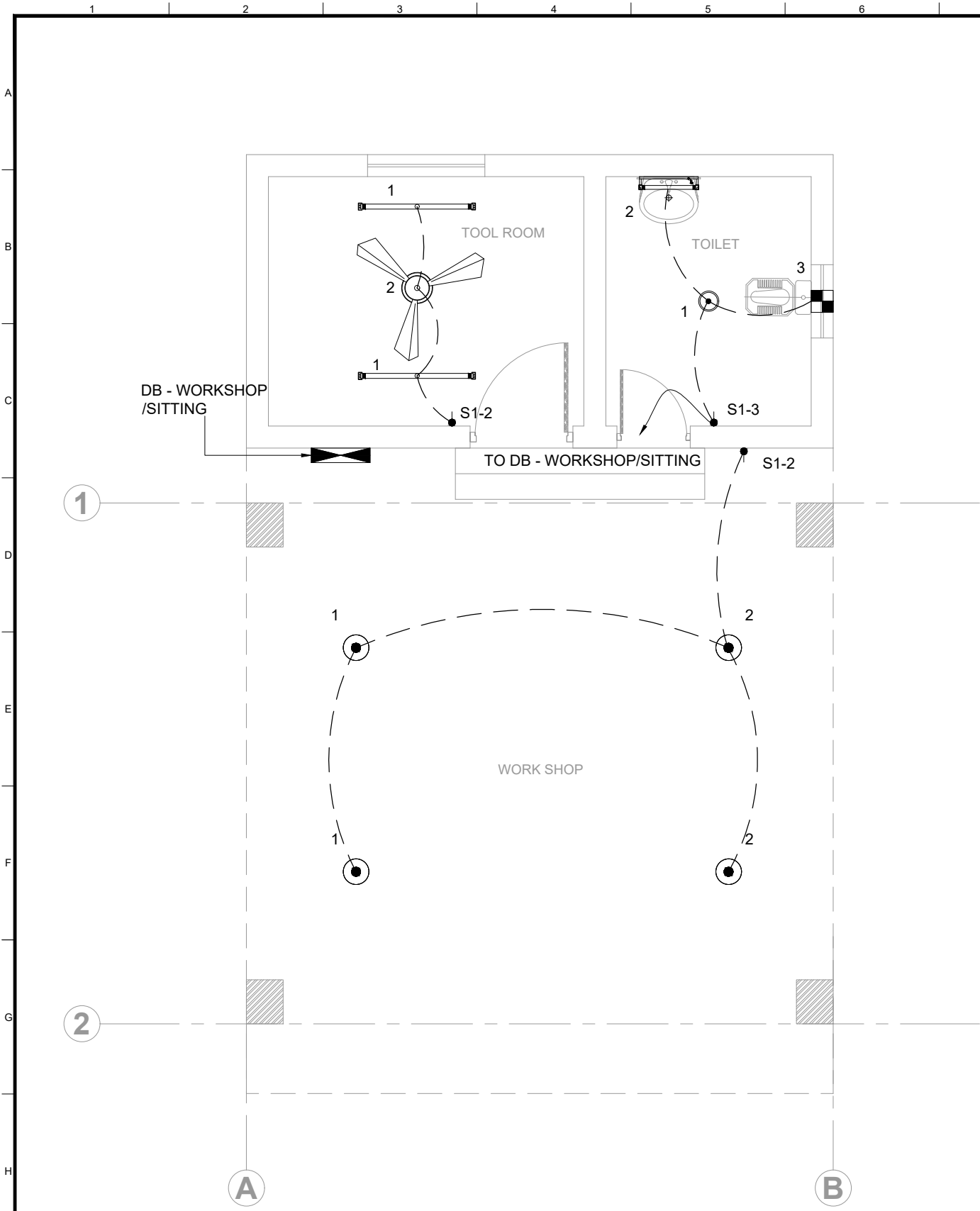
CLIENT:	CONSULTANTS:	PROJECT:	DRAWING TITLE:			DRAWN BY:	DRAWING NO:		
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						DATE:			
						SEP,2022	1"=50'	JOB NO:	
									488-01
								REV.	DATE



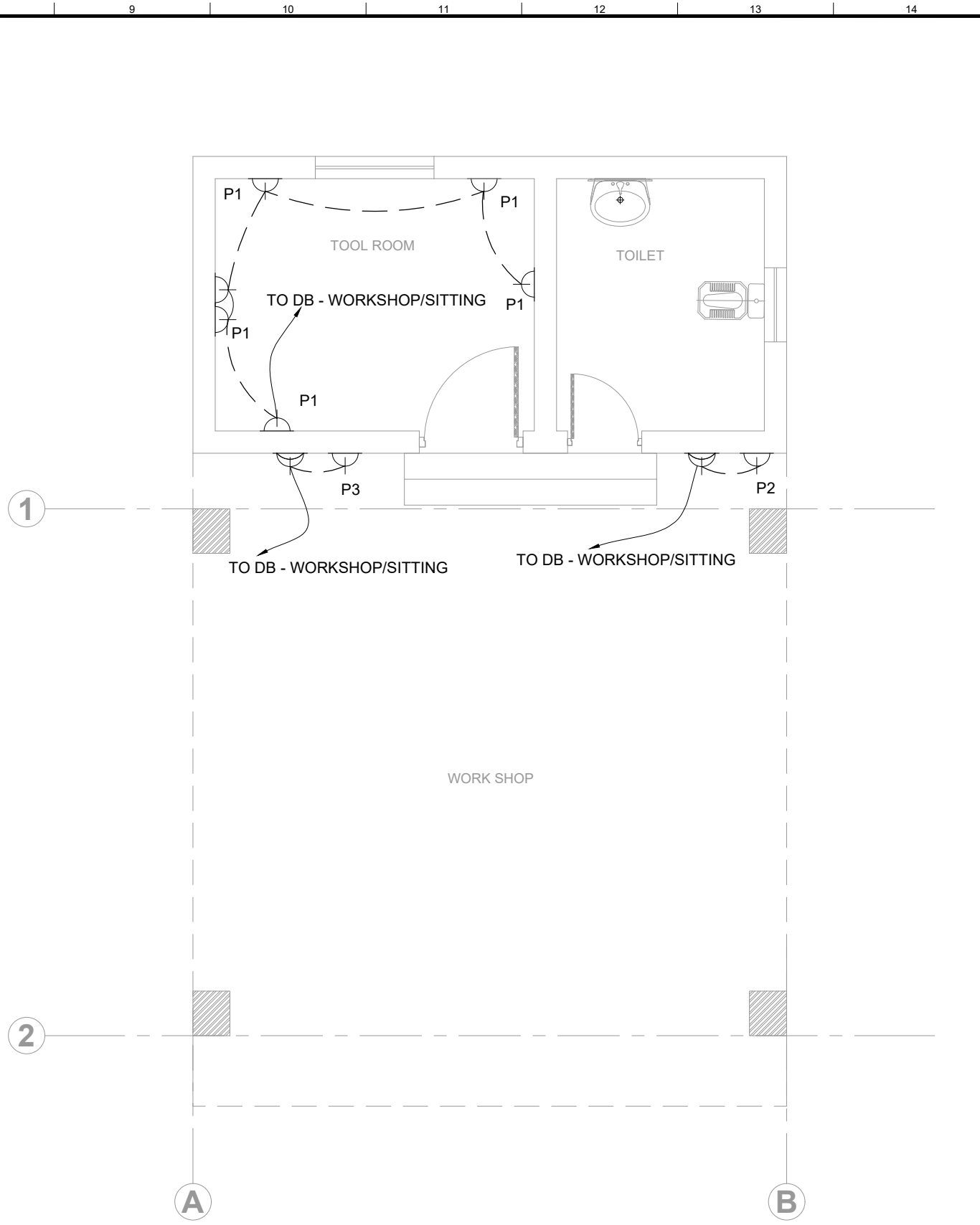
GROUND FLOOR PLAN
LIGHTING LAYOUT PLAN



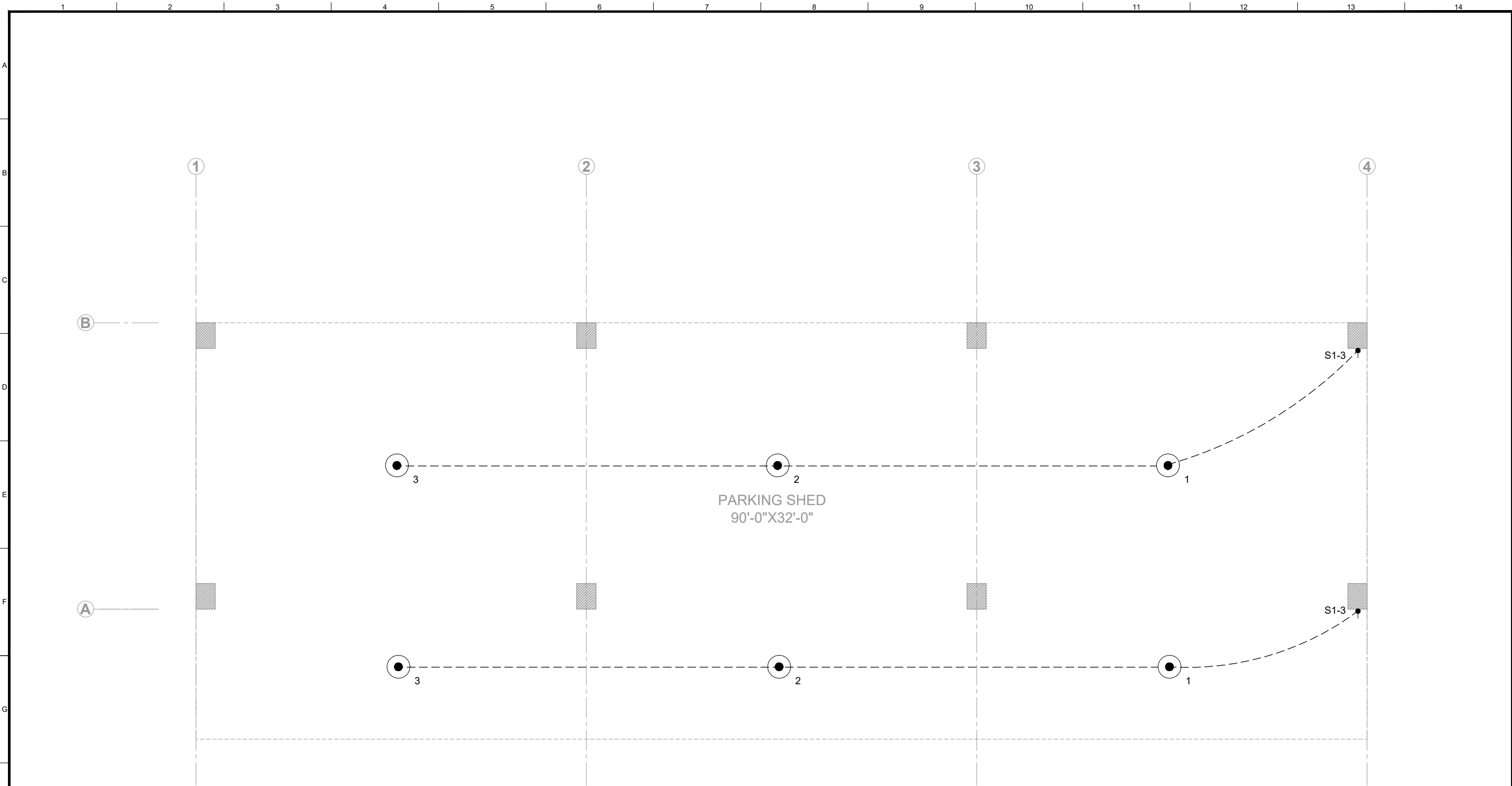
GROUND FLOOR PLAN
SMALL POWER LAYOUT PLAN



GROUND FLOOR PLAN



GROUND FLOOR PLAN



COLUMN & FOOTING LAYOUT PLAN

CLIENT:

HELP BUILD

PMDFC

HEALTHY CITIES

PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)

CONSULTANTS:

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E-mail: info@jers.com.pk, mail@jers.com.pk

Web: http://www.jers.com.pk

PROJECT:

PUNJAB CITIES PROGRAM (PCP)

DETAILED DESIGN OF INFRASTRUCTURE

SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB.

DRAWING TITLE:

LIGHTING LAYOUT PLAN

SHED 1

(BUREWALA)

