

# Local Government & Community Development Department

# Punjab Cities Program Construction of SWM Parking Area in Wazirabad City

# PC-I

# Estimated Cost Million PKR.120.633

March 2023

# **Municipal Committee Wazirabad**



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# **Punjab Cities Program**

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

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#### PC-I FORM

#### for

#### Construction of SWM Parking Area in Wazirabad 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 Wazirabad city			
2.Location	Wazirabad is an industrial city located in Gujranwala District, situated on the banks of the Chenab River nearly 100 kilometres north of Lahore on the Grand Trunk Road. It is 45 kilometres from Sialkot, 30 kilometres from the district capital - Gujranwala and about 12 kilometres from Gujrat. It has 32°26' North latitude and 74° 07' East longitude and elevation of 230 meters (755 feet) above mean sea level. Location map of the city is attached in <b>Annexure-A</b>			
3. Authorities responsible	lor			
i- Sponsoring	Government of the Punjab (through World Bank	funding)		
ii- Execution	Municipal Committee Wazirabad			
iii- Operation and Maintenance	Municipal Committee Wazirabad			
iv-Concerned Provincial Department	Local Government and Community Development Department Punjab			
4a.Plan Provision				
<ul> <li>If the project is included in medium term/five year plan,</li> </ul>	Punjab Cities Program (PCP) is a World Bank f total cost of USD 236.00 million and comprise components.	es of below mentioned		
specify actual	Total loan from World BankUSD 200.00 million			
allocation	Component-1 Infrastructure development USD 180.00 million (PforR)			
	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		

	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 now in ADP 2022-23 - under General Serial No-1769 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	PKR. 1329.90.00 million
5. Project objectives and its relationship with sector objectives	<ul> <li>Sector Objectives</li> <li>The sector objectives include:</li> <li>1. Provision of efficient and effective municipality services to the masses.</li> <li>2. Community development through improving basic infrastructure.</li> <li>3. Clean and green environment for better living standards.</li> <li>4. Effective use of land through master planning of urban areas.</li> <li>5. Social uplifting and cohesion through provision of public open spaces and play grounds.</li> <li>6. Ease in mobility and communication.</li> <li>7. Cost efficient Solid Waste Management through waste to energy initiatives.</li> <li>8. Capacity building of Local Governments.</li> <li>9. Efficient Road network to make areas easily accessible</li> <li>Objectives of the Project</li> <li>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.</li> </ul>

	The Project has the following objectives;		
	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.		
	<ol> <li>8. Provision of better solid waste management service by protection</li> </ol>		
	of the machinery and equipment.		
	of the machinery and equipment.		
	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.		
6 Description justification	n, technical parameters and technology transfer aspects		
i. Present Condition	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.		
	encouraging in the city.		
	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.		
	MC Wazirabad 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 Wazirabad for provision of better		
	solid waste management facilities to the people of Wazirabad.		
	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		

	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 <b>10.28 Kanals</b> in the city. Detail of the components of Parking Area have been given in the table below.			
<ul> <li>iii Detail of civil works, equipment &amp; machinery and other physical facilities</li> </ul>	<ul><li>The detail of Parking Shed for SWM Machinery to be constructed in the city, is given below:</li><li>Location: Arazi Jhalaran near Fruit and Vegetable Market, GT Road, Wazirabad</li></ul>			
	S.       Detail of works         1       Boundary wall, gates and fencing(for future extension)         2       Sheds for vehicles with trusses and Aluzinc sheeting at the top         3       Office room with toilet         4       Workshop with tool room and toilet         5       Washing ramp         6       Sitting room for staff with toilets         7       Parking aprons         8       Store room         9       Guard room         10       Tyre Shop         11       Generator pad         12       Water supply and drainage system         13       Approach road			
iv Indicate governess issues of the sector relevant to the project and strategy to resolve them	<ul> <li>MC Wazirabad 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.</li> <li>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.</li> </ul>			

- Capital Cost of	The sum	mary of the works included in the project is give	n below;
roject			
			Cost
	S. No	Item of works	(PKR
			million)
	1	Office Building	2.743
	2	Sitting Room	1.990
	3	Guard Room	0.603
	4	Tyre Shop	0.602
	5	Store Room	1.760
	6	Workshop	3.339
	7	Parking Shed (Size 150' X 32')	15.177
	8	Parking Shed (Size 120' X 32') (2 Nos.)	24.451
	9	Parking Shed (Size 90'' X 32')	9.287
	10	Parking Shed (Size 60' X 32')	6.360
	11	Washing Pit	0.573
	12	Generator Pad	0.167
	13	Pump Pad	0.015
	14	Septic Tank	0.325
	15	Soakage Well	0.215
	16	External Work (Boundary Wall + Tuff Paver + Lawn)	25.150
	17	External Plumbing Work	0.750
	18	External Electrical Work	9.704
	19	Tube Well	3.416
	20	Environmental Health & Safety Cost	0.112
		Total cost	106.755
		Contingencies @2%	2.135
		Punjab Sales Tax @5%	5.337
		Price Escalation @6%	6.405
		Grand Total	120.633
	See An	nexure-B for details	
Indicate date of estimation of the		ect estimates have been framed during the month	n of March,
project cost			

ii- Basis of determining the estimates be provided.	actua (MR Bi-A For i	cost estimates have been framed on the ally required at site and unit rates from (S) issued by the Government of Punja (Annual of year 2023). items not available in the MRS, the same ailing market rates.	n the Mark b (District	tet Rate System Gujranwala 1st
	Phys	sical phasing of the project is included in	the follow	ving table:
iii- Provide year wise estimation of physical	<b>S.</b> #	<i>t</i> Item of works		Year 2022-2023
activities	1	Boundary wall, gates and fencing(for extension)	future	100%
	2	Sheds for vehicles with trusses and Al sheeting at the top	luzinc	100%
	3	Office room with toilet		100%
	4	Workshop with tool room and toilet		100%
	5	Washing ramp		100%
	6	Sitting room for staff with toilets		100%
	7	Parking aprons		100%
	8	Store room		100%
	9	Guard room	100%	
	10	Tyre Shop	100%	
	11	Generator pad	100%	
	12	Water supply and drainage system	100%	
	13	Approach road	100%	
	14	8		100%
iv- Phasing of capital cost on the basis of each		sing of capital cost of the project is inclu figures are in million rupees)	ded in the	following table:
item of work.	S. #	Items of Shed	<b>Total co</b> (Million I	
	1 Office Building 2.743		2.743	
	2Sitting Room1.9903Guard Room0.603			1.990
				0.603
	4	Tyre Shop	0.602	
		Store Room	1.760	
		Workshop	3.339	
	7	Parking Shed (Size 150' X 32')	15.177	7 15.177
	8	Parking Shed (Size 120' X 32') (2 Nos.)	24.451	24.451
	9	Parking Shed (90' X 72')	9.287	9.287

	10	Parking Shed (Size 60' X 32')	6.360	6.360
	11	Washing Pit	0.573	0.573
	12	Generator Pad	0.167	0.167
	13	Pump Pad	0.015	0.015
	14	Septic Tank	0.325	0.325
	15	Soakage Well	0.215	0.215
	16	External Boundary Wall + Tuff Paver + Lawn	25.150	25.150
	17	External Plumbing Work	0.750	0.750
	18	External Electrical Work	9.704	9.704
	19	Tube Well	3.416	3.416
	20	Environmental Mitigation Cost	0.112	0.112
		PST, Contingencies, Escalation	4.626	4.626
		Total	120.633	120.633
8-Annual recurrent cost after completion of the project and source of financing		t in Million = Rs. 1.367 ails attached in <b>Annexure-1</b> )		
9- Demand & Supply	E	xisting supply level		
Analysis i- Existing Capacity of services	<ul> <li>There is no existing parking facility for the SWM machinery. Resultantly the vehicles are parked at open spaces with no protection.</li> <li>MC Wazirabad is unable to protect the solid waste transportation and other MC vehicles because of non-availability of appropriate parking area.</li> </ul>			
ii- Projected Demand for 10 years	<ul> <li>The Venere's because of non-availability of appropriate parking area.</li> <li>The Parking area is required to park and protect the solid waste transportation and other MC vehicles.</li> <li>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 Wazirabad 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 36 vehicles.</li> <li>The municipal services require radical improvement to enhance the efficiency of the service to increase service delivery to a satisfactory level.</li> <li>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.</li> </ul>			

<ul> <li>iii- Capacity of other</li> <li>similar projects being</li> <li>implemented in</li> <li>public/private sector</li> </ul>	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 Wazirabad City for solid waste transportation and other MC vehicles. So there is a large gap between the supply and demand.					
v-Designed capacity and	1)-Table showing	g details of the	e parking	area is give	en below:	
output of the project	Location	Components	No. of Sheds	Total area	Area Shed area & Nos.	
		As listed in section-7	05	10.28 Kanals	1 No =150'x32' 2 Nos= 120'x32' 1 No = 90'x32' 1 No = 60'x32'	
10. Financial Plan Sources of financing	-	shed is design an for the Pun	ed for 40 njab Citie	vehicles of s Program	SWM Machinery. has been funded by	
Debt	Total loan to Government of Pakistan/PunjabUSD 200 million					
a) Indicate the local and	Component-1 f	or Infrastructu	re Devel	opment	USD 180 million	
foreign debt Loan	Component-2 for Investment Project Financing				USD 20 million	
	20% share of M	Iunicipalities i	is equival	lent to	USD 36 million	
	Total funds available for InfrastructureUSD 216 millDevelopmentUSD 216 mill			USD 216 million		
	This project will be funded under this financing.					
b) Equity	A. Loan/grant to MC         The amount of loan converted to grant to MC Wazirabad will be         Rs 96.506 million. The financing of the project will be as give n         below:         Grant to MC Wazirabad from World         Bank (80% of cost of PC-I)					
	Bank (80% of cost of PC-1)20% Co-finance by MCPKR 24.126 million					
	Total cost of projectPKR 120.633 million					

	B. Project Cost =Rs. 120.633 million
	*The loan is from World Bank to Government of Pakistan/Punjab which will trickle down to MC Wazirabad as grant.
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 an	nalysis
i.Financial: Income to the project with assumption	<ul> <li>No income will be generated from the project and hence the Financial Analysis is not required.</li> <li>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.</li> </ul>
ii.Social benefits to the	The completion of the project will result in:
target group	<ul> <li>Provision of suitable parking area for the MC Vehicles.</li> <li>Making MC self-sufficient in small repairs to the machinery &amp; Equipment possessed by MC</li> <li>Provision of a washing facilities for the vehicles</li> <li>Effective protection to the vehicles against the solar radiation and Ultraviolet rays, rain, hail, wind, and dust.</li> <li>Slowing down the deterioration of vehicles, therefore reducing the cost of maintenance.</li> <li>Enhancement of the security of vehicles during non-working hours.</li> <li>Better watch and ward of MC machinery and equipment and reduction of losses due to theft of equipment and spares.</li> <li>Provision of better solid waste management service by protection of the machinery and equipment.</li> </ul>
iii.Environmental Impact negative/positive	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

	halped identify as arrived with a the sec	a to mitigate them to		
	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 ad			
	on the remarks of the screening checklis			
	Management Plans (ESMPs) does not nee			
	the necessary cost for Environment Health			
	been incorporated in the PC-1. The Envir	-		
	SOPs for labor/workers are provided as An			
iv.Quantifiable project	The quantifiable project out puts have been			
outputs	The social benefits to the citizen have been	a described at Sr. No-11(ii).		
v.Unit cost analysis	A) Capital Unit Cost The unit cost analysis is produced below			
	The unit cost analysis is produced below;	DVD 100 (00 '11'		
	Project capital cost PKR 120.633 million			
	Population of the city in year 2023	256,179 persons		
	Unit capital cost per capita	PKR 470.89		
	B)-Unit R&M cost:			
	Annual R&M cost	1,367,554		
	Population of the city in year 2023	256,179 persons		
	Unit R&M cost per capita	PKR 5.33		
vi.Employment generation	Employment Analysis			
(direct and indirect)	Direct Employment			
	a) Planning and Design of projects			
	The planning and design of the project			
	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.			
	b) Execution of the Project			
	a) PMDFC			
	PMDFC has the project monitoring and supervisory role and the company has enough experts and staff to complete this			
	company nas enough experts an	iu stall to complete this		

	assignment. PMDFC has already deployed under mentioned
	staff for these projects:
	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
	b) Consultants
	PMDFC has employed consultants for detailed design and
	resident supervision of the projects who have deployed their
	staff for detailed design and resident supevision of the project.
	c) Municipality
	MC Wazirabad 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
	d) Contractor
	The contractor responsible for execution of the sub project will
	employ skilled and un-skilled labor on this work.
	Indirect Employment
	Indirect employment for production of material such as cement, steel,
	stone metal, bitumen, bricks etc. will be generated.
vii.Impacts of delays on	The impact of delay in project implementation will result in;
project cost and	• Increased project cost due to escalation in cost of material and
viability	labor.
	• Deterioration of vehicles due to weathering effects
	• Recurrent watch and ward problems for the delayed period
12-Implementation Sched	
a) Indicate starting and	The project is anticipated to commence by May 2023 and to be
completion date of the	completed by October 2023 with project implementation period of 06
project	months.
b) Item wise/year wise	The Gant chart has been attached at Annexure-D
schedule in line chart	

13- Management Structur	e and manpower requirements
i. Administrative	ii. Planning & design of the project
arrangements for the	The project has been designed by the consultants employed by
implementation of the	PMDFC and will also carry out the resident supervision of the
project	project.
	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.
	iv. Execution of the project
	• The project will be executed by MC Wazirabad 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
	Lahore and regional offices. The reporting of progress to LG &
	CDD & World bank and troubleshooting will also be
	responsibility of PMDFC.
	• 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 Wazirabad Unit as per PPRA Rules.
	v. Verification of quantities included in PC-Is and Resident
	Supervision of the works by consultants
	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.
ii)The manpower	a) PMDFC experts and staff
requirements by skills	For rendering assistance in implementation of infrastructure projects
during execution and	in 16 MCs, PMDFC has the experts and staff in the required fields.

operation of the project and; The job description, qualification, experience, age and salary of each post	b	been established b Multan/Khanewal. <b>Resident Supervis</b> The project will be be employed/deploy	y PM <b>ion Co</b> supervi yed by	ogram Units, three regional offices have DFC at Gujranwala, Faisalabad and <b>nsultants</b> used by consultants. The tentative staff to the consultants for the certification of sident supervision of the project is given
	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
		The contractors will skilled & non skilled supervised by exper- number of slots for en- upon the type and que <b>Repair &amp; maintena</b> MC has its own regu- maintenance of the m been observed that t	l empl labor f rienced ngineer antity o <b>nce of</b> lar staf nunicipa the existent and a staff nunicipation of the staff the existent of the staff the existent of the staff the existent of the staff the staff of the	f which has been deployed for repair and al services infrastructure. However, it has sting staff is not adequate to repair and manner which can give good service

Fill up the presently vacant slots

Recruit additional staff as per need of the infrastructure after

obtaining the sanctions from the competent authorities.

MC is facing shortage in provincially appointed and locally appointed cadres. This will seriously affect the pace of progress of

1) Shortage & frequent transfers of Provincially appointed staff

•

•

14-Additional projects /decisions required to

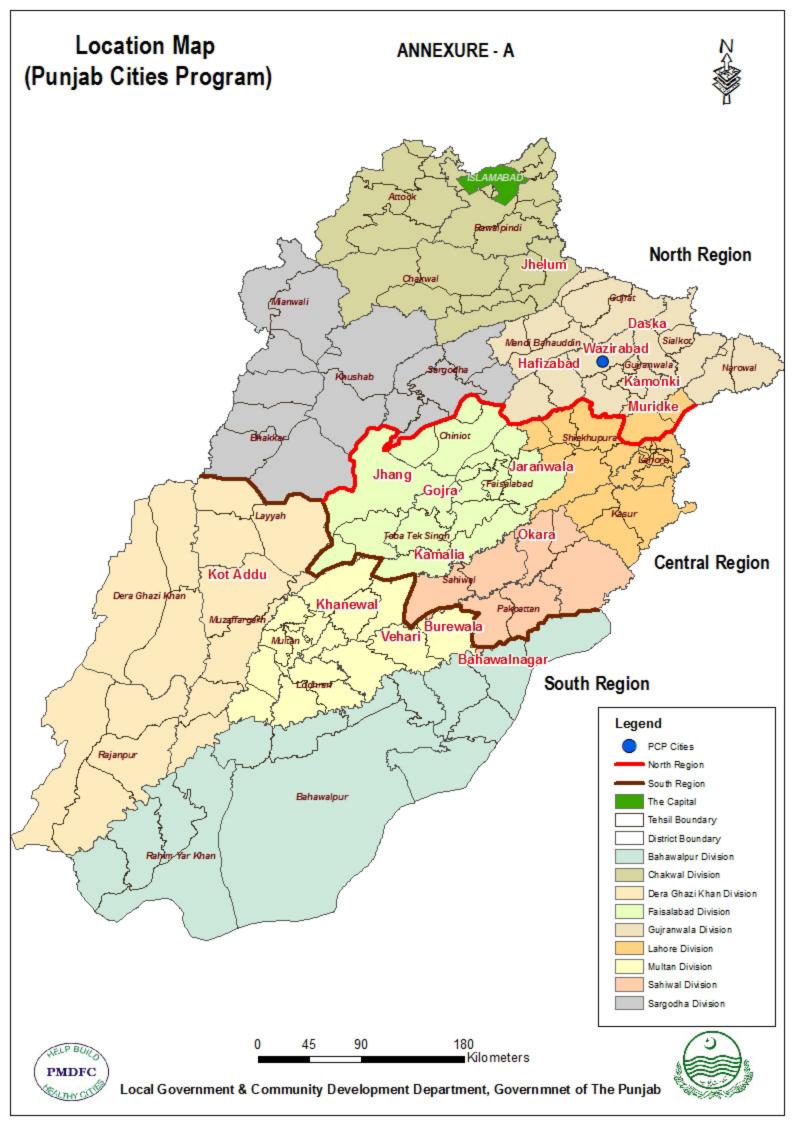
optimize the investment	the program and the implementation of the infrastructure projects
being undertaken	may be delayed. Provincial Government should fill up the vacant
	staff immediately for optimizing the investments in MC.
	2) Repair & Maintenance (R&M) staff
	The R&M staff is also deficient and this is adversely affecting the
	service delivery level. Number of slots are vacant but MC is not
	allowed to recruit the persons to fill these slots due to ban on
	recruitments.
	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.
	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.
15-Certificate	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.

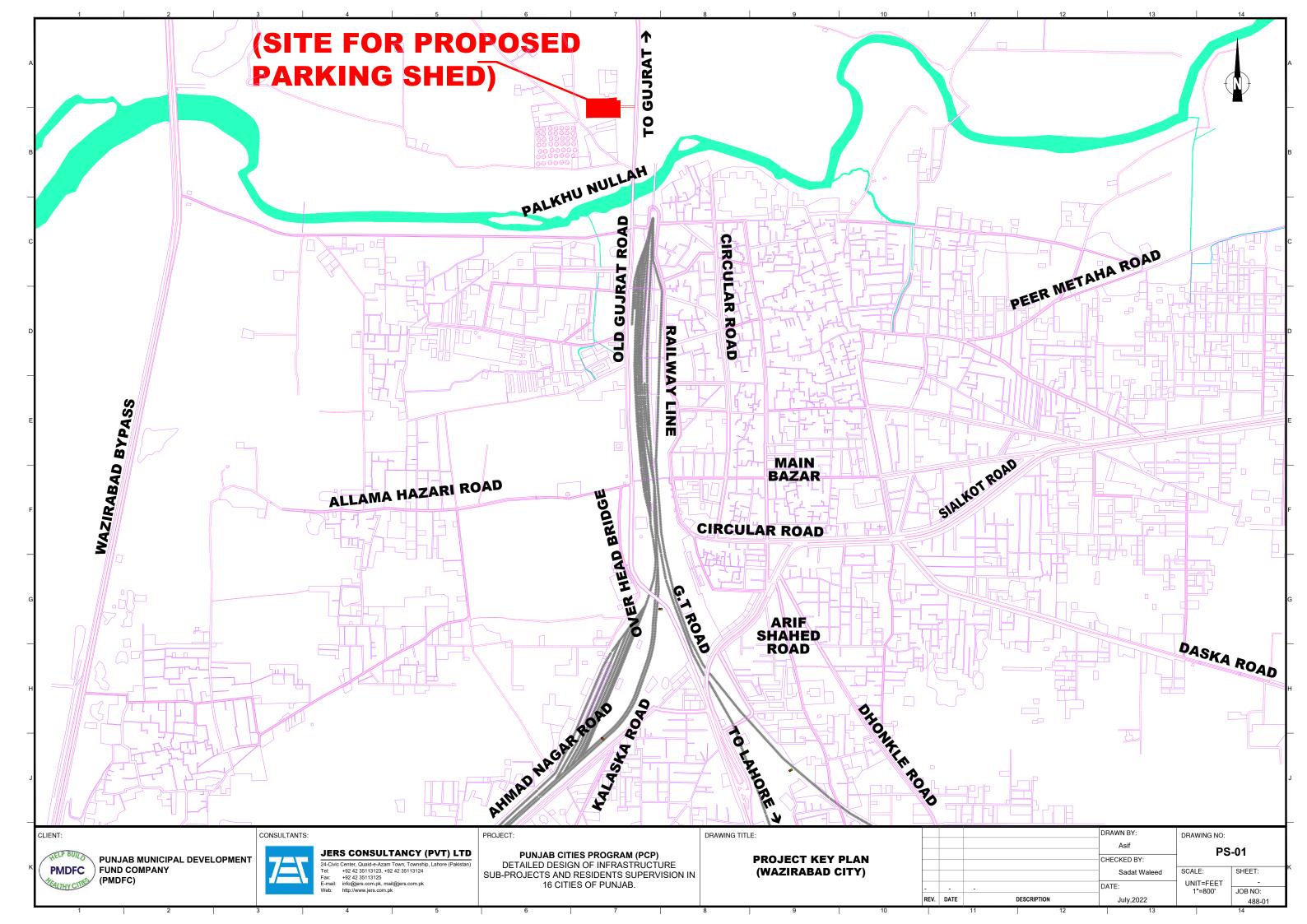
Prepared by	JERS Consultancy (Pvt) Ltd	Stamp & Signatures	
Checked by	Municipal officer (Infrastructure) MC Wazirabad	Stamp & Signatures	
	Chief Officer MC Wazirabad	Stamp & Signatures	
Forwarded by	Administrator MC Wazirabad	Stamp & Signatures	

# Annual Recurrent Cost after Completion of the Project

Cost Category	Cost Breakup	Cost per Annum
Annual Maintenance Cost of	1% of Project Cost =	1,067,554
The Civil Works	0.01*(106,755,418)	
Annual Man Power Cost of	Rs.25,000/month	300,000
One Guard		
	Total cost per Annum (Million Rs.)	1,367,554

Annexure-A Location Map





#### DETAILED COST ESTIMATE

#### SWM PARKING SHED (WAZIRABAD)

#### SUMMARY

Sr. No.	Description	Amount (Rs)
1	OFFICE BUILDING	
i	Civil Work	2,184,814
ii	Plumbing Work	257,297
iii	Electrical Work	301,711
2	SITTING ROOM	
i	Civil Work	1,721,472
ii	Plumbing Work	92,534
iii	Electrical Work	176,469
3	GUARD ROOM	
i	Civil Work	532,809
ii	Plumbing Work	6,540
iii	Electrical Work	69,929
4	TYRE SHOP	
i	Civil Work	526,150
ii	Plumbing Work	6,540
iii	Electrical Work	69,929
5	STORE ROOM	
i	Civil Work	1,634,992
ii	Plumbing Work	6,540
iii	Electrical Work	119,372
6	WORK SHOP	
i	Civil Work	2,927,456
ii	Plumbing Work	93,149
iii	Electrical Work	319,195
7	PARKING SHED (SIZE 150' x 32')	
i	Civil Work	14,731,360
iii	Electrical Work	446,155
8	PARKING SHED (SIZE 120' x 32') (2 Nos.)	
i	Civil Work	23,764,159
iii	Electrical Work	687,734

#### DETAILED COST ESTIMATE

#### SWM PARKING SHED (WAZIRABAD)

#### SUMMARY

a	1	
Sr. No.	Description	Amount (Rs)
9	PARKING SHED (SIZE 90' x 32')	
i	Civil Work	9,032,799
iii	Electrical Work	254,667
10	PARKING SHED (SIZE 60' x 32')	
i	Civil Work	6,183,812
iii	Electrical Work	176,538
11	WASHING PIT	573,215
12	GENERATOR PAD	167,005
13	PUMP PAD	15,441
14	SEPTIC TANK	325,707
15	SOAKAGE WELL	215,643
16	EXTERNAL WORK (BOUNDARY WALL + TUFF PAVER + LAWN)	25,150,483
17	EXTERNAL PLUMBING WORK	750,553
18	EXTERNAL ELECTRICAL WORK	9,704,639
19	TUBEWELL	3,416,186
20	ENVIRONMENTAL HEALTH & SAFETY COST	112,425
	Total Amount (Rs)	106,755,418
	Contingencies @ 2%	2,135,108
	PRA Charges @ 5%	5,337,771
	Price Escalation @ 6%	6,405,325
	Total Amount. Rs.	120,633,622

#### DETAILED COST ESTIMATE

#### OFFICE BUILDING

		CIVIL WORK				
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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	0.88	11,658.25	10,259
2	26/43	Anti-Termite Spraying anti termite proofing by using liquid FMC Biflex 2.5%EC Mixing Ratio 1:50=137-Sft or using				
		liquid MIRAGE Ali Akbar /RANGERS Auriga 5% SC Mixing Ability-HEXTAR Ratio 1:110=205-Sft or any other 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	1,549.88	9.90	15,344
		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	1.16	29,723.50	34,479
		Brick work in Foundation				
4	7/4/i	Pacca brick work in foundation and plinth in:-				
		Cement, sand mortar:- Ratio 1:5	100 Cft	7.27	32,358.60	235,247
5	6/36	Horizontal D.P.C 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	1.05	9,272.70	9,736
			100 010	1.00	>,272.70	2,730
		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:				

#### DETAILED COST ESTIMATE

#### **OFFICE BUILDING**

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		ii) Ratio 1:3 <sup>3</sup> / <sub>4</sub> " thick (20 mm)	100 Sft	1.40	6,932.65	9,706
		Brick work in Super Structure				
7	7/5	Pacca brick work in ground floor:-				
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	10.57	34,761.00	367,424
		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	360.81	580.05	209,289
		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):-	100kg	11.60	31,940.05	370,505
		Deformed bars (Grade-60)	ТООКД	11.00	51,940.05	570,505
		Sand Filling				
10	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	20.00	2,982.00	59,640
		Brick ballast				
11	6/2	Dry rammed brick or stone ballast, 1 <sup>1</sup> / <sub>2</sub> " to 2"( 40 mm to 50 mm) gauge.	100 Cft	1.65	9,900.00	16,335

#### DETAILED COST ESTIMATE

#### OFFICE BUILDING

	1nd BI-Annual-					
Sr. No.	2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
	, , unit ubud	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	0.83	38,723.50	32,141
		D				
13	10/42/d	<b>Porcelain Tile</b> 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 Chequred Tiles) 300mmx300mm	Per Sft	458.63	225.65	103,490
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.				
		<ul><li>a) Full body Glazed Tile</li><li>(i) 400 mm x 400 mm</li></ul>	Per Sft	55.77	310.10	17,294
		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	41.25	255.50	10,539
						-

#### DETAILED COST ESTIMATE

#### OFFICE BUILDING

	1nd BI-Annual-					
Sr.	2023	Description	Unit	Quantity	Unit Rate	Amount
No.	(Jan to June) Wazirabad	Description	Omt	Quantity	( <b>R</b> s)	( <b>R</b> s)
16	10/25	Providing and laying superb quality Ceramic tiles				
10	10/20	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	182.00	310.10	56,438
		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	5.00	3,963.30	19,817
		Cement Plaster				
18	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:-				
		3/4" (20 mm) thick	100 Sft	15.60	4,650.85	72,553
		Pointing				
19	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-				
		a) ratio 1:2	100 Sft	14.56	3,776.40	54,984
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	14.56	822.00	11,968
		Distempering				
21	11/23	Distempering:-				
		iii) three coats	100 Sft	20.60	1,446.35	29,795

#### DETAILED COST ESTIMATE

#### OFFICE BUILDING

	1nd BI-Annual-					
Sr. No.	2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Wooden Door				
22	12/50-i	Providing and fixing 1 <sup>1</sup> / <sub>2</sub> " (40 mm) thick hollow flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1 <sup>1</sup> / <sub>4</sub> " (30 mm) thick and partal wood braces at about 3" (75 mm) apart and deodar wood lipping 1 <sup>1</sup> / <sub>2</sub> "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 1 <sup>1</sup> / <sub>2</sub> "x1 <sup>1</sup> / <sub>2</sub> "x <sup>1</sup> / <sub>4</sub> ", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x <sup>1</sup> / <sub>4</sub> " (50 mm x 6 mm)				
			Per Sft	105.00	1,603.20	168,336
		Lock				
23	12/22	Providing and fixing, approved quality mortice				
	12,22	lock.	Each	5.00	774.00	3,870
		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	2.10	1,460.05	3,066
		ii) Second coat	100 Sft	2.10	841.65	1,767
		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 <sup>3</sup> / <sub>4</sub> "x1"x <sup>3</sup> / <sub>4</sub> "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	104.00	1,170.70	121,753

#### DETAILED COST ESTIMATE

#### OFFICE BUILDING

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Roof Insulation				
26	9/5	Single layer of tiles 9"x4 <sup>1</sup> /2"x1 <sup>1</sup> /2" (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	6.05	12,104.25	73,231
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	605.00	8.65	5,233
		Khurras				
28	9/15	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	2.00	905.25	1,811
		Bottom Khuras				
29	9/16	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4 <sup>1</sup> / <sub>2</sub> " (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	2.00	1,908.05	3,816
		Crush				
30	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 contratcor.	Cf	500.40	100.70	54 047
			Cft	500.49	109.79	54,947
		Total Rs.				2,184,814

#### OFFICE BUILDING CALCULATION OF QUANTITIES

CIVIL	WORK

a			-	1	1		
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	125.00	2.50	2.50	781.25	Cft
	Toilet wall	1	15.00	2.50	2.50	93.75	Cft
		-	10100	2.00	Total	875.00	Cft
					Total	0.88	%oCft
	Anti-Termite						
2	Spraying anti termite proofing by using liquid FMC Biflex 2.5%EC Mixing Ratio 1:50=137-Sft or using liquid MIRAGE Ali Akbar /RANGERS Auriga 5% SC Mixing Ability-HEXTAR Ratio 1:110=205-Sft or any other 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	125.00	7.50		937.50	Sft
	Toilet wall	1	15.00	7.50		112.50	Sft
	Floor	2	13.00	16.00		416.00	Sft
		1	5.50	7.75		42.63	Sft
		1	5.50	7.50		41.25	Sft
					Total	1,549.88	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	125.00	2.50	0.33	103.13	Cft
	Toilet wall	1	15.00	2.50	0.33 Total	12.38 115.50	Cft Cft
					TOTAL	115.50	
					Total	1.16	%Cft
	Brick work in Foundation						
4	Pacca brick work in foundation and plinth in:-						
	Cement, sand mortar:- Ratio 1:5						

#### OFFICE BUILDING CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Office wall						
	Step - 1	1	125.00	1.875	0.25	58.59	Cft
	Step - 2	1	125.00	1.500	0.25	46.88	Cft
	Step - 3	1	125.00	1.125	0.25	35.16	Cft
	Step - 4	1	125.00	0.750	5.42	508.13	Cft
	Toilet wall						
	Step - 1	1	15.00	1.875	0.25	7.03	Cft
	Step - 2	1	15.00	1.500	0.25	5.63	Cft
	Step - 3	1	15.00	1.125	0.25	4.22	Cft
	Step - 4	1	15.00	0.750	5.42	60.98	Cft
					Total	726.60	Cft
					Total	7.27	%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) 1 <sup>1</sup> / <sub>2</sub> " thick (40 mm)						
	Office wall	1	125.00	0.75		93.75	Sft
	Toilet wall	1	15.00	0.75		11.25	Sft
					Total	105.00	Sft
					Total	1.05	%Sft
	Vertical D.P.C						
6	Providing and laying vertical damp proof course						
0	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 <sup>3</sup> / <sub>4</sub> " thick (20 mm)						
	Office wall	1	125.00		1.00	125.00	Sft
	Toilet wall	1	125.00		1.00	125.00	Sft
		1	15.00		Total	140.00	Sft
					Total	140.00	511
					Total	1.40	%Sft
	Brick work in Super Structure						
7	Pacca brick work in ground floor:-						
	i) Cement, sand mortar:- Ratio 1:5						
	Office wall	1	125.00	0.75	10.50	984.38	Cft
	Toilet wall	1	15.00	0.75	10.50	118.13	Cft
	Parapet Wall	1	105.00	0.38	2.50	98.44	Cft
	Entrance step	4	4.00	1.00	0.75	12.00	Cft

#### OFFICE BUILDING CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	D/d Doors and Window						
	D-1	-2	3.50	0.75	7.00	(36.75)	Cft
	D-2	-1	3.00	0.75	7.00	(15.75)	Cft
	D-3	-2	2.50	0.75	7.00	(26.25)	Cft
	W-1	-4	6.00	0.75	4.00	(72.00)	Cft
	V-1	-2	2.00	0.70	2.00	(5.60)	Cft
					Total	1,056.59	Cft
					Total	10.57	%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	605.00	1.00	0.50	302.50	Cft
	Sun shade	1	5.50	1.50	0.25	2.06	Cft
	Sun shade	2	34.50	1.50	0.25	25.88	Cft
	Doors and window Lintels						
	D-1	2	4.50	0.75	0.75	5.06	Cft
	D-2	1	4.00	0.75	0.75	2.25	Cft
	D-3	2	3.50	0.75	0.75	3.94	Cft
	W-1	4	7.00	0.75	0.75	15.75	Cft
	V-1	2	3.00	0.75	0.75	3.38	Cft
					Total	260.01	Ctt
					Total	360.81	Cft

#### OFFICE BUILDING CALCULATION OF QUANTITIES

	CIVIL W	UKR	<b>L</b>				
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):-					2 (0, 0, 1	<u> </u>
	Deformed bars (Grade-60)		(75		=	360.81	Cft lbs/cft
	Top Slab & lintel @ 6.75 lbs / Cft		6.75	Tatal	-	2,435.48	lbs/cft
				Total	_	2,435.48	
			A 1 1 5 0/ X	Total	=	1,105.03	Kg.
			Add 5% V	<b>Total</b>	=	55.25	Kg. <b>Kg</b>
				Total	_	1,160	ng
					Total	11.60	%kg
	Sand Filling						
10	Supplying and filling sand under floor; or plugging in wells.						
	Floor	2	13.00	16.00	4.00	1,664.00	Cft
	toilet	1	5.50	7.50	4.00	1,004.00	Cft
	Store	1	5.50	7.75	4.00	170.50	Cft
		1	5.50	1.15	Total	1,999.50	Cft
						-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
					Total	20.00	%Cft
	Brick ballast						
11							
11	Dry rammed brick or stone ballast, 1 <sup>1</sup> / <sub>2</sub> " to 2"( 40 mm to 50 mm) gauge.						
	Floor	2		16.00	0.33	137.28	Cft
	toilet	1	5.50	7.50	0.33	13.61	Cft
		1	5.50	7.75	0.33	14.07	Cft
					Total	164.96	Cft
					Total	1.65	%Cft
					1000	1.00	/0010
	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	2	13.00	16.00	0.17	69.33	Cft
	toilet	1	5.50	7.50	0.17	6.88	Cft
		1	5.50	7.75	0.17	7.10	Cft
					Total	0.83	%Cft
					Total	0.03	70UII

#### OFFICE BUILDING CALCULATION OF QUANTITIES

-							
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 Chequred Tiles) 300mmx300mm	2	13.00	16.00		416.00	Sft
	d) (Non-Skid Chequied Thes) SooninixSoonini	1	5.50	7.75		42.63	Sft
		1	5.50	1.15		42.03	511
					Total	458.63	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	2	58.00		0.33	38.28	Sft
		2	26.50		0.33	17.49	Sft
					Total	55.77	Sft
					Iotai	55.11	510
	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	5.50	7.50		41.25	Sft
						44.65	~ ~
					Total	41.25	Sft

### **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 over1/2" 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	5.50		7.00	77.00	Sft			
		2	7.50		7.00	105.00	Sft			
					Total	182.00	Sft			
17	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)									
		2	13.00	16.00		416.00	Sft			
		1	5.50	7.50		41.25	Sft			
		1	5.50	7.75		42.63	Sft			
					Total	5.00	%Sft			
					Total	5.00	70511			
	Cement Plaster									
18	Cement plaster 1:4 upto 20' (6.00 m) height:-									
	3/4" (20 mm) thick									
	Office Room		10.00		10.70	546.00				
		4	13.00		10.50	546.00	Sft			
	T-11-4	4	16.00		10.50	672.00	Sft			
	Toilet	2	7.50		10.50	157.50	Sft			
		2	5.50		10.50	115.50	Sft			
	Store	2	5.50		10.50	115.50	511			
		2	7.75		10.50	162.75	Sft			
		2	5.50		10.50	115.50	Sft			
	D/d Doors and Window									
	D-1	-2	3.50		7.00	(49.00)	Sft			
	D-2	-1	3.00		7.00	(21.00)	Sft			
	D-3	-2	2.50		7.00	(35.00)	Sft			
	W-1	-4	6.00		4.00	(96.00)	Sft			
	V-1	-2	2.00		2.00	(8.00)	Sft			
					Total	1,560.25	Sft			
					Total	15.60	%Sft			
	Pointing									

#### OFFICE BUILDING CALCULATION OF QUANTITIES

		_		1			
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
19	Cement pointing struck joints, on walls, upto 20'						
	(6.00 m) hiehgt:-						
	a) ratio 1:2						
	Outer Walls	1	104.00		14.00	1,456.00	Sft
					Total	1,456.00	Sft
					Total	14.56	%Sft
20	Extra cost of labour and material for red oxide						
	pigment in cement pointing to match with the						
	colour of bricks.				Total	14.56	%Sft
1	Distempering						
21	Distempering:-						
	iii) three coats						
	Office Room		10.00		10.50	546.00	~ ~ ~
		4	13.00		10.50	546.00	Sft
		4	16.00		10.50	672.00	Sft
	Toilet	2	7.50		10.50	157.50	
		2	7.50		10.50	157.50 115.50	Sft
	<u>Stand</u>	2	5.50		10.50	115.50	Sft
	Store	2	7.75		10.50	102.75	Sft
	Q1_1	2	5.50	16.00	10.50	416.00	Sft
	Slab	2	13.00	16.00		416.00	Sft
		1	7.50	5.50		41.25	Sft
	D/d Deers and Window	1	7.75	5.50		42.03	Sft
	D/d Doors and Window D-1	-2	3.50		7.00	(49.00)	Sft
	D-1 D-2		3.00		7.00	(49.00)	
		-1 -2	2.50		7.00	(35.00)	Sft Sft
	W-1	-2 -4	6.00		4.00	(96.00)	Sft
	W-1 V-1	-4	2.00		2.00	(30.00)	Sft
	v -1	-2	2.00		2.00	(0.00)	SIL
					Total	2,060.13	Sft
					Total	2,000.15	511
					Total	20.60	%Sft
					Total	20.00	70511

## OFFICE BUILDING

# CALCULATION OF QUANTITIES

S-							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Wooden Door						
22	Providing and fixing 11/2" (40 mm) thick hollow						
	flush doors and windows with commercial ply (3						
	ply) on both faces of deodar wood shutter frame						
	1 <sup>1</sup> / <sub>4</sub> " (30 mm) thick and partal wood braces at about						
	3" (75 mm) apart and deodar wood lipping						
	1 <sup>1</sup> / <sub>2</sub> "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 1 <sup>1</sup> / <sub>2</sub> "x1 <sup>1</sup> / <sub>2</sub> "x <sup>1</sup> / <sub>4</sub> ", welded (40 mmx40						
	mmx 6mm) with M.S. flat 2"x <sup>1</sup> /4" (50 mm x 6 mm)						
	D-1	2	3.50		7.00	49.00	Sft
	D-2	1	3.00		7.00	21.00	Sft
		2	2.50		7.00	35.00	Sft
					Total	105.00	Sft
	Lock						
23	Providing and fixing, approved quality mortice						
23	lock.	5				5.00	Eacl
		5				5.00	Eaci
	Paint						
24	Painting new surface:-						
	Preparing surface and painting of doors and						
	windows any type (including edges):-						
	i) priming coat.					• 10	~ ~
	ii) Second coat				Total	2.10	Sft
	Steel Window						
25	Providing and fixing steel windows with openable						
	glazed panels, using beam section for frame						
	1 <sup>1</sup> / <sub>2</sub> "x1"x5/8"x1/8" (40x25x16x3 mm), Z-section						
	for leaves <sup>3</sup> / <sub>4</sub> "x1"x <sup>3</sup> / <sub>4</sub> "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	4	6.00		4.00	96.00	Sft
	V-1	2	2.00		2.00	8.00	Sft
	V-1		2.00		2.00	0.00	bit

### OFFICE BUILDING CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Roof Insulation						
26	Single layer of tiles $9"x4\frac{1}{2}"x1\frac{1}{2}"$ (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	605.00	1.00		605.00	Sft
					Total	605.00	Sft
					Total	6.05	%Sft
27	Supplying and laying polythene sheet over D.P.C.						
	under floors and on roofs, etc. ii) 500 gauge (.005" thick)				Total	605.00	Sft
	Khurras						
28	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	2				2.00	Each
	Bottom Khuras						
29	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4 <sup>1</sup> / <sub>2</sub> " (1200x600x113 mm) over 3" (75						
	mm) cement concrete 1:4:8.	2				2.00	Each

# **DETAILED COST ESTIMATE**

# OFFICE BUILDING

		PLUMBING WORKS		1		
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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	2,461.85	2,462
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	3,061.65	3,062
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	6,160.50	6,161
4	19-30	Providing and fixing, chromium plated mixing valve, for wash hand basin, sink or shower.	Each	1.00	2,477.00	2,477
6	19-16	Providing and fixing, chromium plated soap dish.	Each	1.00	538.60	539
8	19-20	Providing and fixing looking glass 55x40 cm (22"x16") size	Each	1.00	800.30	800
9	19-26	Providing and fixing chromium plated bib cock:- i) 2 cm ( <sup>3</sup> / <sub>4</sub> ")	Each	1.00	1,099.75	1,100
10	19-28	Providing and fixing chromium plated tee stop cock 15mm ( <sup>1</sup> / <sub>2</sub> ").	East	2.00	1 001 00	2 0 4 5
			Each	3.00	1,081.60	3,245
11	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	670.20	670
12	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	1,214.75	1,215

	DET	PUNJAB CITIES PROGRAM FAILED DESIGN OF INFRASTRUCTURE SUB- SUPERVISION IN 16 CITIES OF	PROJI	ECTS AND	RESIDENTS	
		DETAILED COST ESTIM				
		OFFICE BUILDING				
		PLUMBING WORKS				
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
13	19-35-ii	Providing and fitting "P" trap:-				
10	17 55 11	ii) 10 cm (4") glazed.	Each	2.00	323.25	647
		PPRC Pipe				
14	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	50.00	67.15	3,358
		(iii) (1") 32 mm	Rft	50.00	107.65	5,383
15	23/46	Valve 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 iii) 1" dia		1.00	1,545.60 1,809.60	1,546 1,810
		DVC Dir -				
16	19-47	<b>uPVC Pipe</b> 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)	De	20.00	00.27	1 705
		(iii) 2"(60 mm)	Rft Rft	20.00 80.00	89.25	<u>1,785</u> 17,440
		(v) 4"(110 mm) (vi) 6"(160 mm)	Rft Rft	20.00	218.00 422.55	8,451
			- Kit	20.00	422.33	0,431

	DET	PUNJAB CITIES PROGRAM FAILED DESIGN OF INFRASTRUCTURE SUB- SUPERVISION IN 16 CITIES O	PROJI F PUN	ECTS AND	RESIDENTS	5					
		DETAILED COST ESTIM	ATE								
		OFFICE BUILDING									
	PLUMBING WORKS										
a	1nd BI-Annual-					•					
Sr.	2023	Description	Unit	Quantity	Unit Rate	Amount					
No.	(Jan to June) Wazirabad				(Rs)	( <b>R</b> s)					
	,, white would										
		HDPE Tank									
17	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	117.30	175,950					
		Total Rs. (A)				238,097					
		Non-Schedule Item									
18	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	19,199.71	19,200					
		Total Rs. (B)				19,200					
		Total Amount Rs. (A + B)				257,297					

### DETAILED COST ESTIMATE

### **OFFICE BUILDING**

### FI FCTDICAL WODKS

	ELECTRICAL WORKS								
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)			
1	C-24/3-ii	<u>Scheduled Items (A)</u> 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.	1,000.00	86.40	86,400			
2		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.	650.00	101.60	66,040			
3	C-24/10a.i	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (3.029)		1,050.00	27.85	29,243			
4		Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)		750.00	44.05	33,038			
5		Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.036)		600.00	58.50	35,100			
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")		15.00	296.00	4,440			
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	4.00	409.95	1,640			

### DETAILED COST ESTIMATE

### **OFFICE BUILDING**

		ELECTRICAL WORK	S			
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
8	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	21.00	96.95	2,036
9	C-24/36-i	Supply and erection of 3 pin switch and Plug combined, recessed type. (5Amps)	Each	2.00	126.95	254
10	C-24/36-ii	Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)	Each	6.00	167.75	1,007
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	2.00	2,579.25	5,159
		ii) single rod (40 watts) with one choke and one starter.	Each	12	1,444.20	17,330
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	3,380.85	3,381
		Sub Total (A)				285,066
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		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" ceiling fan, complete with capacitor, hanging rod, canopy, blades, dimmers nuts and bolts complete in all respect.		2.00	7,000.00	14,000
		Sub Total (B)				16,645
		Sub Total (A+B)				301,711

### DETAILED COST ESTIMATE

### SITTING ROOM

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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	1000 00	0.55		<b>-</b>			
		ii) in ordinary soil.	1000Cft	0.66	11,658.25	7,694			
		Anti-Termite							
2	26/43	Spraying anti termite proofing by using liquid FMC Biflex 2.5%EC Mixing Ratio 1:50=137-Sft or using liquid MIRAGE Ali Akbar /RANGERS Auriga 5% SC Mixing Ability-HEXTAR Ratio 1:110=205-Sft or any other 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	1,241.13	9.90	12 227			
			SIL	1,241.15	9.90	12,287			
		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	0.87	29,723.50	25,859			
			100 010	0.07	27,725.50	20,007			
		Brick work in Foundation							
4	7/4/i	Pacca brick work in foundation and plinth in:-	100 55						
		Cement, sand mortar:- Ratio 1:5	100 Cft	5.49	32,358.60	177,649			
		Horizontal D.P.C							
5	6/36	<ul> <li>Providing and laying damp proof course of cement concrete 1 : 2 : 4 (using cement, sand and shingle), including bitumen coating :-</li> <li>(a) with one coat bitumen and one coat polythene sheet 500gauge</li> <li>i) 1<sup>1</sup>/<sub>2</sub>" thick (40 mm)</li> </ul>	100 Sft	0.79	9,272.70	7,325			
		Vortical D.B.C.							
6	6/38	Vertical D.P.C 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 <sup>3</sup> / <sub>4</sub> " thick (20 mm)	100 Sft	1.06	6,932.65	7,349			

### DETAILED COST ESTIMATE

### SITTING ROOM

Sr.	1nd BI-Annual- 2023				Unit Rate	Amount
No.		Description	Unit	Quantity	(Rs)	(Rs)
-		Brick work in Super Structure				
7	7/5	Pacca brick work in ground floor:-	100 06	8.22	247(1.00	205 725
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	8.22	34,761.00	285,735
		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	302.19	580.05	175,284
		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	9.72	31,940.05	310,457
		Sand Filling				
10	7/30	Supplying and filling sand under floor; or plugging				
10	7/30	in wells.	100 Cft	17.92	2,982.00	53,437
		Brick ballast				
11	6/2	Dry rammed brick or stone ballast, 11/2" to 2"(40				
		mm to 50 mm) gauge.	100 Cft	1.48	9,900.00	14,652
						-

### DETAILED COST ESTIMATE

# SITTING ROOM

	1nd BI-Annual-					
Sr. No.	2023 (Jan to June) Wazirabad	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):	100.05	0.75	20 722 50	20.042
		Ratio 1: 2: 4	100 Cft	0.75	38,723.50	29,043
		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 Chequred Tiles) 300mmx300mm	Per Sft	448.00	225.65	101,091
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		20.04		
		(i) 400 mm x 400 mm	Per Sft	29.04	310.10	9,005
		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	42.63	255.50	10,892
			210			

### DETAILED COST ESTIMATE

# SITTING ROOM

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
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 over1/2" 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	185.50	310.10	57,524
		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	4.48	3,963.30	17,756
		Cement Plaster				
18	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:-				
		3/4" (20 mm) thick	100 Sft	7.82	4,650.85	36,370
		Pointing				
19	11/18/a	Cement pointing struck joints, on walls, upto 20'				
		(6.00 m) hiehgt:-				
		a) ratio 1:2	100 Sft	13.30	3,776.40	50,226
20	11/31	Extra cost of labour and material for red oxide				
20	11/31	pigment in cement pointing to match with the				
		colour of bricks.	100 Sft	13.30	822.00	10,933
			100 51	15.50	022.00	10,755
		Distempering				
21	11/23	Distempering:-				
		iii) three coats	100 Sft	12.30	1,446.35	17,790

### DETAILED COST ESTIMATE

### SITTING ROOM

	1nd BI-Annual-					
Sr. No.	2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
	() užii ubuu	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 partal 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 1 <sup>1</sup> / <sub>2</sub> "x1 <sup>1</sup> / <sub>2</sub> "x <sup>1</sup> / <sub>4</sub> ", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x <sup>1</sup> / <sub>4</sub> " (50 mm x 6 mm)				
			Per Sft	42.00	1,603.20	67,334
		Lock				
23	12/22	Providing and fixing, approved quality mortice lock.	Each	2.00	774.00	1,548
24	13/5/c	PaintPainting new surface:-Preparing surface and painting of doors andwindows any type (including edges):-				
		i) priming coat.	100 Sft	0.84	1,460.05	1,226
		ii) Second coat	100 Sft	0.84	841.65	707
		Steel Window				
25	25/41/b	Providing and fixing steel windows with openable glazed panels, using beam section for frame 1 <sup>1</sup> / <sub>2</sub> "x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for leaves <sup>3</sup> / <sub>4</sub> "x1"x <sup>3</sup> / <sub>4</sub> "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	100.00	1,170.70	117,070

### DETAILED COST ESTIMATE

# SITTING ROOM

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Roof Insulation				
26	9/5	Single layer of tiles 9"x4 <sup>1</sup> /2"x1 <sup>1</sup> /2" (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	5.16	12,104.25	62,458
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	516.00	8.65	4,463
		Khurras				
28	9/15	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	1.00	905.25	905
		Bottom Khuras				
29	9/16	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4 <sup>1</sup> / <sub>2</sub> " (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	1.00	1,908.05	1,908
		Crush				
30	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 contratcor.	Cft	414.37	109.79	45,493
		Total Rs.				1,721,472

# 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	91.00	2.50	2.50	568.75	Cft			
	Toilet wall	1	14.75	2.50	2.50	92.19	Cft Cft			
		1	14.75	2.30	Total	660.94	Cft			
					Total	0.66	%oCft			
	Anti-Termite									
2	Spraying anti termite proofing by using liquid FMC Biflex 2.5%EC Mixing Ratio 1:50=137-Sft or using liquid MIRAGE Ali Akbar /RANGERS Auriga 5% SC Mixing Ability-HEXTAR Ratio 1:110=205-Sft or any other 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	91.00	7.50		682.50	Sft			
	Toilet wall Floor	1 1	14.75 28.00	7.50 16.00		110.63 448.00	Sft Sft			
					Total	1,241.13	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	91.00	2.50	0.33	75.08	Cft			
	Toilet wall	1	14.75	2.50	0.33	12.17	Cft			
					Total	87.24	Cft			
					Total	0.87	%Cft			
	Brick work in Foundation									
4	Pacca brick work in foundation and plinth in:-									
	Cement, sand mortar:- Ratio 1:5									
	Room wall									
	Step - 1	1	91.00	1.875	0.25	42.66	Cft			

# SITTING ROOM CALCULATION OF QUANTITIES

Sr.	Description	No.	Length	Width	Height	Qty.	Unit
No.	Step - 2	1	91.00	1.500	0.25	34.13	Cft
	Step - 3	1	91.00	1.125	0.25	25.59	Cft
	Step - 4	1	91.00	0.750	5.42	369.92	Cft
	Toilet wall	-	71.00	0.750	5.42	507.72	Cit
	Step - 1	1	14.75	1.875	0.25	6.91	Cft
	Step - 2	1	14.75	1.500	0.25	5.53	Cft
	Step - 3	1	14.75	1.125	0.25	4.15	Cft
	Step - 4	1	14.75	0.750	5.42	59.96	Cft
					Total	548.84	Cft
					Total	5.49	%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) 1 <sup>1</sup> / <sub>2</sub> " thick (40 mm)	1	01.00	0.75		<0.0 <b>5</b>	
	Room wall	1	91.00	0.75		68.25	Sft
	Toilet wall	1	14.75	0.75	<b>T</b> (1	11.06	Sft
					Total	79.31	Sft
					T-4-1	0.70	0/ 00
					Total	0.79	%Sft
	Vertical D.P.C						
6	Providing and laying vertical damp proof course						
0	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 <sup>3</sup> / <sub>4</sub> " thick (20 mm)						
	Room wall	1	91.00		1.00	91.00	Sft
	Toilet wall	1	14.75		1.00	14.75	Sft
		-	14.75		Total	105.75	Sft
					Total	105.75	SIL
					Total	1.06	%Sft
					1000	100	/0010
	Brick work in Super Structure						
7	Pacca brick work in ground floor:-						
	i) Cement, sand mortar:- Ratio 1:5						
	Room wall	1	91.00	0.75	10.50	716.63	Cft
	Toilet wall	1	14.75	0.75	10.50	116.16	Cft
	Parapet Wall	1	95.00	0.38	2.50	89.06	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

### SITTING ROOM CALCULATION OF QUANTITIES

Sr.	Description	No.	Length	Width	Height	Qty.	Unit
No.	D-2	-1	2.50	0.75	7.00	(13.13)	Cft
	W-1	-1	6.00	0.75	4.00	(72.00)	Cft
		-4	2.00	0.73	2.00	( )	Cft
	V-1	-1	2.00	0.70	2.00	(2.80)	Cit
					Total	821.54	Cft
					1000	021101	010
					Total	8.22	%Cft
	Comparete Work						
8	Concrete Work Providing and laying reinforced cement concrete						
0	(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	29.50	17.50	0.50	258.13	Cft
	Sun shade	2	29.50	1.50	0.25	22.13	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	4	7.00	0.75	0.75	15.75	Cft
	V-1	1	3.00	0.75	0.75	1.69	Cft
						202.10	~
					Total	302.19	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 from bars):-						
	Deformed bars (Grade-60)					302.19	Cft
	Top Slab & lintel @ 6.75 lbs / Cft		6.75		=	2,039.77	lbs/cft
	*			Total	=	2,039.77	lbs/cft
				Total	=	925.48	Kg.
			Add 5% V	Wastage	=	46.27	Kg.

### SITTING ROOM CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
				Total	=	972	Kg
					Total	9.72	%kg
	Sand Filling						
10	Supplying and filling sand under floor; or plugging in wells.						
	Floor	1	28.00	16.00	4.00	1,792.00	Cft
					Total	1,792.00	Cft
					Total	17.92	%Cft
	Brick ballast						
11	Dry rammed brick or stone ballast, 1 <sup>1</sup> / <sub>2</sub> " to 2"( 40 mm to 50 mm) gauge.					9.72 9.72 1,792.00 1,792.00	
	Floor	1	28.00	16.00	0.33	147.84	Cft
					Total	147.84	Cft
					Total	1.48	%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	28.00	16.00	0.17	74.67	Cft
					Total	0.75	%Cft
	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 Chequred Tiles) 300mmx300mm	1	28.00	16.00		448.00	Sft
					Total	448.00	Sft
					I Utal	110.00	511

# SITTING ROOM

# CALCULATION OF QUANTITIES

	CIVIL WORK										
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit				
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	88.00		0.33	29.04	Sft				
					Total	29.04	Sft				
					Total	29.04	511				
	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	5.50	7.75		42.63	Sft				
					Total	42.63	Sft				
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 over1/2" 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	5.50		7.00	77.00	Sft				
		2	7.75		7.00	108.50	Sft				
					Total	185.50	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	28.00	16.00		448.00	Sft				
					Total	4.48	%Sf				
	Cement Plaster				IUIAI	7,40	/031				

# SITTING ROOM CALCULATION OF QUANTITIES

CIVIL	WORK

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
18	Cement plaster 1:4 upto 20' (6.00 m) height:-						
	3/4" (20 mm) thick						
	Sitting Room						
		2	28.00		10.50		Sft
		2	16.00		10.50	336.00	Sft
	D/d Doors and Window						
	D-1	-1	3.50		7.00		Sft
	D-2	-1	2.50		7.00		Sft
	W-1	-4	6.00		4.00		Sft
	V-1	-1	2.00		2.00	(4.00)	Sft
					Total	782.00	Sft
					Total	7.82	%Sft
	Pointing						
19	Cement pointing struck joints, on walls, upto 20'					588.00         336.00         (24.50)         (17.50)         (96.00)         (4.00)         782.00         782.00         1,330.00         1,330.00         1,330.00         1,330.00         13.30         13.30         (24.50)         (24.50)         (24.50)         (24.50)         (24.50)         (24.50)         (24.50)         (24.50)         (24.50)	
	(6.00 m) hiehgt:-						
	a) ratio 1:2						
	Outer Walls	1	95.00		14.00	1,330.00	Sft
					Total	1,330.00	Sft
					Total	13.30	%Sft
20							
20	Extra cost of labour and material for red oxide						
	pigment in cement pointing to match with the colour of bricks.				Tatal	336.00 (24.50) (17.50) (96.00) (4.00) 782.00 782.00 7.82 1,330.00 1,330.00 1,330.00 13.30 13.30 13.30 13.30 (24.50) (17.50) (96.00) (4.00)	0/ 58
	colour of bricks.				Total		%Sft
	Distempering						
21	Distempering:-						
21	iii) three coats					336.00 (24.50) (17.50) (96.00) (4.00) 782.00 7.82 1,330.00 1,330.00 1,330.00 1,330.00 1,330.00 1,330.00 (24.50) (17.50) (96.00) (17.50) (96.00) (4.00) (4.00)	
	Sitting Room						
		2	28.00		10.50	(4.00) 782.00 782.00 1,330.00 1,330.00 1,330.00 13.30 13.30 13.30 13.30 (24.50) (17.50) (24.50) (17.50) (96.00) (4.00) (4.00)	Sft
		2	16.00		10.50		Sft
	Slab	1	28.00	16.00	10.50		Sft
	D/d Doors and Window	1	20.00	10.00		- <del>1</del> 0.00	SIL
	D-1	-1	3.50		7.00	(24.50)	Sft
	D-1 D-2	-1 -1	2.50		7.00		Sft
	W-1	-1 -4	6.00		4.00	(96.00) (4.00)	Sft
	V-1 V-1	-4 -1	2.00		2.00		Sft
	V - 1	-1	2.00		2.00		SII
					Total		Sft
					Total	12.30	%Sft
							-
	Wooden Door						

# SITTING ROOM

# CALCULATION OF QUANTITIES

	CIVIL WORK									
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit			
22	Providing and fixing 1 <sup>1</sup> / <sub>2</sub> " (40 mm) thick hollow									
	flush doors and windows with commercial ply (3									
	ply) on both faces of deodar wood shutter frame									
	$1\frac{1}{4}$ " (30 mm) thick and partal wood braces at about									
	3" (75 mm) apart and deodar wood lipping									
	$1\frac{1}{2}x3/8$ " (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 11/2"x11/2"x1/4", welded (40 mmx40									
	mmx 6mm) with M.S. flat 2"x1/4" (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			
					Iotai	-12.00	511			
	Lock									
23	Providing and fixing, approved quality mortice					• • • •				
	lock.	2				2.00	Each			
	Paint									
24	Painting new surface:-									
	ii) Second coat				Total	0.84	Sft			
	Steel Window									
25										
-	4       Painting new surface:- Preparing surface and painting of doors and windows any type (including edges):- i) priming coat.       Image: Constraint of the second coast in the secon									
	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 course 22 SWC									
	<ul><li>b) fixed with wire gauze, 22 SWG</li><li>v) glass pane 5 mm thick</li></ul>									
	W-1	4	6.00		4.00	96.00	Sft			
	V-1	1	2.00		2.00	4.00	Sft			

### SITTING ROOM CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
					Total	100.00	Sft
	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	29.50	17.50		516.25	Sft
					Total	516.25	Sft
					Total	5.16	%Sft
27	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.						
	ii) 500 gauge (.005" thick)				Total	516.00	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'x4 <sup>1</sup> / <sub>2</sub> " (1200x600x113 mm) over 3" (75					1.00	
	mm) cement concrete 1:4:8.	1				1.00	Each

### DETAILED COST ESTIMATE

# SITTING ROOM

		PLUMBING WORKS				
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item Indian W.C				
1	19-4-i	Providing and fitting glazed earthen ware water				
1	17 11	closet, squatter type (Orisa pattern), combined with foot rest.				
		i) white	Each	1.00	2,461.85	2,462
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	3,061.65	3,062
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	6,160.50	6,161
4	19-30	Providing and fixing, chromium plated mixing valve, for wash hand basin, sink or shower.	Each	1.00	2,477.00	2,477
6	19-16	Providing and fixing, chromium plated soap dish.	Each	2.00	538.60	1,077
7	19-20	Providing and fixing looking glass 55x40 cm (22"x16") size	Each	1.00	800.30	800
8	19-26	Providing and fixing chromium plated bib cock:- i) 2 cm ( <sup>3</sup> / <sub>4</sub> ")	Each	1.00	1,099.75	1,100
9	19-28	Providing and fixing chromium plated tee stop cock 15mm (1/2").	Each	3.00	1,081.60	3,245
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	670.20	670
	10.2-					
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").		1.00	1,214.75	1,215
12	19-35-ii	Providing and fitting "P" trap:-				
12	17-33-11	ii) 10 cm (4") glazed.	Each	2.00	323.25	647

### DETAILED COST ESTIMATE

# SITTING ROOM

		PLUMBING WORKS				
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		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	50.00	67.15	3,358
		(iii) (1") 32 mm	Rft	50.00	107.65	5,383
		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	1,545.60	1,546
		iii) 1" dia	Each	1.00	1,809.60	1,810
		DV/C D				
15	19-47	<b>uPVC Pipe</b> 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	89.25	1,785
	1	(v) 4"(110 mm)	Rft	60.00	218.00	13,080

### DETAILED COST ESTIMATE

# SITTING ROOM

		PLUMBING WORKS		1		
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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.		200.00	117.30	23,460
		Total Rs. (A)				73,335
		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.		1.00	19,199.71	19,200
		Total Rs. (B)				19,200
		Total Amount Rs. (A + B)				92,534

#### DETAILED COST ESTIMATE

### SITTING ROOM

# ELECTRICAL WORKS

		ELECTRICAL WORK	S	[		
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
1	C 24/2 ::	Scheduled Items (A)				
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.	Dft	500.00	96 40	42 200
		completed with all specified. (20 mm i/d)	Rft.	500.00	86.40	43,200
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.	300.00	101.60	30,480
3	C-24/10a.i	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only).				
		(3.029)	Rft.	800.00	27.85	22,280
4	C-24/10a.iii	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing				
		an capping/G.I. wire/trenches (rate for cables only). (7.029)	Rft.	450.00	44.05	19,823
5	C-24/10a.iv	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only).		500.00	59.50	20.250
		(7.036)	Rft.	500.00	58.50	29,250
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")		8.00	296.00	2,368
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	2.00	409.95	820

#### DETAILED COST ESTIMATE

### SITTING ROOM

# ELECTRICAL WORKS

No.Wait manual wait manualC 24/32-ii (Recessed Type)Supply and erection of switches 10/15 Amp. (Recessed Type)Each11.0096.951,0669C-24/36-i supply and erection of 3 pin switch and Plug combined, recessed type. (5Amps)Each2.00126.9525410C-24/36-ii supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)Each2.00126.9525411C-24/36-ii supply and erection of tube light, including rod, choke, starter with frame, flexible wire, including connection from celling rose, etc., complete6.00167.751,00711C-24/43Supply and erection of tube light, including rod, choke, starter s.Each5.002,579.2512,89612C-24/102/aProviding and fixing Copper winded Exhaust fan with louver and shutter made of Pak/Younas /G.F.C. ic the cost of necessary cable and hardware for connection from celling rose complete as approved and directed by Engineer Incharge.Each1.003,380.853,38113N.SSupply, installation and commissioning of und frame all necessary fixing accessories, complete in all respectsEach1.001,215.001,215.0014N.SSupply, installation, and commissioning recessed following size 55° ceiling fan, complete with capacitor, hanging rod, canopy, blades, dimmers nuts and bolts complete in all respects1.007,000.007,000.0013N.SSupply, installation, testing and commissioning of following size 55° ceiling fan, complete with capacitor, hanging rod, canopy, blades, dimmers nuts			ELECTRICAL WORK	S			
Image: constraint of the constr		2023 (Jan to June)	Description	Unit.	Quantity		Amount (Rs.)
InterpretationImage: Control of the second sec	8	C-24/32-ii		Each	11.00	96.95	1,066
Image: combined recessed type (10/15Amps)Each6.00167.751,007Image: combined recessed type (10/15Amps)Image: combined	9	C-24/36-i			2.00	126.95	254
choke, starter with frame, flexible wire, including connection from ceiling rose, etc., completeImage: starter with frame, flexible wire, including connection from ceiling rose, etc., completei) double rod (80 watts) with two chokes and 2 starters.Each5.002,579.2512,89612C-24/102/aProviding and fixing Copper winded Exhaust fan 	10	C-24/36-ii			6.00	167.75	1,007
Image: starters.Each $5.00$ $2,579.25$ $12,896$ Image: starters.Image: starters. <t< td=""><td>11</td><td>C-24/43</td><td>choke, starter with frame, flexible wire, including</td><td></td><td></td><td></td><td></td></t<>	11	C-24/43	choke, starter with frame, flexible wire, including				
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.Image: Connection from ceiling rose complete as approved 				Each	5.00	2,579.25	12,896
Image: constraint of the system of the sys	12	C-24/102/a	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				
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" ceiling fan, complete with capacitor, hanging rod, canopy, blades, dimmers nuts and bolts complete in all respect.       Each       1.00       7,000.00       7,000         16       Image: Complete in all respect.       Image: C			(a) Plastic body (ii) 12 " dia	Each	1.00	3,380.85	3,381
Interference </td <td></td> <td></td> <td>Sub Total (A)</td> <td></td> <td></td> <td></td> <td>166,824</td>			Sub Total (A)				166,824
Interpretent of the second structure       10W LED Down Light complete in all respects       Each       1.00       1,430.00       1,430         Image: Supply in the second structure       Image: Supply in the second structure <t< td=""><td>13</td><td>N.S</td><td>mounted mirror LED light 10 watt with tube rod and frame all necessary fixing accessories, complete</td><td></td><td>1.00</td><td>1,215.00</td><td>1,215</td></t<>	13	N.S	mounted mirror LED light 10 watt with tube rod and frame all necessary fixing accessories, complete		1.00	1,215.00	1,215
following size 56" ceiling fan, complete with capacitor, hanging rod, canopy, blades, dimmers nuts and bolts complete in all respect.       Each       1.00       7,000.00       7,000         Image: Sub Total (B)	14	N.S			1.00	1,430.00	1,430
	15	N.S	following size 56" ceiling fan, complete with capacitor, hanging rod, canopy, blades, dimmers		1.00	7,000.00	7,000
Sub Total (A + B) 176 460			Sub Total (B)				9,645
			Sub Total (A+B)				176,469

#### DETAILED COST ESTIMATE

# GUARD ROOM

Sr. No.	1nd BI-Annual- 2023 (Jan to June)	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
110.	Wazirabad				(115)	(13)
		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	0.27	11,658.25	3,148
		Anti-Termite				
2	26/43	Spraying anti termite proofing by using liquid FMC				
		Biflex 2.5%EC Mixing Ratio 1:50=137-Sft or using				
		liquid MIRAGE Ali Akbar /RANGERS Auriga 5%				
		SC Mixing Ability-HEXTAR Ratio 1:110=205-Sft or any other 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	422.50	9.90	4,183
						.,
		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	0.35	29,723.50	10,403
		Dei de marde in Franz de 4i an				
4	7/4/i	Brick work in Foundation Pacca brick work in foundation and plinth in:-				
4	//4/1	Cement, sand mortar:- Ratio 1:5	100 Cft	2.23	32,358.60	72,160
		Cement, said mortal Kato 1.5	100 CH	2.23	52,550.00	72,100
		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) 1 <sup>1</sup> /2" thick (40 mm)	100 Sft	0.32	9,272.70	2,967
6	6/20	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 <sup>3</sup> / <sub>4</sub> " thick (20 mm)	100 Sft	0.43	6,932.65	2,981
	1	11/ 1000 110 /7 (IIIOK (20 IIIII)	100 010	5.15	3,752.05	<b>_</b> ,701

#### DETAILED COST ESTIMATE

# GUARD ROOM

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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	3.55	34,761.00	123,402
		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.):- <b>Above foundation</b> (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	75.78	580.05	43,957
		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	2.44	31,940.05	77,934
		Sand Filling				
10	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	4.00	2,982.00	11,928
		Brick ballast				
11	6/2	Dry rammed brick or stone ballast, 1 <sup>1</sup> / <sub>2</sub> " to 2"( 40 mm to 50 mm) gauge.	100 Cft	0.33	9,900.00	3,267

#### DETAILED COST ESTIMATE

# GUARD ROOM

nd BI-Annual- 2023				-	
(Jan to June) Wagirahad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
Wazirabad	Plain Cement Concrete				
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	0.17	38,723.50	6,583
10/42/4	Porcelain Tile				
10/42/u	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 Chequred Tiles) 300mmx300mm	Per Sft	100.00	225.65	22,565
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	13.20	310.10	4,093
11/10/1					
11/10/b	R.C.C. roof slabs only, upto 20' height. (Ratio:- 1:3)	100 Sft	1.00	3,963.30	3,963
11/9	Cement plaster 1:4 upto 20' (6.00 m) height:- 3/4" (20 mm) thick	100 Sft	3.80	4,650.85	17,673
	Pointing				
11/18/a	0				
11, 10/ u					
	a) ratio 1:2	100 Sft	4.83	3,776.40	18,240
11/31	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	100 Sft	4.83	822.00	3,970
					,- · · ·
	Distempering				
	10/42/d 10/43/a 10/43/a 11/10/b 11/10/b 11/19	6/5       Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):         Ratio 1: 2: 4       Porcelain Tile         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.         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) 4400 mm x 400 mm         5       Slab Plaster         11/10/b       Cement Plaster 1/4 upto 20' (6.00 m) height:-3/4" (20 mm) thick         11/10/b       Cement plaster 1:4 upto 20' (6.00 m) height:-3/4" (20 mm) thick         11/11/b       Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-3/4" (20 mm) thick         11/31       Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	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         Porcelain Tile         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 Chequred Tiles) 300mmx300mm       Per Sft         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       Per Sft         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)         11/9       Cement plaster 1:4 upto 20' (6.00 m) height:-3/4" (20 mm) thick         11/18/a       Cement pointing struck joints, on walls, upto 20' (6.00 m) height:-3/4" (20 mm) thick         11/18/a       Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	6/5       Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):       100 Cft       0.17         Ratio 1: 2: 4       100 Cft       0.17         Porcelain Tile         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.       100.00         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 saler for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge.       10/43/a         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.       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 1.00         Cement plaster 1:4 upto 20' (6.00 m) height:-3/4" (20 mm) thick         100 Sft 3.80         Pointing	6/5       Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stome aggregate):       Image: Compacting and Washing of stome aggregate):         Ratio 1: 2: 4       100 Cft       0.17       38,723.50         Porcelain Tile         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 cuting grinding complete in all respect as approved and directed by the Engineer Incharge.       Image: Color and Shade with adhesive / bond over 1/2" thick (1:2)cement plaster i/c the cost of and scaler for finishing the joints i/c cuting grinding complete in all respect as approved and directed by the Engineer Incharge.       Image: Color and Shade with adhesive / bond over 1/2" thick (1:2)cement plaster i/c the cost of and scaler for finishing the joints, cutting grinding complete in latt respect as approved and directed by the Engineer Incharge.       Image: Color and Shade with adhesive / bond over 1/2" thick (1:2)cement plaster i/c the cost of and scaler for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge.       Image: Color and Shade with adhesive / bond over 1/2" thick (1:2)cement plaster i/c the cost of and scaler for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge.       Image: Color and Shade with adhesive / bond over 1/2" thick (1:2)cement plaster i/c the cost of and scaler for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge.       Ima

#### DETAILED COST ESTIMATE

# GUARD ROOM

Sr.	1nd BI-Annual- 2023		•	<b>a</b>	Unit Rate	Amount
No.	(Jan to June) Wazirabad	Description	Unit	Quantity	(Rs)	(Rs)
19	11/23	Distempering:-				
		iii) three coats	100 Sft	4.80	1,446.35	6,942
		Wooden Door				
20	12/50-i	Providing and fixing $1\frac{1}{2}$ " (40 mm) thick hollow flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame $1\frac{1}{4}$ " (30 mm) thick and partal wood braces at about 3" (75 mm) apart and deodar wood lipping $1\frac{1}{2}$ "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 $1\frac{1}{2}$ "x $1\frac{1}{2}$ "x $1\frac{4}{4}$ ", welded (40 mmx40				
		mmx 6mm) with M.S. flat 2"x <sup>1</sup> /4" (50 mm x 6 mm)		24.50	1 (02 20	20.270
			Per Sft	24.50	1,603.20	39,278
		Lock				
21	12/22	Providing and fixing, approved quality mortice				
21	12/22	lock.	Each	1.00	774.00	774
22	13/5/c	Paint         Painting new surface:-         Preparing surface and painting of doors and windows any type (including edges):-         i) priming coat.	100 Sft	0.49	1,460.05	715
		ii)Two coat	100 Sft	0.49	841.65	412
23	25/41/b	Steel Window 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:-				
		<ul><li>b) fixed with wire gauze, 22 SWG</li><li>v) glass pane 5 mm thick</li></ul>	Per Sft	16.00	1,170.70	18,731
		Roof Insulation				

#### DETAILED COST ESTIMATE

## GUARD ROOM

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
24	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	1.32	12,104.25	15,978
25	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	132.00	8.65	1,142
		Khurras				
26	9/15	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	1.00	905.25	905
		Bottom Khuras				
27	9/16	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4 <sup>1</sup> / <sub>2</sub> " (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	1.00	1,908.05	1,908
		Crush				
28	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 contratcor.	Cft	114.82	109.79	12,605
		Total Rs.				532,809

### GUARD ROOM CALCULATION OF QUANTITIES

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	43.00	2.50	2.50 Total	268.75 268.75	Cft Cft
					Total	0.27	%oCft
	Anti-Termite						
2	Spraying anti termite proofing by using liquid FMC Biflex 2.5%EC Mixing Ratio 1:50=137-Sft or using liquid MIRAGE Ali Akbar /RANGERS Auriga 5% SC Mixing Ability-HEXTAR Ratio 1:110=205-Sft or any other 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	43.00	7.50		322.50	Sft
	Floor	1	10.00	10.00		100.00	Sft
					Total	422.50	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	43.00	2.50	0.33 Total	35.48 35.48	Cft Cft
					Total	0.35	%Cft
	Brick work in Foundation						
4	Pacca brick work in foundation and plinth in:-						
	Cement, sand mortar:- Ratio 1:5 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	5.42	174.80	Cft
					Total	223.17	Cft

### GUARD ROOM CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
					Total	2.23	%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) 1 <sup>1</sup> / <sub>2</sub> " thick (40 mm)						
	Room wall	1	43.00	0.75		32.25	Sft
					Total	32.25	Sft
					Total	0.32	%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 <sup>3</sup> / <sub>4</sub> " thick (20 mm)						
	Room wall	1	43.00		1.00	43.00	Sft
					Total	43.00	Sft
					Total	0.43	%Sft
	Brick work in Super Structure						
7	Pacca brick work in ground floor:-						
	i) Cement, sand mortar:- Ratio 1:5						
	Room wall	1	43.00	0.75	10.50	338.63	Cft
	Parapet Wall	1	43.00	0.38	2.50	40.31	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
	W-1	-1	4.00	0.75	4.00	(12.00)	Cft
					Total	354.56	Cft
					Total	3.55	%Cft
	Concrete Work						

### GUARD ROOM

# CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
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	11.50	11.50	0.50	66.13	Cft
	Sun shade	1	5.50	1.50	0.25	2.06	Cft
	Sun shade	1	6.00	1.50	0.25	2.25	Cft
	Doors and window Lintels						
	D-1	1	4.50	0.75	0.75	2.53	Cft
	W-1	1	5.00	0.75	0.75	2.81	Cft
					T-4-1	75 79	06
					Total	75.78	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						
	from bars):-						
	Deformed bars (Grade-60)					75.78	Cft
	Top Slab & lintel @ 6.75 lbs / Cft		6.75		=	511.52	lbs/cft
				Total	=	511.52	lbs/cft
				Total	=	232.09	Kg.
			Add 5% V	<u> </u>	=	11.60	Kg.
				Total	=	244	Kg
					Total	2.44	%kg
	Sand Filling						
10	Supplying and filling sand under floor; or plugging						
	in wells.						
	Floor	1	10.00	10.00	4.00	400.00	Cft
						100.00	~ 1
					Total	400.00	Cft

### GUARD ROOM CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Brick ballast						
11	Dry rammed brick or stone ballast, $1\frac{1}{2}$ " to 2"(40						
11	mm to 50 mm) gauge.						
	Floor	1	10.00	10.00	0.33	33.00	Cft
		-	10100	10100	Total		Cft
					Total	0.33	%Cft
10	P.C.C						
12	Cement concrete plain including placing,						
	compacting, finishing and curing complete (including screening and washing of stone						
	(including screening and washing of stone aggregate):						
	Ratio 1: 2: 4						
	Floor	1	10.00	10.00	0.17	16.67	Cft
					Total	0.17	%Cft
	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 Chequred Tiles) 300mmx300mm	1	10.00	10.00		100.00 100.00	Sft
					Total	100.00	Sft
14	Providing and laying superb quality Porcelain						
14	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	40.00		0.33	13.20	Sft
					Total	13.20	Sft
	Slab Plaster						

### GUARD ROOM CALCULATION OF QUANTITIES

Sr.	Description	No.	Length	Width	Height	Qty.	Unit
<b>No.</b> 15	Cement plaster 3/8" (10 mm) thick under soffit of		0		U		
13	R.C.C. roof slabs only, upto 20' height. (Ratio:- 1:3)						
	R.C.C. 1001 stabs only, upto 20 height. (Ratio 1.5)						
		1	10.00	10.00		100.00	Sft
		-	10.00	10.00			511
					Total	1.00	%Sf
	Cement Plaster						
16	Cement plaster 1:4 upto 20' (6.00 m) height:-						
	3/4" (20 mm) thick						
	Guard Room	-	10.00		10.50	210.00	~ ~ ~
		2	10.00		10.50	210.00	Sft
		2	10.00		10.50	210.00	Sft
	D/d Doors and Window	1	2.50		7.00	(24.50)	
	D-1	-1	3.50		7.00	(24.50)	Sft
	W-1	-1	4.00		4.00	(16.00)	Sft
					Total	379.50	00
					Total	579.30	Sft
					Total	3.80	0/ 54
					Total	3.80	%Sf
	Pointing						
17	Cement pointing struck joints, on walls, upto 20'						
17	(6.00 m) hiehgt:-						
	a) ratio 1:2						
	Outer Walls	1	46.00		10.50	483.00	Sft
		1	40.00		10.50		SIL
					Total	483.00	Sft
					1000		
					Total	4.83	%Sf
18	Extra cost of labour and material for red oxide						
	pigment in cement pointing to match with the colour						
	of bricks.				Total	4.83	%Sf
	Distempering						
19	Distempering:-						
	iii) three coats						
	Guard Room					210.00	
		2	10.00		10.50	210.00	Sft
		2	10.00	10.00	10.50	210.00	Sft
	Ceiling	1	10.00	10.00		100.00	Sft
	D/d Doors and Window		2.50			(04.50)	~ -
	D-1	-1	3.50		7.00	(24.50)	Sft
	W-1	-1	4.00		4.00	(16.00)	Sft

### **GUARD ROOM**

# CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
					Total	479.50	Sft
					Total	4.80	%Sft
	Wooden Door						
20	Providing and fixing 1 <sup>1</sup> / <sub>2</sub> " (40 mm) thick hollow flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1 <sup>1</sup> / <sub>4</sub> " (30 mm) thick and partal wood braces at about 3" (75 mm) apart and deodar wood lipping 1 <sup>1</sup> / <sub>2</sub> "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 1 <sup>1</sup> / <sub>2</sub> "x1 <sup>1</sup> / <sub>2</sub> "x <sup>1</sup> / <sub>4</sub> ", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x <sup>1</sup> / <sub>4</sub> " (50 mm x 6 mm)	1	3.50		7.00	24.50	Sft
	D-1	1	5.50		7.00	24.30	Sit
					Total	24.50	Sft
	Lock						
21	Providing and fixing, approved quality mortice lock.	1				1.00	Each
	Paint						
22	Painting new surface:- Preparing surface and painting of doors and windows any type (including edges):- i) priming coat.					0.40	
	ii)Two coat				Total	0.49	Sft
	Steel Window						
23	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						

#### **GUARD ROOM CALCULATION OF QUANTITIES**

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	W-1	1	4.00		4.00	16.00	Sft
					Total	16.00	Sft
	Roof Insulation						
24	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	11.50	11.50		132.25	Sft
					Total	132.25	Sft
					Total	1.32	%Sft
25	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.						
	ii) 500 gauge (.005" thick)				Total	132.00	Sft
	Khurras						
26	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	1				1.00	Each
	Bottom Khuras						
27	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4 <sup>1</sup> / <sub>2</sub> " (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 GUARD ROOM PLUMBING WORKS								
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)			
		uPVC Pipe							
1	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)							
		(v) 4"(110 mm)	Rft	30.00	218.00	6,540			
		Total Rs.				6,540.00			

#### DETAILED COST ESTIMATE

#### **GUARD ROOM**

	ELECTRICAL WORKS									
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)				
1	C-24/3-ii	<u>Scheduled Items (A)</u> Supply and erection of PVC pipe for wiring recessed								
1	C-24/5-11									
		in walls, including bends, inspection joints, boxes,								
		pull boxes, hook, cutting and repair surface etc.	DC	200.00	06.40	17 000				
		completed with all specified. (20 mm i/d)	Rft.	200.00	86.40	17,280				
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	101.60	15,240				
3	C-24/10a.i	Supply and erection of single core PVC insulated								
		copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing								
		an capping/G.I. wire/trenches (rate for cables only).								
		(3.029)	Rft.	500.00	27.85	13,925				
4	C-24/10a.iii	Supply and erection of single core PVC insulated								
		copper conductor cables, in prelaid PVC pipe/M.S.								
		conduit/G.I pipe/wooden strip batten/wooden casing								
		an capping/G.I. wire/trenches (rate for cables only). (7.029)	Rft.	200.00	44.05	8,810				
						,				
5	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	4.00	296.00	1,184				
6	C-24/14-ii	Supply and erection of M.S. sheet box of 16 SWG,								
0	C-24/14-11	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.		1.00	400.05	410				
		(7"x4")	Each	1.00	409.95	410				
7	C-24/32-ii	Supply and erection of switches 10/15 Amp.								
		(Recessed Type)	Each	3.00	96.95	291				
8	C-24/36-i	Supply and erection of 3 pin switch and Plug								
0	C-2+/ JU-I	combined, recessed type. (5Amps)	Each	1.00	126.95	127				

#### DETAILED COST ESTIMATE

#### **GUARD ROOM**

ELECTRICAL WORKS								
1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)			
C-24/36-ii	Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)	Each	3.00	167.75	503			
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	2.00	2,579.25	5,159			
	Sub Total (A)				62,929			
N.S	following size 56" ceiling fan, complete with		1.00	7,000.00	7,000			
	Sub Total (B)				7,000			
	Sub Total (A+B)				69,929			
	2023 (Jan to June) Wazirabad C-24/36-ii C-24/43	Ind BI-Annual- 2023 (Jan to June) Wazirabad       Description         C-24/36-ii       Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)         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.         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.         Sub Total (B)	Ind BI-Annual- 2023 (Jan to June) Wazirabad       Description       Unit.         C-24/36-ii       Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)       Each         C-24/43       Supply and erection of tube light, including rod, choke, starter with frame, flexible wire, including connection from ceiling rose, etc., complete       Each         ii) single rod (40 watts) with one choke and one starter.       Each         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         Sub Total (B)       Each	Ind BI-Annual-2023 (Jan to June) Wazirabad       Description       Unit.       Quantity         C-24/36-ii       Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)       Each       3.00         C-24/43       Supply and erection of tube light, including rod, choke, starter with frame, flexible wire, including connection from ceiling rose, etc., complete       Image: Complete iii) single rod (40 watts) with one choke and one starter.       Each       2.00         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       1.00         Sub Total (B)       Image: Complete in all respect.       Image: Complete in all respect.       Image: Complete in all respect.	Ind BI-Annual 2023 (Ian to June) Wazirabad       Description       Unit.       Quantity       Rate (Rs.)         C-24/36-ii       Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)       Each       3.00       167.75         C-24/43       Supply and erection of tube light, including rod, choke, starter with frame, flexible wire, including connection from ceiling rose, etc., complete       3.00       167.75         Iii single rod (40 watts) with one choke and one starter.       Each       2.00       2,579.25         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.       1.00       7,000.00         Lust       Sub Total (B)       IIII (B)       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII			

#### DETAILED COST ESTIMATE

# TYRE SHOP

		CIVIL WORK				
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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	0.27	11,658.25	3,148
2	26/43	Anti-Termite Spraying anti termite proofing by using liquid FMC Biflex 2.5%EC Mixing Ratio 1:50=137-Sft or using liquid MIRAGE Ali Akbar /RANGERS Auriga 5% SC Mixing Ability-HEXTAR Ratio 1:110=205-Sft or any other 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	422.50	9.90	4,183
3	6/5	Plain Cement ConcreteCement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):(i) Ratio 1: 4: 8	100 Cft	0.35	29,723.50	10,403
	7/4/	Brick work in Foundation				
4	7/4/i	Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:5	100 Cft	2.23	32,358.60	72,160
		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) 1 <sup>1</sup> / <sub>2</sub> " thick (40 mm)	100 Sft	0.32	9,272.70	2,967
		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:				

#### DETAILED COST ESTIMATE

# TYRE SHOP

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
	Wazii abau	ii) Ratio 1:3 <sup>3</sup> / <sub>4</sub> " thick (20 mm)	100 Sft	0.43	6,932.65	2,981
		Brick work in Super Structure				
7	7/5	Pacca brick work in ground floor:-				
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	3.22	34,761.00	111,930
		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.):-				
		(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	78.31	580.05	45,425
9	6/12/c	Steel Work. 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	2.52	31,940.05	80,489
		Sand Filling				
10	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	4.00	2,982.00	11,928
11	6/2	Brick ballast Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.	100 Cft	0.33	9,900.00	3,267

#### DETAILED COST ESTIMATE

# TYRE SHOP

		CIVIL WORK				
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
	() uzii uouu	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	0.17	38,723.50	6,583
		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 Chequred Tiles) 300mmx300mm	Per Sft	100.00	225.65	22,565
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	13.20	310.10	4,093
15	11/10/b	Slab Plaster Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:- 1:3)	100 Sft	1.00	3,963.30	3,963
		Cement Plaster				
16	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:- 3/4" (20 mm) thick	100 Sft	3.36	4,650.85	15,627
		Pointing				
17	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-				
		a) ratio 1:2	100 Sft	4.83	3,776.40	18,240
18	11/31	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	100 Sft	4.83	822.00	3,970

#### DETAILED COST ESTIMATE

# TYRE SHOP

		CIVIL WORK				
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Distempering				
19	11/23	Distempering:-				
		iii) three coats	100 Sft	4.36	1,446.35	6,306
		Rolling Shutter				
20	25/37	Providing and fixing 24 SWG G.I. sheet rolling shutter, consisting of steel frame of M.S. channel 2"x1 <sup>1</sup> /4"x1/8" (50x30x3 mm), angle iron 1 <sup>1</sup> /2"x1 <sup>1</sup> /2"x1/8" (40x40x3 mm), M.S. plate 1'x1'x1/8" (300x300x3 mm), G.I. pipe 1 <sup>1</sup> /2" (37 mm) dia, springs 2' (600 mm) centre to centre, rollers, 24 SWG G.I. covering 1 ft. x 1 ft. (300x300 mm), handles, holdfast, and painting three coats, complete in all respects.		68.00	653.05	44,407
		Steel Window				
21	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	16.00	1,170.70	18,731
22	9/5	<b>Roof Insulation</b> 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.		1.32	12,104.25	15,978
23	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	132.00	8.65	1,142
		Khurras				
24	9/15	Knurras Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	1.00	905.25	905
	-					

#### DETAILED COST ESTIMATE

# TYRE SHOP

nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
	Bottom Khuras				
9/16	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4 <sup>1</sup> / <sub>2</sub> " (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	1.00	1,908.05	1,908
	Crush		1.00	1,500,000	1,700
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 contratcor.	Cft	117.04	109.79	12,850
					,
	Total Rs.				526,150
		the contratcor.	the contratcor. Cft	the contratcor. Cft 117.04	the contratcor.         Cft         117.04         109.79

### TYRE SHOP

# CALCULATION OF QUANTITIES

	CIVIL W	UKF	<b>X</b>				
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	43.00	2.50	2.50	268.75	Cft
					Total	268.75	Cft
					Total	0.27	%oCft
	Anti-Termite						
2	Spraying anti termite proofing by using liquid FMC Biflex 2.5%EC Mixing Ratio 1:50=137-Sft or using liquid MIRAGE Ali Akbar /RANGERS Auriga 5% SC Mixing Ability-HEXTAR Ratio 1:110=205-Sft or any other 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	43.00	7.50		322.50	Sft
	Floor	1	10.00	10.00		100.00	Sft
					Total	422.50	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	43.00	2.50	0.33	35.48	Cft
		1	15.00	2.30	Total	35.48	Cft
					Total	0.35	%Cft
	Brick work in Foundation						
4	Pacca brick work in foundation and plinth in:-						
	Cement, sand mortar:- Ratio 1:5						
	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	5.42	174.80	Cft
					Total	223.17	Cft

### TYRE SHOP

### CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
					Total	2.23	%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) 1 <sup>1</sup> / <sub>2</sub> " thick (40 mm)						
	Room wall	1	43.00	0.75		32.25	Sft
					Total	32.25	Sft
					Total	0.32	%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 <sup>3</sup> / <sub>4</sub> " thick (20 mm)						
	Room wall	1	43.00		1.00	43.00	Sft
					Total	43.00	Sft
					Total	0.43	%Sft
	Brick work in Super Structure						
7	Pacca brick work in ground floor:-						
	i) Cement, sand mortar:- Ratio 1:5						
	Room wall	1	43.00	0.75	10.50	338.63	Cft
	Parapet Wall	1	43.00	0.38	2.50	40.31	Cft
	Entrance step	2	4.00	1.00	0.75	6.00	Cft
	D/d Doors and Window						
	Shutter	-1	8.00	0.75	8.50	(51.00)	Cft
	W-1	-1	4.00	0.75	4.00	(12.00)	Cft
					Total	321.94	Cft
					Total	3.22	%Cft

### TYRE SHOP

# CALCULATION OF QUANTITIES

			<u> </u>				
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	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	11.50	11.50	0.50	66.13	CA
	Sun shade	1	5.50	11.50	0.30	2.06	Cft Cft
	Sun shade	1	6.00	1.50	0.23	2.00	Cft
	Doors and window Lintels	1	0.00	1.50	0.23	2.23	Cit
	Shutter	1	9.00	0.75	0.75	5.06	Cft
	W-1	1	5.00	0.75	0.75	2.81	Cft
		-	0.00	0170	0.70		011
					Total	78.31	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 from bars):-						
	Deformed bars (Grade-60)					78.31	Cft
	Top Slab & lintel @ 6.75 lbs / Cft		6.75		=	528.61	lbs/cft
				Total	=	528.61	lbs/cft
				Total	=	239.84	Kg.
			Add 5% V	Wastage.	=	11.99	Kg.
				Total	=	252	Kg
					Total	2.52	%kg
	Sand Filling						
10	Supplying and filling sand under floor; or plugging in wells.						
	Floor	1	10.00	10.00	4.00	400.00	Cft
		-			Total	400.00	Cft

### TYRE SHOP

# CALCULATION OF QUANTITIES

q							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
					Total	4.00	%Cft
	Brick ballast						
11	Dry rammed brick or stone ballast, $1\frac{1}{2}$ " to 2"(40						
11	mm to 50 mm) gauge.						
	Floor	1	10.00	10.00	0.33	33.00	Cft
					Total	33.00	Cft
					Total	0.33	%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	10.00	10.00	0.17	16.67	Cft
		-	10.00	10.00	0.17	10.07	en
					Total	0.17	%Cft
	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 Chequred Tiles) 300mmx300mm	1	10.00	10.00		100.00	Sft
	a) (Non-Skia Chequred Thes) SoominxSoomin	1	10.00	10.00		100.00	SIL
					Total	100.00	Sft
14							
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	40.00		0.33	13.20	Sft
					Total	13.20	Sft
					IUdi	13.20	511
	Slab Plaster				++		

#### TYRE SHOP CALCULATION OF QUANTITIES

		UKR	<b>\</b>				
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
15	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:-						
	1:3)		10.00	10.00		100.00	
		1	10.00	10.00		100.00	Sft
					Total	1.00	%Sft
	Cement Plaster						
16	Cement plaster 1:4 upto 20' (6.00 m) height:-						
	3/4" (20 mm) thick						
	Guard Room						
		2	10.00		10.50	210.00	Sft
		2	10.00		10.50	210.00	Sft
	D/d Doors and Window						
	Shutter	-1	8.00		8.50	(68.00)	Sft
	W-1	-1	4.00		4.00	(16.00)	Sft
					Total	336.00	Sft
					1000		
					Total	3.36	%Sft
	Pointing						
17	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-						
	a) ratio 1:2						
	Outer Walls	1	46.00		10.50	483.00	Sft
					Total	483.00	Sft
					Total	4.83	%Sft
18	Extra cost of labour and material for red oxide						
10	pigment in cement pointing to match with the						
	colour of bricks.				Total	4.83	%Sft
	colour of bricks.				TUtal	4.03	70511
	Distempering						
19	Distempering:-						
	iii) three coats						
	Guard Room						
		2	10.00		10.50	210.00	Sft
		2	10.00		10.50	210.00	Sft
	Ceiling	1	10.00	10.00		100.00	Sft
	D/d Doors and Window						
	Shutter	-1	8.00		8.50	(68.00)	Sft
	W-1	-1	4.00		4.00	(16.00)	Sft
	W-1	-1	4.00			4.00	4.00 (16.00)

### TYRE SHOP

### CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
1100					Total	436.00	Sft
					Total	4.36	%Sft
20	Wooden Door Providing and fixing 24 SWG G.I. sheet rolling shutter, consisting of steel frame of M.S. channel 2"x1¼"x1/8" (50x30x3 mm), angle iron 1½"x1½"x1/8" (40x40x3 mm), M.S. plate 1'x1'x1/8" (300x300x3 mm), G.I. pipe 1½" (37 mm) dia, springs 2' (600 mm) centre to centre, rollers, 24 SWG G.I. covering 1 ft. x 1 ft. (300x300 mm), handles, holdfast, and painting three coats, complete in all respects. Shutter		8.00		8.50	68.00	Sft
					Total	68.00	Sft
	Steel Window						
21	Providing and fixing steel windows with openable glazed panels, using beam section for frame 1 <sup>1</sup> / <sub>2</sub> "x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for leaves <sup>3</sup> / <sub>4</sub> "x1"x <sup>3</sup> / <sub>4</sub> "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	1	4.00		4.00	16.00	Sft
					Total	16.00	Sft
						-0.00	51

	PUNJAB CITIES PI DETAILED DESIGN OF INFRASTRUCTU SUPERVISION IN 16 C TYRE S	RE S XITIE HOP	UB-PRO. S OF PU	JECTS A NJAB	AND RESI	IDENTS	
	CALCULATION O CIVIL W			28			
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
22	Roof Insulation 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		11.50	11.50	Total Total	132.25 132.25 <b>1.32</b>	Sft Sft %Sft
23	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc. ii) 500 gauge (.005" thick)				Total	132.00	Sft
24	Khurras           Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	1				1.00	Each
25	Bottom Khuras Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4 <sup>1</sup> / <sub>2</sub> " (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	1				1.00	Each

	DET	PUNJAB CITIES PROGRAM AILED DESIGN OF INFRASTRUCTURE SUB-P SUPERVISION IN 16 CITIES OF DETAILED COST ESTIMA TYRE SHOP PLUMBING WORKS	PROJE PUNJ	CTS AND	RESIDENTS	
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
1	19-47	<b>uPVC Pipe</b> 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)				
		(v) 4"(110 mm) Total Rs.	Rft	30.00	218.00	6,540 6,540.00

#### DETAILED COST ESTIMATE

#### TYRE SHOP

	ELECTRICAL WORKS						
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)	
	G 04/2 ''	Scheduled Items (A)					
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.	200.00	86.40	17,280	
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	101.60	15,240	
3	C-24/10a.i	Supply and erection of single core PVC insulated					
		copper conductor cables, in prelaid PVC pipe/M.S. conduit / G.I pipe/ wooden strip batten/wooden					
		casing an capping /G.I. wire/trenches (rate for cables					
		only). (3.029)	Rft.	500.00	27.85	13,925	
4	C-24/10a.iii	Supply and erection of single core PVC insulated					
		copper conductor cables, in prelaid PVC pipe/M.S.					
		conduit/G.I pipe/wooden strip batten/wooden casing					
		an capping/G.I. wire/trenches (rate for cables only). (7.029)	Rft.	200.00	44.05	8,810	
		(1.027)	140	200.00	11.00	0,010	
5	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	4.00	296.00	1,184	
6	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	409.95	410	
7	C-24/32-ii	Supply and erection of switches 10/15 Amp.					
	C 2 1 0 2 1	(Recessed Type)	Each	3.00	96.95	291	
8	C-24/36-i	Supply and erection of 3 pin switch and Plug	Each	1.00	126.95	127	
		combined, recessed type. (5Amps)	Lacii	1.00	120.75	127	

#### DETAILED COST ESTIMATE

#### TYRE SHOP

		ELECTRICAL WORK	.5			
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
9	C-24/36-ii	Supply and erection of 3 pin switch and Plug				
		combined recessed type (10/15Amps)	Each	3.00	167.75	503
10	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	2.00	2,579.25	5,159
		Sub Total (A)				62,929
11	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.		1.00	7,000.00	7,000
		Sub Total (B)				7,000
		Sub Total (A+B)				69,929

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

#### STORE ROOM

		CIVIL WORK				
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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	1000Cft	0.61	11,658.25	7,112
		ii) in ordinary soil.	1000CII	0.61	11,036.23	7,112
		Anti-Termite				
2	26/43	Spraying anti termite proofing by using liquid FMC Biflex 2.5% EC Mixing Ratio 1:50=137-Sft or using liquid MIRAGE Ali Akbar /RANGERS Auriga 5% SC Mixing Ability-HEXTAR Ratio 1:110=205-Sft or any other 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	1,237.50	9.90	12,251
		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	0.80	29,723.50	23,779
	714/	Brick work in Foundation				
4	7/4/i	Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:5	100 Cft	5.03	32,358.60	162,764
		Centent, said mortal Kato 1.5	100 Cit	5.05	52,550.00	102,704
		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	0.73	9,272.70	6,769
		,			.,	-,>>
		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 <sup>3</sup> / <sub>4</sub> " thick (20 mm)	100 Sft	0.97	6,932.65	6,725
		Brick work in Super Structure				
7	7/5	Pacca brick work in ground floor:-	100.00		24761.00	262.141
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	7.57	34,761.00	263,141

# STORE ROOM

	1nd BI-Annual-					
Sr. No.	2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		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	328.88	580.05	190,764
		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	10.58	31,940.05	337,926
		Sand Filling				
10	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	20.40	2,982.00	60,833
		Brick ballast				
11	6/2	Dry rammed brick or stone ballast, $1\frac{1}{2}$ " to 2"(40 mm to 50 mm) gauge.	100 Cft	1.68	9,900.00	16,632
				1.00	2,2 30.00	10,00

#### STORE ROOM

	CIVIL WORK						
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)	
		Tuff Paver					
12	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)					
		b) 60-mm thick	Per Sft	510.00	158.90	81,039	
		Slab Plaster					
13	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	5.10	3,963.30	20,213	
		Cement Plaster					
14	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:-					
		3/4" (20 mm) thick	100 Sft	8.49	4,650.85	39,486	
		Pointing					
15	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-					
		a) ratio 1:2	100 Sft	14.00	3,776.40	52,870	
16	11/31	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	100 Sft	14.00	822.00	11,508	
		Distempering					
17	11/23	Distempering:-					
		iii) three coats	100 Sft	13.59	1,446.35	19,656	
		Wooden Door					
18	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 partal 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"x <sup>1</sup> /4" (50 mm x 6 mm)					

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# STORE ROOM

CIVIL WORK										
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)				
		Lock								
19	12/22	Providing and fixing, approved quality mortice								
		lock.	Each	1.00	1,142.40	1,142				
		Paint								
20	13/5/c	Painting new surface:-								
20	13/3/0									
		Preparing surface and painting of doors and								
		windows any type (including edges):-	100 Sft	0.84	1,460.05	1,226				
		i) priming coat.			-					
		ii)Two coat	100 Sft	0.84	841.65	707				
		Steel Window								
21	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 3/4"x1"x3/4"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	96.00	1,170.70	112,387				
		Roof Insulation								
22	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	5.83	12,104.25	70,568				
23	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	583.00	8.65	5,043				
		Khurras								
24	9/15	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	1.00	905.25	905				
		Bottom Khuras								
25	9/16	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4 <sup>1</sup> / <sub>2</sub> " (1200x600x113 mm) over 3" (75	Each	1.00	1 009 05	1 000				
		mm) cement concrete 1:4:8.	LaCII	1.00	1,908.05	1,908				

	DE	PUNJAB CITIES PROGRA TAILED DESIGN OF INFRASTRUCTURE SUE SUPERVISION IN 16 CITIES ( DETAILED COST ESTIN STORE ROOM CIVIL WORK	B-PROJE DF PUNJ		ESIDENTS	
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
26	1/1	Crush 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 contratcor.	Cft	365.23	109.79	40,097
		Total Rs.				1,634,992

### STORE 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.					60 6 <b>8 7</b>				
	Room wall	1	97.00	2.50	2.50	606.25	Cft			
					Total	606.25	Cft			
					Total	0.61	%oCft			
	Anti-Termite									
2	Spraying anti termite proofing by using liquid FMC Biflex 2.5%EC Mixing Ratio 1:50=137-Sft or using liquid MIRAGE Ali Akbar /RANGERS Auriga 5% SC Mixing Ability-HEXTAR Ratio 1:110=205-Sft or any other 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	97.00	7.50		727.50	Sft			
	Floor	1	30.00	17.00		510.00	Sft			
					Total	1,237.50	Sft			
	Plain Cement Concrete				Total	1,207.00	Sit			
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	97.00	2.50	0.33	80.03	Cft			
		1	97.00	2.30	Total	80.03	Cft			
					Totul	00.02	Off			
					Total	0.80	%Cft			
	Brick work in Foundation									
4	Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:5									
	Room wall									
	Step - 1	1	97.00	1.875	0.25	45.47	Cft			
	Step - 2	1	97.00	1.500	0.25	36.38	Cft			
	Step - 3	1	97.00	1.125	0.25	27.28	Cft			
	Step - 4	1	97.00	0.750	5.42 Total	<u>394.31</u> 503.43	Cft Cft			
					Iotai	505.45				
					Total	5.03	%Cft			

#### STORE ROOM CALCULATION OF QUANTITIES

	CIVIL WORK										
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit				
	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) 1 <sup>1</sup> / <sub>2</sub> " thick (40 mm)										
	Room wall	1	97.00	0.75		72.75	Sft				
					Total	72.75	Sft				
					Total	0.73	%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 <sup>3</sup> / <sub>4</sub> " thick (20 mm)										
	Room wall	1	97.00		1.00	97.00	Sft				
					Total	97.00	Sft				
					Total	0.97	%Sft				
	Brick work in Super Structure										
7	Pacca brick work in ground floor:-										
,	i) Cement, sand mortar:- Ratio 1:5										
	Room wall	1	97.00	0.75	10.50	763.88	Cft				
	Parapet Wall	1	97.00	0.38	2.50	90.94	Cft				
	Entrance step	2	4.00	1.00	0.75	6.00	Cft				
	D/d Doors and Window										
	D-1	-1	6.00	0.75	7.00	(31.50)	Cft				
	W-1	-4	6.00	0.75	4.00	(72.00)	Cft				
					Total	757.31	Cft				
					Total		0/ 00				
					Total	7.57	%Cft				

### STORE ROOM

# CALCULATION OF QUANTITIES

	CIVIL WORK										
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit				
	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)		01.70	10 -0	0.50	201.20					
	Top Slab	1	31.50	18.50	0.50	291.38	Cft				
	Sun shade	1	31.50	1.50	0.25	11.81	Cft				
	Sun shade	2	8.00	1.50	0.25	6.00	Cft				
	Doors and window Lintels	1	7.00	0.75	0.75	3.94	<u> </u>				
	D-1	1	7.00	0.75	0.75	15.75	Cft				
	W-1	4	7.00	0.75	0.75	15.75	Cft				
					Total	328.88	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 from bars):-										
	Deformed bars (Grade-60)					328.88	Cft				
	Top Slab & lintel @ 6.75 lbs / Cft		6.75		=	2,219.91	lbs/cft				
				Total	=	2,219.91	lbs/cft				
				Total	=	1,007.22	Kg.				
			Add 5% V	Wastage.	=	50.36	Kg.				
				Total	=	1,058	Kg				
					Total	10.58	%kg				
	Sand Filling										
10	Supplying and filling sand under floor; or plugging in wells.										
	Floor	1	30.00	17.00	4.00	2,040.00	Cft				

#### STORE ROOM CALCULATION OF QUANTITIES

	CIVIL WORK									
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit			
					Total	20.40	%Cft			
	<b>N</b> A A A N									
	Brick ballast									
11	Dry rammed brick or stone ballast, 1 <sup>1</sup> / <sub>2</sub> " to 2"( 40 mm to 50 mm) gauge.									
	Floor	1	30.00	17.00	0.33	168.30	Cft			
					Total	168.30	Cft			
					Total	1.68	%Cft			
	Tuff Paver									
12	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)									
	b) 60-mm thick	1	30.00	17.00		510.00	Sft			
					Total	510.00	Sft			
	Slab Plaster									
13	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:-1:3)	1	30.00	17.00		510.00	Sft			
					Total	5.10	%Sft			
					1000		/0010			
	Cement Plaster									
14	Cement plaster 1:4 upto 20' (6.00 m) height:-									
	3/4" (20 mm) thick									
	Sitting Room									
		2	30.00		10.50	630.00	Sft			
		2	17.00		10.50	357.00	Sft			
	D/d Doors and Window									
	D-1	-1	6.00		7.00	(42.00)	Sft			
	W-1	-4	6.00		4.00	(96.00)	Sft			
					Total	849.00	Sft			
					Total	8.49	%Sft			
					Total	<b>U.T</b> /	/0.011			

#### STORE ROOM CALCULATION OF QUANTITIES

	CIVIL WORK									
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit			
	Pointing									
15	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-									
	a) ratio 1:2									
	Outer Walls	1	100.00		14.00	1,400.00	Sft			
					Total	1,400.00	Sft			
					Total	14.00	%Sft			
16	Extra cost of labour and material for red oxide									
10	pigment in cement pointing to match with the colour of bricks.				Total	14.00	%Sf			
	Distempering									
17	Distempering:-									
-	iii) three coats									
	Store Room	2	30.00		10.50	630.00	Sft			
		2	17.00		10.50	357.00	Sft			
	Ceiling	1	30.00	17.00		510.00	Sft			
	D/d Doors and Window									
	D-1	-1	6.00		7.00	(42.00)	Sft			
	W-1	-4	6.00		4.00	(96.00)	Sft			
					Total	1,359.00	Sft			
					Total	13.59	%Sf			
	Wooden Door									
18	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 partal 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"x <sup>1</sup> /4" (50 mm x 6 mm)				_					
	D-1	1	6.00		7.00	42.00	Sft			
					Total	42.00	Sft			

### STORE ROOM

# CALCULATION OF QUANTITIES

CIVIL WORK									
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit		
	Lock								
19	Providing and fixing, approved quality mortice lock.	1				1.00	Each		
	Paint								
20	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								
21	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	4	6.00		4.00	96.00	Sft		
					Total	96.00	Sft		
	Roof Insulation								
22	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.		1						
	Roof area	1	31.50	18.50		582.75	Sft		
					Total	582.75	Sft		
					Total	5.83	%Sft		
23	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.								
	ii) 500 gauge (.005" thick)				Total	583.00	Sft		

	PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB STORE ROOM CALCULATION OF QUANTITIES CIVIL WORK									
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit			
	Khurras									
24	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	1				1.00	Each			
	Bottom Khuras									
25	Bottom Khuras of brick masonry in cement mortar									
	1:6, 4'x2'x4 <sup>1</sup> / <sub>2</sub> " (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 STORE ROOM PLUMBING WORKS										
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)				
		uPVC Pipe								
1	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 InchargeType (SDR 41/SN-4) (v) 4"(110 mm)		30.00	218.00	6,540				
						- ,				
		Total Rs.				6,540.00				

#### DETAILED COST ESTIMATE

#### STORE ROOM

	ELECTRICAL WORKS										
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)					
		Scheduled Items (A)									
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	86.40	25,920					
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	101.60	15,240					
3	C-24/10a.i	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (3.029)		750.00	27.85	20,888					
4	C-24/10a.iii	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)		300.00	44.05	13,215					
~	<u> </u>										
5	C-24/10a.1v	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.036)	Rft.	200.00	58.50	11,700					
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. $(4"x4")$		5.00	296.00	1,480					
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")		1.00	409.95	410					

#### DETAILED COST ESTIMATE

#### STORE ROOM

	ELECTRICAL WORKS										
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)					
8	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	5.00	96.95	485					
9	C-24/36-i	Supply and erection of 3 pin switch and Plug combined, recessed type. (5Amps)	Each	1.00	126.95	127					
10	C-24/36-ii	Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)	Each	4.00	167.75	671					
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	6.00	2,579.25	15,476					
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	2.00	3,380.85	6,762					
		Sub Total (A)				112,372					
13	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.		1.00	7,000.00	7,000					
		Sub Total (B)				7,000					
		Sub Total (A+B)				119,372					
		Sub Total (A+D)				117,372					

DETAILED COST ESTIMATE

#### WORK SHOP

CIVIL WORK									
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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	1.23	11,658.25	14,340			
		ii) iii ordinary son.	1000Cit	1.25	11,036.23	14,340			
		Anti-Termite							
2	26/43	Spraying anti termite proofing by using liquid FMC							
		Biflex 2.5% EC Mixing Ratio 1:50=137-Sft or using							
		liquid MIRAGE Ali Akbar /RANGERS Auriga 5%							
		SC Mixing Ability-HEXTAR Ratio 1:110=205-Sft							
		or any other 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							
		approved by the Engineer mentalge	Sft	2,010.89	9.90	19,908			
				,		17,700			
		Plain Cement Concrete							
3	6/5	Cement concrete plain including placing,							
		compacting, finishing and curing complete							
		(including screening and washing of stone							
		aggregate):	100 06	1.12	20 722 50	22 500			
		(i) Ratio 1: 4: 8	100 Cft	1.13	29,723.50	33,588			
		Brick work in Foundation							
4	7/4/i	Pacca brick work in foundation and plinth in:-							
		Cement, sand mortar:- Ratio 1:5	100 Cft	3.37	32,358.60	109,048			
		Horizontal D.P.C							
5	6/36	Providing and laying damp proof course of cement							
5	0/30	concrete $1:2:4$ (using cement, sand and shingle),							
		including bitumen coating :-							
		(a) with one coat bitumen and one coat polythene							
		sheet 500gauge							
		i) 1 <sup>1</sup> / <sub>2</sub> " thick (40 mm)	100 Sft	0.49	9,272.70	4,544			
6	6/27	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 <sup>3</sup> / <sub>4</sub> " thick (20 mm)	100 Sft	0.65	6,932.65	4,506			

DETAILED COST ESTIMATE

WORK SHOP

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
	Wazii abau					
		Brick work in Super Structure				
7	7/5	Pacca brick work in ground floor:-				
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	5.27	34,761.00	183,190
		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	470.70	90,610
		Above foundation				,
		<ul> <li>(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:-</li> <li>Type C (nominal mix 1: 2: 4)</li> </ul>		172.75	580.05	100,204
9	6/11/c	Steel Work. 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	12.18	31,940.05	389,030
		Sand Filling				
10	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	33.95	2,982.00	101,239

DETAILED COST ESTIMATE

#### WORK SHOP

	1nd BI-Annual-				1	
Sr. No.	2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
	wazii abau	Brick ballast				
11	6/2	Dry rammed brick or stone ballast, 11/2" to 2"(40				
		mm to 50 mm) gauge.	100 Cft	0.49	9,900.00	4,851
		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	0.10	38,723.50	3,872
		Sub Base Course				
13	18/3/a/	Providing and laying sub-base course of stone				
15	(i)	product of approved quality and grade including,				
	(1)	placing, mixing, spreading and compaction of sub				
	1/1	base material to required depth, camber and grade				
	1/1	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 sargodha querry to site, actual compacted				
		depth shall be considered for payment)	100Cft	2.31	13,687.35	31,618
			Tooen	2.31	15,007.55	51,010
		Water Bound Macadam				
14	18/4/a	Providing and laying base course of crushed stone				
	+	(Water Bound Macadam) of approved quality and				
	1/1	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 sargodha querry to site, actual		0.01	25 410 00	(2.2.4)
		compacted depth shall be considered for payment)	100Cft	2.31	27,419.98	63,340
		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	89.25	158.90	14,182
		For Work shop c) 80-mm thick	Per Sft	700.00	197.40	138,180
		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.				
	1	:) 10"19"/10"04"/10"04"/9"04"/10"26"	Per Sft	59.50	255.50	15,202
		i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	Fel Sit	57.50	255.50	15,202

DETAILED COST ESTIMATE

### WORK SHOP

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
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 over1/2" 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	217.00	310.10	67,292
		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	1.49	3,963.30	5,905
		Cement Plaster				
19	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:-				
		3/4" (20 mm) thick	100 Sft	6.63	4,650.85	30,835
		Pointing				
20	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-				
		a) ratio 1:2	100 Sft	8.33	3,776.40	31,457
21	11/31	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.		8.33	822.00	6,847
		Distempering				
22	11/23	Distempering:-				
22	11/23	iii) three coats	100 Sft	8.11	1,446.35	11,730
	11/20		100 Sft	8.11	1,446.35	_

DETAILED COST ESTIMATE

#### WORK SHOP

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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 partal 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"x1/4", welded (40 mmx40				
		mmx 6mm) with M.S. flat 2"x1/4" (50 mm x 6 mm)				
			Per Sft	42.00	2,084.35	87,543
		Lock				
24	12/21	Providing and fixing, approved quality mortice lock.	Each	2.00	1,142.40	2,285
		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	1,460.05	1,226
		ii)Two coat	100 Sft	0.84	841.65	707
		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 <sup>3</sup> /4"x1"x <sup>3</sup> /4"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	1,170.70	23,414

DETAILED COST ESTIMATE

#### WORK SHOP

		CIVIL WORK				
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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	2.00	12,104.25	24,209
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	200.00	8.65	1,730
29	9/15	Khurras	Each	1.00	905.25	905
29	9/13	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Laen	1.00	905.25	905
		Bottom Khuras				
30	9/16	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4 <sup>1</sup> / <sub>2</sub> " (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	1.00	1,908.05	1,908
31	1/1	Crush 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 contratcor.	Cft	437.31	109.79	48,011
		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	700.00	1,800.00	1,260,000
		Total Rs.				2,927,456

# WORK SHOP

# CALCULATION OF QUANTITIES

			-				
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	41.00	2.50	2.50	256.25	Cft
	Toilet wall	1	24.00	2.50	2.50	150.00	Cft
	Columns	4	7.50	6.00	4.58	824.40	Cft
					Total	1,230.65	Cft
					Total	1.23	%oCft
2	Anti-Termite Spraying anti termite proofing by using liquid FMC Biflex 2.5%EC Mixing Ratio 1:50=137-Sft or using liquid MIRAGE Ali Akbar /RANGERS Auriga 5% SC Mixing Ability-HEXTAR Ratio 1:110=205-Sft or any other 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						
	Tool Room wall	1	41.00	7.50		307.50	Sft
	Toilet wall	1	24.00	7.50		180.00	Sft
	Floor	1	8.50	10.50		89.25	Sft
		1	8.50	7.00		59.50	Sft
		1	35.00	20.00		700.00	Sft
	Columns	4	27.00	4.58		494.64	Sft
		4	7.50	6.00		180.00	Sft
					Total	2,010.89	Sft
3	Plain Cement ConcreteCement 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	41.00	2.50	0.33	33.83	Cft
	Toilet wall	1	24.00	2.50	0.33	19.80	Cft
	Columns	4	7.50	6.00	0.33	59.40	Cft
					Total	113.03	Cft
			1	1			
					Total	1.13	%Cft

# WORK SHOP CALCULATION OF QUANTITIES

	CIVIL V		1				
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
4	Pacca brick work in foundation and plinth in:-						
	Cement, sand mortar:- Ratio 1:5						
	Tool Room wall						
	Step - 1	1	41.00	1.875	0.25	19.22	Cft
	Step - 2	1	41.00	1.500	0.25	15.38	Cft
	Step - 3	1	41.00	1.125	0.25	11.53	Cft
	Step - 4	1	41.00	0.750	5.42	166.67	Cft
	Toilet wall						
	Step - 1	1	24.00	1.875	0.25	11.25	Cft
	Step - 2	1	24.00	1.500	0.25	9.00	Cft
	Step - 3	1	24.00	1.125	0.25	6.75	Cft
	Step - 4	1	24.00	0.750	5.42	97.56	Cft
					Total	337.35	Cft
					Total	3.37	%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) 1 <sup>1</sup> / <sub>2</sub> " thick (40 mm)						
	Tool Room wall	1	41.00	0.75		30.75	Sft
	Toilet wall	1	24.00	0.75		18.00	Sft
					Total	48.75	Sft
					Total	0.49	%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 <sup>3</sup> / <sub>4</sub> " thick (20 mm) Tool Room wall	1	41.00		1.00	41.00	C.f.
	Toilet wall	1	24.00		1.00	24.00	Sft Sft
		1	24.00		Total	65.00	Sft
					Total	0.65	%Sft
7	Brick work in Super Structure						
7	Pacca brick work in ground floor:-						
	i) Cement, sand mortar:- Ratio 1:5	1	41.00	0.75	10.50	200.00	0.6
	Tool Room wall	1	41.00	0.75	10.50	322.88	Cft
	Toilet wall	1	24.00	0.75	10.50	189.00	Cft
	Parapet Wall	1	59.50	0.38	2.50	55.78	Cft

# WORK SHOP CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
110.	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	527.36	Cft
					Total	5.27	%Cf
	Concerned Work						
0	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:-						
	Columns	4	7.00	5.50	1.25	192.50	Cft
						102 50	CR
					Total	192.50	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	200.00	1.00	0.50	100.00	Cft
	Sun shade	2	5.00	1.50	0.25	3.75	Cft
	Columns	4	1.25	1.50	8.00	60.00	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	1	5.00	0.75	0.75	2.81	Cft
	V-1	1	3.00	0.75	0.75	1.69	Cft
		-	2.00	0.70		/	

# WORK SHOP

# CALCULATION OF QUANTITIES

	CIVIL V	, on	-				
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
					Total	172.75	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 from bars):-						
	Deformed bars (Grade-60)					365.25	Cft
	Top Slab, lintel & Columns @ 7 lbs / Cft		7.00		=	2,556.75	lbs/cft
	-			Total	=	2,556.75	lbs/cft
				Total	=	1,160.05	Kg.
			Add 5%	Wastage.	=	58.00	Kg.
				Total	=	1,218	Kg
					Total	12.18	%kg
	Sand Filling						
10	Supplying and filling sand under floor; or plugging						
	in wells.						
	Tool Floor	1	8.50	10.50	4.00	357.00	Cft
	Toilet	1	8.50	7.00	4.00	238.00	Cft
	Work Shop Area	1	35.00	20.00	4.00	2,800.00	Cft
					Total	3,395.00	Cft
					Total	33.95	%Cft
	Brick ballast						
11	Dry rammed brick or stone ballast, 11/2" to 2"(40						
	mm to 50 mm) gauge.						
	Tool Floor	1	8.50	10.50	0.33	29.45	Cft
	Toilet	1	8.50	7.00	0.33	19.64	Cft
					Total	49.09	Cft
					Total	0.49	%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						
	Toilet	1	8.50	7.00	0.17	9.92	Cft
		-	0.00	,	,	2.74	
					Total	0.10	%Cft

# WORK SHOP

# CALCULATION OF QUANTITIES

C.,							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	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 sargodha querry to site, actual compacted						
	depth shall be considered for payment)						
	Work Shop Area	1	35.00	20.00	0.33	231.00	Cft
					Total	2.31	%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 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 sargodha querry to site, actual						
	compacted depth shall be considered for payment)	- 1	25.00	<b>2</b> 0.00	0.00	221.00	~~~
	Work Shop Area	1	35.00	20.00	0.33	231.00	Cft
					Total	2.31	%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	8.50	10.50		89.25	Sft
	Work Shop Area	1	35.00	20.00		700.00	Sft
	Ceramic Tile						

# WORK SHOP

# CALCULATION OF QUANTITIES

	CIVIL V	VOKI	•				
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 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	8.50	7.00		59.50	Sft
					Total	59.50	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 over1/2" 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	8.50		7.00	119.00	Sft
		2	7.00		7.00	98.00	Sft
					Total	217.00	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	8.50 8.50	10.50 7.00		89.25 59.50	Sft Sft
					Total	1.49	%Sft
	Cement Plaster				Iotui	100	/0010
19	Cement plaster 1:4 upto 20' (6.00 m) height:- 3/4" (20 mm) thick Tool Room wall						
		2	8.50 10.50		10.50 10.50	178.50 220.50	Sft Sft
	Toilet						~
		2	8.50		10.50	178.50	Sft
	D/d Doors and Window	2	7.00		10.50	147.00	Sft
	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

# WORK SHOP

# CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	V-1	-1	2.00		2.00	(4.00)	Sft
					<b>T</b> 1	((2.50)	~ ~ ~
					Total	662.50	Sft
					Total	6.63	%Sft
	Pointing						
20	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-						
	a) ratio 1:2						
	Outer Walls	1	59.50		14.00	833.00	Sft
						022.00	
					Total	833.00	Sft
					Total	8.33	%Sf
21	Extra cost of labour and material for red oxide pigment in cement pointing to match with the						
	colour of bricks.				Total	8.33	%Sf
	Distempering						
22	Distempering:-						
	iii) three coats						
	Tool Room wall						
		2	8.50		10.50	178.50	Sft
		2	10.50		10.50	220.50	Sft
	Toilet						
		2	8.50		10.50	178.50	Sft
		2	7.00		10.50	147.00	Sft
	Slab	1	8.50	10.50		89.25	Sft
		1	8.50	7.00		59.50	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	811.25	Sft
					Total	8.11	%Sf

# WORK SHOP

# CALCULATION OF QUANTITIES

		. 0111	-				
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
23	Providing and fixing 1 <sup>1</sup> / <sub>2</sub> " (40 mm) thick hollow flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1 <sup>1</sup> / <sub>4</sub> " (30 mm) thick and partal wood braces at about 3" (75 mm) apart and deodar wood lipping 1 <sup>1</sup> / <sub>2</sub> "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 1 <sup>1</sup> / <sub>2</sub> "x1 <sup>1</sup> / <sub>2</sub> "x <sup>1</sup> / <sub>4</sub> ", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x <sup>1</sup> / <sub>4</sub> " (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						
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 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	1	4.00		4.00	16.00	Sft
	V-1	1	2.00		2.00	4.00	Sft
		-					

# WORK SHOP

# CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit			
	Roof Insulation									
27	Single layer of tiles 9"x4 <sup>1</sup> / <sub>2</sub> "x1 <sup>1</sup> / <sub>2</sub> " (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.	1	200.00	1.00		200.00	0.6			
	Roof area	1	200.00	1.00	T - ( - 1	200.00	Sft			
					Total	200.00	Sft			
					Total	2.00	%Sft			
					Total	2.00	% <b>5</b> 11			
28	Supplying and laying polythene sheet over D.P.C.									
20	under floors and on roofs, etc.									
	ii) 500 gauge (.005" thick)				Total	200.00	Sft			
					Iotai	200.00	bit			
	Khurras									
29	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	1				1.00	Each			
	Bottom Khuras									
30	Bottom Khuras of brick masonry in cement mortar									
	1:6, 4'x2'x4 <sup>1</sup> / <sub>2</sub> " (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 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									
	substructure i.e. foundation. Approval of manufacturer must be sought prior to placing order.									
	manuracturer must be sought prior to pracing order.	1	25.00	20.00		700.00	0.0			
		1	35.00	20.00		700.00	Sft			
					Total	700.00	Sft			
					Total	/00.00	511			

# DETAILED COST ESTIMATE

# WORK SHOP

# PLUMBING WORKS

Sr.	1nd BI-Annual- 2023	Description	Unit	Quantity	Unit Rate	Amount
No.	(Jan to June) Wazirabad			C	(Rs)	(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	2,461.85	2,462
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	3,061.65	3,062
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	6,160.50	6,161
5	19-30	Providing and fixing, chromium plated mixing valve, for wash hand basin, sink or shower.	Each	1.00	2,477.00	2,477
7	19-16	Providing and fixing, chromium plated soap dish.	Each	1.00	538.60	539
9	19-20	Providing and fixing looking glass 55x40 cm (22"x16") size	Each	1.00	800.30	800
10	19-26	Providing and fixing chromium plated bib cock:-				
10	17-20	i) 2 cm (¾")	Each	1.00	1,099.75	1,100
11	19-28	Providing and fixing chromium plated tee stop cock				
		15mm (½").	Each	3.00	1,081.60	3,245
12	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	670.20	670
13	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")		1.00	1,214.75	1 215
		(12"x12").	Each	1.00	1,214.73	1,215
14	19-35-ii	Providing and fitting "P" trap:-				
		ii) 10 cm (4") glazed.	Each	2.00	323.25	647

# DETAILED COST ESTIMATE

# WORK SHOP

# PLUMBING WORKS

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		PPRC Pipe				
15	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	50.00	67.15	3,358
		(iii) (1") 32 mm	Rft	50.00	107.65	5,383
16	23/46	Valve 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	1,545.60	1,546
		iii) 1" dia	Each	1.00	1,809.60	1,810
17	19-47	<b>uPVC Pipe</b> 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)	DC	10.00	00.05	000
		(iii) 2"(60 mm)	Rft	10.00	89.25	893
		(v) 4"(110 mm)	Rft	50.00	218.00	10,900
		(vi) 6"(160 mm)	Rft	10.00	422.55	4,226

# DETAILED COST ESTIMATE

# WORK SHOP

# PLUMBING WORKS

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		HDPE Tank				
18	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.		200.00	117.30	23,460
		Total Rs. (A)				73,949
		Non-Schedule Item				
19	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	19,199.71	19,200
		Total Rs. (B)				19,200
		Total Amount Rs. (A + B)				93,149

#### DETAILED COST ESTIMATE

#### WORK SHOP

# FI ECTDICAL WORKS

		ELECTRICAL WORK	S	1		
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
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.	200.00	86.40	17,280
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)		300.00	101.60	30,480
3	C-24/10a.i	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (3.029)		800.00	27.85	22,280
4	C-24/10a.iii	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)		500.00	44.05	22,025
5	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")		10.00	296.00	2,960
6	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")		2.00	409.95	820
7	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	12.00	96.95	1,163
8	C-24/36-i	Supply and erection of 3 pin switch and Plug combined, recessed type. (5Amps)	Each	2.00	126.95	254

#### DETAILED COST ESTIMATE

#### WORK SHOP

# ELECTRICAL WORKS

Ι	ELECTRICAL WORK	.5	1		
1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
C-24/36-ii	Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)	Each	8.00	167.75	1,342
C-24/102/a	with louver and shutter made of Pak/Younas /G.F.C. i/c the cost of necessary cable and hardware for				
	(a) Plastic body (ii) 12 " dia	Each	1.00	3,380.85	3,381
	Sub Total (A)				101,985
N.S			6.00	35,035.00	210,210
N.S	following size 56" ceiling fan, complete with		1.00	7,000.00	7,000
	Sub Total (B)				217,210
	Sub Total (A+B)				319,195
	2023 (Jan to June) Wazirabad C-24/36-ii C-24/102/a N.S	Ind BI-Annual- 2023 (Jan to June) Wazirabad       Description         C-24/36-ii       Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)         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         Supply, installation and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respects         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.	Ind BI-Annual- 2023 (Jan to June) Wazirabad       Description       Unit.         C-24/36-ii       Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)       Each         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.       Each         (a) Plastic body (ii) 12 " dia       Each         N.S       Supply, installation and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respects       Each         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         Sub Total (B)       Image: Sub Total (B)       Image: Sub Total (B)	Ind BI-Annual- 2023 (Jan to June) Wazirabad       Description       Unit.       Quantity         C-24/36-ii       Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)       Each       8.00         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.       Each       1.00         Mathematical       Sub Total (A)       Image: Complete in all respects       Each       6.00         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       1.00         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       1.00	Ind BI-Annual 2023 (Jan to June) WazirabadDescriptionUnit.QuantityRate (Rs.)C-24/36-iiSupply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)Each8.00167.75C-24/102/aProviding 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.Each1.003,380.85C(a) Plastic body (ii) 12 " diaEach1.003,380.85N.SSupply, installation and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respectsEach6.0035,035.00N.SSupply, 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.1.007,000.00

# DETAILED COST ESTIMATE

# PARKING SHED (SIZE 150' x 32')

	1nd BI-Annual					
Sr. No.	2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
1	3/21/a/ii	<b>Excavation</b> Excavation in foundation of building, bridges and				
1	J/21/d/11	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	3.50	11,658.25	40,804
		Anti-Termite				
2	26/43	Spraying anti termite proofing by using liquid FMC				
2	20/43	Biflex 2.5% EC Mixing Ratio 1:50=137-Sft or using				
		liquid MIRAGE Ali Akbar /RANGERS Auriga 5%				
		SC Mixing Ability-HEXTAR Ratio 1:110=205-Sft				
		or any other 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	7,323.72	9.90	72,505
		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	2.52	29,723.50	74,903
		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:-				
			DCA	0.40.00	470 70	205 202
		(2) Type C (nominal mix 1: 2: 4)	P.Cft	840.00	470.70	395,388
		Above foundation				

#### DETAILED COST ESTIMATE

# PARKING SHED (SIZE 150' x 32')

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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: 1 <sup>1</sup> / <sub>2</sub> : 3)	P.Cft	288.00	634.75	182,808			
5	6/12/c	<b>Steel Work.</b> Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-							
		Deformed bars (Grade-60)	100kg	64.49	31,940.05	2,059,814			
6	7/30	Sand Filling Supplying and filling sand under floor; or plugging in wells.	100 Cft	192.00	2,982.00	572,544			
7	18/3/a/ (i) + 1/1	Sub Base Course 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 sargodha querry to site, actual compacted depth shall be considered for payment)	100Cft	15.84	13,687.35	216,808			

# DETAILED COST ESTIMATE

# PARKING SHED (SIZE 150' x 32')

	1. J.DI. Annual					
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
	Wazii abau	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 sargodha querry to site, actual compacted depth shall be considered for payment)	100Cft	15.84	27,419.98	434,332
		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	4,800.00	197.40	947,520
		Crush				
10	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 contratcor.	Cft	1,219.94	109.79	133,934
		Parking Shed				
11	N.S	Providing, laying and fixing in position shed as per drawings, 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 of size 10ZS 2.25X0.085 (Grade 50) and truss frame of 2- 1/2"X2-1/2"X1/2" Double angle with Gusset Plate 3/16" thick with approved Colour/ paint supported with Steel Hexagonal / round shaped Columns size 9" to 12" diameter having not less than 3/16" thick fitted with J-Type bolt <sup>3</sup> /4" diameter having shown in drawings. 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.		4,800.00	2,000.00	9,600,000
		Total Rs.				14,731,360

# PARKING SHED (SIZE 150' x 32') CALCULATION OF QUANTITIES

		om					
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	12	8.50	7.50	4.58	3,503.70	Cft
					Total	3,503.70	Cft
					Total	3.50	%oCft
	Anti-Termite						
2	Spraying anti termite proofing by using liquid FMC						
	Biflex 2.5%EC Mixing Ratio 1:50=137-Sft or						
	using liquid MIRAGE Ali Akbar /RANGERS						
	Auriga 5% SC Mixing Ability-HEXTAR Ratio						
	1:110=205-Sft or any other 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	150.00	32.00		4,800.00	Sft
	Columns	12	32.00	4.58		1,758.72	Sft
		12	8.50	7.50		765.00	Sft
					Total	7,323.72	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	12	8.50	7.50	0.33	252.45	Cft
					Total	252.45	Cft
					Total	2.52	%Cft

# PARKING SHED (SIZE 150' x 32') CALCULATION OF QUANTITIES

			•				
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	12	8.00	7.00	1.25	840.00	Cft
						0.40.00	<b>CA</b>
					Total	840.00	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: 1 <sup>1</sup> / <sub>2</sub> : 3)						
	Columns	12	1.50	2.00	8.00	288.00	Cft
					Total	288.00	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)					1,128.00	Cft
	Columns @ 12 lbs / Cft		12.00	T-4 1	=	13,536	lbs/cft lbs/cft
				Total Total	=	13,536 6,142	Kg.
			Add 5% V			307	Kg.
				Total	=	<b>6,449</b>	Kg
					Total	64.49	%kg
							~
	Sand Filling						

# PARKING SHED (SIZE 150' x 32') CALCULATION OF QUANTITIES

	CIVIL WORK										
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit				
6	Supplying and filling sand under floor; or plugging in wells.										
	Shed	1	150.00	32.00	4.00	19,200.00	Cft				
					Total	19,200.00	Cft				
					Total	192.00	%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 sargodha querry to site, actual compacted										
	depth shall be considered for payment)										
	Shed	1	150.00	32.00	0.33	1,584.00	Cft				
					Total	15.84	%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 sargodha querry to site, actual compacted depth shall be considered for payment)										
	Shed	1	150.00	32.00	0.33	1,584.00	Cft				
					Total	15.84	%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)										
	Shed	1	150.00	32.00		4,800	Sft				
		-				,	~-•				

# PARKING SHED (SIZE 150' x 32') CALCULATION OF QUANTITIES

Sr			Sr									
No.	Description	No.	Length	Width	Height	Qty.	Unit					
	Parking Shed											
10	Providing, laying and fixing in position shed as per drawings, 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 of size 10ZS 2.25X0.085 (Grade 50) and truss frame of 2- 1/2"X2-1/2"X1/2" Double angle with Gusset Plate 3/16" thick with approved Colour/ paint supported with Steel Hexagonal / round shaped Columns size 9" to 12" diameter having not less than 3/16" thick fitted with J-Type bolt <sup>3</sup> /4" diameter having shown in drawings. 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.											
	proving order.	1	150.00	32.00		4,800	Sft					

#### DETAILED COST ESTIMATE

# PARKING SHED (SIZE 150' x 32')

# ELECTRICAL WORKS

	ELECTRICAL WORKS										
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)					
		Scheduled Items (A)									
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.	400.00	101.60	40,640					
2	C-24/10a.i	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only).		200.00	27.95	22,290					
		(3.029)	Rft.	800.00	27.85	22,280					
3	C-24/10a.iii	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)		400.00	44.05	17,620					
						,					
4	C-24/10a.iv	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.036)		200.00	58.50	11,700					
5	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")		6.00	296.00	1,776					
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.		2.00	400.05	820					
		(7"x4")	Each	2.00	409.95	820					
5	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	10.00	96.95	970					
		Sub Total (A)				95,805					
		Sub Iotal (A)				23,003					

	PUNJAB CITIES PROGRAM (PCP)         DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS         SUPERVISION IN 16 CITIES OF PUNJAB         DETAILED COST ESTIMATE         PARKING SHED (SIZE 150' x 32')         ELECTRICAL WORKS									
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)				
6	N.S	Supply, installation and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respects		10.00	35,035.00	350,350				
		Sub Total (B)				350,350				
		Sub Total (A+B)				446,155				

DETAILED COST ESTIMATE

# PARKING SHED (SIZE 120' x 32')

Sr.	1nd BI-Annual- 2023				Unit Rate	Amount
No.	(Jan to June) Wazirabad	Description	Unit	Quantity	(Rs)	(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	2.92	11,658.25	34,042
		Anti-Termite				
2	26/43	Spraying anti termite proofing by using liquid FMC Biflex 2.5%EC Mixing Ratio 1:50=137-Sft or using liquid MIRAGE Ali Akbar /RANGERS Auriga 5% SC Mixing Ability-HEXTAR Ratio 1:110=205-Sft or any other 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		5,943.10	9.90	58,837
		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	2.10	29,723.50	62,419
4	6/6	Concrete Work 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 there these mentioned in				
		<ul> <li>members other than those mentioned in 6(a) (i)&amp;(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-</li> <li>(3) Type B (nominal mix 1: 2: 4)</li> <li>Above foundation</li> </ul>	P.Cft	700.00	470.70	329,490

DETAILED COST ESTIMATE

# PARKING SHED (SIZE 120' x 32')

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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: 1 <sup>1</sup> / <sub>2</sub> : 3)	P.Cft	240.00	634.75	152,340
5	6/12/c	Steel Work. 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	53.74	31,940.05	1,716,458
		Sand Filling				
6	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	153.60	2,982.00	458,035
		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 sargodha querry to site, actual compacted denth shall be appriddend for neuronation	100.00			
		depth shall be considered for payment)	100Cft	12.67	13,687.35	173,419

#### DETAILED COST ESTIMATE

# PARKING SHED (SIZE 120' x 32')

	1nd BI-Annual-					
Sr. No.	2023 (Jan to June) Wazirabad	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 sargodha querry to site, actual compacted depth shall be considered for payment)	100Cft	12.67	27,419.98	347,411
		Tuff Paver	Tooen	12.07	27,119.90	517,111
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	3,840.00	197.40	758,016
		Crush				
10	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 contratcor.	Cft	1,016.62	109.79	111,612
		Parking Shed				
11	N.S	Providing, laying and fixing in position shed as per drawings, 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 of size 10ZS 2.25X0.085 (Grade 50) and truss frame of 2- 1/2"X2-1/2"X1/2" Double angle with Gusset Plate 3/16" thick with approved Colour/ paint supported with Steel Hexagonal / round shaped Columns size 9" to 12" diameter having not less than 3/16" thick fitted with J-Type bolt <sup>3</sup> /4" diameter having shown in drawings. 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.	S.A.	2 0 10 00	2 000 00	7 (00 000
			Sft	3,840.00	2,000.00	7,680,000
		No of One unit cost				11,882,079
		No of two unit cost				23,764,159

# PARKING SHED (SIZE 120' x 32') CALCULATION OF QUANTITIES

CIVIL V	WORK
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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	10	8.50	7.50	4.58	2,919.75	Cft
					Total	2,919.75	Cft
					Total	2.92	%oCft
2	Anti-Termite Spraying anti termite proofing by using liquid FMC						
Ζ	Biflex 2.5%EC Mixing Ratio 1:50=137-Sft or						
	using liquid MIRAGE Ali Akbar /RANGERS						
	Auriga 5% SC Mixing Ability-HEXTAR Ratio						
	1:110=205-Sft or any other 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	120.00	32.00		3,840.00	Sft
	Columns	10	32.00	4.58		1,465.60	Sft
		10	8.50	7.50		637.50	Sft
					Total	5,943.10	Sft
						,	
2	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	10	8.50	7.50	0.33	210.38	Cft
					Total	210.38	Cft
					Tatal	3 10	0/ 00
					Total	2.10	%Cft

# PARKING SHED (SIZE 120' x 32') CALCULATION OF QUANTITIES

	CIVIL WORK									
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	10	8.00	7.00	1.25	700.00	Cft			
					Total	700.00	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: 1 <sup>1</sup> / <sub>2</sub> : 3)									
	Columns	10	1.50	2.00	8.00	240.00	Cft			
					Total	240.00	Cft			
	Steel Work.				1000	210000	on			
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)					940.00	Cft			
	Columns @ 12 lbs / Cft		12.00		=	11,280	lbs/cft			
				Total	=	11,280	lbs/cft			
				Total	=	5,118	Kg.			
			Add 5% V	Wastage.	=	256	Kg.			
				Total	=	5,374	Kg			
					Total	53.74	%kg			
	Sand Filling					2017 1	, , , , , , , , , , , , , , , , , , , ,			

# PARKING SHED (SIZE 120' x 32') CALCULATION OF QUANTITIES

Sr.		Na	I on ~4k	XX/: J41-	Hoicht	Of	I
No.	Description	No.	Length	Width	Height	Qty.	Unit
6	Supplying and filling sand under floor; or plugging in wells.						
	Shed	1	120.00	32.00	4.00	15,360.00	Cft
					Total	15,360.00	Cft
					Total	153.60	0/ Cf
					Total	155.00	%Cf
	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 sargodha querry to site, actual compacted depth shall be considered for payment) Shed	1	120.00	32.00	0.33	1,267.20	Cft
		1	120.00	32.00	0.55	1,207.20	Cit
					Total	12.67	%Cf
	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 sargodha querry to site, actual compacted depth shall be considered for payment)			22.00	0.02		
	Shed	1	120.00	32.00	0.33	1,267.20	Cft
					Total	12.67	%Cf
					- 0141	12001	7001
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)						
	Shed	1	120.00	32.00		3,840	Sft
		-				, - · ·	

# PARKING SHED (SIZE 120' x 32') CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
110.	Parking Shed						
10	Providing, laying and fixing in position shed as per drawings, 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 of size 10ZS 2.25X0.085 (Grade 50) and truss frame of 2- 1/2"X2-1/2"X1/2" Double angle with Gusset Plate 3/16" thick with approved Colour/ paint supported with Steel Hexagonal / round shaped Columns size 9" to 12" diameter having not less than 3/16" thick fitted with J-Type bolt <sup>3</sup> /4" diameter having shown in drawings. 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	120.00	32.00		3,840	Sft

# DETAILED COST ESTIMATE

#### PARKING SHED (SIZE 120' x 32')

# ELECTRICAL WORKS

	ELECTRICAL WORKS									
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)				
1	0.04/2 ***	Scheduled Items (A)								
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	101.60	30,480				
2	C-24/10a.i	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe / M.S. conduit / G.I pipe / wooden strip batten/wooden casing an capping / G.I. wire / trenches (rate for		650.00	27.95	10 102				
		cables only). (3.029)	Rft.	650.00	27.85	18,103				
3	C-24/10a.iii	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit / G.I pipe / wooden strip batten/wooden casing an capping / G.I. wire/trenches (rate for cables only). (7.029)		300.00	44.05	13,215				
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. $(7"x4")$		2.00	409.95	820				
5	C 24/32 ii	Supply and arraction of switches 10/15 Amp								
5	C-24/32-11	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	10.00	96.95	970				
		Sub Total (A)				63,587				
6	N.S	Supply, installation and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respects		8.00	35,035.00	280,280				
		Sub Total (B)				280,280				
		Sub Total (A+B)				343,867				
		No of One unit cost				343,867				
		No of two unit cost				687,734				

#### DETAILED COST ESTIMATE

#### PARKING SHED (SIZE 90' x 32')

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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	11,658.25	27,280
2	26/43	Anti-Termite Spraying anti termite proofing by using liquid FMC Biflex 2.5%EC Mixing Ratio 1:50=137-Sft or using				
		liquid MIRAGE Ali Akbar /RANGERS Auriga 5% SC Mixing Ability-HEXTAR Ratio 1:110=205-Sft or any other 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		4,562.48	9.90	45,169
		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	29,723.50	49,935
4	6/6	<b>Concrete Work</b> 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	560.00	470.70	263,592

### DETAILED COST ESTIMATE

PARKING SHED (SIZE 90' x 32')

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		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: 1 <sup>1</sup> / <sub>2</sub> : 3)	P.Cft	192.00	634.75	121,872
		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	42.99	31,940.05	1,373,103
		Sand Filling				
6	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	115.20	2,982.00	343,526
		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 sargodha querry to site, actual compacted				
		depth shall be considered for payment)	100Cft	9.50	13,687.35	130,030
				,	- ,	,

### DETAILED COST ESTIMATE

### PARKING SHED (SIZE 90' x 32')

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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 sargodha querry to site, actual				
		compacted depth shall be considered for payment)	100Cft	9.50	27,419.98	260,490
9	10/41	Tuff PaverProviding 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	197.40	568,512
		Crush				
10	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 contratcor.	Cft	813.29	109.79	89,289
		Parking Shed				
11	N.S	Providing, laying and fixing in position shed as per drawings, 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 of size 10ZS 2.25X0.085 (Grade 50) and truss frame of 2-1/2"X2/ 1/2"X1/2" Double angle with Gusset Plate 3/16" thick with approved Colour/ paint supported with Steel Hexagonal / round shaped Columns size 9" to 12" diameter having not less than 3/16" thick fitted with J-Type bolt <sup>3</sup> / <sub>4</sub> " diameter having shown in drawings. 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	2,000.00	5,760,000
		Total Amount Rs.				9,032,799

### PARKING SHED (SIZE 90' x 32') CALCULATION OF QUANTITIES

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 Total	2,335.80 2,335.80	Cft Cft
					Total	2.34	%oCf
	Anti-Termite						
2	Spraying anti termite proofing by using liquid FMC Biflex 2.5%EC Mixing Ratio 1:50=137-Sft or using liquid MIRAGE Ali Akbar /RANGERS Auriga 5% SC Mixing Ability-HEXTAR Ratio 1:110=205-Sft or any other 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
			1	1			

### PARKING SHED (SIZE 90' x 32') CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
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: 1 <sup>1</sup> / <sub>2</sub> : 3)						
	Columns	8	1.50	2.00	8.00	192.00	Cft
					Total	192.00	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)					752.00	Cft
	Columns @ 12 lbs / Cft		12.00		=	9,024	lbs/cft
				Total Total	=	9,024	lbs/cft
			Add 5% V			4,094 205	Kg. Kg.
				Total	=	4,299	Kg
					Total	42.99	%kg
							-

### PARKING SHED (SIZE 90' x 32') CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
6	Supplying and filling sand under floor; or plugging in wells.						
	Shed	1	90.00	32.00	4.00	11,520.00	Cft
					Total	11,520.00	Cft
					Total	115.20	%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 sargodha querry to site, actual compacted depth shall be considered for payment)						
	Shed	1	90.00	32.00	0.33	950.40	Cft
		-	20.00	52.00	0.00	200.10	on
					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 sargodha querry to site, actual compacted depth shall be considered for payment) Shed		90.00	32.00	0.33	950.40	Cft
		1	70.00	52.00	0.55	750.40	Cit
					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)						

### PARKING SHED (SIZE 90' x 32') CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Shed	1	90.00	32.00		2,880	Sft
	Parking Shed						
10	Providing, laying and fixing in position shed as per drawings, 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 of size 10ZS 2.25X0.085 (Grade 50) and truss frame of 2- 1/2"X2-1/2"X1/2" Double angle with Gusset Plate 3/16" thick with approved Colour/ paint supported with Steel Hexagonal / round shaped Columns size 9" to 12" diameter having not less than 3/16" thick fitted with J-Type bolt <sup>3</sup> / <sub>4</sub> " diameter having shown in drawings. 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
		1	90.00	32.00		2,000	

### DETAILED COST ESTIMATE

### PARKING SHED (SIZE 90' x 32')

### ELECTRICAL WORKS

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
		Schodulod Itoms (A)				
1	C-24/3-iii	<u>Scheduled Items (A)</u> Supply and erection of PVC pipe for wiring recessed				
1	C 2 # 5 III	in walls, including bends, inspection joints, boxes,				
		pull boxes, hook, cutting and repair surface etc.	Rft.	200.00	101.60	20,220
		completed with all specified. (25 mm i/d)	KII.	200.00	101.00	20,320
2	C-24/10a.i	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (3.029)		500.00	27.85	13,925
3	C-24/10a.iii	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only).		200.00	44.05	0.010
		(7.029)	Rft.	200.00	44.05	8,810
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	409.95	820
5	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	6.00	96.95	582
		Sub Total (A)				44,457
6	N.S	Supply, installation and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respects		6.00	35,035.00	210,210
		Sub Total (B)				210,210
		Sub Total (A+B)				254,667

### DETAILED COST ESTIMATE

PARKING SHED (SIZE 60' x 32')

	CIVIL WORK									
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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	1.75	11,658.25	20,402				
2	26/43	Anti-Termite Spraying anti termite proofing by using liquid FMC Biflex 2.5%EC Mixing Ratio 1:50=137-Sft or using								
		liquid MIRAGE Ali Akbar /RANGERS Auriga 5% SC Mixing Ability-HEXTAR Ratio 1:110=205-Sft or any other 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		3,181.86	9.90	31,500				
						,				
		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	1.26	29,723.50	37,452				
4	6/6	<b>Concrete Work</b> 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	420.00	470.70	197,694				
	i.					,				

### DETAILED COST ESTIMATE

PARKING SHED (SIZE 60' x 32')

		CIVIL WORK				
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		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: 1 <sup>1</sup> / <sub>2</sub> : 3)	P.Cft	144.00	634.75	91,404
		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	32.24	31,940.05	1,029,747
		Sand Filling				
6	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	76.80	2,982.00	229,018
		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 sargodha querry to site, actual compacted depth shall be considered for payment)		6.34	13 697 35	86 778
		depth shall be considered for payment)	100Cft	6.34	13,687.35	86,778

### DETAILED COST ESTIMATE

### PARKING SHED (SIZE 60' x 32')

		CIVIL WORK				
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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 sargodha querry to site, actual compacted depth shall be considered for payment)	100Cft	6.34	27,419.98	173,843
		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	1,920.00	197.40	379,008
						,
10	1/1	Crush 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 contratcor.	Cft	609.97	109.79	66,967
		Parking Shed				
11	N.S	Providing, laying and fixing in position shed as per drawings, 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 of size 10ZS 2.25X0.085 (Grade 50) and truss frame of 2-1/2"X2- 1/2"X1/2" Double angle with Gusset Plate 3/16" thick with approved Colour/ paint supported with Steel Hexagonal / round shaped Columns size 9" to 12" diameter having not less than 3/16" thick fitted with J-Type bolt <sup>3</sup> / <sub>4</sub> " diameter having shown in drawings. 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	1,920.00	2,000.00	3,840,000
		Total Amount Rs.				6,183,812

### PARKING SHED (SIZE 60' x 32') CALCULATION OF QUANTITIES

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	6	8.50	7.50	4.58 Total	1,751.85 1,751.85	Cft Cft
					Total	1.75	%oCft
	Anti-Termite						
2	Spraying anti termite proofing by using liquid FMC Biflex 2.5%EC Mixing Ratio 1:50=137-Sft or using liquid MIRAGE Ali Akbar /RANGERS Auriga 5% SC Mixing Ability-HEXTAR Ratio 1:110=205-Sft or any other 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	60.00	32.00		1,920.00	Sft
	Columns	6	32.00	4.58		879.36	Sft
		6	8.50	7.50		382.50	Sft
					Total	3,181.86	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	6	8.50	7.50	0.33 Total	126.23 126.23	Cft Cft
					- 0141		
					Total	1.26	%Cft

### PARKING SHED (SIZE 60' x 32') CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
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:-						
			0.00	7.00	1.05	120.00	
	Columns	6	8.00	7.00	1.25	420.00	Cft
					Total	420.00	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: 1 <sup>1</sup> / <sub>2</sub> : 3)						
	Columns	6	1.50	2.00	8.00	144.00	Cft
					Total	144.00	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)					564.00	Cft
	Columns @ 12 lbs / Cft		12.00		=	6,768	lbs/cft
				Total	=	6,768	lbs/cft
				Total	=	3,071	Kg.
			Add 5% V	-		154	Kg.
				Total	=	3,224	Kg
					Total	32.24	%kg

### PARKING SHED (SIZE 60' x 32') CALCULATION OF QUANTITIES

<u>No.</u> 6	Supplying and filling sand under floor; or plugging				Height	Qty.	
	in wells.						
	Shed	1	60.00	32.00	4.00	7,680.00	Cft
					Total	7,680.00	Cft
					Total	76.80	%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 sargodha querry to site, actual compacted depth shall be considered for payment)						
	Shed	1	60.00	32.00	0.33	633.60	Cft
					Total	6.34	%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 sargodha querry to site, actual compacted depth shall be considered for payment) Shed	1	60.00	32.00	0.33	633.60	Cft
	Snea	1	00.00	52.00	0.55	055.00	Cit
					Total	6.34	%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						

### PARKING SHED (SIZE 60' x 32') CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Shed	1	60.00	32.00		1,920	Sft
	Parking Shed						
10	Providing, laying and fixing in position shed as per drawings, 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 of size 10ZS 2.25X0.085 (Grade 50) and truss frame of 2- 1/2"X2-1/2"X1/2" Double angle with Gusset Plate 3/16" thick with approved Colour/ paint supported with Steel Hexagonal / round shaped Columns size 9" to 12" diameter having not less than 3/16" thick fitted with J-Type bolt <sup>3</sup> /4" diameter having shown in drawings. 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.		60.00	32.00		1,920	Sft

### DETAILED COST ESTIMATE

### PARKING SHED (SIZE 60' x 32')

### ELECTRICAL WORKS

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
		Scheduled Items (A)				
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.	150.00	101.60	15,240
2	C-24/10a.i	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (3.029)		400.00	27.85	11,140
3	C-24/10a.iii	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/ M.S. conduit /G.I pipe /wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)		200.00	44.05	8,810
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	409.95	820
5	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	4.00	96.95	388
		Sub Total (A)				36,398
6	N.S	Supply, installation and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respects		4.00	35,035.00	140,140
		Sub Total (B)				140,140
		Sub Total (A+B)				176,538
						- ,

### DETAILED COST ESTIMATE

# WASHING PIT

~	1nd BI-Annual-					
Sr. No.	2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Excavation				
1	3/21/a/ii	Excavation Excavation in foundation of building, bridges and				
1	J/21/0/11	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	11,658.25	11,192
		Sand Filling				
2	7/30	Supplying and filling sand under floor; or				
		plugging in wells.	100Cft	1.12	2,982.00	3,340
	<i></i>	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	44,303.50	25,253
		(f) Ratio 1: 2: 4	100 Cft	0.15	38,723.50	5,809
		(i) Ratio 1: 4: 8	100 Cft	1.12	29,723.50	33,290
		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	33,293.40	367,559
		Plaster				
5	11/8/b	Cement plaster 1:3 upto 20' (6.00 m) height:-	100 00		2 (20 10	12.002
		b) <sup>1</sup> /2" (13 mm) thick	100 Sft	3.32	3,639.10	12,082
		Magaia flagwing				
6	10/22/a	<b>Mosaic flooring</b> 1 <sup>1</sup> / <sub>2</sub> "(40 mm) thick mosaic flooring, consisting of				
0	10/22/a	$\frac{1}{2}$ (40 mm) there mosaic mosaic moning, consisting of $\frac{1}{2}$ (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	21,681.35	19,080

### DETAILED COST ESTIMATE

# WASHING PIT

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		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 $\frac{1}{2}''(13 \text{ mm})$ thick cement plaster 1:3, including rubbing and polishing, complete with finishing:				
		(a) using grey cement:				
		ii) <sup>1</sup> /2"(13 mm) thick	100 Sft	3.32	23,268.60	77,252
		Crush				
8	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 contratcor.	Cft	167.22	109.79	18,359
		Total Amount Rs.				573,215

### WASHING PIT CALCULATION OF QUANTITIES

Sr.		NT	T (I	<b>XX</b> 7• 141	<b>TT</b> • 14	0	<b>T</b> T •4
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.	1	35.00	9.67	2.83	958.93	Cft
	Washing Pit	1	35.00	9.07	2.83	958.95	Cft
					Total	0.96	%oCft
					10tai	0.70	700011
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):				0.05		
	(c) Ratio 1: 1 <sup>1</sup> / <sub>2</sub> : 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
	(1) Kallo 1. 2. 4	1	35.00	2.50	0.17	14.50	Cit
					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	1	0.00	1.075	0.50	0.44	<u> </u>
	Step - 1	1	9.00	1.875 1.500	0.50	<u>8.44</u> 6.75	Cft Cft
	Step - 2	1	9.00	1.500	0.50 5.50	55.69	Cft Cft
	Step - 3 Side walls	1 2	9.00	3.250	6.00	741.00	Cft
		2	15.00	3.250	3.00	292.50	Cft
			10.00	5.250	Total	1,104.38	Cft
						,	
					Total	11.04	%Cft
	Plaster						

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
5	Cement plaster 1:3 upto 20' (6.00 m) height:-						
	b) <sup>1</sup> / <sub>2</sub> " (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	<ul> <li>1½"(40 mm) thick mosaic flooring, consisting of ½</li> <li>"(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 :-</li> <li>(a) using grey cement</li> </ul>		35.00	2.50		87.50	Sft
					Total	0.88	%Sft
					Total	0.00	/0010
	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

### DETAILED COST ESTIMATE

### **GENERATOR PAD**

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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	11,658.25	933							
		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	29,723.50	5,053							
		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	470.70	37,656							
4	6/12/c	Steel Work. 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	31,940.05	97,417							

### DETAILED COST ESTIMATE

## GENERATOR PAD

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Theremopore Sheet				
5	6/35	Providing and fixing theremopore (foamed polythene) sheet in horizontal and vertical expansion joints:				
		a) 1" (25 mm) thick thermopore sheet	Sft	34.58	21.15	731
		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, revitting, handling, assembling and fixing, but excluding erection in position.	100Kg	0.45	33,389.40	15,078
			Toong	0.15	33,307.10	15,070
7	25/11	Erection and fitting in position iron trusses, staging of water tanks, etc.	100Kg	0.45	1,414.70	639
		Crush				
8	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 contratcor.	Cft	86.51	109.79	9,498
		Total Amount Rs.				167,005

### GENERATOR PAD CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
1	<b>Excavation</b> 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
						0.00	
					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
		1	0.04	5.64	Total	17.04	Cft
					Total	17.04	Cit
					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
		1	0.00	5.00	2.00	00.00	CII
					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
	Theremopore Sheet						
5	Providing and fixing theremopore (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" x1-1/2"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

### DETAILED COST ESTIMATE

# PUMP PAD

	CIVIL WORK									
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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	11,658.25	117				
		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	29,723.50	892				
		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	470.70	3,766				
		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	31,940.05	9,582				

	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.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)				
		Crush								
5	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 contratcor.		9.88	109.79	1,085				
				7.00	107.17	1,005				
		Total Amount Rs.				15,441				

### PUMP PAD

# CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
1	<b>Excavation</b> 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.	1	2.50	2.50	1.00	6.25	Cft
	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
3	<b>Concrete Work</b> 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.):-						
	<b>In Foundation</b> (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

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)					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

### DETAILED COST ESTIMATE

# SEPTIC TANK

	1nd BI-Annual-					
Sr. No.	2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
1	3/21/a/ii	Excavation				
1	5/21/a/11	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	11,658.25	8,277
		•				
		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	38,723.50	13,166
		(i) Ratio 1: 4: 8	100 Cft	0.55	29,723.50	16,348
		Brick work				
3	7/7/i	Pacca brick work other than building upto 10ft. (3				
-	., ., =	m)				
		Ratio 1:3	100 Cft	4.21	35,897.90	151,130
		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.):-				
		Taoneation 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	580.05	29,365

### DETAILED COST ESTIMATE

### SEPTIC TANK CIVIL WORK

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
	vv azii abau	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	31,940.05	40,424
		Cement Pointing				
6	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-			0 == - 10	
		a) ratio 1:2	100Sft	5.19	3,776.40	19,600
		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	12,474.55	24,949
8	21/13	Angle Iron Step Providing and fixing 1 <sup>1</sup> / <sub>4</sub> "x1 <sup>1</sup> / <sub>4</sub> "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	610.65	8,549
		Crush				
9	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 contratcor.		126.59	109.79	13,898
		Total Amount Rs.				325,707

### SEPTIC TANK

# CALCULATION OF QUANTITIES

Sr.							
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.	-	10.50	0			
	Septic tank	1	13.50	7.50	7.00	708.75	Cft
					Total	708.75	Cft
						o <b>=</b> 4	
					Total	0.71	%oCft
	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	0/ 64
					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
	Type C (nominal mix 1. 2. 4)	1	13.30	7.50	0.50	50.05	CII
	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) hiehgt:-						
	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.
0	Angle Iron Step						
8	Providing and fixing 1 <sup>1</sup> / <sub>4</sub> "x1 <sup>1</sup> / <sub>4</sub> "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.
ļ		14				14.00	1105.

### DETAILED COST ESTIMATE

# SOAKAGE WELL

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)	
		Excavation					
1	22/1	Excavation of well in dry upto 20'(6 metre) below					
		ground level, and disposal of soil within one chain					
		(30 metre)					
		a) in ordinary soil or sand :-					
		i) from 0' to 5' (o to 1.5 m) depth	1000Cft	0.17	8,238.40	1,367	
		ii) from 5.1' to 10' (1.5 to 3.0 metre) depth	1000Cft	0.17	8,604.30	1,428	
		iii) from 10.1' to 15' (3.0 to 4.5 metre) depth	1000Cft	0.17	9,679.80	1,606	
		iv) from 15.1' to 20' (4.5 metre to 6.0 metre) depth					
			1000Cft	0.17	11,110.20	1,844	
		Brick work					
2	7/7/i	Pacca brick work other than building upto 10ft. (3					
		m) Ratio 1:3					
		0 to 10 Height / depth	100 Cft	1.35	35,897.90	48,462	
		10 to 20 Height / depth	100 Cft	1.15	37,376.30	42,983	
3	7/10	Extra for pacca brick work in steining of wells or					
		any other circular masonry.	100 Cft	2.50	3,028.80	7,572	
					-		
		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.):-					
		raonearion and praemig 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:-					
			P.Cft	43.35	580.05	25 145	
		Type C (nominal mix 1: 2: 4)	I.CII	43.33	380.03	25,145	

### DETAILED COST ESTIMATE

# SOAKAGE WELL

Sr. No.       2023 (Man to June)       Description       Unit       Quantity       Unit kate (Rs)       Image: Comparison of the second secon	G	1nd BI-Annual-					
No.       Wazirabad       (US)         Steel Work.	Sr. No	2023 (Jan to June)	Description	Unit	Quantity	Unit Rate	Amount (Rs)
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):-         0       Deformed bars (Grade-60)       100kg       1.08       31,940.05         0       Cement Pointing       0       0       0         6       11/18/a       Cement Pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-       0       0       0         7       21/16       Providing and fixing 6" thick R.C.C. manhole cover with tee shaped C.I. frame of 22" 1/d (frame weighing 37.324 Kg. or one maund as per Standard Drawing STD/PD No. 6, of 1977, complete in all respect.       0       16,068.40         8       6/2       Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.       0       16,068.40         9       1/1       Carriage of 100 cft of all materials like stone aggregate spawl kanker lime surkhi et or 150 cft of timber by truck or by any other means owned by the contratcor.       0       109.79	110.	· /				(113)	(113)
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):-       Image: Concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding of steel reinforcement (also includes removal of rust from bars):-         Image: Deformed bars (Grade-60)       100kg       1.08       31,940.05         Image: Cement Pointing       Image: Cement Pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-       Image: Cement Pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-       Image: Cement Pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-       Image: Cement Pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-         Image: Cement Pointing 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.       Image: Cement Pointing struck or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.       Image: Cement Pointing Struck or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.         9       1/1       Carriage of 100 cft of all materials like stone aggregate spawl kanker lime surkhi et or 150 cft of timber by truck or by any other means owned by the contratcor.       Image: Cft       38.15       109.79							
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):-       100kg       1.08       31,940.05         Deformed bars (Grade-60)       100kg       1.08       31,940.05         Cement Pointing	5	6/12/c					
cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-       -         Deformed bars (Grade-60)       100kg       1.08       31,940.05         Cement Pointing       -       -       -         6       11/18/a       Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-       -       -         a) ratio 1:2       100sft       3.34       3,776.40 <b>RCC Manhole Cover</b> -       -       -         7       21/16       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       16,068.40         8       6/2       Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.       -       -         9       1/1       Carriage of 100 cft of all materials like stone aggregate spawl kanker lime surkhi et or 150 cft of timber by truck or by any other means owned by the contratcor.       -       -       -							
binding of steel reinforcement (also includes removal of rust from bars):-       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
removal of rust from bars):-Image: constraint of the system							
Deformed bars (Grade-60)       100kg       1.08       31,940.05         Cement Pointing       Image: Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-       Image: Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-         a) ratio 1:2       100Sft       3.34       3,776.40         RCC Manhole Cover       Image: 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.       Image: Cement Pointing STD/PD No. 6, of 1977, complete in all respect.         Brick Ballast       Image: Cement Pointing STD/PD No. 6, of 1977, complete in all respect.       Image: Cement Pointing STD/PD No. 6, of 1977, complete in all respect.         Brick Ballast       Image: Cement Pointing STD/PD No. 6, of 1977, complete in all respect.       Image: Cement Pointing STD/PD No. 6, of 1977, complete in all respect.         Brick Ballast       Image: Cement Pointing STD/PD No. 6, of 1977, complete in all respect.       Image: Cement Pointing STD/PD No. 6, of 1977, complete in all respect.         Brick Ballast       Image: Cement Pointing STD/PD No. 6, of 1977, complete in all respect.       Image: Cement Pointing STD/PD No. 6, of 1977, complete in all respect.         9       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 contratcor.       Image: Cement Pointing Point							
Cement Pointing       Cement pointing struck joints, on walls, upto 20'         6       11/18/a       Cement pointing struck joints, on walls, upto 20'         a) ratio 1:2       100Sft       3.34         7       21/16       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         8       6/2       Dry rammed brick or stone ballast, 1½" to 2"( 40 mm to 50 mm) gauge.       Each       0.17       9,900.00         9       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 contratcor.       Cft       38.15       109.79				1001	1.00	21.040.05	24 (15
6       11/18/a       Cement pointing struck joints, on walls, upto 20 (6.00 m) hiehgt:-       a) ratio 1:2       100Sft       3.34       3,776.40         a) ratio 1:2       100Sft       3.34       3,776.40       a)         7       21/16       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       16,068.40         8       6/2       Dry rammed brick or stone ballast, 1½" to 2"( 40 mm to 50 mm) gauge.       Each       0.17       9,900.00         9       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 contratcor.       Cft       38.15       109.79			Deformed bars (Grade-60)	TOOKg	1.08	31,940.05	34,615
6       11/18/a       Cement pointing struck joints, on walls, upto 20 (6.00 m) hiehgt:-       a) ratio 1:2       100Sft       3.34       3,776.40         a) ratio 1:2       100Sft       3.34       3,776.40       a)         7       21/16       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       16,068.40         8       6/2       Dry rammed brick or stone ballast, 1½" to 2"( 40 mm to 50 mm) gauge.       Each       0.17       9,900.00         9       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 contratcor.       Cft       38.15       109.79			Cement Pointing				
(6.00 m) hiehgt:-       100Sft       3.34       3,776.40         a) ratio 1:2       100Sft       3.34       3,776.40         RCC Manhole Cover       100Sft       3.34       3,776.40         7       21/16       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       16,068.40         8       6/2       Dry rammed brick or stone ballast, 1½" to 2"( 40 mm to 50 mm) gauge.       Each       0.17       9,900.00         9       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.       Cft       38.15       109.79	6	11/18/a	<u> </u>				
RCC Manhole Cover       Image: Cover with the 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       16,068.40         Brick Ballast       Image: Cover With the 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       16,068.40         Brick Ballast       Image: Cover With the state of 20 mm to 50 mm) gauge.       Image: Cover With the state of 2.00       16,068.40         8       6/2       Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.       Image: Cover With the state of 2.00       16,068.40         9       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 contratcor.       Image: Cover With the state of 2.00       Image: Cover With the state of 2.00         9       1/1       Carriage of 100 cft of by any other means owned by the contratcor.       Cft       38.15       109.79							
7       21/16       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       16,068.40         8       6/2       Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.       Each       0.17       9,900.00         9       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.       Cft       38.15       109.79			a) ratio 1:2	100Sft	3.34	3,776.40	12,613
7       21/16       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       16,068.40         8       6/2       Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.       Each       0.17       9,900.00         9       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.       Cft       38.15       109.79							
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.Each2.0016,068.40Brick BallastImage: Complete in all respect.Each2.0016,068.40Brick BallastImage: Complete in all respect.Each0.179,900.00CrushImage: CrushImage: CrushImage: CrushImage: CrushImage: Crush91/1Carriage 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 contratcor.Cft38.15109.79							
weighing 37.324 Kg. or one maund as per Standard Drawing STD/PD No. 6, of 1977, complete in all respect.       Each       2.00       16,068.40         Brick Ballast       Image: Complete in all respect.       Each       0.17       9,900.00         8       6/2       Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.       Each       0.17       9,900.00         9       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 contratcor.       Cft       38.15       109.79	7	21/16	<u> </u>				
Standard Drawing STD/PD No. 6, of 1977, complete in all respect.Each2.0016,068.40Brick Ballast							
Image: complete in all respect.Each2.0016,068.40Image: complete in all respect.Image:							
Brick Ballast       Image: Second secon					2 00	16.060.40	22,127
8       6/2       Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.       Each       0.17       9,900.00         Image: Crush			complete in all respect.	Each	2.00	16,068.40	32,137
mm to 50 mm) gauge.Each0.179,900.00CrushImage: Crush91/1Carriage 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 contratcor.Cft38.15109.79			Brick Ballast				
Image: Crush       Image: Crush <td< th=""><td>8</td><td>6/2</td><td>Dry rammed brick or stone ballast, 11/2" to 2"(40</td><td></td><td></td><td></td><td></td></td<>	8	6/2	Dry rammed brick or stone ballast, 11/2" to 2"(40				
9       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 contratcor.       Cft       38.15       109.79			mm to 50 mm) gauge.	Each	0.17	9,900.00	1,683
9       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 contratcor.       Cft       38.15       109.79			Crush				
aggregate spawl kanker lime surkhi etc or 150 cft of timber by truck or by any other means owned by the contratcor. Cft 38.15 109.79	9	1/1					
of timber by truck or by any other means owned by the contratcor.     Cft     38.15     109.79	Í	1/1					
by the contratcor.         Cft         38.15         109.79							
Total Amount Rs.					38.15	109.79	4,188
Total Amount Rs.							
			Total Amount Rs.				215,643

### SOAKAGE WELL CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit		
	Excavation								
1	Excavation of well in dry upto 20'(6 metre) below								
	ground level, and disposal of soil within one chain								
	(30 metre)								
	i) from 0' to 5' (o to 1.5 m) depth	1	33.19	1.00	5.00	0.17	Cft		
	ii) from 5.1' to 10' (1.5 to 3.0 metre) depth	1	33.19	1.00	5.00	0.17	Cft		
	iii) from 10.1' to 15' (3.0 to 4.5 metre) depth	1	33.19	1.00	5.00	0.17	Cft		
	iv) from 15.1' to 20' (4.5 metre to 6.0 metre) depth	1	33.19	1.00	5.00	0.17	Cft		
	Brick work								
2	Pacca brick work other than building upto 10ft. (3 m)								
	Ratio 1:3								
	0 to 10 Height / depth								
	Outer wall	1	18.07	0.75	10.00	135.50	Cft		
					Total	135.50	Cft		
					Total	1.35	%C		
	10 to 20 Height / depth								
	Outer wall	1	18.07	0.75	8.50	115.17	Cft		
					Total	115.17	Cft		
					<b>T</b> ( )	1 1 5			
					Total	1.15	%Ci		
	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.):-								
	(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	33.19	1.00	0.50	16.59	Cft		
	Mid Slab	1	33.19	1.00	0.50	16.59	Cft		
	Bottom Beam	1	18.07	0.75	0.75	10.16	Cft		
					Total	43.35	Cft		
	Steel Work.								

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
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)		2.50 kg/	cft		108.37	Kg
					Total	1.08	%Kg
	Cement Pointing						
5	Cement pointing struck joints, on walls, upto 20' (6.00						
5	m) hiehgt:-						ĺ
	a) ratio 1:2	1	18.07		18.50	334.23	Sft
		1	10.07		Total	334.23	Sft
					Total	554.25	SIL
					Total	3.34	%Sft
	RCC Manhole Cover						
6	Providing and fixing 6" thick R.C.C. manhole cover						
Ŭ	with tee shaped C.I. frame of 22" I/d (frame weighing						Í
	37.324 Kg. or one maund as per Standard Drawing						ĺ
	STD/PD No. 6, of 1977, complete in all respect.						ĺ
		2				2.00	Nos.
							11051
	Brick Ballast						
7	Dry rammed brick or stone ballast, 11/2" to 2"(40 mm						
	to 50 mm) gauge.						
		1	33.19	1.00	0.5	16.59	Cft
					Total	0.17	%Cft
							/ • • • • •

### DETAILED COST ESTIMATE

# EXTERNAL WORK

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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	7.12	11,658.25	83,007
		•				
		Anti-Termite				
2	26/43	Spraying anti termite proofing by using liquid				
		FMC Biflex 2.5%EC Mixing Ratio 1:50=137-Sft				
		or using liquid MIRAGE Ali Akbar /RANGERS				
		Auriga 5% SC Mixing Ability-HEXTAR Ratio				
		1:110=205-Sft or any other 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		0.000.00	0.00	00.051
-		Incharge	Sft	8,086.00	9.90	80,051
		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	9.39	29,723.50	279,104
		Brick work in Foundation				
4	7/4/i	Pacca brick work in foundation and plinth in:-				
4	//4/1	Cement, sand mortar:- Ratio 1:5	100 Cft	96.12	32,358.60	3,110,309
		Cement, sand mortal Katio 1.5	100 Cit	90.12	32,338.00	3,110,309
		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) 1 <sup>1</sup> / <sub>2</sub> " thick (40 mm)	100 Sft	7.50	9,272.70	69,545

#### DETAILED COST ESTIMATE

# EXTERNAL WORK

	1nd DT Asses	1				
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
	wazii abau	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 <sup>3</sup> / <sub>4</sub> " thick (20 mm)	100 Sft	10.00	6,932.65	69,327
		Brick work in Super Structure				
7	7/5	Pacca brick work in ground floor:-				
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	64.01	34,761.00	2,225,052
		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	73.50	470.70	34,596
		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	123.47	556.05	68,655
		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	11.26	31,940.05	359,645

#### DETAILED COST ESTIMATE

# EXTERNAL WORK

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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	82.52	4,650.85	383,788		
		Pointing						
11	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-						
		a) ratio 1:2	100 Sft	82.52	3,776.40	311,629		
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	82.52	822.00	67,831		
		Distempering						
13	11/23	Distempering:-						
10		iii) three coats	100 Sft	80.00	1,446.35	115,708		
		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 <sup>3</sup> / <sub>4</sub> " (20 mm) square bars 4" (100 mm) centre to centre.	Sft	240.00	1,998.60	479,664		
		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.	100 Sft	4.80	927.05	4,450		
		ii) each subsequent coat of paint.	100 Sft	4.80	572.20	2,747		
		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 cladded 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 1½"x1½"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 horizantally 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	Rft	1,000.00	526.30	526,300		
		Crush						

#### DETAILED COST ESTIMATE

## EXTERNAL WORK

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
17	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 contratcor.		1,063.22	109.79	116,729
		Total Rs. "A"				8,388,135
		Tuff Paver				
18	3/47	Jungle Clearance Jungle clearance and removing within 100 ft. (30 m).			554.40	20.212
		b) thick	100Sft	70.73	554.40	39,213
		Borrow Earth				
19	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.		172.64	17,627.60	3,043,229
20	18/3/a/ (i) + 1/1	Sub Base Course 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 sargodha querry to site, actual compacted depth shall be considered for payment)		132.53	13,687.35	1,813,984
			TOUCH	132.33	13,08/.33	1,813,984
		Water Bound Macadam				

#### DETAILED COST ESTIMATE

# EXTERNAL WORK

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
21	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 sargodha querry to site, actual compacted depth shall be considered for payment)		132.53	27,419.98	3,633,969
		Tuff Paver				
22	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		40,160	197.40	7,927,584
23	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).		65.00	1,848.00	120,120
		Wine Foreing				
24	26/3	Wire Fencing Providing and fixing barbed wire fencing, with 4 horizontal and 2 number cross wires fixed with posts of R.C.C., 1:2:4 (straining posts 7'x9"x9" (2.13m x225 x 225mm) at 100' (30 m) centre to centre, stiffening posts 7'x6"x6" (2.13m x150x150 mm) at 50 ft. (15 m) interval and intermediate post 7'x5"x5" (2.13 mx125x125 mm) at 8 ft.(2.4 m) centre to centre), including cost of steel, its fabrication and placing of steel reinforcement, eye bolts, washers, etc. complete.		3.25	56,692.00	184,249
		Total Rs. "B"				16,762,348
		Total Rs. "A+B"				25,150,483

#### EXTERNAL WORK CALCULATION OF QUANTITIES

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.		1.0.0.0				
	Boundary wall	1	1,000	2.75	2.50		Cft
	Columns	6	4.00	4.00	2.50 Total		Cft Cft
					Total	7,113.00	Cit
					Total	7.12	%oCft
	Anti-Termite						
2	Spraying anti termite proofing by using liquid FMC Biflex 2.5%EC Mixing Ratio 1:50=137-Sft or using liquid MIRAGE Ali Akbar /RANGERS Auriga 5% SC Mixing Ability-HEXTAR Ratio 1:110=205-Sft or any other 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	1,000	7.75		7,750.00	Sft
	Columns	6	16.00	2.50		240.00	Sft
		6	4.00	4.00		96.00	Sft
					Total	6,875.00 240.00 7,115.00 7,12 7,750.00 240.00 96.00 8,086.00 8,086.00	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						
	(I) Kauo 1. 4. 8	1	1,000	2.75	0.33	907 50	Cft
	Boundary wall		1,000	2.15			Cft
	Boundary wall		4 00	4 00	033		On
	Boundary wall Columns	6	4.00	4.00	0.33 Total		Cft
			4.00	4.00		939.18	Cft %Cft
	Columns		4.00	4.00	Total	939.18	
4			4.00	4.00	Total	939.18	

#### EXTERNAL WORK CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Boundary wall						
	Step - 1	1	1,000	2.250	0.50	1,125.00	Cft
	Step - 2	1	1,000	1.875	0.50	937.50	Cft
	Step - 3	1	1,000	1.500	4.42	6,630.00	Cft
	Step - 4	1	1,000	1.125	0.75	843.75	Cft
	Columns						
	Gate Columns	6	6.50	0.38	5.17	75.61	Cft
					Total	9,611.86	Cft
					Total	96.12	%Cft
					10tai	70.12	/0010
	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	1,000	0.75		750.00	Sft
		1	1,000	0.75	Total	750.00	Sft
					Total	750.00	511
					Total	7.50	%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 <sup>3</sup> / <sub>4</sub> " thick (20 mm)						
	Boundary wall	1	1,000		1.00	1,000.00	Sft
					Total	1,000.00	Sft
					Total	10.00	%Sft
	Brick work in Super Structure						
7	Pacca brick work in ground floor:-						
	i) Cement, sand mortar:- Ratio 1:5						
	Boundary wall	1	905.50	0.75	8.00	5,433.00	Cft
	Columns	84	1.13	1.13	8.00	850.50	Cft
	Gate Columns	6	6.50	0.38	8.00	117.00	Cft
					Total	6,400.50	Cft
					Total	64.01	%Cft
	Concrete Work						

#### EXTERNAL WORK CALCULATION OF QUANTITIES

~		_					
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
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	6	3.50	3.50	1.00	73.50	Cft
					Total	73.50	Cft
					Total	75.50	en
	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	6	1.25	1.25	13.17	123.47	Cft
					Total	123.47	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						
	from bars):-						
	Deformed bars (Grade-60)					196.97	Cft
	Columns @ 12 lbs / Cft		12.00		=	2,363.63	lbs/cft
				Total	=	2,363.63	lbs/cft
			A 44 50/	Total Wastage.	=	1,072.43 53.62	Kg. Kg.
			Auu 3%	Total	=	<b>1,126</b>	Kg.
					Total	11.26	%kg

### EXTERNAL WORK CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
110.	Cement Plaster						
10	Cement plaster 1:4 upto 20' (6.00 m) height:-						
	3/4" (20 mm) thick						
	Boundary wall	1	905.50		8.00	7,244.00	Sft
	Columns	84	1.50		8.00	1,008.00	Sft
					Total	8,252.00	Sft
					Total	82.52	%Sft
	Pointing						
11	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-						
	a) ratio 1:2						
	Outer Walls	1	905.50		8.00	7,244.00	Sft
	Columns	84	1.50		8.00	1,008.00	Sft
					Total	8,252.00	Sft
					Total	82.52	%Sft
12	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.				Total	82.52	%Sft
	Distempering						
13	Distempering:-						
10	iii) three coats						
	Boundary wall	1	1,000		8.00	8,000.00	Sft
		-	1,000		Total	8,000.00	Sft
						00.00	
					Total	80.00	%Sft
	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.	2	20.00		6.00	240.00	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.					4.80	%Sft
	ii) each subsequent coat of paint.					4.80	%Sft

#### EXTERNAL WORK CALCULATION OF QUANTITIES

<b>C</b>							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
110	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 cladded 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 11/2"x11/2"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 horizantally 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	1,000			1,000.00         1,000.00         58,730         12,000         70.73         70.73	Rft
	Tuff Paver						
	Jungle Clearance						
17							
17	Jungle clearance and removing within 100 ft. (30 m).						
	b) thick						
	Total Parking Area	1	58,730	1.00		58,730	Sft
	Approach Road	1	300	40.00		12,000	Sft
					Total	70 73	%oSft
	Borrow Earth				IUtai	10.15	700511
18	Earthwork in ordinary soil for embankment						
10	including ploughing and mixing with blade grade or					58,730 12,000 70.73	
	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				
	Parking Area	1	31,160	1.00	4.00	124,640	Cft
	Approach Road	1	300	40.00	4.00	48,000	Cft
					Total	172,640	Cft
					Total	172.64	%oCft

#### EXTERNAL WORK CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Sub Base Course						
19	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 sargodha querry to site, actual compacted depth shall be considered for payment)						
	Parking Area	1	31,160	1.00	0.33	10,282.80	Cft
	Approach Road	1	300	30.00	0.33	2,970.00	Cft
					Total	132.53	%Cft
	Water Bound Macadam						
20	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 sargodha querry to site, actual compacted depth shall be considered for payment)						
	Parking Area	1	31,160	1.00	0.33	10,282.80	Cft
	Approach Road	1	300	30.00	0.33	2,970.00	Cft
					T-4 1	100 50	0/ (20)
	Tuff Paver				Total	132.53	%Cft
21	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	31,160	1.00		31,160	
		1	300	30.00		9,000	Sft
					Total	40,160	Sft

	PUNJAB CITIES P DETAILED DESIGN OF INFRASTRUCTU SUPERVISION IN 16 ( EXTERNAI CALCULATION O CIVIL W	URE S CITIE L WO F QU	SUB-PROJ ES OF PUP DRK JANTITIE	IECTS AL	ND RESI	DENTS	
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
22	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).		6,500	1.00		6,500	Sft
					Total	65.00	%Sft

### DETAILED COST ESTIMATE

# EXTERNAL WORKS

#### PLUMBING WORKS

	[	PLUMBING WORK	S			
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Everyotion				
1	3/44	<b>Excavation</b> 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.		4.28	8,321.30	35,574
		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				
		(iii) (1") 32 mm	Rft	275.00	107.65	29,604
		(v)(1-1/2") 50 mm	Rft	175.00	250.00	43,750
		(vi)(2") 63 mm	Rft	100.00	378.65	37,865
		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.				
		iii) 1" dia	Each	2.00	1,809.60	3,619
		v) 1-1/2" dia	Each	2.00	2,289.60	4,579
		vi) 2" dia	Each	2.00	2,709.60	5,419
		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)				

DETAILED COST ESTIMATE

# EXTERNAL WORKS

		PLUMBING WORK	S			
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		(vi) 6"(160 mm)	Rft	400.00	422.55	169,020
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	7.00	19,199.71	134,398
		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	19,360.20	19,360
		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	646.70	64,670
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	1,083.25	108,325
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	451.30	22,565
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) 1½" i/d (40 mm)	Rft	200.00	152.95	30,590
		c) 2" i/d (50 mm)	Rft	70.00	221.20	15,484

# DETAILED COST ESTIMATE

# EXTERNAL WORKS

		PLUMBING WORK	S			
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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	187.95	5,639
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	92.45	92
		Booster Pump				
13	N.S	Providing, installing, Fixing and commisioning 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 Da				750,553
		Total Rs				750,

#### DETAILED COST ESTIMATE

# FXTERNAL WORKS

	EXTERNA						
	PLUMBIN	IG WC	ORKS				
Sr. No.	Description	No	Length	Width	Height	Qty.	Unit
	Execution						
1	<b>Excavation</b> 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	950.00	1.50	3.00	4,275.00	Cft
					Total	4.28	%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						
	(iii) (1") 32 mm	1	275.00			275.00	Rft
	(v)(1-1/2") 50 mm	1	175.00			175.00	Rft
	(vi)(2") 63 mm	1	100.00			100.00	Rft
3	Valve 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.						
	iii) 1" dia	2				2.00	Nos.
	v) 1-1/2" dia	$\frac{2}{2}$				2.00	Nos.
	vi) 2" dia	2				2.00	Nos.
<u> </u>	uPVC Pipe						
4	Providing, fixing, testing and commissioning of $\mu$ - 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)						

	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		
	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.					7.00	Nos.		

#### DETAILED COST ESTIMATE

	EXTERNAL ELECTRICAL WORKS						
r. 1nd BI-Annual 2023 (Jan to June) Wazirabad	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	5.21	11,658.25	60,786		
	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:-						
	(3) Type C (nominal mix 1: 2: 4)	Cft	264.00	470.70	124,265		
3 6/12/b	Steel WorkFabrication 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):-('b) Deformed bars (Grade-40)		6.60	31,940.05	210,804		
4 24/13b.iii	Supply and erection of 3 core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)		500.00	126.30	63,150		
		an capping/G.I. wire/trenches (rate for cables only).					

#### DETAILED COST ESTIMATE

	1nd BI-Annual-					
Sr. No.	11d BI-Annual- 2023 (Jan to June) Wazirabad	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	1,650.00	177.75	293,288
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	800.00	119.20	95,360
		iv) 16 mm sq (7/0.064")	Rft	100.00	208.35	20,835
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				
			DC	1 150 00	173.45	100.469
		v) 7/1.12 mm (7/0.044") vi) 7/1.63 mm (7/0.064")	Rft Rft	1,150.00 50.00	331.30	199,468 16,565
		b) PVC insulated, PVC sheathed 3 core 660/1100 volt non armoured cable:-	Kit	50.00	551.50	10,505
		v) 7/1.12 mm (7/0.044")	Rft	200.00	267.15	53,430
		c) PVC insulated, PVC sheathed 4 core, 660/1100 volt non armoured cable:-				
		v) 6 mm (7/0.044")	Rft	265.00	344.40	91,266
		vii) 16 mm (7/0.064")	Rft	100.00	694.80	69,480
		viii) 25 mm (19/0.052")	Rft	165.00	1,301.65	214,772
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 ,tappered 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	8.00	116,323.35	930,587
		b) Double Arm	р 1	2.00	100 100 05	260 410
		(i) 10 mtr height	Each	3.00	120,139.35	360,418

#### DETAILED COST ESTIMATE

	EXTERNAL ELECTRICAL WORKS							
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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	14.00	52,598.60	736,380		
10	24/77	Supply and erection of electric energy meter, including meter testing fee, etc.						
		b) three phase, 4 wires:		1.00	1.5.005.00			
		iii) 3x80 Amp, 400 volts	Each	1.00	15,987.30	15,987		
11	24/86	Suppling,Installation and comissioning 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 screwes,necessary wire complete in all respect as approved and directed by the Engineer Incharge.						
		a) Single Pole						
		(ii) 6-40 Amp (6 KA)	East-	9.00	1 10/ 15	10 ((0		
		DB-Shed 1, Store&W.S DB-Shed 2 to 5 & Sitting Area	Each Each	9.00	1,184.45 1,184.45	10,660 14,213		
		DB-Office/Guard Room	Each	9.00	1,184.45	10,660		
		DB-Tyre Shop	Each	3.00	1,184.45	3,553		
		b) Double Pole	Lacii	5.00	1,104.45	5,555		
		(ii) 6-40 Amp (6 KA)	Each					
		DB-Shed 1, Store&W.S	Each	1.00	3,614.45	3,614		
		DB-Shed 2 to 5 & Sitting Area	Each	1.00	3,614.45	3,614		
		DB-Office/Guard Room	Each	1.00	3,614.45	3,614		
		DB-Tyre Shop	Each	1.00	3,614.45	3,614		
		LCP Ext	Each	4.00	3,614.45	14,458		
		MPB	Each	1.00	3,614.45	3,614		
		c) Triple Pole						
		(iii) 6-63 Amp (10 KA)	Each					
		MPB & All DBs	Each	12.00	9,036.95	108,443		

#### DETAILED COST ESTIMATE

			WORK			
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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 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) Tripple Pole With Adjustable Thermal-Magnetic				
		Trip /Electronic Trip (60-100%)				
		(i) 25-100 Amp(25 KA)				
		MPB	Each	1.00	28,956.95	28,957
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-Shed 1, Store&W.S	Cft	1.50	2,233.00	3,350
		DB-Shed 2 to 5 & Sitting Area	Cft	1.50	2,233.00	3,350
		DB-Office/Guard Room	Cft	1.50	2,233.00	3,350
		DB-Tyre Shop	Cft	1.50	2,233.00	3,350
		LCP Ext	Cft	1.50	2,233.00	3,350
14	24/91	P/F floor mounted Electric Panel board of required depth and size, fabricarted with 14SWG M.S sheet (Indoor/Outdoor Type),derusting, zinc Phosphated, finish with electro static powder coating in approved colour i/c the cost of Lock, Indication lights,thimbles, Copper Comb, Wiring, Netural & Earth Bar, glands,Current Transformers of specified capacity ,Door Earthing, Brass glands,bus bars,controles complete in all respects as approved and directed by the Engineer Incharge (Breakers will be Paid				
		Separately).				
		i) LT Switchboards MPB				
		a) 2.50 Ft deep				
		(i)300~600A (3.0x6'x2.5')	Cft	45.00	3,489.45	157,025

#### DETAILED COST ESTIMATE

		EXTERNAL ELECTRICAL		-		
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
15	<u>wazirabad</u> 24/92	P/F floor mounted ATS (Auto Transfer Switch) panel board , fabricarted with 14S WG M.S sheet (Indoor Type) duly painted with 100 microns powder coated paint in approved colour , front access ,extendable,insulation class of 600 volts IP-44, incomimg & outgoing connections from bottom with flexible copper cable suitable for 415 VAC, 3-phase 4 wire, 50 HZ TPN&E system having rated service, short circuit breaking capacity at 400VAC conforming to IEC-947-2 to accomodate given no of circuit components, instruments & accessories,assembled & wired with Electrolitic Copper bus bars at 50 deg and cables duly cleaned down to bare shining metal phosphate, manual change Over i/c the cost of Lock, Indication lights,thimbles, Copper Comb, Wiring, Netural & Earth Bar,CTs,Contactors,Relays, Door Earthing, Brass glands complete in all respects as approved and directed by the Engineer Incharge. (Breakers wil be				
		paid additionally)				
		a) 1.00 Ft deep				
		(i) 15-40 KVA	Each	1.00	843,621.70	843,622
16	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				
		(iii) 50 KVA	Each	1.00	581,485.15	581,485
17	24/70	Earthing of iron clad/aluminum switches, etc. with G.I. wire No. 8 SWG in G.I. pipe 15 mm ( $\frac{1}{2}$ ") 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,				
18	24/72	and 2 metre away from building plinth. Bonding to earth with wire on surface, including cost	Job	6.00	10,199.15	61,195

#### DETAILED COST ESTIMATE

	4 101 4 1					
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
		a) G.I. wire:				
		i) 8 SWG	Per Rft	100.00	25.20	2,520
		Crush				
19	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				
		contratcor.	Cft	232.32	109.79	25,506
		Sub Total Scheduled Iter	ms: (A)			5,453,959
Non	Schedule	Part-B	(12)			
20		Supply at site brand new 30KVA 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 35KVA 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.		1.00	4,120,260	4,120,260
21	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		1.00	56,200	56,200
		ii) Automatic Star Delta Starter ASDS for 7.5kW Motor	Set	1.00	74,220	74,220
					, · · ·	, -
		Total Cost (Part B)			Rs.	4,250,680
		<b>Grand Total (Part A + Part B)</b>			Rs.	9,704,639

#### DETAILED COST ESTIMATE

#### **TUBE WELL**

Inct	IUBE WELL Istallation of Tubewell (0.25 Cusec)									
mst		Tubeweii (0.25 Cusec)	-							
Sr. No	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate ( Rs)	Amount (Rs)				
1	22/5									
1	23/5	Direct Rotary/Reverse Rotary drilling of bore for tubewells, in all types of soil except shingle, gravel and rock:- a) from ground level to 200 ft. (60 m) below ground								
		level:-								
		i) 15" to 18" (375 to 450 mm) i/d	P.Rft	200.00	755.35	151,070				
		b) exceeding 200 ft. (60 m) depth below ground level:- i) 15" to 18" (375 to 450 mm) i/d	P.Rft	100.00	755.35	75,535				
2	23/7	Providing strong substantially built box of deodar wood 4'x2½'x9" (1200x750x225 mm), with compartments, lock and locking arrangement, for preserving samples of strata from bore hole.		1.00	37,257.95	37,258				
3	23/8	Furnishing sample of water from borehole each set of 2 bottles.	Per Set of Two bottles	2.00	188.40	377				
4	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	100Cft	0.18	38,723.50	6,970				
		H ' D'								
5	23/15-i	Housing Pipe Providing and Installing MS blind pipe (Housing) socket/welded joints, including MS Reducer in tubewell borehole, including jointing/welding with strainer etc. complete in all respect. i) 10" i/d, <sup>1</sup> / <sub>4</sub> " (250 mm i/d 6 mm) thick		150.00	4,041.60	606,240				
6	23/15	Blind Pipe Providing and Installing MS blind pipe (Housing) socket/welded joints, including MS Reducer in tubewell borehole, including jointing/welding with strainer etc. complete in all respect.								
		e) 6" i/d, 3/16" (150 mm i/d 5 mm) thick	Per Rft	100.00	2,432.80	243,280				
		Strainer								
7	23/13	Providing and installing Fiberglass reinforced Polypropelene (FRP) strainer of specifid wall thickness having slot size of 0.9mm to1.00mm in Tubewell bore hole i/c the cost of male/ female coupling with Nylone Strip, studs complete in all respect as approved and directed by the Engineer Incharge.								
		iv) 6" inch dia	Per Rft	50.00	1,858.30	92,915				
		Bail Plug								
8	23/10	Providing and installing M.S. Bail plug in tubewell bore hole:		1.00	4 10 1 07	4.404				
		e) 6" i/d, 2 ft. (150 mm i/d 600 mm) long.	Each	1.00	4,104.35	4,104				

#### DETAILED COST ESTIMATE

#### **TUBE WELL**

Inst	allation of "	TUBE WELL Fubewell (0.25 Cusec)				
Sr. No	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate ( Rs)	Amount (Rs)
		Pea Gravel				
9	23/19	Shrouding with graded pea gravel 3/8" to 1/8" around tubewell in borehole	Per Cft	368.00	160.55	59,082
10	23/18 i	Development and Testing (D&T) at 150 % of the rated capacity of tubewell for a minimum period of 72 hours. D&T will include pumping, disposal and backwashing as approved by the Engineer.	Per hour	72.00	2,383.95	171,644
11	23/16 a	Providing and installing PVC gravel makeup pipe 3" dia class 'B' in tube well bore hole for gravel feeding including sockets, solvents and jointing etc complete in all respect.	Per Rft	40.00	314.45	12,578
12	23/52	Sluice Valve Providing and fixing heavy duty Gate valve of specified diameter and material for pressure rating PN-16 mde of Crane (USA), Hatersly (UK) or Scon (Pakistan) i/c the cost of all accessories flanges,nut/bolt and gaskit where required complete in all respect as approved and directed by the Engineer Incharge.				
		(b) Flange Ended Ductile Iron Valve (ix) 4" dia	Each	1.00	45,252.00	45,252
13	23/34b	Air Valve Providing and fixing, air valve 2 <sup>1</sup> / <sub>2</sub> (65mm) dia of B.S.S.quality and weight (complete with jointing material). Double	Each	1.00	12,467.60	12,468
		Non Return Valve				
14	23/54	Providing and fixing heavy duty Check valve of specified diameter and material for pressure rating PN-16 made of Crane (USA), Hatersly (UK) or Scon (Pakistan) i/c the cost of all accessories flanges,nut/bolt and gaskit where required complete in all respect as approved and directed by the Engineer Incharge (b) Flange Ended Ductile Iron Valve				
		(ix) 4" dia	Each	1.00	30,158.40	30,158
		M.S Plate				
15	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, revitting, handling, assembling and fixing, but excluding erection in position.	100Kg	0.21	33,389.40	6,959
16	25/11	Erection and fitting in position iron trusses, staging of water tanks, etc.	100Kg	0.21	1,414.70	295
					Total. A	1,556,186
		NON SCHEDULE ITEMS				

#### DETAILED COST ESTIMATE

#### **TUBE WELL**

Inst	allation of [	Fubewell (0.25 Cusec)				
Sr. No	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Quantity	Unit Rate ( Rs)	Amount (Rs)
17	NS	Grouting of top 100 ft of annular space between bore and pump housing casing with 1:1 cement sand mortar complete in all respect as per drawings and specifications (Sanitary seal)	Per Rft	100.00	500.00	50,000
18	NS	Taking samples and preserving of starta from borehole, from each strata change or as directed by Engineer including submission of starta charts along with results of strata analysis.	Each	10.00	1,000.00	10,000
10	NG	PUMP & MOTOR				
19	NS	Providing, installing, testing and lowering submersible pump of 0.25 cusecs capacity against a pumping head of 200 ft. including lowering of bowl assembly about 150 ft. column pipe/setting alongwith flow meter, pressure guage, CI. Bends tail pieces etc. upto duck foot bend, motor control unit and earthing, testing complete in all respects as per specifications, drawings and as approved by the Engineer incharge.	Each	1.00	1,800,000	1,800,000
					Total. B	1,860,000
		Total Amount Rs.			Total A+B	3,416,186

#### DETAILED COST ESTIMATE

## ENVIRONMENTAL HEALTH SAFETY BUDGET

Sr 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 (R	ks)			112,425
	Total Amount (R	Total Amount (Rs)	Total Amount (Rs)	Total Amount (Rs)

Rate Analysis Road - 3

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 contratcor.

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Lead (Km)	Rate (Rs)	Amount (Rs.)
2		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 contratcor.				
	-	1st KM	100 Cft	1	305.40	305.40
	-	2nd KM	100 Cft	1	145.65	145.65
	1/1	3rd KM	100 Cft	1	114.10	1145.05
	-	4th KM	100 Cft	1	81.20	81.20
	-	5th KM	100 Cft	1	75.85	75.85
	-	6th KM	100 Cft	1	74.60	74.60
		7th KM	100 Cft	1	69.60	69.60
		8th KM	100 Cft	1	68.85	68.85
		9th KM	100 Cft	1	64.75	64.75
		10th KM	100 Cft	1	60.75	60.75
		From 11 km to 200 km	100 Cft	190.00	52.20	9,918.00
		Total.				10,978.75
		Total Amount per 100 Cft				10,978.75
		Total cast for Per Cft				109.79

		RT										
Rate Analysis Road- 1												
l BI-Annual- 2023 (an to June) Wazirabad	Description	Lead	Unit.	Qty	Rate (Rs)	Amount (Rs)						
3/5/i	Earthowrk 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	9,963.35	9,963.35						
3/17a.b.c	Carriage											
	upto ¼ mile (400 m).	1	1000 Cft	1	4,472.30	4,472.30						
	for every 330 ft. (100 m) additional lead or part thereof, beyond <sup>1</sup> / <sub>4</sub> mile (400 m) upto one mile. (1.6 Km.) for every <sup>1</sup> / <sub>4</sub> mile (400 m) additional lead or part thereof,	12	1000 Cft	1	36.85	442.20						
	beyond one mile (1.6 Km.) upto 5 mile (8 Km).	8.5	1000 Cft	1	323.50	2,749.75						
	for every ½ mile (800 m) additional lead or part thereof, beyond 5 miles (8 Km).	0	1000 Cft	1	305.45	-						
	Total Amount I,000 (Rs.).					17,627.60						
	Total Amount Per Cft					17.63						

Rate Analysis Road- 2

 Description
 Image: Compact of a proved 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 Dina querry to site, actual compacted depth shall be considered for payment)

Crusl	h Stone						
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	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	7,403.25	7,403.25
2		Carriage				,	,
		1st KM	100 Cft	1	1.2	305.40	366.48
		2nd KM	100 Cft	1	1.2	145.65	174.78
		3rd KM	100 Cft	1	1.2	114.10	136.92
		4th KM	100 Cft	1	1.2	81.20	97.44
	1/1	5th KM	100 Cft	1	1.2	75.85	91.02
	1/1	6th KM	100 Cft	1	1.2	74.60	89.52
		7th KM	100 Cft	1	1.2	69.60	83.52
		8th KM	100 Cft	1	1.2	68.85	82.62
		9th KM	100 Cft	1	1.2	64.75	77.70
		10th KM	100 Cft	1	1.2	60.75	72.90
		From 11 km to 200 km	100 Cft	80.00	1.2	52.20	5,011.20
		Total.					13,687.35
		Total Amount per 100 Cft					13,687.35
		Total cast for Per Cft					136.87

#### Rate Analysis Road - 3

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 sargodha querry to site, actual compacted depth shall be considered for payment)

Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	Unit	Lead (Km)	Qty	Rate (Rs)	Amount (Rs.)
1	10/4( )						
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 sargodha querry to site, actual compacted depth shall be considered for payment)			1	14,025.90	14,025.90
2		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 contratcor.					
		1st KM	100 Cft	1	1.22	305.40	372.59
		2nd KM	100 Cft	1	1.22	145.65	177.69
	1/1	3rd KM	100 Cft	1	1.22	114.10	139.20
		4th KM	100 Cft	1	1.22	81.20	99.06
		5th KM	100 Cft	1	1.22	75.85	92.54
		6th KM	100 Cft	1	1.22	74.60	91.01
		7th KM	100 Cft	1	1.22	69.60	84.91
		8th KM	100 Cft	1	1.22	68.85	84.00
		9th KM	100 Cft	1	1.22	64.75	79.00
		10th KM	100 Cft	1	1.22	60.75	74.12
		From 11 km to 200 km	100 Cft	190.00	1.22	52.20	12,099.96
		Total.					27,419.98
		Total Amount per 100 Cft					27,419.98
		Total cast for Per Cft					274.20

	I	1	Rat	e Analy	sis Roa	d - 4				
Maı	1hole Constru	ction 2 x 2 Ft							Unit	Each
Sr. No.	1nd BI-Annual- 2023 (Jan to June) Wazirabad	Description	No.	Length	Width	Height	Qty	Unit	Rate (Rs)	Amount (Rs)
1		Excavation.		2.50	2.50	2.00		1000 60	10.006.55	
	3-42-i	(0 to 7 feet depth)	1	3.50	3.50	3.00	36.75	1000 Cft	12,836.55	471.74
2	6-3-b	Cement concrete brick or stone ballast (1:4:8)	1	3.50	3.50	0.33	4.04	100 Cft	25,832.40	1,044.27
3	6-5-f	Base slab	1	3.50	3.50	0.25	3.06	100 Cft	38,723.50	1,185.91
4	6-6-(a)(i)	Top ring Beam Ratio 1:2:4	1	3.500	3.50	0.33	4.04	100 Cft	580.05	2,344.85
5	6/12 ( c)	Steel work		3.00 kg	per cft		14.15	kg	31,940.05	4,519.12
6	7-7-i	Brick Work Ratio 1:3 Step - 1	1	11.00	0.75	2.00	16.50	100 Cft	35,897.90	5,923.15
7	11-8-c	3/4" thick Plaster Ratio 1:3 (External)	1	11.00		2.00	22.00	100 Sft	4,856.75	1,068.49
8	11-18-a	Cement pointing struck joints, on walls (1:2) (Internal)	1	8.00		2.00	16.00	100 Sft	3,776.40	604.22
9	13-9-i	Bitumen Coating on External Plaster	1	11.00		2.00	22.00	100 Sft	2,297.95	505.55
10	19-40-ii	Supply and fitting of cast iron manhole cover ii) 45 cm (18") dia	1				1.00	Each	1,532.40	1,532.40
								Gran	nd Total.	19,200

	RATE	ANAL	YSI	S				
iption								
•	÷	d mirro	or LI	ED ligi	nt 10 v	vatt with tu	ibe rod ai	nd frame all
							Unit.	Each
Dof	Detail			1	Unit R	ate (Briti	sh Syster	n) per Each
Kei	Detail				ty	Rate Pe	er Unit	Amount (Rs.)
	Material							
MR	Mirror Light			1.00	No	850	No.	850.00
							Total.	850.00
	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
	ITEM RATES							
	Composite rate Per Each						Rs.	1,215.00
	y, instal sary fixi <b>Ref</b>	iption y, installation and commissioning of wall mounters sary fixing accessories, complete in all respects  Ref Detail  MR Material MR Mirror Light  MR Mirror Light  Carriage & Installation Charges  Carriage & Installation Charges  GST 17% on item No. 1  Contractor's Profit on item No. (1&2) Total  IITEM RATES III	iption y, installation and commissioning of wall mounted mirrors sary fixing accessories, complete in all respects          Ref       Detail         Ref       Detail         Material	iption       Image: complete in all respects         sary fixing accessories, complete in all respects       Image: complete in all respects         Ref       Image: complete in all respects         MR       Image: complete in all respects         MR       Mirror Light         Image: complete in all respects       Image: complete in all respects         Image: complete in all respects       Image: complete in all respects         MR       Mirror Light       Image: complete in all respects         Image: complete in all respects       Image: complete in all respects         Image: complete in all respects       Image: complete in all respects <td>y, installation and commissioning of wall mounted mirror LED lights Ref Detail LED light LED li</td> <td>iption       Image: light of the second second</td> <td>iption     Image: Constraint of the second of</td> <td>iption     Image: light of the light of the</td>	y, installation and commissioning of wall mounted mirror LED lights Ref Detail LED light LED li	iption       Image: light of the second	iption     Image: Constraint of the second of	iption     Image: light of the

#### **RATE ANALYSIS**

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1 14	acor	int	non
$\boldsymbol{\nu}$	escr	IVI	JUIL
		- I	-

Supply, installation and commissioning recessed 10W LED Down Light complete in all respects.

								Unit.	Each			
Sr.	Ref				Unit Rate (British System) per Each							
No.		Detail			Q	ty	Rate Pe	r Unit	Amount (Rs.)			
		Material										
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			
		ITEM RATES										
		Composite rate Per Each						Rs.	1,430.00			

		SUPERVISION IN				PUNJA	AB		
		RATE	ANAL	YSI	<u>S</u>				
Descr	iption								
	y, instal respects	lation and commissioning high bay light 10	00W wit	th 12	201m/w	LED 1	hanging wit	h all acco	essories complete
								Unit.	Each
Sr.	Ref	Detail				Unit F	Rate (Britis	h System	n) per Each
No.	Ku	Detail	1	1	Q	ty	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
		ITEM RATES							
		Composite rate Per Each						Rs.	35,035

**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.

		T						Unit.	Each			
Sr. No.	Ref	Detail			Unit Rate (British System) per Each							
					Qty		Rate Per Unit		Amount (Rs.)			
		Material										
1	MR	i) Direct of Line (DOL) Starter for 3kW Mot	or		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			
		ITEM RATES										
		Composite rate Per Each						Rs.	56,200			

#### **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.)		
		Material									
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		
		ITEM RATES									
		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.

		Ι						Unit.	Per Sft					
Sr.	Ref	Detail				Unit Rate (British System) per Sft								
No.	Kel					ety	Rate Per	Unit	Amount (Rs.)					
		Area 1920 Sft												
		Material												
1	MR	Supply of PEB Shed (32' x 60')			1	Sft	3,198,934	Sft	3,198,934					
								Total.	3,198,934					
		Contractor's Profit	20	%					639,787					
		Total							3,838,721					
		ITEM RATES												
	<u> </u>	Composite rate 1920 Sft						Rs.	3,838,730					
		Composite rate Per Sft						Rs.	2,000					

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

# RATE ANALYSIS Description </td

Supply at site brand new 30KVA 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 30KVA 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.	Ref	Detail			Unit Rate (British System) per Each							
No.	Kel	Detan			Q	Qty	Rate Per	Unit	Amount (Rs.)			
		Material					1 \$ = 225					
1	MR	Brand New KOHLER-SDMO France Diesel Generator Set, Model K33; 30 kVA Prime					1 \$ = 223					
		Power			1	No.	2,616,300	No.	2,616,300			
2	MR	Sound and Weather Proof Canopy			1	No.	265,000	No.	265,000			
								Total.	2,881,300			
3		Transportation & Installation Charges	5	%					144,065			
								Total.	3,025,365			
		GST 17% on item No. (1&2)	17	%					489,821			
		Contractor's Profit on item No. (1,2&3)	20	%					605,073			
		Total							4,120,259			
		ITEM RATES										
		Composite rate Per Each						Rs.	4,120,260			

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

		RATE	ANAL	Y 515	)			[	1	
)escri	ption									
		lation, testing and commissioning of follow s, dimmers nuts and bolts complete in all re	-	e 56"	ceilin	g fan, o	complete wi	ith capaci	itor, hanging ro	
								Unit.	Each	
Sr. Ref		Detail	Unit Rate (British System) per Each							
No.	Ku	Detail	Qty		Rate Per	Amount (Rs.)				
		Material								
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	
		ITEM RATES								
		Composite rate Per Each						Rs.	6,961	
		Say						Rs.	7,000	

# 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	MA	Y-23	3	JU	N-23		JUI	2-23		AU	G-23	;	SEP	-23		OCI	Г <b>-23</b>	
1	Approach Road																		
2	Boundary wall & Gates																		
3	Building Works																		
4	Parking Shed																		
5	Workshop & Washing area																		
6	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 document<sup>2</sup> 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

his chem. dequately considered, ... jii) The purpose of this E&S Screening Chem. and social attributes or to enhance the existing environment discuss any anticipated mitigation measures. Name of ESFP: Wayar Ahmed Name of MC: Murricipal Committee Waztrabad Sub-Project Sector: Parking Shed Sub-Project Title: Construction of Parking Shed for Machinely, Mazi Sub-Project Categorization: E-1 S-1 Jhalalan neal E-2 S-2 Vegetable & fruit E-3 S-3 market, GT I pada Wazirabad Data And Wazirabad Anticipated Project Activities Construction of Parking Shed for Machinery, Workshop, Runcture shop, Service Station for Washing of machinery etc.

**Estimated Cost of Subprojects** 

**Tentative Completion Time/Duration** 

Estimated Labor for Subproject

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.

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

A. Project Siting Is the Sub-Project area adjacent to or within any of the fol Environmentally sensitive areas? Legally protected Area Any surface water body (river, canal, stream, lake, wetland) within 250 meter of the proposed sub project <sup>3</sup> Estuarine Special area for protecting biodiversity Butter 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			Nullah Palkhu
Legally protected Area Any surface water body (river, canal, stream, lake, wetland) within 250 meter of the proposed sub project <sup>3</sup> Estuarine 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	\ \ \	ソレン	Nullah Palkhu
Any surface water body (river, canal, stream, lake, wetland) within 250 meter of the proposed sub project <sup>3</sup> Estuarine Special area for protecting biodiversity Butter 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	2	ソレン	Nullah Palkhu
wetland) within 250 meter of the proposed sub project <sup>1</sup> Estuarine Special area for protecting biodiversity Butter 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	ン	レン	Nullah Palkhu
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		レレ	
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		V	
Mangroves Forest Man-made forest /game reserve, orchid /crops or any other area of environmental importance Socially sensitive /important areas/communities/ people		and the second sec	
Man-made forest /game reserve, orchid /crops or any other area of environmental importance Socially sensitive /important areas/communities/ people		V	
other area of environmental importance Socially sensitive /important areas/communities/ people		V	
		V	
DCBs and an any site of sultural/religious importance	e?		
(Graveyard, Shrine, Mosque, Church, Gordwarah, Temple, Fort, archeological/historical site) within 100 m of the proposed subproject <sup>4</sup>		V	
Sensitive receptors (Schools, colleges, hospitals and clinics) within 100 meter of the proposed sub project <sup>5</sup>		$\checkmark$	
Any graveyard of local community (Muslims or Christians)		V	
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 <sup>6</sup> of the society and women or children)?		V	
Already existing infrastructure <sup>7</sup> (including public amenities) which may be required to dismantle or may be affected temporarily by any means?		$\checkmark$	
<b>B. Potential Environmental Impacts</b> Will the Sub-Project cause			
1. Disturbance to habitats/biodiversity of environmentally sensitive or protected areas?		~	
2. Cutting of trees?			
B. Disruption to habitats/biodiversity of surrounding ecosystem/environment?		11	

<sup>5</sup> Ibid.

<sup>&</sup>lt;sup>3</sup> Ibid.

<sup>&</sup>lt;sup>4</sup> According to Environmental Assessment Guidelines adopted by Punjab EPA

<sup>&</sup>lt;sup>6</sup>due to caste, creed, religion or gender e.g. transgender

<sup>&</sup>lt;sup>7</sup>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.

4. Generation of wastewater during construction or operation?	V
<ol> <li>Pollution of surface water/ground water due to wastewater discharge from construction site or due to direct/indirect disposal of waste water?</li> </ol>	
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?	V
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; disfiguration of landscape or potential loss/damage to Physical Cultural Resources (PCRs)?	
<ol> <li>Displacement or involuntary resettlement of people? (physical displacement and/or economic displacement) (If "Yes", please also fill Involuntary Resettlement Screening Checklist)</li> </ol>	
3. Disproportionate impacts on the poor, women and children and or other vulnerable groups <sup>8</sup> (mentioned above)?	$\checkmark$
4. Temporary impediments in movements of people/transport and animals?	

<sup>&</sup>lt;sup>8</sup> Women, Children, Women headed households, People in old age, people having disabilities, socially isolated community groups and or people living below the poverty line

	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)?		$\checkmark$	
6.	Social conflicts if workers from other areas are		$\checkmark$	
7.	Risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during project			
8.	construction and operation? 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?			
	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?			
	Any impact on sensitive receptors (mentioned	1 contraction	V	
11.	Any impact of negative nature on already existing infrastructure including public amenities		V	•

Prepared By: Name: Signature:

Date:

Ubgar Ahmed M.O(I&S), 1 mage MUNICIPAL OFFICER (185, Municipal Committee Mazirahad

Endorsed By: Name:

DPO ESS Tehmina Kiran 14\_6.

Signature:

Date:



## **PUNJAB CITIES PROGRAM**

#### ENVIRONMENT, HEALTH AND SAFETY SOPs FOR LABOR/WORKERS

Labor /workers play key role in the infrastructure development and construction activities. The objective of preparation of the EHS SOPs for Labor/Workers is to address environment, health and safety issues related to the proposed sub-project implementation. These SOPs will provide guidelines to be followed by the contractors for effective management of EHS issues related to labor/workers/daily wagers (including women). These SOPs will be annexed in the general conditions of all the contracts carried out under the PCP. These SOPs are designed for Punjab Cities Program and will be applicable to all types of labor/workers/daily wagers (including women), hired for the construction activities under PCP. Following are the anticipated Environment, Health and Safety issues and their recommended mitigation measures.

Activity/ Impact Source	EHS Concerns/issues	Mitigation Measures/ Management Guidelines
Siting and Location of construction camps	Camp sites for construction workers are the important locations that have significant impacts such as health and safety hazards on labor/workers Lack of proper infrastructure facilities, such as housing, water supply and sanitation facilities will increase pressure on the local services and generate substandard living standards and health hazards.	The Contractor shall: Locate the construction camps at areas which are acceptable from environmental, cultural or social point of view. Consider the location of construction camps away from communities in order to avoid social conflict with the surrounding communities. Submit to the relevant MC for approval of a detailed layout plan for the development of the construction camp showing the relative locations of all temporary buildings and facilities that are to be constructed together with the location of site roads, fuel storage areas (for use in power supply generators), solid waste management and dumping locations, and drainage facilities, prior to the development of the construction camps. Local authorities responsible for health, religious and security shall be duly informed on the set up of camp facilities so as to maintain effective surveillance over public health, social and security matters
Construction Camp Facilities	Lack of proper infrastructure facilities, such as housing, water supply and sanitation facilities will generate social issues and impacts on health and environment.	Contractor shall provide the following facilities in the campsites: Adequate ventilation facilities Safe and reliable drinking water supply for personal hygiene (washing or bathing) Adequate housing for all workers Safe and reliable drinking water supply. Water supply from tube wells that meets the Punjab Environment Quality Standards Hygienic sanitary facilities, hand washing facilities and sewerage system. The toilets and domestic waste water will be collected

#### **Table 1: Construction Camp Management**

Activity/ Impact Source	EHS Concerns/issues	Mitigation Measures/ Management Guidelines
		<ul> <li>through a common sewerage.</li> <li>Provide separate latrines and bathing places for males and females with total isolation by wall or by location. Female toilets should be clearly marked in language or signage clearly understood by the persons using them to avoid miscommunication. The minimum number of toilet facilities required is one toilet for every ten persons.</li> <li>Storm water drainage facilities. Both sides of roads are to be provided with shallow v drains to drain off storm water to a silt retention pond which shall be sized to provide a minimum of 20 minutes retention of storm water flow from the whole site. Channel all discharge from the silt retention pond to natural drainage via a grassed swale at least 20 meters in length with suitable longitudinal gradient.</li> <li>Paved internal roads. Ensure with grass/vegetation coverage to be made of the use of top soil that there is no dust generation from the loose/exposed sandy surface. Pave the internal roads of at least haring-bond bricks to suppress dusts and to work against possible muddy surface during monsoon.</li> <li>Provide child crèches for women working on the construction site. The crèche should have facilities for dormitory, kitchen, indoor/outdoor play area. Schools should be attached to these crèches so that children are not deprived of education whose mothers are construction workers</li> <li>Provide in-house community/common entertainment facilities. Dependence of local entertainment outlets by construction camps to be discourage/prohibited to the</li> </ul>
Disposal of Labor Camp waste	Management of wastes is crucial to minimize impacts on the environment as well as on the health of the workers/labor	<ul> <li>extent possible.</li> <li>The Contractor shall:</li> <li>Ensure proper collection and disposal of solid wastes within the construction camps</li> <li>Insist waste separation by source; organic wastes in one pot and inorganic wastes in another pot at household level.</li> <li>Store inorganic wastes in a safe place within the household and clear organic wastes on daily basis to waste collector.</li> <li>Establish waste collection, transportation and disposal systems at their own.</li> <li>Dispose organic wastes in a designated safe place on daily basis. At the end of the day cover the organic wastes with a thin layer of sand so that flies, mosquitoes, dogs, cats, rats, are not attracted. One may dig a large hole to put organic wastes in it; take care to protect groundwater from contamination by leachate formed due to decomposition. Cover the bed of the pit with impervious layer of materials (clayey, thin concrete) to protect groundwater from</li> </ul>

Activity/ Impact Source	EHS Concerns/issues	Mitigation Measures/ Management Guidelines
		contamination. Locate the garbage pit/waste disposal site min 500 m away
		from the residence so that peoples are not disturbed with the odor likely to be produced from anaerobic decomposition of wastes at the waste dumping places. Encompass the waste dumping place by fencing and tree plantation to prevent children to enter and play with.
		All solid waste will be collected and removed from the work camps and disposed in approval waste disposal sites.
Fuel supplies	Illegal sourcing of fuel	The Contractor shall:
for cooking purposes	wood by construction workers will impact the natural flora and fauna	Provide fuel to the construction camps for their domestic purpose, in order to discourage them to use fuel wood or other biomass.
		Make available alternative fuels like natural gas or kerosene on ration to the workforce to prevent them using biomass for cooking.
		Conduct awareness campaigns to educate workers on preserving the protecting of biodiversity in the project area, and relevant government regulations and punishments on wildlife protection.
Health and	There will be a potential	The Contractor shall:
Hygiene	for diseases to be transmitted including	Provide adequate health care facilities within construction sites.
	COVID-19, malaria, exacerbated by inadequate health and safety practices. There	Provide first aid box facility at the construction site round the clock. Maintain stock of medicines in the first aid facility in camp sites facility and appoint fulltime designated first aider or nurse.
	will be an increased risk of work crews spreading sexually transmitted infections and HIV/AIDS.	Provide ambulance facility for the laborers during emergency to be transported to nearest hospitals and telephone/mobile facility to call for Emergency Services 1122.
		Initial health screening of the laborers coming from outside areas
		Train all construction workers in basic sanitation and health care issues and safety matters, and on the specific hazards of their work
		Provide HIV awareness programming, including STI (sexually transmitted infections) and HIV information, education and communication for all workers on regular basis
		Provide adequate drainage facilities throughout camps to ensure that disease vectors habitats (stagnant water bodies, puddles) do not form.
		Regular mosquito repellant sprays in monsoon.
		Carryout short training sessions on best hygiene practices to

Activity/ Impact Source	EHS Concerns/issues	Mitigation Measures/ Management Guidelines
		be mandatorily participated by all workers.
		Place display boards at strategic locations within the camps containing messages on best hygienic practices
		Place display boards of contact information of nearest dispensary/health clinic/hospital
Safety	In adequate safety	The Contractor shall:
	facilities to the construction camps may create security problems	Provide appropriate security personnel (police / home guard or private security guards) and enclosures to prevent unauthorized entry in to the camp area.
	and fire hazards	Maintain register to keep track on a head count of persons present in the camp at any given time.
		Encourage use of flame proof material for the construction of labor housing/site office. Ensure that these houses/rooms are of sound construction and capable of withstanding storms/cyclones.
		Provide appropriate type of firefighting equipment suitable for the construction camps
		Display emergency contact numbers clearly and prominently at strategic places in camps.
		Communicate the roles and responsibilities of laborers in case of emergency in the monthly meetings with contractor.
Food Safety	There is potential for exposure to poisonous substances by ingestion	Suitable arrangements are to be made for provision of clean eating areas where workers are not exposed to the hazardous or noxious substances
Site Restoration	Restoration of the	The Contractor shall:
Site restoration	construction camps to original condition requires demolition of construction camps.	Dismantle and remove from the site all facilities established within the construction camp including the perimeter fence and lockable gates at the completion of the construction work.
		Dismantle camps in phases as the work decreases (do not wait for completion of the entire work.
		Give prior notice to the laborers before demolishing their camps/units
		Maintain the noise levels within the national standards during demolition activities
		Different contractors should be hired to demolish different structures to promote recycling or reuse of demolished material.
		Reuse the demolition debris to a maximum extent. Dispose remaining debris at the designated waste disposal site by MCs/ESFPs.
		Handover the construction camps with all built facilities as it is if agreement between both parties (contactor and land- owner) has been made so.

Activity/ Impact Source	EHS Concerns/issues	Mitigation Measures/ Management Guidelines
		Restore the site to its original condition or to an agreed condition with the landowner defined prior to the commencement of the works (in writing). Not make false promises to the laborers for future employment in O&M of the project.

#### **Table 2: Cultural and Religious Issues**

Activity/ Impact Source	Environmental Impacts	Mitigation Measures/ Management Guidelines
Construction Disturbance		The Contractor shall:
activities	activities performance of religious activities	Provide separate prayer facilities (men and women) to the construction workers.
		Show appropriate and non-biased behavior with all construction workers irrespective of their religious or cultural affinities
		Allow the workers to participate in praying during construction time
		Inform the local authorities responsible for health, religious and security duly informed before commencement of civil works so as to maintain effective surveillance over public health, social and security matters
	In case of working during COVID-19 pandemic, SOPs for prayers in Mosque issued by the Government of Punjab, will be applicable and it will be responsibility of contractor to sensitize the labor/workers about it	

#### Table 3: Workers/Labor Health and Safety at Construction Site

Activity/ Impact Source	Impacts	Mitigation Measures/ Management Guidelines
Construction Activities	Construction works may pose health and safety risks to the construction workers and site visitors leading to severe injuries and deaths. The population in the proximity of the construction site and the construction workers will be exposed to a number of (i) biophysical health risk factors, (e.g. noise,	The Contractor shall: Implement suitable safety standards for all workers and site visitors which should not be less than those laid down on the international standards (e.g. International Labor Office guideline on 'Safety and Health in Construction; World Bank Group's 'Environmental Health and Safety Guidelines') and contractor's own national standards or statutory regulations, in addition to complying with the national acts and rules of the Government of Pakistan Provide the workers with a safe and healthy work environment, taking into account inherent risks in its particular construction activity and specific classes of

Activity/ Impact Source	Impacts	Mitigation Measures/ Management Guidelines
	dust, chemicals, construction material, solid waste, waste water, vector transmitted diseases etc), (ii) risk factors resulting from human behavior (e.g. STD, HIV etc) and (iii) road accidents from construction traffic.	hazards in the work areas, Provide Personal Protection Equipment (PPEs)1 for workers, such as safety boots, helmets, masks, gloves, protective clothing, goggles, full-face eye shields, and ear protection. Maintain the PPE properly by cleaning dirty ones and replacing them with the damaged ones. Safety procedures include provision of information, training and protective clothing to workers involved in hazardous operations and proper performance of their job Appoint an environment, health and safety manager to look after the health and safety of the workers Inform the local authorities responsible for health, religious and security before commencement of civil works and establishment of construction camps so as to maintain effective surveillance over public health, social and security matters
	Child and pregnant labor	The Contractor shall: not hire children of less than 14 years of age and pregnant women or women who delivered a child within 8 preceding weeks, in accordance with the Employment of Children Act (2015)2 and Pakistani Labor Laws and policies respectively.

<sup>1</sup> Table 4 presents general examples of occupational hazards and types of PPE available for different purposes.

<sup>2</sup> The ECA 2015 defines a child as a person who has not completed his/her 14th year of age. The ECA states that no child shall be employed or permitted to work in any of the occupations set forth in the ECA (such as transport sector, railways, construction, and ports) or in any workshop wherein any of the processes defined in the Act is carried out

Activity/ Impact Source	Impacts	Mitigation Measures/ Management Guidelines
Accidents	Lack of first aid facilities and health care facilities in the immediate vicinity will aggravate the health conditions of the victims	<ul> <li>Provide health care facilities and first aid facilities are readily available. Appropriately equipped first-aid stations should be easily accessible throughout the place of work</li> <li>Document and report occupational accidents, diseases, and incidents.</li> <li>Prevent accidents, injury, and disease arising from, associated with, or occurring in the course of work by minimizing, so far as reasonably practicable, the causes of hazards. In a manner consistent with good international industry practice.</li> <li>Identify potential hazards to workers, particularly those that may be life-threatening and provide necessary preventive and protective measures.</li> <li>Provide awareness to the construction drivers to strictly follow the driving rules</li> <li>Provide adequate lighting in the construction area and along</li> </ul>
Water and sanitation facilities at the construction sites	Lack of Water sanitation facilities at construction sites cause inconvenience to the construction workers and affect their personal hygiene.	the roads The contractor shall provide separate portable toilets and hand washing facilities at the construction sites, if about 25 people are working the whole day for a month. Location of portable facilities should be at least six m away from storm drain system and surface waters. These portable toilets should be cleaned once a day and all the sewerage should be pumped from the collection tank once a day and should be brought to the common septic tank for further treatment. Contractor should provide bottled drinking water facilities to the construction workers at all the construction sites.
Other issues	Potential risks on health and hygiene of construction workers and general public	The Contractor shall follow the following management measures to reduce health risks to the construction workers and nearby community: Drainage Management Air Quality Management Noise and Vibration Management Road Transport and Road Traffic Management
Trainings	Lack of awareness and basic knowledge in health care among the construction workforce, make them susceptible to potential diseases.	The Contractor shall: Train all construction workers in basic sanitation and health care issues (e.g., how to avoid COVID-193, malaria and transmission of sexually transmitted infections (STI) HIV/AIDS. Train all construction workers in general health and safety matters, and on the specific hazards of their work Training should consist of basic hazard awareness, site specific

3 .SOPs issued by the GoPunjab during COVID-19 Pandemic will be implemented

Activity/ Impact Source	Impacts	Mitigation Measures/ Management Guidelines
		hazards, safe work practices, and emergency procedures for fire, evacuation, and natural disaster, as appropriate.
		Commence the COVID-19, malaria, HIV/AIDS and STI education campaign before the start of the construction phase and complement it with by a strong condom marketing, increased access to condoms in the area as well as to voluntary counseling and testing.
		Implement COVID-19, malaria, HIV/AIDS and STI education campaign targeting all workers hired, international and national, female and male, skilled, semi- and unskilled occupations, at the time of recruitment and thereafter pursued throughout the construction phase on ongoing and regular basis. This should be complemented by easy access to condoms at the workplace as well as to voluntary counseling and testing.

 Table 4: Summary of Recommended Personal Protective Equipment According to Hazard4

Objective	Workplace Hazards	Suggested PPE
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 lines). On-site rescue equipment.
Body/leg protection	Extreme temperatures, hazardous materials, biological agents, cutting and laceration.	Insulating clothing, body suits, aprons etc. of appropriate materials.

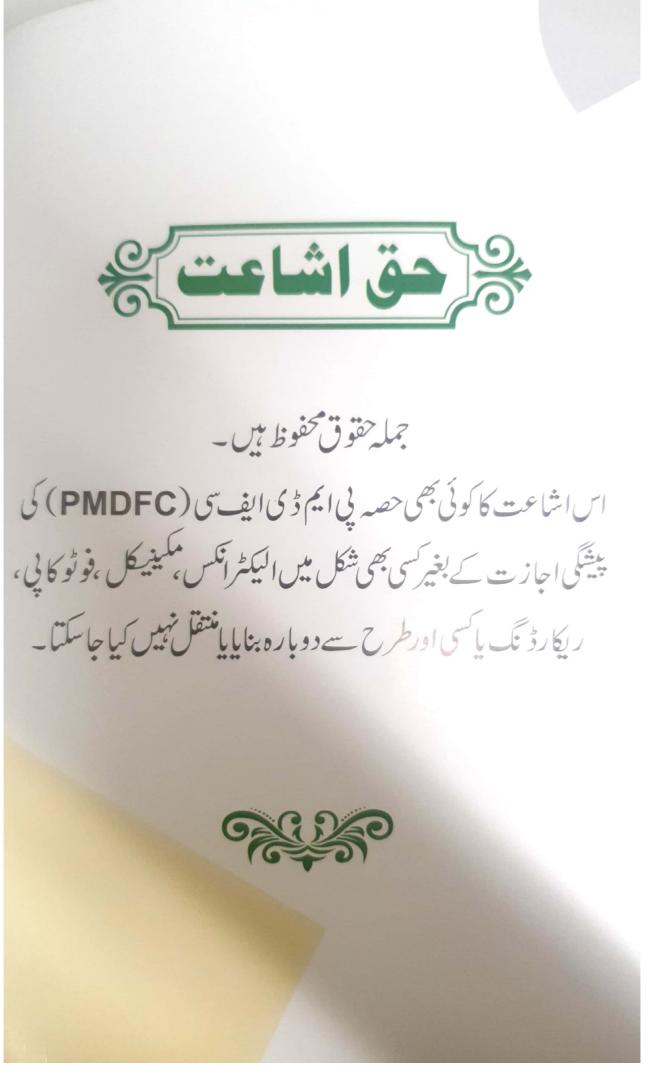
<sup>4</sup> Source: IFC Environmental, Health, and Safety (EHS) Guidelines

PUNJAB CITIES PROGRAM (PCP)

ا<u>ککام بوربا ب</u> تکنید کیدمدد مد مود

TMAWAZIRABAD

# تر قیاتی منصوبوں کی تغییر ومرمت کے دوران کام کرنے والے مزدوروں مردرز (بشمول خواتین لیبر مردرز) کی صحت ، حفاظت اور ماحول کے لئے معیاری اصول وضوابط





لوکل گور نمن ایند کمیونی ڈویلپمنٹ ڈیپار شمنٹ اور پنجاب میون پل ڈویلپمنٹ فند کمپنی (PMDFC) نے درلڈ بینک کے اشتراک سے بنجاب سیٹرز پروگرام (PCP) کا کامیابی سے اجرا کردیا ہے . اس منصوبے کے تحت صوبہ پنجاب کے 16 چھوٹے شہروں (MCs) بشمول ہما ولنگر ، بور یوالا ، خانیوال ، کوٹ ادو، وہاڑی ، گوجرہ ، جھنگ ، کمالیہ ، اوکا ڑا، ڈسکہ ، حافظ آباد، جہلم ، کاموکی ، مرید کے افتد کر استر ترقیاتی کاموں پر کامیابی سے کام جاری ہے ۔ ان ترقیاتی منصوبوں میں ویسٹ مینڈ مین کی فراہمی ، نکامی آ جہ استان کے مرت ، کمیونی پارٹس کی بحالی اور قدرتی آ فات کی روک تھام کے منصوبہ جات شامل ہیں ۔

، پنجاب سیٹیز پروگرام (PCP) کے منصوبہ جات کی تکمیل کے دوران ساجی اور ماحولیاتی مسائل کی جانچ پڑتال اوراس کے طل کے لئے انوائر منظل اینڈ سوشل سیف گارڈز (ESSs) ٹیم نے انوائر منظل اینڈ سوشل مینجہنٹ فریم ورک (ESMF) بنایا ہے . مختلف منصوبہ جات اسی فریم ورک کی روسے پایہ سیمیل تک پہنچ رہے ہیں۔

تعمراتی اور ترقیاتی کاموں کی تحمیل 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 لکو ظِ خاطر رکھتے ہوئے، پی ایم ڈی ایف سی کے زیر اہتمام پنجاب سٹیز پر وگرام کی انواز نمنٹ اینڈ سوشل مینجمنٹ ٹیم نے " تر قیاتی منصوبوں کی تعمیر و مرمت کے دوران کام کرنے والے مزدوروں ، ورکرز (بشمول خواتین لیبر رورکرز) کی صحت ، حفاظت اور ماحول کی لیے بنیا دی اصول وضوالط"



اغراض ومقاصد

ا\_ بحوزہ معاری اصول وضوابط پنجاب سیٹیز پروگرام (PCP) کے تحت بنجاب میونیک ڈویلیمنٹ فنڈ کمپنی ( PMDFC) کے ماہرین ما حولیات نے بروگرام ڈائر یکٹر (PCP) اورڈیٹی بروگرام ڈائر یکٹر (PCP) کی زیرتگرانی تشکیل دیے ہیں۔ ۲\_شہری ترقی کے ترقباتی منصوبہ جات کی تغمیر ومرمت میں مز دور/درکرز بنیادی کردار ادا کرتے ہیں۔ ان ( SOPs ) کابنیادی مقصد مز دور ادر (بشمول خواتین کیبر / ورکرز) کو تعمیراتی جگہوں (Constrcution sites) اور ليبر كيميس ميں ماحولياتي اور ساجی تحفظ فراہم کرنا اور صحت، ماحولیات اور کسی خطرنا ک صورتحال ے بچنے کے لئے حفاظت فراہم کرنا ہے۔ ۳- یہ SOPs (PCP) پنجاب سیٹیز پردگرام کے تحت 16 شہروں کی میونیل کمیٹیز/کاریوریشنز میں تعمیر دمرمت کے تمام پراجیکٹس برلاگوہوں گے۔ ۳- یه SOPs مزدوروں کا م کرنے والوں رد پہاڑی دار (بشمول خواتین) بربلاتخصیص لاگوہوں گے۔ ۵\_ان SOPs کوموٹر اور یقینی بنانے کے لئے اُنھیں ٹھکید اروں کے کنٹریکٹ کا حصبہ بنانا اوران پڑمل درآ مدکرانا میونیل کمیشیز/کارپوریشنز کی ذمہ داری ہے۔ جسے پی ایم ڈی ایف سی کی متعلقہ پروگرام ٹیم یقینی بنائے -5



پاکستان کی ترقی میں تغمیراتی کاموں کے دوران کام کرنے والامز دور طبقہ نہایت اہمیت کا حامل ہے اور الح صحت و تندر متی سے متعلق مسائل کا مؤثر حل انتہائی ضروری ہے۔ " ترقیاتی منصوبوں کی تغمیر و مرمت کے دوران کام کرنے والے مزدوروں رورکرز (بشمول خواتین لیبر رورکرز) کی صحت، حفاظت اور ماحول کیلئے بنیادی اصول وضوابط " کی اشاعت و



ترون احول نیر بردفت عمل درآمد بے حد ضروری ہے جس سے اس طبقہ کے بنیا دی حقوق کا تحفظ یقینی بنایا جا سیک گا اور اس طرح اس طبقہ کی کار کردگی میں بھی بہتری نظر آئے گی۔ ان اصولوں تے تحت ہر تھکیدار کو ور کرز کی صحت اور حفاظت کی ذمہ داری دی گئی ہے۔ مز دور تعمیر اتی کا مول کے دوران خطرات کے مطابق ذاتی حفاظتی سامان بھی استعمال کریں گے جس سے دوران کا م 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 بنایا کی نظر آئے گی۔ ماحولیات اور صحت کے اصولوں کو مد نظر رکھتے ہوئے ہر سطح پر ہم اس بات کو یقینی بنانے کی کو شش کریں این نے میں کسی بھی قشم کا سمجھو تہ نہیں کیا جائے گا۔ میں امید کرتا ہوں کہ ان اصول وضوا اط کی روشنی میں مزد دور دور کرز ( بشمول خواتین لیبر ) کے حقوق کی پاسداری کو ایک نیا رخ کی اور صوا بط کی روشنی میں مزدور دور کرز ( بشمول خواتین لیبر ) کے حقوق کی پاسداری کو ایک نیا رخ کی اور صوا بط کی روشنی میں مزدور دور کرز ( بشمول خواتین لیبر ) کے حقوق کی پاسداری کو ایک نیا رخ کی ایف سی اور پنجاب سیٹر پر دور ام کی انواز نمنٹ اینڈ سوشل سیف گارڈن (ESSs) میں بلا شبہ مبار کباد کی سیختی ہو تو کی جنوبی کی بھی کہی ہم کر دور معنی کی ہو ہوں کی دور اور کی کی ہیں کر میں بی پر ایم ڈی ایف سی اور پر خو کی جا کہ کہ کی ایو از نمنٹ اینڈ سوشل سیف گارڈن ( ESSS) میں بلا شبہ مبار کباد کی سیختی ہے اور میو قوتی کی جا

محمد عا مرنذ بر پروگرام ڈائریکٹر پنجاب سیٹیز پروگرام (PCP)



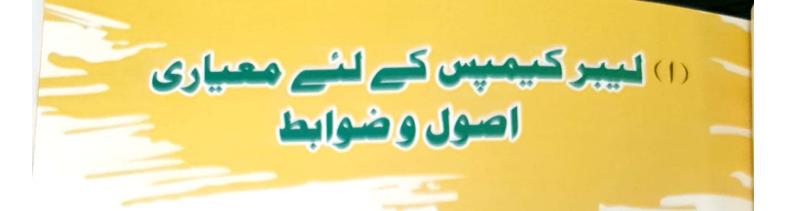
زیر نگرانی



افتخار رسول

ڈ پٹی پروگرام ڈائر یکٹر پنجاب سیٹیز پروگرام(PCP)

تکنیکی ٹیم رضوانه انجم پروگرام آفیسر(انوایزنمنٹ اینڈ سوشل سیف گارڈ ز) پنجاب سييرز پروگرام(PCP) تهمينهكرن کنزی ند ڈپٹی پروگرام آفیسر (ESSs) ريسرج إينالسط پنجاب سيٹيز پروگرام (PCP) پنجاب سييرز پروگرام (PCP)



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

///

مسائل

- م مقامی آبادی کے دسائل پراضافی بوجھ
  - م مقامی آبادی سے تناز عات کا خدشہ
  - م سابق، مذہبی، اور سکیورٹی کے مسائل۔

## حفاظتي اقدامات

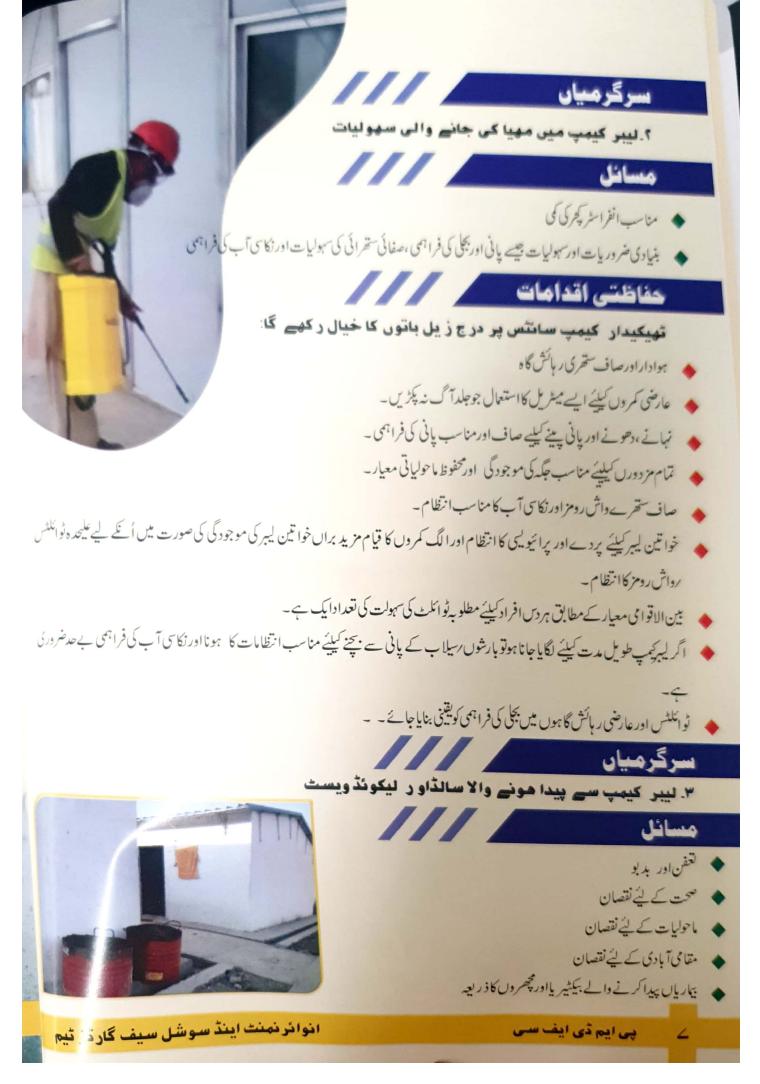


تھیکیدار لیبر کیمپس کے قیام کے وقت مندر جہ ذیل ہاتوں کا خیال رکھے گا: کیمپس ایی جگہوں پرلگائے جا کیں جو ماحولیاتی، نہ ہی، سماجی اور ثقافتی نقط نظر ۔ قابل قبول ہوں۔ مقائی آبادی کے ساتھ کسی تنازعہ ہے بچنے کے لیئے آبادی ہے دور جگہ کا انتخاب کیا جائے پر کیمپ کی جگہ اور سہولیات ۔ متعلق ایک تفصیلی نقشہ تیار کر متعلقہ میونپل کمیٹی رکار پوریش میں جح کرایا جائے۔ دیگر مقائی ادارے جیسے صحت ، سکیورٹی وغیرہ کو لیبر کیمپ کے مقام اور مدت کے بارے طلع کیا جائے تا کہ کی نا گہانی صورتحال ہے، پچا جائے۔ پر کیمپ کی جگہ اور سہولیات ۔ متعلق ایک تفصیلی نقشہ تیار کر کے متعلقہ میونپل کمیٹی رکار پوریش میں جح کرایا جائے۔ پر کیمپس کے قیام کیلیئے عارضی جگہ رزمین کا حصول زمین کے مالک کی مرضی، طرکہ دہ کرایا اور با قاعدہ تحریری معاہدے کی صورتحال ہے۔ پر کیمپس سے قیام کیلیئے عارضی جگہ رزمین کا حصول زمین کے مالک کی مرضی، طرکہ دہ کرایا وربا قاعدہ تحریری معاہدے کی صورت میں کیا جائے۔ پر کیمپس سے ملحقہ بنیا دی سہولتوں جیسے پنے کاپانی اور نکا تی آب کا نظامات سے ماحولیاتی آلودگی میں اضافہ نہ ہو



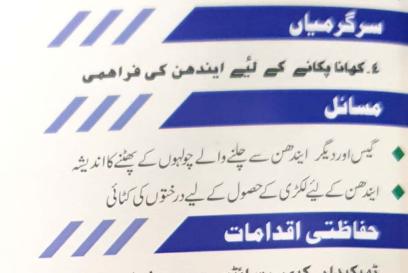
انوائر نمنٹ اینڈ سوشل سیف گارڈز ٹیم

پی ایم ڈی ایف سی



حفاظت ما ملاہ میں اور کو اکرک اور کجن کو ڈاکرک کے لیے الگ الگ کوڑادانوں کا انتظام روز مرہ پیدا ہونے والے کو ڈاکرک اور کجن کے کو ڈاکرکٹ کے لیے الگ الگ کوڑادانوں کا انتظام میونیل ممینی رکار پوریشن کی جانب سے خت کردہ جگہ پرروزانہ کی بنیاد پرکوڑ کے واٹھ نے اور تاف کرنے کا مناسب انتظام عارض لو انکٹس سے پیدا شدہ فضلے اور کیکو یڈو ایٹ کو حفظان صحت کے اصواوں کے مطابق ٹی مکانے لگا نے کا انتظام ہے عارض لو انکٹس سے پیدا شدہ فضلے کو ٹیکا کے محار کہ 2000 میٹر دور جگہ کا انتظام کے مطابق ٹی مکانے رکھ دوکوں کی رہائش مدہو۔ رہائش داخل نہ ہوں اور چھر اور بد یو تھی پیدا نہ ہو۔

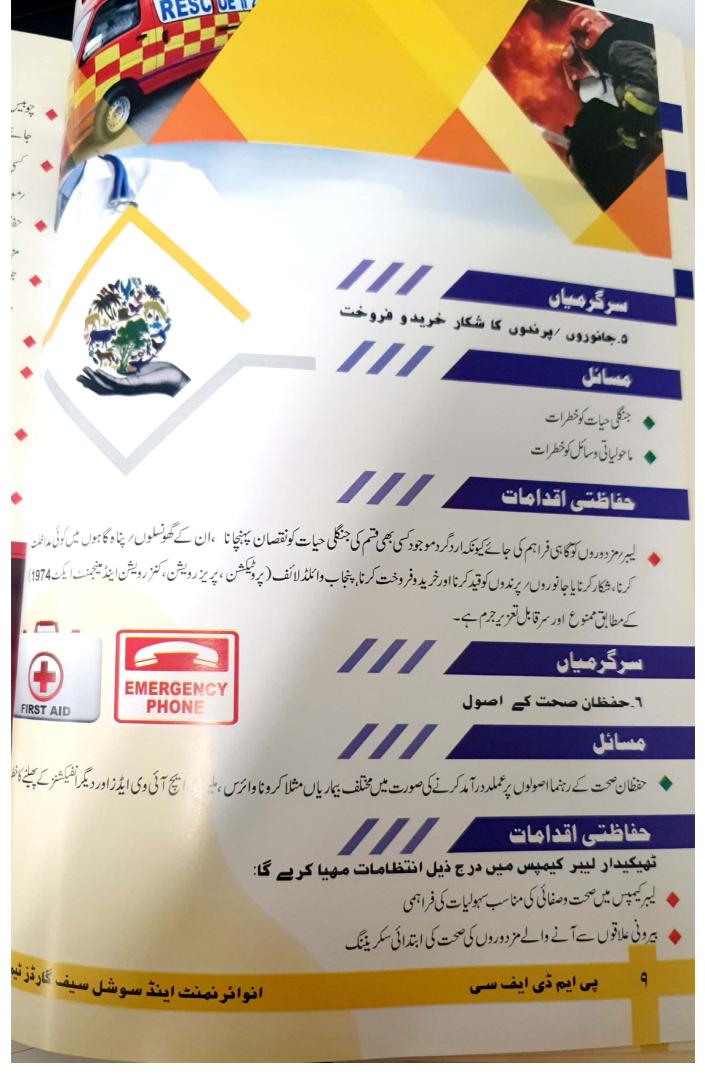




ٹھیکیدار کیمپ سائٹس پر درج زیل سہولیات مہیا کریے گا۔

 لیبر کیمیس میں کھانا پکانے، کمروں کہ گرم رکھنے نیز سر دیوں میں نہانے اور دھونے کے لیے گرم پانی کے لیے ایند شن کی لکڑی یا دیگر بائیو گیس استعال کرنے کی حوصلہ تکنی کریں اور ایند شن کیلیے درختوں کی کٹائی نہ کریں۔
 درختوں اور ارد گرد جنگلات کی حفاظت کیلیے مزدوروں رلیبر کو آگاہی دی جائے۔
 کھانا پکانے کے لیئے قدرتی گیس یامٹی کے تیل کے حفوظ چو لہے استعال کیے جاپیں۔





Scanned with CamScanner

چوہیں گھنٹے لیبر کیمپس میں پرفرسٹ ایڈ بکس کی سہولت موجود ہو۔ کیمپ سائٹ <mark>س میں ابتدائی طبی امداد سے متعلقہ دواؤں کا موجود ہونا یق</mark> ینی بنایا جائے ۔اورطویل المدتی کیمپ کی صورت میں کسی ڈسپنسر رڈاکٹر کاکیمپ میں موجود ہونا چاہئیے ۔
کسی ایم جنسی کے دوران مز دوروں کے لیے ایم ویٹس کی سہولت فراہم کی جامےاورا یم جنسی سروسز 1122 یا 15 پر کال کرنے کے لیے ٹیلیفون رمہ مائل کی سہولت مہیا کی جائے ۔
مزدوروں کی شرکت کو یقینی بنایا جائے۔ مزدوروں کی شرکت کو یقینی بنایا جائے۔
جنسی طور پزشقل ہونے والی بیماریوں اورایڈرز وغیرہ کے بارے میں مزدوروں کو کمل معلومات فراہم کی جائیں اوران بیماریوں سے بچنے کے لیے م حفاظتی اصول اپنانے پرزور دیا جائے۔
پچھروں اور دیگر بیکٹیر یا کو پیدا ہونے سے روکنے کیلئے حفاظتی سپر پر لازمی کرائے جائیں۔
کرونا سے بچنے کے لیئے ابتدائی سکریڈنگ یقینی بنائیں اور بار بار باتھ دھونے پرزوردیں اور علامات ظاہر ھونے پرفوری طور پردیگر مزدوروں سے آئرولیشن کے کمل اصولوں پرشختی سے ممل کیا جائے۔
🔶 لیبر کیمپس کے اندر مناسب مقامات پر حفظان صحت کے اصولوں سے متعلقہ پیغامات اور طریقے ڈسپلے کیے جایئ اور تربیتی پروگرام کا اہتمام کیا
-26
قریبی ڈسپینسری رہیلتھ کلینک رہیپتال کے رابطہ نمبر وغیرہ واضح مقامات پرآ ویزاں کئے جائیں۔

SECURITY سرگرمیاں ۷۔سکیور ٹی اور حفاظت کی سہو لیات مسائل ا سكور ٹي سے مسائل ورى كاخطره و بشت گردی کاخطره • آگ لکنے کے خطرات حفاظتي اقدامات 🔶 کیمی کے گردحفاظتی باڑ کی فراہمی حفاظتى المكار (يوليس يانجى سكيور ٹى گارڈ رہوم گارڈ وغيرہ) كى تعيناتى 🔶 کیمی میں موجودافراد کی صحیح تعداداورآ مدورفت کا حساب کتاب رکھنے کے لیے رجسٹر میں اندراج۔ آگ ۔ جیاؤ کے لیئے لیبرکیمیں بنانے میں ایسا کوئی میٹریل استعمال نہ کیا جا ہے جس ہے آگ لگنے کا ندیشہ ہو۔ 🔶 بارش،طوفان،سیلاب وغیرہ سے بیچنے کیلےاس بات کو یقینی بنایا جائے کر کیمپ سما ترف اور عارضی کمر <mark>سے رہائش گا ہیں محفو</mark>ظ رہیں۔ لیبر کیمپس میں آگ بچھانے والا آلات موجود ہوں جن پرانگی آخری معیاد کی تاریخ درج سے اور سکیورٹی گارڈیا لیبر وغیرہ میں سے نگ افرادکوآگ بچھانے والے آلداستعال کرنے کی تربیت دی جائے۔ ليركيم يين واضح مقامات پر ہنگامی را يرجنسي را بط نمبر نماياں درج ہوں۔ ٹھیکیدار، لیبر کے ساتھ ماہانہ میٹنگز میں ایمرجنسی کی صورت میں ہرایک مز دورکواسکی ذمہ دا<mark>ریوں اور تربیت سے آگ</mark>اہ کرے<sup>ادرا کی تقبل<sup>نگ</sup> ان اند</sup> کنسلننٹ اور میون کمیٹی رکار پوریشن کوفراہم کرے۔ اور کسی بھی قشم کی شکایات ایک رجسٹر میں درج کرے۔ انوائر نمنٹ اینڈ سوشل سیف گلان 11 پی ایم ڈی ایف سی





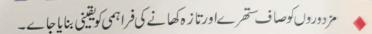
Food Safety محت کے اصولوں پر مبنی خوراک Food

مسائل

فودْ بواتر تك كاخدشه

بارىكادر

### حفاظتي اقدامات



سرگرمیاں

٩.مذهبي و سماجي ميل جول

## مسائل

## مذہبی عبادات میں رکاوٹ

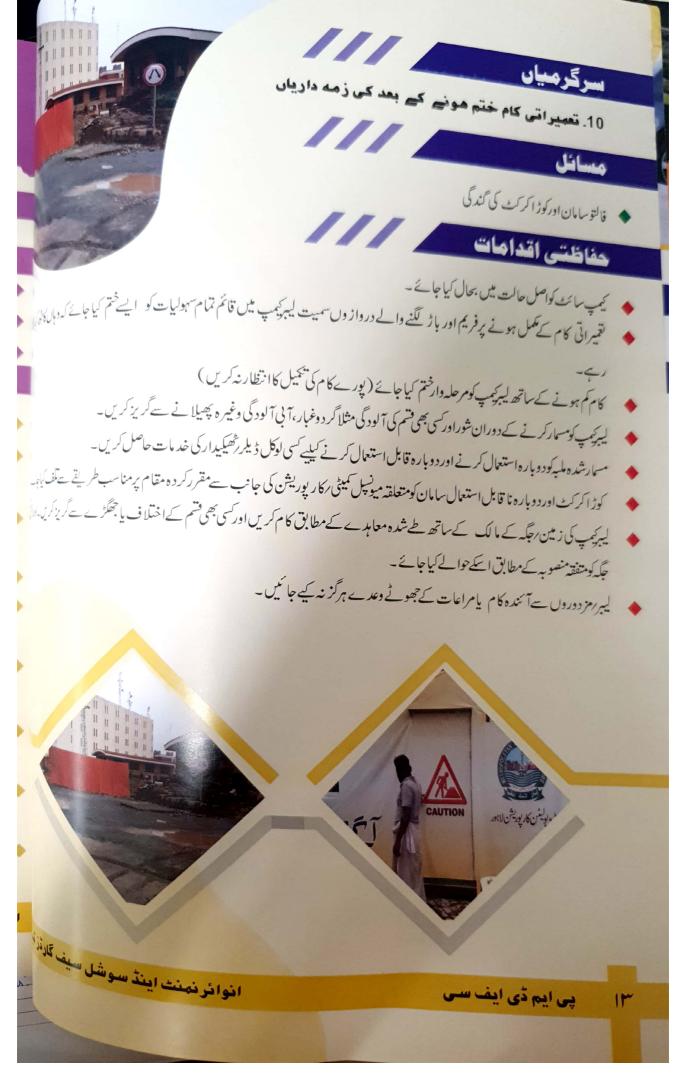
- الجاجى تعلقات ميں دشوارى
- ساجی، ثقافتی اور مذہبی خیالات میں شدت پسندی پالڑائی جھگڑ اوغیرہ

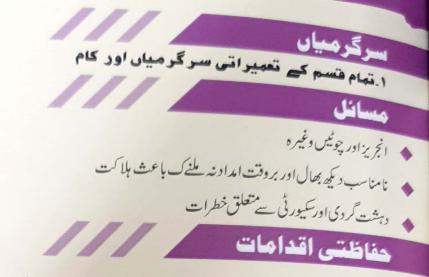
## حفاظتي اقداهات

- مزدوروں رلیبر کوان کے مذہب اور فرقے کے مطابق مذہبی عبادات کی سہولیات فراہم کرنا۔
- 🔶 خواتین لیبر کی موجودگی کی صورت میں ان کے لیے علیحدہ وضو، نمازاور پردے کا اہتمام کیا جائے۔
- متمام مزددروں کی مذہبی، ثقافتی یا فرقے کی وابستگی سے قطع نظر غیر متعصّبانہ اور برابری کاسلوک کیا جائے۔
- مزدوردں کو تعمیراتی کام کے دوران نماز میں شرکت کرنے یا دیگر عبادات کی اجازت دی جائے ا<mark>وراس سلسلے میں مذہبی اور سکیور ٹی امور کے ذمہ دار</mark> مقامی حکام کو تعمیراتی کاموں کے آغاز سے پہلے باضابطہ طور پر آگاہ کیا جائے تا کہ صحت عامہ، معاشرتی اور حفاظتی امور پرموژنگرانی برقراررہ سکے۔

پی ایم ڈی ایف سی ۱۲

## أنوائر نمنت اينڈ سوشل سيف گارڈز ٹيم







- متام مزدوروں رلیبر سے مقامی رمین الاقوامی معیار کے مطابق مناسب حفاظتی اور قانونی ضوابط کی پیروی کردائی جائے۔
- کام کی جگہ پر اردگرد کے علاقوں میں موجود دہشت گردی اور سکیورٹی کے خطرات کے مطابق حکمت عملی کی بروقت تیاری اور ایک محفوظ وضحت مند ماحول مہیا کیا جائے۔
- مزدورورں رلیبر کیلیے ذاتی حفاظت کے سامان (PPEs) کی فراہمی مثلا حفاظتی جوتے ، ہیلم طے، ماسک، دستانے، حفاظتی لباس، چشمے، چہرے اور کان کی حفاظت کے سامان وغیرہ کی فراہمی
  - 🖌 تمام مزدوروں رلیبر کوذاتی حفاظت کے سازوسامان کے بارے میں مکمل آگاہی اوراستعال کے طریقے کارکے بارے تربیت کا نتظام۔
- ۔ اگر تعمیراتی کام ایک ماہ سے زائد عرصہ کیلئے جاری رہنا ہوتو تمام مدت کے لیئے صحت، صفائی اور تربیت یافتہ ماحولیات کی تعیناتی کی جائے جو مزدوردں کی صحت،صفائی اور ماحولیات کے امور کی نگرانی کرے اورانھیں تربیت وآگا ہی فراہم کرے۔
- تعمیراتی کاموں کے دوران کسی چوٹ لگنے را نجریز کی صورت میں مزدور رکیبر کے علاج معالیج کی سہولت مہیا کرنا اور بروفت ہیپتال رڈ سپنسر کی و غیرہ پہچانا ٹھیکیدار کی ذمہ داری ہے۔
- مزید برآن دوران تعمیر تعمیر اتی کام کی وجہ سے لگنے والی چوٹ رانجریز کے نتیج میں ہلاکت ہوجانے کی وجہ سے مزدور رلیبر کی انشورنس اور اس کر بروفت ادائیگی کویقینی بنایا جائے۔
- ایم جنسی رابطه نمبر مثلا ریسکیو**1122یا15**اور دیگر قریبی مہپتالوں رڈ سپنسری وغیرہ کے نمبر تعمیر ات<mark>ی جگہوں پر واضح درج ہونے جاہیں اور کال کے</mark> سہولت فراہم کی جائے۔
- شہری ترقی کے تعمیراتی منصوبہ جات کے اغاز سے قبل صحت ، مذہبی اموراور شہری تحفظ رسکیورٹی فراہم کرنے والے مقامی اداروں کوآگاہ رکھا جا۔ اوران سلسلے میں متعلقہ میونپل کمیٹی رکار پوریشن کے تعاون سے موثر حکمت عملی تشکیل دی جائے۔

پی ایم ڈی ایف سی

انوائرنمنٹ اینڈ سوشل سیف گارڈز ٹیم

۲۔تمام مسم کی تعمیراتی سر گرمیاں اور کنسٹر کشن کے کام

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 مز دور عور توں کی صحت سے متعلقہ خطرات

حفاظتي اقدامات

مسائل

دی پنجاب رسٹرکشن آن ایمپلائمنٹ آف چلڈرن ایکٹ 2016 کے مطابق15سال سے کم عمر بچوں کومزدوری یاکسی سرگرمی کے لیئے کام پر نہیں رکھا جاسکتا۔

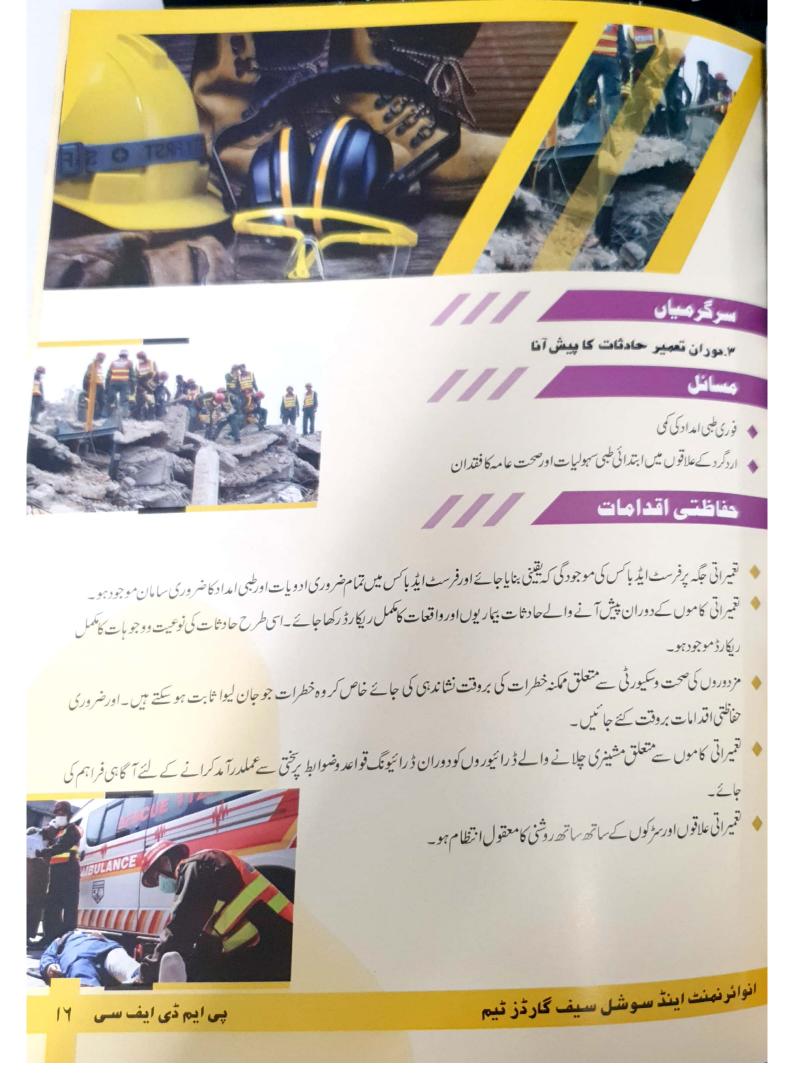
- ویسٹ پاکستان میٹرنٹی بنیفٹ آردیننس **1958 کے مطابق حاملہ خواتین یا ایسی خواتین جنہوں نے** چھ ہفتے قبل بچے کوجنم دیا ہو، کومز دوری یاکسی سرگرمی کے لیئے کام پرنہیں رکھا جاسکتا۔
- دی پنجاب رسٹرکشن آن ایمپلائمنٹ آف چلڈرن ایکٹ2016 کے مطابق18 سال اوراس سے کم عمر کے بچوں کہ محنت مزدوری کے ایسے کام کے لیے تھیں رکھا جاسکتا جن میں صحت کو نقصان پنچنے یاچوٹ لگنے یاکسی کیمیائی زہر یلے مادے سے <mark>نقصان پنچنے یا جہاں مڈی ٹوٹے کا اندیشہ ہو۔</mark>

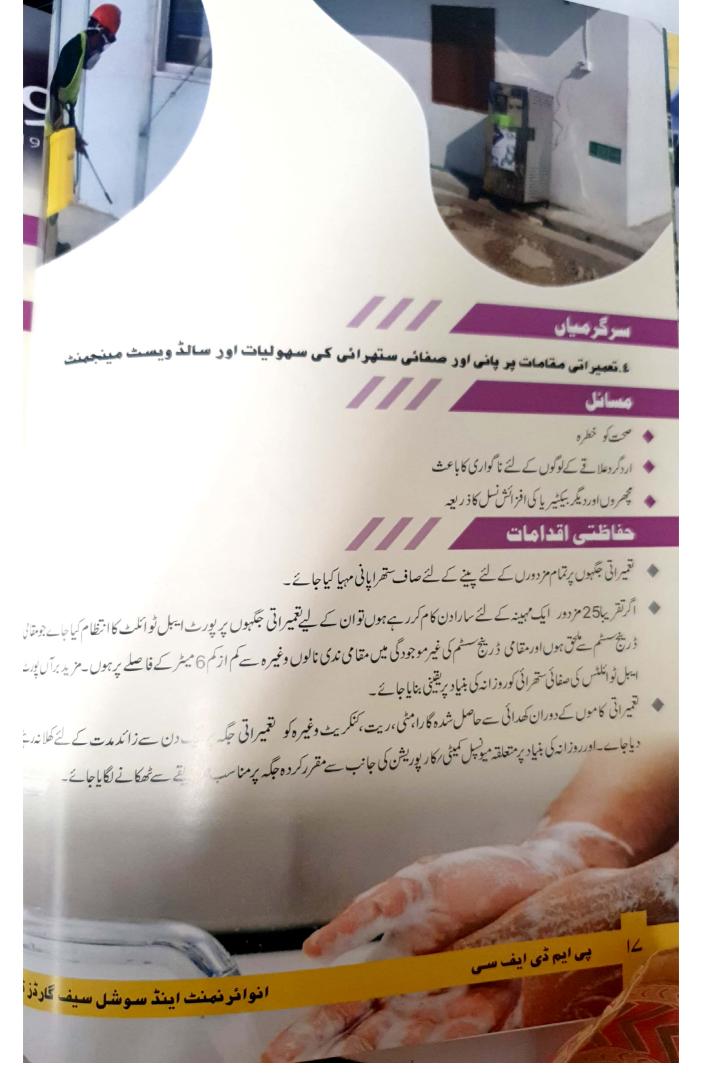


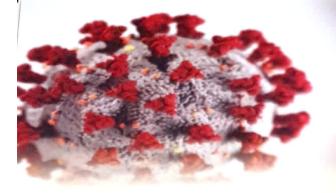
انوائر نمنٹ اینڈ سوشل سیف گارڈز ٹیم

10

پی ایم ڈی ایف سی







کرونا وائرس کی وہا کے دوران حفاظتی تدابیر

CORONAVIRUS DISEASE 2019

## مفاظتی اقدامات

سرگرمیاں

گورنمنٹ آف پنجاب اور ورلڈ بنک کی مدایات کے مطابق کرونا کی وبا کے دوران درج ذیل حفاظتی اقدامات کی پابندی کروانا کنٹریکٹر کی ذمہ داری مے :

- کرونادائرس کی وبا کے دنوں میں کنسٹرکشن سائٹ پر ہاتھ دھونے کیلتے پانی (پورٹ ایبل ہینڈ داشنگ کی سہولت )اورصابن مہیا کیا جائے اور لیبرکوبار بارصابن سے ہاتھ دھونے کی تلقین کی جائے۔ لیبرکیمپس میں اورکنسٹرکشن سائٹ پرسوشل ڈیسٹینسنگ (6m کا فاصلہ ) کے اصولوں کو مدنظر رکھا جائے۔
- اگر کسی مریض میں دائر کی علامات (خشک کھانسی، نزلہ، زکام، بخاروغیرہ) پائی جائیں تو اسے فوراً دوسرے مزدوروں ہے آئسولیٹ کر دیاجائے اور ٹیسٹ کروانے کیلئے کہا جائے۔

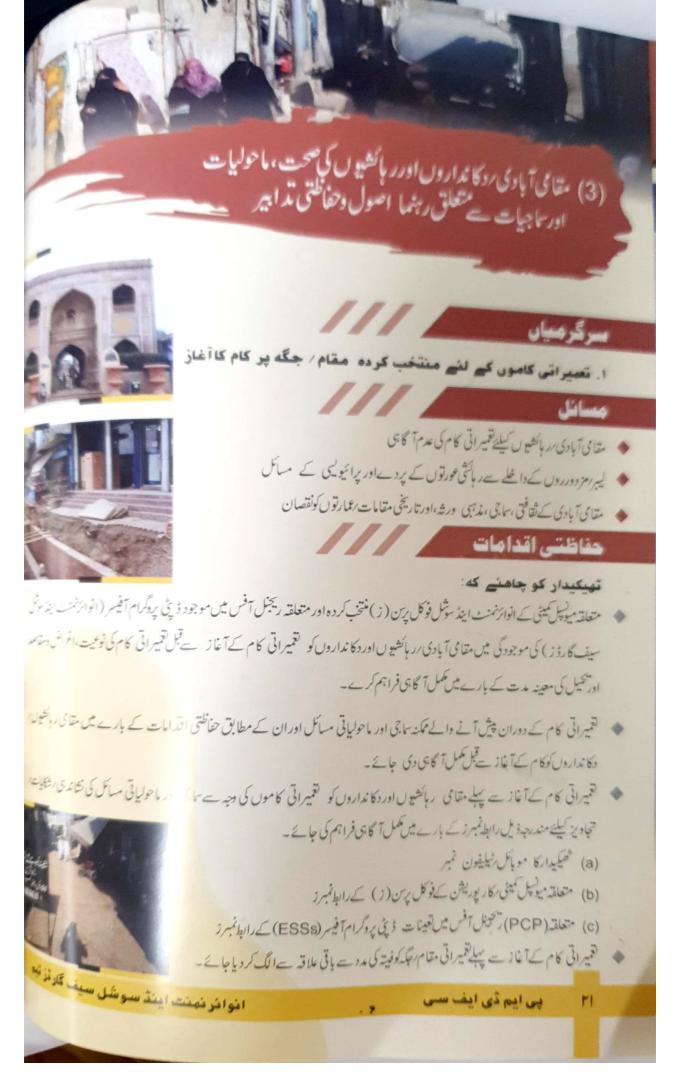
دان کنسٹرکشن سائٹ پردیگر PPEs کے ساتھ ساتھ مزدوروں کو ماسک لازمی استعال کرایا جائے۔



لتہیراتی کاموں کے دوران خطرات/حادثات سے چی جی مال کا بید سے دوران طاطنت کا خلار تصويري داتى حفاظت تعمیراتی کام اڑنے والے ذرات کا ستعال جیسے پکھلی ہوئی مقصد حفاظتي عينكيس دهات مائع کیمیکل ، پیس، اور بخارات، روشنی کی آنکھوں اور چہرے کی او پراوراطراف نفصان سے بچاؤ کیلئے ایے تمام کام جن میں گرنے کا خطرہ ہو، بلندی پر حفاظت/ تحفظ بلاستك تح جميلم ف کام کرنا بقمیراتی کام کوسنجا لنے اور دوسری جگہ پر سر کی حفاظت/ تحفظ ساعت کی حفاظت کے آلدجات جیسے کن پیش منتقل كرف والحكام-كهدائي/شور پيداكر في والحكام يا بهارى اايتريك یندر پال بلنے اور گرنے والی اشیاء، مائعات اور کیمیائی مشیزی استعال کرنے کی وجہ سے شور۔ سماعت کی حفاظت/ تحفظ تمام تعميراتي كام جن ميں چيزوں كا كرنايا تھمانا، موادیے بچاؤ کیلیے حفاظتی جوتے یا بوٹ نو کیلی اشیاشامل ہوں ۔ گلانے والایا گرم مائع ، پاؤں کی حفاظت/ تحفظ رېژيامصنوعي مواد(نيورويېن)، چېژا، شيل، بجري كي في حر الثمانا-جسماني صحت كيليح نقصان ده سامان جیسے کچر بے کو غير موصل مواد سے بنے گلوز سنجالنا،ایسے کام جس میں کاٹ یا گہرے زخم لگنے ماتهوں کی حفاظت/ تحفظ کاندیشہو،ارتعاش، بہت زیادہ درجہ حرارت۔ ایک جگہ سے دوسری جگہ لے جانے والے یا ایک ہی جگہ پڑے مواد کی فراہمی تعمیراتی جگہ دهول، دهند، شعلے، کیسیں، دهواں، بخارات 1 يربيحاة كاسامان چېرے کے ماسک جن میں دھول ہٹانے اور ہواکوصاف رکھنے کیلئے ( کیمیائی مواد، تحفظ تنفس دھند، بخارات اور کیسوں سے )مناسب فلٹر آسيجن کی کمی لگے ہوں مناسب ميٹريل سے بے غير موصل كيڑے، تمام کام جن میں شدید درجہ حرارت ، نقصان دہ جسم / ٹانگوں کی حفاظت/ اييرن وغيره مواد، حیاتیاتی ایجن، چھوٹے یا گہرے زخم لگنے کا تحفظ انديشهو ہیلم ہے، حفاظتی عینکیں ، کے گلوز اورر بڑ تمام تعميراتي كام جو 4 فث ياس سے زيادہ كى 42 اونچائی پر کام کرتے ھوئے کے بوٹ اونچائی پر کے جانے ہوں بشمول سٹریٹ لائٹس حفاظت وغيره 1 13 تمام تعميراتي كام جو 4 فث يااس - زائداد نيجائي اونچائی پر کام کرتے ھوئے ایک ساتھی فرد برسلسل ایک دن کیلئے کیے جانے ہوں حفاظت انوائر نمنٹ اینڈ سوشل سیف گارڈ پی ایم ڈی ایف سی 19

## Summary of Recommended Personal Protective Equipment According to Hazard

Eye and face protectionFlying patholesials, gases of vapors, light radiation.shields, protective shades, etc.Head protectionFalling objects, inadequate height clearance, and overhead power cords.Plastic Helmets with top and side impact protection.Hearing protectionNoise, ultra-sound.Plastic Helmets with top and side impact protectors (ear plugs or ear muffs).Foot protectionFalling or rolling objects, pointed objects. Corrosive or hot liquids.Safety shoes and boots for protection against moving & falling objects, liquids and chemicals.Hand protectionHazardous materials, cuts or la cerations, vibrations, extreme temperatures.Safety shoes and boots for protection against moving & falling objects, liquids and chemicals.Respiratory protectionDust, fogs, fumes, mists, gases, smokes, vapors.Facemasks with appropriate filters for dust removal and air purification (chemicals, mists, vapors and gases). Single or multigap personal monitors, if available.Body/leg protectionExtreme temperatures, hazardous materials, cuting and trails, sological agents, cutting and suits, aprons etc.Insulating clothing, body suits, aprons etc.	Objective	Workplace Hazards	Suggested PPE	Piet.
Head protectionheight clearance, and overhead power cords.side impact protection.Hearing protectionNoise, ultra-sound.Hearing protectors (ear plugs or ear muffs).Foot protectionFalling or rolling objects, pointed objects. Corrosive or hot liquids.Safety shoes and boots for protection against moving & falling objects, liquids and chemicals.Hand protectionHazardous materials, cuts or lacerations, vibrations, extreme temperatures.Safety shoes made of rubber or synthetic materials (Neoprene), leather, steel, insulating materials, etc.Respiratory protectionDust, fogs, fumes, mists, gases, smokes, vapors.Facemasks with appropriate filters for dust removal and air putfication (chemicals, mists, vapors and gases). Single or multi-gas personal monitors, if available.Dust, fogs, fumes, mists, star ardous materials, extreme temperatures, hazardous materials, olds agaes, single or multi-gas personal monitors, if available.Insulating clothing, body suits, aprons etc.Body/leg protectionExtreme temperatures, hazardous materials, biological agents, cutting andInsulating clothing, bodyWorking at *heightRehabilitation ProjectsHelmet, Safety glasses,		liquid chemicals, gases or	shields, protective shades,	Picture
Hearing protectionNoise, ultra-sound.or ear muffs).Foot protectionFalling or rolling objects, pointed objects. Corrosive or hot liquids.Safety shoes and boots for protection against moving & falling objects, liquids and chemicals.Hand protectionHazardous materials, cuts or lacerations, vibrations, extreme temperatures.Safety shoes and boots for protection, gainst moving & falling objects, liquids and chemicals.Respiratory protectionDust, fogs, fumes, mists, gases, smokes, vapors.Facemasks with appropriate filters for dust removal and air putification (chemicals, mists, igases). Single or wapors and gases). Single or suiti-gage personal monitors, if available.Body/leg protectionExtreme temperatures, hazardous materials, biological agents, cutting and * heightInsulating clothing, body suits, aprons etc.Working at *heightRehabilitation ProjectsHelmet, Safety glasses,		height clearance, and overhead		
Foot protectionFailing of rolling objects, pointed objects. Corrosive or hot liquids.protection against moving & falling objects, liquids and chemicals.Hand protectionHazardous materials, cuts or lacerations, vibrations, extreme temperatures.Gloves made of rubber or synthetic materials, etc.Respiratory protectionDust, 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.Body/leg protectionExtreme temperatures, hazardous materials, biological agents, cutting and wrking at *heightRehabilitation ProjectsInsulating clothing, body suits, affety glasses,		Noise, ultra-sound.		
Hand protectionHazardous materials, cuts or lacerations, vibrations, extreme temperatures.synthetic materials (Neoprene), leather, steel, insulating materials, etc.Respiratory protectionDust, 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.Body/leg protectionExtreme temperatures, hazardous materials, biological agents, cutting and Rehabilitation ProjectsInsulating clothing, body suits, aprons etc.Working at *heightRehabilitation ProjectsHelmet, Safety glasses,		pointed objects. Corrosive or	protection against moving & falling objects, liquids and	
Respiratory protectionDust, fogs, fumes, mists, gases, smokes, vapors.filters for dust removal and air purification (chemicals, mists, vapors and gases). Single or multi-gas personal monitors, if available.Body/leg protectionExtreme temperatures, hazardous materials, biological agents, cutting andInsulating clothing, body suits, aprons etc.Working at *heightRehabilitation ProjectsHelmet, Safety glasses,	Hanu	lacerations, vibrations,	synthetic materials (Neoprene), leather, steel,	Y.
Body/leg       Extreme temperatures,       Insulating clothing, body         protection       Extreme temperatures,       Insulating clothing, body         Working at *height       Rehabilitation Projects       Helmet, Safety glasses,			filters for dust removal and air purification (chemicals, mists, vapors and gases). Single or multi-gas personal monitors,	1
Body/leg       h a z a r d o u s m a t e r i a l s, biological agents, cutting and       suits, aprons etc.         Working at *height       Rehabilitation Projects       Helmet, Safety glasses,		Oxygen deficiency	Portable or supplied air (fixed	1
Working at *height		hazardous materials,		.35
	-	Rehabilitation Projects	Helmet, Safety glasses,	
······································	0	New Construction Projects	Anchor, belt, lanyard,	-



سرگرمیاں

2-کپدائی کی جگہ اور اس سے متعلقہ کام اور نالوں کی صفائی اور اس سے حاصل شدہ بہل وغیرہ

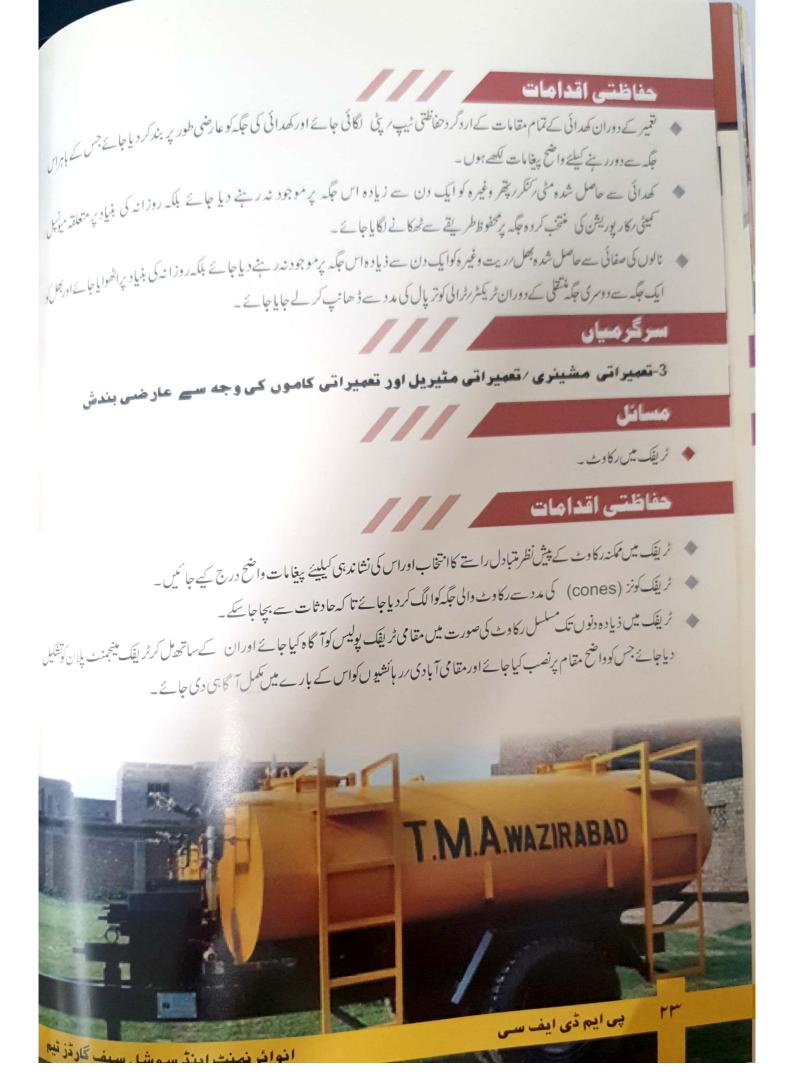
مسائل

حُدانی سے حاصل شدہ مٹی رکنگر کے ڈچیر (Debris) سے رہائشیوں کی آمدور ڈت اورٹر یفک میں رکاوٹ ىتانى بالشيول كىلىيۇ ناگوارى كاباعث مچروں اور دیگر بیماری چھیلانے والے جراشیم کی افز اکش کا ذ ربعیہ کھدائی کی جگہ پر گرنے اور حادثات کے خطرات وانرنمنت اینڈ سوشل سیف گارڈز ٹیم

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ہ۔ 4۔تعمیر اتی کاموں کی وجہ سے راستوں میں عارضی رکاوٹ اور زمین کا عارضی حصول

> روز مرہ معمولات اور کا موں میں رکاوٹ رہائٹی خواتین کیلئے آنے جانے میں رکاوٹ دکانداروں کے دکانوں کے آگے رکاوٹیں اور گا ہکوں کیلئے مشکلات مستقل وعارضی سٹالز لگا کر بیچنے والے چھوٹے بڑے مستقل دکانداروں کا گا مکہ کم ہوجانے کی وجہ سے مالی نقصان

حفاظتي اقدامات

مسائل

لتحیراتی علاقے میں اردگر دموجود قمام تحیوثی بودی دکانوں بھیلوں ، عارضی خوانچ فروشوں اور گھروں کا تعمل سروے (تعداد اور مالی حیثیت وغیرہ) او ان پر تمکنہ تعابی اور ماحولیاتی اثر ات کا جائزہ لے کر ایک تفصیلی رپورٹ اور متعلقہ پلان میونہل کمیٹی رکار پوریش کے دفتر میں موجود ہونی چا ج جو کہ فو کل پر سنز ، متعلقہ علاقائی آف میں موجود ڈپٹی پروگرام آفیسر (ESSs) کے ساتھ قعیراتی کا موں کی مالیت کا اندازہ لگا کے دفت تیل جو کہ فو کل پر سنز ، متعلقہ علاقائی آف میں موجود ڈپٹی پروگرام آفیسر (ESSs) کے ساتھ قعیراتی کا موں کی مالیت کا اندازہ لگا کے دفت تیل جو کہ فو کل پر سنز ، متعلقہ علاقائی آف میں موجود تابی اور ماحولیاتی مسائل سے طل کیلیے مختص قم اور ان کا تصحیح طریقہ کے استعمال تعکیدار کے نظر یک حصہ ہوگا۔ دمیں مور کہ اور پلان میں موجود ساجی اور ماحولیاتی مسائل سے طل کیلیے محتص قم اور ان کا تصحیح طریقہ کے استعمال تعکیدار کے نظر یک در ہائشوں کہلیئے آنے جانے اور دکانوں رگھروں تک رسائی کے لیے متبادل رائے میں کرنا ٹھیکدار کی ذمہ داری ہے۔ در کانوں رتھڑ وں رشیلوں وغیرہ کیا ہر کی بھی قسم کے نقصان یا تو ژ چھوڑ کی صورت میں تھک یدار کی دمداری ہے۔ اور ار حرد دور کو تربیلوں وغیرہ کی ہر میں تعالی اور پندیں کی تو تعاد کا دائے ہوئی کی دونی داری ہے۔ اور مرد دور کو تربیلوں وغیرہ کی ہر کی بھی قدم کے نقصان یا تو ژ چھوڑ کی صورت میں تھک یدار کے نہ بین اور رائشیوں کی تھیں اس کی دور کو توں رائیں مور در کی تعلیم کی تھیں اور کی تعلیم کی تو دو کی کی دور دور کو تھیں ہوئی دور کی کہ تی جائیں کی تعلیم کی دوتوں کی تعلیم کی دو تعلیم کی کی دو توں رائیں مورد ہوئی کی تعلیم کی جو تو ہور تی میں کوئی رکاوٹ نہ بینیں اور رائشیوں کی تاتھ بلا خرد دو کو کی میں جو لی کر توں ہوئی کی دو توں کی تعلیم کی کر دو کی دو توں دو توں اور کی تعلیم کی کر دو کی دو تو کی دو توں دو توں کی کی دو توں کی دو توں کی کی توں کی دو توں دو کو کی دو تو توں دو توں دو توں دو توں دو توں دو توں کی دو توں کی دو تو توں دو توں دو

تعمیراتی کیمپ لگانے بعمیراتی کام کرنے کامشینری اور سیرانی منامان کو تصویر الطاکا پابندہوگا۔ پرادا کی جائے گا۔اورتحریری معاہد کے کامور سیری شکیدارتمام تو اعد وضوالط کا پابندہوگا۔ تعمیراتی کاموں کیمپ وغیرہ لگانے کے لیے عارضی زیرن حاصل کرنے کے لئے مقامی رہائشیوں سے مشاورت اوردنوں کے حیاب کے کرایدادر اس کا کمل طریقہ کا روضع کرتے با قاعدہ لکھا جائے گا۔اورخلاف ورزی کی صورت میں ٹھیکیدارذ مہدارہوگا۔



FTY-

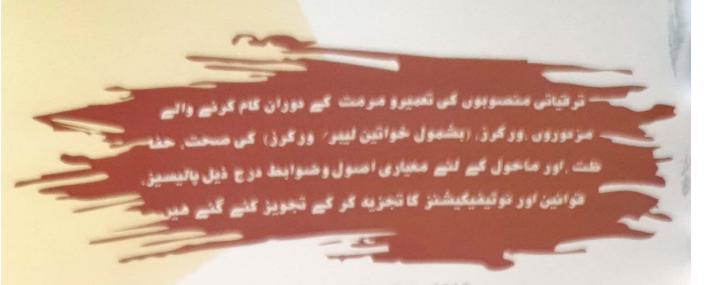


- تعمیراتی کاموں کے دوران پیداشدہ فاضل پانی یا پورٹیبل ٹو انگٹس کا پانی رفضلہ وغیرہ کا محفوظ اور مناسب طریقے سے ٹھکانے لگانے کا بندو بست کیا جائے اور فاضل پانی کو پینے کے صاف پانی کے ساتھ شامل ہونے سے بچانے کا ہزمکن قدم اٹھایا جائے۔
- واٹر سپلائی کی سکیموں یا ایسی تمام کا مجن کی دجہ سے رہائشیوں کو پانی یا سیور بنی وغیرہ میں عارضی بندش کا سامنا کرنا پڑ سکتا ہو۔، ایسے تمام کا موں کے آغاز سے پہلے رہائشیوں کو پیشگی اطلاع دی جائے اور متبادل انتظامات کا خاطر خواہ انتظام کیا جائے۔
- تعمیراتی کاموں کی وجہ سے درختوں کی کٹائی سے ہر حال میں گریز کیا جائے اور ناگز برصورت حال میں ایک درخت کی کٹائی کے متبادل کے طور پر چار درخت لگا ناضروری میں۔
- التمیراتی جگہ پر پیدا ہونے دالےکوڑا کرکٹ کوٹھکانے لگانے کیلئے ڈسٹ بن لگائے جائیں اوران کوروزانہ کی بنیاد پر متعلقہ میونیل کمیٹی کی طرف سے مقرر کر دہ مقام پرٹھکانے لگایا جائے۔
  - کوڑا کرکٹ اور فاضل پانی اردگر دموجو دفصلوں اور ندی نالوں میں تھینکنے سے گریز کریں۔
    - گردد غباراور ہوائی آلودگی کی صورت میں پانی کا با قاعدہ چھڑ کاؤ کریں۔
- تعمیراتی کام کی مدت اورنوعیت کے مطابق کام کے آغاز سے پہلے، کام کے دوران اور کام کے بعد شرک آلودگی، ہوائی آلودگی اور آبی آلودگی کے نعمیراتی کام کی مدت اورنوعیت کے مطابق کام کے آغاز سے پہلے، کام کے دوران اور کام کے بعد شرک آلودگی، ہوائی آلودگی اور آبی آلودگی کے نمو خد جات حاصل کر کے ان کی جار پنج پڑتال کرانا ٹھیکیدار کی ذمہ داری ہے۔ اس سلسلے میں ریجنل آشن میں موجود ڈپٹی پروگرام آفیسر (ESSs) سے مزید رہنمائی حاصل کر ہے۔

لتمیراتی کا مکمل ہوجانے کے بعدعلاقے کی صفائی ستھرائی اور ماحولیاتی خوبصورتی کا خاص <mark>خیال رکھیں اور پہلے سے بہتر حالت میں چھوڑیں</mark>۔

\* سريم كورث آف باكتان كرودولكس نبر 25 بطابق 2009 حال نبر "كتل آف فرينال دوا يونك لا مود" تيراق كامول كردران برايد درخت كاكانى كتادل باردرخت لا عران تخيرات كامول كردران برايد درخت كاكانى كتادل باردرخت لا عران تحد وي ايم شى ايم شى ايف سى

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- 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

