

Local Government & Community Development Department

Punjab Cities Program Construction of SWM Parking Area in Vehari City

PC-I

Estimated Cost Million PKR.29.050

August 2022

Municipal Committee Vehari



JERS CONSULTANCY (PVT) LTD

(Formely Jers Engineering Consultants)

24-Civic Center, Queid-e-Acen Town, Township, Lature (Pakislan)

Tel: 492 42 35113123, 492 42 35113124

Fax: 482 42 35113125

White Prince in the same of





Punjab Cities Program

PC-I Form for Construction of SWM Parking Area in Vehari City Table of Contents

S. No.	Description	Page No.
1	PC-I Form	1-14
2	Annexure-1	15-16
3	Annexure-A Location map	17-19
4	Annexure-B Project cost Estimates	20-98
5	Annexure-C Project Economic Analysis	99-100
6	Annexure-D Project Implementation Period (Gant Chart)	101-102
7	Annexure-E E&S Checklist and SOPs	103-116
8	Annexure-F Project Drawings	117-155

PC-I FORM

for

Construction of Parking Area in Vehari City

Project Serial Number

Sector:

Local Government & Community Development Department

Sub Sector:

Social

1. Name of the project	Punjab Cities Program				
trame of the project	Construction of Parking Area in Vehari city				
2.Location	Vehari city is located at 100 km (62 miles) distance from the historical city of Multan in the east at old Multan-Delhi Road and is the headquarters of Vehari District. It is located at 300 02' N and 720 21'E and connected with all nearby cities through rail and road. Location map of the city is attached in Annexure-A				
3. Authorities responsible	for				
i- Sponsoring	Government of the Punjab (through World Bank	funding)			
ii- Execution	Municipal Committee Vehari				
iii- Operation and Maintenance	Municipal Committee Vehari				
iv-Concerned Provincial Department	Local Government and Community Developmen	t Department Punjab			
4a.Plan Provision		•			
	Punjab Cities Program (PCP) is a World Bank f	unded Program with			
i. If the project is included in medium	total cost of USD 236.00 million and comprise components.	s of below mentione			
term/five year plan,	Total loan from World Bank	USD 200.00 million			
specify actual allocation	Component-1 Infrastructure development (PforR)	USD 180.00 million			
	Component-2 Technical Assistance	USD 20.00 million			
	MCs share (20% of PforR component)	USD 36.00 million			
	equivalent to: Total Program cost	USD 236.00 million			
	Component-2 i-e Technical Assistance compon USD 20.00 million is meant for management c	ent of Program costir ost of the Program ar			

	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	Not applicable
proposed to be	
accommodated] 이 [a - ^] A - ^ [ii] 그는 아이 나는 이 그는 아이 없었다.
iii If the project is	
proposed to be financed	The Project is being financed by World Bank as Donor along with
out of block provision	20% co-financing from the Program Units and is not proposed to be
indicate.	financed out of block allocation.
4b- Provision in the	PKR. 1329.90.00 million under ADP 2022-23 General Serial No 1769
current year	as described above.
PSDP/ADP	
5. Project objectives and	Sector Objectives
its relationship with	The sector objectives include:
sector objectives	그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그
	1. Provision of efficient and effective municipality services to the
	masses.
	2. Community development through improving basic infrastructure.
	3. Clean and green environment for better living standards.
	4. Effective use of land through master planning of urban areas.
	5. Social uplifting and cohesion through provision of public open
	spaces and play grounds.
	6. Ease in mobility and communication.
	7. Cost efficient Solid Waste Management through waste to energy
	initiatives.
	그리다 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그
1 1	8. Capacity building of Local Governments.
	9. Efficient Road network to make areas easily accessible
	Objectives of the Project
	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.
	recleational facilities.
	Scope of the work for this particular project includes the construction of
the state of the second state of the second	Parking shed for SWM Machinery.
	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.
- 8. Provision of better solid waste management service by protection 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, technical parameters and technology transfer aspects

. 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.

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 Vehari 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 Vehari for provision of better solid waste management facilities to the people of Vehari.

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 4.15 Kanals in the city. Detail of the components of Parking Area have been given in the table below.			
iii Detail of civil works,	The detail of Parking Shed for SWM Machinery to be constructed in the			
equipment &	city, is given below:			
machinery and other	기가 되었다. 그는 사람들은 사람들이 되었다. 그는 사람들이 되었다. 그는 사람들이 되었다. 그는 사람들이 가장 함께 되었다. 그는 사람들이 되었다. 그는 사람들이 살아 없는 것이 없다. 그 없는 사람들이 살아 없는 것이 없었다. 그는 사람들이 살아 없는 것이 없다. 그는 사람들이 없는 것이 없다면 보다는 것이 없다면 없다. 그는 사람들이 없는 것이 없다면			
physical facilities	Location: Jinnah Road near DPS and Govt. Girls MC High School			
	S. N. Detail of works			
	Sheds for vehicles with trusses and Aluzinc sheeting at the top			
	2 Washing ramp			
	3 Parking aprons			
	4 Generator pad			
	5 Water supply and drainage system			
iv Indicate governess	MC Vehari is facing acute shortage of staff. The smooth sailing of			
issues of the sector	the Punjab Cities Program can only be assured when the required			
relevant to the project	staff is available with Unit.			
and strategy to resolve	The Repair and maintenance of the municipal services in not up to			
them	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.			

,	The sum	mary of the works included in the project is give	n below;
Project	S. No	Item of works	Cost (PKR million)
	1	Parking Shed (Size 72' X 32')	6.508
,	2	Parking Shed (Size 45' X 32') (2 Nos.)	8.224
,	3	Washing Pit	0.499
	4	Generator Pad	0.163
	5	Pump Pad	0.014
	6	External Work (Boundary Wall + Tuff Paver + Lawn)	0.566
	7	External Plumbing Work	0.547
	8	External Electrical Work	7.688
	9	Tube Well	2.750
,	10	Environmental Health & Safety Cost	0.112
* * * * * * * * * * * * * * * * * * * *	11	Dismantling Work	0.074
	- eq , 2	Total cost	27.150
•		Contingencies @2%	0.543
		Punjab Sales Tax @5%	1.357
		Grand Total	29.050
	See An	nexure-B for details	
- Indicate date of estimation of the project cost	2022	ect estimates have been framed during the month	
i- Basis of determining the estimates be provided.	actually (MRS) i Annual of For item	t estimates have been framed on the basis of bil required at site and unit rates from the Market issued by the Government of Punjab (District of year 2022). Is not available in the MRS, the same have been any market rates.	t Rate Syster Vehari 2 nd B

iii- Provide year wise estimation of physical activities	Phys	ical phasing of the project is included in	the following	; table:	
,	S. #	Item of works	. 2	Year 022-2023	
	1	Sheds for vehicles with trusses and Alasheeting at the top	and the same of th	100%	
	2	Washing ramp		100%	
	3	Parking aprons		100%	
	4	Generator pad		100%	
	5	Water supply and drainage system		100%	
	6	Contingencies & PRS Taxes		100%	
iv- Phasing of capital cost on the basis of each	1	ing of capital cost of the project is including figures are in million rupees)	ded in the foll		
item of work.	S. #	Items of Shed	Total cost (Million Rs)	Year 2022-2023 (Million Rs)	
	1	Parking Shed (Size 72' X 32')	6.508	6.508	
	2	Parking Shed (Size 45' X 32') (2 Nos.)	8.224	8.224	
	3	Washing Pit	0.499	0.499	
-0 cg - 2×9	4	Generator Pad	0.163	0.163	
- 2	5	Pump Pad	0.014	0.014	
1500	6	External Work (Boundary Wall + Tuff Paver + Lawn)	0.566	0.566	
	7	External Plumbing Work	0.547	0.547	
4	8	External Electrical Work	7.688	7.688	
	9	Tube Well	2.750	2.750	
	10	Environmental Mitigation Cost	0.112	0.112	
	11	Dismantling Work	0.074	0.074	
		PST contingencies	1.900	1.900	
		Total	29.050	29.050	
8-Annual recurrent cost after completion of the project and source of financing	1	t in Million = Rs.0.571 ails attached in Annexure-1)			

9- Demand & Supply	Existing suppl				
Analysis i- Existing Capacity of services	 There is no existing parking facility for the SWM machinery. Resultantly the vehicles are parked at open spaces with no protection. MC Vehari is unable to protect the solid waste transportation and other MC vehicles because of non-availability of appropriate parking area. 				
ii- Projected Demand for 10 years	The Parking area is required to park and protect the solid waste transportation and other MC vehicles. •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 Vehari 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 11 vehicles. •The municipal services require radical improvement to enhance the efficiency of the service to increase service delivery to a satisfactory level. •Many shortcomings, problems and bottlenecks have been observed in the present situation which could not be addressed by MC due to funding constraints and now have been proposed to be addressed by the construction of the municipal services infrastructure.				
iii- Capacity of other similar projects being implemented in public/private sector	No other project of this nature is being implemented in public as well as private sector because of funding constrains in the Unit.				
iv- Supply and Demand		tion and othe	er MC ve		Vehari City for solid there is a large gap
gaps			2 ¹ 11 21 21 21 21 22 22 22 22 22 22 22 22		
	1)-Table showing		, 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	area is giv	
v- Designed capacity	1)-Table showing	g details of th	e parking		Area
	1)-Table showing		e parking	area is giv	

	3)-This Parking shed is designed for 11 vel				
10. Financial Plan Sources of financing	Below given loan for the Punjab Cities Program has been funded by World Bank for 16 PCP cities in Punjab.				
Debt	Total loan to Government of Pakistan/Pur	njab	USD 200 million		
a) Indicate the local and	Component-1 for Infrastructure Developm	USD 180 million			
foreign debt Loan	Component-2 for Investment Project Financing For capacity building of MCs & three Govt. organization and program management. USD 20 million				
	20% share of Municipalities is equivalent	to,	USD 36 million		
	Development	ructure	USD 216 million		
	This project will be funded under this fina	incing.			
b) Equity	A. Loan/grant to MC The amount of loan converted to grant 23.240 million. The financing of the public below: Grant to MC Vehari from World Bank				
	(80% of cost of PC-I)	PKR 2	3.240 million		
	20% Co-finance by MC	PKR 5	.810 million		
	Total cost of project PKR 29.050 million				
	B. Project Cost =Rs. 29.050 million *The loan is from World Bank to Government in the control of the control o		akistan/Punjab		
c) Grants	which will trickle down to MC Vehari as No grant is being given by Government of The World Bank loan to Government of down as grant to MC from Government of	f Punjab Pakistan			
d) Weighted cost of capital	Nil				
11-Project benefits and an	alysis				
i.Financial: Income to the project with assumption	 No income will be generated from the property Analysis is not required. It is a social sector project and the capitation intended to be recovered. MC will maintenance out of its own resources. The is given as Annexure-C. 	tal cost	of the project is not cost of repair and		

ii.Social benefits to the target group

The completion of the project will result in:

- Provision of suitable parking area for the MC Vehicles.
- Making MC self-sufficient in small repairs to the machinery & Equipment possessed by MC
- Provision of a washing facilities for the vehicles
- Effective protection to the vehicles against the solar radiation and Ultraviolet rays, rain, hail, wind, and dust.
- Slowing down the deterioration of vehicles, therefore reducing the cost of maintenance.
- Enhancement of the security of vehicles during non-working hours.
- Better watch and ward of MC machinery and equipment and reduction of losses due to theft of equipment and spares.
- Provision of better solid waste management service by protection of the machinery and equipment.

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/preconstruction, construction and operation phases of the Parking Sheds. This 'activity wise' screening enabled to obtain a clear picture of the expected level of impacts resulting from the different activities and helped identify required mitigation measures to mitigate them to within acceptable limits as per the guidelines provided by the World Bank in the form of Environment and Social Management Framework. However, the impacts will be temporary and there will be no negative impacts after completion of the project, rather, during the operation phase of the Parking Sheds, mostly positive impacts are expected. To facilitate the selection of an optimal solution and for the inclusion of Safe Operating Procedures for Construction workers/labors; assessment indicators or an Environmental Screening Checklist has been developed which is attached as Annexure E (A) of this PC-1. The checklist focuses on Environmental Issues and social concerns and ensure that all environmental and social dimensions are adequately considered. Based on the remarks of the screening checklist, Environment and Social Management Plans (ESMPs) does not need to be prepared. However, the necessary cost for Environment Health and Safety of Workers has been incorporated in the PC-1. The Environment, Health and Safety SOPs for labor/workers are provided as Annexure E (B).

iv.Quantifiable project	The quantifiable project out puts have be	en given above in Sr. No. 0 (XI)		
outputs	The social benefits to the citizen have b	een described at Sr. No-9 (V).		
v.Unit cost analysis	A) Capital Unit Cost	described at St. 140-11(11).		
,	The unit cost analysis is produced below;			
	Project capital cost	PKR 29.050 million		
	Population of the city in year 2023	145,590 persons ?		
	Unit capital cost per capita	PKR 199.54		
		1111(1)),54		
	B)-Unit R&M cost:			
	Annual R&M cost	571,502		
	Population of the city in year 2023	145,590 persons		
	Unit R&M cost per capita	PKR 3.93		
vi.Employment generation	Employment Analysis			
(direct and indirect)	Direct Employment			
	a) Planning and Design of projects			
	The planning and design of the proj			
	consultants (JERS Consultancy) w			
	experts in Structural designing and	1 , 0		
	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 monitori			
	company has enough experts and staff to complete this assignment. PMDFC has already deployed under mentioned			
		dy deployed under mentione		
13.00	staff for these projects:			
	Civil Engineers	d!4		
	Accounts, administration and au	dit personnei		
	Urban planners			
	GIS experts			
	Support staff like computer op	erators, vehicle drivers, offic		
	boys and guards.			
*	Procurement experts			
	Communication experts			
	Environmental and social expert	is a second of the second of t		
	Contract management experts	All yets a second		
	b) Consultants	BADO STATE		
	PMDFC has employed consul	tants for detailed design an		
	resident supervision of the pro	iects who have deployed the		
공기 가능의 가 있었습니다.	staff for detailed design and resi	dent supervision of the project		
[1] 고립 (1 2명 - 1 명) (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Starr for detailed design and resi			

	c) Municipality
	MC Vehari 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
- 1	
	Indirect employment for production of material such as cement, steel,
vii.Impacts of delays on	stone metal, bitumen, bricks etc. will be generated.
project cost and	The impact of delay in project implementation will result in;
viability	• Increased project cost due to escalation in cost of material and labor.
Vidomity	
	Deterioration of vehicles due to weathering effects
12 Implementation School	Recurrent watch and ward problems for the delayed period
12-Implementation Sched	- 1 (many many many many many many many many
a) Indicate starting and	The project is anticipated to commence by October, 2022 and to be
completion date of the	completed by March, 2023 with project implementation period of 06
b) Item wise/year wise	months.
schedule in line chart	The Gant chart has been attached at Annexure-D
i. Administrative	re and manpower requirements
arrangements for the	ii. Planning & design of the project
implementation of the	The project has been designed by the consultants employed by
project	PMDFC and will also carry out the resident supervision of the
	project.
1 1 1	iii. Preparation of cost estimation
	The cost estimates have been prepared by the design consultants by
7	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.
	these consultants.
	iv. Execution of the project
	The project will be executed by MC Vehari 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 Vehari 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 requirements by skills during execution and operation of the project and:

> The job description, qualification, experience, age and salary of each post

a) PMDFC experts and staff

For rendering assistance in implementation of infrastructure projects in 16 MCs, PMDFC has the experts and staff in the required fields. In order to facilitate the Program Units, three regional offices have been established by PMDFC at Gujranwala, Faisalabad and Multan/Khanewal.

b) Resident Supervision Consultants

The project will be supervised by consultants. The tentative staff to be employed/deployed by the consultants for the certification of quantities of works and resident supervision of the project is given below:

	Personnel hief Resident ngineer/Team Leader ssistant Resident	Nos 01	Qualification BSc:/BE in Civil engineering from HEC approved University with minimum 20 years professional experience and 5 years' experience on similar assignment or MSC; Civi 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.
1 CE	ngineer/Team Leader	01	approved University with minimum 20 years professional experience and 5 years' experience on similar assignment or MSC; Civi 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
		1	eenstruction supervision assignment
	ngineer	01	Bachelor Degree in Civil engineering with minimum 8 years' experience in site supervision and execution for projects of similar nature
3 Si	ite Inspectors	01	DAE in Civil with minimum 10 years' experience in site supervision for projects of similar nature
c) Contractor's Technical staff, skilled & non sk The contractors will employ the supervisory skilled & non skilled labor for execution of work supervised by experienced Engineers and sub number of slots for engineers and skilled and non upon the type and quantity of work and its period d) Repair & maintenance of the project MC has its own regular staff which has been dep maintenance of the municipal services infrastruct been observed that the existing staff is not add maintain the services in a manner which can delivery. Hence it is proposed to; • Fill up the presently vacant slots • Recruit additional staff as per need of the obtaining the sanctions from the compete late. Additional projects /decisions required to optimize the investment being undertaken 1) Shortage & frequent transfers of Provincially MC is facing shortage in provincially app appointed cadres. This will seriously affect the the program and the implementation of the in may be delayed. Provincial Government shoul staff immediately for optimizing the investments 2) Repair & Maintenance (R&M) staff			Engineers and sub engineers and the sand skilled and non-skilled will depend of work and its period of completion. The project which has been deployed for repair and all services infrastructure. However, it has sting staff is not adequate to repair and manner which can give good service ed to; vacant slots aff as per need of the infrastructure after ans from the competent authorities. The provincially appointed staff in provincially appointed and locally seriously affect the pace of progress of mentation of the infrastructure projects. Government should fill up the vacant taking the investments in MC.

	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 Vehari	Stamp & Signatures	Low
	Chief Officer MC Vehari	Stamp & Signatures	GH
Forwarded by	Administrator MC Vehari	Stamp & Signatures	Cephif9;

Vetted

Deputy Program Officer Infrastructure Development Punjab Cities Program-Lahore Program Officer-1
Infrastructure Development
Punjab Cities Program-Lahore

Senior Program Officer
Infrastructure Divelopment
Punjab Cities Program
14