Özkartallar Campak Joint Venture

Sikandriya workshop 2



Solid Waste Management Plan For Sabza Zar (UC-112)

By

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1. Facts

SR.N	Description					
1	Phase	С				
2	UC	112 –Sabza Zar				
3	Area Manager / Shef OZPak	Javeed Iqbal/ Usman				
4	Zonal Officer LWMC	Awais Butt				
5	Population	49745				
6	UC Area	4137204 m ² (middle income)				
7	Waste Generation (estimated)	32.33 tons/day				

2. Operational Arrangements / Resources Deployed

2.1 1st Shift Arrangement – 6 AM to 2 PM

Manual Sweeping						
Sanitary Supervisors		5				
Sanitary Workers	74					
Wheelie Bins		12				
Hand Carts		18				
Special Gang		-				
Sanitary Workers	1	15				
Sanitary Supervisor		2				
Toyota Hilux		1				
Note: Special Gang solely	on Shef / ZO	's disposal to	attend important complaints and to			
work for absent workers be						
Centralize Gang						
Sanitary worker	20					
Sanitary Supervisor	2					
Mini Bus	1					
workers beats of the day.	also solely on shef / ZO'S disposal to attend important complaints and to work for absent workers beats of the day.					
Containers Collection						
Containers Placed	89					
Containers Points	31					
Compactors	C-1065		k. 8 to 10 tons			
•	C-1135	2 trips, (appi	ox. 4 to 5 tons in each trip)			
Drivers	2	_				
Helpers	4					
D-T-D Collection						
Mini Dumpers – Suzuki						
Pickup	1	4	MD-47			
Driver	1	4				
Helper	1					
Note: Compactor also colle shop	ecting waste	if waste bags i	ound on road or in front of home or			

2.2 2nd Shift Arrangement - 2 PM to 10 PM

Manual Sweeping - Special Gang				
Shift In-charge	1			
Sanitary Workers	10			
Driver	1			
Toyota Hilux - 2013	1			
Note: for taking care of whole Zone-21, attending major roads, markets, 1139 complaints and to coordinate compactors and ensure containers collection.				
Containers Collection				
Compactors	1	C-1034, 1 trip (approx. 8 to 10 tons)		
Note: attending 2 UC's 110 & 112				

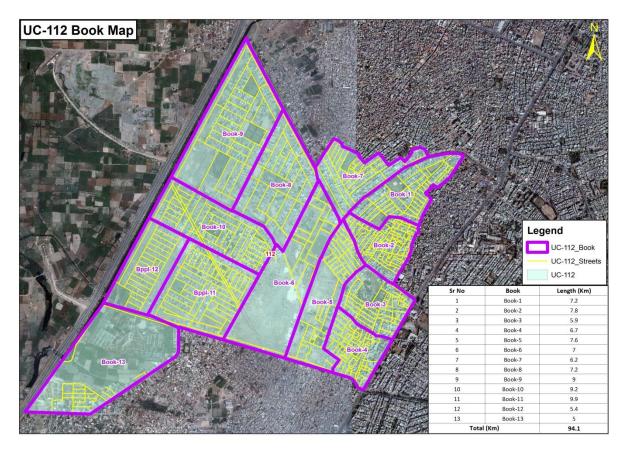
2.3 3rd Shift Arrangement – 10 PM to 6 AM

Containers Collection				
Compactors	1	C-1019, 1 trip (approx. 8 to 10 tons)		
Driver	1			
Helper	2			
Note:				

3 Introduction

Union Council – 112 (Sabza Zar) is located in Allama Iqbal Town. Total area of the UC is 4137204 m^2 with population of 49745^1 . This area is predominantly middle income area with planned settlement.

Figure 1: Map of UC 112 Sabza Zar



4 Solid Waste Generation

Estimated solid waste generation is 32.33 tons per day @ waste generation rate of 0.65 kg/person/day.

5 Solid Waste Management Practices

This area is under control of M/s. OZPak J.V for solid waste management. Existing arrangements for SWM based upon actual operations are as follows:

¹ Punjab Development Statistics – 2011, Bureau of Statistics, Govt. of the Punjab

6 Street Sweeping and Waste Collection by Sanitary Workers

6.1 Team Division

Teams are divided according to equivalent sweeping length of the area which is as follows:

- 10 sanitary workers deployed in each Team and each sanitary worker has his own defined beat.
- Solid waste is collected by sanitary workers from streets & households and hauled to container by wheelie bins / hand carts.
- Waste bags also used for roads sweeping

7 Solid Waste Storage

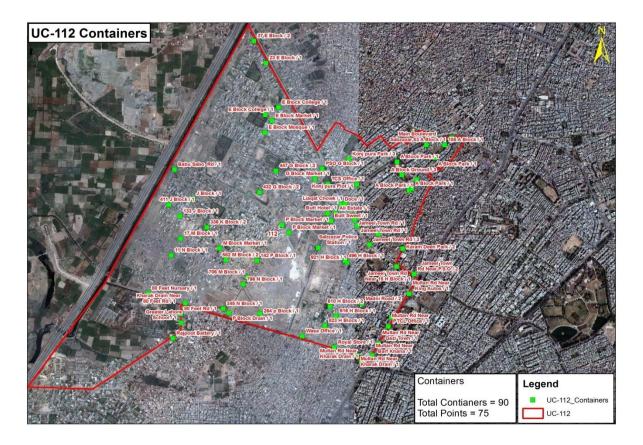
7.1 Waste Storage Facility

- Currently 89 waste storage containers are placed at 31 different points.
- Storage capacity is 22 tons in one time lifting
- Lifting is operational in 3 times

7.2 Existing Points of Containers

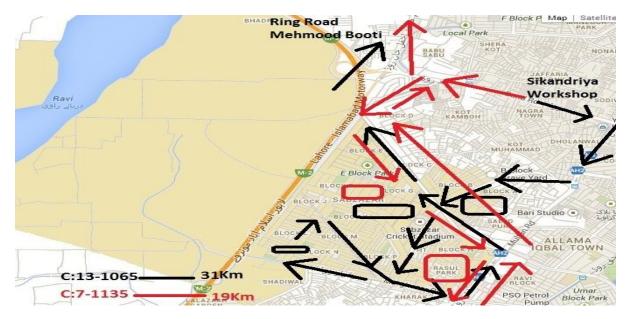
Sr. No.	Location
1	Liaqat chowk
2	Service chowk motorway naala
3	PSO petrol pump liaqat chowk
4	Jamil town to bijli ghr
5	Jamil town to Lift side
6	Multan road Alfalah park
7	Pulli noon exchange multan road
8	Baraf khana multan road
9	Kamini town
10	Liaqat chowk to kharak
11	Liaqat chowk kharak lift side
12	Makkah chowk to babu sabu
13	F Block
14	K Block
15	P Block
16	N Block
17	E Block
18	G Block
19	B Block
20	Koonj pura
21	A Block
22	Shah fareed road A Block
23	Shah fareed chowk
24	Shah fareed qabrastan
25	Karam deen park
26	H block
27	Madni road Rasool park
28	C Block
29	Model bazar
30	Mahboob park
31	Hajwairi town

Existing Points of Containers



8 Solid Waste Collection & Transportation

8.1Route for Compactor



8.2 Staff Deployment for Compactor Vehicle

	Conservancy Staff Zone-21									
	Usman razaq (0321-4049043)									
Shift Supervisor = Waseem (0321- 4803215)				Shift Supervisor = MEHMOOD ASHRAF (0313-4805842)			Shift Supervisor = ZAIN UL ABDIN (0313-6898748)			
		1st shift			(0313-48058 2nd shift	42)	ABD	3rd shift	98748)	
		Driver	Name				Driver			
UC	Vehicle No.	Name & Mobile	of Helpers	Vehicle No.	Driver Name & Mobile	Name of Helpers	Vehicle No.	Name & Mobile	Name of Helpers	
	1063	M. Iqbal (0324-	Mukhtar	1063 (Cover	Jaan Muhammad	Zafar Ghulam				
110	1005	4892866)	Shaukat	all UC's)	(0323- 4896081)	Arif Aslam				
110	1131	Amjad Ali (0333-	Tariq Anayat	1065	Safdar Ali (0336-	Rafaqat			Salamat	
	1151	4059741)	Hashim s/o Laal	1005	7860712)	Shareef Gulam	1010			
111	1132	Abdul Rasheed	Sunny	112/	Waseem Imran	Anwar	1019 (Cover	M. Yousif (0301-		
111	1152	(0344- 4588809)	Younis	- 1134	(0323- 8841521)	Allah Ditta	all UC's)	4647922)		
	1065	Nasir ali	sunny	1034	Nasir ali (03446637757)	Anwar/salamat				
		(0344- 6637757)	salman							
112		Asif Mehmood	Nasir							
	1135	(0323- 8629348)	Ghulam							
		Malik Shahid	Rasheed							
110	1133	(0321- 8874549)	Jabran		Same Driver				Shameer	
113	1134	Iftikhar Abmad	Shan							
		Ahmad (0321- 4765477)	Shareef	1134		Same Helpers				
	1066	Aftab	Marakas							
114		Alam (0324- 4458940)	Shehzad							
147	1065	Nasir Ali	Bashir				Come III I			
117		(0323- 8040230)	Shakeel	1065	Same Driver	Same Helpers				
All	1084	Shahid Ali (0333-	Shehbaz							
	1004	4949699)	Amanat							

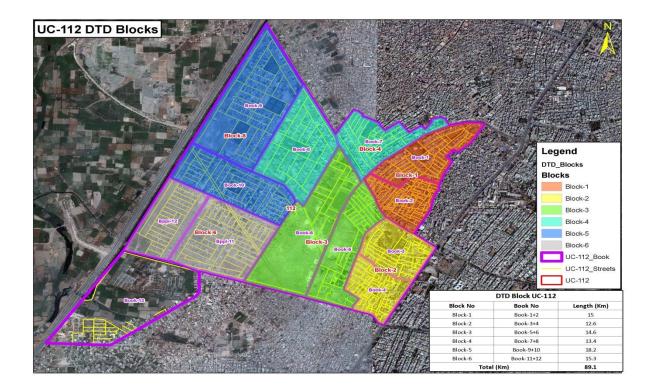
9 Door To Door Waste Collection

9.1 Existing System for D-T-D Waste Collection

- 1 Pickup for door to door waste collection
- Waste collected by pickup will be unloaded into nearby Compactor or transfer station.
- Compactors are also collecting waste if found in waste bags on road or in front of home or shop

	UC 112-MD-47			
Blocks	Major Areas/ Mohalla's	Timings		
	A Block Sabzazar			
	Said Pur	8:00 am to 10:00 am		
Block1	Gunj shaker			
	Karam Din Park			
	Mehboob Park			
	G Block Sabzazar			
	H,H1 Block Sabzazar			
Block 2	Qazi Town 10:30 am to 1:30			
	Rasool Park			
	Madni Road			
	B Block			
Block 3	C Block	2:30 pm to 4:30 pm		
DIOCKS	E Block Sabzazar			
	F Block Sabzazar			
	M Block Sabzazar			
Block 4	Q Block Sabzazar	4:45 pm to 6:00 pm		
	K Block Sabzazar			
	J Block Sabzazar			
Block 5	L Block Sabzazar	6:15 pm to 8:30 pm		
DIUCK J	M Block Sabzazar	0.13 pm to 0.30 pm		
	N Block Sabzazar			

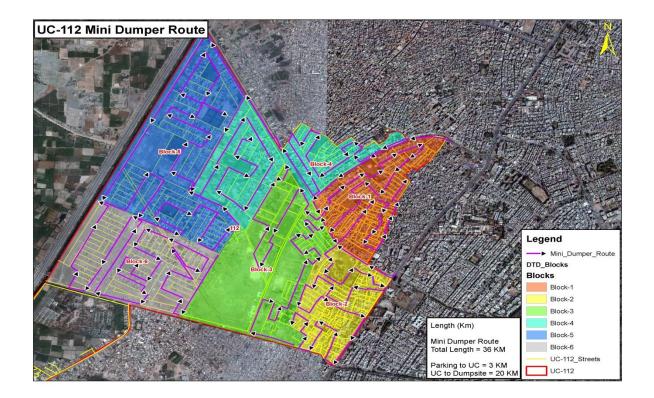
DTD BLOCKS MAP



DTD MAP



MINI DUMPER ROUTE MAP



10 2nd Shift Operational Arrangement

Manual Sweeping - Special Gang				
Shift In-charge	1			
Sanitary Workers	15			
Driver	1			
Toyota Hilux - 2013	1			
Note: for taking care of whole Zone-21, attending major roads, markets, 1139 complaints and to coordinate compactors and ensure containers collection.				
Containers Collection				
Compactors	1	C-1034, 1 trip (approx. 8 to 10 tons)		
Note: attending 2 UC's 110 & 112				

11 3rd Shift Operational Arrangement

Containers Collection				
Compactors	1	C-1019, 1 trip (approx. 8 to 10 tons)		
Driver	1			
Helper	2			
Note:				

12 Mjaor Areas

- Sabaz zar main boulevard road
- Kharak Nala
- Shah fareed Road
- Makah Chowk
- Said Purr
- Qazi Town

13 Problematic Areas

Sabza zar Open Plots:

• An open plot in UC 112 is major hurdle in cleaning of sabzazar society.

Observation:

• Most of the open plots are full of solid waste.



Recommendation:

 A group of workers in the form of gang must be formed to attend these open plots on regular bases.

Said Purr:

This is a rural area of uc 112.

Observation:

• Poor sweeping was observed in Said purr and surrounding areas.



Recommendation:

• Sanitary worker should be deployed permanently in these areas.

14 Open Plots:

Almost in all UC's of zone open plots are exist. These open plots are major hurdle in cleaning operation. To maintain the cleaning of open plots is quiet hard because of the immature attitude of residence and walking people (nonresidence).

Solid waste types:

Different solid waste types are observed in these open plots which can be categorized as follow.

- Inorganic
- Organic
- C & D waste
- Green Waste
- Animal waste

Measurements:

To maintain the cleaning of open plots an operational strategy has been developed and also **door to door waste** collection has been focused more to make open plots cleaning operation more effective.

Group activity:

15-20 people group activity has arranged on regular basis to cover-up the cleaning of open plot. Machinery is also used to clean up where an open plot cannot be handled with manual sweeping.



15 Public Awareness

- Distribution of leaflets along-with bags distribution has been done as per contract.
- Announcement of waste collection when pickup will move in the area
- Involvement of public representatives in mass awareness campaign