

**ÖZKARTALLAR CAMPAK JOINT VENTURE**

*Sikandriya workshop 2*



**Solid Waste Management  
Plan For  
HanjerWal (UC-117)**

*By*

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## 1. Facts

SR.N	Description	
1	Phase	C
2	UC	117 –Hanjerwal
3	Area Manager / Shef OZPak	Javed Iqbal /Usman
4	Zonal Officer LWMC	Awais butt
5	Population	69849
6	UC Area	9474375 m <sup>2</sup> (middle income)
7	Waste Generation (estimated)	45.4 tons/day

## 2. Operational Arrangements / Resources Deployed

### 2.1 1<sup>st</sup> Shift Arrangement – 6 AM to 2 PM

<b>Manual Sweeping</b>			
Sanitary Supervisors	4		
Sanitary Workers	74		
Wheelie Bins	18		
Hand Carts	18		
<b>Special Gang</b>			
Sanitary Workers	10		
Sanitary Supervisor	1		
Toyota Hilux	1		
<b>Note:</b> Special Gang solely on Shef / ZO's disposal to attend important complaints and to work for absent workers beats of the day.			
<b>Centralize Gang</b>			
Sanitary worker	20		
Sanitary Supervisor	2		
Mini Bus	1		
<b>Note:</b> The centralize Gang is arranged to attend any problematic area. Centralize gang is also solely on shef / ZO'S disposal to attend important complaints and to work for absent workers beats of the day.			
<b>Containers Collection</b>			
Containers Placed	Sector (A) 26	1 trip, approx. 10 tons	
	Sector (B) 29		
Containers Points	Sector (A) 17		
	Sector (B)13		
Compactors	C-1109		
	C-1028		
Drivers	2		
Helpers	4		
<b>D-T-D Collection</b>			
Mini Dumpers – Suzuki Pickup	1	MD-59	
Driver	1		
Helper	1		

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**2.2 2<sup>nd</sup> Shift Arrangement - 2 PM to 10 PM**

<b>Manual Sweeping - Special Gang</b>		
Shift In-charge	1	
Sanitary Workers	10	
Driver	1	
Toyota Hilux - 2013	1	
<b>Note:</b> for taking care of whole Zone-21, attending major roads, markets, 1139 complaints and to coordinate compactors and ensure containers collection.		
<b>Containers Collection</b>		
Compactors	1	C-1132, 1 trip (approx. 8 to 10 tons)
<b>Note:</b> attending 3 UC's 110, 112 & 117		

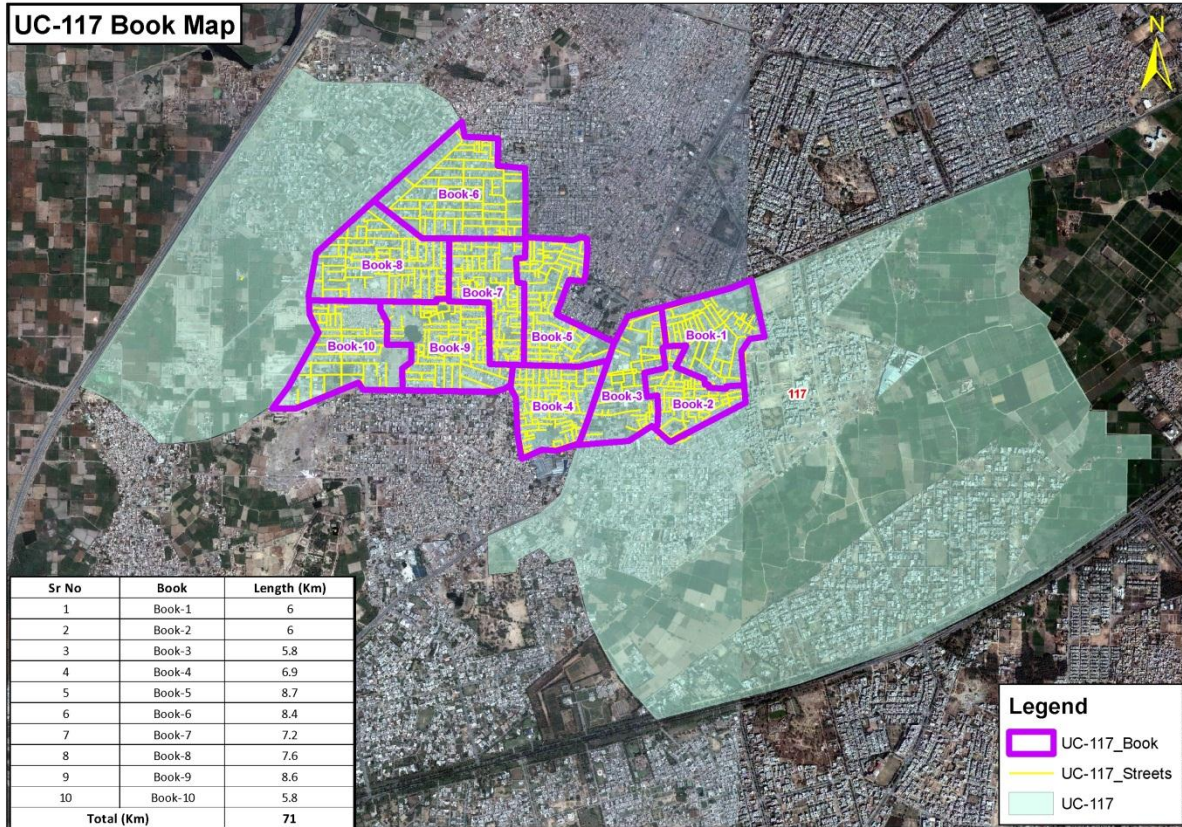
**2.3 3<sup>rd</sup> Shift Arrangement – 10 PM to 6 AM**

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

### 3 Introduction

Union Council – 117 (Hanjerwal) is located in Allama Iqbal Town. Total area of the UC is 9474375 m<sup>2</sup> with population of 69849<sup>1</sup>. This area is predominantly middle income area with planned settlement.

Figure 1: Map of UC 117 Hanjerwal



### 4 Solid Waste Generation

Estimated solid waste generation is 45.4 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:

<sup>1</sup> 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 26 waste storage containers are placed at 17 different points in sector (A)
- Currently 29 waste storage containers are placed at 13 different points in sector (B)
- Storage capacity is 10.5 tons in one time lifting
- Lifting is operational in 3 times

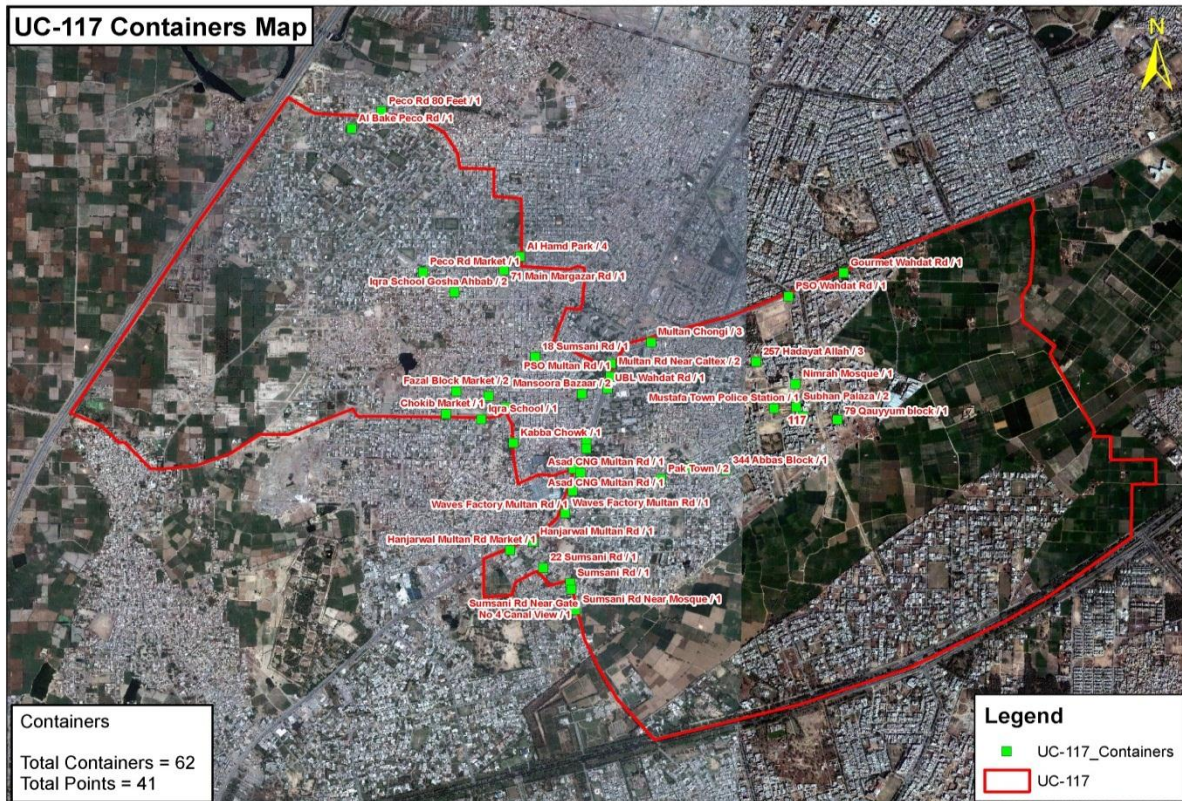
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**7.2 Points of Containers**

SECTOR (A)	
SR.NO	Container Location
1	Wahadat Road Gourmet Bakery
2	Main Wahdat Road
3	Main Multan Road
4	Multan Road Girls School Mansura
5	Multan Road Zainabia Hospital
6	Multan Road Near Azam Garden
7	Multan Road Near Bata Shop
8	Sumsani Road Near Abid Colony
9	sumsani Road Near Chooria Shareef
10	Pak Town
11	Bordh wala Chowk
12	419 Abas Block
13	Hadayat ullah Block Near Police Choki
14	Subhan Plaza
15	Hadayat ullah Block Near Nimra Masjid
16	Qayyum Block
17	Ghani Colony
SECTOR (B)	
SR.NO	Container Location
1	Main Multan Road Near AlHafiz Resturant
2	Main Multan Road Near Master Paint
3	Main Multan Road Near Caltex Pump
4	Main Mansura Bazar
5	Chonki Wala Bazar
6	Main Kehwa Chowk
7	80 Feet Road
8	Fazal Block
9	Budh Bazar
10	Barkat chowk
11	Peco Road
12	Alhamd Park
13	Main 80 Feet Road

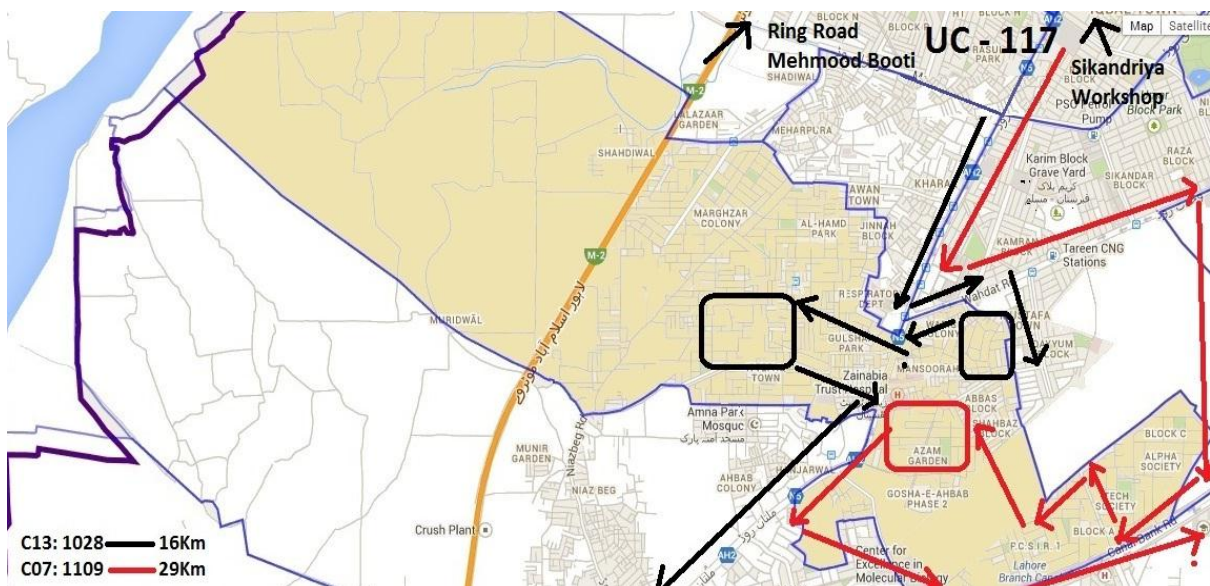
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Points of container Map



8 Solid Waste Collection & Transportation

8.1 Route for Compactor





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**8.2 Staff Deployment for Compactor Vehicle**

<b>Conservancy Staff Zone-21</b>											
<b>Usman razaq (0321-4049043)</b>											
<b>Shift Supervisor = MEHMOOD ASHRAF (0313-4805842)</b>				<b>Shift Supervisor = MEHMOOD ASHRAF (0313-4805842)</b>			<b>Shift Supervisor =</b>				
<b>1st shift</b>				<b>2nd shift</b>			<b>3rd shift</b>				
<b>UC</b>	<b>Vehicle No.</b>	<b>Driver Name &amp; Mobile</b>	<b>Name of Helpers</b>	<b>Vehicle No.</b>	<b>Driver Name &amp; Mobile</b>	<b>Name of Helpers</b>	<b>Vehicle No.</b>	<b>Driver Name &amp; Mobile</b>	<b>Name of Helpers</b>		
110	1063	M. Iqbal (0324-4892866)	Mukhtar	1063 (Cover all UC's)	Jaan Muhammad (0323-4896081)	Zafar Ghulam	1019 (Cover all UC's)	M. Yousif (0301-4647922)	Salamat		
			Shaukat			Arif Aslam					
	1131	Amjad Ali (0333-4059741)	Tariq Anayat			1065				Safdar Ali (0336-7860712)	Rafaqat
			Hashim s/o Laal								Shareef Gulam
111	1132	Abdul Rasheed (0344-4588809)	Sunny	1134	Waseem Imran (0323-8841521)	Anwar					
			Younis			Allah Ditta					
112	1060	Asif Anwar (0322-4848992)	Rafiq	1065	Same Driver	Same Helpers					
			Aslam								
	1135	Asif Mehmood (0323-8629348)	Nasir								
			Ghulam								
113	1133	Malik Shahid (0321-8874549)	Rasheed	1134	Same Driver	Same Helpers					
			Jabran								
	1134	Iftikhar Ahmad (0321-4765477)	Shan								
			Shareef								
114	1066	Aftab Alam (0324-4458940)	Marakas								
			Shehzad								
117	1109	Asif masih (0322-4892866)	shakeel	1132	Jan mohmmad (0323-4896081)	Same Helpers					
	1028	Safer ahmad (0311-5582742)	usman								
All	1084	Shahid Ali (0333-4949699)	Shehbaz								
			Amanat								

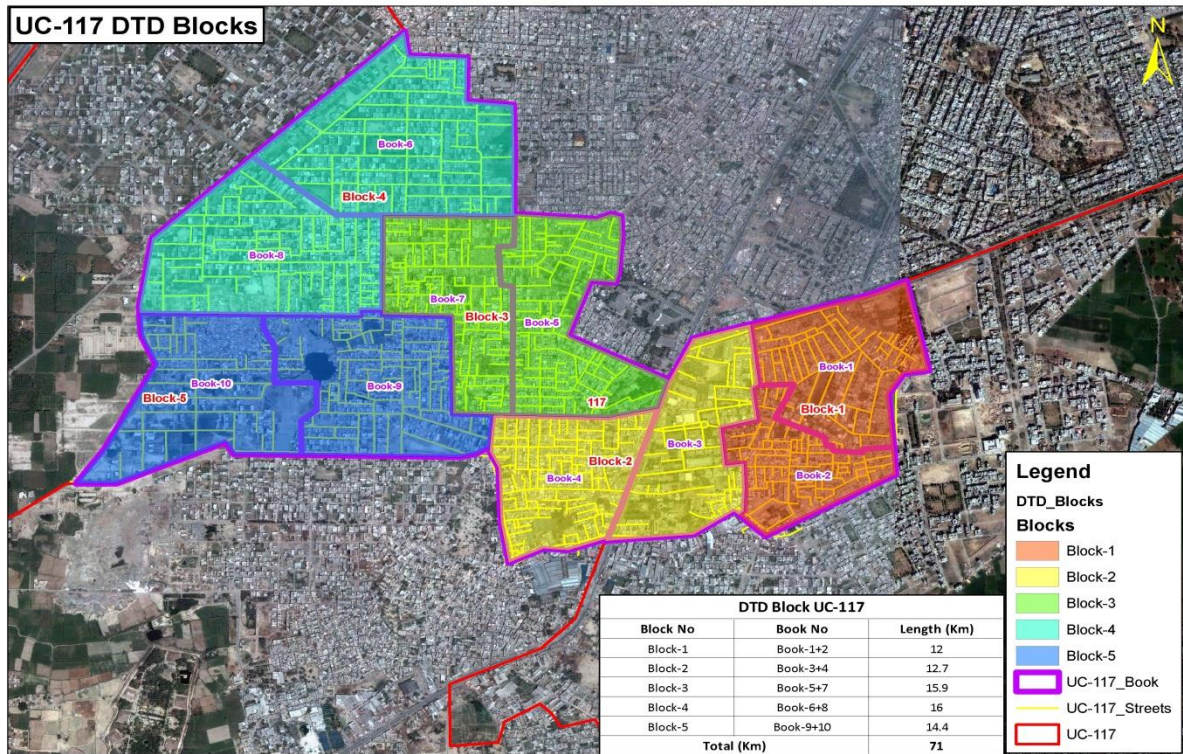
## **9 Door To Door Waste Collection**

### **9.1 System for D-T-D Waste Collection**

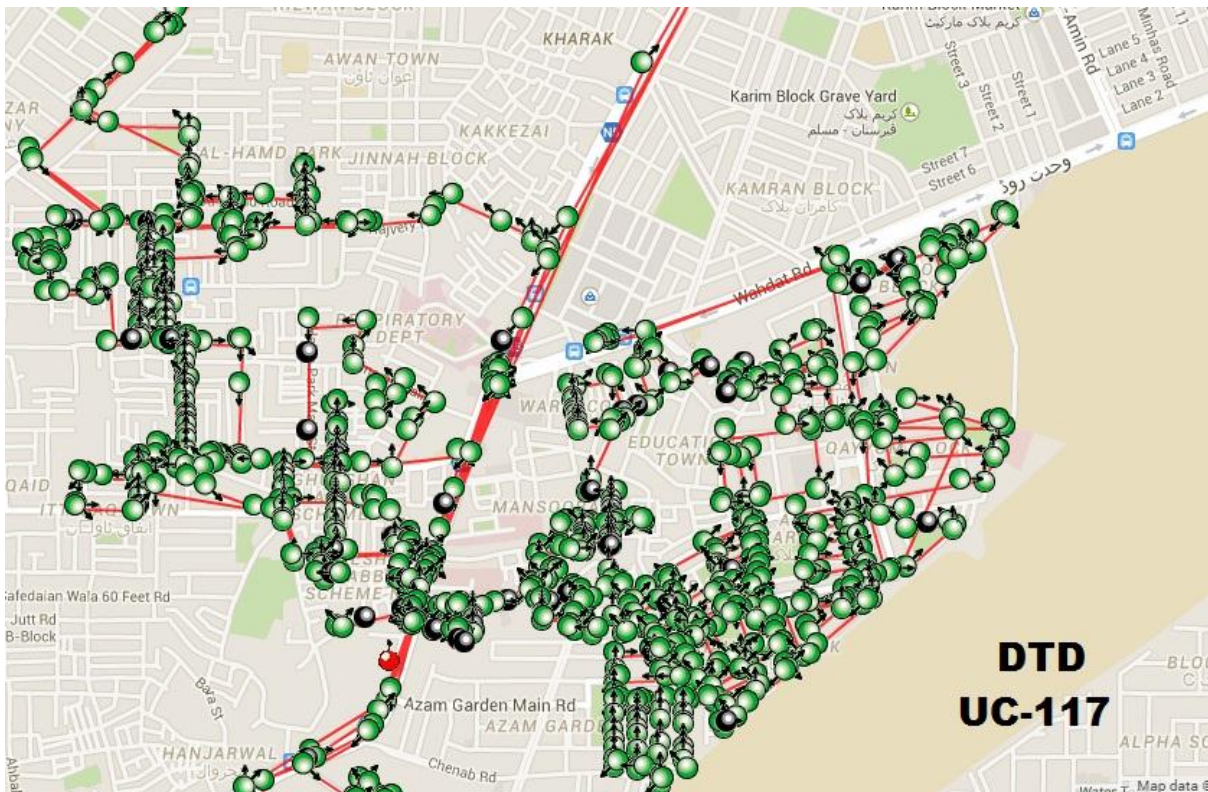
- 1 Pickup for door to door waste collection
- Waste collected by pickup will be unloaded into nearby Compactor or transfer station.
- Compactors are also collecting waste if found in waste bags on road or in front of home or shop

UC-117-MD-59		
BLOCKS	Major Areas/ Mohalla's	Timings
BLOCK 1	Pak Town Azam Garden	6:00 am to 8:00 am
	Abbas Block Azam Garden,	
	Shehbaz Block	
BLOCK 2	Ghani Colony	8:00 am to 10:00 am
	Qayum Block	
	Muhammatat Block,	
	Arshad Ali Road	
BLOCK 3	Hidayatullah Block,	10:00 am to 12:00 pm
	Subhan Plaza	
	Peco Road	
	Fazal Block	
BLOCK 4	Samsani Road	12:00 pm to 2:00 pm
	Khayaban Chora Shareef	
	Karamat Colony	
	Al Hamad Colony	

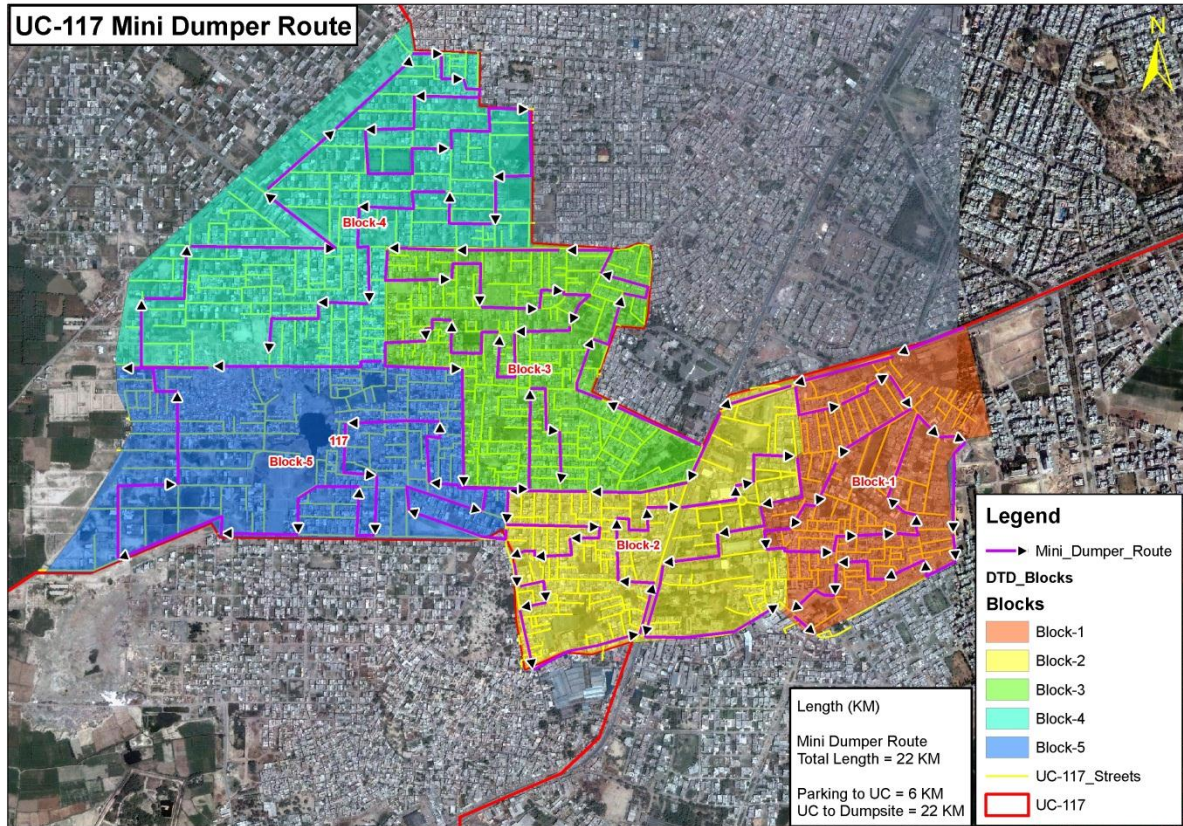
## DTD BLOCKS MAP



## DTD MAP



## DTD 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	
<b>Note:</b> 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-1132, 1 trip (approx. 8 to 10 tons)
Note: attending UC,117		

## 11 3rd Shift Operational Arrangement

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

## 12 Major Areas

- Ghani Colony
- Abbas Block
- Samsani Road
- Main Wahadat Road
- Main Multan Road
- Peco Road

## 13 Problematic Areas

- Al-Hamad Park
- Tokay wali Gali
- Main Mansura Bazar

## 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 (non-residence).

### **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 Observations

- Waste around the containers was observed.
- Containers were over flowed.
- Small Street's sweeping was missing in some areas.
- Heaps were observed in congested areas.
- Open plots were full of solid waste in some UC's.
- Door-To-Door collection was not focused.
- Main roads protocol was not followed in some areas.

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- Mechanical sweeping standard was not followed all time.



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## 15 Recommendations

- Compactor drivers should strictly asked to clean waste around tthe container under their
- Supervision.
- New containers should be placed to stop the over flow of solid waste.
- Supervisors and UC coordinators must be asked to assure the cleaning/sweeping of unattended areas.
- Group of 3-4 workers should be arranged to clear open heaps.
- Open plots list with solid waste must be prepared to clear the waste from these plots.
- Mini dumper must be used for door to door collection instead of 1139 complains and open heaps.
- Main road protocol must be followed by superviosers.
- Mechanical sweeper should be instructed to follow standard speed per hour.

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