

### **Waste Management Plan**

# Request for Project 2025 / 2026

Submitted to

### GUJRANWALA WASTE MANAGEMENT COMPANY

Submitted By

## AL KISWA Water & Environment Research Initiatives

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#### RESIDENTIAL WASTE MANAGEMENT PLAN

#### When is this document used?

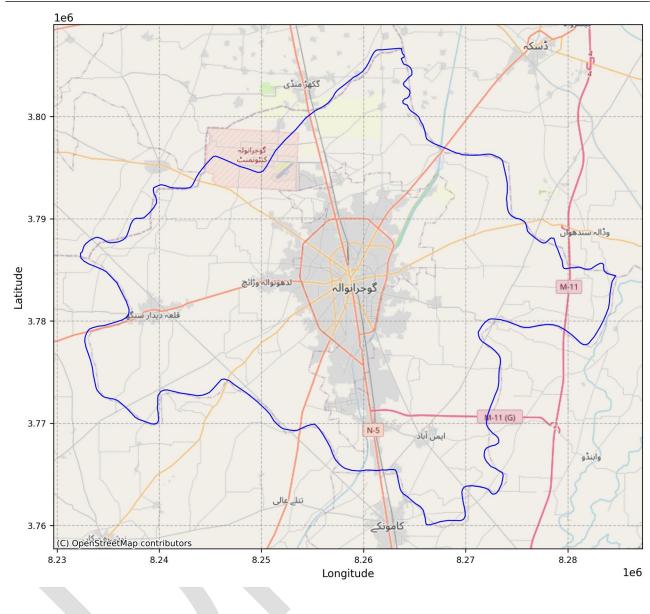
This document may be used to assist in putting together a Waste Management Plan (WMP) for **small residential development** planning applications. This document contains instructions and a template form for both the residential and commercial components of the development.

#### What is the purpose of a Waste Management Plan?

To support circular economy which diverts waste from landfill and reuses resources. The goal is to improve waste management, including reducing the number of truck movements and bins in public areas. A WMP helps developers to ensure that appropriate and sustainable provision is made for the separation, storage and collection of waste.



Figure 1: Geographic boundary of Gujranwala district located adjacent to the Lahore city, located in the province of Punjab, Pakistan. Data source: https://gujranwaladivision.punjab.gov.pk



### WHAT WILL BE SUBMITTED AS PART OF A WASTE MANAGEMENT PLAN?

- Critical SWM sites such as transfer stations, temporary collection points (TCPs), dumping sites, workshops, and parking lots to gather primary data
- Gathered primary data on human resources (HR), equipment inventory, expenditures, population demographics & daily waste generation rates
- Thorough gap analysis to identify shortcomings in the current SWM systems
- Coordinates of existing SWM infrastructure/sites to map their distribution and condition
- Primary and secondary data to determine additional resources needed to optimize waste management operations in each UC
- A tailored SWM plans for all the Union Councils in Gujranwala district
- Establish mechanisms for continuous monitoring and evaluation to assess the effectiveness of implemented SWM strategies

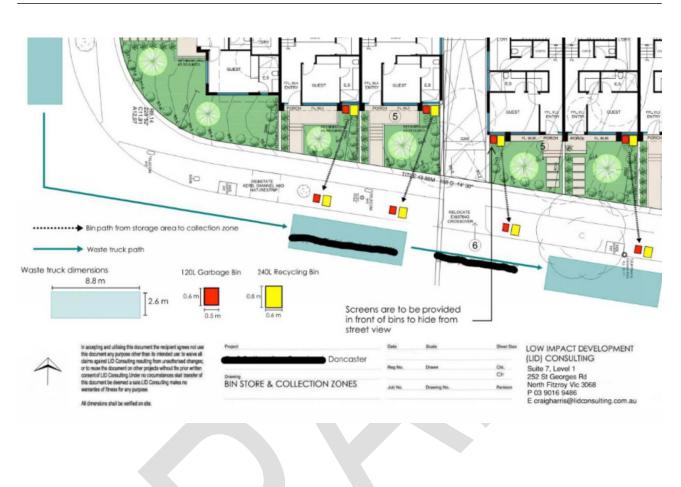
### PROCESS FLOW FOR RESIDENTIAL WASTE MANAGEMENT PLANNING

- STEP 1: Estimate the volume of waste that the residences will produce weekly
- STEP 2: Analyse the existing waste collection process
- STEP 3: Determine the size and number of residential bins.
- STEP 4: Decide where waste will be stored and collected from.
- STEP 5: Prepare plan drawings to present the entire waste collection program

Figure 2: Process flow for residential waste management planning in Punjab, Pakistan

<b>01</b> Voumetrics	<b>02</b> Existing Processes	<b>03</b> Disposal	<b>04</b> Collection	<b>05</b> Next Steps
2645	90%	<b>***</b>	2000 1500 1000 500 April May June	
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Figure 3: Example plan drawing of a small residential development, showing future bin storage, drawn to scale, at the main location of the site / ward / UC.



## DATA COLLECTION FOR RESIDENTIAL WASTE MANAGEMENT PLANNING

Waste Management Plan: Data Collection Form					
Site / Ward / UC:					
Reference Address:					
Number of Houses:					
Current Residential Waste Collection Service:					
Collection frequency, number and size of residential bins:					
Local Waste Collection Bin Location					
Waste vehicle stopping location for collection of bins					
Waste vehicle stopping location for collection of bins					
Waste collection contractor company					
Data Collected by:					
Dated:					