engineering CONSULTANCY

Hampshire County Council

Relocation of Eastleigh HWRC
Stoneycroft Rise, Eastleigh

Design, Access & Traffic Statement

This statement outlines the main features of the proposed new Eastleigh HWRC, located on an unused area of land with access from Stoneycroft Rise, and to the south of, Chestnut Avenue in Chandlers Ford parish. The proposed site layout is shown on drawing no. R.J509002/GA-001.

1. Bin Bay Description

1.1. There are 7 no. double container bays. The bays are contained by a 1.6m high reinforced concrete retaining wall and are separated by 1.6m high permanently positioned steel walkways, with similar height concrete walkways at each end. Each bay is designed to accept two open-top 40 cubic yard waste containers.

1.2. The walkways have 1.0m high guardrails on three sides and are accessed from the parking area by 2.1m high lockable double leaf gates. The gates will prevent access by the general public when the containers are either full or are being serviced. The concrete walkways at each end are enclosed by 1.1m high pedestrian guardrails and also have full height lockable access gates.

1.3. The general public only have access to the containers from the upper area, which consists of parking spaces and a footway serving all of the walkways. The area in front of each double bay and between the walkway gates will have a 2.1m high pedestrian guardrail to prevent customers from attempting to throw waste into the bins from the main pedestrian footway.

2. Storage Areas

2.1. There are two high level storage zones situated either end of the bin bays with a total area of approximately 950m2, 300m2 for the west and 650m2 for the east.

2.2. The western storage area is at a height of 1.1m from the lower servicing area. On this will be located 3 no. containers, 1 for soil & rubble, a bottle bank and 1 for Waste Electrical & Electronic Equipment (WEEE). They will be serviced from the lower area. There will also be smaller containers for oil, paint, metal and designated areas for storing gas bottles and refrigerators.

2.3. The eastern storage area is also at a height of 1.1m from the lower servicing area. There will also be 4 no. containers, 2 for soil & rubble, a bottle bank and a spare space to supplement the other bins. They will be serviced from the lower area. There will also be designated areas for the storage of fluorescent tubes, textiles and batteries. The eastern area will also have a zone provided for sales, site offices, welfare and lockable storage containers.

2.4. The upper storage areas will have 1.1m high pedestrian guardrails around the perimeter, with similar height field gates adjacent to the low level area to give temporary access by servicing vehicles during bin replacement.

3. Servicing

3.1. All the waste containers will be serviced from within the separate lower servicing yard, avoiding the requirement to temporarily close the site to the public during bin servicing.
3.2. The waste containers will be serviced from the lower area by 'Roll-on-off' vehicles.
3.3. Pedestrian ramps are provided for the site staff to access the lower servicing area and for white goods to be transported safely to the lower level for removal off site. These will be constructed of concrete at a fall of 1:12 and will have an anti-slip finish applied.

4. Access / Egress

4.1. All vehicles will approach the HWRC via the new access road off Stoneycroft Rise. The new access road will form a junction with Stoneycroft Rise; traffic priority will be to the vehicles going to the car park at the end of Stoneycroft Rise where there is also a skate park known as Free Space.
4.2. HWRC customers will access the site by turning left into it off Stoneycroft Rise. They then proceed east along the stacking lane for 35m and then they are directed north along the western edge, then east again along the north side of the site. The stacking lane provides sufficient capacity for up to 25 vehicles waiting to be accommodated. Traffic modelling indicates that all customer vehicles will be accommodated on the site and in the designated lane on the access road with no cars queuing on Stoneycroft Rise even during the busiest times of the year. The public will leave from the western end of the parking area via the same access road.
4.3. Servicing lorries will enter the lower level servicing area by taking the first turning on the right off the access road (south of the site) and will exit via the same route. Servicing lorries will have to give way to vehicles exiting the site as they enter and depart.

5. Parking

5.1. There will be 22 no. parking bays (including 2 no. bays for the disabled) for customers delivering their household waste.
5.2. A Staff & Sellers parking area will be provided directly opposite the HWRC customer parking on the northern side.

6. Landscaping

6.1. The perimeter fencing to the HWRC will consist of 3.0m high strengthened close mesh that is very difficult to cut through with anything but power tools. This will ensure site security and minimise any adverse visual impact of the site.
6.2. Appropriately sized Landscaping buffer zones will be provided around the perimeter of the site. These will be planted with suitable and agreed species of trees and shrubs.
6.3. The planting proposals are shown on Eastleigh Borough Council Drawings CF05-100, CF05-101, CF05-102 and CF05-103. Further details are described in the Planning Statement.

7. Staff Accommodation

7.1. The site office and welfare facilities will conform to current Health and Safety standards and will be situated on the eastern upper level storage area.

8. Storage Containers

8.1. 2 no. secure and lockable storage containers, in which site staff can keep essential equipment and goods, will be provided, both on eastern upper level area.

9. Services and Drainage

9.1. Water, electricity and telephone supplies will be taken from existing connections on Stoneycroft Rise and brought into the site via the new access. Proposed services are shown on the services layout drawings R.J509002/GA-008.
9.2. The nearest foul water connection is in Stoneycroft Rise, it is intended for a gravity connection to be made to this sewer. If a gravity connection can not be made a mini foul pumping station will be used.
9.3. Surface water will be directed via trapped gullies to a new infiltration pond on the north side of the site. This will be sized to provide storage for the 1 in 100 year +30% for climate change run-off.

10. Security

10.1. Site security systems will be in place to prevent vandalism and trade waste abuse. The site will be fully enclosed by 3.0m high security fencing, with lockable gates, and Automatic Number Plate Recognition cameras will be in use.

11. Crime & Prevention

11.1. Street lighting - To deter criminal activity and help prevent crime, additional street lighting will be placed at the proposed entrance junction of the HWRC.
11.2. CCTV - There will be onsite CCTV and Automatic Number Plate Recognition (ANPR) cameras.
11.3. Fencing - The site will be protected by a 3m strengthened close mesh security fence that will prevent people from climbing the fence and gaining unlawful access to the HWRC.

12. Traffic

Modelling and Analysis of likely queue lengths for the new layout and location of the Eastleigh HWRC

12.1 **Purpose of the analysis**

The purpose of this analysis is to determine the likely traffic queue lengths that would occur during busy periods at the Eastleigh HWRC.

12.2 **Traffic counts for existing site**

The maximum number of vehicles recorded in any one hour during 2011 was 83.

12.3 **Factoring of existing traffic figures to accommodate future demand at the site in its new location**

Take the maximum number of vehicles recorded in any one hour (83) and increase by 50% for future expected demand:

83 x 1.5 = 125 vehicles per hour for design purposes

12.4 Capacity of the new site

The average duration on site per vehicle = 6 minutes and the site has 22 parking spaces including 2 disabled spaces.

Theoretical capacity of site = 54/6 x 22 = 198 vehicles/hour parked

(This is on the assumption that all spaces are full at the start of the hour and one will take 6 minutes to empty and that all traffic is free flowing.)

The stacking lane is 180m long from the new junction with Stoneycroft Rise to the give way line inside the site, the average length of a vehicle visiting the site is 7m. Therefore there is room for approximately 25 vehicles to queue within the site in the stacking lane.

12.5 Modelling of queue lengths

Taking the future demand figure minus the capacity of the site:

125 – 198 = additional capacity available for 73 cars/hour

There is room for 25 vehicles in the stacking lane. With the capacity for 73 more cars per hour this means the existing peak of 83 cars can increase by 2.38 times before traffic backs up on to Stoneycroft Rise.

It should be borne in mind that the above relates to the **worst case scenario**. Queue lengths will be far shorter than this in general. The dimensions of the site and the provision of an additional lane on the access road both provide sufficient room for stacking to minimise the probability of traffic queuing back onto the public highway.

13. Access Statement: Planning Stage

Project Name: Proposed New Eastleigh HWRC
Project Officer: Neil Mugford
Revision dates: 03/10/12

	Inclusion issues	Explanatory notes	Comments	Action taken
13.1	Project Summary	Summarise the project, its aims for inclusion and potential users	Relocation of the Household Waste Recycling Centre (HWRC) from Woodside Avenue, Eastleigh to Stoneycroft Rise, Chandlers Ford. The new site will be a large 'split-level' HWRC. The potential users would be local Householders depositing their own bulky household and garden waste.	Planning Application to be submitted.
13.2	Consultation	Access, conservation or planning officers	Planning Officers and Access Officer contacted.	Consultation with Planning Officer & Access Officer.
13.3	Standards & other legislative issues	eg, Local planning guidance, Licensing laws, Disability Discrimination Act, Listed Building	Planning Authority guidance obtained. Disability Discrimination Act complied with.	See above.
13.4	Pedestrian approach to the site	Catchment areas, different approach routes, gradients, barriers etc	Pedestrians do not use the HWRC and there is no provision in the design of the new HWRC for them to do so.	
13.5	Vehicle approach & parking	Disabled persons' parking bays. Travel distances to entrances. Traffic vs pedestrian conflicts. Drop-off zones for cars/taxis/mini-buses	Parking bays for disabled customers are provided. Parking bays for non-disabled customers are provided. There is direct access from the parking bays to the waste containers and the recycling area all located on the upper area of the HWRC. All waste container servicing is carried out from the separate lower area of the HWRC.	Signs. Speed controls.

	Inclusion issues	Explanatory notes	Comments	Action taken
13.6	Pedestrian routes within site	Widths of paths, passing places, gradients and materials used, lighting, seating	Level site. Walkways 2.4m wide with regulation height guardrails, between waste containers. No artificial lighting on Site. The HWRC is only open during daylight hours.	See Dwg No. R.J509002/GA-001General Arrangement
13.7	Entrances	Level entrance, steps and/or ramps. Canopy	The HWRC entrance and exit routes are level and designed for vehicles only.	As above.

Neil Mugford
Senior Engineer
Engineering Consultancy
Tel number 01962 847612
03/10/12