

Pre-Demolition Audit for Ham Close Richmond

Report From:

ANDY HOPKINS FROM RYE DEMOLITION LTD

Report Prepared For:

HILL GROUP

**Pre-demolition and pre-refurbishment audit
of Ham Close Richmond**

21st February 2022

Executive Summary

The pre-demolition and refurbishment audit was undertaken by Andy Hopkins of Rye Demolition Ltd

A visual survey of the buildings (where accessible), combined with analysis of the plans provided, was used to calculate the Key Demolition and Refurbishment Products. Ranked by percentage total weight, these are:

The table below provides weight, volume and European Waste Codes (EWC) for each material:

	Weight (tonnes)	Volume (m ³)	EWC
Concrete	12,438.50	6250.00	17 01 01
Brick	5228.66	3075.68	17 01 01
Metal	300.00	150.00	17 04 05
Plaster products	167.00	135.00	17 08 02
Timber products	285.16	148.20	17 02 01
Stone	85.08	31.45	01 04 13
Asbestos	120.00	50.00	10 13 10
Glass	28.61	11.63	17 02 02
Carpet	28.12	34.02	20 01 11
Ceramic	23.38	9.74	17 01 03
Plastics	21.33	23.99	17 02 03
Bitumen	3.04	4.95	17 03 02
WEEE*	-	-	16 02 14
Grand Total	18,728.88	9,924.66	

*Not quantified

It is recommended that an overall recycling target is set prior to the demolition phase commencing based on the recommendations of this report. An estimate on the total percentage of waste materials that can be recycled, and thus diverted from landfill on this project is 98% (by weight) but

–

it should be possible to reach a figure of nearly 100% diversion from landfill, if the inert waste (concrete and brick) is all recycled. From the buildings that are to be demolished, there is an estimated 18,728.88 tonnes of materials arising, equivalent to 9,924.66m³.

1. The Requirement

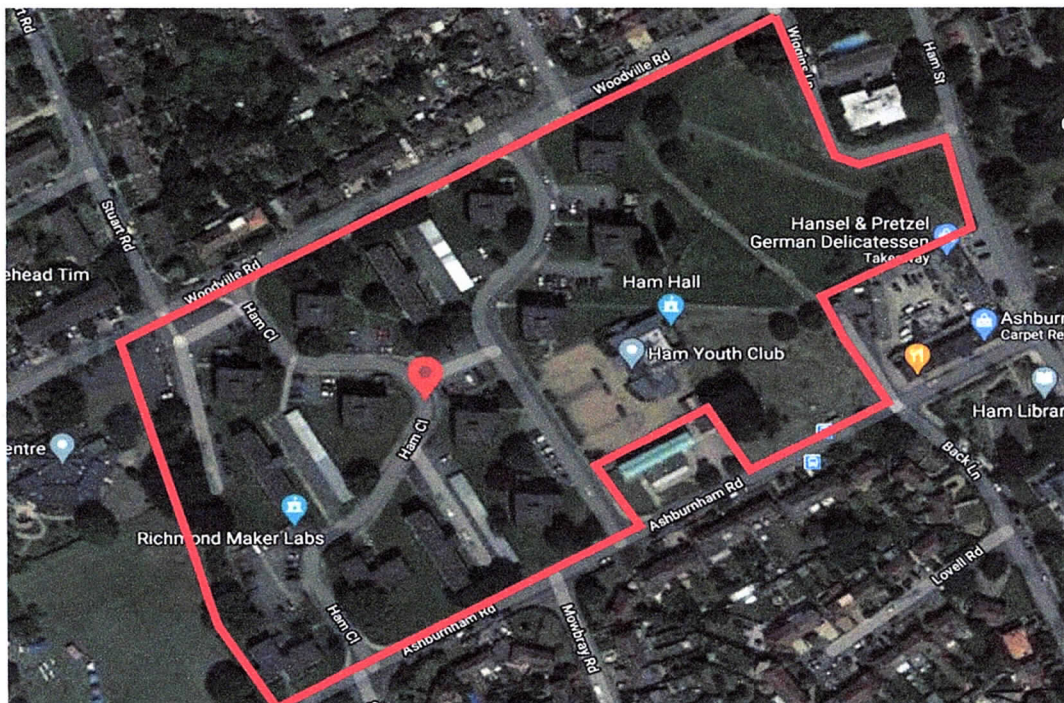
Hill Group have engaged Rye Demolition Ltd to carry out a pre-demolition audit and pre-refurbishment audit of the buildings at Ham Close which is located in Richmond on Thames

The aim of the audit is:

- To provide an understanding of the types and amounts of products and materials arising during the demolition.
- To optimise the management of products and materials from the demolition and provide recommendations to the design team and demolition contractor in line with the waste hierarchy i.e. maximise reuse and recycling and minimise waste to landfill
- To provide technical advice on the reuse of products and recycling of material on site
- To facilitate better links and communication within the supply chain and provide details of local charities, organisations and companies who may be able to deal with the products and materials arising
- To provide data to help with populating the Resource Management Plan and in support of the BREEAM assessment and the Greater London Authority Circular Economy Statement
- To advise on targets for reuse and recycling for products and materials arising during the demolition

2. Site details

The buildings are located on the site of Ham Close Richmond. There are various buildings which are to be demolished as shown by the map below displaying the location and extent of the demolition works.



It is highly recommended that to maximise the recycling of the KDP's and KRP's that the following materials are segregated on site:

- ☐ concrete
- ☐ brick
- ☐ metal
- ☐ timber
- ☐ carpet
- ☐ plasterboard
- ☐ hazardous waste

Recycling/reuse targets

It is recommended that an overall recycling target is set prior to the demolition phase commencing based on the recommendations of this report. An estimate on the total percentage of waste materials that can be recycled, and thus diverted from landfill on this project is 98% (by weight) but it should be possible to reach a figure of nearly 100% diversion from landfill, if the inert waste

(concrete and brick) is all recycled. An estimated 1,155 tonnes of materials are potentially suitable for reuse (at around 5%). This does not include the reuse of inert waste as fill onsite.

It is recommended that the targets set out in Table 18 could be set per material.

	Weight (tonnes)	Reuse rate	Recycling rate	Sent to efW/landfill
Concrete	12,438.50	0%	100%	0%
Brick	5,229	0%	100%	0%
Plaster products	167	0%	75%	25%
Bitumen	3	0%	100%	0%
Metal	300	0%	100%	0%
Timber products	285	1%	100%	0%
Ceramic	23	0%	100%	0%
Carpet	28	0%	35%	65%
Glass	29	0%	100%	0%
Plastics	21	0%	95%	5%
Asbestos	120	0%	0%	100%
Stone	185	75%	25%	0%

Table 18: Recommended waste management targets

During the demolition, details of the actual materials arisings and the waste management methods used should be recorded to compare actual with forecast and to assess performance against the targets set. Following completion of the project, any barriers to achieving the targets should be reviewed to ensure that in future projects these barriers can be overcome.