**PLANNING REF. PP-02039185: AREA OF LAND ADJACENT TO HARPURHEY ROAD, HARPURHEY**

**HARPURHEY FORMER TIP REMEDIATION WORKS - SUPPORTING INFORMATION**

## Background

In May 2011 the former tip adjacent to Harpurhey Reservoirs was determined as Contaminated Land under Part 2A of the Environmental Protection Act 1990. The tip materials consist mainly of gas works waste plus brick and ash fill, and contaminants in the waste include cyanide, heavy metals, sulphate and sulphide. (N.B. No contaminants have been identified on site that are listed in Section 23 of the planning application form.) Elevated cyanide concentrations in shallow waste materials were identified as posing an acute risk to site-users, and all listed contaminants are either currently impacting on the nearby non-potable reservoirs or are likely to do so. Similarly contaminated sludges around the base of the tip in the adjacent reservoir were also identified as posing a risk to site-users and surface waters.

Priority interim action was taken in 2011 to address the most significant identified risks, including erecting signs warning against using the site or disturbing the ground, covering the level areas of the tip with grass-seeded soil and an informal gravel path, and installing fencing around the part of the site.

A slope stability analysis carried out for the tip concluded that the current slope profile does not meet the required factor of safety, and recommended that regrading be carried out. A subsequent remedial options appraisal identified the preferred approach as described in the 'Proposed works' section below.

## Proposed works

The remedial options appraisal identified the preferred approach of reprofiling a large area of the tip slope, followed by the placement of an impermeable cover system to protect human health and reduce the entry of contaminants into the reservoirs. The more wooded northern area of the tip will not be re-graded, but will be subjected to surface dressing isolated areas of elevated contaminant concentrations, together with fencing to reduce access to the steep and potentially unstable slopes.

Further details describing the proposed remediation works are summarised below and contained in the following report submitted with the planning application: 'AMEC UK Limited, June 2012, Harpurhey Tip Site - Outline Design and Remediation Strategy'.

A Detailed Design and Remediation Strategy will also be produced and submitted to the Local Planning Authority for approval prior to site works commencing.

**Imported materials:**

- Sub-soil: 560m$^3$
- Recycled hardcore material (MOT Type 1 or 6F2): 2340 m$^3$
- Lime: 12m$^3$

**Exported materials:** No materials are to be exported from site.

**Capping design:** Impermeable drainage layer, overlain with a 500mm thick layer comprised of 300mm hardcore and 200mm sub-soil.

**Site levels and profile:** The Outline Design and Remediation Strategy contains cross-section profile drawings of the tip, with the final profile superimposed on the existing profile. These diagrams are included in Annex I of this document.

**Traffic movements:** 16 wagons per day for 20 days (total 320 wagons).

**Hours of working:** The works will take place during Monday to Friday, between 07:30 and 17:00 hours.

**Leachate controls:** Any leachate generated during the re-grading works will drain into the upper reservoir, which is currently impacted by tip leachate and contarninated surface run-off.

**Completion report:** Validation documentation of the cover system will be submitted to the Local Planning Authority for approval following completion of the site works.

## Ecology

Consultation on the proposals has been carried out with the Greater Manchester Ecological Unit (GMEU), and their responses to specific ecological issues and potential impacts are included below:

**SBI:** The former tip site is adjacent to a Site of Biological Importance (Harpurhey Reservoirs). GMEU advised the following by email on 27 February 2012: "*...the recommended option for remediation, taken together with the post-restoration Masterplan, would appear to allow for effective restoration of the site in such a way as to ensure that the overall ecological value of the site can be maintained and/or enhanced.*"

**Wildlife and timetable of works:** GMEU were asked to comment on the most appropriate time to commence the proposed works with regard to bird nesting

and breeding seasons. GMEU advised the following by email on 29 March 2012: "*August or September would be a good time to start, since the birds will have finished nesting and any small mammals or amphibians will have largely finished breeding but will not yet be in torpor and so will be able to move easily.*"

**Vegetation clearance:** The scheme involves the clearance of vegetation in order to facilitate slope re-profiling; this clearance is to be kept to the minimum necessary to facilitate an effective scheme that will protect human health and controlled waters. The broad-leaved closed canopy tree species to the north of the proposed re-grade area of the site will be protected as far as possible, and the clearance will be limited to immature birch saplings and shrubs that have colonised the edges of the tip and the perimeter mound between the site and Harpurhey Road.

**Final site restoration:** GMEU advised that they support a diverse grassland species mix to restore and re-seed the site following the proposed remediation works. A meadow grass seed selection has therefore been specified in the remediation design.

## Flood Risk Assessment

The advice of the Environment Agency (EA) was sought with regard to requirements of a Flood Risk Assessment (FRA) for the proposed works. The EA confirmed that an FRA would not be required; their response is included in Annex II.

## Communications

A Communications Strategy will be developed at an early stage of the scheme in order to establish the most appropriate methods of providing relevant information to potential stakeholders prior to and during the works, and to establish procedures for processing any queries received. In addition to providing public information signage at the site boundary, nearby housing associations and schools will also be contacted before works commence. Consultation regarding the development of the Communications Strategy will be held with MCC Central Communications, the Health Protection Agency and NHS Manchester.

## Design & Access

The proposed works comprise remediation of the former tip only, and do not include the creation of access across the site. A locked steel vehicular gate is currently in place at the northern end of the site at the entrance from Harpurhey Road and no public rights of way are present on the site, although an informal

gravel path was created as part of the priority works to discourage site-users from walking on the newly seeded soil.

The Irk Valley Local Plan includes an aspiration for the Irk Valley trail to cross the site, and the remedial works will facilitate this objective. Following completion of the remedial works, a scheme to design and create access may therefore be developed under the Irk and Medlock Valley Programme, and any necessary permissions shall be sought at that time.

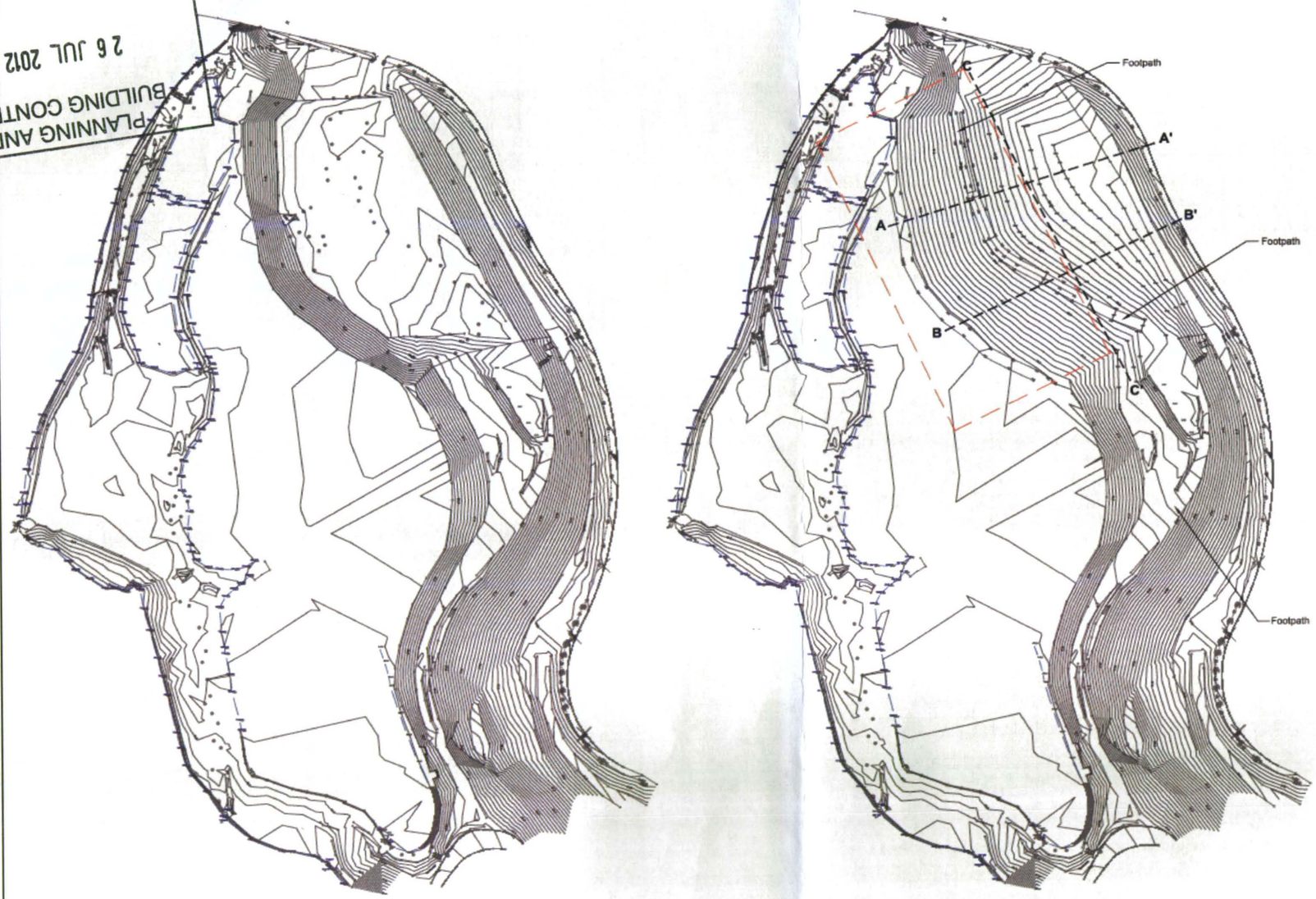
# ANNEX I

## Site Profile Drawings

PLANNING AND BUILDING CONTROL
26 JUL 2012

Existing Profile of Harpurhey Tip

Regraded Profile of Harpurhey Tip




**Key**

Line of cross section shown on Figure 5.4

Area of detail shown on Figure 5.5

0 m — 75 m

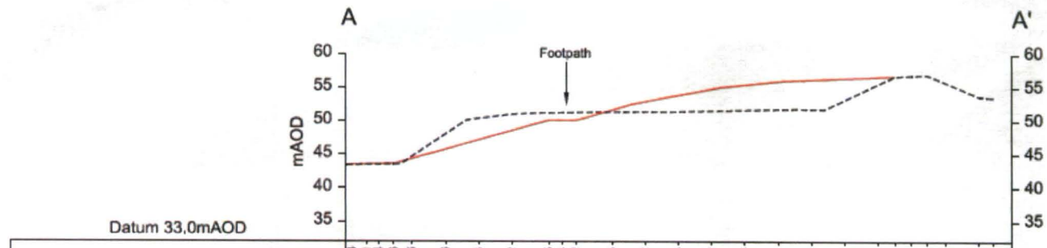
Scale 1:1500 @ A3

Manchester City Council
Harpurhey Tip Site
Outline Design and Remediation Strategy

**Figure 5.3**
**Topography Pre and Post Regrading**

March 2012
30323-Mol06.dwg park

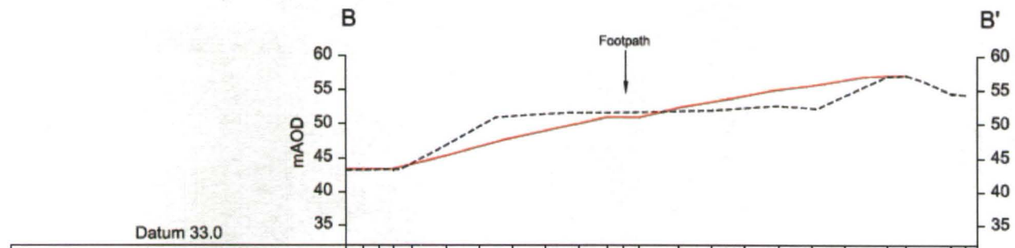
amec




Datum 33.0mAOD

| Chainage | 0.000 | 5.000 | 10.000 | 15.000 | 20.000 | 25.000 | 30.000 | 35.000 | 40.000 | 45.000 | 50.000 | 55.000 | 60.000 | 65.000 | 70.000 | 75.000 | 80.000 | 85.000 | 90.000 | 95.000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Offsets | 0.000 | 3.235 | 7.249 | 10.000 | 15.000 | 20.000 | 25.000 | 30.553 | 32.550 | 34.548 | 35.000 | 40.000 | 45.000 | 50.000 | 55.000 | 60.000 | 65.000 | 70.000 | 75.000 | 80.000 | 82.486 | 85.000 | 87.367 | 90.000 | 95.103 | 97.288 |
| OGL | 43.399 | 43.490 | 43.634 | 44.892 | 48.007 | 50.159 | 50.342 | 50.942 | 51.155 | 51.244 | 51.328 | 51.341 | 51.398 | 51.514 | 51.829 | 51.738 | 51.791 | 51.758 | 51.727 | 53.169 | 55.535 | 56.697 | 56.813 | 56.919 | 55.821 | 53.666 | 53.479 |
| Proposed Regraded Levels | 43.383 | 43.451 | 43.484 | 43.536 | 44.295 | 45.686 | 47.084 | 48.482 | 50.035 | 50.034 | 50.032 | 51.573 | 52.842 | 53.796 | 54.732 | 55.376 | 55.801 | 56.179 | 56.387 | 56.594 | 56.697 | 56.813 | 56.919 | 55.821 | 53.666 | 53.479 |

Section A - A'

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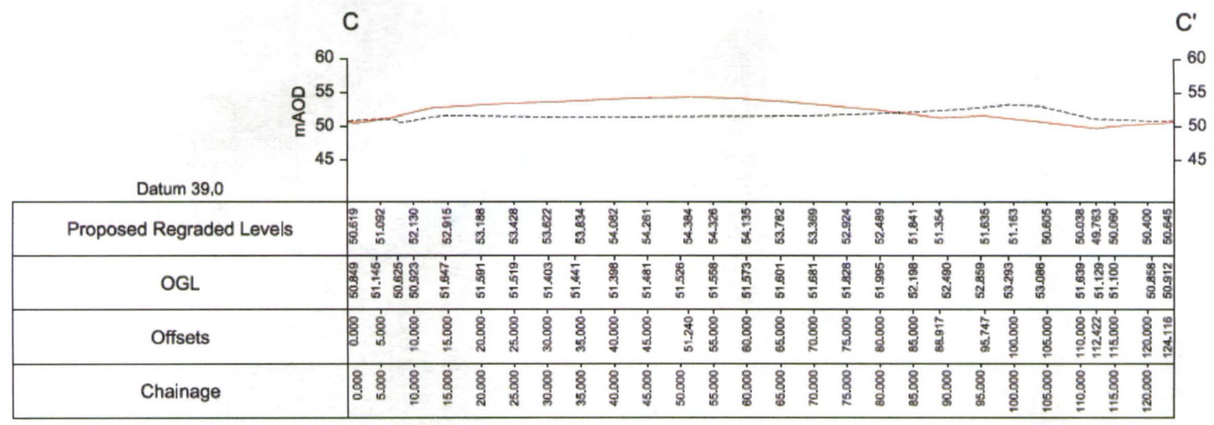
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Offsets | 0.000 | 2.589 | 7.093 | 10.000 | 15.000 | 20.000 | 25.000 | 30.000 | 35.000 | 39.263 | 41.680 | 44.077 | 50.000 | 55.000 | 60.000 | 65.000 | 70.000 | 75.000 | 80.000 | 81.303 | 84.201 | 90.862 | 93.101 |
| OGL | 43.231 | 43.296 | 43.337 | 44.248 | 46.860 | 49.610 | 50.977 | 51.160 | 51.497 | 51.710 | 51.704 | 51.726 | 51.803 | 51.934 | 52.065 | 52.400 | 52.715 | 52.281 | 54.213 | 57.063 | 57.188 | 54.575 | 54.369 |
| Proposed Regraded Levels | 43.242 | 43.277 | 43.316 | 43.336 | 44.041 | 45.279 | 46.627 | 47.924 | 49.004 | 50.083 | 51.000 | 51.000 | 51.000 | 52.399 | 53.278 | 54.178 | 55.088 | 55.711 | 56.522 | 57.154 | 57.188 | 54.575 | 54.369 |

Section B - B'




Datum 39.0

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Offsets | 0.000 | 5.000 | 10.000 | 15.000 | 20.000 | 25.000 | 30.000 | 35.000 | 40.000 | 45.000 | 51.240 | 55.000 | 60.000 | 65.000 | 70.000 | 75.000 | 80.000 | 85.000 | 88.917 | 95.747 | 100.000 | 105.000 | 110.000 | 112.422 | 115.000 | 120.000 | 124.116 |
| OGL | 50.849 | 51.145 | 50.826 | 50.923 | 51.647 | 51.891 | 51.519 | 51.403 | 51.441 | 51.398 | 51.481 | 51.526 | 51.558 | 51.573 | 51.801 | 51.881 | 51.826 | 51.995 | 52.198 | 52.859 | 53.293 | 53.086 | 51.839 | 51.129 | 51.100 | 50.858 | 50.912 |
| Proposed Regraded Levels | 50.619 | 51.092 | 52.130 | 52.915 | 53.188 | 53.428 | 53.622 | 53.834 | 54.082 | 54.261 | 54.384 | 54.326 | 54.135 | 53.792 | 53.399 | 52.924 | 52.489 | 51.841 | 51.354 | 51.635 | 51.163 | 50.605 | 50.038 | 49.763 | 50.090 | 50.400 | 50.645 |

Section C - C'

**Key**

Original ground level (OGL)

Proposed regraded level

0 m 40 m

Scale 1:750 @ A3

Manchester City Council
Harpurhey Tip Site
Outline Design and Remediation Strategy

**Figure 5.4**
**Cross Sections Comparing Existing with Regraded Slope**

April 2012
30323-Mol07.dwg parkj

amec

# ANNEX II

## Environment Agency Pre-Application Response

Ms Rebecca Twig
Manchester City Council
Operational Services
Hammerstone Road
Manchester
Lancashire
M18 8EQ

**Our ref:** SO/2012/110713/01-L01
**Your ref:** PRE-AP

**Date:** 27 June 2012

Dear Ms Twig

**FRA REQUIREMENTS LAND OFF HARPURHEY ROAD**

Further to your email enquiry dated 6 June 2012, we can advise as follows:

We have reviewed the Outline Design and Remediation Strategy from Amec and are satisfied in principle with the proposals. It appears that most of the work will take place away from the flood risk area and as such not have a negative impact.

The proposed remediation works at the Harpurhey Tip site are being undertaken under the Part 2A Contaminated Land regime and we are providing advice to Manchester City Council with respect to the controlled waters aspects of the remediation.

**Flood Defence Consents**
Under the terms of the Water Resources Act 1991, and the Land Drainage Byelaws , the prior written consent of the Environment Agency is required for any proposed works or structures, in, under, over or within 8 metres of the top of the bank of the River Irk which, is designated a 'main river'.

We have discretionary powers to carry out maintenance works on the channels of "main river" watercourses to remove blockages and ensure the free flow of water. The responsibility for the repair and condition of the River Irk, its channel, banks and adjacent structures, lies ultimately with the riparian owner.

I trust you find this information useful.

Yours sincerely

**Mrs SYLVIA WHITTINGHAM**
**Planning Liaison Officer**

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