

Waste and Recycling Committee

Date: 23 March 2022

Subject: Asset Management Plan Update – Part A

Report of: Michael Kelly, Head of Engineering and Asset Management,
Waste and Resources Team

Purpose of Report

Provide members with an update on the implementation of the asset management plan and key engineering projects.

Recommendations:

Members of the Committee are recommended to:

1. Note and comment on matters set out within the report

Contact Officer

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Equalities Impact, Carbon and Sustainability Assessment:

Equalities Implications:

There are no equalities impacts arising from the matters set out in this report.

Climate Change Impact Assessment and Mitigation Measures:

A fundamental principle of the WRMS and HWRCMS contracts is the sustainable management of waste in order to reduce carbon emissions from landfill disposal. The carbon impacts of the contracts are monitored and provided annually by the contractor.

Risk Management

Performance of the contracts and associated risks are captured in the GMCA corporate risk register.

Legal Considerations

Activities set out in this report are in accordance with the terms of the WRMS and HWRCMS contracts.

Financial Consequences – Revenue

Activities set out in this report are in accordance with the Waste revenue budget.

Financial Consequences – Capital

Activities set out in this report are in accordance with the Waste capital budget.

Number of attachments to the report:

Appendix A - Asset Management Plan – Action List Update Q3 2021

Comments/recommendations from Overview & Scrutiny Committee

N/A

Background Papers

N/A

Tracking/ Process

Does this report relate to a major strategic decision, as set out in the GMCA Constitution

No

Exemption from call in

Are there any aspects in this report which means it should be considered to be exempt from call in by the relevant Scrutiny Committee on the grounds of urgency? N/A

GM Transport Committee

N/A

1. Introduction

This report provides Members with updates relating to the Waste and Resources team asset portfolio. Updates are provided for key projects focusing on progress at quarter 3 in 2021. Assets within Waste and Resources are managed by the Engineering team and fall into the following categories:

(A) - Operational Waste Facilities
WRMS Contract Facilities - Lot1 28 waste processing and reception facilities across 11 locations.
WRMS Contract – Lot 2 11 Household Waste Recycling Centres
(B) - Buildings and Land
Includes vacant land and building premises at 8 locations
(C) - Closed Landfill Sites
4 Closed landfill sites managed by GMCA 18 Closed landfill sites managed by POS Landcare

2. 2021-22 Quarter (3) Update

The following information provides individual updates against selected projects across the Waste and Resources Asset categories.

2.1 Category (A) Updates – Operational Waste Facilities

1 Reliance Street Mechanical Treatment and Reception Facility

Update - Q3 2021

The new MTR facility at Reliance Street is now fully operational following successful commissioning of the main plant and equipment. The plant is running at higher-than-expected daily tonnages providing essential capacity while our Longley Lane MTR is offline and undergoing refurbishment.

The odour control system (OCS) is currently undergoing further testing against the contractual test criteria. This is an ongoing snagging defect which is being reviewed by the technology provider and main contractor. GMCA and Suez are in dialogue on this matter and provisional options are being reviewed. Suez are continuing to monitor the situation and operate the plant and rectification measures for the OCS will be reviewed and actioned in the coming months.

2 Chichester Street Transfer Loading Station - Floor Replacement

Background

The floor at our Chichester Street transfer loading Station (TLS) has suffered from significant wear and tear in the recent years which has seen the concrete floor degrade to such a degree that steel reinforcement was constantly exposed, undermining the floors structural integrity.

The floor at Chichester Street was constructed on concrete piles as a result of the facility being built on a former landfill site. Due to risks associated with exposure of the landfill materials, gas, and potential damage to existing gas management provisions, GMCA decided to expose the top 50% of the floor and replace with a new concrete surface finish to protect the existing structure and associated ground condition risks.

Update - Q3 2021

Work to address the floor was undertaken between September and November and the solution was achieved by using hydro-demolition to remove approximately 50% of the existing floor depth exposing the top layer of structural reinforcement. Approximately 30% of the top layer of steel was lost due to the deteriorating concrete conditions, this was replaced while retaining the integrity of an existing gas membrane and passive air flow system constructed beneath the slab to manage potential gas migration from the landfill.

A new top layer of concrete was poured and blended into the remaining floor to create a re-levelled tipping hall floor. All works were delivered within 10 weeks and on time by our

appointed contractor. This solution was very successful and as result we are now considering options to replicate the solution at Bredbury as we have similar issues at the former In-vessel composter (IVC) building. Further details for this work will be presented at the committee meeting.

3 Longley Lane Mechanical Treatment and Reception Facility

Background

In 2016-17 GMCA commenced a review to modify all 4 of our Mechanical-Biological-Treatment (MBT) facilities. The key principals of the project were to simplify the technologies by removing the biological element of treatment, reducing operational costs, reducing maintenance requirements, and increasing throughput efficiencies at each facility.

Modifications at Bredbury and Cobden Street were successfully delivered in 2019-20 to create new simplified Mechanical Treatment and Reception (MTR) Facilities. Each plant was adapted, to receive residual waste for shredding and compaction, these modifications have seen an average increase in tonnages received of 20% at both facilities.

Our third plant at Reliance Street was demolished and replaced with a new MTR design on the same principals as Bredbury and Cobden Street. Reliance Street was delivered earlier this year and is now in operation.

Our final MBT plant at Longley Lane is to be replaced with a new simplified MTR arrangement. The new Layout has been designed to simplify conveyor routes and create a more accessible plant for operation and maintenance. The existing shredder and compactors will be retained, serviced and modified as part of the upgrades. All existing conveyors, plant and equipment including a waste screening trommel will be removed and replaced by new conveyors along with an over-band magnet to remove ferrous metals from the waste stream.

Update - Q3 2021

Site works to modify the plant began in October with the initial focus between October and December to address enabling works before installation of the new plant. This work included mechanical disconnections, electrical isolations, and removal of all redundant plant.

Modifications of the sites operational software were also undertaken to ensure the plant could be removed in readiness for the new installation. The existing shredder has been dismantled for upgrades and the provision of a new cutting table. Works for this period have remained on programme with all demolition activities being complete at the end of December.

The focus from January onwards covers the followings areas:

- Mechanical and electrical installation;
- Shredder upgrades;
- Compactor Upgrades;
- Service reconnections including sprinklers, fire alarm and CCTV;
- Readiness testing;
- Training; and
- Commissioning and Handover.

All works are scheduled for completion at the end of May 2022. Further details for this work will be presented at the committee meeting.

2.2 Category (B) Updates - Buildings and Land

1 Dunkirk Farm

The Dunkirk Farm site is located in Hyde adjacent to Dunkirk Lane closed landfill site, which the former GMWDA sold onto POS Landcare in 2012 as part of a larger portfolio of 18 landfill sites. Dunkirk Farm and its associated derelict buildings were retained as valuable assets. In recent years several attempts were made to sell the site by auction however these failed for various reasons associated with each interested buyer.

This year the site was relisted at auction and offered with a small reserve to achieve a sale. In October a bid was accepted resulting in a completed sale of the site in November 2021. The land and buildings were sold to a Manchester based business who intend to renovate the existing dwellings and outbuildings. This now removes an ongoing operational liability and cost from GMCA.

2 Other Category (B) Assets

No significant works or capital projects are ongoing or planned at other category B locations

2.3 Category (C) Updates - Closed Landfill Sites

1 Closed Landfill Sites

GMCA currently manage 4 closed landfill sites at Bredbury, Waithlands, Barlow Hall and Cringle Road. 2 sites at Barlow Hall and Cringle Road are jointly managed with Manchester City Council (MCC)

Update - Q3 2021

No significant capital projects have been delivered at any of the 4 sites this year, each site is being managed by our in-house landfill operatives against our annual maintenance schedules.

Recent minor works to note include:

- Upgrades to the methane stripping plant (MSP) at Bredbury to provide additional surface water drainage and improve manhole access to chambers. This work was required as the plant was experiencing flood events on a regular basis. A perimeter land drain was installed to manage surface water levels local to the MSP. All existing manhole covers were replaced with new covers providing safer access and egress into the chamber for maintenance and confined space entries;
- New boundary fencing has been installed at Waithlands to provide long term security for the Chichester Street operational facilities and wider landfill area. Existing fencing was beyond its life expectancy and the site has recently suffered from unauthorised access, thefts and anti-social behaviour. New fencing was installed on the Waithlands landfill site to increase the site's overall security; and
- New power supply has been installed at Barlow Hall landfill as the site existing power cable was damaged beyond repair resulting in electrical disruption to the MSP. A new supply was installed this year after which the MSP returned to operation. The MSP is now running consistently which will have a positive impact on local ground water levels.

3. Asset Management Plan 2021-22 Update

Updates against the 2021-22 Asset Management Plan are provided within Appendix A. Asset Management Plan – Action List.