Thornton Waste Recovery Park

Proposed Extension in Height of Five Existing Bio-Filter Stacks

Landscape Character and Visual Amenity

Addendum

Submitted by

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Introduction

The purpose of this report is to assess the potential impact of the proposed extension of five bio-filter stacks at the Thornton Waste Recovery Park on landscape character and visual amenity.

This report is intended as an addendum to the visual impact assessment carried out as part of the original landscape character and visual impact assessment1 2006. The intention is not to re-write the original landscape and visual impact assessment, but to build upon its findings and assess the proposed additional stacks as additional visual elements to the existing facility.

The Proposals

The proposed development is for the height extension of the five bio-filter stacks at the recovery park in Thornton, Lancashire.

The structures currently stand at 12.65m above ground level. The proposals seek to increase the height of all the existing structures by 12.35m to a total individual height of 25m.

Raising the height of the stacks is to increase the atmospheric dispersion of emissions derived from the odour management system of the plant.

Assessment Methodology

The assessment methodology for this addendum has been carried forward from the original landscape character assessment 2006. For further information refer to Thornton Waste Technology Park – Landscape Character & Visual Impact Assessment - Chapter 8.3 Assessment Methodology.

1 Thornton WTP – Landscape Character & Visual Impact Assessment (copyright RPS Group 2006)
Landscape Character Assessment

Baseline

Within the wider study area of 1000m from the proposals, four distinct local character zones have been identified and are described as follows:

Character Zone A - Open Agricultural Areas

This character zone comprises the open agricultural areas adjacent to the recovery park and their immediate surroundings.

In summary, the character of the landscape around the recovery park comprises unremarkable farmland, rough grassland and scrub. It is considered of low/medium sensitivity to change, both in landscape value and context of its importance locally.

Character Zone B – Employment Areas

The existing industrial area consist of large shed developments, which are mainly in light industrial use, and are interspersed with smaller areas of hard standing, access routes for vehicles and parking bays for workers and visitors.

It is an area with a distinctly utilitarian feel and with no significant internal landscape components or structure. It is a zone typical of many overtly functional industrial and commercial areas and one of ordinary quality for its type and use, which is of low sensitivity to change in relation to the proposed development.

Character Zone C - Urban Fringe / Residential & Associated Amenity Spaces

This character zone comprises a mix of housing and amenity green spaces primarily used for sports. The zone wraps around the southern and western extents of Character Zones A & B.

Overall, the landscape is of reasonably good quality, with well-maintained housing bounded by pasture farmland with hedgerows and mature hedgerow trees. Although visible, the recycling facility doesn’t dominate the landscape, which is considered of high sensitivity to change arising from the proposals.

Character Zone D – Holiday Park / Tourist Destination

This character zone comprises a complex of holiday caravans with associated services such as convenience store, restaurants, indoor pool and amusements.

The holiday park consists of a grid system layout with a network of access roads and car parks servicing clusters of caravan pitches. The site is functional with no significant internal landscape components. Though of little landscape value, the nature of the holiday park as a tourist destination renders it of high sensitivity to changes arising from the proposals.
Assessment and Evaluation

The proposals will be finished to a high standard of design and are intended to match the existing facility in terms of colour and materials. Due to the relatively minor nature of the proposals in relation to the scale and character of the existing facility, they are not expected to have a significant effect on the character of the surrounding areas.

The following provides a summary of the likely effects on identified local character zones:

Character Zone A - Open Agricultural Areas

The sensitivity of this zone to development of the type proposed is low / medium, as the landscape is already affected by the existing facility. The magnitude of change is also considered low given the size of the overall facility and will not have a fundamental effect on the defining characteristics of the landscape.

The low magnitude of change, combined with the low sensitivity of this character zone, will result in a negligible effect on the landscape. This effect is considered not significant.

Character Zone B - Employment Areas

The sensitivity of this zone to development of the type proposed is low. The magnitude of change is considered low given the size of the overall facility and will not have a fundamental effect on the defining characteristics of the landscape.

The low magnitude of change, when combined with the low sensitivity of this character zone will result in a negligible effect on the landscape. This effect is considered not significant.

Character Zone C - Urban Fringe / Residential & Associated Amenity Spaces

The sensitivity of this zone to development of the type proposed is high. The magnitude of change is considered low given the size of the overall facility and will not have a fundamental effect on the defining characteristics of the landscape.

The low magnitude of change, when combined with the high sensitivity of this character zone will result in a negligible effect on the landscape. This effect is considered not significant.

Character Zone D – Holiday Park / Tourist Destination

The sensitivity of this zone to development of the type proposed is high. The magnitude of change is considered low given the size of the overall facility and will not have a fundamental effect on the defining characteristics of the landscape.

The low magnitude of change, when combined with the high sensitivity of this character zone will result in a negligible effect on the landscape. This effect is considered not significant.
Assessment of Visual Effects

The following paragraphs examine the potential effects of the proposals on views in and around the recycling facility.

This includes views from the following residential properties, public open space and public footpaths, the locations of which are shown within Figure 1 – Viewpoint Locations and Indicative Receptor Zones:

- Views from residential properties to the south of the recycling plant which back onto Bourne Road, and have views which face north in line with the stacks 1 & 2.
- Views from open public space along Bourne Way looking north east
- Views from the B5268 Fleetwood Road, at the roundabout and main entrance to Thornton Waste Recovery Park looking east
- Views from a Public Rights of Way footpath along the northern perimeter of Thornton Waste Recovery Park looking south

To illustrate the likely effects of the proposals, four viewpoints were included in the assessment. These represent open views of the proposals from publicly accessible receptor locations. A full description of each viewpoint is provided, together with a baseline photograph and a photomontage.

A detailed assessment of the likely effects on the viewpoints is provided. This combines a determination of the sensitivity of the visual receptor with the magnitude or scale of predicted change arising from the proposals, to determine firstly the overall likely change and secondly whether the change is likely to be significant.

It is worth noting that the assessments were carried out in slight overcast weather conditions, however breaks in cloud coverage where frequent and substantial, which present a near worst case scenario in terms of visibility. In each case, the predicted effect is that which will arise during the operational life of the proposal and considered long term but reversible.
Figure 1 – Viewpoint Locations & Indicative Receptor Zones
Receptor Zone A – Residential properties to the south

These residential properties are located from 489m to 747m south of the bio-filter stacks location and are set some 1m below the general site level of the recovery park.

Baseline

Existing views are largely screened due to a combination of factors. Relatively flat topography and an east /west orientation of most homes offer visual discretion. Well-established trees and shrubs and sports facility buildings located along the boundary of New Bourne Park provide screening to homes which back onto Bourne Road, however occasional breaks in the vegetated boundary offer glimpses of the upper third section of the recovery park which breaks the distant skyline. Further screening is offered to these homes at ground level by 1.8m high timber panel garden fences. However it is certain that views from the upper floors which are directed towards site will be open and unbroken.

It is worth mentioning that Bourne Road is used as an access road by a large volume of heavy goods vehicles to the Hillhouse Business Park.

Sensitivity

Views are from within a residential area: sensitivity for this type of receptor is considered to be high.

Magnitude of Change

Views of the stacks will be possible from some upper floors of the properties which back onto Bourne Road, most notably the properties running from east to west along Dallam Dell. Occasional glimpses of the bio-filter stacks through breaks in vegetation will be apparent to pedestrians and receptors in vehicles travelling along Bourne Road, however they will be infrequent and minor.

The view is already characterised by elements of man-made structures and the stacks will only introduce limited change.

The magnitude of change is considered to be low.

Significance

The low magnitude of change, when combined with the high sensitivity of the receptor will result in a minor effect. This minor effect is considered not significant.
Receptor Zone B - Open views over amenity space, Bourne Way

The public open space located between 479m to 962m south west of the bio-filter stacks location and is set at the same height as the general site level of the recovery park.

Baseline

Existing views towards the site look out over public open space and are mainly screened by shrub and tree planting in the mid distance. Occasional breaks in screening produce glimpses of the recovery park roof which breaks the skyline.

The viewpoint location is taken from a slightly elevated roadside position on a roadside footpath which dissects two public open spaces. Views are completely screened when within the open space to the north due to a combination of a drop in levels, closer proximity to the mid distance screening and relatively flat topography.

Views from properties and open space directly south of the viewpoint are further screened by additional well established tree and shrub planting which forms the perimeter of the open space, however it is highly likely that many properties will be have increased views from upper floors.

Sensitivity

Views are within the imminent vicinity of a residential area: sensitivity for this type of receptor is considered to be high.

Magnitude of Change

Properties on Breeze Close and The Maltings will have some limited views of the bio-filter stacks from upper floors. The view is already characterised by elements of man-made structures and the stacks will only introduce limited change.

The magnitude of change is considered to be low.

Significance

The low magnitude of change, when combined with the high sensitivity of the receptor will result in a minor effect. This minor effect is considered not significant.
Receptor Zone C - Residential properties to the south west

The residential properties are located between 562m to 966m west south west of the bio-filter stacks location and are set some 1m above the general site level of the recovery park.

Baseline

Existing views from these residential receptors are largely screened in the foreground by a substantial buffer of tree and shrub planting which surrounds a contained, informal and naturalised grass and scrub area. This forms the boundary between the residential properties and the adjacent public open space (Receptor Zone B).

A drastic rise in landform to the east of the residential properties provide major screening in the mid ground, segregating homes running from north to south along Pheasant Wood Drive from any views of the proposed stacks. Views from upper floors are predicted to be limited to occasional glimpses.

Sensitivity

Views are from within a residential area: sensitivity for this type of receptor is considered to be high.

Magnitude of Change

Although intervening landform and vegetation will serve to screen many views, there may be occasional glimpsed views of the stacks from properties at the eastern end of this group of properties. Properties along Pheasant Wood Drive will have some limited views of the tops of the bio-filter stacks, but overall views will be prevented by landform and the close proximity of homes to the well-established tree and shrub screening.

The magnitude of change is considered to be low.

Significance

The low magnitude of change, when combined with the high sensitivity of the receptor will result in a minor effect. This minor effect is considered not significant.
Receptor Zone D – New Bourne Park

The sports recreational ground is approximately 311m to 625m south of the bio-filter stacks location and is set some 1m below the general site level of the recovery park.

Baseline

Current views towards the existing facility are significant due to the open, flat nature of the recreational ground. Mature trees and shrubs produce a substantial vegetated periphery which provides screening to lower sections of the recovery park, however the upper sections of the building can clearly be seen breaking the skyline, the scale of which appears vast in the landscape.

Sensitivity

Views are from within an open amenity area: sensitivity for this type of receptor is considered to be high.

Magnitude of Change

Upper parts of the extended bio-filter stacks will be clearly visible from the sports recreational ground, although the scale of the existing recycling plant structure is so large that the addition of stacks will appear relatively small.

The view is already characterised by elements of man-made structures and the stacks will only introduce limited change.

The magnitude of change is considered to be low.

Significance

The low magnitude of change, when combined with the high sensitivity of the receptor will result in a minor effect. This minor effect is considered not significant.
Receptor Zone E – New Barratt Homes

The new residential area which is currently under construction will, upon completion be approximately 132m to 439m south of the bio filter stacks location and is set at the same height as the general site level of the recovery park.

Baseline

A residential development to the south of the recovery park is still under construction. The site has a boundary of mature trees and shrubs from previous infrastructure which provides partial screening to the lower section of the recovery park.

Views from the existing residential development are similar to that of Receptor Zone D. The residential area is located within close proximity to the recovery park and substantial views are inevitable. It is however anticipated that houses which are currently under construction will have their views screened by the future development of further homes, the proposals for which indicate houses will be around 15-20m from the southern boundary of the recovery park, which is too close to site to have any views of the stacks.

Sensitivity

Views are from within a future residential area: sensitivity for this type of receptor is considered to be high.

Magnitude of Change

Views from new properties currently under construction is similar to those of Receptor Zone D, however future development will provide screening which will vastly reduce the visual impact. It is anticipated that views may be obtainable from upper floors within individual properties from windows of a north to south orientation; however this will only apply to a small number of properties.

The proposed extension of the bio-filter stacks will appear as small additions in the landscape with minor visual impact.

The magnitude of change is considered to be low.

Significance

The low magnitude of change, when combined with the high sensitivity of the receptor will result in a minor effect. This minor effect is considered not significant.
Receptor Zone F – Public Rights of Way

The Public Rights of Way runs adjacent to the recovery parks northern boundary and is approximately 175m to 459m north of the bio-filter stacks location and is set at the same height as the general site level of the recovery park.

Baseline

Current views towards the recovery park are extensive due to their proximity. Mature trees and shrubs provide a substantial vegetated covered walkway which follows a ditch line, retaining and directing views along the rights of way path which runs in a south east to north west direction. Intermittent breaks in the vegetated canopy reveal detailed views of the recovery park which dominates the foreground and completely restricts any mid or distant views.

Sensitivity

Views are from within a Public Rights of Way: sensitivity for this type of receptor is considered to be high.

Magnitude of Change

Views of the recovery park will largely be prevented by a well vegetated canopy which lines the walkway. Sporadic openings in the canopy will produce detailed views of the recovery park and occasional glimpses of the bio-filter stacks. The effect of the additional stacks will be reduced due to the proximity to the north face of the recovery park which results in close range views of large scale elements including many vertical components which provide the context for the proposed stacks, and therefore reduce their visual impact.

The nature of existing immediate views will render the extension of the bio-filter stacks on any obtainable views as minor.

The magnitude of change is considered to be low.

Significance

The low magnitude of change, when combined with the high sensitivity of the receptor will result in a minor effect. This minor effect is considered not significant.
Receptor Zone G – Cala Gran Holiday Park

The holiday park is approximately 328m to 1077m north of the bio-filter stacks location and is set some 1m below the general site level of the recovery park.

Baseline

The holiday park is located to the north of the recovery park and lies on relatively flat open land which is bounded by a 1.8m high timber panel fence and occasional trees and shrubs planting. It is separated from the recovery park by the Public Rights of Way of Receptor Zone F and an open meadow.

Current views towards the recovery park vary. Adequate screening from the raised walkway and mature vegetated screening of Receptor Zone F provide screening to caravans in the south west of the holiday park, whereas caravans to the north and east of the site will experience intermittent views due to the open nature and relatively flat landform.

Sensitivity

Views are from within a holiday park destination: sensitivity for this type of receptor is considered to be high.

Magnitude of Change

Mature trees and shrubs provide adequate screening and containment to the south west of the holiday park though there are intermittent views from all other areas within the holiday destination. However many other man-made structures within the landscape will detract and reduce the visual impact of the bio-filter stacks.

An increased in stack height will slightly increase the visual impact of the recovery park. Views however are already characterised by elements of man-made structures and the addition of stacks will only introduce limited change.

The magnitude of change is considered to be low.

Significance

The low magnitude of change, when combined with the high sensitivity of the receptor will result in a minor effect. This minor effect is considered insignificant.
Photomontages

In addition to the above visual impact assessment, four viewpoints have been assessed and photomontages prepared, so as to ascertain the full extent of the visual impacts resulting from the increased stack heights of the existing bio-filters. The locations of the photomontage viewpoints in this report have been selected to provide a near match of viewpoints 1 -4 used in the original Thornton WTP – Landscape Character & Visual Impact Assessment, 2006.

Viewpoint 1 – Bourne Road looking north

Location

The viewpoint is situated at the mid-point of Bourne Road, to the rear of properties of Dallam Dell. The view looks directly north towards the recovery park.

The viewpoint is 489 m from the proposals, and lies at an elevation of 5m.

Baseline

The viewpoint takes in a medium range view over amenity space with the recovery park in the background. When a break in boundary planting of shrubs and trees permit, the open, near flat landscape affords clear views of the existing recovery park in the distance, which forms a prominent feature on the horizon.

A break in the semi mature shrubs and trees frame stacks no 1 & 2 which protrude above the recovery parks structure breaking the skyline. Stacks 3,4 &5 are well screened by the recently constructed Barratt Homes development to the right of view.

Sensitivity

The viewpoint is taken from a public highway within a residential area: sensitivity for this type of viewpoint is considered to be high.

Magnitude of Change

The upper parts of two of the extended bio-filter stacks will be visible to the centre right of the viewpoint, but they will only result in a minor change to the existing view. Much of their structure will be screened by other parts of the recovery park. The magnitude of change is therefore considered to be low.

Significance

The low magnitude of change, when combined with the high sensitivity of the receptor will result in a minor effect. This minor effect is considered not significant.
Viewpoint 2 – Public Open Space along Bourne Way looking north east

Location

The viewpoint is situated along a public footpath, which runs through an open recreational space. It looks north east towards the existing recovery park.

The viewpoint is 676 m from the proposals, and lies at an elevation of 7m.

Baseline

The viewpoint takes in a long range view of the surrounding open space with the recovery park in the background. Views from the footpath over open, relatively flat public open space affords sporadic views of the existing roofline of the recovery park above layers of vegetation.

The upper third sections of all five proposed bio-filter stacks protrude over the mid distance vegetation breaking the skyline. However the extended distance between the viewpoint and the recovery park coupled with other vertical elements in the landscape vastly reduce the impact of the stacks.

Sensitivity

Views are from a public open space within the imminent vicinity of a residential area: sensitivity for this type of receptor is considered to be high.

Magnitude of Change

Although the bio-filter stacks will be visible from this location in the centre of the view, much of their impact will be lessened by other parts of the recovery park and the many other man made vertical elements within the landscape, the cumulative effects of which will only result in a minor change to the existing view. The magnitude of change is therefore considered to be low.

Significance

The low magnitude of change, when combined with the high sensitivity of the receptor will result in a minor effect. This minor effect is considered not significant.
**Viewpoint 3 – B5628 – Fleetwood Road looking east**

**Location**

The viewpoint is situated on Fleetwood Road; looking east on the approach to the entrance of the recovery park.

The viewpoint is 371m from the proposals, and lies at an elevation of 11m.

**Baseline**

The viewpoint takes in a short range view of the recovery park and its entrance and ancillary buildings. The view is contained on both sides by large landscaped bunds with mature trees.

The recovery park is a prominent feature on the horizon and all five of the bio-filter stacks will be clearly visible from the viewpoint. The approach to the entrance is populated by a number of vertical man-made features, including lighting columns, road signs and bollards, which will reduce the impact of the stacks on what is already a predominantly industrial landscape.

**Sensitivity**

Views are from a public highway: sensitivity for this type of receptor is considered to be medium.

**Magnitude of Change**

All five stacks will be visible from this location. However a large number of man-made vertical elements including lighting columns, road signs and bollards, in what is already an industrial landscape will vastly reduce any visual impact.

The magnitude of change is considered to be low.

**Significance**

The low magnitude of change, when combined with the medium sensitivity of the receptor will result in a minor effect. This minor effect is considered not significant.
**Viewpoint 4 – View from Public Rights of Way footpath looking south west**

**Location**

The viewpoint is situated on a heavily vegetated Public Rights of Way footpath which runs adjacent to the northern boundary of the recovery park. The view looks in a south easterly direction.

The viewpoint is 217m from proposals and lies at an elevation of 6m.

**Baseline**

The viewpoint takes in a short range view of the surrounding open space with the recovery park in the background. The close range scene represents views through a break in the tree lined footpath, looking onto the north face of the recovery park which blocks any mid or distant views.

None of the proposed bio-filter stacks are visible from this viewpoint due to the vast scale of and close proximity to the recovery park.

**Sensitivity**

Views are from a Public Rights of Way footpath. Sensitivity for this type of receptor is considered to be high.

**Magnitude of Change**

Views of the proposed stacks will be completely screened by the existing recovery park structure. This will result in no changes to the existing view.

The magnitude of change is considered to be no change.

**Significance**

The absence of any change to the view combined with the medium sensitivity of this receptor type will result in a neutral effect.
Mitigation

No significant effects have been identified and no mitigation is intended as part of these proposals.

The planting undertaken as part of the original development of the recovery park will increasingly help screen views. Whilst the stacks will remain partially visible, the overall building mass of the development will be screened or filtered.

Conclusion

Landscape Character

The proposal would involve the introduction of additional vertical elements to an existing industrial structure.

The assessment has demonstrated that the proposed development would be seen in the context of the established industry, creating only a minor addition to the existing industrial fabric of the site. It would not result in a fundamental change to the landscape character of the wider area, which is already affected by the existing facility and other urban influences.

The assessment has accordingly concluded that effect upon each of the local landscape character zones would be negligible and therefore not significant.

Visual Impact

The assessment has demonstrated that receptors subjected to adverse visual effects are limited to an approximate 850m radius from the centre of the existing facility.
Viewpoint 01 - Bourne Road looking north (25m stack)

Date Photo Taken: 15.08.2012  
OS Co ordinates: 353362, 423941  
Elevation: 7m  
Field of view: 160°
Viewpoint 04 - View from Public Rights of Way (PROW) footpath looking south west (25m stack)