

A63 Castle Street Improvement, Hull

Scheme Number: TR010016

6.1 Environmental Statement Volume 1 Addendum 1



Page left intentionally blank

Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning
(Applications: Prescribed Forms
and Procedure) Regulations 2009**

**A63 (Castle Street Improvement, Hull)
Development Consent Order 20[]**

ENVIRONMENTAL STATEMENT VOLUME 1 ADDENDUM 1

Planning Inspectorate Scheme Reference	TR010016
Application Document Reference	TR010016/APP/6.1
Author:	A63 Castle Street Project Team

Page left intentionally blank

A63 Castle Street Improvement, Hull

Environmental Statement Volume 1 Addendum 1

**Assessment of changes to effects arising from removing
the Staples site compound from the DCO**

A63 Castle Street Improvement, Hull

Environmental Statement Volume 1 Addendum 1 Assessment of changes to effects arising from removing the Staples site compound from the DCO

Revision Record						
Rev No	Date	Originator	Checker	Approver	Status	Suitability
0.1	14 May 2019	A Sadler	C Stott	J McKenna	S1	For review
0.2	06 June 2019	A Sadler	C Stott	J McKenna	S2	Final

This document has been prepared on behalf of Highways England by Mott MacDonald Sweco JV for Highways England's Collaborative Delivery Framework (CDF). It is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose. Mott MacDonald Sweco JV accepts no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document contains confidential information and proprietary intellectual property. It should not be shown to other parties without consent from Highways England.

Prepared for:
Highways England
Lateral
8 City Walk
Leeds
LS11 9AT

Prepared by:
Mott MacDonald Sweco JV
Stoneham Place, Stoneham Lane
Southampton, Hampshire
SO50 9NW

Contents	Page
Chapter 1. Introduction	2
1.1 Purpose of the Addendum	2
1.2 Background to the proposals for a production compound at the Arco site and Staples site	2
Chapter 2. The Arco site and the Staples site.....	6
2.1 Introduction	6
2.2 Baseline	6
2.3 Compound proposals.....	6
Chapter 3. Consideration of any significant changes to effects	9
3.1 Assessment approach	9
3.2 Air quality	9
3.3 Noise and vibration	9
3.4 Cultural heritage	11
3.5 Landscape	11
3.6 Ecology and nature conservation.....	15
3.7 Road drainage and the water environment.....	16
3.8 Geology and soils	17
3.9 Materials	17
3.10 People and communities	18
3.11 Effects on all travellers.....	19
3.12 Combined and cumulative effects.....	19
Chapter 4. Conclusion	20

Chapter 1. Introduction

1.1 Purpose of the Addendum

- 1.1.1 This Addendum to Environmental Statement (ES) Volume 1 (APP-023) for the A63 Castle Street Improvement, Hull (the “Scheme”) reviews the potential for any changes to the ES arising from the decision to use the “Arco site” as the location for the production compound, instead of the “Staples site”. The decision to progress the “Arco site” was made following agreement between Highways England and Arco and approval of a planning application by Hull City Council (HCC) for the relocation of Arco to another site in Hull.
- 1.1.2 Option A, referred to in the ES as the “Arco site”, is located on the site of the current Arco office and hosing factory to the south west of the existing A63 Mytongate Junction and is the preferred option. Option B, known as the “Staples site” is on the current Staples, American Golf and Maplin sites to the north east of Mytongate Junction. It was proposed as the alternative production compound site in the draft Development Consent Order (DCO) submitted to the Planning Inspectorate in September 2018 should Option A be unobtainable.
- 1.1.3 The agreement to use the Arco site now requires the subsequent removal of the Staples site from the DCO. This includes a review of any changes to the significance of effects to the assessments in the ES which are presented in this Addendum.

1.2 Background to the proposals for a production compound at the Arco site and Staples site

- 1.2.1 As one of Hull’s largest employers, Arco’s head office is located at Waverley Street, south of the A63 and south west of Mytongate Junction. Arco has in excess of 400 employees at the site, which also comprises a trade counter and a hosing factory. There is a significant amount of site parking for staff and there are several access and egress points to the site, namely:
- Two directly from A63 Castle Street westbound including one from the un-adopted Spruce Road
 - Three from Lister Street
 - One from St James Square
- 1.2.2 During the development of the Scheme, there has always been a requirement to obtain land from Arco in order to deliver the Scheme. The land was required to construct the Porter Street pedestrian, cycle and disabled user bridge, divert statutory undertaker apparatus and amend the access arrangements to the existing Arco site. Several of the access points were to be closed in the vicinity of

Arco including one from the A63 to the centre of the site and one to the west at St James Street.

- 1.2.3 Highways England had regular discussions with Arco since the publication of the Preferred Route Announcement in March 2010, with every effort made to determine a solution that would work for both Highways England and Arco.
- 1.2.4 As the Scheme developed, the un-adopted Spruce Road access to the Arco site (eastern most access) was retained in the design to offer access for delivery vehicles and retain access for the other businesses that currently use Spruce Road (ATS, Armstrong Hydraulics and Kingston Retail Park). It was proposed that all other Arco staff would use the other accesses from Lister Street and St James Square to access the site. As the Scheme advanced towards DCO submission in September 2018, discussions with Arco and their representatives progressed on this basis.
- 1.2.5 During this time Arco raised a number of concerns about the impact of the Scheme on their business, operations, employee safety and the effects of noise and vibration during the Construction Phase. Arco were also concerned about the Scheme requirement to reduce the number of car parking spaces during the Construction Phase, proposed to enable the works to be completed.
- 1.2.6 In 2017, following design development, Highways England identified the requirement for a substantially sized production compound to be located in close proximity to the proposed underpass at Mytongate. The compound was needed for the pumping in of material necessary to stabilise the large excavations (bentonite), the pumping in of the foundations for the underpass (jet grout) and also for the treatment of any excess wet material. The site identified was the semi vacant Staples site (now known as “Option B” within the DCO Application) which is owned by Hull Retail Limited and leased to Princes Quay Retail Ltd (represented by Shulmans LLP).
- 1.2.7 In November 2017, the production compound proposals for the Staples site were discussed with HCC. HCC made it clear that they would not support this proposal as the Staples site was adjacent to the Bonus Arena music venue (under construction at this time) and would compromise a prime retail development site already identified within the HCC Local Plan.
- 1.2.8 HCC suggested alternative sites for the production compound including the Hull Ice Arena site. This was assessed and discounted by Highways England due to the distance from the A63, conflict with businesses, health and safety risks and the number of highway junctions that the pumping lines would have to cross to connect the production compound to the underpass works.
- 1.2.9 As there was no viable alternative suggested, “*Additional Targeted Statutory Consultation under s42 of the 2008 Act on the proposed ‘Staples’ Construction Compound*” was undertaken between 25 January and 22 February 2018 as noted in the Consultation Report at Section 1.2 Table 1 Summary of Consultation

Activities, page 4 and Section 3.7.30 (APP-021). Out of a total of 305 consultation letters three responses (1%) were received, with two out of the three responses objecting to the use of the Staples site as a production compound.

- 1.2.10 Separately to the Staples site consultation exercise, discussion was ongoing with HCC regarding alternative sites. HCC suggested the use of the Arco site at Waverley Street as a potential production compound. Highways England considered this suggestion as a possibility as securing the Arco site would enable Highways England to remove interest in the Staples site. It was also likely to be of interest to Arco as they were already assessing the feasibility of relocating their head office. In addition, Arco had concerns regarding the impact that the Scheme might have if the Arco business remained in-situ on the Arco site during construction and also potential impacts after completion.
- 1.2.11 Following several meetings between Arco, Highways England and HCC, and involvement from elected officials including the local Member of Parliament and Cabinet Member for HCC, the proposal to base the production compound at Arco (now known as preferred Option A) was assessed by Highways England. As a result, it was deemed to be a feasible site.
- 1.2.12 *“Additional Targeted Statutory Consultation under s42 of the 2008 Act on the proposed ‘Arco’ Construction Compound”* was then undertaken between 25 April and 23 May 2018 as noted in the Consultation Report at Section 1.2 Table 1 Summary of Consultation Activities, page 5 and Section 3.7.36 (APP-021). Out of a total of 267 consultation letters five responses (1.8%) were received, with three of the responses expressing concerns regarding loss of business to disruption and impacts to local residents.
- 1.2.13 Highways England, Arco and HCC agreed that the use of the Arco site for the production compound could only be justified if Arco were able to relocate from Waverley Street to a suitable site which had been identified to the south of Blackfriargate to the east of the Scheme. This required all three parties to work together in advance of the DCO submission in September 2018 to finalise agreements regarding the relocation, lease and purchase of the new site at Blackfriargate.
- 1.2.14 Highways England made it clear to all parties that both the Arco site and the Staples site would remain in the DCO application until such a time that the Staples site could be removed. It was agreed that this was dependent on the successful decision of the planning application¹ (Ref: 19/00103/FULL) for Arco’s new offices at Blackfriargate. The application was determined successfully on 24 April 2019.

¹ <https://www.hullcc.gov.uk/padcbc/publicaccess-live/applicationDetails.do?keyVal=PM8TFPSO00200&activeTab=summary>

- 1.2.15 Between April 2018 and January 2019, prior to the successful outcome of the planning application, Arco, HCC and Highways England held regular meetings to finalise the agreements, which have now been signed, sealed and exchanged.
- 1.2.16 Highways England have kept Princes Quay Retail Ltd and their representatives (Shulmans LLP) up to date with progress on the agreements and application. This was always with a view to removing interest in the Staples site (Option B) on successful completion of the planning application for Arco's new offices. Following discussion at the DCO Preliminary Meeting on 26 March 2019, Highways England has agreed to remove the Staples site from the DCO application on 6 June 2019 following the end of the judicial review period for the planning application.

Chapter 2. The Arco site and the Staples site

2.1 Introduction

2.1.1 ES Volume 1 Chapter 2 The Scheme (APP-023) describes the two sites and the proposals for each of the production compounds for the Scheme as Arco site being the “preferred Option A” and the Staples site as “alternative Option B”. This forms the basis of assessment for the topic chapters within the ES.

2.2 Baseline

2.2.1 The Arco site is located on the site of the current Arco store to the south of the A63 and west of Mytongate Junction. The majority of the site is currently used as offices and industrial buildings with car parking. Amenity trees and grassland occur along the A63 verge and a small area to the east of the site.

2.2.2 The Staples site is a retail park comprising the former Staples, American Golf and Maplin sites located to the north east of the existing A63 Mytongate Junction. It is bounded by and accessed off Myton Street to the east. There is a car park to the south with scattered trees present along the southern and eastern boundary of the car park. A hedgerow and trees are located along the southern boundary adjacent to the A63.

2.2.3 ES Volume 1 Section 2.5.2 states that the area of the Arco site (preferred Option A) totals approximately 332,534m² and the Staples site (alternative Option B) totals approximately 332,157m².

2.3 Compound proposals

2.3.1 The proposed use of the sites as a production compound for bentonite also includes other operations such as jet grouting, concrete batching plant and materials treatment. These operations will now be restricted to the Arco site area only.

2.3.2 The ES states at Section 2.6.77 *“The Arco buildings would be demolished to clear the area for use as a construction compound if the preferred bentonite compound Option A was implemented. If the alternative Option B was progressed, then Staples, American Golf and Maplin buildings would demolished instead”*. As the Arco site is being progressed, the buildings on the Staples site will remain standing.

2.3.3 The ES states at Section 2.9.14 *“Boundary treatment for both areas would be a 2.4m hoarding for safety and security purposes. 24 hour lighting would be implemented to enable night working, and for security and safety purposes”*. Hoarding and lighting will now only be implemented at the Arco site and not at the Staples site.

- 2.3.4 During construction, access to the Arco site production compound will be limited as stated in the ES at Section 2.9.15: “. . . access from A63 Hessle Road to Spruce Road would be limited to local businesses and construction traffic and closed to the public. A link road would be constructed between Spruce Road and Lister Street as a replacement and permanent access for local businesses during Phase 0. Access between the A63 and Spruce Road would be maintained for construction purposes and permanently closed at the end of the works. Footpaths are proposed on either side of the new link road with an NMU diversion proposed along Lister Street to ensure the safety of the public.”
- 2.3.5 ES Section 2.9.19 states that there is no current estimate of construction traffic by volume including construction staff traffic. Section 2.9.17 states “*Parking provision would be limited to cars and small vans with disabled spaces provided. The temporary car park would not be used for operational plant or HGVs. Hours of use may be up to 24 hours a day, 7 days a week. The temporary car park would have 24 hour lighting and a 1.8m high hoarding on the boundary for security and safety purposes*”. The ES assessments have taken into account any significant effects arising from site staff working at either compound. Staff would utilise parking facilities at the Myton Centre temporary car park.
- 2.3.6 As stated at Section 2.9.20 “*Staff numbers are estimated to be in the range of 100 to 200 operatives, but not all would be working continually for the full five year period. It is expected that most staff would work during the typical hours of day time construction (to be specified), although it is possible that some activities, for example piling operations, would be carried out in longer 12 hour shifts*”.
- 2.3.7 ES Section 2.9.22 details the likely construction plant, equipment and vehicles by type to be used at the Arco production compound and taken into account in the ES assessments. These are listed below (although this list is not exhaustive):
- *“Transit pick-up*
 - *All terrain fork lifts*
 - *7.5t tonne (t) lorries*
 - *Loader crane lorries*
 - *Crawler cranes (30t, 40t, 60t)*
 - *Mobile cranes (40t, 500t, 800t)*
 - *Dumpers (6t, 20t)*
 - *All terrain forklifts*
 - *Mobile Elevating Work Platforms (MEWP)*
 - *Slip form paver*
 - *Road marking lorry*
 - *Well Pointing Drilling Rig, Drilling Rig*
 - *Hydraulic pile breaker*
 - *Piling rig (60t, 30t)*
 - *Generator*
 - *Compressor*
 - *Silo*
 - *Water tank*

- *Cement mixer*
- *Piling hammer*
- *Roller*
- *360 excavators (6t, 13t tyred, 20t, 25t, 35t)*
- *Asphalt paving machine*
- *Cones*
- *Agitation tanks*
- *Pump*
- *Concrete pump*
- *Mobile Variable Message Signs (VMS)*
- *Temporary traffic lights, pedestrian crossing lights, signs and lighting”*

2.3.8 As stated at Section 2.9.18, at handover, the Arco production compound would be cleared with no above ground structures left in situ and the hoarding removed.

Chapter 3. Consideration of any significant changes to effects

3.1 Assessment approach

- 3.1.1 The ES approach was to base assessment on the production compound (also known in the ES as the “bentonite” compound), being located at the Arco site as the preferred Option A with the possibility of the Staples site being utilised as an alternative Option B if the Arco site was unavailable.
- 3.1.2 This Section of the Addendum reviews the potential for any changes to the ES arising from the decision to use the Arco site as the location for the production compound instead of the Staples site, and the subsequent removal of the Staples site from the assessment process.

3.2 Air quality

- 3.2.1 There would be no changes to the assessment of effects described in Chapter 6 Air quality arising from the use of the Arco site as the location for the production compound instead of the Staples site. The original assessment considered both compounds and recommended appropriate mitigation measures which were applicable to both. The removal of the Staples site does not change the mitigation proposed.

3.3 Noise and vibration

- 3.3.1 ES Chapter 7 Noise and vibration undertakes a direct comparison of predicted effects arising from the production compound at both Arco and Staples. The assessment was undertaken in accordance with the ‘Example Method 1 – ABC Method’ described in Annex E of the British Standard 5228 ‘Code of practice for noise and vibration control on construction and open sites – Part 1: Noise’ (2009+A1:2014).
- 3.3.2 The predicted noise and vibration impacts during construction are discussed at ES Chapter 7 Noise and vibration. Section 7.8. Section 7.8.2 states that: “*Operation of the construction compounds associated with the Scheme would be ongoing during relevant phases of the construction programme and noise sources associated with the compounds has the potential to impact nearby noise sensitive receptors.*” This includes the operations at the Arco site or the Staples site as one of seven compound sites for the Scheme.
- 3.3.3 Section 7.8.3 states that “*Noise mitigation measures shall be employed to minimise associated noise impact from compound activities and plant items with respect to any nearby properties. Site hoarding around the compounds and compound structures (i.e. office and site cabins, etc.) will provide acoustic screening subject to the specific location of noise sources and nearby receptors.*”

Appropriate compound layout arrangements of plant and machinery will be considered to minimise noise impact from all relevant noise sources.”

- 3.3.4 Section 7.8.4 states that *“The programme of work, methods of working and selection of construction equipment is still being determined. These factors influence the characteristics of the noise and vibration impacts. As construction planning is inevitably in an early stage it is necessary to make some assumptions in order to evaluate the potential impacts. The assumptions on construction activities, plant noise emissions and the utilisation of construction plant upon which the assessment is based, are stated in (TR010016/APP/6.3 ES) Volume 3, Appendix 7.3 Construction source noise levels. The predicted levels have been compared with threshold levels in order to establish potential significant adverse effects.”*
- 3.3.5 The assessment of potential impacts of the option of having a production compound at the Arco site or the Staples site was based on the same predicted noise levels attributable to an assumed group of plant items that would be used inside the compound. The assessment considered the predicted noise levels at the closest receptor to each compound: The Lodge, Bathurst Street was the shortest distance of 65m from the Arco site; and for the Staples site, the closest dwelling was on Ferry Road at 40m.
- 3.3.6 The noise impacts were assessed against the daytime and night-time threshold values for the receptor although the predicted level of noise from the compound was assumed to be the same for day and night-time. The threshold values correspond with baseline noise levels applicable to the receptor, and this is how the assessment accounts for noise impact relative to the baseline noise climate. Daytime baseline noise levels in the area of The Lodge, Bathurst Street were lower than that applicable to the receptor at Ferry Road. Consequently, the daytime threshold value of 70 dB(A) was applied to the nearest receptor to the Arco site, which is lower than that applied to the nearest receptor to the Staples site (75 dB(A)). However, the night-time threshold of 55 dB(A) was applied to the nearest receptors to both sites.
- 3.3.7 The assessment found that predicted noise levels due to activities within the compound fell below the daytime threshold value at the closest receptor to either site. The predicted noise levels fell below the threshold value by 2 dB in both cases. It was concluded that the noise impact of both options at the closest receptor to each was not predicted to be significant adverse and would be the same.
- 3.3.8 The assessment found that predicted noise levels from activities within the compound exceeded the night-time threshold value at the closest receptor to either site. The predicted noise levels exceeded the night-time threshold value by 13 dB in the case of the Arco site and by 18 dB in the case of the Staples site. It was concluded that the predictions indicated that the noise impacts of both options have the potential to be significant adverse during the night-time.

- 3.3.9 It should be noted that this was based on an assumed list of plant operating within the compound and represented a worst case without accounting for screening provided by a site hoarding or any reduction in activity within the compound at night-time compared to that undertaken during the daytime.
- 3.3.10 The removal of the Staples option would not modify the conclusion of the assessment of potential noise impacts arising from the production compound. The assessment in the ES found that for both sites, the worst-case noise impacts are not predicted to be significant adverse during the daytime but with the potential to be significant adverse during the night-time.

3.4 Cultural heritage

- 3.4.1 ES Chapter 8 Cultural heritage undertakes a direct comparison of temporary effects on heritage assets arising from locating the production compound at either the Arco and Staples sites.
- 3.4.2 Table 8.1 Zones of cultural heritage assessment divides the cultural heritage study area into 10 zones in order to enable understanding of the individual areas of the Scheme in terms of the historic environment. The Staples sites in located in “*Zone 3 West of Humber Docks, A63 Castle Street*”. The Arco site is located in “*Zone 4 West of Mytongate Junction, A63 Castle Street*”.
- 3.4.3 There are no significant effects arising from the Staples site to archaeological remains in Zone 3. There would be temporary impacts to the setting of the Castle Buildings arising from the use of the Staples compound as outlined in Volume 3, Appendix 8.3, MMS603 (APP-048). However, Castle Buildings is subject to other impacts to its setting including the construction of the Mytongate Junction which would result in a temporary large significant adverse effect.
- 3.4.4 There are no significant effects arising from the use of the Arco site as a production compound to archaeological remains in Zone 4. There would be no significant effects arising from the use of the Arco site to historic buildings in Zone 4.
- 3.4.5 As regards the utilisation of the Arco site in preference to the Staples site, there would be no change to the impacts to archaeological remains in Zone 3 and 4. There would be a reduction in temporary impacts to the setting of the Castle Buildings. However, given continued construction work and associated impacts from the proposed Scheme there would be no change to the assessment of effects.

3.5 Landscape

- 3.5.1 ES Chapter 9 Landscape Section 9.5.9 describes how the approach to the assessment of compounds focuses on generally assessing the Arco site as the preferred Option A. Section 9.10 then sets out any identified significant effects arising from the use of the Staples site compound as alternative Option B.

Arco site

Summary of effects on landscape features arising from the Arco site

- 3.5.2 The establishment of the Arco site production compound would not result in the direct loss of trees, with the exception of the removal of one category B tree to enable the construction of the link road between Lister Street and Spruce Road. Effects on landscape features are therefore not considered to be significant.

Summary of effects on landscape character arising from the Arco site

- 3.5.3 The effects on the landscape character of the Arco site are provided in full in ES Volume 3 Appendix 9.4 (APP-049). The site is located within a commercial and light industrial land use area (Project Landscape Character Area (PLCA) 2: South West Commercial) with residential properties present in close proximity to the north of the site (PLCA 1: North West Residential). Due to the low sensitivity of PLCA 2, the demolition of the Arco buildings and establishment of a production compound is not considered to result in significant effects upon this landscape character area. The production compound would have an adverse indirect impact upon the landscape character of the adjacent PLCA 1: North West Residential. However, PLCA 1 would experience significant moderate adverse effects regardless of the use of the Arco site as a production compound. This is due to its higher sensitivity combined with changes resulting from the proposed demolition work of the Myton Centre and installation of a temporary car park, highway realignment, extensive tree removal activity and the construction of Porter Street bridge.
- 3.5.4 The Arco buildings are not considered to be of high value and their removal from the townscape is not considered to be of landscape significance during the Operation Phase of the Scheme. Hoarding surrounding the site during the Operation Phase would be partially screened by vegetation and is not considered to be of landscape significance.

Summary of effects on representative viewpoints arising from the Arco site

- 3.5.5 The effects on representative viewpoints of the Arco site are provided in full in ES Volume 3 Appendix 9.5 (APP-049). The Arco site demolition and production compound would be prominent in representative viewpoints 1, 2 and 3, and visible in representative viewpoint 4. All of the above viewpoints are considered to experience significant large adverse visual effects during the Construction Phase. This is due not only to the demolition of the Arco building and establishment of the production compound, but also due to the extensive amount of construction work taking place within the views including: the demolition of the Myton Centre and presence of the temporary car park; the construction of the Mytongate Junction cutting, extensive tree removal activity; utilities diversions; the realignment of the highway; and the construction of the Porter Street Bridge. The demolition of the Arco buildings and establishment of the production compound would add to the already significant large adverse Construction Phase effects.

- 3.5.6 The Arco buildings are not considered to be of high value and their removal from the townscape is not considered to be of visual significance during the Operation Phase of the Scheme. Hoarding surrounding the site during the Operation Phase would be partially screened by vegetation and is not considered to be of visual significance.

Summary of effects on visual receptors arising from the Arco site

- 3.5.7 The effects on visual receptors arising from the Arco site are provided in full in ES Volume 3 Appendix 9.6 (APP-049). The production compound would be seen within the view of the immediately surrounding individual visual receptors. The following visual receptors would experience views of the demolition and production compound: residential properties located on Porter Street (RR8, RR9, RR10) Cogan Street (RR16) and William Street (RR12, RR14); users of Jubilee Arboretum (OSR1) and William Oak Park (OSR2) business properties located on William Street (BR19), St James' Street (BR17) and Lister Street (BR16); and road users of William Street (FRR4), Cogan Street (FRR5), Hessle Road (FRR1), the north of St James' Street (FRR26), Spruce Road (FRR25), the south of Porter Street (FRR3) and Lister Street (FRR32).
- 3.5.8 As with the representative viewpoints, most of the above visual receptors would experience large or moderate significant adverse visual effects due not only to the demolition of the Arco buildings and the utilisation of the site as a production compound, but also from the extensive amount of construction work taking place within views as described above. The exceptions to the above are users of Lister Street (FRR31), businesses located on Lister Street (BR16), and the Vauxhall Tavern and Hull Daily Mail (BR17) located on north of St James Street where the Arco site is the most prominent feature in the view and where significant adverse visual effects are anticipated as a direct result of the production compound.
- 3.5.9 As noted above, the removal of the Arco buildings and introduction of hoarding surrounding the site is not considered to be of visual significance during operation.

Staples site

Summary of effects on landscape features arising from the Staples site

- 3.5.10 If the Staples site had been taken forward, there would be very little difference to the impact on landscape features. The Staples site production compound would require the removal of one category U tree within the tree line located to the south of American Golf and Maplin. Therefore, effects on landscape features are not considered to be significant.

Summary of effects on landscape character arising from the Staples site

- 3.5.11 The Staples site is located within a commercial land use area (PLCA 3: Myton Street Commercial) with residential properties present in close proximity to the east of the site (PLCA 1: North West Residential). If the Staples site had been

taken forward, it would have resulted in an increase in the significance of Construction Phase effects of the production compound to significant moderate adverse upon landscape character for PLCA 3: Myton Street Commercial. This is due to the required demolition of the Staples, American Golf and Maplin buildings to make way for an extensive production compound and the introduction of the large scale construction plant that would occupy a most of the PLCA. This would have introduced an industrial element out of character within this commercial area close to the city centre. The removal of the Staples site from the DCO will subsequently reduce effects on landscape character for PLCA 3 as assessed in Chapter 9 Landscape Section 9.10, however the change is not significant.

- 3.5.12 The Staples site production compound would have resulted in a not significant indirect adverse impact upon the landscape character of the adjacent PLCA 1: North West Residential during the Construction Phase. However, this would not increase the landscape effects on PLCA 1 which would remain as significant moderate adverse due to the demolition of the Myton Centre, and construction and tree removal activity taking place elsewhere within this PLCA. Therefore, there is no change in effect from the removal of the Staples site from the DCO.
- 3.5.13 There would have been no change in the assessment of Operation Phase effects (at the year of opening and 15 years hence) upon the landscape character of PLCA 3: Myton Street Commercial from the removal of the Staples site from the DCO. This is due to the Staples, American Golf and Maplin buildings not being considered to be of high value or making an important contribution to landscape character due to their low quality, standard, commercial design.
- 3.5.14 There would have been no change to the assessment of Construction and Operation Phase landscape effects on PLCA 2: South West Commercial from the withdrawal of the Staples site due to the extensive construction works associated with the Scheme and tree removal not being due to the production compounds.

Summary of effects on representative viewpoints arising from the Staples site

- 3.5.15 If the Staples site production compound had been taken forward it would have formed a prominent feature within representative viewpoints 5, 6 and 7. The demolition of Staples, Maplin and American Golf and establishment of a production compound in this location would have added to the already significant large adverse Construction Phase effects. This is due to extensive construction work carried out along the highway including: utilities diversions; the construction of the split level junction; significant removal of trees within Trinity Burial Ground; the construction of Princes Quay Bridge (seen in viewpoint 7); the dismantling of the Earl de Grey public house (seen in viewpoint 7); and the laying out of the new landscape scheme. The removal of the Staples site from the DCO therefore does not constitute any significant reduction in large adverse effects
- 3.5.16 With the removal of the Staples site from the DCO, there is no significant change in the assessment of visual effects experienced at the above representative viewpoints at the year of opening and 15 years hence. This is due to the

assessment of visual effects at Operation Phase being largely determined by the presence of Princes Quay Bridge and the loss of mature tree canopy cover.

Summary of effects on visual receptors arising from the Staples site

- 3.5.17 The Staples site production compound would have formed a noticeable to prominent feature within the views of the immediately surrounding individual visual receptors. The following visual receptors would have experienced views of the production compound: residential properties located on Ferensway (RR18, RR19, RR21), William Street (RR16) and Commercial Road (RR36); users of Great Passage Street Pocket Park (OSR3); business properties located on Myton Street (BR20) and the Hessle Road (BR14); and road users of west of Castle Street (FRR2), east of Hessle Road (FRR1), south of Ferensway (FRR7), south of Myton Street (FRR8), south of Waterhouse Lane (FRR9), east of Amy Johnson Court (FRR6) and south of Commercial Road (FRR24). Users of the adjacent Bonus Arena Hull, which did not form part of the original assessment of the Scheme as it was not complete at the time of writing, would have also experienced prominent views of the demolition of the buildings and production compound. As the Staples site has now been withdrawn from the DCO, the visual receptors listed above will experience a reduction in Construction Phase adverse visual effects to those assessed in Chapter 9 Landscape Section 9.10. However, the overall change is not significant due to construction works ongoing elsewhere on the Scheme.

Changes in the significance of effects

- 3.5.18 The above paragraphs summarise effects to landscape and visual effects arising from the decision to progress the Arco site and remove the Staples site from the DCO. The adoption of the Staples site would have resulted in the assessment of greater adverse Construction Phase landscape and visual effects arising from the Scheme, therefore the progression of the Arco site lessens the adverse effects during construction, but not to a significant degree. Therefore, there are no changes to the assessment of the significance of landscape and visual effects as arising from the Scheme as provided in Chapter 9 Landscape due to the Staples site alternative Option B being removed from the DCO application and the Arco site being taken forward.

3.6 Ecology and nature conservation

- 3.6.1 Chapter 10 considers the temporary effects arising from the two locations for the production compound at either the Arco or Staples sites. Sections 10.6.21 to 10.6.22 describe the existing ecology of the sites.
- 3.6.2 The Arco site is currently used as industrial buildings and car parking. Amenity trees and grassland occur along the A63 verge and a small area to the east of the site. The buildings are assessed as not having bat roost potential. The site has been assessed as of negligible biodiversity value and of value within the survey area only.

- 3.6.3 The Staples site consists of a retail park containing three buildings in the north and west and a car park in the south. Scattered trees are present along the southern and eastern boundary of the car park including beech *Fagus sylvatica*, sycamore *Acer pseudoplatanus* and rowan *Sorbus aucuparia*. Areas of introduced shrub are present in the south west of the site, adjacent to the Maplins building, and in areas in the car park consisting of the non-native invasive cotoneaster sp., dog-rose *Rosa canina*, *Senecio* species, *Mahonia* species and ornamental cultivar species. A species-poor hedgerow and trees comprising introduced cultivars with planted beech and sycamore is present along the southern boundary adjacent to the A63. The scattered trees and hedgerow on site have the potential to support breeding birds and provide foraging habitat for bats, but the urban location, lack of connectivity and non-native species composition of the hedgerow indicates a low value for biodiversity. The trees and buildings are assessed as not having bat roost potential. This site has been assessed as of negligible biodiversity of value within the survey area only.
- 3.6.4 In terms of terrestrial invertebrates, both the Arco site and Staples site are assessed as of negligible value (Section 10.6.32). It is considered unlikely that any reptile species would be present within the Arco site and the Staples site “*due to the unsuitable habitats present within them and highly urban locations*” (Section 10.6.35). Both sites offer a “*Variety of nesting opportunities and foraging habitat for common UKBAP (UK Biodiversity Action Plan) and LBAP (Local (Hull) Biodiversity Action Plan) birds*” (10.6.36). In April 2018, both sites were assessed for bat roost potential, but none was found (Section 10.6.45). The invasive shrub cotoneaster was identified within the Staples site (Section 10.7.43).
- 3.6.5 Section 10.8.4 concludes “*There would be no significant effects if preferred Option main compound at Arco is chosen or the alternative site compound at Staples is selected. Both site compounds were assessed at negligible biodiversity value*”. On this basis it is concluded that there would be no significant effects from the production compound proposals at the Staples site being removed from the DCO.

3.7 Road drainage and the water environment

- 3.7.1 The road drainage and water environment assessment at Chapter 11 considers the temporary effects arising from the two locations for the production compound at either the Arco or Staples sites.
- 3.7.2 As explained at Section 11.6.8 “*Given the similar hydrogeological and hydrological conditions at the Arco and Staples sites, which are being considered as the potential compound for the jet grouting, bentonite plant and concrete batch plant, the construction design mitigation requirements would be similar for both locations*”.
- 3.7.3 Section 11.6.25 states “*As the Arco site is further away from Mytongate Junction, booster pumps would be required on bentonite slurry supply pipelines, which may increase the risk of blockages or equipment breakdown. However, mitigation to*

avoid materials entering the ground during maintenance and rehabilitation works would reduce this risk at both sites”.

- 3.7.4 Section 11.7.21 explains “*Dependent on the location of the working compound at either the Arco or Staples site, there will be a requirement to demolish a number of existing buildings. This has the potential to alter flood flow routes across and adjacent to the chosen compound site. The removal of buildings from the floodplain would act to increase, albeit by a small amount, the amount of available floodplain storage volume but is considered to have a negligible magnitude impact on the conveyance of flow”.*
- 3.7.5 Section 11.7.13 explains “*Increases in impermeable areas associated with temporary construction compounds may result in an increase in surface water runoff entering surface water receptors, either via direct runoff or indirectly via the sewer system. This has the potential to affect the water quality, biodiversity, economic value and recreational use of all surface water receptors”.* The areas of the Arco site and Staples sites are broadly similar. It is expected that any changes to impermeable area would be similar at either the Arco site or Staples site and with mitigation, any such effects would be negligible.
- 3.7.6 Section 11.7.22 explains “*An increase in impermeable, hardstanding area within the temporary construction site compounds and from the removal of permeable areas, for example, part of the Trinity Burial Ground, as part of the Scheme during the Construction Phase is likely to increase surface water runoff rates and could lead to localised flooding. To avoid an increase in flood risk, mitigation measures set out in the OEMP would include the use of closed drainage systems incorporating SuDs. As such, the impact on the conveyance of flow is of negligible magnitude”.* As explained above, any changes to impermeable areas would be similar at either the Arco site or Staples site.
- 3.7.7 It is therefore concluded that there would be no significant effects to road drainage and the water environment with the progression of the production site compound at Arco and the removal of the Staples site from the DCO.

3.8 Geology and soils

- 3.8.1 There would be no significant changes to the assessment of effects described in Chapter 12 Geology and soils arising from the use of the Arco site as the location for the production compound instead of the Staples site.

3.9 Materials

- 3.9.1 There would be no significant changes to the assessment of effects described in Chapter 13 Materials arising from the use of the Arco site as the location for the production compound instead of the Staples site.

3.10 People and communities

- 3.10.1 The People and communities assessment at Chapter 14 considers the effects arising from the two potential locations for the production (bentonite) compound at either the Arco site or Staples site. Table 14.8 Private property and associated land take – predicted effects, summarises the significance of effects of the construction compounds at each location (including the production compound).
- 3.10.2 The effects on private property arising from the temporary land required to locate the production compound at the Arco site for the 5 year construction period is assessed as being “*slight adverse, not significant*”, with the demolition of the Arco buildings considered to be a permanent “*moderate adverse, significant effect*”.
- 3.10.3 The effects on private property arising from the temporary land required to locate the production compound at the Staples site during the construction period is assessed as being “*slight adverse, not significant*”, with the demolition of the buildings on the Staples site considered to be a permanent effect which is “*moderate adverse and significant*”.
- 3.10.4 There would be temporary and permanent land required at Kingston Retail Park by locating the production compound at either the Arco site or the Staples site. The effect involves the loss of parking spaces, thereby potentially affecting the ability of retail outlets at the Kingston Retail Park to trade. “*A slight adverse effect, which is not considered to be significant*” to private property is assessed for all scenarios.
- 3.10.5 Table 14.12 Local economy – predicted effects, summarises the significance of effects from the construction compounds to local businesses. It is stated that by use of the Arco site as the bentonite compound, “. . . *there will be disruption to businesses in the LIA due to construction works and limited access along Castle Street to Spruce Road. This may affect the ability of businesses to operate as normal. Up to five years of service disruptions may result in disrupted customer access, potentially affecting trade and reducing custom to these businesses*”. “. . . *a link road would be constructed between Spruce Road and Lister Street as a replacement and permanent access for local businesses. Access between the A63 and Spruce Road would be maintained for construction purposes and permanently closed at the end of the works. Footpaths are proposed on either side of the new link road with an NMU diversion proposed along Lister Street to ensure the safety of the public.*”
- 3.10.6 Based on the above, the effect on other commercial access to other businesses of locating the compound located at the Arco site is considered to be “*slight adverse, based on the effect being temporary, confined to the local study area and affecting a relatively small number of receptors. This is not considered to be significant*”.
- 3.10.7 Table 14.15 summarises temporary effects on the local economy in general to be “*not significant*” and identifies *slight adverse, not significant* effects associated with the use of both the Arco site or the Staples site.

- 3.10.8 Table 14.16 summarises permanent effects on the local economy and concludes that the demolitions of buildings on both the Arco and Staples sites would be *moderate adverse, significant* effects, with required permanent land take being slight adverse, not significant on both sites. It also identifies “*Alterations to access to businesses reached via Spruce Road*” i.e. as a result of basing the production site at Arco, to be “*Slight adverse, not significant*”.
- 3.10.9 It is therefore concluded that there would be no additional significant effects arising from locating the compound at Arco and removing the Staples site from the DCO.

3.11 Effects on all travellers

- 3.11.1 There would be no significant changes to the assessment of effects described in Chapter 15 Effects on all travellers arising from the use of the Arco site as the location for the production compound instead of the Staples site.

3.12 Combined and cumulative effects

The changes described in the sections above, do not change the significance of effects as assessed in Chapter 16 Combined and cumulative effects.

Chapter 4. Conclusion

- 4.1.1 From the findings detailed in Chapter 3 Consideration of any significant changes to effects, it is concluded that there are no significant implications to the findings of the ES from the removal of the proposals for a production compound at the Staples site from the DCO and the progression of the Arco site as a production compound for the Construction Phase of the Scheme.