highways england

M621 Motorway Junctions 1 to 7 Improvements

Highways England Statement of Case

In respect of Orders under Provision of the Highways Act 1980

February 2020

STATEMENT OF CASE

for

THE HIGHWAYS ENGLAND (M621 MOTORWAY JUNCTIONS 1 TO 7 IMPROVEMENTS) COMPULSORY PURCHASE ORDER 2019

and

THE HIGHWAYS ENGLAND (M621 MOTORWAY JUNCTIONS 1 TO 7 IMPROVEMENTS) (SIDE ROADS) ORDER 2019

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Documents referred to in this Statement

The documents to which Highways England intends to refer, within this Statement or other documents or to use in supporting evidence during the Inquiries are listed in Appendix A and are referred to in this Statement of Case as Deposit Documents using the format of '**(DD-A1)**', '**(DD-A2)**' etc.

Glossary of Terms and Abbreviations

Abbreviation	Definition
AADT	Annual Average Daily Traffic
AM	Ante meridiem
AQMA	Air Quality Management Areas
AQS	Air Quality Standard
AST	Appraisal Summary Table
AVLAAP	Aire Valley Leeds Area Action Plan
BCR	Benefit to Cost Ratio
CCTV	Closed Circuit Television
CPO	Compulsory Purchase Order
dB	Decibels
DD-	Deposit Document
DfT	Department for Transport
DMRB	Design Manual for Roads and Bridges
EAR	Environmental Assessment Report
EAST	Early Assessment and Sifting Tool
ECHR	European Convention on Human Rights
EIA	Environmental Impact Assessment
EU	European Union
GPDO	General Permitted Development Order
ha	Hectare
HA 1980	Highways Act 1980
km	Kilometres
LCC	Leeds City Council
LNA	Local Nature Areas
LNR	Local Nature Reserves
LUFC	Leeds United Football Club
LWS	Local Wildlife Site
NIA	Noise Important Areas

Abbreviation	Definition
NN NPS	National Networks National Policy Statement
NO2	Nitrogen Dioxide
NPG	Northern Powergrid (Yorkshire) plc
NPPF	National Planning Policy Framework
NPV	Net Present Value
NRSWA	New Roads and Street Works Act (1991)
PDR	Permitted Development Rights
PIC	Personal Injury Collisions
PLC	Public Limited Company
PM	Post meridiem
PVB	Present Value of Benefits
PVC	Present Value of Costs
RB	Reliability Benefits
RIS	Road Investment Strategy
SRO	Side Roads Order
TAG	Transport Appraisal Guidance
TCP 1990	Town and Country Planning Act 1990
TUBA	Transport User Benefit Analysis
UDP	Unitary Development Plan
WCH	Walking, Cycling and Horse Riding
WEI	Wider Economic Impacts
WYCA	West Yorkshire Combined Authority

1 Introduction

1.1 Overview

1.1.1 This Statement of Case (this “Statement”) has been prepared in relation to the M621 Motorway Junctions 1 to 7 Improvements (the "Scheme"). It relates to the following Orders that were made by Highways England Company Limited (“Highways England”) and submitted to the Secretary of State for Transport (“the Secretary of State”) for confirmation on 31 October 2019 (the “Orders”):

- The Highways England (M621 Motorway Junctions 1 to 7 Improvements) (Side Roads) Order 2019 (the “SRO”); **(DD-A1)** and
- The Highways England (M621 Motorway Junctions 1 to 7 Improvements) Compulsory Purchase Order 2019 (the “CPO”) **(DD-A3)**.

1.1.2 A representation and objection period, lasting six weeks, in which interested parties were able to make representations in respect of the Scheme and Orders, ended on 13 December 2019. Two objections were received to the Orders of which one was withdrawn before the end of the objection period. Further details can be found at Chapter 9 of this Statement.

1.1.3 The decision on whether the Scheme will be subject to a Public Inquiry is made by the Secretary of State. A notice was issued, to Highways England and to the remaining outstanding objector, by the Department for Transport (DfT) on 10 January 2020 confirming that the Secretary of State intends to hold a Public Inquiry. The date for the Inquiry is not yet confirmed.

1.1.4 This Statement is provided pursuant to Rule 7 of the Compulsory Purchase (Inquiries Procedure) Rules 2007 **(DD-C.1)** and Rule 6 of the Highways (Inquiries Procedure) Rules 1994 **(DD-C2)**. It sets out the case that Highways England will present at the Public Inquiry in support of the Orders, although Highways England reserves the right to supplement the issues to be addressed and produce further documents and evidence in response to submissions made by other parties to the Inquiry.

Documents published with the Orders

1.1.5 Additional documents, to aid in the understanding of the Orders, were published for information at the same time as the Orders in October 2019. These documents consisted of:

- A public notice explaining the SRO and a public notice explaining the CPO; **(DD-A2 & DD-A4)**
- A Statement of Reasons which provided sufficient information to support the argument that a compelling case in the public interest exists for the acquisition of land identified in the CPO; **(DD-A5)**
- A Planning Statement which is required to demonstrate that the ‘requirements of local and national planning’ have been considered in support of the case for the Scheme; **(DD-A6)**
- A non-statutory Environmental Assessment Report (the “EAR”) **(DD-B1 & DD-B2)** has been completed to ensure that the final design and any mitigation measures address any concerns regarding environmental impact as a result of the Scheme. Refer to Chapter 3 of this Statement for further information.

1.2 Highway Authorities’ Responsibilities

1.2.1 Highways England is the government-owned company charged with operating, maintaining and improving the strategic road network (motorways and trunk roads) in England on behalf of the Secretary of State. Highways England is the Strategic Highway Authority for the M621 Motorway.

1.2.2 Leeds City Council (LCC) is the Local Highway Authority for all other public roads connecting to the Motorway junctions (including Cemetery Road, Elland Road, the Junction 2 roundabout, the A643 and the A61).

1.3 Scheme Area

1.3.1 The M621 Motorway runs through Leeds from Junction 27 of the M62, in the west, to Junction 43 of the M1, in the east, and serves Leeds City Centre and the surrounding area. The total length of the M621, is approximately 13.5 kilometres (km). Junctions 1 to 7 of the M621 is located within a seven km length of the overall 13.5 km route. The Scheme is predominantly focused on the sections between Junctions 1 and 4; located to the south and south-east of Leeds City Centre respectively.

1.3.2 Figure 1-1 and Figure 1-2 provides an overview of the full extent of the M621 between Junctions 1 and 7 and its location in the wider context of the Leeds area. Location plans for the key elements of the Scheme (Junctions 2, 2a and 7) are included at Appendix C of this Statement.

Figure 1-1 Leeds City Council Local Authority Area Boundary

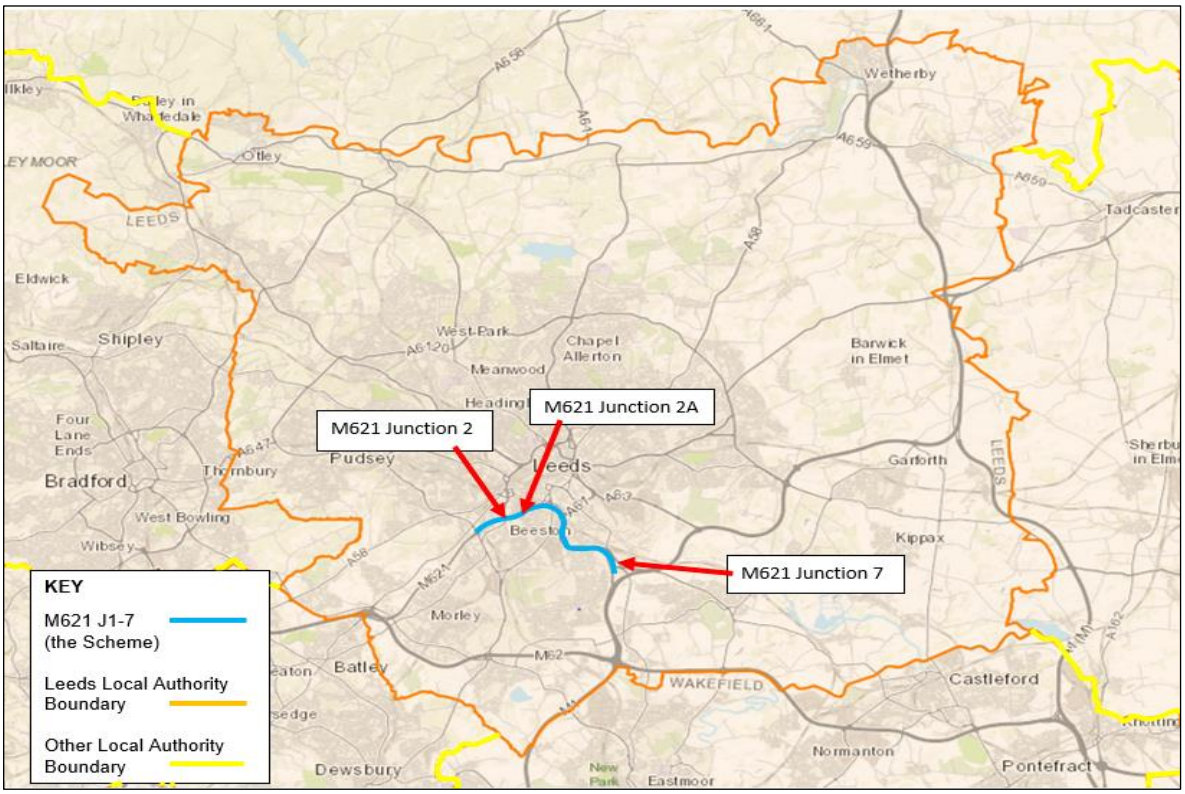
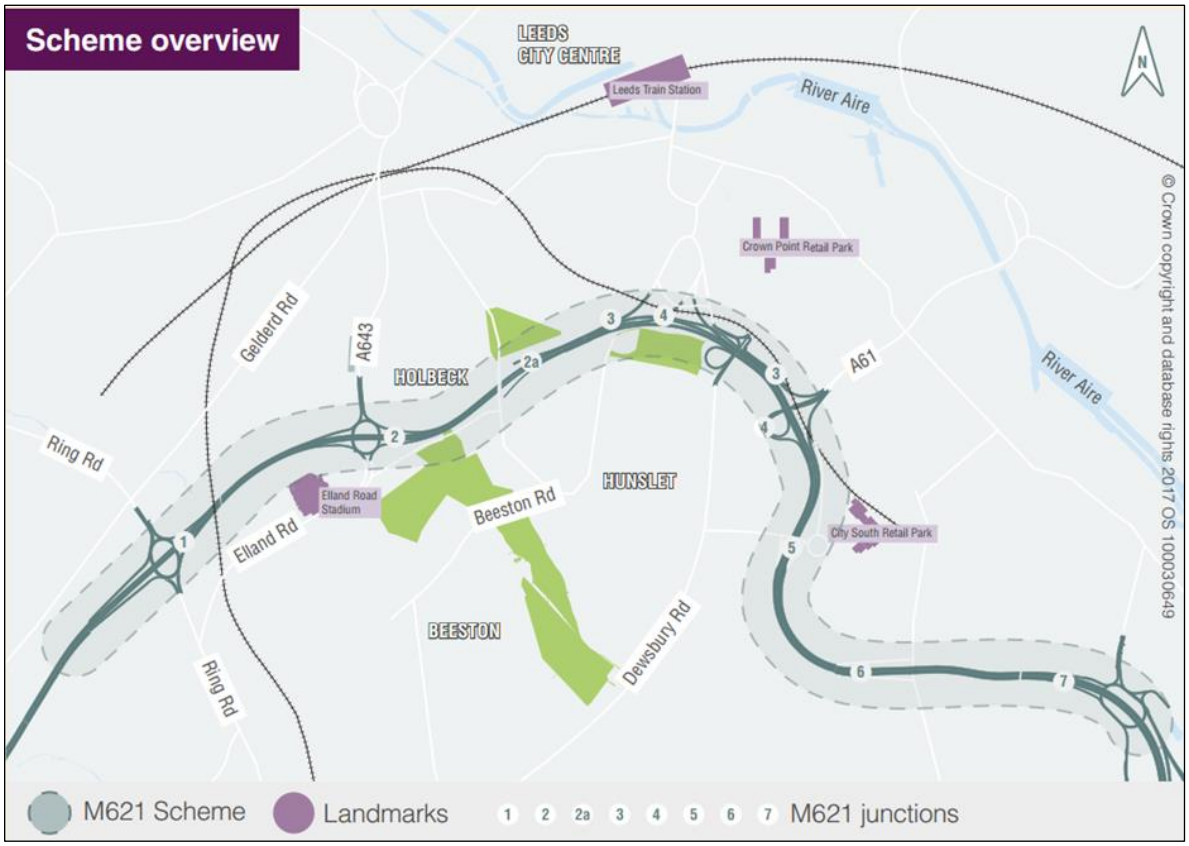


Figure 1-2 M621 Scheme Extent



1.3.3 The M62, approaching Leeds from the west, serves major cities located south west of Leeds including Manchester and Liverpool. Junctions 3 and 4 of the M621 provide direct access to Leeds City Centre. The M621 terminates at Junction 7 where it interchanges with the M1, connecting Leeds to the south and north of England.

1.3.4 From the M62 Junction 27, the M621 is fringed to its northwest by predominantly agricultural land with areas of broadleaved woodland bordering the route corridor; isolated farm buildings and commercial premises are located throughout the farmland. This characteristic range of land uses continues for approximately two kilometres before encountering an out of town industrial estate at Beeston Royds.

1.3.5 Residential areas of mixed building style, size and period are located at New Brighton, Churwell and Cottingley, to the south-east of the route corridor. These areas are generally screened from the motorway by landform and vegetation, however views across open space and farmland are possible from the westbound carriageway south of Cottingley.

1.3.6 From Cottingley, land uses immediately to the east of Junction 1 of the M621 comprise mixed residential and commercial development; and the Leeds United Football Club (LUFC) sport stadium at Elland Road. The built-up areas between Junctions 2 and 7 incorporate mixed residential / commercial areas and urban open spaces, including cemeteries, playing fields and parks.

1.3.7 Junctions 3 and 4 provide direct access to Leeds City Centre and incorporate mixed tree and scrub planting within the highway boundary.

1.3.8 The Environmental Constraints Plan (see Chapter 17 of the EAR, **(DD-B1)** sets out the important environmental features within the vicinity of the Scheme and also overlays the Scheme area.

1.4 Scheme Description

1.4.1 The route identified and published as the preferred scheme was originally identified through the Options Selection Stage as Option A. This was developed as an option that was affordable and represented best value for money, whilst meeting the Scheme objectives (refer to Section 2.4 of this Statement). Details of the assessment of development options are provided in Section 2.5 of this Statement and in Chapter 3: Assessment of Alternatives of the EAR **(DD-B1)**.

1.4.2 The Scheme comprises the following aspects (as identified on Figure 1-3)

M621 Junction 2

- Widening the circulatory roundabout from 2 to 3 lanes on the north and widening from 2 to 4 lanes to the south;
- A new free-flow link will be provided between the M621 eastbound off-slip and A643 northbound with associated widening of the verge at this location to enhance highway visibility and sight lines;
- The A643 southbound approach to the Junction 2 roundabout will be widened from 2 to 3 lanes and the M621 eastbound on-slip will be widened from 1 to 2 lanes;
- Widening of the Junction 2 westbound off-slip from 2 to 3 lanes, and widening of the Junction 2 westbound on-slip from 1 to 2 lanes for the first circa one third of the length of the slip road starting from the point where the slip road joins the circulatory carriageway at Junction 2;
- Revised signage;
- The re-alignment of the Brown Lane footpath on the north eastern side of the Junction to make way for the free-flow lane from M621 eastbound to the A643 northbound; and
- Improvements and alterations to the A643 north and south of the M621 to tie-into the roundabout alterations.

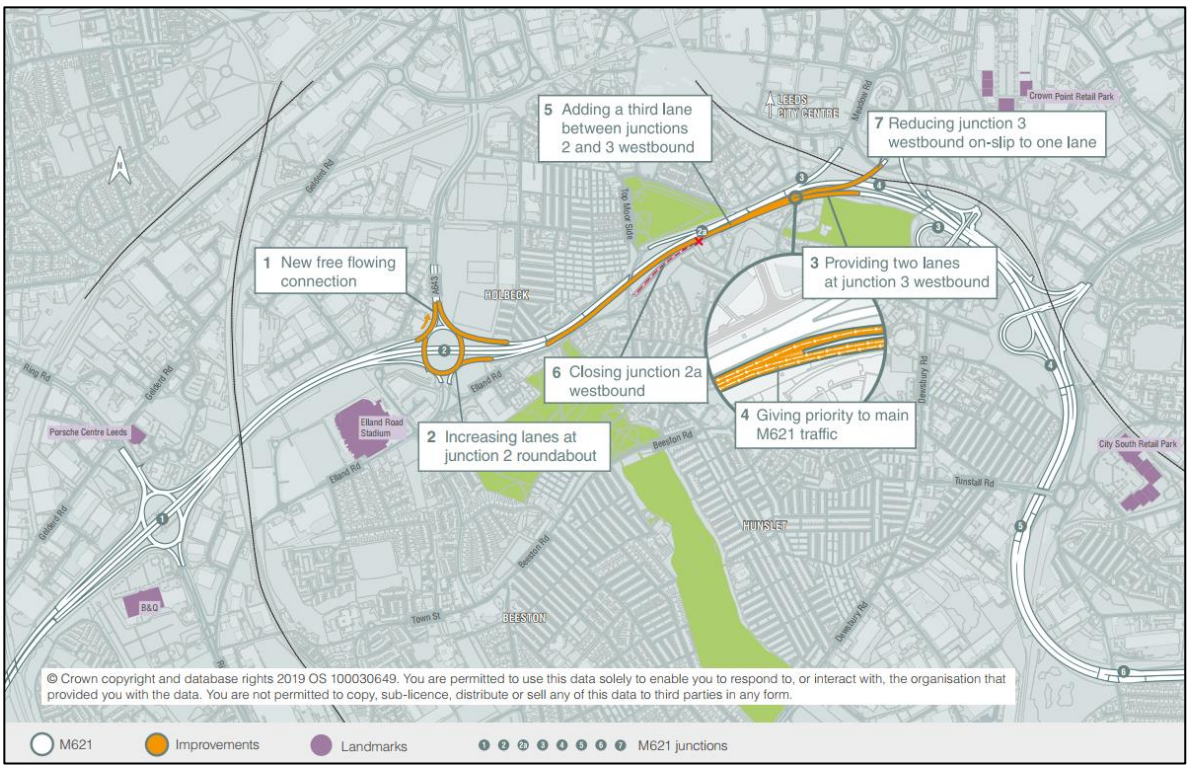
M621 Junctions 3 and 2a

- Junction 3 westbound on-slip and merge layout will be changed to provide two lanes through the Junction on the M621 westbound carriageway with a reduction to a single offside lane gain from the westbound on-slip road (which is currently 2 lanes). The Junction 3 improvements require the full closure of the Junction 2a westbound off-slip connecting to Cemetery Road.

M621 Main Carriageway

- A third lane will be added between Junctions 2 and 3 westbound by converting the existing hard shoulder to provide an additional running lane.

Figure 1-3 M621 Main Highway Modifications



Technology

1.4.3 Technology will be introduced along the M621 to manage and monitor vehicle speeds along this section of the motorway, including the introduction of advisory variable speed limits during busy periods and real time information on delays caused by congestion. The technological improvements will be used to control traffic conditions, communicate driver hazards and support Highways England and the West Yorkshire Police to improve the management and response to incidents. These improvements will help to improve road safety and reduce driver stress. Further details of the technology improvements are provided in the EAR Chapter 2: The Project **(DD-B1)**.

Junction 2a post-closure

1.4.4 The Junction 2a westbound off-slip road will be physically closed off from the M621 with new works constructed adjacent to the M621 main line including a safety barrier to match those existing along the M621 and new motorway communication equipment locations. The remaining slip road carriageway will be reduced to a single-width maintenance track, as a private access for Highways England, for the purposes of maintaining lighting, motorway communications and drainage infrastructure. The retained area will be fenced and gated on the western side at Cemetery Road from the local highway network to prevent unauthorised access.

1.4.5 Additional landscaping will be completed in this area. Further details of the landscaping scheme and general arrangement drawings are located within EAR Chapter 6: Landscape and Visual **(DD-B1)**. Alterations to the existing T-Junction between Junction 2a westbound off-slip and Cemetery Road are also required to create a new smaller private means of access to enable future maintenance of the M621 by Highways England.

Cemetery Road / Elland Road T-Junction

1.4.6 A traffic assessment known as a microsimulation traffic model has been prepared to assess the changes on the local road network. The model indicates, as a result of the closure of Junction 2a, that there is likely to be congestion at the existing T-Junction of Cemetery Road / Elland Road, which lies approximately 30 metres to the south of the point at which Junction 2a meets Cemetery Road.

1.4.7 To mitigate the predicted congestion and delays, it is proposed the existing T-Junction at Cemetery Road / Elland Road is signal controlled including the provision of a controlled pedestrian crossing. Without mitigation in place to signal control the T-Junction, delays are predicted to average 114 seconds per vehicle on Elland Road in the morning peak. With the proposed signalisation in place, delays are predicted to reduce by 60% to an average of 44 seconds per vehicle in the morning peak. In the evening peak, delays are predicted to reduce from 63 seconds to 29 seconds. It should be noted that with signalisation in place, drivers on Cemetery Road will experience some delay due to the introduction of traffic lights, but traffic modelling shows that the delays will be within acceptable levels.

Construction Compound

1.4.8 To support the construction of the Scheme, a temporary construction compound is proposed to be located adjacent to Junction 7 within the plot of land bounded by the M621 southbound, A61 southbound and A639 eastbound.

1.4.9 The existing access to this plot of land from the A61 southbound at the northern corner of the plot of land is via a narrow track which is currently in an unsafe location and is to be stopped up permanently. A new access will be created onto the A61 southbound to serve the compound and provide a safe access to this plot of land for future uses. The establishment of the compound can be carried out under Highways England's permitted development rights (PDRs), however consent for the access to be closed and relocated is being sought via the SRO for the Scheme.

1.4.10 The enabling works to the land for the temporary construction compound will involve stripping of the topsoil, erection of the compound, as well as the creation of the above described new access from the A61 southbound to serve the site. The compound will accommodate a storage area, site office and car park. The land required for the temporary construction compound is shown in the Junction 7 location plan contained in Appendix C of this Statement.

Agreement with Leeds City Council

1.4.11 Highways England has an approval in principle to enter into an agreement pursuant to Section 4 of the Highways Act 1980 (the "HA 1980") **(DD-C3)** with LCC to enable works to be undertaken by Highways England on the local highway network (refer to Section 5.4 of this Statement for further details). These works are required to ensure the effectiveness of the Scheme proposed. The works, which will be covered by this agreement consist of:

- Improvements and alterations to the T-Junction between Cemetery Road and Elland Road;
- Improvements and alterations to the M621 Junction 2 roundabout; and
- Improvements and alterations to the A643 north and south of the M621 to tie into the above roundabout alterations.

Engineering Plans

1.4.12 A Preliminary Design layout of the Scheme illustrating the works referred to is provided on the Engineering and General Arrangement Plans **(DD-A7)**. The design includes all necessary third-party land requirements to complete the Scheme as described in Section 6.1.

2 Background

2.1 Existing Conditions

2.1.1 The M621 between Junctions 1 and 4 is a dual two-lane urban motorway with two 3.65 metre lanes and a 2.75 metre hard shoulder in both directions. To the east of this section, the M621 gains an additional lane in both directions becoming a dual three lane urban motorway cross-section. Three lanes are then maintained until it meets with the M1 at Junction 43. West of Junction 1, the M621 gains an additional lane in the westbound direction, which is maintained until it approaches the free-flow link with Junction 27 of the M62, where it reduces to two lanes. West of Junction 1 in the eastbound direction, two lanes are maintained from the M62 Junction 27 free-flow link through to the M621 Junction 1.

2.1.2 A vertical concrete barrier has been installed within the central reserve over the greater part of the M621 between Junctions 1 and 3. The remaining central barrier between Junctions 3 and 6 was upgraded to concrete barrier in 2019.

2.2 Existing Land Use and Character

2.2.1 The M621 is fringed by commercial and residential development along its length, interspersed with greenspaces providing amenity and opportunities for pastoral grazing and recreation.

2.2.2 At Junction 2 of the M621, commercial development lies on the north western (Maple Park) and southern sides of the Junction with residential estates beyond. The LUFC sports stadium, Elland Road, is approximately 230m to the south east of Junction 2. On the north eastern side of the Junction lies an area designated as an urban green corridor and a playing pitch (as shown on the Leeds Unitary Development Plan (UDP) Review Policies map 2018) **(DD-E8)**, which formed part of the now demolished Matthew Murray High School.

2.3 Background to the Scheme

2.3.1 In 2013 the Highways Agency (now Highways England), undertook the Leeds Infrastructure Study, which considered the highway network's ability to accommodate plans for the redevelopment of Leeds City Centre by LCC. The M621 was found to experience significant congestion, which the Scheme aims to alleviate, whilst improving journey time reliability and supporting such redevelopment.

2.3.2 Highways England's Delivery Plan **(DD-F2)** indicates that construction of the Scheme will start within the current Road Investment Strategy (RIS) period (2015 – 2020), improving connection to Leeds and road safety along the M621.

2.3.3 In 2014, Highways England prepared an initial preliminary design for the improvement of Junctions 1 to 4 and Junction 7 of the M621 and undertook a further feasibility study for technology options along the M621 corridor. This work was developed further in July 2015, when Highways England undertook an appraisal of the work undertaken to date, with a view to developing an integrated scheme. This scheme looked to combine the improvements of Junctions 1 to 4, Junction 7 and technology improvements into one scheme. Several options were identified to improve the M621 and were presented to the public for consultation in September 2017 as part of the design development. Following the consultation events and further design/assessment, it was decided that Option A would be selected for development and it was announced as the Preferred Route in March 2018. The current Scheme evolved from Option A, as described below.

2.4 Scheme Objectives

2.4.1 Demand for the Scheme was recognised in the Government's RIS for the 2015/16 – 2019/20 road period (2015) **(DD-F1)**. Highways England's Delivery Plan 2015-2020 (2015) **(DD-F2)**, which outlines what Highways England will do to deliver against the commitments in its Strategic Business Plan and the Government's RIS, identified the need to construct the Scheme within the current RIS period, improving connection to Leeds and road safety along the M621.

2.4.2 The Scheme, as identified in Figure 1-2 and Figure 1-3, is set out in the Delivery Plan as *'Improvement of key Junctions on the M621 in central Leeds, providing safer and more reliable journeys for those travelling in the city.'* The key objectives of the Scheme are as follows:

- Increase capacity and improve journey time reliability;
- Improve the safety of the M621 corridor for road users;
- Provide better and real time information to road users;
- Avoid and mitigate potential environmental impacts of the Scheme and enhance, where possible, the built and natural environment; and
- Support LCC's development plans including updates to the Leeds transport network, where possible.

2.4.3 In summary Table 2-4 sets out how the Scheme meets its key objectives for which it was designed.

2.5 Alternatives Considered

2.5.1 Highways England has undertaken various assessments of the proposed options. Details of the alternative development options assessed and the methodology which has been used to arrive at the preferred option are set out further in the EAR (see EAR Chapter 3: Assessment of Alternatives) **(DD-B1)**, and are also summarised below.

Assessment Methodology

2.5.2 Several options for the Scheme have been considered since 2013. The assessment of alternatives has been considered in accordance with the guidance in the Design Manual for Roads and Bridges (DMRB) Volume 11 Section 2, Part 5, HA 205/08. The level of investigation and assessment of each of the options considered has been directly proportionate to the feasibility of that option and benefits that it could provide.

2.5.3 A number of high-level strategic solutions were developed, which were assessed in terms of technical feasibility, safety, engineering, value for money and environmental considerations. The aim of exploring alternatives is to ensure consideration of a range of possible solutions in order to identify the option that offers the best outcomes across the full range of objectives set for the Scheme.

2.5.4 Throughout this process, the following types of alternatives were considered, but have since been discounted as they did not meet the Scheme objectives:

- Online improvements – relating to various improvements to Junctions 2, 2a, 3, 4 and 7;
- Offline improvements – upgrading the A62, realignment of the M621;
- Public transport - improving public transport and restricting Junction 2a to public transport use only; and
- Policy - Charging for road use and closing City Centre car parks.

Reasonable Alternatives Studied

2.5.5 During the Strategy, Shaping and Prioritisation Stage an options workshop was held in early 2016. The workshop generated options that would address the Scheme objectives based on knowledge of existing and future traffic flows, identified constraints and work previously undertaken. The workshop identified a total of 20 options for initial assessment. In accordance with Highways England guidance on developing a transport business case, the 20 options were subjected to analysis using the 'Early Assessment and Sifting Tool' (EAST).

2.5.6 The design development undertaken in the Option Identification Stage, 2016/17, considered the key benefits and issues associated with each of the Strategy, Shaping and Prioritisation Stage options. This then informed the development of four rationalised options (Options A to D). Table 2-1 provides a summary of the assessment undertaken in the Option Identification Stage. At the Option Identification Stage, the environmental impacts of all the options were considered to be of neutral significance and cumulative impacts were considered 'not significant', therefore environmental impact was not used to inform the Option Identification Stage.

Table 2-1 Assessment Summary for options considered during the Options Identification Stage

Option	Description	Assessment Summary
Option A	This option includes: • Junction 2 improvements, which comprise the free-flow links between the M621 eastbound and A643 to the north of Junction 2. Improvements to the circulatory carriageway to facilitate the forecast increase in traffic flows. • changes to the Junction 3 westbound merge layout to provide two lanes through the Junction from the M621 westbound mainline with an offside lane gain from the slip-road • closure of the Junction 2a westbound diverge • conversion of the hard shoulder into a running lane between Junction 3 and Junction 2 westbound • improved technology provision, which meets the minimum criteria prescribed by standards	Provided the key junction improvements that deliver the most journey time saving benefits and aligned with the objectives set out in both the RIS and LCC's Strategic Case. Environmental impacts were very similar across the options however, Option A was seen to have marginally lower impacts than Options B, C and D. Option A satisfied the Scheme objectives. Economic assessment indicated high value for money. Environmental impacts assessed as neutral significance and cumulative impacts 'not significant'.
Option B	This option: • comprises all the improvements identified for Option A • involves adding a third lane in each direction between Junctions 1 and 2 by converting the hard shoulder into a lane for traffic	Provided additional benefits over Option A through the conversion of the existing hard shoulder between Junctions 1 and 2 in both directions. This would provide additional road capacity, reduced congestion and better journey time reliability. Environmental impacts were marginally higher than Option A. Option B satisfied the Scheme objectives. Economic assessment indicated high value for money. Environmental impacts whilst marginally higher than Option A assessed as neutral significance and cumulative impacts 'not significant'.

Option	Description	Assessment Summary
Option C	This option includes: • all the improvements of Options A and B • adding a third lane between Junctions 2 and 4 eastbound (clockwise) by converting the existing hard shoulder into a lane for traffic. This would include changing Junction 2a on-slip and Junction 3 off-slip to a standard Junction, to enable the existing auxiliary lane to form part of the additional third lane	Provision of three lanes between Junction 2 and Junction 4 eastbound increases the main carriageway capacity and the Scheme is aligned with LCC's ambition to promote the use of Junctions 2 and 4. Environmental impacts marginally higher than those of Option B. Option C satisfied the Scheme objectives. Economic assessment indicated high value for money. Environmental impacts whilst marginally higher than Options A and B, assessed as neutral significance and cumulative impacts 'not significant'.
Option D	This option includes: • all the improvements of Option C • incorporates the proposal to restrict Junction 2a eastbound to public transport only	Could have a negative impact on those currently using the slip-road to join the M621. It would promote the use of the Elland Road Park and Ride facility and could reduce the risks of queues forming on the merge due to limited merging opportunities. Environmental impacts very similar to Option C and the option satisfied the Scheme objectives. Economic assessment indicated medium value for money. Environmental impacts whilst marginally higher than options A and B assessed as neutral significance and cumulative impacts 'not significant'.

2.5.7 Option D was assessed in the Option Identification Stage, but it was deemed to offer poorer value for money compared to the other options and was therefore not taken forward into the Option Selection Stage.

Options Selection

2.5.8 Options A, B and C were assessed further during the Option Selection Stage between April 2017 to until March 2018. Between 4 September 2017 and 18 October 2017, the three options were taken forward to a non-statutory public consultation. Consultation events took place at three locations close to the scheme and in total 123 responses were received comprising of 105 completed questionnaires and 18 comments were received by letters and emails.

2.5.9 The majority of respondents (81%) identified that they agreed that *"something should be done to improve reliability and reduce congestion on the M621"*. Although Options A, B and C were all very similar in nature, Option C was the most popular option preferred by 46% of respondents. Approximately one quarter of respondents (27%) indicated that they did not prefer any of the options, whilst Option A was selected by 13% of respondents; Option B was the least popular selected by less than one in ten respondents (8%) with the remaining respondents giving no preference (6%). Further details of the findings from the consultation are published in the Public Consultation Report **(DD-B5)**.

2.5.10 The Option Selection Stage EAR concluded that all options were similar in terms of environmental issues, however, Option A was predominantly the most favourable option as it involved the least amount of technology and therefore the least amount of disturbance and change. The EAR mostly reported no significant effects, however it recommended further assessment of some potential impact areas (landscape and visual, population and human health and geology and soils) once the Preliminary Design proposals were known, as they were identified as requiring further mitigation to avoid giving rise to significant effects. Largely, it was concluded that these potential impacts would be reduced by mitigation measures. Potential impacts associated with Options B and C were considered to be more probable and more difficult to mitigate compared to Option A.

2.5.11 In November 2017, following the non-statutory consultation, revised scheme cost estimates showed the costs across all the options had increased. The Option Selection Stage demonstrated that all three options still met the RIS requirements and Scheme objectives but with cost increases coupled with a reduced scheme budget, both Options B and C were now too expensive against the available budget.

Justification for Chosen Option

2.5.12 Although all the options were very similar in nature, Option A was announced as the Preferred Route in March 2018. It was found to meet the Scheme objectives and was within the RIS allocated budget. In terms of environmental impacts, the Option Selection Stage EAR concluded that Option A was the least intrusive and therefore would result in the least amount of disturbance, change and environmental impact. Noting that Option A was not the most popular option during the consultation process, it was however very similar to options B and C but was the best performing option following the assessment process and was shown to deliver high value for money.

Rationalisation of Preferred Option

2.5.13 During the Preliminary Design stage (April 2018 onwards), assessments were undertaken to rationalise the level of technology provision within the Scheme (Option A), whilst still retaining the ability to meet the key objectives for the Scheme.

2.5.14 The review identified that, for the current conditions from recent traffic information, Junctions 2 to 5 in both directions were the most problematic for congestion levels. Based on this, a provision of technology from Junction 2 to 5 in both directions (and extended to Junction 1 westbound) would be beneficial noting that the greater the extent the more benefit there would be for the road user.

2.5.15 Based on recent collisions data, Junction 2 to 5 (and up to Junction 6 westbound) seemed appropriate for the installation of technology to help with collision reduction. In addition, congestion levels on the lead up to Junction 1 westbound would benefit from the introduction of technology. Given that Junction 5 westbound sees a high number of collisions, technology prior to this would help inform road users and likely prevent collisions.

2.5.16 The review therefore concluded that new technology as part of the Scheme should be provided between Junction 1 to Junction 6. Previously proposed technology, including emergency slip signals and CCTV outside of these areas was therefore no longer to be provided as part of the Scheme. Following the rationalisation exercise, it was considered that the revised Scheme continued to meet its key objectives.

2.5.17 A number of potential amendments to the Scheme were also considered during the preliminary design phase as a result of the non-statutory consultation undertaken. The amendments which have been considered are summarised in Table 2-2.

Table 2-2 Comments at Non-Statutory Consultation and associated design development

Issues Raised	Design Development
Provision for walking, cycling and horse riding (WCH).	Additional signage for walking and cycling will be included in the Scheme as part of the detailed design process.
Improvements to the T-Junction between Elland Road and Cemetery Road.	Improvements to signalise the Junction are included in the Scheme and will be secured via a Section 4 Agreement with LCC. This Junction lies within the local road network, however a need to provide additional highway capacity for the locality following the closure of Junction 2a was highlighted in consultation responses as well as traffic modelling.
Provision of additional landscaping at Junction 2a following the closure of the off-slip.	A landscaping scheme for the area of land at Junction 2a forms part of the Scheme proposals.
Reducing the speed limit on the M621.	Advisory variable speed limit will be incorporated to manage speeds on the M621.

2.6 Need for and Benefits of the Scheme

2.6.1 As identified in Section 2.3 of this Statement the Highways Agency undertook the Leeds Infrastructure Study in 2013, which considered the infrastructure required on the surrounding highway network to accommodate the plans for the redevelopment of Leeds City Centre by LCC. The M621 was found to experience significant congestion, and therefore improvements are required both to address existing demand and accommodate LCC's development plans.

2.6.2 The M621 is congested during the peak AM and PM periods, resulting in poor journey time reliability. It is expected that such congestion will increase across the M621 corridor over time, due to planned and committed developments in the area, further exacerbating the congestion issues. As the Scheme design has matured, traffic modelling has indicated that the westbound Annual Average Daily Traffic (AADT) on the key section between Junction 3 and Junction 4 is expected to increase from 35,300 to 38,900 vehicles per day in 2036, equivalent to a 10% increase from the base year (2015). One way traffic flows between other junctions on the M621 are forecast to increase across the board typically by less than 10%, but the significance of Junction 3 to Junction 4 westbound is that this is the link most directly improved by the Scheme's revised merge arrangements at Junction 3 and by the additional running lane thereafter.

2.6.3 Without intervention, delays during peak hours are expected to rise on the M621 due to increased traffic demand from planned and committed developments, including a substantial amount of development planned within Leeds City Centre and the Aire Valley Leeds Area Action Plan (AVLAAP) area of coverage **(DD-E3)** (see Chapter 4 – Policy Context of the Planning Statement **(DD-A6)** and Chapter 14 – Assessment of Cumulative Effects of the EAR) **(DD-B1)**. The M621 westbound movements are likely to experience high delay increases particularly in the evening peak period, with delays in 2036 expected to more than double between Junctions 2 and 4 compared to those in 2015. The majority of the links along the M621 are forecasting increased delays as a result of the traffic growth, further reducing journey time reliability and hindering future economic growth.

2.6.4 The Scheme falls within LCC's aspiration to construct 10,200 new dwellings and create 57,500 new jobs in Leeds City Centre by 2031 (Leeds Core Strategy 2014, policy CC1 – City Centre Development) **(DD-E7)**, as well as ambitious plans for economic development within the area of coverage of the AVLAAP 2017, which is identified as a key strategic location for job growth in the adopted Leeds Core Strategy 2014 (Spatial Policy 1 – Location of Development). Such plans would be constrained without improvement of the existing M621. However, the existing congestion experienced on the M621 would justify the need for improvement irrespective of LCC's proposals.

2.6.5 The recent two-way AADT averaged across the M621 is expected to increase from modelled flows of 78,500 per day in 2015 to approximately 86,800 vehicles per day in 2036 with the Scheme in place, equivalent to a 11% increase from the base year (2015). Accordingly, between 2015 and 2036, the M621 westbound movements, particularly between Junction 2 and Junction 4 are likely to experience delay increases under the 'do minimum' scenario (without the Scheme). Without the Scheme, westbound PM peak delays along the length of the M621 are forecast to increase by 27 seconds between 2021 and 2036. With the Scheme, the equivalent delays are forecast to reduce by 34 seconds compared to 2021 without the Scheme. This improvement is despite a forecast 11% increase in the corresponding AADT traffic flows over the same period.

2.6.6 In safety terms, the M621 performs relatively poorly in terms of slight personal injury collisions (PICs) compared with the national average as demonstrated in Table 2-3.

Table 2-3 Accident PIC Data (2011 to 2015)

	Fatal	Serious	Slight	All
Total PICs (2011 to 2015)	0	11	113	124
M621 PIC rate (per billion veh miles)	0	10.4	106.7	117.1
National motorway average (per billion veh miles)	1.4	9.1	77.3	87.8

2.6.7 This poor safety performance is associated with peak hour congestion and sub-standard distances between junctions in several locations, resulting in short weaving lengths. One of the main objectives of the Scheme is to improve safety for road users. The removal of the off-slip road at Junction 2a together with reduced level of congestion, improved driver information and smoother traffic flows is likely to have an improvement on road safety. A risk analysis has shown that the Scheme is predicted to achieve a 10% reduction in the rate of road accidents.

2.6.8 Improvement of the M621 is therefore required to alleviate existing congestion, facilitate the short-term city centre improvements, improve safety and to support longer term economic growth in the area.

2.6.9 The relevant planning, transport and economic policy goals, and analysis of how the Scheme will support these goals are set out in Section 6.3 of this Statement. Table 2-4 below sets out how the Scheme meets its key objectives for which it was designed.

Table 2-4 How the Scheme will achieve its Objectives

Objective	Achieved by the Scheme
Increase capacity and improve journey time reliability	The Scheme can demonstrate journey time benefits which equate to £104 million as a result of opening the hard shoulder as a running lane between Junction 2a and Junction 2 westbound, improvements to Junction 2 to provide additional lanes including a free-flow link, and improving the Junction 3 westbound on-slip and merge layout, which will enhance highway capacity and the flow of traffic. A further £3.5m of journey time reliability benefits is also forecast. Variable message signs will also be added, which will provide advanced notice of traffic conditions.
Improve the safety of the M621 corridor for road users	The Scheme can demonstrate accident related benefits to the value of £10.4 million and a predicted 10% reduction in the rate of road accidents. This will be as a result of the removal of the off-slip road at Junction 2a which will remove an unsafe weaving manoeuvre between Junction 3 and 2a, together with reduced level of congestion, improved driver information and smoother traffic flows. In addition, the proposed enhancements to road signage will include early warnings when required on variable message boards, and additional electronic signage providing advisory speed limits during periods of congestion or when incidents occur.
Provide better and real time information to road users	Enhanced real time driver information signage, enhancing journey time reliability. CCTV cameras will be installed to monitor traffic conditions. This information will be distributed to the regional control centre, West Yorkshire Police and Highway England's Traffic Officer service to support their rapid incident response and the distribution of relevant information to drivers.

Objective	Achieved by the Scheme
Avoid and mitigate potential environmental impacts of the Scheme and enhance, where possible, the built and natural environment	The EAR **(DD-B1 & DD-B2)** has concluded that the key potential impacts created by the Scheme are temporary or localised (*'any potential significant adverse effects arising from the proposed Scheme are temporary and/or localised*'). Environmental mitigation proposals have been prepared which demonstrate a biodiversity net gain (see Chapter 7 of the EAR) **(DD-B1)**. The proposals are shown on the Environmental Mitigation Plans at Appendix E of the EAR. Although an increased quantity of traffic may lead to higher noise levels, the closure of Junction 2a will reduce noise pollution to the area around the Junction as a result of reduced through traffic. Low noise road surfacing will be incorporated in the hard shoulder between Junctions 2 and 2a and as part of the improvements to Junctions 2 and 3. Therefore it is concluded that the Scheme will have a neutral impact upon noise pollution (see Chapter 8 of the EAR) **(DD-B1)**. For local air quality the assessment has shown that the Scheme will have no significant adverse effect on local air quality with the Scheme in place. (see Chapter 5 of the EAR) **(DD-B1)**. In terms of landscape impact, the impacts of the Scheme will be associated with temporary loss of trees in tree belts along the route of the Scheme. However, proposals to replant trees will lead to a neutral impact upon landscape character (see Section 6.7 of Chapter 6 of the EAR) **(DD-B1)**. Intensification of the road infrastructure (including the addition of new motorway portal and cantilever gantries and associated signs) associated with the M621 from Junctions 1 to 7 may have some initial minor impacts upon the townscape. However, the improvements will be made within an existing context of an urban motorway. Tree re-planting proposals are included to address a reduction in the amount of screening from the construction of the Scheme as a result of tree removal and the reprofiling of the landscape bund on the southbound approach from the A643 to Junction 2 (see Chapter 6 of the EAR) **(DD-B1)**. A Construction Environmental Management Plan (CEMP) will be developed by the Principal Contractor prior to commencement of construction to minimise and manage impacts where possible during the construction phase of the Scheme, and to ensure all environmental commitments identified in the EAR are fully addressed and mitigation measures implemented.
Support LCC's development plans including updates to the Leeds transport network, where possible.	The Scheme will increase the capacity and flow of traffic on the M621 motorway, and at key junctions with the local road network, aligning with LCC's plans to reconfigure the local transport network. Through enabling the reconfiguration of the local transport network under LCC's and supporting the AVLAAP development strategy at Junction 7, the Scheme will support the development of key employment and housing sites.

3 Environmental Assessment of the Scheme

3.1 Introduction

3.1.1 The Scheme is deemed to be an Annex II project in line with the Environmental Impact Assessment (EIA) Directive 2014/52/EU. Highways England as a competent authority, has screened the Scheme using the Annex III criteria to determine whether the Scheme requires an Environmental Impact Assessment (EIA). The screening process concluded there were no significant effects with the exception for the following:

- Population – Predicted significant adverse effects on the access to private residential dwellings due to the closure of Junction 2a westbound are considered to be localised and small scale in the context of the wider study area. However, any adverse effects on access will be offset by significant beneficial impacts by reduced through-traffic in this area which will bring about a wide range of improved conditions for the local community. In addition, there will be significant beneficial health effects as reduced traffic will make the streets safer for the local community (refer to Section 3.3 of this Statement for further details); and,
- Visual – Predicted significant effects for residents in properties on Euston Grove will be short term and localised, and can be reduced to slight beneficial through sensitive design and embedded mitigation measures in the medium term (refer to Section 3.3 of this Statement for further details)

3.1.2 Furthermore, the proposed Scheme is also expected to provide significant beneficial effects to the local businesses due to the improved connectivity bringing new markets within reach. The proposed Scheme is also projected to compliment the emerging Transport Strategy for Leeds, catering for public transport improvements aiming to provide better access to the wider area, resulting in further significant beneficial effects.

3.1.3 On balance, the adverse effects are not considered to be significant in the context of formal EIA because they are either temporary (and can be mitigated in the long term) or their localised nature is offset by wider significant benefits on more than one area, therefore an EIA is not required. The non-statutory EAR **(DD-B1 & DD-B2)** is however required to ensure that the final design, and any mitigation measures, address any concerns regarding environmental impact.

3.1.4 An EAR is a requirement for schemes which are being progressed under the Highways Act 1980 to demonstrate that the Scheme:

- Meets the requirements within the Highways England Licence (DfT, April 2015);
- Will identify how the objectives set out in the RIS (DfT, March 2015) will be met; and
- Demonstrates compliance with the relevant policy requirements e.g. the National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government, 2019).

3.1.5 The EAR comprises two volumes, as follows:

- The Environmental Assessment Report (Volume 1), which comprises the main text setting out the environmental assessment in chapters **(DD-B1)**; and
- The Environmental Assessment Report, Appendices (Volume 2) including drawings, photos and other illustrative material that supplements the information provided in Volume **1 (DD-B2)**.

3.1.6 The following environmental topics have been assessed as part of the EAR:

- Air Quality;
- Biodiversity;
- Landscape and Visual;
- Population and Human Health;
- Noise and Vibration;
- Road Drainage and the Water Environment;

- Geology and Soils;
- Materials and Waste, and
- Climate.

3.1.7 The EAR **(DD-B1 & DD-B2)**, was published to accompany the Orders and has been undertaken by a team of specialists working in collaboration with the design engineers responsible for the preliminary design of the Scheme. This has maximised the opportunity to avoid or reduce environmental effects and to identify the most effective mitigation of those effects that cannot be avoided. The Scheme has been designed to avoid key environmental constraints as much as possible. Cultural Heritage was screened out of the assessment as no significant effects, in relation to any of the sub-topics, were considered likely; this approach was supported by the Principal Archaeologist at West Yorkshire Archaeology Advisory Service.

3.1.8 The engineering and environmental designs will continue to be developed and will seek further opportunities to reduce or avoid any residual environmental impacts.

3.1.9 A summary of the relevant EAR Chapters is included in Section 3.3 of this Statement.

3.2 Environmental Overview and Constraints

3.2.1 The Environmental Constraints Plan (see Chapter 17 of the EAR) **(DD-B1)**, sets out the important environmental features within the vicinity of the Scheme and also overlays the Scheme area. These constraints are summarised in this section.

3.2.2 There are two Local Nature Reserves (LNRs) within 1 km of the Scheme, Middleton Woods LNR, located 500 metres (m) south of westbound carriageway at Junction 6 around 800 m south of Junction 6, and Oakwell Park LNR located 1 km west of the M621/M62 merge. The LNRs are not adversely affected by the Scheme as stated in Section 3.3 of this Statement.

3.2.3 Four Leeds Nature Areas (LNA) and one Local Wildlife Site (LWS) are located immediately adjacent to or within 100 m of the Scheme: (Clubbed Oaks and Dean Wood (LNA and LWS), Noster Hill (LNA), Hunslet Moor (LNA) and Hunslet Old Cemetery (LNA). These sites are not adversely affected by the Scheme as stated in Section 3.3 of this Statement.

3.2.4 There is a Registered Park and Garden, Hunslet Cemetery, located around 95 m south of the M621 just west of Junction 7. These locations are not adversely affected by the Scheme as stated in Section 3.3 of this Statement.

3.2.5 The following areas of designated Ancient Woodland are located within 1 km of the Scheme which are not adversely affected as stated in Section 3.3 of this Statement:

- Dean Wood (Ancient Replanted Woodland) located 30 m north-west, between Junction 27 of the M62 and Junction 1;
- Birkby Brow Wood (Ancient Replanted Woodland) located 540 m south of Junction 27 of the M62; and
- Middleton Wood (Ancient & Semi-Natural woodland) located 940 m south of Junction 6.

3.2.6 There are six watercourses within 500 m of the Scheme as follows which are not adversely affected as stated in Section 3.3 of this Statement:

- Low/Wortley/Pudsey Beck, culverted under the Scheme. North-east of Junction 1;
- Unnamed Watercourse, culverted under the Scheme at Junction 7;
- Farney Wood Beck, culverted under the Scheme near Junction 1;
- Clark Spring, located approximately 30 m south-east, near Junction 1. Joins Farnley Wood Beck;
- Dean Beck, flows adjacent to the Scheme, near Junction 1. At the closest point is located approximately 90 m north-west; and
- Haigh Beck located approximately 475 m east of Junction 43 of the M1.

3.2.7 Within 100 m of the Scheme alignment, there is one groundwater abstraction located north of the east bound approach to Junction 1, which is not adversely affected by the Scheme. There are no Groundwater Source Protection Zones.

3.2.8 There are six Air Quality Management Areas (AQMAs) currently declared in the area and administered by LCC due to exceedances of the annual mean NO_2 Air Quality Standard (AQS) objective. There is only one AQMA, (The Tilbury's), located within the Scheme extent as detailed below in Figure 3-1.

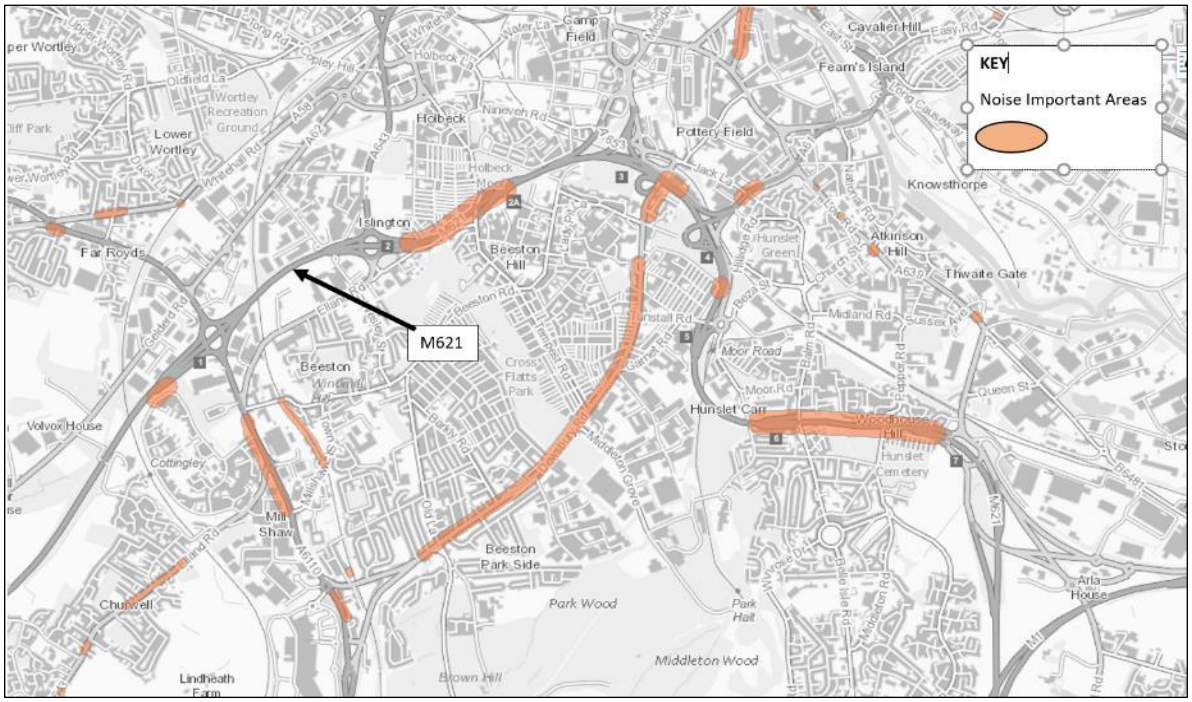
3.2.9 The area of coverage of The Tilbury's AQMA includes a number of properties adjacent to the eastbound slip road of Junction 2 of the M621 and A653 Ingram Road Distributor, extending south across the M621 on the eastern side of Junction 2 with the southern boundary drawn adjacent to the M621 on the southern side.

Figure 3-1 Area of Coverage of The Tilbury's AQMA

(Source: DEFRA Air Information Resource/Atkins Go)

3.2.10 There are five Noise Important Areas (NIAs) within the Scheme boundary, with an additional four located adjacent to the Scheme between the M62 and the M621 Junction 1. There are an additional 25 NIAs located on other nearby local roads which are within 1 km of the Scheme, as identified in Figure 3-2 below. The NIAs are not adversely affected by the Scheme as stated in Section 3.3.

Figure 3-2 Noise Important Areas in proximity to the Scheme



Source: Accessed on 17/10/19: https://environment.data.gov.uk/DefraDataDownload/?mapService=DEFRA/NoiseActionPlanningImportantAreasRound3&Mode=spatial

3.3 Environmental Assessment Report Summary of Chapters

3.3.1 The following summary of the EAR Chapters is extracted from the EIA Screening (Determination).

Air Quality

3.3.2 Modelling results indicate that there will be no exceedances of the AQS objectives or EU Limit Values for NO_2 in the first year of full opening (2022), either with or without the Scheme. A small increase in annual mean NO_2 concentrations due to the Scheme were reported at fourteen residential properties predominantly located north / south of M621 at Junction 2 – Junction 2a and at one selected location along the M621 at Junction 6. A small decrease in annual mean NO_2 concentrations were identified at 12 residential properties on minor roads near M621 Junction 2a due to the Scheme. Impacts at all remaining modelled receptors are negligible. The overall conclusion regarding the effect of the Scheme is that there will be no significant adverse effect on local air quality, and there is a 'low risk' of the Scheme affecting compliance with the EU Limit Value.

Biodiversity

3.3.3 The overall significance of effect on statutory and non-statutory sites for nature conservation and habitats during construction and operational phases is neutral. Through the adoption of appropriate mitigation measures, such as a Precautionary Method of Working with respect to reptiles, and pre-construction checks immediately prior to the start of works to check for roosting bats and active badger setts, the overall effect on legally protected and notable species is neutral. The proposed mitigation planting will provide an overall biodiversity net gain and proposed enhancement measures will increase opportunities for roosting bats, nesting birds, common species of reptiles and small mammals. The landscape design has had input from ecology specialists to ensure that it is sensitive to nature conservation interests. The mitigation measures identified above are set out in the Outline Environmental Management Plan (OEMP) **(DD-G1)** which also includes a Record of Environmental Actions and Commitments (REAC). The OEMP will be developed into the Construction Environmental Management Plan (CEMP) by the Principal Contractor prior to commencement of construction of the Scheme.

Landscape and Visual

3.3.4 No residual significant effects on landscape resource are anticipated during the construction and operation phases of the Scheme. The overall loss of trees will cause temporary moderate adverse (significant) effects in the short-medium term to the woodland network within the landscape. However, it is considered that this could be effectively mitigated in the long term through the provision of replacement woodland planting and the effect will not be considered significant at summer year 15.

3.3.5 Temporary moderate adverse (significant) visual effects are anticipated for residents in properties on Euston Grove during construction and at winter year 1 due to the removal of trees and reprofiling of the bund at Junction 2, which will noticeably change the view. However, whilst the bund will not be reinstated in its entirety, replacement tree planting will be greater in width than the existing tree belt and will effectively mitigate this effect; so, the overall significance of the effect will be slight beneficial (direct, permanent, not significant) in the medium term (i.e. at summer year 15). Proposed Scheme-wide mitigation also includes localised beneficial enhancement measures, including specimen tree planting and species rich grassland seeding, to contribute to localised improvements to the landscape and visual amenity value within the M621 corridor. These measures are set out in the OEMP which will be developed into the CEMP by the Principal Contractor and are in accordance with the Environmental Mitigation Proposals (refer to Figure 6.5 in Appendix E-1 of the EAR) **(DD-B1)**.

Population

3.3.6 Following closure of the Junction 2a westbound diverge, significant (moderate adverse) residual effects are predicted for the access to private residential properties at the following locations: west of Domestic Street and Top Moor Side in Holbeck, and Elland Road (south) and on either side of Cemetery Road in Beeston and Beeston Hill. However, these effects are a local factor only and small scale in the context of the wider study area. There will be a non-significant (slight adverse) residual effect on access to private residential properties in the other parts of Holbeck, Beeston Hill and Beeston. The proposed upgrading of the current T-junction of Cemetery Road / Elland Road will increase capacity to off-set the adverse effects and benefit both the rerouted traffic and existing users of the junction. For the wider study area, which comprises approx. 43,675 households, the residual effects will be slight beneficial (non-significant) as increased capacity at Junction 2 and improved free-flow of traffic between Junction 3 and Junction 2 is expected to improve wider accessibility. All effects on access to private properties will be applicable to the operational phase and are permanent and irreversible due to the closure of Junction 2a. However, alternative routes of access will remain available and no private residential or business accesses will be closed as part of these works.

3.3.7 These localised adverse effects for access to private properties will be offset by reduced through-traffic in this area which will improve amenity, reduce severance and improve conditions for the local community, including pedestrians and vulnerable groups. In this regard, significant (moderate) beneficial effects are predicted. This supports a key objective of the Holbeck Neighbourhood Plan (2018) **(DD-E6)** to achieve a well-connected neighbourhood and avoid the route along Domestic Street and Top Moor Road being used as a short cut to avoid congestion on the Armley Gyratory and Ingram Distributor at peak times. The removal of the Junction 2a westbound link and reduction in traffic will improve the amenity value of Holbeck for residents and improve accessibility, including for public transport, pedestrians and others, within the area and to surrounding neighbourhoods and the city centre/South Bank.

3.3.8 During construction, significant adverse effects (temporary) are likely due to a predicted increase in journey length and changes in journey patterns following the proposed temporary closure of the footpath on Brown Lane, to allow a new, realigned footpath to be created. However, these effects will be short-term and will only affect a small number of Walkers, Cyclists and Horse-riders (WCHs) and very few vulnerable groups. Furthermore, the new footpath to be provided will improve the current situation by providing a new facility that is better segregated from traffic. Significant beneficial effects are predicted for local businesses in proximity to the Scheme that would benefit from improved network performance, reduced congestion and improved journey time reliability. See Section 2.48 to 2.54: Walkers, Horse Rider and Cyclist Alterations in the Planning Statement for further details **(DD-A6)**.

Human Health

3.3.9 No significant adverse effects on human health are predicted during the construction or operational phases of the Scheme. Several significant benefits for human health have been identified including reduced risk of injury and death for children and adolescents, and older people, during operation due to reduced congestion, increased capacity, smooth flow of traffic, reduced conflict at the junctions, and improved segregation for pedestrians. Closure of Junction 2a will reduce through traffic on Domestic Road/Top Moor Side which will make the streets safer for the local community, particularly children and older people who are more susceptible to change. Furthermore, closure of Junction 2a will reduce community severance in Holbeck by removing through traffic, a major concern on the route between the M621 and the city centre. This is predicted to have significant beneficial effects for children and adolescents, and older people, that are more reliant on social networks in the core study area.

Noise and Vibration

3.3.10 Noise and vibration effects during the construction phase will be temporary and will be minimised through the adoption of appropriate mitigation measures and best practicable means. Detailed noise calculations have shown that during operation, increases in noise, typically due to increases in traffic flow, speed and/or widening of carriageway, are limited to negligible magnitudes i.e. <+1dB in the opening year. There are some minor decreases in noise on existing roads due primarily to the closure of the M621 Junction 2a westbound off-slip. These decreases typically reduce to negligible in magnitude in the future years. The impact of the Scheme, in terms of noise and vibration, is therefore considered not significant. The OEMP will be developed into the CEMP by the Principal Contractor prior to the commencement of construction works. The CEMP will include a commitment for the Principal Contractor to consult with the Environmental Health Departments at LCC to obtain guidance on their requirements for managing and controlling noise and vibration from construction works. It will also include contractually binding actions that the Principal Contractor will implement to minimise and limit noise and vibration during construction.

Road Drainage and the Water Environment

3.3.11 No significant effects are anticipated for all four surface water bodies assessed under the Water Framework Directive that have been identified. Groundwater receptors are not anticipated to experience significant effects during construction or operation. Initial water quality assessment considered runoff specific thresholds, environmental quality standards, suspended solids and spillage risks and indicated that there will be no significant effects during operation.

Geology and Soils

3.3.12 No significant effects relating to the mobilisation of contamination / ground gas, settlement of soils, and the creation of new pollutant pathways are anticipated. Where there are slight residual effects, these can be mitigated further through the consideration of measures including appropriate pre-construction ground investigation and appropriate design/ construction measures. These measures are set out in the OEMP, and will be delivered through the CEMP, which will be produced prior to the commencement of construction works by the Principal Contractor.

Materials and Waste

3.3.13 Using current design information, estimates of the volumes of waste to be generated and material assets to be used by the Scheme have been produced. These have been assessed against the baselines for waste and material assets to determine the level of impact. It was determined that the effects of the Scheme will not be significant.

Climate – Carbon

3.3.14 It is considered that the magnitude of carbon emissions from the Scheme will not have a significant effect on climate.

Climate – Vulnerability

3.3.15 Climate in the study area is projected to change in the future and the Scheme would be vulnerable to the impacts of this change during construction and operation. However, the assessment has found that none of these vulnerabilities are expected to be significant.

Summary

3.3.16 Overall, only localised or temporary significant effects upon the environmental receptors are expected as a result of the Scheme. A detailed assessment of the potential environmental impacts can be found in the EAR **(DD-B1 & DD-B2)**.

3.3.17 The population and human health assessment (Chapter 10 of the EAR) **(DD-B1)**, completed as part of the EAR's development, has demonstrated that there are localised, significant effects to local residents created by permanent road diversions, due to the closure of Junction 2a and the resultant increase in journey times for local residents.

3.3.18 Additionally, temporary moderate adverse (significant) visual effects are anticipated on residential receptors at Euston Grove in the first year of opening due to the removal of trees and reprofiling of the existing bund. However, these effects will be mitigated through the provision of replacement of woodland planting and will not be considered significant in the medium to long term.

4 Traffic and Economic Assessment of the Scheme

4.1 Introduction

4.1.1 The assessment of traffic impacts of the Scheme has been undertaken using both a strategic and a local operational traffic model developed specifically for this study. The operational model and the economic and environmental assessment of the Scheme impacts are all based on traffic forecasts derived from the strategic model.

4.1.2 The traffic modelling and economic assessment have been undertaken by a team of specialists working in collaboration with the design engineers and environmental assessment team.

4.1.3 A summary of the assessment is given below.

4.2 The Strategic Traffic Model

4.2.1 The traffic modelling is based on an existing model of Leeds updated with data on the pattern of movements observed in the M621 corridor in 2015. Forecasts have been developed to a high level of model convergence and used in subsequent operational, economic and environmental appraisal.

4.2.2 The Scheme model has been based on a 2015 Base year for the following weekday time periods:

- AM peak hour from 08:00 to 09:00
- Inter peak average Hour from 10:00 to 16:00
- PM peak hour from 17:00 to 18:00.

4.2.3 This model has been developed to ensure that it meets the Department for Transport's Transport Analysis Guidance (WebTAG) **(DD-F3)** for the study area. The area of detailed modelling includes all of Leeds bounded by the Ring Road to the north and west, by the motorway M1 to the east and by the M62 to the south. The study area is sufficiently wide in coverage to allow a detailed analysis of the routeing decisions that are likely to be affected by the Scheme. Further it covers the areas affected by LCC's proposals for developments and road schemes in which context the assessment has been undertaken. This includes the area of the Leeds Clean Air Zone.

4.2.4 The model has been calibrated and validated according to the WebTAG Guidance published in Unit M3.1 using a combination of observed traffic flow data and journey time data to ensure that the model adequately represents observed conditions. The validation exercise demonstrated that the model is fit for the purposes of forecasting and scheme assessment.

4.3 Traffic Forecasts

4.3.1 Forecasts have been derived for the Scheme opening year and the design year, fifteen years later. They cover four alternative scenarios:

- Core scenario – which reflects reference case traffic growth from national models along with local developments and schemes which are committed or deemed to be more than likely;
- Low Growth scenario – as the Core scenario but assuming low growth;
- Optimistic scenario - which reflects high traffic growth along with local developments and schemes which are committed, more than likely or deemed to be reasonably foreseeable;
- LCC test scenario – as the Core scenario but including all of LCC's road scheme proposals which are sufficiently well developed to represent in the model.

4.3.2 At the time of the models' development, the opening year was anticipated to be 2021. The latest programme shows the Scheme opening to traffic in 2022, but the current forecasts and their associated assessment continue to reflect 2021. With relatively low levels of traffic growth over a single year on the M621, this discrepancy is not deemed to be material in terms of the scheme assessment.

4.3.3 Forecasts have been undertaken for the future situations with and without the Scheme, in order to determine the impact of the Scheme itself. Most of the Scheme assessment has focused on the Core scenario, for which results are summarised below. Economic appraisals of the other scenarios have demonstrated that the Scheme case is robust in these instances too, with a particularly strong economic performance in the Optimistic and LCC test scenarios.

4.4 Forecast Traffic Flows and Journey Times

M621 Mainline

4.4.1 The averages of traffic flows forecast using the strategic model between junctions on the M621 mainline in each direction are summarised in Table 4-1 below. These are annual average daily traffic (AADT) flows in vehicles.

Table 4-1 M621 Traffic Forecasts (AADT)

		Opening Year			Design Year		
	Direction	No Scheme	Scheme	Difference	No Scheme	Scheme	Difference
Average *	Eastbound	44933	45107	0.4%	44448	45153	1.6%
Average *	Westbound	37645	39539	5.0%	38741	41665	7.5%

* Averages are calculated as the sum of inter-junction link flows divided by the number of links.

4.4.2 The key points to note from this are that:

- Eastbound traffic flows are affected very little by the Scheme, with negligible modelled changes in the opening year and an increase in the design year of 1.6%;
- Westbound traffic flows are generally increased by the Scheme, by between 5% in the opening year and 7.5% in the design year, reflecting the improvements to the mainline through and beyond Junction 3.

4.4.3 In terms of the Scheme's impact on forecast M621 journey times, there is very little impact in the eastbound direction in the vicinity of the Scheme, with journey times from the strategic traffic model forecasts typically a fewer seconds longer due to marginally higher traffic flows. However, westbound the capacity improvements around Junction 3 provide a significant improvement in journey times, particularly in the PM peak. This trend is clearest in the 2036 PM peak forecast results, as shown in Table 4-2. The 'without Scheme' case shows greater journey times than the 'with Scheme' case, with changes focused over the core area of Junction 2 to Junction 4. This is the source of much of the Scheme's economic benefits.

Table 4-2 M621 Westbound Journey Times 2036 PM Peak

	Journey Times (minutes:seconds)		
	No Scheme	Scheme	Time Saving
J7 diverge to J4 merge	03:20	03:24	-00:04
J4 merge to J2 merge	04:14	03:27	00:47
J2 merge to M62 J27	04:52	04:34	00:18
Total	**12:26**	**11:25**	**01:01**

4.4.4 Apart from the forecast Scheme impacts along the M621, the main impacts of the Scheme are at Junction 2 and Junction 2a as presented below.

M621 Junction 2

4.4.5 At Junction 2, the improvements to all approaches and the widening of the circulatory creates additional capacity and reduces delays accordingly. Consequently, the junction is forecast to attract more traffic from all approaches, though this varies by approach road and forecast year:

- The M621 eastbound off-slip shows little increase in forecast flow as a consequence of the Scheme, in both modelled peak periods; this may be attributed to upstream capacity constraints at the M62/M621 intersection to the south. Increases in modelled inter-peak period flows means that overall there is a modest increase in AADT flow;
- The greatest changes are on the M621 westbound approach, reflecting the closure of Junction 2a to westbound traffic and also the improved capacity of the westbound M621 mainline through Junction 3;
- There are also small forecast flow increases on the A643 and Elland Road approaches (though these are principally in the PM peak period and not across the whole day).

4.4.6 The impacts are generally forecast to be greater in the PM peak when commuter traffic is destined to leave the area via the M621. The exception to this is the M621 westbound off-slip which shows the biggest flow increases in the AM peak as traffic is going into Leeds.

4.4.7 Annual average daily forecast one-way traffic flows taken from the strategic model of M621 Junction 2 are presented in the following Tables in vehicles per day, to illustrate the forecast changes.

Table 4-3 M621 Junction 2 Traffic Forecasts 2021 (AADT)

	2021			
Approach	**No Scheme**	**Scheme**	**Difference**	**%age Difference**
A643	31114	31761	647	2.1%
M621 Westbound Off-Slip	9444	14282	4837	51.2%
Elland Road	7521	8306	785	10.4%
M621 Eastbound Off-Slip	9849	11089	1240	12.6%

Table 4-4 M621 Junction 2 Traffic Forecasts 2036 (AADT)

	2036			
Approach	**No Scheme**	**Scheme**	**Difference**	**%age Difference**
A643	29699	31211	1512	5.1%
M621 Westbound Off-Slip	10166	15878	5712	56.2%
Elland Road	7662	8055	394	5.1%
M621 Eastbound Off-Slip	9789	11157	1367	14.0%

M621 Junction 2a

4.4.8 At Junction 2a the Scheme closes the westbound exit from the M621, thereby removing the traffic turning onto Cemetery Road. However, some of the traffic with destinations approached from Cemetery Road is forecast to switch to using Junction 2 and Elland Road to access Cemetery Road from the west. This would be sufficient to cause significant delays at the existing T-Junction between Cemetery Road and Elland Road and explains the Scheme's incorporation of traffic signalisation here, to ensure the junction's performance is acceptable. As stated above, Highways England has an approval in principle from LCC to enter into an agreement to enable these works to be undertaken by Highways England on the local highway network pursuant to Section 4 of the HA 1980.

4.4.9 Annual average forecast one-way traffic flows taken from the strategic modelling of the Cemetery Road / Elland Road T-Junction are presented in the following Tables in vehicles per day, to illustrate the forecast changes.

Table 4-5 Cemetery Road / Elland Road Traffic Forecasts 2021 (AADT)

	2021			
Approach	**No Scheme**	**Scheme**	**Difference**	**%age Difference**
Cemetery Road (North)	4368	2638	-1731	-39.6%
Cemetery Road (South)	7026	7125	99	1.4%
Elland Road	4270	5030	760	17.8%

Table 4-6 Cemetery Road / Elland Road Traffic Forecasts 2036 (AADT)

	2036			
Approach	**No Scheme**	**Scheme**	**Difference**	**%age Difference**
Cemetery Road (North)	3560	2064	-1496	-42.0%
Cemetery Road (South)	6787	6625	-162	-2.4%
Elland Road	3589	4585	996	27.8%

4.4.10 Traffic flows approaching the junction from Cemetery Road (South) are essentially unaffected by the Scheme. Those from Cemetery Road (North) are reduced by about 40%, with much of this reduction forecast to reassign to the Elland Road approach. The pattern of changes is similar between the two forecast years. Traffic signals at Elland Road / Cemetery Road T-Junction will help mitigate the delays on Elland Road resulting from this change in traffic flows, caused as a result of closing Junction 2a.

4.5 Economic Assessment and Methodology

4.5.1 This section outlines the economic assessment of the Scheme. It presents the expected benefits and dis-benefits associated with the Scheme and the Scheme's overall value for money.

4.5.2 The economic case of the Scheme has been based on a 60-year appraisal period in accordance with the Department for Transport (DfT) online Transport Appraisal Guidance (TAG) **(DD-F3)**.

4.5.3 The assessment considers the calculation of impacts, both positive and negative, that are typically expressed in monetary terms. This includes the capital cost of the Scheme and indirect tax revenues generated by it. The appraisal compares the costs against benefits such as travel time and accident savings.

4.5.4 Costs and benefits occur throughout the duration of the assessment period with construction costs occurring before the Scheme becomes operational. Benefits are primarily achieved in the operational phase. Costs and benefits are discounted to present values i.e. benefits accrued today are considered to be of greater value than those accrued further into the future. As such the stream of costs and benefits are discounted to 2010 using the DfT standard discount rate, to provide a common basis of comparison with other schemes.

4.5.5 Scheme costs and monetised impacts (costs and benefits) are summed to produce a Benefit Cost Ratio (BCR); the amount of benefit being bought for every £1.00 cost to the public purse.

4.5.6 Once impacts that can be expressed in monetary terms have been calculated, the assessment captures the remaining impacts that cannot be monetised within an Appraisal Summary Table (AST). The AST is a summary for decision makers containing key economic, environmental and other information drawn from existing documents such as cost benefit analysis and the EAR. The monetised impacts can then be used to determine the value for money for the Scheme.

4.5.7 A scheme's value for money is categorised based on the BCR as follows:

- Poor Value for Money if the BCR is less than 1.0;
- Low Value for Money if the BCR is between 1.0 and 1.5;
- Medium Value for Money if the BCR is between 1.5 and 2.0;
- High Value for Money if the BCR is between 2.0 and 4.0; and
- Very High Value for Money if the BCR is greater than 4.0.

Monetised Benefits

4.5.8 An assessment and monetisation of the expected economic, environmental and social benefits associated with the Scheme has been undertaken in accordance with DfT guidance. The initial BCR contains all costs and benefits that are routinely quantified within economic assessments of transport schemes. The adjusted BCR for the Scheme includes benefits associated with journey time reliability as well as those defined as wider economic benefits.

4.5.9 Table 4-7 provides a summary of the monetised economic, environmental and social benefits of the Scheme. The resulting BCR values are then presented in the section on Value for Money, below.

Table 4-7 Summary of Monetised Benefits

Benefits			Initial Present Value of Benefits (exc. Reliability and Wider Impacts) (£m)	Adjusted Present Value of Benefits (inc. Reliability and Wider Impacts) (£m)
Economic Benefits	Business User Benefits	Travel Time	*51.006*	*51.006*
		Vehicle Operating Costs	*-0.360*	*-0.360*
		Delays during Construction and Maintenance	*-1.524*	*-1.524*
		User Charges	*0*	*0*
		Net Business User Benefits	**49.122**	**49.122**
	Private Sector User Benefits	Revenue	0	0
	Journey Time Reliability benefits		Exc.	3.482
	Wider Economic Impacts		Exc.	34.797
Environmental Benefits	Greenhouse Gas Emissions (TAG)		-1.222	-1.222
	Noise		0.160	0.160
	Air Quality		0.154	0.154
Social Benefits	Non-business commuting	Travel Time	*29.568*	*29.568*
		Vehicle Operating Costs	*2.924*	*2.924*
		Delays during Construction and Maintenance	*- 0.477*	*- 0.477*
		User Charges	*0*	*0*
		Net Non-Business Benefits: commuting	**32.015**	**32.015**

Benefits			Initial Present Value of Benefits (exc. Reliability and Wider Impacts) (£m)	Adjusted Present Value of Benefits (inc. Reliability and Wider Impacts) (£m)
	Non-business other	Travel Time	*23.254*	*23.254*
		Vehicle Operating Costs	*-1.770*	*-1.770*
		Delays during Construction and Maintenance	*- 0.763*	*- 0.763*
		User Charges	*0*	*0*
		Net Non-Business Benefits: Other	**20.720**	**20.720**
	Accident Benefits		10.361	10.361
Public Accounts	Wider Public Finances (Indirect Tax Revenues)		2.492	2.492
TOTAL			**113.803**	**152.082**

4.5.10 It should be noted that the regeneration benefits only consider the effect of a scheme on regeneration areas. There is no single definition of regeneration areas, but these areas will have been designated for specific policy purposes related to economic development under the UK government's or European Union's regeneration programmes. The Scheme does not have an effect on the regeneration areas in which it is located.

Economic Benefits

4.5.11 The Scheme would increase capacity along the M621. The additional capacity will contribute towards reduced congestion and reduced delays in the vicinity of the Scheme, leading to a decrease in lost productive time and subsequent increase in business user and transport service provider benefits. In particular the Scheme will:

- Increase capacity on the westbound M621 through Junction 3;
- Reduce weaving conflicts westbound to the west of Junction 3;
- Increase capacity (for all movements) at M621 Junction 2; and
- Improve driver information and the monitoring and control of traffic, with a consequent reduction in accidents through the Scheme extent.

4.5.12 Business users and transport service providers would therefore significantly benefit from the Scheme through:

- Reduced travel times; and
- Improved access for suppliers and customers.

4.5.13 After accounting for impacts associated with delays during construction and maintenance, the combined monetised value of these benefits for business users is forecast to be £49.122 million. This excludes the journey time reliability benefits and wider economic impacts which are not included in the initial BCR.

Environmental Benefits

4.5.14 Detailed assessment and appraisal have been undertaken to consider the full environmental impacts associated with the Scheme. Full details can be found in the EAR **(DD-B1 & DD-B2)**. The following is a summary of the topics found to provide environmental benefits.

4.5.15 Noise impacts have been assessed and appraised in the EAR **(DD-B1 & DD-B2)**. The attraction of traffic from local roads to the M621 would result in some marginal decrease in noise but negligible improvement in noise for most receptors. There are no predicted noise levels above 80dBLAeq.16h during the day or night and no properties are eligible for noise insulation. The monetised value of the impact on noise is forecast to be a benefit of £0.160 million.

4.5.16 Detailed assessment and appraisal have been undertaken to consider the local air quality impacts of the Scheme. Overall, there is a positive impact on local air quality in monetary terms with the Scheme. This can be attributed to attraction of traffic from local roads to the M621. The monetised value of the predicted change in local air quality is forecast to be a benefit of £0.154million.

4.5.17 These benefits are off-set by marginally increased greenhouse gas emissions, valued at a cost of £1.2m (as a cost it is represented as a negative figure in Table 4-7) over 60 years. This is due to more and/or faster moving traffic over the area as a whole, although the effect is almost negligible compared to the total amount of emissions over the assessment area.

4.5.18 In economic terms, the environmental impact of the Scheme is essentially neutral.

Social Benefits

4.5.19 The social economic benefits attributable to the Scheme are dominated by journey time savings for non-business users. After accounting for impacts associated with delays during construction and maintenance, the combined monetised value of the non-business user benefits is forecast to be £52.7 million.

4.5.20 Additional social benefits come from accident savings, derived using the DfT's COBALT (Cost-Benefit Appraisal – Light Touch) software according to guidance. The Scheme includes technology, which will provide better driver information and facilitate better monitoring and control of traffic flows and speeds, reducing the risk and severity of accidents.

4.5.21 A risk analysis has shown that the Scheme is predicted to achieve a 10% reduction in the rate of road accidents on the improved links. This assessment also considers the impacts upon different road users and the measures included in the Scheme to improve road safety. Some of this saving on Scheme links is eroded by the presence of more forecast traffic, but as this traffic is typically drawn from other, usually less safe local roads, the overall accident saving is significant.

4.5.22 The Scheme is forecast to reduce the value of accidents by £10.4m over the 60 year appraisal period.

Summary of Non-monetised Benefits

4.5.23 An assessment of anticipated environmental and social non-monetised benefits associated with the Scheme has been undertaken and is outline in Table 4-8 below.

Table 4-8 Non Monetised Benefits

Specialism	Potential Benefit
Biodiversity	Taking into account the agreed mitigation, the Scheme is considered to have neutral impact on designated sites (statutory or non-statutory) or protected species. The proposed mitigation planting provides an overall biodiversity net gain and proposed enhancement measures increase opportunities for roosting bats, nesting birds, common species of reptiles and small mammals.
Journey quality	Improvements in journey quality for the high volume of users on the M621 through the increased public information provided by the enhanced overhead gantry signs and the time benefits generated by the Scheme.

Specialism	Potential Benefit
Severance	Pedestrian crossings should not be affected except the removal of access around Junction 2, for which there is an alternative underpass to cross the Junction and hence severance should not be affected. Severance will be improved at Junction 2a as the closure of the slip road and improved pedestrian crossings at the junction of Elland Road / Cemetery Road will support pedestrian movement in this area.

Value for Money

4.5.24 The assessment and monetisation of anticipated economic, environmental and social benefits associated with the Scheme has been undertaken in accordance with DfT guidance. The results of the Transport User Benefit Analysis (TUBA) assessment have been combined with the results of the accident analysis, the user impacts during construction and maintenance, the DMRB greenhouse gas and local air quality analysis and DMRB noise analysis to provide a combined Initial and Adjusted Present Value of Benefits (PVB) as shown in Table 4-7 above.

4.5.25 The PVB is then taken forward to be compared with the Present Value of Costs (PVC) to create a BCR in the Analysis of Monetised Costs and Benefits Table. The results are shown in Table 4-9 below which demonstrates an Adjusted BCR of 4.31

Table 4-9 Analysis of Monetised Costs and Benefits

Description	Benefits/Costs	Total (£m) (taken from Economic Appraisal Package Table 12-1 Core Scenario as 180619
		Core Scenario
Initial BCR	Present Value of Benefits (PVB)	113.803
	Present Value of Costs (PVC)	35.258
	Net Present Value (NPV)	78.545
	Initial Benefit Cost Ratio (BCR) (PVB/PVC)	**3.23**
Adjusted BCR (Including Reliability Benefits and Wider Economic Impacts)	Reliability Benefits (RB)	*3.482*
	Wider Economic Impacts (WEI)	*34.797*
	Adjusted PVB (including RB and WEI)	152.082
	Adjusted BCR (PVB/PVC)	**4.31**

Note: All values are calculated in 2010 market prices for each year over a 60yrs appraisal period, and then discounted back to 2010 present value year as per DfT guidance.

4.5.26 Note that the Adjusted BCR for the Scheme includes the benefits associated with journey time reliability, as well as those defined as wider economic benefits.

4.5.27 As detailed in Table 4-9 above, the Scheme demonstrates High Value for Money.

5 The Orders

5.1 The Planning Position

5.1.1 The Scheme will be delivered under the HA 1980 **(DD-C3)** and has been classified as an "alteration" due to the proposed closure of M621 Junction 2a. The identified development area is 3.87 hectares (ha) (excluding the existing carriageway). This does not exceed the threshold of 15 ha defined under the Planning Act 2008 **(DD-C4)** for a scheme of this type. The Scheme is therefore not a Nationally Significant Infrastructure Project and does not trigger the requirement for a Development Consent Order.

5.2 Consenting Strategy

5.2.1 The Scheme is a highway alteration, which will be consented under the HA 1980 (Part I, Section 4; Part II, Section 18 and Part V) for the following reasons:

- The closure of Junction 2a will require an SRO (Section 18 of HA 1980);
- Associated improvements are required to the surrounding local road network, managed by LCC, in relation to the Scheme. A formal Section 4 Agreement (under the HA 1980) will be required between Highways England and LCC to allow Highways England to carry out the works on the local road network (refer to Section 5.4 of this Statement for further details);
- Improvements to the strategic network will be carried out pursuant to Part V of the HA 1980 (Improvement of Highways);
- The works do not require express planning permission. They are either excluded from the definition of 'development' for these purposes or, as they are being delivered pursuant to the HA 1980, they are permitted development pursuant to Part 9 of Schedule 2 to the Town and Country Planning (General Permitted Development) (England) Order 2015 (the "GDPO") **(DD-C5)**;
- Section 57 of the Town and Country Planning Act 1990 (the "TCP 1990") **(DD-C6)** sets out that, subject to the provisions of that section, planning permission is required for any acts of 'development'. Section 55(1) of that Act provides the definition of development and Section 55(2)(b) excepts certain operations from being categorised as development, including 'the carrying out on land within the boundaries of a road by a highway authority of any works required for the maintenance or improvement of the road but, in the case of any such works which are not exclusively for the maintenance of the road, not including any works which may have significant adverse effects on the environment';
- Section 57 of the TCP 1990 also provides for planning permission to be granted by a development order. The GDPO sets out, in its Schedules 1 and 2, the developments to which planning permission is granted, known as permitted development rights (PDRs).

5.2.2 The following PDRs (identified within the GPDO, Schedule 2, Part 9) are considered applicable to the Scheme:

> "Class A – The carrying out by a highway authority
>
> (a) on land within the boundaries of a road, of any works required for the maintenance or improvement of the road, where such works involve development by virtue of Section 55(2)(b)(g) of the Act; or
>
> (b) on land outside but adjoining the boundary of an existing highway of works required for or incidental to the maintenance or improvement of the highway."
>
> Class B - The carrying out by the Secretary of State or a strategic highways company of works in exercise of the functions of the Secretary of State or the company under the Highways Act 1980, or works in connection with, or incidental to, the exercise of those functions."

5.2.3 These PDRs are applicable to the entirety of the Scheme, as all works are either within the highway boundary of the M621, local highway or immediately adjacent. This includes works within the existing motorway boundary and at Junction 2.

5.2.4 The final layout of the Junction 7 temporary construction compound, located immediately adjacent to the existing highway boundary, will be established during detailed design and following the confirmation period of the SRO for the Scheme, within the area identified on plan ref: HE551464-ATK-HAC-DR-CH-000007 (refer to Appendix C of this Statement). The proposed works to establish the compound can be undertaken using Highways England's PDRs, apart from access into the compound. The construction of the revised new access is therefore being sought within the SRO.

5.3 The Compulsory Purchase Order

5.3.1 A CPO is required to acquire land and rights necessary for the improvements and alterations described in the SRO and works at Junction 2, which will be undertaken using Highways England's PDRs.

5.3.2 The CPO for the Scheme is made under various Sections of the HA 1980. A summary of the powers in the HA 1980 relating to the Scheme is provided below:

- Under Section 239, Highways England as the strategic highways company, may acquire land required for the construction and improvement of the M621. Highways England, as a highway authority, may acquire land required for the construction of a highway, which is to become maintainable at the public expense. It may also acquire land which is required for the carrying out of works authorised by an order relating to the M621 under Section 18 (i.e. the SRO) or for the provision of facilities used in connection with the construction or maintenance of a trunk road. Highways England may also acquire any land required for the improvement of a highway, which it is authorised by the HA 1980 to carry out;
- Under Section 240, Highways England, as highway authority, may acquire land required for use in connection with the construction or improvement of a highway, or with the carrying out of works authorised by an order relating to a trunk road under Section 18 (i.e. the SRO) and the carrying out of a diversion or other works to watercourses;
- Section 250 allows Highways England, as the highway authority, to acquire rights over land, both by acquisition of those rights already in existence, and by the creation of new rights; and
- Section 260 allows Highways England, as highway authority, to override restrictive covenants and third-party rights where land already acquired by agreement is included in a CPO.

5.4 Section 4 Agreement

5.4.1 Improvements to certain aspects of the Scheme will be progressed through an agreement with LCC pursuant to Section 4 of the HA 1980, in order to provide legal permission for Highways England to undertake work on the local authority highway. The formal Section 4 Agreement with LCC will be in place following completion of the detailed design in 2020.

5.4.2 In the interim, a signed approval in principle to a Section 4 Agreement for works to the local highway has been agreed between Highways England and LCC, thus demonstrating support for the completion of the works proposed and commitment to their delivery. Works included in the Section 4 agreement are listed below:

- Improvements and alterations to the existing T-Junction of Cemetery Road and Elland Road, including the addition of a controlled pedestrian crossing at Elland Road; and signalising the T-Junction to enhance capacity. Journey time reliability and road safety will also be enhanced following the closure of the M621 Junction 2a, resulting in more westbound traffic travelling east on Elland Road from Junction 2 to the Junction with Cemetery Road;
- Realignment of the Brown Lane footpath on the north eastern side of Junction 2, following its removal to allow the provision of the free-flow lane from M621 eastbound to the A643 northbound;
- Widening Junction 2 circulatory roundabout from 2 to 3 lanes on the north and widening from two to four lanes to the south; and
- Improvements and alterations to the A643 north and south of the M621 as a result of the proposed works at Junction 2.

5.5 Side Roads Order

5.5.1 An SRO, under Section 18 of the HA 1980, provides consent for Highways England to 'stop up, divert, improve, lower or otherwise alter a highway that crosses or enters the route of the special road, or is, or will be otherwise affected by the construction or improvement of the special road'.

5.5.2 The SRO will allow:

- Stopping-up of the M621 Junction 2a westbound off-slip road, associated improvements to its junction with Cemetery Road and the creation of a new private means of access for Highways England to maintain the M621; and
- Improvements to the A61 (Wakefield Road), stopping-up of a private means of access from A61 (Wakefield Road) and the creation of a new private means of access into the proposed site compound area, at Junction 7, from the A61 (Wakefield Road).

5.6 Scheme works not included within the Orders

5.6.1 Improvement works at Junction 7 of the M621 were identified for early delivery during the Option Selection stage for the Scheme. These improvement works comprise widening of the eastbound off-slip at Junction 7, and an additional lane on the north eastern side of the roundabout. These works have been taken forward as a separate scheme and are therefore not included and assessed within this Statement. However, the Junction 7 Improvements are listed as a 'committed development' within EAR Chapter 14: Assessment of Cumulative Effects **(DD-B1)**.

6 The Case for Compulsory Acquisition at Junctions 2, 2a and 7

6.1 Introduction

6.1.1 Guidance published in February 2018 by the Ministry of Housing, Communities and Local Government titled 'Compulsory purchase process and the Crichel Down Rules' (the "CPO Guidance") **(DD-D1)**, states that authorities should look to use the most specific power available for the purpose in mind and only use a general power where unavoidable. Accordingly, the CPO at Junction 2 is made using the powers contained as set out below and as per Section 5.3 above.

6.1.2 The CPO is made, as detailed in Section 5.3 above, under Section 239, 240, 250 and 260 of the HA 1980, which enables Highways England to acquire land compulsorily as follows:

> "a highway authority may acquire land which is required for use by them in connection with the construction or improvement of a highway, or with the carrying out of works authorised by an order relating to a trunk road under section 14 above or an order under section 18 or section 108(1) above".

6.1.3 The CPO Guidance provides guidance to acquiring authorities on the use of compulsory purchase powers. Highways England has taken the guidance into account in the making of the CPO.

6.1.4 In using the powers of compulsory purchase contained in the HA 1980 and the Acquisition of Land Act 1981 **(DD-C7),** Highways England is satisfied that the acquisition of the land is required to facilitate the construction, operation and maintenance of the Scheme. Highways England is cognisant of the need for a compelling case in the public interest for a CPO, as set out in the CPO Guidance at paragraph 2:

> *"Acquiring authorities should use compulsory purchase powers where it is expedient to do so. However, a compulsory purchase order should only be made where there is a compelling case in the public interest"*

6.1.5 and paragraph 12:

> *"A compulsory purchase order should only be made where there is a compelling case in the public interest".*

6.1.6 It is considered that a compelling case exists here, as set out in Section 6.2 of this Statement, and the requirement for the CPO of each of the plots is provided in Table 6-1.

6.1.7 Highways England is seeking compulsory acquisition powers with regards to 3.87 ha, of which 3.32 ha is required on a temporary basis and 0.56 ha on a permanent basis with the addition of 0.01 ha where permanent future rights are required (see Appendix D of the Planning Statement for a breakdown of these areas) **(DD-A6)**.

6.1.8 Highways England has sought to minimise the extent of compulsory acquisition, including the acquisition or creation of rights instead of outright acquisition wherever possible, whilst enabling the objectives of the Scheme to be met within the context of the constrained nature of the area in which the Scheme sits. Further to this approach, an easement is pursued for the regrading of an existing landscape bund on LCC land at the former Matthew Murray School Site, on the eastern side of the A643 southbound approach to Junction 2. Four options have been considered for the Scheme all of which would have required land acquisition in order to implement the improvements. Further details can be found in Chapter 2 of the Planning Statement **(DD-A6)** and Chapter 3 of the EAR **(DD-B1)**. All options focussed on increasing the effectiveness of the existing motorway, with a focus on providing the required improvements with minimal land take.

6.2 Compelling Case in the Public Interest

6.2.1 This part of the Statement sets out why compulsory purchase powers have been sought in the CPO and are justified to enable the Scheme to be implemented. It explains why Highways England considers such powers to be necessary and proportionate, and why there is a compelling case in the public interest for compulsory acquisition in line with paragraphs 2 and 12 of the CPO Guidance.

Why the CPO is necessary and proportionate

6.2.2 In determining the extent of the compulsory acquisition powers proposed in the CPO, Highways England has had regard to the requirements of the relevant legislation and to the advice in the CPO Guidance. Highways England has consulted all persons whose land is directly impacted by the Scheme, and those whose property interests are directly impacted by the execution of the works. Highways England has sought to acquire interests in the land by agreement, wherever practicable. The purpose for which each part of the land is required is set out in Table 6-1, and the status of negotiations with affected landowners and occupiers for the acquisition of their land interests is set out in Appendix B to this Statement.

6.2.3 Where the land ownership details for plots of land is unknown, site notices have been posted around the immediate vicinity of the relevant plots of land for a period of 28 days, to give any landowners an opportunity to declare their interest in the land (see Chapter 4 of the Statement of Reasons for details of the relevant land plots) **(DD-A5)**.

6.2.4 Highways England is therefore content that the scope of the powers sought and the extent of the interests in the land to be acquired by compulsory acquisition are required for the Scheme and are the minimum necessary that will allow Highways England to construct, operate and maintain the Scheme.

Why there is a compelling case in the public interest

6.2.5 The need for and benefits of the Scheme are set out throughout this Statement but particularly in Chapter 2, as well as in other accompanying documents which have been produced for the Scheme, including the Planning Statement **(DD-A6)**, Statement of Reasons **(DD-A5)** and Chapter 2 of the EAR **(DD-B1)**. Chapter 2 of this Statement also indicates how the Scheme meets its key objectives. Further details of the Scheme's wider alignment with planning policy is provided in Section 6.3 of this Statement and further detailed in Chapter 4 of the Planning Statement **(DD-A6)**. A summary of the key benefits of the Scheme which provide a compelling case in the public interest is as follows:

- The Scheme will increase the capacity of the M621 and improve journey time reliability – there is currently an issue of significant congestion during peak AM and PM periods, and this is predicted to worsen over time without intervention, due to planned future development in the area.
- Safety for road users of the M621 corridor will be improved – the motorway currently performs relatively poorly in terms of slight personal injury collisions (PICs) compared with the national average. A risk analysis has shown that the Scheme is predicted to achieve a 10% reduction in the rate of road accidents.
- The Scheme is vital in facilitating LCC's development plans, by significantly improving access to and from the city. Without the Scheme, LCC's aspirations to build 10,200 new homes and create 57,000 jobs in the city centre by 2031 would be significantly constrained. This would have a negative impact on the city's economic growth and would reduce opportunities to access new homes and jobs for people wanting to live and/or work in the city.
- The Scheme provides the best value for money of the four options considered, which is important as it will be funded entirely through public money from the Government.

6.2.6 Highways England has considered the human rights of the individuals affected by the compulsory acquisition powers (refer to Section 6.5 of this Statement). A limited amount of land is proposed to be taken for the Scheme, as identified in Section 6.1 of this Statement. The design process looked to decrease land take, as much as possible, and avoid any acquisition of residential properties. It is satisfied that there is a compelling public interest case for compulsory acquisition of the limited amount of land needed and that the significant public benefits arising from the Scheme will outweigh the harm to those individuals.

6.2.7 Without the grant of compulsory acquisition powers, Highways England considers that it will not be possible to construct, operate or maintain the Scheme, or realise the public benefits arising from it.

6.2.8 As described above, there is a compelling case in the public interest for the compulsory acquisition powers, sought by Highways England, in the CPO. The exercise of the compulsory acquisition powers that are sought, is shown throughout this Statement and the Statement of Reasons **(DD-A5)**, to be necessary and proportionate to the extent that interference with private land and rights is required.

6.3 Local, Regional and National Planning and Transport Policies

6.3.1 The following section provides a summary to the relevant local, regional and national planning and transport policies, and assesses the Scheme's alignment with the policy context within these documents.

National and Regional Transport Policy

6.3.2 The national and regional transport policy context of the Scheme demonstrates the role of transport infrastructure as a driver of economic growth and quality of life. The Road Investment Strategy (RIS) **(DD-F1)** is referenced in Transport for the North's Strategic Transport Plan **(DD-E1)**, which seeks to drive economic growth and quality of life in the north of England, and the Scheme is identified as 'committed' within the RIS.

6.3.3 Regional policy also emphasises the importance of the Scheme. The West Yorkshire Combined Authority (WYCA) Transport Strategy **(DD-E4)** references the Scheme under the delivery of the Strategy's objectives, and the Strategic Economic Plan **(DD-E2)** highlights Leeds as a key driver of the regional economy, with the City Centre and Aire Valley Local Area Action Plan (AVLAAP) **(DD-E3)** identified as key priorities for job growth and infrastructure investment.

6.3.4 The Scheme will support these objectives as follows:

- Providing increased highway capacity on the M621 carriageway through the conversion of the hard shoulder to a running lane between Junctions 2 and 3;
- Improving the flow of traffic on the main carriageway through technology provision including variable advisory speed limits and live updates on highway congestion and incidents;
- Enhancing the integration between the local and strategic transport networks at Junctions 2 and 3, helping to decrease journey times and reduce congestion for traffic travelling to and from the City Centre; and
- Improving road safety through enhancements to Junction 2, the carriageway layout, pedestrian routes, highway technology and signage, and through the closure of Junction 2a.

6.3.5 By increasing integration between the M621 and the Inner Ring Road, the Scheme will enable the redirection of traffic away from Leeds City Centre, allowing development sites to come forward whilst improving journey times along the M621.

6.3.6 Further details of the transport policy related to the Scheme can be found in Chapter 4 of the Planning Statement **(DD-A6)**.

Scheme Alignment with Planning Policy

6.3.7 The National Networks National Policy Statement (NN NPS) **(DD-D3)** requires that the economic, social and environmental impacts of highway developments are considered. The Scheme will help to enable economic growth through providing further capacity on the strategic road network to support additional demand from planned and committed development sites, including housing sites. A landscaping scheme will be provided to replace trees and vegetation removed as part of the development.

6.3.8 The National Planning Policy Framework (NPPF) **(DD-D2)** promotes road safety and taking opportunities to utilise changing transport technology. The introduction of technology (specifically Motorway Incident Detection and Automatically Signalling also known as MIDAS) throughout the Scheme will enable drivers to be better informed and receive advance warning of incidents or congestion, with the prediction of reducing the rate of accidents by 10%. The Scheme will provide additional capacity on the M621 carriageway and at Junction 2, which will aid LCC's plans to accommodate more traffic on the M621 and Leeds Inner Ring Road.

6.3.9 Local planning policy objectives support infrastructure development that serves local communities, supports economic activity (LCC Core Strategy Spatial Policy 1) and an integrated transport network (Core Strategy Spatial Policy 11) **(DD-E7)**. The Scheme will provide an infrastructure enhancement to an area of high population, as well as economic activity in Leeds.

6.3.10 The saved policies of the Unitary Development Plan Review 2006 (saved policies GP5 and LD2) **(DD-E8)** set out a series of principles for development, including highways. The Scheme has been refined to minimise environmental impacts and harm to amenity, as set out in the EAR for the Scheme. Mitigation measures have been incorporated in the Scheme to address impacts, such as landscape proposals.

Economy

6.3.11 National, regional and local planning policy fully supports transport schemes which enable sustainable economic growth and economic resilience. The NPPF includes policy priorities to support and enable economic growth, while the Leeds City Region Strategic Economic Plan includes a priority of delivering infrastructure for growth and emphasises the importance role which Leeds City Centre plays in the regional and national economy.

6.3.12 In line with this policy context, the Scheme will help to enable the achievement of the economic objectives for Leeds and the wider region. Upgrading the M621 and its integration with the surrounding network will help to increase the capacity and efficiency of the City's network, enhancing the attractiveness of the area to investors and providing further infrastructure capacity to accommodate growth.

6.3.13 At the local level, LCC Core Strategy 2014 Spatial Policy 1 focuses on supporting a successful local economy, while Policies CC1 and CC2 set out goals to accommodate a substantial amount of additional development in the City Centre as well as new public spaces.

6.3.14 The Scheme is a catalyst for LCC's transport strategy **(DD-E5)** as it will provide additional highway capacity to accommodate additional trip generation which in turn will support the City and surrounding area's wider growth and regeneration objectives. The reduction of congestion and associated travel times has been demonstrated to be beneficial to businesses with wider economic impacts of the Scheme calculated to be approximately £35 million.

6.3.15 A detailed assessment of planning and economic policy related to the Scheme can be found in Chapter 4 of the Planning Statement **(DD-A6)**.

6.3.16 Highways England has been successful in gaining an exemption certificate from the Secretary of State for Housing, Communities and Local Government in relation to the requirement for Common Land, Open Space and Allotment exchange land **(DD-B7)**. The Scheme has also received a letter of no objection from Sport England, with regard to the partial acquisition of the previous Matthew Murray playing fields (see Appendix C of the Planning Statement) **(DD-A6)**.

6.4 Acquisition of Land and Rights by Agreement

6.4.1 Highways England is aware of the requirement in paragraph 2 of the CPO Guidance to take reasonable steps to acquire all of the land and rights included in the CPO by agreement.

6.4.2 Highways England has sought to engage with all affected landowners and occupiers with a view to acquiring their interests by agreement. This has included the following methods:

- Meetings and correspondence with LCC and LUFC on an ongoing basis, including face to face meetings on 4 October 2018, and 14 February 2019, 12 March 2019, and 12 May 2019. Further consultation and meetings held post Orders publication on 18 October 2019, 19 November 2019 and 13 December 2019; and
- Meetings with The Prudential Assurance Company Ltd affected by the Scheme as property, which they lease to others, will be required to accommodate the Scheme due to highway widening within their land, north west of the Junction 2 roundabout. Face to face meetings were undertaken with Prudential on 14 February and 14 May 2019, and ongoing written/electronic and verbal correspondence has taken place since the Orders were published.

6.4.3 The current status of such negotiations is set out in Appendix B of this Statement. Where appropriate, the negotiations are considering agreements to use land for a specified, temporary period rather than permanent acquisition, where required.

6.4.4 At the same time, Highways England notes that the CPO Guidance recognises that although compulsory purchase is intended as a last resort to secure the assembly of all the land needed for the implementation of schemes, if an acquiring authority waits for negotiations to break down before starting the compulsory purchase process, valuable time will be lost. Accordingly, the CPO Guidance recognises at paragraph 2 that it may often be sensible for the acquiring authority to plan a compulsory purchase timetable as a contingency measure and initiate formal procedures (i.e. progress the making of an order). The CPO Guidance notes that this will help to make the seriousness of the authority's intentions clear from the outset, which in turn might encourage those whose land is affected to enter more readily into meaningful negotiations.

6.4.5 Whilst negotiations are ongoing, Highways England is mindful that it is under a duty to acquire land at best value and that it is required to deliver the Scheme within a specified timescale. It has concluded that it may not be possible to acquire all land interests necessary to deliver the Scheme within this timescale. In addition, some plots are in unknown ownership and cannot be acquired by agreement (see Chapter 4 of the Statement of Reasons) **(DD-A5)**. Highways England has therefore concluded that the Scheme is unlikely to be capable of being delivered without the need for a CPO.

6.5 Interference with Human Rights

6.5.1 As set out in Chapter 5 of the Statement of Reasons, The Human Rights Act 1998 **(DD-C8)** incorporated into domestic law the provision of the European Convention on Human Rights ("ECHR"). The ECHR includes provisions in the form of Articles, which aim to protect the rights of the individual. The relevant Articles can be summarised as follows:

- Article 1 of The First Protocol protects the rights to peaceful enjoyment of possessions. No one can be deprived of their possessions except in the public interest;
- Article 6 entitles those affected by compulsory powers to a fair and public hearing; and
- Article 8 protects the right of the individual to respect for private and family life, home and correspondence. Interference with this right can be justified if it is in accordance with law and is necessary in the interests of, among other things, national security, public safety or the economic wellbeing of the country.

6.5.2 Section 6 of the Act prohibits public authorities from acting in a way which is incompatible with the rights protected by the ECHR.

6.5.3 Paragraph 12 of the CPO Guidance sets out the approach to the issue of human rights:

> *"An acquiring authority should be sure that the purposes for which the compulsory purchase order is made justify interfering with the human rights of those with an interest in the land affected. Particular consideration should be given to the provisions of Article 1 of the First Protocol to the European Convention on Human Rights and, in the case of a dwelling, Article 8 of the Convention."*

Compliance with the Convention

6.5.4 Highways England recognises that the Scheme may have an impact on individuals but considers that the significant public benefits that will arise from the Scheme, as set out in this Statement, outweigh any harm to those individuals. The CPO strikes a fair balance between the public interest in seeing the Scheme proceed, which is unlikely to happen in the absence of the CPO, and the private rights, which will be affected by the compulsory acquisition.

6.5.5 In relation to both Article 1 and Article 8, the compelling case in the public interest for the compulsory acquisition powers included within the CPO has been demonstrated. The land over which compulsory acquisition powers are sought, as set out in the CPO, is the minimum necessary to ensure the delivery of the Scheme. The Scheme has been designed to minimise harm whilst achieving its key objectives. In this respect the interference with human rights is both proportionate and justified.

6.5.6 In relation to Article 6, Highways England is content that the proper procedures have been followed for both the consultation on the Scheme and in determining the compulsory acquisition powers included within the CPO. Throughout the development of the Scheme, Highways England has given persons with an interest in the land an opportunity to comment on the proposals through public consultation events, face to face meetings and email correspondence.

6.5.7 Highways England has taken into consideration LCC's requests to ensure proposed works on the north east corner of Junction 2 are outside the previous playing pitch boundary at the Former Matthew Murray School site. Highways England has sought to minimise the extent of land required in this area to support the future use of the site as a football training facility proposed by LUFC. Consultation has been undertaken with Sport England who are a statutory consultee given that the Scheme will require minor land take within the Protected Playing Pitch designation. Sport England have raised no objection to the Scheme as identified in Appendix C to the Planning Statement **(DD-A6)**.

6.5.8 Highways England has successfully gained a Land Exchange Exemption Certificate from the Secretary of State for Housing, Communities and Local Government, confirming that the small area of land within the Playing Pitch designation does not need to be replaced elsewhere, after it is acquired for the Scheme as the land is to be taken for highway widening and that the giving in exchange of other land is unnecessary. **(DD-B7)**. See Section 7.1 for further information.

6.5.9 Replacement planting is to be incorporated into the design of the north western corner of Junction 2 to retain screening where possible between the widened carriageways and Maple Park. Highways England will continue to work with LCC and representatives of Maple Park (units on the north west of Junction 2) through the confirmation of the CPO to pursue acquisition through land negotiations rather than compulsory purchase.

6.5.10 Furthermore, any individuals affected by the CPO were given the opportunity to submit representations to the Secretary of State during the period specified in the notice advertising the making of the CPO (a copy of which was served on all persons affected by the CPO). The Secretary of State has informed those that have submitted representations and objections that a Public Inquiry is to be held which will enable those affected by the Orders to have a fair and public hearing. Additionally, if the Orders are confirmed, a person aggrieved may challenge that decision by way of statutory challenge in the High Court if they consider that the grounds for doing so are made out.

6.5.11 Accordingly, it is considered that those affected by the CPO are entitled to a fair and public hearing.

6.6 Public Sector Equality Duty

6.6.1 As set out in Chapter 5 of the Statement of Reasons **(DD-A5)**, The Equality Act came into force on 1st October 2010 and provides a legal framework to protect the rights of individuals and advance equality of opportunity for all. Section 149 of the Act intends for the public sector to drive improvements in equality and this is summarised within the Statement of Reasons.

6.6.2 Highways England has published their own corporate objectives within 'The Highways England Public Sector Equality Duty Objectives 2016 – 2020 and Annual Progress Report 2015 – 2016'. The overarching objective of this document is that:

> *"Highways England will embed the principles of equality, diversity and inclusion into all areas of their business, driving real change in how we work with their customers and communities, their supply chain and their employees".*

6.6.3 Highways England has complied with this duty by preparing an Equality Impact Assessment (EqIA) for the Scheme to ensure it has due regard to these obligations when planning the works. The data gathered as part of the screening exercise for the EqIA demonstrates that there are a range of considerations that may potentially impact on protected characteristic groups. The groups cover sex, age, disability, ethnicity and race, religion or belief and pregnancy/maternity.

6.6.4 The Scheme incorporates upgrades to the existing T-Junction between Elland Road and Cemetery Road. These works include the provision of a new controlled pedestrian crossing at this location, to mitigate any severance impacts as a result of further traffic using this junction. The works will also reduce severance in the wider area through reducing the amount of traffic using the area as a through route, as a result of the closure of the Junction 2a westbound off-slip. A Traffic Management Plan has been produced in draft and will be updated during detailed design by the Principal Contractor, to ensure that access routes for different groups is managed during the construction phase. Public engagement has been carried out to raise awareness of the Scheme both online and at drop-in events, to assist with journey planning and with a view to ensuring that disruption is minimised to all groups during the construction and operational phases of the Scheme.

6.7 Implementation of the Scheme

Timing of the Orders and Construction of the Scheme

6.7.1 The Scheme is due to start construction in 2020/21, with construction due to be completed and the Scheme opened to traffic by 2022.

6.7.2 The confirmation of the Orders during 2020 is important to ensure that work on the Scheme can start in full in 2020/21 and that construction is not delayed due to the necessary land interests not having been secured. Although Highways England already owns some of the land, it is necessary for it to secure the ability to acquire, or create rights over, all the land so that there is no impediment or delay to construction.

6.7.3 Highways England therefore considers that there are sufficiently compelling reasons for the powers to be sought at this time.

Funding

6.7.4 Highways England has been commissioned by the Department for Transport to deliver the Government's first Road Investment strategy (RIS 1). Announced by the Government in December 2014, RIS 1 commits to investment in England's motorways and major roads (the Strategic Roads Network) during the 2015 to 2020 road period. It was the initial step in a long-term programme to improve England's motorways and major roads and outlined a multi-year investment plan including over 100 major schemes funded by £15.2 billon of public money.

6.7.5 The budget allocation within RIS 1 for the Scheme is £42.6 million and will be funded without any third-party contributions. This figure includes all costs for the payment of compensation for the compulsory acquisition of land, interests in land and rights over land, potential claims under Part 1 of the Land Compensation Act 1973, Section 10 of the Compulsory Purchase Act 1965. It also includes costs for any successful blight notices. Highways England is confident that this figure is sufficient to deliver the Scheme and comply with all statutory responsibilities as to the payment of compensation costs.

6.7.6 Further details and information on RIS 1 can be found on the government's website, at: https://www.gov.uk/government/publications/road-investment-strategy-for-the-2015-to-2020-road-period

6.8 Use of the Land

The Land

6.8.1 Highways England is seeking compulsory acquisition powers in respect of the certain land interests. The total amount of land required comprises 3.87 ha, of which 3.32 ha is required on a temporary basis and 0.56 ha on a permanent basis with the addition of 0.01 ha where permanent future rights are required (See Appendix D of the Planning Statement for a breakdown of these areas) **(DD-A6)**. Highways England will offer the temporarily required land back to the owners following construction of the Scheme. The case for compulsory purchase of each of the relevant land interests is set out below.

Junction 2 Improvements (CPO plots beginning with 1/)

6.8.2 At Junction 2 of the M621, the works affect land outside of the current highway boundary. The land is subject to the CPO identified to the north east and north west of the Junction. An engineering plan showing the proposed works is included at Appendix D of this Statement.

6.8.3 On the north western side of Junction 2 a free flow lane would be created between the eastbound off-slip road of Junction 2 and the A643 northbound. The existing narrow slip road and roundabout at the Junction will be widened by five metres at the widest point to provide the new dedicated free flow lane between the eastbound off slip and the A643 northbound to provide for the high traffic demand going into Leeds. These works will involve the acquisition of land which currently forms part of a verge containing trees providing intermittent screening between the units at Maple Park and the Junction 2 roundabout. This acquisition also provides for an appropriate visual splay in this area to meet the safety requirements for the standard of road.

6.8.4 The land to be permanently acquired at this location would enable construction of the free flow lane and partial replacement of the trees and vegetation for screening between the Junction and the adjacent units at Maple Park.

6.8.5 On the north eastern side of Junction 2, the A643 southbound approach to Junction 2 would be widened from two lanes to three, and the M621 Junction 2 eastbound on-slip would be widened. The width of the A643 will be widened by five metres at the widest point to enable three lanes to be provided on the A643 southbound approach to Junction 2.

6.8.6 The widening of the A643, will involve encroachment into the adjacent verge, removal of existing trees and slightly reducing the height of the existing landscape bund from its existing height of 3.4m to 2.2m. Following the removal of existing trees, and to retain a landscape buffer between Junction 2 and the area adjacent which is designated as Green Space and a Protected Playing Pitch on the north eastern side of the Junction, the bund will be replanted with native trees and a two metre high close boarded fence along the top of the bund.

6.8.7 As stated above, Highways England has an approval in principle from LCC to enter into an agreement to enable works to be undertaken by Highways England on the local highway network pursuant to a Section 4 of the HA 1980 (refer to Section 5.4 of this Statement for further details).

Junction 2a Closure (CPO plots beginning with 2/)

6.8.8 Permanent acquisition of land is included in the CPO, which currently forms the Junction 2a slip road. This is because without the CPO and following the stopping up of this Junction, the land would automatically revert back to its historical ownership prior to the creation of the highway.

6.8.9 However, following completion of the Scheme, Highways England will need to retain ownership of this area for future safe access to maintain the modified highway and new infrastructure. This alternative maintenance access is due to the requirement to convert the current hard shoulder into a running lane between Junctions 2 and 3. Parts of the old slip road and embankment of Junction 2a will also be used for compensatory planting and to improve wildlife habits.

Junction 7 Temporary Construction Compound (CPO plots beginning with 3/)

6.8.10 Land south east of Junction 7, enclosed by the M621 to the west, A61 to the east and A639 to the south, is required to accommodate a temporary construction compound to support the construction of the Scheme. Following a site search of land available in the area the Junction 7 site was identified as suitable area available within the required construction timeframe of the Scheme, due to the size of site required (3 ha) and close proximity to the M621 and local highway network. Improvements will be made to the compound entrance to ensure that there is a safe access / egress point from the A61 on the eastern side of the compound site. As this land is only needed on a temporary basis Highways England intends to reinstate the land and offer it back to the owner (LCC) following completion of the Scheme. It is the intention of Highways England, where possible, to acquire a temporary use licence for this area.

Justification for each plot of land within the CPO

6.8.11 The justification for each area of land (as described above) is set out in Table 6-1 below.

6.8.12 Where the 'temporary acquisition of land' is referenced, this means that Highways England currently anticipates that it will require the use of the land for a temporary period only. If the land cannot be accessed and used by agreement, the land would then need to be acquired on a permanent basis through the CPO. Highways England will then offer the land back to the existing landowners at the end of the required period if it is surplus to requirements.

Table 6-1 Justification for the acquisition of each land plot

CPO Plot	Reason for Compulsory Purchase Acquisition
1/1a, 1/1b, 1/1c, 1/1d, 1/1h, 1/1i, 1/2a, 1/2b, 1/3 & 1/3a	Permanent acquisition of land to re-align the existing footway and create a free flow lane and associated visibility splay between the M621 Junction 2 eastbound off slip and the A643 northbound dual carriageway.
1/1, 1/1e, 1/1f, 1/1g & 1/2	Temporary acquisition of land to enable construction of the re-aligned footway and create a free flow lane and associated visibility splay between the M621 Junction 2 eastbound off slip and the A643 northbound dual carriageway.
1/4	Permanent acquisition of land to widen the A643 southbound dual carriageway approach to the M621 Junction 2 roundabout.
1/4a	Permanent acquisition of rights to enable maintenance of a highway fence adjacent to the A643 southbound dual carriageway.
1/4b	Temporary acquisition of land to enable construction of the widened A643 southbound dual carriageway approach to the M621 Junction 2 roundabout.
2/5, 2/5a, 2/5b, 2/5c, 2/5d, 2/5e, 2/5f, 2/5g, 2/5h, 2/6, 2/6a, 2/6b, 2/7, 2/7a, 2/7b, 2/7c, 2/8, 2/9, 2/9a, 2/9b, 2/10, 2/10a, 2/10b, 2/10c, 2/11, 2/11a and 2/12	Permanent acquisition of land to retain access for highway maintenance following stopping up of the M621 Junction 2a westbound off-slip road.
3/13 & 3/13a	Temporary acquisition of land to enable construction and provide a temporary site compound on land south east of M621 Junction 7 to support the construction of the Scheme.

6.9 Other Consents and Impediments

6.9.1 Other standard minor consents, which in the view of Highways England would not cause impedance to the Scheme construction, would also be required such as but not limited to; temporary Traffic Regulation Orders; Section 61 Noise agreements (Control of Pollution Act 1974) and water discharge consents for highway drainage or working in the vicinity of Coal Measure requiring dewatering activities.

6.9.2 Highways England does not consider that the Scheme is likely to be obstructed by any physical or legal impediments to implementation.

7 Special Considerations

7.1 Common Land, Open Space and Allotments

7.1.1 The land subject to the CPO on the north eastern side of Junction 2 (the Former Matthew Murray School site) forms part of an area designated as an urban green corridor and Protected Playing Pitch in adopted planning policy, as shown on the Leeds UDP Policies Map 2018 **(DD-E8)**. The development of open space normally requires the provision of exchange land, so as not to create a deficiency in local public open space. However, Highways England has successfully applied to the Secretary of State for Housing, Communities and Local Government for an exemption certificate as the land is to be taken for highway widening and that the giving in exchange of other land is unnecessary **(DD-B7)**.

7.1.2 The open space to be acquired for highway widening, owned by LCC, will require permanent and temporary acquisition. The total area of land required is identified within the CPO, and totals 1,955 square metres consisting of slip verges, trees and embankments. The Scheme requires approximately 684 square metres of this land permanently, 111 square metres of land required for new rights for future access to maintain fencing and 1,160 square metres of land temporarily to construct the works. These areas are shown in the CPO as Plots 1/4, 1/4a and 1/4b respectively.

7.1.3 The playing pitch has not been in formal use since the demolition of the School in 2007, does not currently accommodate competitive play and is in a state of disrepair. The Site also has a perimeter fence which discourages public use. Recent consultation with Sport England confirmed that they have no objection to the land being used for the Scheme, as the pitch has not been used for more than five years (see Appendix C of the Planning Statement) **(DD-A6)**.

7.1.4 The formal Notice of Intention to grant an exemption certificate was published on 12 December 2019 with an objection period ending on 10 January 2020 **(DD-B6)**. No parties made any objection or representation in respect of the proposed exemption. Therefore, the Secretary of State for Housing, Communities and Local Government has granted an exemption certificate which was received by Highways England on 23 January 2020. The formal public notice of the certificate was published on 13 February 2020 and will trigger a 6-week High Court challenge period for any parties to challenge its validity on the ground that there has been a failure to comply with any relevant statutory requirement **(DD-B7)**. It is expected that the High Court period will pass without challenge and therefore exchange land will not be required.

7.2 Statutory Undertakers' apparatus and land

7.2.1 In order to mitigate the impact of the Scheme on the undertakings of impacted Statutory Undertakers Highways England has identified a number of diversions of apparatus, and protective measures to be taken in respect of apparatus to be retained in situ, which will prevent any disruption to those undertakings. Where applicable, arrangements will be made to divert or protect the apparatus under the provisions of the New Roads and Street Works Act 1991 (NRSWA) **(DD-C9)**.

7.2.2 In addition to the non-statutory public consultation and the statutory representation period, engagement has taken place with the Statutory Undertakers to determine likely diversion requirements and budget diversion estimates as part of the standard NRSWA process. Highways England has identified likely diversions to Northern Powergrid (Yorkshire) plc, Yorkshire Water Services Ltd (waste & clean), British Telecommunications Openreach and Northern Gas Networks Ltd. An objection to the Orders was submitted by Northern Powergrid (Yorkshire) plc which was withdrawn prior to the end of the representation period, details of which are provided in Chapter 9 of this Statement.

8 Summary of Case

8.1.1 This Statement demonstrates that that there is a clear case for the Scheme, which is grounded in local, regional and national planning policy.

8.1.2 The Scheme is essential to the effectiveness of the local and strategic road networks and supports LCC's aspirations to enhance the economy, environment and quality of life in Leeds City Centre. The Scheme would bring benefits to those travelling through the region as well as the communities surrounding the route.

8.1.3 The content of this Statement can be summarised as follows:

- The Scheme comprises the online improvement of the M621 from Junctions 1 to 7, including alterations and improvements to key junctions, technological enhancements to the highway and associated improvements to sections of the local road network at the interface between the local and strategic road networks;
- The Scheme will enhance the capacity of the M621 and the flow of traffic whilst reducing delays, improving road safety and journey time reliability;
- The Scheme meets the initial objectives of the Scheme to decrease congestion, increase capacity and improve journey reliability, whilst minimising environmental impact and incorporating environmental mitigation measures;
- The consenting strategy for the Scheme requires a Section 4 Agreement which has been approved in principle by LCC for working on local authority highways, an SRO for stopping up of Junction 2a and stopping up and creation of new private means of access as well as a CPO to acquire the necessary land and new rights, which both await confirmation as part of the statutory processes;
- National, regional and local transport policy support the delivery of the Scheme, which will help to enable economic growth and enhancements to quality of life, whilst creating high quality environments;
- The Scheme will play a crucial role in supporting LCC's plans to better integrate traffic between the M621 and Inner Ring Road to help to enable their development plans to reduce traffic through the City Centre;
- Option A was chosen as it was determined to have the least impact, (compared to the alternatives examined) with regard to land take and associated environmental impacts, and offered the best value for money against the available budget; and
- A landscaping scheme is embedded within the wider Scheme design to mitigate and enhance the appearance of the M621. Plans for the Scheme ensure that the loss of trees and vegetation is reduced as much as possible, with replacement and additional planting provided.

8.1.4 The EAR concluded that the potential significant, adverse effects of the Scheme are either temporary and/or localised. Therefore, the overall proposed Scheme is not expected to result in long term, significant environmental effects.

8.1.5 The Secretary of State for Housing, Communities and Local Government received no objections from any parties in relation to the use of a small amount of Open Space (Protected Playing Pitch – CPO Plots 1/4, 1/4a & 1/4b) for use by the Scheme and has issued a certificate that exempts Highways England from having to provide replacement land. Sport England also responded to the previous consultation to confirm that it has no objection to the Scheme, specifically the works at Junction 2 where the land classed as a Protected Playing Pitch is required. The consultation process included LCC (as the landowner) and LUFC as a stakeholder, currently looking to develop the Matthew Murray Site for a training facility.

8.1.6 Highways England has considered the human rights of the individuals affected by the compulsory acquisition powers. It is satisfied that there is a compelling public interest case for compulsory acquisition, to be necessary and proportionate to the extent that interference with private land and rights is required and that the significant public benefits arising from the Scheme will outweigh the harm to those individuals. Without the grant of compulsory acquisition powers, Highways England considers that it will not be possible to construct, operate or maintain the Scheme, or realise the public benefits arising from it.

8.1.7 It is considered that the benefits of the Scheme clearly outweigh any potential negative impacts and there is a strong public interest in favour of the development.

9 Objections, Representations and Supporters

9.1 Summary

9.1.1 The Orders were published on 31 October 2019 and the statutory objection period (six weeks) concluded on 13 December 2019. By the end of the objection period only two objections had been received (both statutory), consisting of an objection from Northern Powergrid (Yorkshire) plc (NPG) and one from The Prudential Assurance Company Limited. There is one remaining statutory objector as set out in the relevant date letter from the Department for Transport dated 10 January 2019.

Statutory objectors

- Northern Powergrid (Yorkshire) plc *[objection withdrawn]*
- The Prudential Assurance Company Limited

Non-Statutory Objectors, Representations and Supporters

- No letters were received

9.1.2 A summary of the two objections received in response to the Orders and a summary of Highways England's response is set out below.

9.1.3 Detailed responses to the objections will be provided in the various Proofs of Evidence, as set out in Chapter 10 of this Statement.

9.2 Statutory Objections – Statutory Undertakers

Northern Powergrid (Yorkshire) plc *[Objection Withdrawn]*

9.2.1 Northern Powergrid (Yorkshire) plc (NPG) is a statutory undertaker supporting electricity transmission. NPG submitted a holding objection pending further consultation given the apparatus in the vicinity of the Scheme and requested confirmation that they will be able to carry out their statutory functions no less efficiently than previously and at no additional cost or costs will be reimbursed.

Highways England's Response

9.2.2 During the Preliminary Design stage contact was made with NPG to identify and document the existing utilities as part of the standard NRSWA process. Following various requests for budget diversion estimates further responses provided by NPG indicated that diversions may be required. These will be formally agreed with NPG through the detailed design estimate NRSWA process at a later stage.

9.2.3 Highways England responded to NPG identifying that Highways England adheres to DMRB guidance (Volume 6, Section 2, Part 2, SA 10/05) and the standard utility processes within NRSWA 1991 and has provided written assurances as to the costs and diversion processes.

NPG Objection Withdrawn

9.2.4 Written confirmation from NPG accepting Highways England's response, and confirming that they are content with the proposed solutions in respect of their apparatus, was received on 5 December 2019 by the Secretary of State. Confirmation of the withdrawal of this objection was received by Highways England on 6 December 2019.

9.3 Statutory Objections – Landowners Directly Affected

The Prudential Assurance Company Limited

9.3.1 The Prudential Assurance Company Limited (Prudential) is the landowner of the business units, Maple Park No's 1, 3 & 4 on the north west corner of M621 Junction 2. Land owned by Prudential is included within the CPO (identified as CPO Plots 1/1 to 1/1i & 1/3 and 1/3a), which is required for the free flow lane between the M621 eastbound off slip road to the A643 northbound dual carriageway. Prudential has objected to both the CPO and the SRO and it has raised objection specifically on four points, in relation to the effect the Scheme will or could have on the property it owns. A summary of the objection points 1 to 4 are:

- 1) Environment: Prudential believe that the Scheme will damage the environment as a result of increases in pollution as well as concerns on noise, vibration, air quality and landscape removal and Prudential requests alternative designs to mitigate these effects;
- 2) Safety: Prudential believe that the Scheme will bring fast moving traffic closer to their property and Prudential requests protective barriers or reduced speed limits to mitigate these effects;
- 3) Tenant Use: Prudential believe that the Scheme will have an adverse impact on the present use of the property (Units 1, 3 & 4) and Prudential requests reasonable mitigation measures to protect their current and future tenants; and
- 4) Structural Integrity: Prudential have concerns with regards to greater vibrations associated with construction activities and also, following completion, operational activity will damage their buildings, due to the closer proximity. Prudential requests appropriate assessment and mitigation works.

Highways England's Response

9.3.2 Highways England has provided a detailed response to the objection points (1 to 4) raised by the objector on 20 December 2019 and a summary of response is provided below.

In relation to the Point 1 on Environment:

9.3.3 Highways England has provided written assurance it will endeavour to minimise vegetation removal and undertake close liaison with the owners and tenants to maximise its retention and provide enhanced planting as much as practicable but ensuring the safety requirements of the proposed layout can still be met.

9.3.4 Highways England has undertaken an environmental assessment in the form of an EAR on the Scheme. The outcome of the EAR with respect to pollution (noise and air quality) was predominantly small or negligible changes that would not be significant. Predicted effects, in relation to pollution, were either minor or negligible, which is considered to be below any changes perceptible to humans with measures such as best practice methods implemented to control adverse impacts. For air quality the Scheme impact was "not significant".

9.3.5 Highways England has identified that during the construction phase a CEMP will be in place to provide a framework to manage the environmental effects of the construction of the Scheme.

9.3.6 Highways England has undertaken a traffic model to predict the impact of the Scheme and this projected a negligible number of additional peak period heavy goods vehicles on the M621 Junction 2 east bound off-slip and on A643 north bound in the opening year. There are forecast to be small increases in general traffic without the Scheme at the same locations in the opening year, though it would be less than 100 vehicles per hour more on the M621 east bound off-slip with a maximum peak period impact of an additional 333 vehicles per hour in the PM peak period on the A643 north bound. This equates to 18% more PM peak traffic than would otherwise be present in the opening year.

9.3.7 Highways England has identified that at the business units, the resulting noise impact due to the increase in operational traffic would be less than a 3 decibels (dB) increase, which equates to a minor change that would not be noticeable under outdoor day to day conditions.

9.3.8 Highways England contests that operational vibration would only occur if there were irregularities on the road (e.g. potholes, uneven surfacing) and as the road would be newly resurfaced, and free from any irregularities, operational vibration is not considered to be an impact on the buildings. During construction, it is possible that vibration may be perceptible in the vicinity of the works and adjacent buildings; however, such effects would be temporary. To mitigate these temporary effects, best practicable means such as considerate selection of construction equipment and construction methodology will be incorporated into the CEMP.

9.3.9 Latest local monitoring data show that annual mean concentration for both particulate matter (PM_{10}) and nitrogen dioxide (NO_2) are well below the Air Quality Standard (AQS) objective (i.e. 40 µg/m^3 for both pollutants), therefore, it is unlikely that the site would exceed the threshold limit values with or without the Scheme in place. The closest monitoring locations are (given prevailing wind directions) more worst case than Prudential's site. Modelled concentrations at relevant sensitive receptors are not expected to exceed the AQS objective for NO_2 with or without the Scheme. Modelled NO_2 concentrations at the closest relevant locations to the business units (located within the Tilbury AQMA,) are between 23.3 and 21.6 µg/m^3 without the Scheme, and 23.5 and 21.8 µg/m^3 with the Scheme - hence well below the AQS objective in both scenarios. The Scheme will, therefore, lead to an increase in NO_2 concentration of just 0.2 µg/m^3, classified as 'imperceptible' according to relevant guidance.

9.3.10 Any air quality effect related to the construction phase of the Scheme (such as exhaust emissions from site equipment and dust creating activities) would be temporary and will be managed through the CEMP. The existing vegetation at the business units does not 'act as a dense barrier between source and receptor' as to have a material effect it would need to be between the road source and the potential receptor in line with the prevailing wind. In this case the prevailing wind direction is from the west, the nearest road source the A643 northbound slip road is due east, and the M621 is to the south - so in none of these cases would the barrier effect apply and the objection in this regard is misconceived.

In relation to the Point 2 on Safety:

9.3.11 Highways England has provided written assurance that it will comply with any relevant and required statutory obligations to provide alternative mitigation measures necessary. Further assurances have been given that any repairs that may be required are carried out and that all necessary statutory and legal processes will be adhered to.

9.3.12 Highways England considers that in terms of road safety, the proposed layout provides a safe layout for both road users, pedestrians and people within the business units. Live traffic will still be at a safe distance at 10.1m from the southernmost corner of Unit 1 and between 9.1m to 14.9m from Unit 3.

9.3.13 Highways England contests that the risk of any loss of control accidents resulting in a collision with the business units whilst negotiating the left turn bend of the freeflow link road are very low and consider that in the rare event that a vehicle does lose control then it is more likely to lose control on the outside of the bend taking it away from the business units. The segregation of traffic using the freeflow link road removes the potential for conflict points with other traffic, therefore reducing the potential for accidents with other vehicles (side swipes). There is no intention to reduce the current 50mph speed limit on the eastbound off slip road or reduce the existing 40mph speed limit on the roundabout. The free flow lane from the off slip road onto the A643 will have a 40mph speed limit to match that of the roundabout and A643 northbound into Leeds.

9.3.14 Highways England, to ensure a safe road layout and alignment, has designed the Scheme to provide full standard forward visibility as per DMRB, which is the applicable highway standards appropriate for this road design.

9.3.15 Highways England has conducted a Road Safety Audit of the proposed road layout carried out by a suitably qualified and experienced independent audit team, who did not raise the proposed road design around the business units as a safety concern.

9.3.16 To ensure provision of a safe road layout and maintain good visibility for road users, in accordance with the standards Highways England is not proposing to include vehicle barrier between the freeflow link road and the footpath. However, to mitigate any residual impacts on the business units Highways England will, during the detail design stage, investigate any residual risks identified and consider the possibility of erecting protective barrier along the perimeter of the building (avoiding impact on the sight lines) or alternatively potentially provide higher road edge kerbs to stop any errant vehicles.

In relation to the Point 3 on Tenant Issues:

9.3.17 Highways England has provided written assurance it will comply with the relevant and required statutory obligations to provide compensation and mitigation measures, as part of the legal processes involved.

9.3.18 Highways England has employed the District Valuer (DV) from the Valuation Office Agency, who provides independent, impartial, valuation and professional property advice across the entire public sector, and where public money or public functions are involved, to engage with both the owners and the tenants of the business units 1, 3 & 4. He has held various meetings and inspections on the business units to identify suitable mitigation measures. Highways England acknowledges that the Scheme does bring the altered highway and footway closer to the business units 1, 3 & 4. Consideration has been given to how best to deal with the impact and potential injurious affection to the properties and Highways England is committed to continuing this dialogue to endeavour to identify, propose and implement suitable measures to enable the tenants and owners to retain their existing working environments during construction and post Scheme works.

9.3.19 Following inspection, and correspondence received by Highways England, the requirements of the tenants and the owners appear to be for mitigation measures to be carried out to the buildings, as stated within their objection. The DV is working with the owners and tenants to identify noise reduction measures (by obtaining costings to double glaze the elevations facing the new highway) and examining whether air conditioning is also required for temperature control. Highways England, and the DV, is awaiting quotations from Prudential and its suppliers for this work which will be considered further, and these are to be made available, and expected to be received in mid-February 2020. The DV has offered to have further meetings, accompanied by Highways England , to discuss the works further including answering any technical queries, timing of the works and payment mechanisms.

9.3.20 Highways England held a meeting with one of the tenants, NSM Music, and it is likely that the construction activities may adversely impact the sound sensitive equipment and operations of their business. This tenant may need to be relocated, temporarily or permanently, within another business unit in the Maple Park or elsewhere and this is subject to detailed discussions with the affected parties.

In relation to the Point 4 on Structural Integrity:

9.3.21 It is acknowledged by Highways England that during the works, it will be necessary to carry out construction work that may create vibration, such as compaction. Highways England considers this to be a safe distance from the property and works should not affect the structural integrity of the business units. However, should any remediation works be required due to construction activities Highways England has assured Prudential that this will be undertaken as necessary.

9.3.22 The level of vibration at which cosmetic damage may occur is several orders of magnitude higher than that at which vibration is perceptible. Vibration is commonly measured in Peak Particle Velocity (PPV) which is the maximum level of vibration in an event. The PPV perceptible in a residential setting is 0.3 mm/s compared to 25 mm/s PPV for potential cosmetic damage. Significantly higher levels of vibration (50 mm/s PPV) would be required for minor structural damage (e.g. formation of large cracks in plaster or brickwork) and higher still (100 mm/s PPV) for major structural damage (e.g. damage to structural elements).

9.3.23 Vibration levels due to construction works, including compaction, are expected to be below the level to cause cosmetic damage at the building. Currently specific plant details are unknown; however, vibration levels are likely to be in the order of 5-10mm/s PPV at the building. This value may cause some minor disturbance to the occupants but would be expected to be for a short duration and relate to specific tasks. Once specific construction plant and equipment is known, this will be reassessed by the Principal Contractor and Best Practicable Means, including liaison with local businesses and stakeholders, would be required to reduce impacts as far as possible.

9.3.24 Highways England has identified that activities associated with the road construction of the freeflow link road will require excavation to approximately 1m in depth and the laying and compaction of the road foundation. Pavement layers will be laid using a road paver and roller. The closest the main road construction works (not accounting for earthworks and footways) come to the business units is at the southernmost corner of Unit 1, being 7.3 metres. A new footpath will also be laid between the units and the road, which will come within 3.9 m of the southernmost corner of Unit 1. The footpath will be of a lesser construction, approximately 300mm in depth, when compared to the road construction of approximately 1m as stated above. The footpath construction will require compaction using a mini roller or a small plate compactor due to its lesser depth.

9.3.25 The works in the vicinity of the business units are expected to take approximately four months, but this will be confirmed by the appointed Principal Contractor closer to the time of construction. A public liaison officer will be allocated to the Scheme who will be responsible for all stakeholder communications. Highways England will convey start dates and particular construction (including noisy and vibration impact) activities to relevant stakeholders in advance of them being undertaken.

9.3.26 During the construction phase the construction plant and the methodology used on site will be selected giving consideration to the buildings and its users to help mitigate any vibration (and noise) impacts. Highways England has committed to completing vibration monitoring prior to the works commencing, throughout the works on site and exercising close liaison with the business occupiers to ensure any works with the potential to give rise to vibration or increased noise would be notified in advance. Highways England will carry out a pre and post development building condition survey which would be undertaken by a suitably qualified and experienced building surveyor to confirm the likelihood of any impact on the structural integrity of the business units. Highways England's contactor, as stated above, should be following best practice, but in the unlikely event of damage, Highways England will undertake any repairs and/or further mitigation works as necessary to make good the business units.

9.3.27 Highways England contests that operational vibration would not be considered as a risk to the buildings in terms of structural integrity. A well-maintained road surface free of irregularities and under general maintenance, would not have the potential to lead to significant adverse effects. As referred to above, it should be noted that live traffic will still be at a distance of 10.1m from the southernmost corner of Unit 1 and between 9.1m to 14.9m from Unit 3, limiting any vibration affects to the business units.

Summary

9.3.28 Highways England is committed to working together with the owner and tenants of the business units, to provide a safe and reasonable working environment before starting works on site, during the construction works and following completion of the Scheme.

9.3.29 It should be noted that Prudential's main concern appears to relate to matters which are compensation issues under the statutory code and Highways England is committed to fulfilling all of its obligations in that regard.

10 Specialist Evidence and Deposit Documents

10.1 Proofs of Evidence

10.1.1 Based on the one remaining objection and the points that have been raised, Highways England expects to prepare specialist Proofs of Evidence covering:

1. Highways England General
2. Traffic & Economics
3. Highways
4. Construction
5. Environmental General
6. Air Quality
7. Noise and Vibration

10.1.2 The Proofs of Evidence will be sent to the remaining Statutory Objector, Prudential, at least three weeks before commencement of the Public Inquiry and will be available for inspection at the deposit location from that time.

10.2 Deposit Documents

10.2.1 Documents referred to in this Statement as "**(DD-A#), (DD-B#)**" etc. and listed in Appendix A will be made available for inspection from 21 February 2020 at the following location:

Beeston Library

Town Street

Leeds

LS11 8PN;

Opening hours on Monday to Thursday: 10am to 5pm, Friday: 10am to 6pm and Saturday and Sunday: 11am to 2pm.

10.2.2 From commencement of the Public Inquiry, the deposit documents will be moved to the public inquiry venue and may be inspected whenever the inquiry is in session which will include all documents referred to or submitted in evidence at the Public Inquiry.

10.2.3 Electronic versions of the Deposit Documents "(DD-A#)" are also available to view on the Highways England project website: https://highwaysengland.co.uk/projects/m621-junctions-1-to-7/. Paper copies of the Deposit Documents can be provided but may be subject to the payment of a reasonable charge.

Appendices

Appendix A. List of Deposit Documents

The documents to which Highways England intends to refer, within this Statement or other documents or to use in supporting evidence during the Inquiries are listed below and are referred to in this Statement of Case as Deposit Documents using the format of '**(DD-A1)**', '**(DD-A2)**' etc. The documents are available for inspection at those locations identified in Section 10.2.

A	MADE ORDERS and accompanying documents	LINK
A1	The Highways England (M621 Motorway Junctions 1 to 7 Improvements) (Side Roads) Order 2019 – Orders Booklet	HE Website
A2	The Highways England (M621 Motorway Junctions 1 to 7 Improvements) (Side Roads) Order 2019 – Public Notice	HE Website
A3	The Highways England (M621 Motorway Junctions 1 to 7 Improvements) Compulsory Purchase Order 2019 – Orders Booklet	HE Website
A4	The Highways England (M621 Motorway Junctions 1 to 7 Improvements) Compulsory Purchase Order 2019 – Public Notice	HE Website
A5	Statement of Reasons accompanying the Made Orders	HE Website
A6	Planning Statement accompanying the Made Orders	HE Website
A7	General Arrangement Engineering Plans, Key Sheet & Sheets 1 to 12	HE Website

B	DOCUMENTS PREVIOUSLY ON DEPOSIT	LINK
B1	Preliminary Design Environmental Assessment Report, Volume 1 – Main Text, October 2019	HE Website
B2	Preliminary Design Environmental Assessment Report, Volume 2 – Main Text, October 2019	HE Website
B3	Technical Appraisal Report, March 2017	HE Website
B4	Scheme Assessment Report, March 2018	HE Website
B5	Public Consultation Report, March 2018	HE Website
B6	Notice of Intention to give a certificate for exemption of exchange land (and accompanying plan), December 2019	HE Website
B7	Notice of Certification for exemption of exchange land (and accompanying plan), February 2020	HE Website

C	LEGISLATION (Acts, Regulations, Procedures, Rules)	LINK
C1	The Compulsory Purchase (Inquiries Procedure) Rules 2007	UK SI
C2	The Highways (Inquiries Procedure) Rules 1994	UK SI
C3	Highways Act 1980	UK PGA
C4	Planning Act 2008	UK PGA
C5	The Town and Country Planning (General Permitted Development) (England) Order 2015	UK SI
C6	Town and Country Planning Act 1990	UK PGA
C7	Acquisition of Land Act 1981	UK PGA

C	LEGISLATION (Acts, Regulations, Procedures, Rules)	LINK
C8	Human Rights Act 1998	UK PGA
C9	New Roads and Street Works Act 1991	UK PGA

D	NATIONAL PLANNING POLICY GUIDANCE NOTES/PLANNING POLICY STATEMENTS	LINK
D1	Guidance on compulsory purchase process and the Crichel Down Rules 2019	GOV
D2	National Planning Policy Framework (NPPF) 2019	GOV
D3	National Policy Statement for National Networks (NN NPS) 2014	GOV
D4	Planning Practice Guidance (PPG) 2018 **[Weblink Only]**	GOV

E	LOCAL AND REGIONAL PLANNING & POLICY DOCUMENTS	LINK
E1	Initial Major Roads Report Strategic Transport Plan Evidence Base, Transport for the North (TfN) 2017	TfN
E2	Leeds City Region Strategic Economic Plan (SEP) 2016-2036	LEP
E3	Aire Valley Leeds Area Action Plan 2017	LCC
E4	West Yorkshire Combined Authority (WYCA) Transport Strategy 2040	WYCA
E5	Leeds Transport Strategy Interim 2016	LCC
E6	Holbeck Neighbourhood Plan 2017-2028	LCC
E7	Leeds Core Strategy 2014	LCC
E8	Leeds City Council Unitary Development Plan **[Weblink Only]**	LCC
E9	Leeds Local Implementation Plan and Transport Strategy 2011-2026	LCC
E10	Leeds City Region, Growth Deal Submission 2016 (Local Economic Partnership)	LEP
E11	South Bank Leeds Regeneration Framework Supplementary Planning Document 2018	LCC
E12	Leeds City Council Adopted Site Allocations Plan 2019 **[Weblink Only]**	LCC
E13	The Natural Resources and Waste Development Plan 2013	LCC

F	TRANSPORT & TRAFFIC	LINK
F1	Department for Transport (DfT) Road Investment Strategy 2014	GOV
F2	The Highways England Delivery Plan 2015-2020	GOV
F3	Transport Analysis Guidance (WebTAG) **[Weblink Only]**	GOV

G	ENVIRONMENT	LINK
G1	Outline Environmental Management Plan (OEMP), July 2019	HE Website

Appendix B. Status of Negotiations with Landowners

Landowner	Current Status	Issues still to be resolved
Leeds City Council (LCC)	Meetings held on 4 October 2018, 14 February 2019, 12 March 2019, 10 May 2019, 24 July 2019 and 13 December 2019. The Council have stated that it has no objections in principle. Offer made for land required at Junction 2. Further session to be held with Leeds City Council to discuss Junction 2 and 7, as well as a further session with Leeds City Council and Leeds United regarding the Former Matthew Murray School site. Licence agreed for temporary use of the Junction 7 compound area. Agreement in principle gained from LCC, subject to a further meeting with LUFC to seek their agreement.	Further meeting to be held to ensure that the final development proposals at land parcels 1/4, 1/4a and 1/4b do not impact upon emerging proposals for the use of the Former Matthew Murray School site. Meeting to be set up with LCC and LUFC to ascertain what accommodation works may be required to their retained land and future uses. These works would form part of the agreement with LCC on the compensation. The meeting will provide the opportunity to agree how the work is to be delivered and if entry needed from LCC/LUFC land to facilitate the works. Accommodation works issues regarding standard fencing, gating etc on revised boundary treatments.
The Prudential Assurance Company Ltd.	Meetings held on 15 February 2019, 14 May 2019 and 14 August 2019. The landowner initially had no objections to the proposed development in principle, subject to details of mitigation on the north western side of Junction 2 to safeguard the amenity of occupiers within Maple Park business park. However, an objection has been received during the representation period and will be the subject of a Public Inquiry. The landowner has appointed a property agent to carry forward negotiation over compensation. Agreement in principle gained from the landowner, subject to further discussion on compensation requirements, including establishing the mitigation costs for tenants at MaplePark.	Meeting to be arranged to discuss mitigation measures to safeguard the amenity of tenants at Maple Park Costings awaited from tenants at Maple Park for measures to mitigate against impacts from dust, noise, vibration and lighting. The costings for mitigation measures will help to inform further negotiations on compensation. Current timing for receipt of mitigation work measure prices is expected to be second half of February 2020. Further meeting to be arranged to discuss. Initial objection received during representation period. Highways England replied to points raised by Prudential on 20 December 2019, but no further responses from Prudential have been received regarding the objection points.

Appendix C. Location Plans (Junctions 2, 2a & 7)

Location Plan of M621 Junction 2	Drawing: HE551464-ATK-HAC-J2-DR-CH-000005
Location Plan of M621 Junction 2a	Drawing: HE551464-ATK-HAC-J2A-DR-CH-000006
Location Plan of M621 Junction 7	Drawing: HE551464-ATK-HAC-J7-DR-CH-000007

DO NOT SCALE

Millimetres 0 10 100

HOLBECK

WITHIN THE OF PARISH OF BEESTON & HOLBECK AND THE METROPOLITAN DISTRICT OF LEEDS

MATTHEW MURRAY SCHOOL (former site of)

CONFEDERATION PARK

MAPLE PARK

LATCHMORE PARK INDUSTRIAL ESTATE

ELLAND ROAD STADIUM (Leeds United FC)

JUNCTION 2

M621

M62

M1

A643 INGRAM DISTRIBUTER

A643

A643 ELLAND ROAD

BROWN AVENUE

BROWN PLACE

LOW FIELDS AVENUE

LOW FIELDS ROAD

LOW FIELDS WAY

LATCHMORE ROAD

LOWFIELDS ROAD

HOXTON MOUNT

INGRAM CRESCENT

INGRAM ROAD

EUSTON GROVE

EUSTON MOUNT

EUSTON TERRACE

TILBURY ROW

TILBURY ROAD

TILBURY MOUNT

TILBURY TERRACE

COLENSO GROVE

COLENSO PLACE

COLENSO TERRACE

COLENSO ROAD

BACK COLENSO ROAD

CLEVELEYS AVENUE

CLEVELEYS ROAD

CROSBY ROAD

RECREATION VIEW

RECREATION TERRACE

RECREATION PLACE

RECREATION ROW

RECREATION CRESCENT

Holbeck Community Centre

ELLAND ROAD

MALVERN STREET

REVIE ROAD

LANDMARK COURT

LOW FIELDS ROAD / AVENUE UNDERPASS

PEDESTRIAN OVERBRIDGE

Scale 1:1250

10m 0m 10m 30m 50m 70m 90m

NOTES:

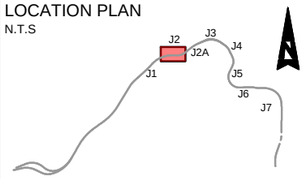
1. DRAWING NOT TO BE SCALED
2. FOR JUNCTION 2 REFER TO HE551464-ATK-HAC-J2-DR–CH-000005,
   FOR JUNCTION 2A REFER TO HE551464-ATK-HAC-J2A-DR–CH-000006, &
   FOR JUNCTION 7 REFER TO HE551464-ATK-HAC-J7-DR–CH-000007

KEY:

- PERMANENT LAND TAKE
- TEMPORARY LAND TAKE
- PROPOSED RED LINE BOUNDARY (AREA OF DEVELOPMENT)
- HIGHWAY BOUNDARY (HIGHWAYS ENGLAND)

LOCATION PLAN

N.T.S



SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
FIRST ISSUE	A1	C01	AD	WS	KD	AP	07/08/19
UPDATED FOR ORDERS PUBLICATION	A1	C02	MT	AP	KD	AP	17/10/19

Drawing Suitability: APPROVED - PUBLISHED

Status: A1

SNC-LAVALIN ATKINS
The Exchange
2nd Floor
3 New Market Street
Manchester
M1 4HN
Tel: +44 (0)1612 453400
Fax: +44 (0)1612 453500
www.atkinsglobal.com

Client: Working on behalf of highways england

Project Title: M621 J1-7

Drawing Title: JUNCTION 2 LOCATION PLAN

Drawing Number: Project HE551464 - Originator ATK - Volume HAC - Location J2 - Type DR - Role CH - Number 000005

Original Size: A1 | Scale: 1:1250 | Project Ref. No: 5155828 | Sheet: 1 of 1 | Rev: C02

This Drawing is saved on ProjectWise. Date: 2019/10/17 Plotted by: pott7053

DO NOT SCALE

Millimetres 0 10 100

HOLBECK

HOLBECK MOOR

JUNCTION 2A

HIGHWAY TO BE STOPPED UP

NEW FENCE LINE AND GATE INSTALLED FOR MAINTENANCE ACCESS

WITHIN THE OF PARISH OF BEESTON & HOLBECK AND THE METROPOLITAN DISTRICT OF LEEDS

Ingram Road Primary School

Holbeck Community Centre

Lane End Primary School

BOWLS CLUB

Skatepark

Play Area

CROSBY STREET
INGRAM ROAD
RYDALL PLACE
RYDALL TERRACE
RYDALL STREET
SHAFTON VIEW
SHAFTON PLACE
SHAFTON STREET
CROSBY ROAD
CROSBY TERRACE
CROSBY PLACE
CROSBY VIEW
BERTRAND STREET
TOP MOOR SIDE
RUNSWICK AVENUE
RUNSWICK STREET
RUNSWICK PLACE
BROWN LANE EAST
CROSBY AVENUE
RECREATION GROVE
RECREATION MOUNT
RECREATION STREET
RECREATION VIEW
RECREATION TERRACE
RECREATION PLACE
RECREATION ROW
RECREATION CRESCENT
CLEVELEYS ROAD
COLENSO MOUNT
BACK COLENSO MOUNT
COLENSO GROVE
COLENSO PLACE
COLENSO TERRACE
COLENSO ROAD
INGRAM CRESCENT
BACK COLENSO ROAD
EUSTON GROVE
EUSTON MOUNT
EUSTON TERRACE
TILBURY ROAD
TILBURY MOUNT
TILBURY TERRACE
TILBURY ROW
HOLBECK MOOR ROAD
MOOR VIEW
M1
M621
M 62
EASTBOUND ON-SLIP
WESTBOUND OFF-SLIP
LANE END PLACE
BEESTON ROAD
HUNSLET HALL ROAD
MOORVILLE ROAD
MOORVILLE GROVE
CAMBRIAN STREET
CAMBRIAN TERRACE
ST. LUKE'S ROAD
ST. LUKE'S CRESCENT
MAITLAND PLACE
NORMANTON PLACE
NORMANTON STREET
NORMANTON GROVE
LADY PIT LANE
COUPLAND PLACE
CEMETERY ROAD
ELLAND ROAD
MALVERN STREET
MALVERN VIEW
BUCKTON MOUNT
MALVERN ROAD
BARTON PLACE
BARTON VIEW
BARTON TERRACE
BARTON GROVE

Scale 1:1250
10m 0m 10m 30m 50m 70m 90m

NOTES:

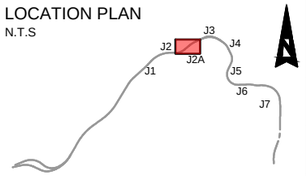
1. DRAWING NOT TO BE SCALED
2. FOR JUNCTION 2 REFER TO HE551464-ATK-HAC-J2-DR–CH-000005,
   FOR JUNCTION 2A REFER TO HE551464-ATK-HAC-J2A-DR–CH-000006, &
   FOR JUNCTION 7 REFER TO HE551464-ATK-HAC-J7-DR–CH-000007

KEY:

- HIGHWAY TO BE STOPPED UP
- PROPOSED RED LINE BOUNDARY (AREA OF DEVELOPMENT)
- HIGHWAY BOUNDARY (HIGHWAYS ENGLAND)

LOCATION PLAN

N.T.S



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Maintenance / Cleaning
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Use
None

Decommissioning / Demolition
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SNC-LAVALIN
ATKINS
The Exchange
2nd Floor
3 New Market Street
Manchester
M1 4HN
Tel: +44 (0)1612 453400
Fax: +44 (0)1612 453500
www.atkinsglobal.com

Client: Working on behalf of highways england

Project Title: M621 J1-7

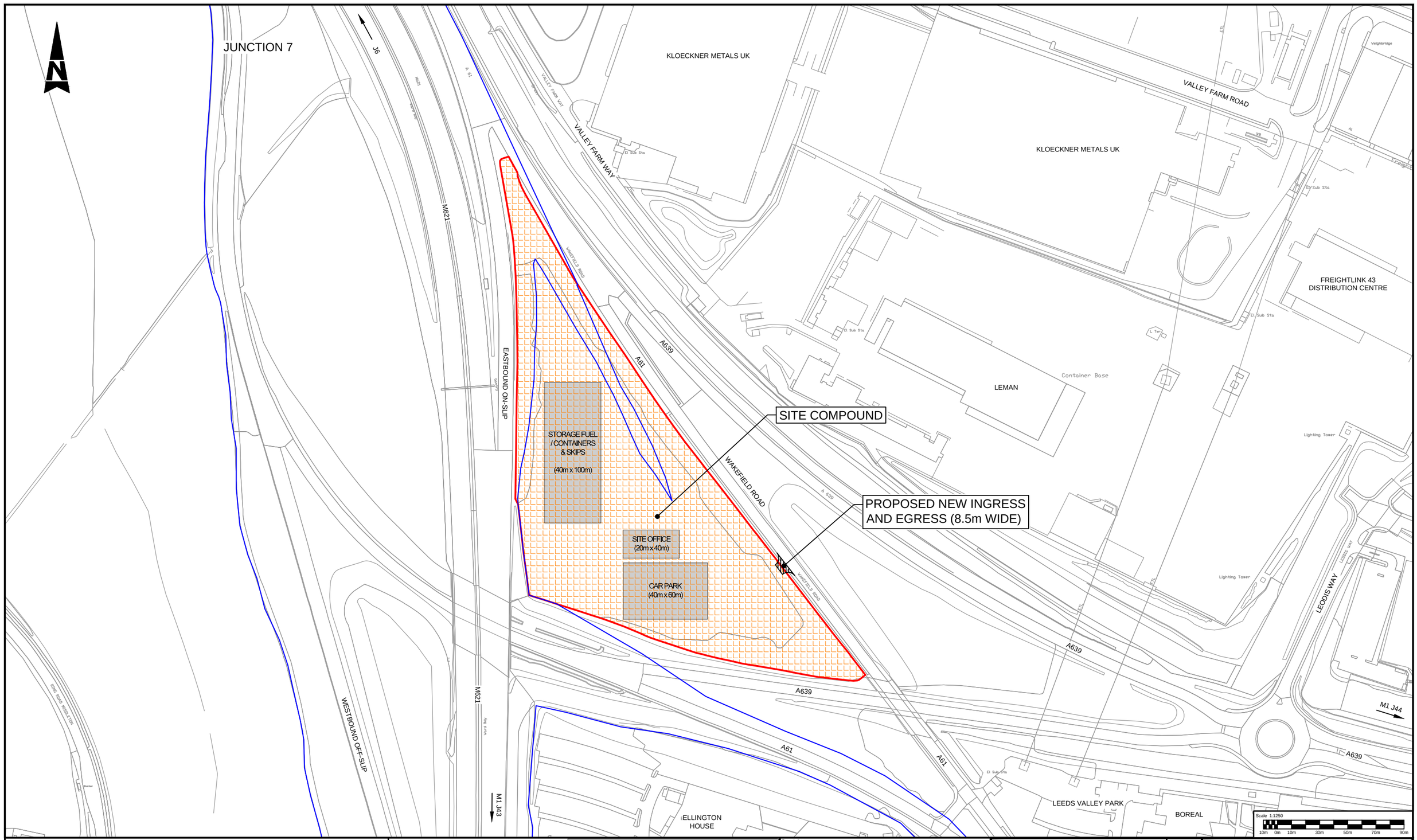
Drawing Title: JUNCTION 2A

LOCATION PLAN

Drawing Number
Project: HE551464 - Originator: ATK - Volume: HAC -
Location: -J2A Type: - Role: DR - CH - Number: 000006

Original Size: A1 | Scale: 1:1250 | Project Ref. No: 5155828 | Sheet: 1 of 1 | Rev: C02

This Drawing is saved on ProjectWise. Date: 2019/10/17 Plotted by: pott7053



NOTES:

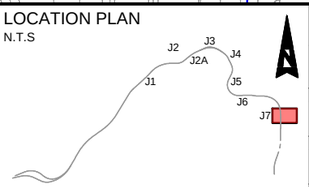
1. DRAWING NOT TO BE SCALED
2. FOR JUNCTION 2 REFER TO HE551464-ATK-HAC-J2-DR–CH-000005,
   FOR JUNCTION 2A REFER TO HE551464-ATK-HAC-J2A-DR–CH-000006, &
   FOR JUNCTION 7 REFER TO HE551464-ATK-HAC-J7-DR–CH-000007

KEY:

- AREA OF SITE COMPOUND
- BOUNDARY OF SITE COMPOUND
- SITE ACCESS POINT
- LAND OWNERSHIP BOUNDARY OF HIGHWAYS ENGLAND

LOCATION PLAN

N.T.S



SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
For Comment	A1	C01	AD	DNJ	KD	AP	07/08/19
UPDATED FOR ORDERS PUBLICATION	A1	C02	MT	AP	KD	AP	17/10/19

Drawing Suitability: APPROVED - PUBLISHED
Status: A1

SNC-LAVALIN ATKINS
The Exchange
2nd Floor
3 New Market Street
Manchester
M1 4HN
Tel: +44 (0)1612 453400
Fax: +44 (0)1612 453500
www.atkinsglobal.com

Client: Working on behalf of highways england

Project Title: M621 J1-7

Drawing Title: JUNCTION 7
SITE COMPOUND LOCATION PLAN,
NEW ENTRANCE
AND INDICATIVE LAYOUT

Drawing Number: HE551464 - ATK - HAC - J7 - DR - CH - 000007
(Project - Originator - Volume; Location - Type - Role - Number)

Original Size: A1 | Scale: 1:1250 | Project Ref. No: 5155828 | Sheet: 1 of 1 | Rev: C02

Appendix D. General Arrangement Plan for Junction 2 & Key

General Arrangement of M621 Junction 2	Drawing: HE551464-ATK-HAC-J2-DR-CH-000008
General Arrangement Key	Drawing: HE551464-ATK-HGN-XX-DR-CH-000100

DO NOT SCALE

Millimetres 100 0 10

EXTENT OF SCHEME

PROPOSED HIGHWAY FENCE

PROPOSED PHYSICAL SEGREGATED LEFT-TURN LANES TO A643

A643 SOUTHBOUND APPROACH TO JUNCTION 2 TO BE WIDENED FROM 2 TO 3 LANES UP TO THE STOP LINE AT JUNCTION 2

RETAIN AND RELOCATE TRAFFIC SIGN IF POSSIBLE. REPLACE AS CLOSE TO CURRENT LOCATION.

EXISTING PATH TO/FROM LOW FIELDS AVENUE TO BE REALIGNED AND PEDESTRIAN ROUTE MAINTAINED

FREE-FLOW LINK TO BE PROVIDED BETWEEN M621 EASTBOUND AND A643 NORTHBOUND.

12544 INGRAM ROAD I/C WEST U/B

CIRCULATORY CARRIAGEWAY TO BE WIDENED FROM 2 TO 3 LANES

12545 INGRAM ROAD I/C EAST U/B

EASTBOUND ON-SLIP IS TO BE WIDENED FROM 1 TO 2 LANES.

GA-08 CH 6+765
PROPOSED CANTILEVER GANTRY WITH MS4

GB-16 CH 7+024
PROPOSED CANTILEVER GANTRY WITH J1 1/2 MILE ADS AND MS4

J2 DIRECTION SIGN

J2 INFORMATORY DS

J2 CONFIRMATORY DS

9800 LOWFIELDS ROAD SUBWAY U/B

J2 FINAL DS

WESTBOUND ON-SLIP IS TO BE WIDENED FROM 1 TO 2 LANES.

PROPOSED WIDENING OF THE CIRCULATORY CARRIAGEWAY ON BOTH SIDES AT THE UNDERBRIDGES

EXISTING PEDESTRIAN FOOTWAY TO BE RESTRICTED

ENTIRE CIRCULATORY CARRIAGEWAY TO BE WIDENED FROM 2 TO 4 LANES

J2 INFORMATORY DS

SLIP ROAD TO BE WIDENED FROM 2 TO 3 LANES ON THE APPROACH TO THE TRAFFIC SIGNALS STOP LINE.

J2 REGULATORY SIGN

J2 CONFIRMATORY DS

J2 WB DIVERGE LAYOUT TO BE CHANGED TO LANE DROP

EXTENT OF SCHEME

ELLAND ROAD STADIUM

HOLBECK

ISLINGTON

M621 J2

Scale 1:1000
10m 0m 10m 20m 30m 40m 50m 60m 70m

NOTES

1. ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE.
2. FOR KEY REFER TO DRAWING HE551464-ATK-HGN-XX-DR-CH-000100.

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
First Issue	A1	C01	AD	WS	KD	AP	04/09/19

Drawing Suitability: APPROVED - PUBLISHED
Status: A1

Project Title: M621 J1-7

Drawing Title: GENERAL ARRANGEMENT PLAN JUNCTION 2 Ch. 6900

SNC-LAVALIN ATKINS
The Exchange
2nd Floor
3 New Market Street
Manchester
M1 4HN
Tel: +44 (0)1612 453400
Fax: +44 (0)1612 453500
www.atkinsglobal.com

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Drawing Number: Project HE551464 - Originator ATK - Volume HAC - Location J2 - Type DR - Role CH - Number 000008

Original Size: A1 | Scale: 1:1000 | Project Ref. No: 5155828 | Sheet: 1 of 1 | Rev: C01

This Drawing is saved on ProjectWise. Date: 2019/09/04 Plotted by: TURN4371

DO NOT SCALE

Millimetres 0 10 100

2500

KEY:

GENERAL DETAILS

- SCHEME CHAINAGE
- PROPOSED RED LINE BOUNDARY
- EXISTING HIGHWAY BOUNDARY
- PROPOSED VERGE BLISTER
- PROPOSED EARTHWORK SLOPE
- PROPOSED HIGHWAY CARRIAGEWAY EDGE
- PROPOSED RETAINING WALL
- NON STRUCTURAL RETAINING WALL AT TECHNOLOGY CHAMBER LOCATIONS
- EXISTING PEDESTRIAN FOOTWAY REMOVED
- EXISTING RETAINING WALL
- PROPOSED CENTRAL RESERVE BARRIER
- EXISTING CANTILEVER GANTRY TO REMAIN
- PROPOSED CANTILEVER GANTRY
- MS4 / MS3 / EMS — EXISTING MS4 / MS3 / EMS MESSAGE SIGN TO REMAIN
- MS4 — PROPOSED MS4 MESSAGE SIGN
- EXISTING GANTRY - MOUNTED ADS / DS TO REMAIN
- PROPOSED GANTRY - MOUNTED ADS / DS
- EXISTING PORTAL GANTRY TO REMAIN
- PROPOSED PORTAL GANTRY
- EXISTING GANTRY MOUNTED ADVANCED MOTORWAY INDICATORS (AMI) / LANE SIGNALS
- PROPOSED GANTRY MOUNTED ADVANCED MOTORWAY INDICATORS (AMI)
- EXISTING ENTRY SLIP MS1 SIGNAL
- PROPOSED ENTRY SLIP AMI SIGNAL

- EXISTING CCTV
- PROPOSED 15m HIGH STAND ALONE CCTV OR GANTRY MOUNTED CCTV
- ASC — PROPOSED AVERAGE SPEED CAMERA SITES
- PROPOSED MIDAS RADAR SENSOR AND LANE COVERAGE
- EXISTING VERGE MOUNTED ADS 1 POST
- PROPOSED VERGE MOUNTED ADS 1 POST
- EXTENT OF SCHEME
- EXISTING VERGE MOUNTED ADS 2 POST (SEE NOTE 2)
- PROPOSED VERGE MOUNTED ADS 2 POST (SEE NOTE 2)
- EXISTING VERGE MOUNTED ADS 3 POST (SEE NOTE 2)
- PROPOSED VERGE MOUNTED ADS 3 POST (SEE NOTE 2)
- EXISTING VERGE MOUNTED ADS 4 POST (SEE NOTE 2)
- PROPOSED VERGE MOUNTED ADS 4 POST (SEE NOTE 2)
- PROPOSED MIDAS LOOP SITE
- RETAINED EMERGENCY ROAD SIDE TELEPHONE (ERT)
- EI E — EXISTING TYPE 609 ELECTRIC INTERFACE CABINET
- EI — PROPOSED TYPE 609 ELECTRIC INTERFACE CABINET
- IC E — EXISTING TYPE 609 COMMS INTERFACE CABINET
- IC — PROPOSED TYPE 609 COMMS INTERFACE CABINET
- PROPOSED DUCTED COMMUNICATION CABLE ROUTE
- PROPOSED COMMUNICATION CABLE ROUTE THROUGH NEW CROSS CARRIAGEWAY DUCTS
- PROPOSED COMMUNICATION CABLE ROUTE THROUGH NEW DUCTS THROUGH STRUCTURES

- PROPOSED COMMUNICATION CABLE ROUTE THROUGH EXISTING CROSS CARRIAGEWAY DUCTS (SUBJECT TO ASSESSMENT VIA SITE SURVEY)
- PROPOSED COMMUNICATION CABLE ROUTE THROUGH EXISTING DUCTS THROUGH STRUCTURES (SUBJECT TO ASSESSMENT VIA SITE SURVEY)
- EXISTING DIRECT BURIED CABLE ROUTE
- EXISTING CENTRAL RESERVE MS1 SIGNAL
- XXXX XXXXX XXXX O/B — OVER BRIDGE
- XXXX XXXXXX XXXX U/B — UNDER BRIDGE
- EXISTING LEEDS CITY COUNCIL HIGH MAST STEEL LIGHTING COLUMN OF 25m NOMINAL HEIGHT TO REMAIN
- EXISTING LEEDS CITY COUNCIL HIGH MAST STEEL LIGHTING COLUMN OF 30m NOMINAL HEIGHT TO REMAIN
- EXISTING HIGHWAYS ENGLAND HIGH MAST STEEL LIGHTING COLUMN OF 25m NOMINAL HEIGHT TO REMAIN
- EXISTING HIGHWAYS ENGLAND HIGH MAST STEEL LIGHTING COLUMN OF 30m NOMINAL HEIGHT TO REMAIN
- EXISTING LEEDS CITY COUNCIL HIGH MAST STEEL LIGHTING COLUMN OF 30m NOMINAL HEIGHT TO BE RELOCATED AND EXISTING FOUNDATION TO BE REMOVED TO TIP.
- EXISTING LEEDS CITY COUNCIL HIGH MAST LIGHTING COLUMN OF 30m NOMINAL HEIGHT TO BE RELOCATED AND HAVE A NEW FOUNDATION.
- EXISTING LEEDS CITY COUNCIL 10m STEEL NOMINAL HEIGHT LIGHTING COLUMN WITH TWIN BRACKET AND 2 No. LUMINAIRES TO REMAIN
- **EXISTING HIGHWAYS ENGLAND 12m NOMINAL HEIGHT LIGHTING COLUMN TO REMAIN**
- EXISTING HIGHWAYS ENGLAND 12m NOMINAL HEIGHT LIGHTING COLUMN WITH TWIN BRACKET AND 2 No. LUMINARIES TO REMAIN
- PROPOSED PCN FEEDER PILLAR TO SUPPLY GANTRY LED LUMINARIES AND HOUSE LUMINAIRE DRIVERS
- **EXISTING DNO FEEDER PILLAR**
- CHAMBERS
- PROPOSED MAINTENANCE ACCESS POINTS
- PROPOSED MAINTENANCE ACCESS FOOTPATH
- PROPOSED ACCESS STEPS

NOTES

1. FOR GENERAL ARRANGEMENT LAYOUTS REFER TO DRAWINGS HE551464-ATK-HGN-XX-DR-CH-000101 TO 000112.
2. ONLY EXISTING & PROPOSED STRATEGIC ADS SIGNS ARE SHOWN ON DRAWINGS HE551464-ATK-HGN-XX-DR-CH-000101 TO 000112. FOR A FULL INVENTORY OF ALL EXISTING & PROPOSED SIGNS, REFER TO THE 'SIGNAGE STRATEGY' REPORT HE551464-ATK-HSN-XX-RP-CX-000001.

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
STAGE 3 DESIGN FIX 2	A1	C01	PM	NP	DI	AP	25/05/18
STAGE 3 DESIGN FIX 3	A1	C02	PM	DI	JG	AP	26/09/18
STAGE 3 DESIGN FIX 3.2	A1	C03	NP	AP	KD	AP	17/06/19
STAGE 3 DESIGN FIX 3.2	A1	C04	NP	AP	KD	AP	28/06/19
STAGE 3 DESIGN FIX 3.2	A1	C05	NP	AP	KD	AP	31/07/19

Drawing Suitability: APPROVED - PUBLISHED

Status: A1

SNC-LAVALIN ATKINS Member of the SNC-Lavalin Group
The Exchange
2nd Floor
3 New Market Street
Manchester
M1 4HN
Tel: +44 (0)1612 453400
Fax: +44 (0)1612 453500
www.atkinsglobal.com

Client: Working on behalf of highways england

Project Title: M621 J1-7

Drawing Title: GENERAL ARRANGEMENT KEY

Drawing Number: Project HE551464 - Originator ATK - Volume HGN - Location XX - Type DR - Role CH - Number 000100

Original Size: A1 | Scale: NTS | Project Ref. No.: 5155828 | Sheet: 1 of 1 | Rev: C05

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