

A629 Phase 2 Halifax Town Centre Improvements

A West Yorkshire Transport + Fund Project

Environmental Impact Assessment: Environmental Statement – Non-Technical Summary
The Town and Country Planning (Environmental Impact Assessment) Regulations 2017



Applicant: Calderdale Council

Date: February 2020



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1. Purpose of this Non-Technical Summary

- 1.1.1 Calderdale Council is submitting an application for planning consent ('the Application') for the A629 Phase 2 Halifax scheme ('the Proposed Development') to be implemented within Halifax town centre. The Proposed Development aims to improve traffic conditions in and immediately around the centre of Halifax through a number of improvements to the highway network, in addition to improving public realm within the town centre. The Proposed Development aims to unlock sites to attract investment, encourage people to spend more time in Halifax, give greater recognition to Halifax's heritage status, broaden Halifax's social and cultural offer and provide space to support skills and education.
- 1.1.2 An initial planning application for the Proposed Development was submitted to Calderdale Council on 03 September 2018 (18/01095/LAA/RNA). This application included the demolition of 31 Square Road (the Hughes Corporation Building) to enable transport and public realm improvements associated with the Proposed Development. During determination of the initial planning application an application to designate 31 Square Road as a listed building was made to Historic England. 31 Square Road was subsequently Grade II listed on 22 January 2019. The Applicant has responded to the listing by amending the Proposed Development design to accommodate the building and facilitate access. Consequently, proposals relating to the bus-rail interchange and an area of public realm formerly referred to as 'Piece Gardens' have been updated, and 31 Square Road is now retained within the revised proposal, being incorporated into the Application.
- 1.1.3 This document presents a description of the Proposed Development and summarises the findings of an Environmental Impact Assessment (EIA) that has been undertaken to consider the impacts and effects associated with the Proposed Development. EIA is a process used to identify and where necessary address potentially significant environmental effects of projects (both adverse and beneficial). The findings of the EIA are reported in an Environmental Statement (ES), of which this Non-Technical Summary forms a part. The ES outlines measures to reduce adverse (or enhance beneficial) effects and has been submitted to Calderdale Council to accompany the planning application.



Proposed Development Site 2.

2.1.1 The Proposed Development encompasses approximately 14 hectares of land within Halifax town centre, (in Calderdale, West Yorkshire), mainly within the existing highway boundary. This is illustrated in Figure NTS1). An estimated 80% of Calderdale's residents live in the eastern third of the Borough, in Halifax, Brighouse and Elland and in local villages. Halifax is the largest town in Calderdale and a key location for future employment and housing growth. An increasing demand to travel to and from Halifax town centre is therefore predicted and investment in improved transport links is seen as crucial for Calderdale to benefit from future economic growth.

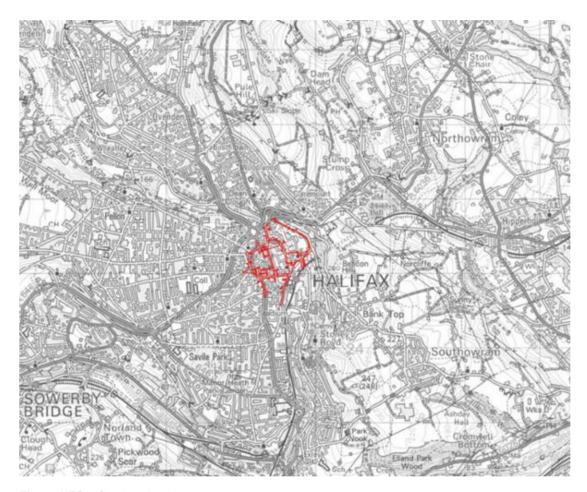


Figure NTS1: Site location plan



3. Overview of the Proposed Development

- 3.1.1 Calderdale Council and Kirklees Council are jointly developing a range of proposed improvements along the A629 Halifax to Huddersfield corridor. Further details can be found in http://www.calderdalenextchapter.co.uk/. The Proposed Development is the second of five main phases proposed within the Halifax to Huddersfield corridor and will be delivered under the West Yorkshire Plus Transport Fund (WY+TF), which approximately totals £1 billion. This fund has been specifically set up to increase employment and promote economic growth in the short to medium-term across the region by unlocking development potential. The fund aims to create 1,740 jobs by 2026 by reducing congestion and traffic journey times, improving pedestrian/ cycle accessibility and reducing bus journey times. The Proposed Development comprises a number of improvements to the highway network in order to improve traffic conditions in and immediately around the centre of Halifax, as well as delivering improvements to the town centre's public realm, increasing employment and promoting economic growth.
- 3.1.2 The Proposed Development will be constructed in Halifax town centre in three main phases. These have been called the Eastern Corridor, the Western Corridor and the Central Area, and are shown in **Figure NTS2**. Within each phase there are a series of proposed works that are known as 'interventions'.



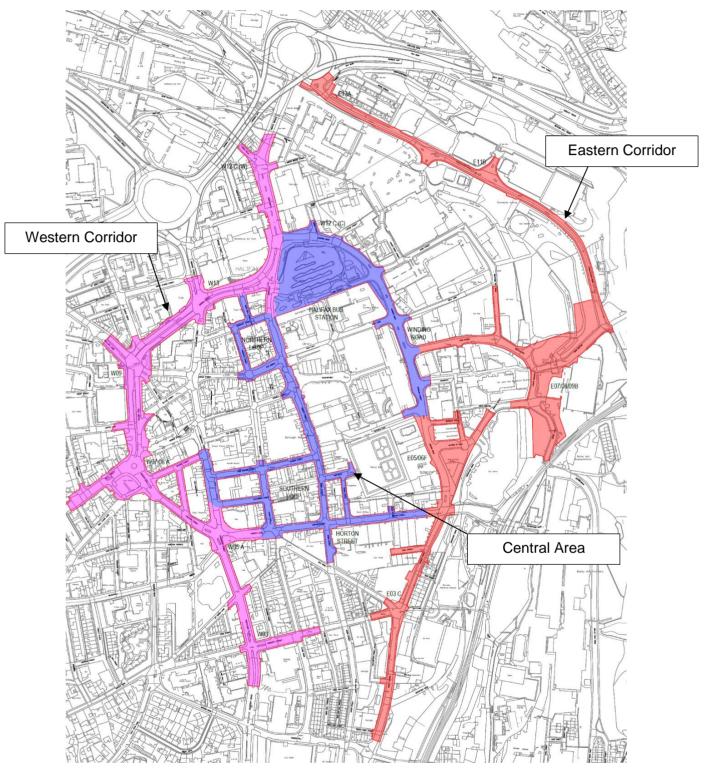


Figure NTS2: Proposed Development phase boundaries



3.1.3 The Eastern Corridor (shown in Figure NT3) is approximately 1.6 km in length and extends around Halifax town centre from the A58/ Charlestown Junction at New Bank in the north, along Charlestown Road, through Bank Bottom, Cripplegate and King Street, Lower Kirkgate and Berry Lane, the junction with Horton Street and Church Street, north up Square Road and south down Church Street and beyond the New Road/ Prescott Street junction. The Eastern Corridor also includes a new public square 'Eastern Gateway' immediately adjacent to the Piece Hall, Calderdale Industrial Museum, the Square Chapel Arts Centre and new Central Library.

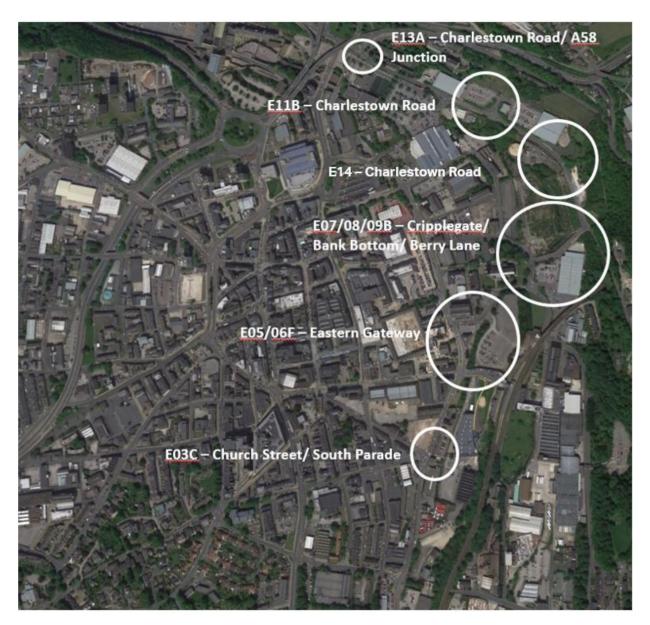


Figure NTS3: Eastern Corridor



3.1.4 The Western Corridor (shown in Figure NTS4) extends around Halifax town centre from the junction at A629 Skircoat Road/ Prescott Street in the south), northwards up Fountain Street through Bull Green, Cow Green and Broad Street, up to Orange Street, along Northgate and to the junction of Cross Hills and North Bridge in the north of the Western Corridor.

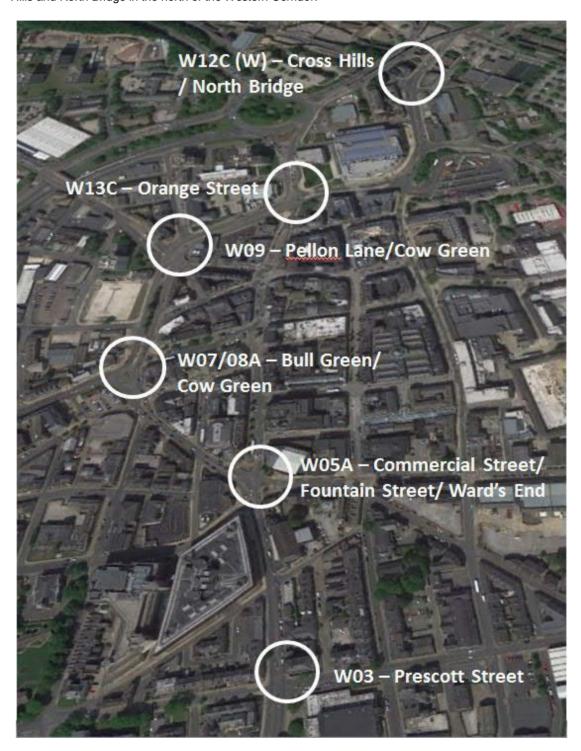


Figure NTS4: Western Corridor



3.1.5 The Central Area (shown in Figure NTS5) encompasses proposed works within the historic heart of Halifax including the pedestrianisation of central and northern sections of Market Street, modifications to routes within the town centre for buses and other traffic, creation of a bus/ rail interchange, improvements to the existing bus station, enhanced pedestrian crossing facilities, improvements to footways and public realm around the Square Chapel and new Library, Theatre, Bull Green and provision of streetscape improvements, using green infrastructure across the town centre.

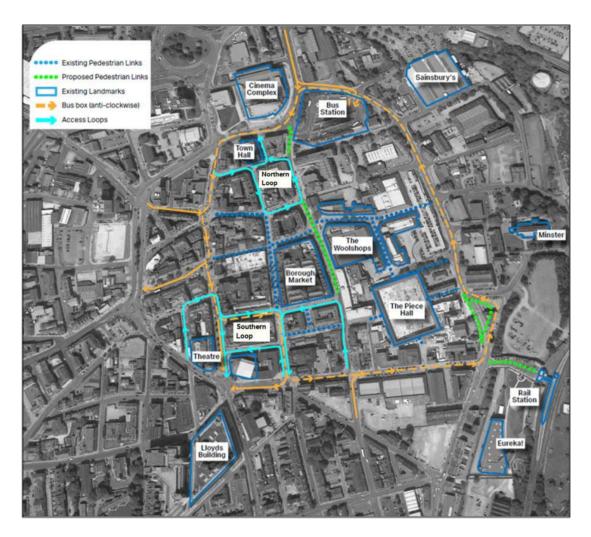


Figure NTS5: Central Area



4. The Proposed Interventions

4.0.1 Chapter 4: The Proposed Development of the ES (ES Volume I) describes each of the interventions and is supported by over 40 drawings (Application Document Ref 4.0 - Figures 4.2 - 4.4). Each proposed intervention has been assigned a name based upon its location (e.g. Church Street/ South Parade) followed by a unique reference number, shown in brackets e.g. (E03C). A summary of the interventions within the Eastern and Western Corridors and Central Areas is presented below.

4.1 **Eastern Corridor**

Church Street/ South Parade (E03C)

4.1.1 The proposed works include widening of Church Street carriageway to 7.3 m and widening of the footway to 2 m, along with the provision of a cycle lane. The existing roundabout, traffic islands, footways and crossings will be removed. The proposed works will lead to loss of part of the front yard area to Hermitage Mews, plus construction of a new stone wall at Hermitage Mews frontage.

The Eastern Gateway (E05/06F)

4.1.2 The proposed works include the closure of the existing Square Road and realignment of the Eastern Corridor, along with the implementation of a new junction between Alfred Street East and Church Street, traffic islands, controlled and uncontrolled pedestrian super crossings. A key element in this work package is the creation of a new public square 'Eastern Gateway' immediately adjacent to the Piece Hall, Calderdale Industrial Museum, the Square Chapel Arts Centre and the New Central Library. An illustration of how Eastern Gateway is expected to look is presented in Figure NTS6.



Figures NTS6: Proposed 'Eastern Gateway'



Cripplegate/ Bank Bottom/ Berry Lane (E07/08/09B)

4.1.3 The proposed works include the replacement of the existing Church Street/ Lower Kirkgate/ Berry Lane mini-roundabout with a priority junction, replacement of the existing junction between Bank Bottom and Lower Kirkgate/ Cripplegate with a new priority junction, widening of footways and the provision of a controlled pedestrian crossing. The works also include a realigned new highway, which connects Church Street and Charlestown Road, requiring the construction of new retaining walls – the existing retaining walls are shown in **Figure NTS7**. There will be works to the Eastern Corridor junctions with Southowram Bank, Cripplegate and Berry Lane and an extension of Southowram Bank with a new priority junction arrangement with Bank Bottom. The proposed works also include a new access to Matalan off Berry Lane, provision for compensatory and increased Matalan car parking, a signalised pedestrian crossing on Lower Kirkgate, and widening of the Bank Bottom bridge – Hebble Brook bridge.



Figure NTS7: View towards Halifax Minster from the Cripplegate/ Bank Bottom/ Berry Lane (E07/08/09B) intervention. The Cripplegate site will be used as a temporary construction compound.

Charlestown Road (E11B)

4.1.4 The proposed works include the remodelling of the existing mini-roundabout that enables access to the Charlestown Road Retail Park to form a new priority junction. Charlestown Road will be widened, realigned and resurfaced, with the existing zebra crossing being removed and replaced with a mid-link controlled pedestrian crossing facility.

Charlestown Road/ A58 Junction (E13A)

4.1.5 The proposed works include road widening into the verge on the north side of Charlestown Road, outside Gledcliffe Apartments (at the location illustrated in **Figure NTS8**) to provide two full northbound approach lanes to the roundabout. The northbound lane off Charlestown Road will also be extended to improve capacity during peak periods. The works also include the relocation of the existing pedestrian crossing, along with reconfiguration and resurfacing of the existing traffic island at the junction between New Bank and Charlestown Road.





Figure NTS8: Residential properties at the Charlestown Road/ A58 Junction (E13A)

Charlestown Road (E14)

4.1.6 The proposed works comprise the resurfacing of sections of Charlestown Road as necessary.

4.2 Western Corridor

Prescott Street (W03)

4.2.1 The proposed works include the signalisation of the Prescott Street junction with Skircoat Road/ Portland Place and Prescott Street, along with carriageway widening to facilitate the provision of cycle lanes on Skircoat Road/ Portland Place. Crossing points will be provided, whilst existing traffic islands will be altered. A single southbound lane is proposed on Portland Place and the left turn from Portland Place into Prescott Street will be prohibited. It is intended that the proposed works will reduce conflicts between southbound cyclists and left turning traffic.

Commercial Street/ Fountain Street/ Ward's End (W05A)

4.2.2 The proposed works at Commercial Street/ Fountain Street/ Ward's End include a ban of right turns into Ward's End, along with improvements to pedestrian and cycle crossings facilities. The existing carriageway will also be widened to allow the creation of a cycle path. Ward's End will become two- way and the southbound exit from Commercial Street will be reduced to a single lane, to permit the enhancement of pedestrian facilities and urban realm improvements. Parking arrangements and splitter islands on Commercial Street and Fountain Street will be modified or removed, to enhance pedestrian connectivity. An existing view and a visualisation of the proposed works at Commercial Street is presented as **Figure NTS9**.







Figure NTS9: Visualisation of proposed works at Commercial Street

Bull Green/ Cow Green (W07/08A)

4.2.3 The proposed works at Bull Green/ Cow Green and its junction with Broad Street and Fountain Street include the replacement of the existing roundabout with traffic signals to increase capacity. Enhanced pedestrian crossing facilities will be provided, together with increased pavement widths. Parking provision at Bull Green will be retained, as illustrated in Figure NTS10, but reduced in size to allow a pavement to be provided on the southern side of Bull Green. The revised parking layout will have 22 spaces including two blue badge spaces and two electric vehicle charging points. The proposed works will enable a right turn out of George Street and include carriageway widening to allow for a new bus stop.



Key

- 1. Surface treatment to be confirmed.
- 2. Tree robust species, fastigiate.
- 3. Large Tree large impact specimen to be drought, disease and pollution tolerant species.
- 4. Planting to be low maintenance, and screen the parked vehicles

Figure NTS10: Visualisation of public realm improvements at Bull Green roundabout



Pellon Lane/ Cow Green (W09)

4.2.4 The proposed works include the closure of the existing subway, the introduction of pedestrian crossing facilities and the implementation of a 1.5 m wide cycle path and cycle crossing facilities.

Northqate/ Cross Hills (W12C (W))

4.2.5 The proposed works include new signal controlled pedestrian crossing facilities across North Bridge Street and Cross Hills, along with enhanced provision for cyclists, including a 1.5 m wide cycle lane.

Orange Street (W13C)

4.2.6 The proposed works include pedestrian crossings across Broad Street, enabled through the removal of the existing northbound right turn flared lane on Broad Street (south) and the creation of a 5 m wide central island. The proposed works also include carriageway widening to accommodate a proposed cycle lane.

4.3 **Central Area**

- 4.3.1 The proposed works in the Central Area will introduce major changes to the town centre bus network, including modification of access into Halifax Bus Station and the creation of an anti-clockwise bus box. The removal of buses from parts of the centre of Halifax will allow pedestrianisation and public realm improvements along Market Street and the southern part of Commercial Street, enhancing pedestrian amenity in the town centre. The proposed works will also provide a new northern gateway, aimed at addressing connectivity issues between the town centre, Dean Clough and North Bridge Leisure Centre. It is intended that the proposed works will encourage the approximately 5,000 workers based in Dean Clough to utilise (and thus economically support) the wider town centre.
- 4.3.2 The proposed works range from modifications to signing and lining within the existing highway to the extensive resurfacing and installation of street furniture for the proposed pedestrianisation of Market Street. There will also be enhancements for non-motorised users, plus amendments to disabled blue badge parking, bus stops, taxi bays, loading bays and to on-street parking provisions.
- 4.3.3 The proposed works within the Central Area are summarised below.

Junction W12C (C) - Winding Road and Bus Station

- 4.3.4 The roads adjacent to Halifax Bus Station, around Northgate and Winding Road, will be subject to enhancements, including footway widening on the east side of Northgate to enhance pedestrian access to Dean Clough and the North Bridge Leisure Centre. The works also include significantly improved cycle facilities throughout the junction, including a 1.5 m wide cycle lane.
- 4.3.5 Additional improvements are proposed to the layout at the Bus Station and Winding Road junction – this includes changes to the pedestrian crossing alignment across Broad Street/ Northgate to better accommodate existing pedestrian desire lines towards the southern entrance of Broad Street Plaza. This will be made possible by the closure to traffic of Northgate at the bus station entrance. The former eastern access into the Bus Station will be re-opened, with traffic signals introduced at the relocated Bus Station access on Winding Road (refer to Figure NTS11). The works will also include amendments to the junction of Cross Hills/ Northgate, including amendments to signals/ pedestrian crossing facilities.





Figure NTS11: Improvements to pedestrian and cycling facilities and landscape planting proposed at Winding Road, near to Halifax Bus Station

Northern Loop including Princess Street/ Old Market

- 4.3.6 A modified northern town centre access loop will be created for vehicles, circulating anti-clockwise along Town Hall Street, Crossley Street, Princess Street, Old Market and Northgate. The proposed Northern Loop is illustrated in **Figure NTS5**. There will be modifications to relocate bus stops/ taxi ranks and parking, as a result of changes to Market Street.
- 4.3.7 The proposed works include the replacement of the existing carriageways on Northgate and Market Street with pedestrian zones and the implementation of rising bollards at the junction between Market Street/ Albion St and Northgate/ Crossley Street. A 1.5 m wide cycle path will be implemented on Northgate and junction improvement works will be undertaken at the northern and southern ends of Princess Street.

Southern Loop including Horton Street/ Union Street

4.3.7 A modified southern town centre access loop will be created off Market Street for vehicles, circulating anti-clockwise along Albion Street, King Edward Street, Commercial Street, Alexandra Street and Westgate (as illustrated in **Figure NTS5**). There will be modifications to relocate bus stops/ taxi ranks and parking as a result of changes to Market Street. The proposed works also include carriageway alterations to create a 1.5 m wide cycle lane. The section of Horton Street from Ward's End to its junction with Church Street is currently one-way, but will be modified to form the south-eastern part of the town centre bus box, with associated bus stops provided and becoming two-way along its full length.

Winding Road/ King Street

4.3.8 This proposed intervention covers the section of Winding Road located to the north-east of the bus station to Charles Street in the south, adjacent to the Post Office depot on Gaol Lane and Woolshops multi-deck car park. The street will form the eastern part of the town centre bus box, with associated bus stops provided. A series of public realm improvements will be undertaken, including re-surfacing, tree planting, enhanced pedestrian crossing facilities, traffic island alterations, junction improvements and carriageway alterations to accommodation a 1.5 m cycle lane. The existing junction with King Street/ Smithy Street. Charles Street will be changed from signal control to priority control with King Street/ Smithy Street forming the main line, and Charles Street being for buses and taxis only.



Moreover, the priority of the junction between Cripplegate and Bank Bottom will be changed, with Bank Bottom forming the main line and Cripplegate becoming a side street.

4.4 Pedestrians and Cyclists

4.4.1 One of the key Proposed Development objectives is to make Halifax a more attractive destination, building upon its unique Victorian heritage and historic townscape. This will involve the creation of new public spaces, connected pedestrianised streets, and green infrastructure to improve the town centre environment and create a sense of place that encourages more walking and cycling, commercial activity and tourism. Key enhancements include the pedestrianisation of the central section of Market Street between the junction with Albion Street and junction with Old Market, along with pedestrianisation of the northern end of Market Street (Northgate, close to the junction with Broad Street) and development of Eastern Gateway (E05/E06F). Existing and proposed views of Market Street are illustrated on Figures NTS12a and b.





Figure NTS12a and b: Existing and proposed views south along Market Street

4.4.2 The Proposed Development also has the key objective to provide high quality cycling infrastructure and permeability in central Halifax to promote increased levels of cycling to/ from and through Halifax town centre. Proposed arrangements for cyclists include the implementation of signal-controlled crossing facilities for cyclists at key crossing points along the Western and Eastern Corridors.

4.5 Parking

4.5.1 The Proposed Development will affect a number of existing pay-and-display parking bays. Some parking bays will be relocated, although some will be lost. The loss of on-street parking in the town centre will be minimised through identification of new spaces or combining the use of bays with other provision (i.e. dual role bays). The Proposed Development will retain the existing total number of blue badge parking bays across the town centre, and introduce two additional blue badge parking bays, helping to provide good access to the town centre core and the Piece Hall.

4.6 Buses and Taxis

- 4.6.1 The proposed introduction of an anti-clockwise bus box around the town centre necessitates the rerouting of a number of bus services and the relocation of a number of bus stops around the town centre. The Proposed Development also includes the creation of a new bus/ rail interchange, with new bus stops to be provided on Southgate (southbound), Ward's End (westbound), Union Street (northbound), and Horton Street (eastbound).
- 4.6.2 As a consequence of the Proposed Development, several existing taxi bays in Halifax town centre will need to be relocated. The key design objectives for the taxi bays include minimising the impact upon passenger walking distances to/ from taxi bays, whilst also taking cognisance of the topography of Halifax town centre, maintaining a presence in close proximity to Market Street and the Borough Market and maintaining the existing number of taxi bays in the town centre, along with introducing five new taxi bays on Market Street north and south and Albion Street.



4.8 **Proposed Development Construction**

- 4.8.1 Construction of the Proposed Development will be phased in order to enable the remainder of the road network to operate satisfactorily during the construction period. Subject to the award of the necessary statutory provisions and funding, the Proposed Development construction is anticipated to commence in 2021, with the Proposed Development opening in 2023. Construction working hours will generally be Monday to Friday 07:00 to 19:00 and Saturday 08:00 to 18:00. However, it is likely that some construction activities may need to be undertaken for short periods outside of these working hours. All construction works will be undertaken in accordance with a Construction Environmental Management Plan (CEMP) and Site Waste Management Plan (SWMP) in order to minimise impacts on the environment.
- 4.8.2 It is proposed that a contractors' compound is located at Cripplegate/ Bank Bottom/ Berry Lane (E07/08/09B). This area will be used for materials and plant storage, siting of temporary generators, construction offices and construction staff welfare facilities. This area will be secured by security fencing and gates, as appropriate.
- 4.8.3 The Proposed Development will require the removal of the steps leading to the main entrance of the Grade II listed 31 Square Road building and a number of walls including existing retaining walls at the Cripplegate/ Bank Bottom/ Berry Lane intervention (E07/08/09B). An assessment of the effects associated with removal of these structures forms part of the ES. In addition, a limited number of interventions will require trees to be removed. Where this is the case, mitigation planting is proposed to provide a continuity of tree cover and to address any adverse effects on local amenity and townscape character.

4.9 **Alternatives**

4.9.1 A number of alternative options were considered during the progression of the Proposed Development design process. This design 'evolution' sought to prevent or reduce adverse environmental effects, while maintaining the Proposed Development's operational efficiency and cost- effectiveness. Alternatives that have been considered for the Proposed Development are discussed in Chapter 4: The Proposed Development of the ES.



5. Environmental Impact Assessment

5.0.1 An EIA has been undertaken to identify how people and the environment could be affected by the Proposed Development and put forward measures (often referred to as mitigation measures) that will avoid, minimise or offset negative environmental effects. This followed a consultation (or scoping) exercise, when details of the proposals were shared with relevant organisations and responses used to inform the scope and content of the EIA. Specialists in a wide range of disciplines then carried out environmental studies, the findings of which are summarised below.

5.1 Traffic and Transport

- 5.1.1 This assessment considers the effects of the Proposed Development's construction and operation on traffic on the local road network. During the construction phase, there will be short-term traffic impacts due to temporary road closures and local traffic management. A Construction Traffic Management Plan has been produced, which identifies how traffic will be managed throughout the duration of the construction period in order to minimise potential impacts.
- 5.1.2 Proposed Development operation is not anticipated to generate any significant traffic and transport effects (severance, pedestrian amenity, fear and intimidation, highway safety and driver delay). Pedestrian and cycling movements will be monitored after the Proposed Development has been implemented, in addition to traffic counts to monitor effects.

5.3 Air Quality and Greenhouse Gases

- 5.3.1 Proposed Development construction activities will be undertaken in accordance with a CEMP, which will include best practice measures to control dust emissions associated with construction and demolition activities. With the application of such measures, significant effects on dust and air quality sensitive receptors will mostly be avoided.
- 5.3.2 The assessment of operational road traffic emissions has identified that the Proposed Development will have a negligible impact on local air quality for the vast majority of receptor locations. However, moderate and minor beneficial air quality effects are predicted at a number of locations within Halifax town centre, namely where interventions will restrict traffic flows on roads located adjacent to air sensitive receptors. However, the redistribution of traffic on roads around the town centre has to the potential to generate major, moderate and minor adverse effects at several sensitive locations adjacent to these roads. Mitigation measures proposed within the Calderdale Council Air Quality Action Plan and the West Yorkshire Low Emissions Strategy will be implemented over the coming years. If implemented to the maximum extent, these measures should be capable of reducing the exceedances of the annual mean NO₂ air quality objective to the extent that there may no longer be a significant effect.
- 5.3.3 At a regional level, it is forecast that in the opening year of the Proposed Development, and for 15 years following that, there will be an overall net improvement in levels of NO₂ and PM₂₅.

5.4 Noise and Vibration

5.4.1 Construction noise levels are likely to vary during the different construction phases of the Proposed Development, depending upon the location of the interventions and their proximity to Noise Sensitive Receptors (NSR). Works associated with the widening of Hebble Brook bridge and removal/ reconstruction of the Cripplegate retaining walls have the potential to result in the greatest noise emissions. In addition, some construction/ demolition activities (such as piling) have the potential to generate vibration effects. In order to mitigate such potential effects, construction and demolition works will be undertaken in accordance with the CEMP which will include a range of best practice noise and vibration control measures. With the implementation of such measures, construction activities during normal working hours will not generate any significant noise/ vibration effects. However, if construction activities are required outside of normal working hours (e.g. night-time, evenings, weekends etc.), there is the potential for short-term significant noise effects upon some nearby NSR. If potentially significant noise or vibration emitting activities are required outside normal working hours, such activities will need to be agreed with Calderdale Council, whilst local residents will be informed.



5.4.2 With respect to operational road traffic noise, the Proposed Development will result in relatively minor realignment of roads and junction layouts across the intervention areas, closure of some town centre roads and redistribution of traffic. In the short-term (upon opening) predicted effects are significant, ranging between major beneficial and major adverse, and in the long-term predicted effects are expected to be significant, ranging from major beneficial to moderate adverse. However, the vast majority of noise sensitive receptors are expected to experience very low noise level change or no change.

5.5 Surface Water Quality, Flood Risk and Drainage

There is only one water feature that could be potentially affected by the Proposed Development, namely Hebble Brook as shown in **Figure NTS13**. All construction activities will be undertaken in accordance with the CEMP, which will include a range of measures to protect surface water. With the implementation of such measures, significant effects upon Hebble Brook will be avoided, whilst also preventing an increase in flood risk. The Proposed Development will include an appropriate surface water drainage design that will include petrol interceptors, such that operational phase water and flooding effects will be negligible.



Figure NTS13: The road at Bank Bottom runs above Hebble Brook

5.6 Ecology and Nature Conservation

- 5.6.1 The Proposed Development will be implemented within an urban area dominated by areas of hardstanding and buildings. Such areas support few ecological habitats of value, although there are areas of broad-leaved woodland, scattered mature trees and dense/ scattered scrub which are all considered to be of importance to nature conservation at a local level.
- 5.6.2 The proposed construction works will be undertaken in accordance with a CEMP, which will include measures to appropriately manage impacts upon ecology, protect vegetation to be retained and ensure legal compliance. During the Proposed Development construction phase, some mature trees will



need to be removed to facilitate the works, whilst a small area of scattered scrub will also be lost. In order to mitigate for such losses, the Proposed Scheme design aims to retain large areas of scrub, whilst new trees will be planted, including tree planting within the Eastern Gateway, Bull Green/ Cow Green, Winding Road, Market Street and Northgate. With appropriate design of Proposed Development, and with the implementation of the mitigation measures included within the CEMP, there will be no significant adverse effects upon ecology and nature conservation.

5.7 Geology, Ground Conditions and Groundwater

5.7.1 The Proposed Development will be implemented within an area with a history of industrial development. As such, construction works have the potential to encounter contaminated materials. A site investigation has been carried out in order to identify potential contamination hotspots and enable the design of appropriate mitigation measures, including a piling risk assessment for works proposed at Hebble Bridge. In addition, the construction works will be undertaken in accordance with the CEMP, which will include a range of measures to protect soil, surface water and groundwater resources. With the implementation of such actions, no significant effects with respect to ground conditions and groundwater have been identified. Similarly, no significant effects have been identified during Proposed Development operation.

5.8 Townscape and Visual Amenity

- 5.8.1 The Proposed Development is located in the centre of Halifax, comprising urban elements with residential properties, commercial buildings and places of worship. Much of the Proposed Development lies within Halifax Town Centre Conservation Area and forms part of the urban core of the town, with close connections to Halifax Railway Station and Halifax Bus Station.
- 5.8.2 The townscape and visual amenity assessment considered the potential for the Proposed Development to impact upon townscape character and visually sensitive receptors, during both the construction and operational phases.
- 5.8.3 The assessment identified that the Proposed Development is not anticipated to result in any significant townscape effects during either the construction or operational phases, although there will be some minor beneficial townscape effects to the town centre/Historic Core, north-eastern and north-western urban edge, due to the proposed improvements to the public realm.
- 5.8.4 With regard to visual effects, the Proposed Development is located in relatively low topographical position within Halifax, with the surrounding land rising to the east, with intervening buildings and vegetation screening much of the Proposed Development from long distance receptors.
- 5.8.5 A total of ten viewpoints were selected for detailed assessment that represent typical views of the Proposed Development from within the selected study area. The assessment identified three viewpoints which will experience moderate adverse visual effects during the construction phase these being representative of residential properties on Church Street, Charlestown Road and high-rise flats adjacent to Pellon Lane. However, the assessment also identified two viewpoints that will experience moderate beneficial visual effects during operation, with these viewpoints being representative of pedestrian receptors in close proximity to the public realm improvements within the Proposed Development. Figures NTS14a and b illustrates the location of these viewpoints within Halifax town centre.







Figure NTS14a and b: Significant beneficial effects on visual amenity are predicted at viewpoint locations 5 (Eastern Gateway) and 9 (Bull Green) in the long-term

5.9 **Cultural Heritage**

5.9.1 Much of the Proposed Development is located within Halifax Town Centre Conservation Area, which contains almost 100 listed buildings. These include Square Chapel (as illustrated in Figure NTS15) and the 31 Square Road building (as illustrated in Figure NTS16). Other designated heritage assets that lie adjacent to the Proposed Development are Square Chapel and Steeple, the Piece Hall and Halifax Railway Station. There are also a significant number of other non-designated buildings of heritage importance within the conservation area. Two scheduled monuments lie within the study area. These are a post-medieval (AD1500-1900) gibbet platform, approximately 250 m west of the Western Corridor and a 19th century ventilation chimney and furnace house, located approximately 440 m north-west of the Eastern Corridor.



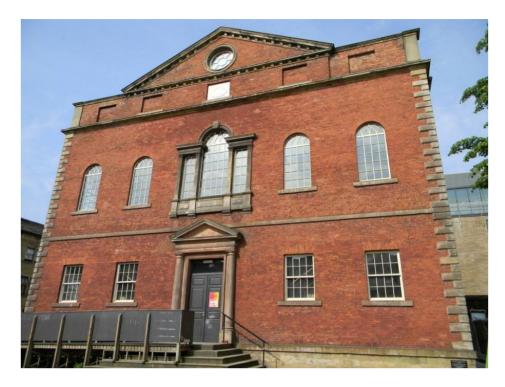


Figure NTS15: Square Chapel (Grade II* listed building, now Square Chapel Centre for the Arts)



Figure NTS16: The Grade II listed 31 Square Road building. The steps leading to the main entrance will require removal due to the intervention at the Eastern Gateway (E05/06F).



- 5.9.2 Intervention works at the Eastern Gateway (E05/06F) and Cripplegate/ Bank Bottom/ Berry Lane (E07/08/09B) have the potential to impact upon archaeological remains. As such, during the construction of the Proposed Development, mitigation will be put in place, including archaeological recording of any surviving remains, through archaeological excavation and sampling.
- 5.9.3 Given the nature of the Proposed Development, most interventions will be of a relatively small scale and will have a limited ability to impact on individual heritage assets. The creation of the Eastern Gateway (E05/06F) will also open-up views to and from the Grade I listed Halifax Minster from the Eastern Gateway (E05/06F). This is considered to represent a significant beneficial effect upon the Minster and the Halifax Town Centre Conservation Area.
- 5.9.4 Within the Eastern Gateway (E05/06F), the Proposed Development will require physical intervention to the Grade II listed 31 Square Road to improve access to the building through altering the stone steps on the building's northern elevation. However, proposed works will have no impact upon the asset's heritage value and will create a step-free access to the building that should provide a beneficial contribution to help to secure a sustainable re-use of the building in the future.
- 5.9.5 The proposed Bull Green/ Cow Green (W07/08A) intervention includes proposed landscape planting and public open space, which has the potential to have a significant beneficial effect on the Halifax Town Centre Conservation Area, as will the pedestrianisation of Market Street.
- 5.9.6 Overall, the Proposed Development will, in the majority of interventions, lead to an enhancement of the Halifax Town Centre Conservation Area. These enhancements will either be visual, through an improvement in materials, reduction in street clutter and consistency of signage, or physical, by improving the experience of the conservation area by redressing the domination of vehicles and improving and aiding pedestrian wayfinding and the sense of place. The assessment thus considers that the Proposed Development will have an overall minor beneficial effect on the Halifax Town Centre Conservation Area.

5.10 Waste

5.10.1 Waste generated during the Proposed Development construction phase (including demolition where required) will be managed in accordance with the CEMP and SWMP. These documents will define good construction waste management practices, including opportunities to re-use and recycle waste, and requirements to ensure legal compliance during waste management disposal. Implementation of such measures will avoid the potential for significant adverse effects.

5.11 Population and Health

- 5.11.1 The Proposed Development has the potential to generate a range of potential health benefits, in particular through the stimulation of the local economy and through the promotion of more active modes of travel (such as walking and cycling), which will result in health benefits, through increased physical activity. The Proposed Development is also intended to help reduce health inequalities for vulnerable road users, including pedestrians and cyclists. Public realm improvements and green infrastructure, which are a key component of the Proposed Development have the potential to generate wider health benefits, including creation of opportunities for social gatherings with associated beneficial effects for health and reduction of health inequalities.
- 5.11.2 The potential for localised adverse health effects in relation to localised increases in nitrogen dioxide (NO₂) and road traffic noise emissions is also noted, as described in **Chapter 7**: Air Quality and Greenhouse Gases and **Chapter 8**: Noise and Vibration respectively.



What Happens Next? 6.

6.1.1 Prior to making a decision on the planning application, Calderdale Council will seek advice from the Environment Agency, Natural England, Historic England and other consultees, and will make the full Environmental Statement available for examination by members of the public at Calderdale Councils' office. Details regarding the content of the Environmental Statement are provided in the 'Navigation Document' that accompanies the Application.

