

City of London Corporation

Beech Street Transport and Public Realm Improvements Equalities and Health Impact Assessment

Draft report

Prepared by LUC

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City of London Corporation

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Chapter 1

Introduction

Overview

1.1 The City of London Corporation has commissioned LUC to undertake an Equalities Impact Assessment (EqIA) and Health Impact Assessment (HIA) of the proposed Interim Scheme (Phase 1) of the Beech Street Transport and Public Realm Improvements in the City of London (the 'City').

1.2 The proposals include the implementation of a two-way 'Zero Emission Street' along the length of Beech Street. The street will be controlled at either end and only zero emission compliant vehicles will be able to use the street as a through road. Access for residents, visitors and services to off street premises, such as the car parks for the Barbican Centre and Barbican Estate, will be retained for non-compliant vehicles.

1.3 The aim of the Interim Scheme is to bring positive changes to the Beech Street area, particularly in terms of improving air quality.

1.4 This EqIA and HIA includes research into the existing studies to establish the baseline and a detailed review of the 'Zero Emission Street' proposals. The assessments provide positive and negative impacts of the proposals in accordance with the study's aims and relevant legislation. Recommendations have been provided for what actions can be taken to avoid or mitigate any negative impact and to better advance health and equality.

1.5 We understand that the City of London Corporation is actively working with both Islington Council and Transport for London (TfL) in obtaining the necessary approvals to deliver this scheme. The outputs of both the EqIA and HIA will be key to the approvals process and will contribute to the transformation of Beech Street.

Equality

Equality is about ensuring that every individual has an equal opportunity to make the most of their lives and not experience discrimination because of who they are, where they come from, what they believe or whether they have a disability.

1.6 The **Equality Act**¹ came into effect in October 2010 and replaced the Disability Discrimination Act and other anti-discrimination legislation. It legally protects people from discrimination in the workplace and in wider society.

1.7 Section 149 of the Equality Act (2010) sets out the general equality duty:

“A public authority must, in the exercise of its functions, have due regard to the need to—

(a) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act;

(b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;

(c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.”

1.8 In relation to this project, the main equality considerations include eliminating discrimination as far as possible and advancing equality of opportunity for anyone using Beech Street as a through, or as a means to access other destinations in the area. This includes not only people with disabilities, but people of all ages, races, religions, genders and sexual orientations.

Health

The definition of health is “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”²

1.9 The **Health and Social Care Act 2012**³ gave local authorities new duties and responsibilities for health improvement and protection and reducing health inequalities.

1.10 The Act requires every local authority to use the levers at its disposal to improve health and wellbeing.

1.11 To achieve this, public health teams have moved from the National Health Service (NHS) into local authorities and are working closely with planning officers to ensure local health issues are addressed. The planning process can help to promote the health and wellbeing of residents, workers and visitors in boroughs through its role in shaping the built and natural environment. Effective planning can create the conditions for healthy, active lifestyles and influence people's ability to follow healthy behaviours. It can also have positive impacts on reducing inequalities.

1.12 In terms of this project, the main health considerations relate to the conditions for residents, visitors and workers using the street. This includes topics such as active travel, healthy environment (e.g. improved air quality, minimised noise) and vibrant neighbourhoods.

¹ Equality Act (2010) www.legislation.gov.uk/ukpga/2010/15/contents

² World Health Organization (2019) www.who.int/about/who-we-are/frequently-asked-questions

³ Health and Social Care Act (2012)

www.legislation.gov.uk/ukpga/2012/7/contents/enacted

Chapter 2

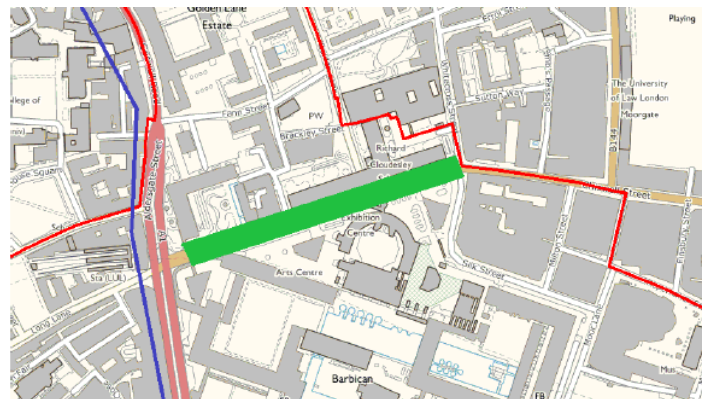
Interim Scheme (Phase 1): Project Description

Site Location

2.1 Beech Street (B100) is located in the City and comprises a covered roadway underneath the Barbican Estate. The road runs west-east from its junction with Aldersgate Street (A1) and Long Lane in the west to the junction with Whitecross Street, Silk Street and Chiswell Street in the east. The eastern junction marks the boundary between the City and Islington. Whitecross Street and Chiswell Street (north and east) are in Islington, while Beech Street and Silk Street (west and south) are in the City.

2.2 The Site Location Map is presented in Figure 2.1 below. Beech Street is highlighted in green.

Figure 2.1: Site Location Map



2.3 Beech Street spans across two City of London wards; Aldersgate Ward to the west and Cripplegate Ward to the east.

2.4 Beech Street currently provides key vehicular, cycle and pedestrian movement between Moorgate and Farringdon. Currently all traffic is unrestricted. To the west of the street lies Barbican Underground Station, located in Zone 1 on the Metropolitan, Circle and Hammersmith & City lines. Moorgate Station is also located within close proximity (0.5km). Within 1km of the site lies Farringdon Station to the west, St Paul's Underground Station to the south, Liverpool Street Station to the south-east and Old Street Station to the north-west. Farringdon and Liverpool Street will also be connected to the new Crossrail route. Two new ticket halls will be provided at Farringdon. The western end, located on the corner of

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Interim Scheme (Phase 1): Project Description

Beech Street Transport and Public Realm Improvements
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Farringdon Road and Cowcross Street, will provide access to and from the Thameslink ticket hall. The eastern end is bound by Charterhouse Street, Lindsey Street and Long Lane.

2.5 The site is also well connected by local bus routes, with the 153 electric bus service passing along Beech Street in both directions.

Context and Issues

2.6 Beech Street is an important access route for visitors to the Barbican Centre and forms part of the 'Culture Mile'. The Barbican Estate is a Grade II listed mixed-use development which was constructed between 1963 and 1982. The Estate and surrounding area contain the Barbican Arts Centre, Museum of London and Guildhall School of Music & Drama. The theatre and music events, art performances, bars and restaurants attract many people to the locality, including visitors and staff.

2.7 The Barbican Estate and surrounding area is densely populated. According to the 2011 Census, the Aldersgate Ward had 1,465 residents (113 people per hectare) and Cripplegate had 2,782 residents (97 people per hectare) which are higher densities than the London average of 52 people per hectare.

Figure 2.2: Photograph of Lauderdale Tower in the Barbican Estate



2.8 The dominant land use directly adjacent to Beech Street is characterised as residential and cultural, however other land uses include:

- Retail and office uses along Chiswell Street, Silk Street and Whitecross Street;
- Educational uses with the Guildhall School of Music & Drama located on Silk Street and Prior Weston Primary School on Whitecross Street;
- Primarily office uses along Aldersgate Street; and
- Retail and food outlets along Long Lane with Smithfield Market.

Figure 2.3: Photograph of the Barbican Estate



2.9 The covered roadway is characterised by narrow footpaths and high levels of motor vehicles, which is unwelcoming to pedestrians. Around 9,500 vehicles travel along Beech Street on an average weekday (over 24 hours); 6,500 on an average Saturday; and 5,700 on an average Sunday.

The main health issues are associated with high concentrations of Nitrogen Dioxide (NO₂) inside the covered roadway which are twice the required annual average daily limit (40 µg/m³).

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Interim Scheme (Phase 1): Project Description

Beech Street Transport and Public Realm Improvements
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Figure 2.4: Photograph of Beech Street



2.10 In October 2018 a Healthy Streets Assessment was carried out where the street was scored out of 100, based on ten criteria. The street scored 54% overall, with 'clean air' being the worst score. Other identified issues were 'noise', 'lack of places to stop and rest', and 'things to see and do'. The highest scoring indicators were 'easy to cross' and 'people feel safe', albeit the scores were not very high.

Proposals

2.11 The Interim Scheme (Phase 1) will include a two-way 'Zero Emission Street' along the length of Beech Street between its junctions with Aldersgate Street and Silk Street. The restrictions will be introduced in early 2020, through an experimental traffic order that is set to run for a maximum of 18 months.

2.12 Under current proposals, vehicles will need to comply with all three of the following:

- Emit maximum 75kg CO₂/km
- Minimum 20-mile zero emission range capability
- Compliant with Euro 6 equivalent NO_x emission standard.

2.13 The restrictions will be in place for all hours, every day (24 hours) and will be enforced using ANPR cameras.

2.14 Access to the Barbican car park (for both residents and visitors to the Barbican Centre), as well as for servicing and loading purposes, will be retained for non-compliant vehicles (as shown on Figure 2.5 below). The 153 electric bus service will also continue to run.

Figure 2.5: Photograph of Existing Access to one of the Barbican Resident Car Parks



2.15 As part of the scheme it is also proposed to close off the junctions with Golden Lane and Bridgewater Street (as pictured in Figure 2.6 below).

Figure 2.6: Photograph of Bridgewater Street / Beech Street Junction



Chapter 3

Methodology

Equalities Impact Assessment (EqIA)

3.1 As previously mentioned, the proposed changes to Beech Street need to eliminate discrimination as far as possible and advance equality of opportunity for anyone passing through Beech Street or using it to access other destinations.

3.2 The Equality Act 2010 establishes a number of groups with protected characteristics. The Act requires that when a new policy or strategy is proposed, the potential impacts on these groups are considered and that the outcomes of this assessment inform the policy or strategy.

3.3 In accordance with the Act and the Equality Analysis Template (included in **Appendix A**) provided by the City of London Corporation, the EqIA identifies potential impacts on different groups according to the following protected characteristics:

- Age
- Disability
- Pregnancy and Maternity
- Race
- Religion or Belief
- Sex
- Sexual Orientation and Gender Reassignment
- Marriage and Civil Partnership

3.4 A significant proportion of users will be non-residents who are using the street to travel to work or to access destinations within the vicinity. Therefore, the impacts on the wider public who regularly use the street have been assessed, not just the impact on local residents and workers.

3.5 Socio-demographic statistics from the 2011 Census⁴ (for the Aldersgate and Cripplegate wards), together with information from the baseline studies carried out by the City, have been used to carry out analysis of the impact of the proposals in relation to any duties under the Equality Act 2010

⁴ Census Data (2011) www.nomisweb.co.uk/census/2011

and Crime and Disorder Act 1998⁵. The assessment determines the proposal's impact on people with protected characteristics, in accordance with the aims of the EqIA. It also, where appropriate, provides recommendations for what actions can be taken to avoid or mitigate any negative impact or to better advance equality and foster good relations.

Health Impact Assessment (HIA)

3.6 The proposed changes will also need to create healthy conditions for residents, visitors and workers using the street.

3.7 In order to carry out the HIA, the Healthy Urban Planning Checklist⁶ has been used. This was developed by the London Health Urban Development Unit (HUDU). The most recent checklist was published in April 2017. It aims to promote healthy urban planning by ensuring that health and wellbeing implications of local plans and major planning applications are consistently taken into account.

3.8 The checklist is divided into the following four key themes:

1. Healthy housing
2. Active travel
3. Healthy environment
4. Vibrant neighbourhoods

3.9 Each theme contains a number of questions focused on a planning issue. Under each theme there are a number of related health and wellbeing issues, many of which are identified in local joint strategic needs assessments and health and wellbeing strategies, such as those related to:

- Obesity and diseases related to physical inactivity and poor diet
- Excess winter deaths
- Air and noise pollution
- Road safety
- Social isolation

3.10 The issues most relevant to the proposed changes to Beech Street include the following:

- Active Travel
 - Promoting Walking
 - Promoting Cycling

- Safety / Crime
- Connectivity
- Minimising Car Use

- Healthy Environment

- Air Quality
- Noise
- Open Space
- Play Space
- Biodiversity
- Flood Risk

- Vibrant Neighbourhoods

- Access to Services
- Public Buildings and Spaces

3.11 Key information sources for the assessment include the baseline technical data and qualitative assessments gathered by the City.

3.12 The assessment determines the proposal's impact on health. Where appropriate, recommendations are provided to avoid or mitigate any negative impacts.

⁵ Crime and Disorder Act (1998) www.legislation.gov.uk/ukpga/1998/37/contents

⁶ HUDU Healthy Urban Planning Checklist (2017) www.healthyrbandevelopment.nhs.uk/

Chapter 4

Equalities Impact Assessment

4.1 Baseline conditions have been established for each of the topics using the 2011 Census data, the Office of National Statistics (ONS) data, and studies carried out by the City of London Corporation.

4.2 The full Equality Analysis template has been completed and is included in **Appendix A** of this report. Key findings from the assessment have been outlined in this report.

Age

Baseline Information

4.3 According to the 2011 Census data, a large proportion of people who live in the local wards are between 30 and 59 years old, with the average age being 44. Approximately 25% of people are aged 60 or above.

4.4 Compared to the London average, the Aldersgate and Cripplegate wards have much lower percentages of residents aged 17 and younger. The number of residents aged over 65 are higher in these wards than the London averages.

Assessment

4.5 The proposals have the potential to negatively impact unequally across different age groups, particularly for the significant number of residents aged over 65 in the area, but also for very young children and their parents or carers.

4.6 Current baseline studies confirm that the pedestrian environment along Beech Street is uncomfortable and unwelcoming, with some hidden corners. There is a close proximity between pedestrians and traffic, and the pavement is narrow with several unmarked changes in levels and uneven surfaces. The Healthy Streets Assessment also identified there are a lack of places to stop and rest along the Street.

4.7 The proposed changes may restrict older people's mobility. Elderly people tend to rely on helpers because they may no longer be able to drive themselves (e.g. due to restricted eyesight or lack of confidence). If they currently use taxis or family/friends to get around, they may have to be

dropped-off at either end of Beech Street if the vehicle does not meet the requirements⁷ or seek an alternative route.

4.8 Given that the proposals are likely to increase pedestrian traffic, particularly at peak times, elderly people who need to rely on mobility aids (such as scooters and walking aids) may struggle, or be fearful, of the street.

4.9 Parents with buggies and infants/small children may also struggle for the same reasons. Manoeuvring buggies could be difficult, particularly at peak times.

4.10 Issues could also arise should access for essential support be limited by the blocked-off roads and alternative routes have to be taken (e.g. vehicles belonging to district nurses, doctors and carers). This is likely to be most associated with residents in older age groups.

4.11 Also, a reduction in vehicle traffic is likely at certain times of the day to reduce the number of 'eyes on the street', and at other times may increase numbers of cyclists and/or pavement users. Vulnerable groups, such as those in old age, or those with young children may feel increased fear for personal safety due either to fear of crime walking through the street at quiet times, or through injury by the increased number of cyclists (including inattentive cyclists) when using and crossing the street. As well as a risk of personal injury, fear can lead to adverse health outcomes.

Disability

Baseline Information

4.12 The 2011 Census counted the number of single people in a household with a '*long-term health problem or disability*'. This is defined as something that limits a person's day-to-day activities, and has lasted, or is expected to last, at least 12 months. This includes problems that are related to old age.

4.13 The percentage of people with a long-term health problem or disability is 14.4% in the Aldersgate ward and 20% in the Cripplegate ward. Although this is less than the London average of 22.4%, this is still a considerable number of people (126 and 329) taking into consideration the dense population of the Beech Street area.

Assessment

4.14 The proposals have the potential to negatively impact in ways that may discriminate against people with disabilities, including residents and people using Beech Street.

4.15 People with a disability who need to rely on mobility aids (such as scooters and walking aids) may struggle, or be fearful, of the street without further mitigation should they have to rely more on public transport as a result of the changes. If they currently rely on taxis or family/friends to get around (e.g. because they may not be able to use or afford an adapted vehicle), they may have to be dropped-off at either end of Beech Street, if the vehicle does not meet the proposed requirements, or seek an alternative route.

4.16 Issues could also arise should access for essential support be limited by the blocked-off roads and alternative routes have to be taken (e.g. vehicles belonging to district nurses, doctors and carers).

4.17 Reducing vehicle traffic is also likely at certain times of the day to reduce the number of 'eyes on the street', and at other times may increase numbers of cyclists and/or pavement users. Vulnerable groups, such as those with disabilities, may feel increased fear for personal safety due either to fear of crime walking through the street at quiet times, or through injury by the increased number of cyclists (including inattentive cyclists) when using and crossing the street. As well as a risk of personal injury, fear can lead to adverse health outcomes.

Pregnancy and Maternity

Baseline Information

4.18 Statistics on pregnancy were not collected as part of the 2011 Census, however the total the number of people aged between zero and four years old was 50 in the Aldersgate ward and 113 in the Cripplegate Ward. This suggests that there may be a significant number of expecting parents in the Barbican area.

Assessment

4.19 The proposals have the potential to negatively impact people in pregnancy and maternity including residents and people using the street.

4.20 The proposed changes may result in people using public transport options instead of taxis and other hired vehicles. In addition, the proposals are likely to increase pedestrian traffic, particularly at peak times. Therefore, the narrow, busy pavement during peak times is a particular concern and the safety of expecting mothers and parents with children should be considered in the proposals. Manoeuvring buggies could be difficult, particularly at peak times.

⁷ In June 2019, it was estimated that only 0.8% (20,000) of vehicles in London were electric. Of the 21,000 black taxis, only 8% (1,700) were electric.

4.21 Similarly to people of older age and with disabilities, issues could also arise should access for essential support be limited by the blocked-off roads and alternative routes have to be taken).

4.22 Additionally, there could be an increased fear for personal and child safety when using the street at quiet times. The vehicles currently offer natural surveillance and restricting access will reduce this. Expectant mothers, or parents with infants, may also fear injury by the increased number of cyclists (including inattentive cyclists) when using and crossing the street. As well as a risk of injury, fear can lead to adverse health outcomes.

Race

Baseline Information

4.23 According to the 2011 Census, a high proportion of people living in the Aldersgate and Cripplegate wards identify as 'white' in terms of ethnic group; 84.5% and 83.7% respectively compared to the London average of 59.8%.

4.24 Asian (mainly Indian and Chinese) backgrounds were the most frequently claimed ethnicity aside from white groups; 8.7% and 9.5% in Aldersgate and Cripplegate respectively. This is still lower than the London average of 18.5% however.

Assessment

4.25 As previously discussed, restricting vehicle traffic is likely to reduce the number of 'eyes on the street' at certain times of day and night. People from non-white groups are over-represented among shift, evening, night and early morning workers, when there is less pedestrian cycle or bus traffic.

4.26 People from non-white groups have been found to feel increased fear for personal safety, and are more frequently victims of crime, and so may be disproportionately adversely affected by the proposals. People from non-white backgrounds are disproportionately more represented in caring professions and could be adversely impacted, particularly when visiting the Barbican Estate at quieter times. As well as a risk of personal injury, fear can lead to adverse health outcomes.

Religion or Belief

Baseline Information

4.27 As shown in Table 4.1 below, the 2011 Census identified that the majority of people living around the Barbican Estate were either Christian (approximately 44%) or had no religion (approximately 37%). Jewish, Muslim and Hindu religions

were the most frequently claimed religions aside from Christianity or no religion. However, there were very low numbers compared to the London averages in most cases.

Table 4.1: Religion Statistics from the 2011 Census

Religion	Aldersgate Ward	Cripplegate Ward	London Region
Christian	43.5%	44.7%	48.4%
Buddhist	1.4%	1.2%	1%
Hindu	2.7%	1.8%	5%
Jewish	3.1%	1.9%	1.8%
Muslim	1.2%	2.2%	12.4%
Sikh	0%	0.3%	1.5%
No religion	38.7%	37.6%	20.7%

Assessment

4.28 Reducing vehicle traffic using the street is likely at certain times of day and night to reduce the number of 'eyes on the street'. People from some minority religious groups, have been found to feel increased fear for personal safety, and are more frequently victims of intimidation, and crime (for example those who show their religion through dress), and so may be disproportionately adversely affected by the proposals. As well as a risk of personal injury, fear can lead to adverse health outcomes.

Sex

Baseline Information

4.29 In both the Aldersgate and Cripplegate wards, the 2011 Census identified that approximately 52.4% and 53.2% of the population were males, respectively. Therefore, slightly more males live in the area than females.

Assessment

4.30 As discussed, the issue of reduced natural surveillance along the street through reduced vehicle traffic may increase crime and fear of crime. Women in particular may feel increased fear for personal safety, and so may be disproportionately adversely affected by proposals. Fear can lead to adverse health outcomes. This may result in women using other, less convenient connection routes, to avoid using the covered roadway.

4.31 Women are disproportionately more represented in caring professions and could be adversely impacted,

particularly when visiting the Barbican Estate at quieter times. As well as a risk of personal injury, fear can lead to adverse health outcomes.

Sexual Orientation and Gender Reassignment

Baseline Information

4.32 Statistics on sexual orientation and gender reassignment were not collected as part of the 2011 Census, however the ONS⁸ provides a figure that in 2017, 2.6% of people in London were likely to identify as lesbian, gay or bisexual.

Assessment

4.33 Again, reducing vehicle traffic using the street is likely to reduce the number of 'eyes on the street' at certain times of the day and night.

4.34 People within the LGBTQ (Lesbian, Gay, Bisexual, Transgender, Questioning) community have been found to feel increased fear for personal safety, and are more frequently victims of intimidation, and crime and so may be disproportionately adversely affected by proposals. As well as a risk of personal injury, fear can lead to adverse health outcomes.

movement for the less powerful groups, and these can be (and are) played out through acts of violence or threat of violence and harassment in public space.

4.39 Violence and intolerance are not socially acceptable and are unlawful in the UK, and therefore people who believe they may be victimised are more fearful where they feel unable to gain protection of others, or hidden from view.

Marriage and Civil Partnership

Baseline Information

4.35 According to the 2011 Census, a higher percentage of people living in the Aldersgate Ward were married or in a civil partnership (44%) compared to the London average of 37.4%. Cripplegate had a lower percentage of 34.4%, which coincides with their slightly younger population compared to Aldersgate.

Assessment

4.36 There is no research to indicate that marriage and civil partnership could be considered to impact the use or non-use of public space, however there is a large body of research to support claims regarding all the other groups mentioned.

4.37 The underlying theoretical position would be that there are no power dynamics operating in public space with regard to marital status, that might be enforced by for example violence or threat of violence.

4.38 There are power dynamics that operate in society to sustain other social 'hierarchies', which do constrain

⁸ Office for National Statistics (ONS) (2019) www.ons.gov.uk/

Chapter 5

Health Impact Assessment

5.1 According to the 2011 Census, between 85.4% and 88.6% of people living in the Aldersgate and Cripplegate wards identified themselves as having either 'very good health' or 'good health'. Less than 4.4% of people claimed to have either 'bad health' or 'very bad health'. This is slightly better than the London average of 83.6% with either 'very good health' or 'good health' and 4.9% having either 'bad health' or 'very bad health'.

5.2 The full Healthy Urban Planning Checklist has been completed and is included in **Appendix B** of this report.

Promoting Walking

Baseline Information

According to the latest baseline traffic data⁹, between the hours of 8am to 9am and 5pm to 6pm (which are the morning and evening peak periods), pedestrians make up over 60% of the composition of Beech Street, followed by cyclists which represent 18% of the number of movements on Beech Street.

5.3 During 2019, the overall pedestrian volumes in Beech Street decreased compared to volumes experienced in the years 2016 to 2018, where there was an increase, particularly between the years of 2016 to 2017.

5.4 It is anticipated that there will be little change in the number of pedestrians using Beech Street between the years of 2015 and 2026¹⁰, although this prediction does not consider the impact of the proposals.

5.5 Today, footways are provided either side of the carriageway and lie between the cycle path and the walls of the covered tunnel. Where a road or service area connects to Beech Street, the footway kerb drops therefore allowing those with limited mobility (e.g. wheelchair users and buggies) to easily navigate the change in pavement height. Some of the change in levels are unmarked and some of the footway surfaces are uneven. Both defects therefore create barriers to

⁹ City of London Borough Council (2019) Traffic and Movement. Traffic and pedestrian counts were recorded on 4 March 2019 to 10 March 2019 over a 24hour period.

¹⁰ This finding has been sourced from the Pedestrian Model which has been produced by the City of London Borough. The model is based on existing and

future spatial hierarchy, office distributions, attractiveness of routes and the location and passenger volume of Underground, National Rail and Crossrail stations.

accessibility, for example those pedestrians who are partially-sighted may not be aware of the edges of pavements, dropped curbs or uneven surfaces.

5.6 Although the footways were widened in 2014, the pavements are also perceived to be narrow in width making it difficult for pedestrians to pass, particularly during the peak periods. It is common for pedestrians to be close to the edge of the footway and even stepping into the carriageway.

5.7 However, the Pedestrian Comfort Levels (PCL)¹¹ which categorises the level of comfort based on the level of crowding pedestrians experience on the footway found that there is variation in footway widths.

All locations surveyed along Beech Street meet or exceed the minimum footway width requirement¹² of 1.5m

5.8 The PCL found that a proportion of the footways on Beech Street meet the A+ classification – the highest standard. These sections include the entire southern footway along Beech Street, the northern footway between Silk Street and Golden Lane and the eastern footways on Golden Lane and Bridgewater Street. In contrast, the western footways on Golden Lane and Bridgewater Street were found to be in category E – the lowest range and most uncomfortable level.

5.9 The PCL however does not consider the wider context of the footway and the blank frontages directly adjacent to the pavements. The lack of streetscaping detracts from the urban realm and the covered design of Beech Street, coupled with the level of traffic, creates a noisy and unpleasant walking environment.

5.10 In terms of crossings, there are several informal crossings along Beech Street. Between Aldersgate Street and Bridgewater Street (where the highest number of overall informal crossing movements occur) pedestrians align themselves along the kerb edge when entering the covered area and then cross the street at the first opportunity and make use of the central median.

Figure 5.1 Photograph of the Crossing at the Beech Street junction with Aldersgate Street and Long Lane



5.11 A similar pattern is found between Silk Street and Golden Lane, which had the second highest overall informal crossing movements. The least crossed area in Beech Street lies between Bridgewater Street and Golden Lane.

Assessment

5.12 Even though Beech Street meets the minimum footway width requirements, the current pedestrian environment is uncomfortable and unwelcoming. There is a close proximity between pedestrians and traffic; the air quality is poor; the pavement is considered too narrow during peak times; and there are said to be uneven surfaces along the street.

5.13 On the one hand, the proposed vehicular restrictions could promote walking along Beech Street, which is very positive. Pedestrians may feel safer as a result of less vehicles passing along the street and less chance of accidents and collisions.

5.14 Pedestrians will certainly feel more comfortable as a result of the improved air quality along the covered walkway. This could result in more people walking along the street, including those who may have previously avoided it.

5.15 On the other hand, the proposed vehicle restrictions could increase the fear of crime through the reduced number of 'eyes on the street', and therefore reduce the number of people walking along Beech Street. The proposals are likely to increase the number of cyclists and therefore pedestrians may feel fear of injury by a potentially greater number of inattentive cyclists.

¹¹ TfL Pedestrian Comfort Guidance for London: Guidance Document (2010) <http://content.tfl.gov.uk/pedestrian-comfort-guidance-technical-guide.pdf>

¹² Widths are defined as the amount of clear useable width that is required for pedestrians at each comfort level and is the width usable to pedestrians excluding street furniture and other barriers to movement.

Promoting Cycling

Baseline Information

5.16 In 2016 the cycle lanes along Beech Street were officially designated as a Quietway route, having been informal cycle lanes for over ten years. A mandatory cycle lane is provided on each side of the carriage way, allowing cyclists to follow the traffic flow. The cycle lanes are at times fragmented and broken up by the bus stop and loading bays.

Only a white line segregates the cycle lanes from the main carriageways and often motor vehicles stray into the cycle lanes.

Figure 5.2: Photograph of the Cycle Lanes along Beech Street



5.17 Advanced stop lines are located on the southern carriageway at the Beech Street and Aldersgate Street junction. These provisions give cyclists a safe place to stop and allow them to be positioned in front of other motorised traffic, so they have more time to pull off as the traffic lights change.

5.18 There is cycle parking provision in the following locations:

- Within residential car parks for Barbican residents;
- Within residential car parks on Brackley Street;
- Within the Barbican Centre car park accessed off Beech Street; and
- On-street cycle parking at Long Lane.

5.19 In addition to cycle infrastructure, several TfL Cycle Hire docking stations are located within close proximity to Beech Street; one is situated on Aldersgate Street (12 bicycles), another just off Golden Lane (15 bicycles) and another on Silk Street (12 bicycles).

Figure 5.3: Location Map of the nearest TfL Cycle Hire Docking Stations¹³



Assessment

5.20 The current cycling environment along Beech Street is considered fairly poor due to the narrow cycle lanes; lack of segregation between vehicles and cyclists; fragmented cycle lanes; and poor air quality.

5.21 The proposed vehicular restrictions are likely to promote cycling along the street. Cyclists will almost certainly feel safer as a result of fewer vehicles passing along the street as there will be a lower probability of accidents and collisions.

5.22 They will certainly feel more comfortable as a result of the improved air quality along the covered walkway. This could result in more people using the street, including those who may have previously avoided it.

5.23 On the other hand, the proposed vehicle restrictions could increase the fear of crime through the reduced number of 'eyes on the street', and therefore reduce the number of people cycling along Beech Street. Though the time taken to cycle along the street is less than the time taken to walk, and generally people feel less fearful of crime on a bicycle.

¹³ TfL Docking Stations (2019) <https://tfl.gov.uk/modes/cycling/santander-cycles/find-a-docking-station>

Safety

Baseline Information

5.24 As previously discussed, the current environment along Beech Street is considered fairly poor for both pedestrians and cyclists. In terms of safety, the narrow pavements and cycle lanes and lack of segregation between vehicles and cyclists is a concern.

5.25 The current speed limit along Beech Street is 20mph, with a 5mph limit in the car parks and loading bays.

5.26 According to the historic records, Beech Street has undergone a number of changes in recent years, including:

- 2014: Pedestrian enhancements were made at the Golden Lane and Whitecross Street/Silk Street junction by way of zebra crossings and widened footways. As part of this scheme, the carriageway outside the Barbican Centre entrance was raised to enhance the status of this entrance, as well as calm traffic.
- 2016: The cycle lanes along Beech Street were officially designated as a Quietway route, having been informal cycle lanes for over ten years.
- 2018: Lighting throughout the street was upgraded from luminaries to a light emitting diode (LED) system. A recent lighting survey was undertaken and found the recommended lux levels were exceeded.

Figure 5.4: Photograph of the Cycle Lanes and Lighting along Beech Street



Assessment

5.27 Although the proposals within Phase 1 do not include any traffic calming measures or any additional cycle crossings or routes, safety is likely to improve as a result of introducing the 'Zone Emission Street'. The restrictions on vehicles will, in the short term at least, result in fewer motor vehicles traveling along Beech Street and therefore decrease the likelihood of pedestrians and cyclists coming into contact with motor vehicles.

Crime

Baseline

5.28 According to the latest crime statistics¹⁴, between September 2018 and August 2019, 24 individual crimes have been recorded on or near Beech Street. These which consist of the following:

Table 5.1: Table of Recorded Crimes on or near Beech Street between September 2018 and August 2019

Type of Crime	Number of Records
Anti-social behaviour	8
Violence and sexual assault	3
Drugs (possession, supply and production)	3
Bicycle theft	2
Theft from the person	2
Other theft	2
Vehicle crime	1
Robbery	1
Possession of weapons	1
Other crime	1

5.29 The results above are not considered abnormal compared to the rest of the City of London.

Assessment

5.30 The Healthy Streets Assessment score for 'people feel safe' on Beech Street was 56%. Although this was one of the highest scores, there is definitely room for improvement.

¹⁴ Police.UK Detailed statistics for Community Policing (2019)
<https://www.police.uk/city-of-london/cp/crime/stats/>

5.31 It should be noted that the street changes from 2014, particularly in terms of the lighting, will have helped to reduce crime and fear of crime.

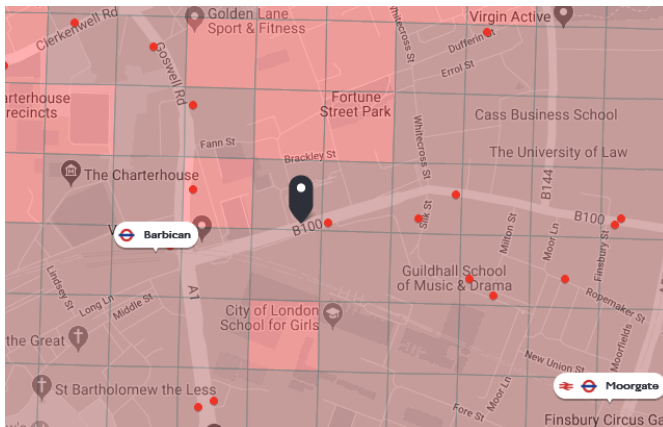
5.32 The new proposals however may lead to pedestrians feeling increased fear for personal safety due to fear of crime walking through the street at quiet times. This could be because of 'less eyes on the street' as a result of the reduced vehicle numbers.

Connectivity

Baseline Information

5.33 As previously mentioned, the street has excellent connections to public transport. The site's Transport for London Public Transport Accessibility Level (PTAL)¹⁵ is 6b which is the highest rating, as shown in Figure 5.5 below.

Figure 5.5: Transport for London's Public Transport Accessibility Level Map identifying Beech Street's Location



When compared to other streets in the City of London Borough, Beech Street is the second highest recorded pedestrian volumes for the morning and evening peak travel periods.

5.34 The southern footway of Beech Street is busier during the morning and interpeak periods compared to the northern footway. This finding is reversed during the evening peak period.

5.35 There is a high pedestrian flow heading eastward during the morning peak period from Aldersgate Street, where the Barbican Underground station is located and along Beech Street. This finding is also reversed during the evening peak period. Although pedestrian flows are consistent in both

directions during the interpeak period, data shows there is a higher number of pedestrians heading eastwards along Beech Street.

5.36 At either end of Beech Street lies a formal crossing. To the east at the Beech Street junction with Silk Street there is a zebra crossing which was installed in 2014, and to the west at the Beech Street junction with Aldersgate Street there is a signalised crossing.

5.37 At the Silk Street formal zebra crossing it was found that during all peak periods, northbound and southbound crossings were consistent, whereas during the interpeak period the northbound crossing was used substantially more when compared to the other survey periods.

5.38 To the west of Beech Street, at the Aldersgate signalised crossing, there was a contrast between morning and afternoon crossings. There were significantly more southbound movements occurring in the morning compared to any other surveyed time. While the northbound crossing experienced slightly higher movements when compared to any other survey period.

5.39 The cycle paths along Beech Street form part of TfL's Quietway system and were officially designated as "Quietway Q" in 2016. At a local level, Quietway Q provides a direct connection to cycle facilities on Aldersgate Street to the west and Quietway 11 off Chiswell Street at Moor Lane/Bunhill Row to the east. At a wider scale, Quietway Q links Cycle Superhighway 1 and Cycle Superhighway 6 to the east and west respectively.

5.40 Where Golden Lane and Bridgewater Street intersect Beech Street, protected cycling refuge crossing points have been provided in the raised central barrier (known as the central median). These allow cyclists travelling south along Bridgewater Street and Golden Lane to join Beech Street at these locations and make use of the same refuge points. Similarly, westbound cyclists can change direction by executing a right turn (northbound) via these protected cycling refuge crossing points.

5.41 During the morning and evening peak periods, data found that cyclists primarily travel westbound along Beech Street towards Aldersgate Street. At these times it was also observed that many cyclists travelled east of Gold Lane, while the number of cyclists decreased when travelling west of Golden Lane. This shows that Golden Lane is a primary cycle connection to Quietway Q.

¹⁵ TfL PTAL WebCAT Planning Tool (2019) <https://tfl.gov.uk/info-for/urban-planning-and-construction/planning-with-webcat/webcat>

5.42 Outside of these peak periods, there were less cyclists using Beech Street, and those that were present generally travelled westbound.

Assessment

5.43 Beech Street already provides direct and convenient movement between Moorgate and Farringdon and is situated within close proximity to the existing public transport network. The Interim Scheme will limit vehicle access along the street, however it is not proposed to make improvements to the public realm and internal routes.

5.44 In theory the proposals will increase the existing connectivity for pedestrians and cyclists in the area and it should encourage more people to use the route rather than avoid it.

Minimising Car Use

Baseline Information

5.45 According to the 2011 Census, a large percentage of people living in the Aldersgate and Cripplegate wards had no cars or vans in their households (between 59% and 69%). Between 27% and 33% of households had one car or van and between 4% and 8% had two or more.

5.46 The excellent public transport links, lack of available car parking spaces and affordability are likely to be the main reasons for people not having cars or vans.

Assessment

5.47 The proposals do not necessarily seek to reduce car use for residents. Access to the Barbican car parks (for both residents and visitors to the Barbican Centre), as well as for servicing purposes and loading will be retained for non-compliant vehicles.

5.48 That said, the proposals are likely to increase traffic on the surrounding roads and may therefore discourage car use (for non-compliant vehicles).

Air Quality

Baseline Information

5.49 In 2001, the City of London declared an Air Quality Management Area (AQMA) across the entire administration

area owing to high levels of Nitrogen Dioxide (NO₂) and Particulate Matter PM₁₀¹⁶ in the Square Mile.

5.50 Beech Street is a covered road. Most of the length of the road has a ceiling and different sections have walls on either one or both sides. The walls and ceiling can trap pollutants emitted by motorised vehicles travelling along Beech Street and prevent them from dispersing, resulting in elevated concentrations. Pollutants emitted from within the fully-enclosed sections will leave the road via the open sections.

Concentrations of NO₂ are measured at a monitoring site at the western end of Beech Street; the measured annual average daily NO₂ concentration in 2018 was 69 µg/m³, which exceeds the UK air quality limit value of 40 µg/m³.

5.51 The presence of these high level of pollutants can adversely impact pedestrians and cyclists using Beech Street as well as creating an uninviting environment.

Assessment

5.52 A dispersion model was carried out to quantify the potential impact of a two-way closure of Beech Street which permitted residential access for the year 2021. The model found that there will be significant reductions in NO₂ concentrations along the covered roadway and so there will be a reduction in air pollution and an improvement in air quality.

5.53 In contrast, there is expected to be an increase in NO₂ concentrations on the surrounding roads where non-compliant vehicles will be re-routed to avoid Beech Street.

Noise

Baseline Information

5.54 Noise surveys have been undertaken as part of the baseline studies carried out by the City of London Corporation. In almost all instances, the monitored noise levels exceeded the recommended levels due to the road traffic noise. The highest noise levels were during the daytime and exceeded recommended levels by 20 decibels.

5.55 All surveys found the noise readings to be between 60 and 70 decibels (dB) and the World Health Organisation (WHO) guidelines for community noise, as ascribed by the European Union¹⁷, suggests noise on or above 55dB can cause serious annoyance.

¹⁶ Department for Environment and Rural Affairs UK Air Information Resources (2019) https://uk-air.defra.gov.uk/aqma/details?aqma_ref=117

¹⁷ WHO Noise Guidelines for the European Region (2018) <http://www.euro.who.int/en/health-topics/environment-and->

Assessment

5.56 Although the proposals are not changing the physical space or environment of the project area, through the creation of a Zero Emission Street, the number of vehicles passing through Beech Street is expected to decrease as a result of the Zero Emission Street and therefore reduce noise impacts. In addition, vehicles passing through are likely to be quieter compared to petrol or diesel vehicles.

5.57 In contrast, there is expected to be an increase in noise levels on the surrounding roads where non-compliant vehicles will be re-routed to avoid Beech Street.

Open Space

Baseline Information

5.58 There is some (albeit limited) open space at no. 45 Beech Street (at Bridgewater St Junction).

Assessment

5.59 If the scheme proves successful, the experimental traffic order will become permanent before the 18 months is up and public realm enhancements introduced as part of Phase 1. Details of enhancement are unknown at this stage, but the scheme would potentially capitalise on available open-air space at no.45

Play Space

Baseline Information

5.60 The existing street does not provide any play space.

Assessment

5.61 The creation of play space is not included as part of the Phase 1 proposals.

Biodiversity

Baseline Information

5.62 In 2014, additional street trees were planted adjacent to the Guildhall School of Music & Drama and the carriageway outside the Barbican Centre.

5.63 Recently the Barbican's Sustainability Steering Group have been responsible for greening initiatives around the Barbican Estate, including the planting of drought-resistant planting and plants which promote better air quality.

Figure 5.6: Photograph of Greening Initiatives around the Barbican Estate



5.64 There are currently some trees and plants outside no.45.

Assessment

5.65 The Interim Scheme does not propose any improvements to biodiversity at this stage, however this is likely to be considered as part of the Phase 1 scheme. Details are not known at this stage.

Flood Risk

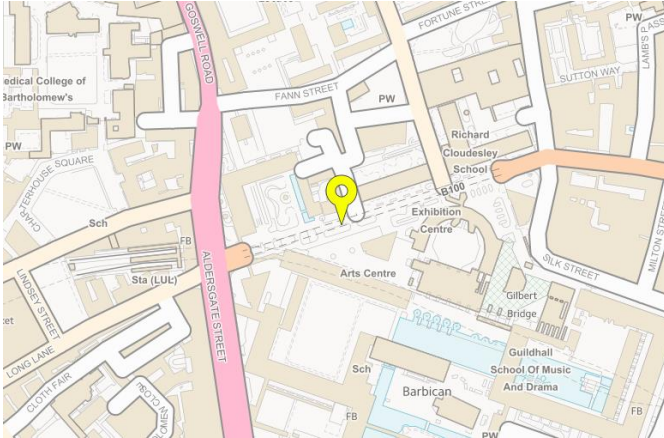
Baseline Information

5.66 According to the Environment Agency's Flood Map for Planning¹⁸ (shown in Figure 5.7 overleaf), the site lies in a low flood risk zone (Zone 1) which represents less than 1 in 1,000 annual probability of river or sea flooding.

health/noise/publications/2018/environmental-noise-guidelines-for-the-european-region-2018

¹⁸ Environment Agency Flood Map for Planning (2019) <https://flood-map-for-planning.service.gov.uk/>

Figure 5.7: Environment Agency's Flood Map for Planning identifying the location of Beech Street



5.67 Within the wider study area, Flood Zone 2 (land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding) can be found to the south of Beech Street at the Barbican Water Gardens and to the north of Beech Street in Beech Gardens. Both of these areas however are water features and form part of the public realm.

Assessment

5.68 The Interim Scheme is not likely to increase or decrease the risk of flooding in the Beech Street area.

Vibrant Neighbourhoods

Baseline Information

5.69 In 1996, to further enhance the pedestrian experience, colourful panelling was installed to cover the blank walls and materials used to minimise water leaks (as shown in Figure 5.8 below).

Figure 5.8: Photograph of the Existing Colourful Panelling along Beech Street



Assessment

5.70 Public realm improvements are not proposed as part of this Interim Scheme but instead will be introduced at Phase 1 however, details are not known at this stage.

Access to Services

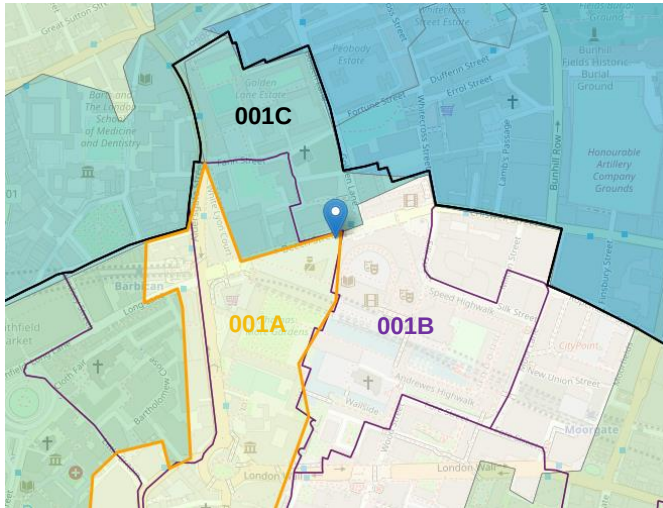
Baseline Information

5.71 The 2019 Index of Multiple Deprivation (IMD) uses nine domains¹⁹ to rank the deprivation in England, including the *Barriers to Housing and Services* domain. The City of London local authority ranked 208 of 317 local authorities in the country in 2019²⁰.

5.72 Each local authority area is divided into neighbourhoods, wards and then further subdivided into Lower-Layer Super Output Areas (LSOAs). There are six LSOAs within the City of London and Beech Street spans the boundary of three (as shown in Figure 5.9 overleaf).

¹⁹ Income; Employment; Health deprivation and Disability; Education Skills and Training; Barriers to Housing and Services; Crime; Living Environment; Income Deprivation Affecting Children Index; and, Income Deprivation Affecting Older People Index.

²⁰ DCLG Apps (2019) Indices of Deprivation: 2019 and 2015. http://dclgapps.communities.gov.uk/imd/iod_index.html#

Figure 5.9: Map of the LSOAs along Beech Street²¹

- **001A** is and includes the south section of Beech Street west of the eastern boundary of Shakespeare Tower.
- **001B** is situated within the Cripplegate Ward and contains the southern section of Beech Street between the eastern boundary of Shakespeare Tower and Golden Lane and then the entire area of Beech Street, east of Golden Lane and Silk Street.
- **001C** is also located within the Cripplegate Ward and covers the northern section of Beech Street between White Lion Court and Golden Lane.

5.73 The *Barriers to Housing and Services* domain uses indicators that measure the physical and financial accessibility of housing and local services.

5.74 Applying only this domain to the three LSOAs on Beech Street, in 2019 LSOA 001B ranked 11,707 out of 32,844 LSOAs; where 1 is the most deprived LSOA. This is therefore amongst the 40% most deprived neighbourhoods in the country and the least deprived ward in the City.

5.75 Using the same time period and domain, LSOA 001A ranked 7,319 out of the 32,844 LSOAs meaning it lies within the 30% most deprived neighbourhoods in the country.

The most deprived LSOA along Beech Street is 001C (within Cripplegate Ward) as it ranks 2,157. This is amongst the 10% most deprived neighbourhoods in the country and the second most deprived neighbourhood in the City.

5.76 Between the years of 2015 (when the previous IMD study took place) and 2019, two LSOAs (001A and 001B) along Beech Street became more deprived and one LSOA (001C) became less deprived in relation to *Barriers to Housing and Services*.

5.77 The **Neaman GP Practice** is the nearest²² GP practice to Beech Street and although it is located outside of the wider study area, it lies approximately 150m southwest of Beech Street.

5.78 Results²³ from the GP patient survey²⁴ for this practice found that 79% of respondents described their overall experience of this GP practice as 'good'. This is slightly below the Local Care Commission Group and the national averages of 83%. A significant proportion (89%) of respondents found they have had enough support from local services or organisations in the last 12 months to help manage their long-term condition(s). This is greater compared to the Local Care Commission Group average of 84% and national average of 78%.

5.79 Similarly, a substantial number (97%) of respondents felt they were involved as much as they wanted to be in decisions about their care and treatment during their last general practice appointment and this exceeds the national and the Local Care Commission Group averages of 93%.

5.80 The survey however did reveal that only 61% of respondents found it easy to contact the GP practice by phone. 73% of respondents found the healthcare professional they saw or spoke to was good at giving them enough time during their last general practice appointment and 59% of respondents were satisfied with the general appointments available. These are all below the national and local care commissioning group responses.

5.81 The City of London Corporation has one maintained primary school, eight sponsored academies as part of the City of London Academies Trust, and two co-sponsored academies in neighbouring boroughs. It also supports three independent schools.

²¹ Adapted from DCLG Apps (2019) Indices of Deprivation: 2019 and 2015. http://dclgapps.communities.gov.uk/imd/iod_index.html#

²² As the crow flies and using the nearest point of Beech Street.

²³ Results were published on 11th July 2019 and are based on data collected between January and March 2019 where 363 surveys were sent out and 112 surveys were returned (a 31% completion rate).

²⁴ GP Patient Survey (2019) Results from the 2019 survey: The Neaman Practice. Available at: <https://gp-patient.co.uk/report?practicecode=F84640>

Assessment

5.82 The proposals are not seeking to change access arrangements to/from existing services as part of the Interim Scheme.

- Two trade exhibition halls; and
- Many more informal performance venues.

Assessment

5.85 The proposals will not change public buildings and spaces as part of the Interim Scheme.

Public Buildings and Spaces

Baseline Information

5.83 Beech Street lies wholly within the Barbican Estate. This development was constructed between 1963 and 1982 and is predominantly a residential estate that is situated above a raised pedestrian podium which in turn is set above ground-level car parking.

5.84 The following public buildings are located within the Beech Street and wider study area:

- **The Museum of London** was opened in 1976 and tells the history of London from its beginnings in 450,000 BC to the present day. Between 2013-18, four million people visited the museum²⁵ and the building is operating at capacity. The current site is located on a busy roundabout and is disconnected with the street, making the building difficult to access. In 2015 the Museum of London announced its intention to relocate to a new museum in Smithfield General Market, with a provisional opening date likely to be 2024²⁶.
- **The Guildhall School of Music and Drama** is funded and administered by the City of London²⁷. It is ranked as one of the top ten performing arts institutions in the world and is also the UK's leading provider of specialist music training at the under-18 level²⁸. The School moved to the Barbican in 1977 and was designated as a Grade II listed building in 2001.
- Barbican Centre (also known as the Arts Centre) was built between 1971-82 and comprises of:
 - The Barbican Hall with a capacity of 1,950 persons;
 - The Barbican Theatre with a capacity of 1,160 persons;
 - Three cinema screens where capacities range between 160 to 280 persons;
 - The Barbican Library;
 - Three restaurants;

²⁵ Museum of London (2018) Museum of London Strategic Plan 2018-2023. Available at: https://www.museumoflondon.org.uk/application/files/4215/2646/1105/Museum_of_London_Strategic_Plan_2018-2023.pdf

²⁶ Museum of London (2019) About Us – our organisation, our story: Available at: <https://www.museumoflondon.org.uk/about-us/our-organisation>

²⁷ Guildhall School of Music & Drama (2015) A Brief History. Available at: https://www.gsmd.ac.uk/about_the_school/about_us/history/

²⁸ Guildhall School of Music & Drama (2015) About the School. Available at: https://www.gsmd.ac.uk/about_the_school/

Chapter 6

Conclusions and Recommendations

Conclusions

- 6.1** Overall, the proposed Interim Scheme is expected to result in a positive change along Beech Street, particularly in terms of improved air quality, reduced noise pollution, increased walking and cycling and reduced likelihood of pedestrians and cyclists coming into contact with motor vehicles.
- 6.2** The Equalities Impact Assessment identified that the proposals could have the potential to negatively impact certain groups of people, particularly those aged over 65, with disabilities, with infants and/or in pregnancy and maternity.
- 6.3** Given the existing narrow and uncomfortable environment and the anticipated increase in pedestrian and bicycle traffic during peak times, this could affect those who use mobility aids or buggies. It could make manoeuvring more difficult and users could be more fearful of the street.
- 6.4** Issues could also arise should access for essential support be limited by the blocked-off roads and alternative routes have to be taken (e.g. vehicles belonging to district nurses, doctors and carers).
- 6.5** In addition, the reduced traffic along Beech Street is likely to reduce the number of 'eyes on the street' at quieter times of the day and could therefore increase crime and fear of crime. This could have a negative impact on the above groups in addition to residents and users of Beech Street from non-white backgrounds, minority religious groups, females and/or people from the LGBTQ community.
- 6.6** The Health Impact Assessment identified that the proposals would result in an overall positive change compared to the existing baseline situation. The new proposals will promote walking and cycling; reduce the likelihood of pedestrians and cyclists coming into contact with motor vehicles; increase connectivity for pedestrians and cyclists; discourage car use; improve air quality; and decrease noise pollution.
- 6.7** The identified negative impacts included the potential for increased crime and fear of crime at certain times of the day, and increased traffic and NO₂ concentrations on the surrounding roads. At this stage, the Interim Scheme is not expected to affect the provision of open space and play space, biodiversity, flood risk, access to services and public buildings

and spaces. However, the provision of public realm enhancements, including more biodiversity and areas of open space, will be considered as part of the Phase 1 scheme.

Recommendations

6.8 The following measures are recommended to minimise the potential negative impacts of the Interim Scheme.

■ Short-term improvements to Beech Street and the surrounding area:

- Installation of designated drop-off areas at either end of Beech Street (e.g. for taxis).
- Enhanced segregation between cycle lanes and roadways (e.g. using coloured lanes or small bollards).
- Provision of (anti-homeless) benches to allow resting opportunities for elderly/disabled people, set back from the road. Possible locations could be to the front of the offices at 45 Beech Street and at the junctions to Bridgewater Street and Golden Lane.
- Measures to address the issue of 'hidden corners' (e.g. mirrors, CCTV and enhanced lighting in darker areas).
- Levelling improvements to the pavement to smooth-out any uneven surfaces as much as possible.
- Ensure all level changes are suitably marked.
- Ensure the street is well-maintained and continues to be well-lit.

■ Access arrangements:

- Consider direct access arrangements through the junctions at Golden Lane and Bridgewater Street for any vehicles belonging to essential medical support.
- Consider exemptions for non-compliant taxis when collecting/dropping off elderly and disabled residents of the Barbican Estate (within the two to three-minute time window).

■ Security arrangements:

- Consider the provision of wardens or other officers at certain times of day to support confidence of use for all groups.
- Install enhanced CCTV along Beech Street with appropriate signage.
- Continue to monitor crime incidents in and around the Beech Street area.

- Following implementation of the Interim Scheme, carry out a survey to investigate the fear of crime, particularly during quieter times of the day, and respond to any negative findings.

■ Signage:

- Provide clearer signage to promote the direct connectivity between Aldersgate Street and Silk Street, particularly for pedestrians (signage for cyclists already exists).
- Provide smaller signs to identify alternative routes in order to provide choice.
- Provide signage to reduce the speed of cyclists along the street.

■ Further monitoring:

- Following implementation of Phase 1, it is recommended to carry out further dispersion air quality and noise monitoring in order to assess the impact of the changes along Beech Street and the surrounding roads and respond to negative findings.

Appendix A

Equalities Analysis

EQUALITY ANALYSIS (EA) TEMPLATE

The Proposal *Click and hover over the questions to find more details on what is required*

Assessor name:

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1. What is the Proposal?

The Interim Scheme (Phase 1) will include a two-way 'Zero Emission Street' along the length of Beech Street between its junctions with Aldersgate Street and Silk Street. The restrictions will be introduced in early 2020, through an experimental traffic order that is set to run for a maximum of 18 months.

Under current proposals, vehicles will need to comply with all three of the following:

- Emit maximum 75kg CO₂/km
- Minimum 20-mile zero emission range capability
- Compliant with Euro 6 equivalent NO_x emission standard.

The restrictions will be in place for all hours, every day (24 hours) and will be enforced using ANPR cameras.

Access to the Barbican car park (for both residents and visitors to the Barbican Centre), as well as for servicing and loading purposes, will be retained for non-compliant vehicles. The 153 electric bus service will also continue to run. As part of the scheme it is also proposed to close off the junctions with Golden Lane and Bridgewater Street.

2. What are the recommendations?

The key recommendations include the following:

- Consider short-term improvements such as drop-off areas, enhanced segregation between cycle lanes and roadways and levelling improvements.
- Consider direct access arrangements through the junctions at Golden Lane and Bridgewater Street for any vehicles belonging to essential medical support.
- Monitor crime and fear of crime and consider provision of wardens or other officers at certain times of day to support confidence of use for all groups.
- Consider improved signage and wayfinding of any alternative routes that provide choice.
- Ensure street is well maintained, well lit, and 'hidden corners' are addressed.

3. Who is affected by the Proposal? *Identify the main groups most likely to be directly or indirectly affected by the recommendations.*

The assessment identified that the proposals could have the potential to negatively impact certain groups of people, particularly those aged over 65, with disabilities, with infants and/or in pregnancy and maternity.

Given the existing narrow and uncomfortable environment and the anticipated increase in pedestrian and bicycle traffic during peak times, this could affect those who use mobility aids or buggies. It could make manoeuvring more difficult and users could be more fearful of the street. Issues could also arise should access for essential support be limited by the blocked-off roads and alternative routes have to be taken (e.g. vehicles belonging to district nurses, doctors and carers). In addition, the reduced traffic along Beech Street is likely to reduce the number of 'eyes on the street' at quieter times of the day and could therefore increase crime and fear of crime. This could have a negative impact on the above groups in addition to residents and users of Beech Street from non-white backgrounds, minority religious groups, females and/or people from the LGBTQ community.

Key borough statistics:

The City has proportionately more people aged between 25 and 69 living in the Square Mile than Greater London. Conversely there are fewer young people. Approximately 955 children and young people under the age of 18 years live in the City. This is 11.8% of the total population in the area. Summaries of the City of London [age profiles from the 2011 Census can be found on our website](#)

A number of demographics and projections for demographics can be found on the [Greater London Authority website in the London DataStore](#). The site details statistics for the City of London and other London authorities at a ward level:

- [Population projections](#)

NB: These statistics provide general data for these protected characteristics. You need to ensure you have sufficient data about those affected by the proposals – see below under “additional equalities data”.

[Double click here to show borough wide statistics / hide statistics](#)

Age

Additional Equalities Data (Service level or Corporate) *Include data analysis of the impact of the proposals*

The impact of the proposals on residents will be greatest on those who are supported by non-electric vehicles currently parking, stopping or delivering in or from Beech Street, and residents within a 10-minute walk of Beech Street. According to the 2011 Census data, a large proportion of people who live in the local wards are between 30 and 59 years old, with the average age being 44. Approximately 25% of people are aged 60 or above. Compared to the London average, the Aldersgate and Cripplegate wards have much lower percentages of residents aged 17 and younger. The number of residents aged over 65 are higher in these wards than the London averages.

What is the proposal's impact on the equalities aims? *Look for **direct impact** but also evidence of **disproportionate impact** i.e. where a decision affects a protected group more than the general population, including **indirect impact***

The proposals have the potential to negatively impact unequally across different age groups, particularly for the significant number of residents aged over 65 in the area, but also for very young children and their parents or carers.

Current baseline studies confirm that the pedestrian environment along Beech Street is uncomfortable and unwelcoming, with some hidden corners. There is a close proximity between pedestrians and traffic, and the pavement is narrow with several unmarked changes in levels and uneven surfaces. The Healthy Streets Assessment also identified there are a lack of places to stop and rest along the Street.

The proposed changes may restrict older people's mobility. Elderly people tend to rely on helpers because they may no longer be able to drive themselves (e.g. due to restricted eyesight or lack of confidence). If they currently use taxis or family/friends to get around, they may have to be dropped-off at either end of Beech Street if the vehicle does not meet the requirements or seek an alternative route.

Given that the proposals are likely to increase pedestrian traffic, particularly

What actions can be taken to avoid or mitigate any negative impact or to better advance equality and foster good relations?

To consider direct access arrangements through the junctions at Golden Lane and Bridgewater Street for any vehicles belonging to essential medical support.

To ensure the physical environment supports confidence in use for example the street is well maintained free of litter and graffiti, well lit, and any 'hidden corners' are addressed;

To consider ways to support considerate user behaviour, for example ways to encourage cyclists to be attentive to those seeking to use crossings;

To support confidence of use for all groups by for example provision of wardens or other officers at certain times of day;

To consider wayfinding that might provide choice of routes between public transport and community / public facilities serving people who feel / are vulnerable because of this protected characteristic; and

To monitor crime and fear of crime, accident statistics, and new movement patterns and respond to any negative findings.

Age

at peak times, elderly people who need to rely on mobility aids (such as scooters and walking aids) may struggle, or be fearful, of the street. Parents with buggies and infants/small children may also struggle for the same reasons. Manoeuvring buggies could be difficult, particularly at peak times. Issues could also arise should access for essential support be limited by the blocked-off roads and alternative routes have to be taken (e.g. vehicles belonging to district nurses, doctors and carers). This is likely to be most associated with residents in older age groups. Also, a reduction in vehicle traffic is likely at certain times of the day to reduce the number of 'eyes on the street', and at other times may increase numbers of cyclists and/or pavement users. Vulnerable groups, such as those in old age, or those with young children may feel increased fear for personal safety due either to fear of crime walking through the street at quiet times, or through injury by the increased number of cyclists (including inattentive cyclists) when using and crossing the street. As well as a risk of personal injury, fear can lead to adverse health outcomes.

Disability [Double click here to add impact / Hide](#)

Check box if NOT applicable ☐

Key borough statistics:

Day-to-day activities can be limited by disability or long term illness - In the City of London as a whole, 89% of the residents feel they have no limitations in their activities – this is higher than both in England and Wales (82%) and Greater London (86%). In the areas outside the main housing estates, around 95% of the residents responded that their activities were not limited. Extract from summary of the [2011 Census relating to resident population health for the City of London can be found on our website](#).

The 2011 Census identified that for the City of London's population:

- 4.4% (328) had a disability that limited their day-to-day activities a lot
- 7.1% (520) had a disability that limited their day-to-day activities a little.

Source: 2011 Census: [Long-term health problem or disability, local authorities in England and Wales](#)

NB: These statistics provide general data for these protected characteristics. You need to ensure you have sufficient data about those affected by the proposals – see below under "additional equalities data".

[Double click here to show borough wide statistics / hide statistics](#)

Disability

Additional Equalities Data (Service level or Corporate) *Include data analysis of the impact of the proposals*

There are residents with disabilities and long-term illnesses who may suffer some disproportionate adverse effects due to changed local movement patterns. In addition, people with disabilities may visit or use Beech Street from outside the immediate area who may be disproportionately affected by changed movement patterns. The 2011 Census counted the number of single people in a household with a '*long-term health problem or disability*'. This is defined as something that limits a person's day-to-day activities, and has lasted, or is expected to last, at least 12 months. This includes problems that are related to old age. The percentage of people with a long-term health problem or disability is 14.4% in the Aldersgate ward and 20% in the Cripplegate ward. Although this is less than the London average of 22.4%, this is still a considerable number of people (126 and 329) taking into consideration the dense population of the Beech Street area.

Disability

What is the proposal's impact on the equalities aims? Look for **direct impact** but also evidence of **disproportionate impact** i.e. where a decision affects a protected group more than the general population, including **indirect impact**

The proposals have the potential to negatively impact in ways that may discriminate against people with disabilities, including residents and people using Beech Street.

People with a disability who need to rely on mobility aids (such as scooters and walking aids) may struggle, or be fearful, of the street without further mitigation should they have to rely more on public transport as a result of the changes. If they currently rely on taxis or family/friends to get around (e.g. because they may not be able to use or afford an adapted vehicle), they may have to be dropped-off at either end of Beech Street, if the vehicle does not meet the proposed requirements, or seek an alternative route.

Issues could also arise should access for essential support be limited by the blocked-off roads and alternative routes have to be taken (e.g. vehicles belonging to district nurses, doctors and carers).

Reducing vehicle traffic is also likely at certain times of the day to reduce the number of 'eyes on the street', and at other times may increase numbers of cyclists and/or pavement users. Vulnerable groups, such as those with disabilities, may feel increased fear for personal safety due either to fear of crime walking through the street at quiet times, or through injury by the increased number of cyclists (including inattentive cyclists) when using and crossing the street. As well as a risk of personal injury, fear can lead to adverse health outcomes.

What actions can be taken to avoid or mitigate any negative impact or to better advance equality and foster good relations?

To consider direct access arrangements through the junctions at Golden Lane and Bridgewater Street for any vehicles belonging to essential medical support.

To monitor the supply of electric taxis, and availability for disabled residents or others with long-term illness and consider means of providing exemptions to meet the needs of this group;

To ensure the physical environment supports confidence in use, for example the street is well maintained free of litter and graffiti, well lit, and any 'hidden corners' are addressed;

To consider ways to support considerate user behaviour, and support confidence of use for all groups by, for example provision of wardens or other officers at certain times of day;

To consider wayfinding that might provide choice of routes between public transport and community facilities serving people with this protected characteristic for example health care facilities, and other public buildings;

To monitor crime and fear of crime, accident statistics, and new movement patterns and respond to any negative findings.

Pregnancy and Maternity [Double click here to add impact / Hide](#)

[Check box if NOT applicable](#) ☐

Key borough statistics:

Under the theme of population, the [ONS website](#) has a large number of data collections grouped under:

- [Conception and Fertility Rates](#)
- [Live Births and Still Births](#)
- [Maternities](#)

NB: These statistics provide general data for these protected characteristics. You need to ensure you have sufficient data about those affected by the proposals – see below under "additional equalities data".

[Double click here to show borough wide statistics / hide statistics](#)

Pregnancy and Maternity

Additional Equalities Data (Service level or Corporate) *Include data analysis of the impact of the proposals.*

Pregnancy and Maternity

Statistics on pregnancy were not collected as part of the 2011 Census, however the total the number of people aged between zero and four years old was 50 in the Aldersgate ward and 113 in the Cripplegate Ward. This suggests that there may be a significant number of expecting parents in the Barbican area.

What is the proposal's impact on the equalities aims? Look for **direct impact** but also evidence of **disproportionate impact** i.e. where a decision affects a protected group more than the general population, including **indirect impact**

The proposals have the potential to negatively impact people in pregnancy and maternity including residents and people using the street. The proposed changes may result in people using public transport options instead of taxis and other hired vehicles. In addition, the proposals are likely to increase pedestrian traffic, particularly at peak times. Therefore, the narrow, busy pavement during peak times is a particular concern and the safety of expecting mothers and parents with children should be considered in the proposals. Manoeuvring buggies could be difficult, particularly at peak times.

Similarly to people of older age and with disabilities, issues could also arise should access for essential support be limited by the blocked-off roads and alternative routes have to be taken).

Additionally, there could be an increased fear for personal and child safety when using the street at quiet times. The vehicles currently offer natural surveillance and restricting access will reduce this. Expectant mothers, or parents with infants, may also fear injury by the increased number of cyclists (including inattentive cyclists) when using and crossing the street. As well as a risk of injury, fear can lead to adverse health outcomes.

What actions can be taken to avoid or mitigate any negative impact or to better advance equality and foster good relations?

To ensure the physical environment supports confidence in use for example the street is well maintained free of litter and graffiti, well lit, and any 'hidden corners' are addressed;

To consider ways to support considerate user behaviour, and support confidence of use for all groups by, for example, provision of wardens or other officers at certain times of day;

To consider wayfinding that might provide choice of routes between public transport and community facilities serving people with this protected characteristic for example health care facilities, schools, and other public buildings;

To monitor crime and fear of crime, accident statistics, and new movement patterns and respond to any negative findings.

Race Double click here to add impact / Hide

Check box if NOT applicable ☐

Key Borough Statistics:

Our resident population is predominantly white. The largest minority ethnic groups of children and young people in the area are Asian/Bangladeshi and Mixed – Asian and White. The City has a relatively small Black population, less than London and England and Wales. Children and young people from minority ethnic groups account for 41.71% of all children living in the area, compared with 21.11% nationally.

White British residents comprise 57.5% of the total population, followed by White – Other at 19%.

The second largest ethnic group in the resident population is Asian, which totals 12.7% - this group is fairly evenly divided between Asian/Indian at 2.9%; Asian/Bangladeshi at 3.1%; Asian/Chinese at 3.6% and Asian/Other at 2.9%. The City of London has the highest percentage of Chinese people of any local authority in London and the second highest percentage in England and Wales. The City of London has a relatively small Black population comprising 2.6% of residents. This is considerably lower than the Greater London wide percentage of 13.3% and also smaller than the percentage for England and Wales of 3.3%.

[See ONS Census information](#) or [Greater London Authority projections](#)

NB: These statistics provide general data for these protected characteristics. You need to ensure you have sufficient data about those affected by the proposals – see below

Race

Additional Equalities Data (Service level or Corporate) *Include data analysis of the impact of the proposals*

According to the 2011 Census, a high proportion of people living in the Aldersgate and Cripplegate wards identify as 'white' in terms of ethnic group; 84.5% and 83.7% respectively compared to the London average of 59.8%. Asian (mainly Indian and Chinese) backgrounds were the most frequently claimed ethnicity aside from white groups; 8.7% and 9.5% in Aldersgate and Cripplegate respectively. This is still lower than the London average of 18.5% however.

What is the proposal's impact on the equalities aims? Look for **direct impact** but also evidence of **disproportionate impact** i.e. where a decision affects a protected group more than the general population, including **indirect impact**

Restricting vehicle traffic is likely to reduce the number of 'eyes on the street' at certain times of day and night. People from non-white groups are over-represented among shift, evening, night and early morning workers, when there is less pedestrian cycle or bus traffic.

People from non-white groups have been found to feel increased fear for personal safety, and are more frequently victims of crime, and so may be disproportionately adversely affected by the proposals. People from non-white backgrounds are disproportionately more represented in caring professions and could be adversely impacted, particularly when visiting the Barbican Estate at quieter times. As well as a risk of personal injury, fear can lead to adverse health outcomes.

What actions can be taken to avoid or mitigate any negative impact or to better advance equality and foster good relations?

To ensure the physical environment supports confidence in use for example the street is well maintained free of litter and graffiti, well lit, and any 'hidden corners' are addressed;

To consider ways to support confidence of use for all groups by for example provision of wardens or other officers at certain times of day;

To consider wayfinding that might provide choice of routes;

To monitor crime and fear of crime, and respond to any negative findings;

To consider access permission for health support/carer vehicles.

Religion or Belief [Double click here to add impact / Hide](#)

[Check box if NOT applicable](#) ☐

Key borough statistics – sources include:

The ONS website has a number of data collections on [religion and belief](#), grouped under the theme of religion and identity.

[Religion in England and Wales provides a summary of the Census 2011 by ward level](#)

NB: These statistics provide general data for these protected characteristics. You need to ensure you have sufficient data about those affected by the proposals – see below under "additional equalities data".

Religion or Belief

Additional Equalities Data (Service level or Corporate) *Include data analysis of the impact of the proposals*

The 2011 Census identified that the majority of people living around the Barbican Estate were either Christian (approximately 44%) or had no religion (approximately 37%). Jewish, Muslim and Hindu religions were the most frequently claimed religions aside from Christianity or no religion. However, there were very low numbers compared to the London averages in most cases.

Religion or Belief

What is the proposal's impact on the equalities aims? Look for **direct impact** but also evidence of **disproportionate impact** i.e. where a decision affects a protected group more than the general population, including **indirect impact**

Reducing vehicle traffic using the street is likely at certain times of day and night to reduce the number of 'eyes on the street'. People from some minority religious groups, have been found to feel increased fear for personal safety, and are more frequently victims of intimidation, and crime (for example those who show their religion through dress), and so may be disproportionately adversely affected by the proposals. As well as a risk of personal injury, fear can lead to adverse health outcomes.

What actions can be taken to avoid or mitigate any negative impact or to better advance equality and foster good relations?

To ensure the physical environment supports confidence in use for example the street is well maintained free of litter and graffiti, well lit, and any 'hidden corners' are addressed;
To consider ways to support confidence of use for all groups by for example provision of wardens or other officers at certain times of day;
To consider wayfinding that might provide choice of routes;
To monitor crime and fear of crime and respond to any negative findings.

Sex [Double click here to add impact / Hide](#)

[Check box if NOT applicable](#) ☐

Key borough statistics:

At the time of the [2011 Census the usual resident population of the City of London](#) could be broken up into:

- 4,091 males (55.5%)
- 3,284 females (44.5%)

A number of demographics and projections for demographics can be found on the [Greater London Authority website in the London DataStore](#). The site details statistics for the City of London and other London authorities at a ward level:

- [Population projections](#)

NB: These statistics provide general data for these protected characteristics. You need to ensure you have sufficient data about those affected by the proposals – see below under “additional equalities data”.

[Double click here to show borough wide statistics / hide statistics](#)

Sex

Additional Equalities Data (Service level or Corporate) Include data analysis of the impact of the proposals

In both the Aldersgate and Cripplegate wards, the 2011 Census identified that approximately 52.4% and 53.2% of the population were males, respectively. Therefore, slightly more males live in the area than females.

What is the proposal's impact on the equalities aims? Look for **direct impact** but also evidence of **disproportionate impact** i.e. where a decision affects a protected group more than the general population, including **indirect impact**

Reducing vehicle traffic using the street is likely at certain times of day / night to reduce the number of 'eyes on the street'.
Women have been found to feel increased fear for personal safety, and so may be disproportionately adversely affected by proposals.
Fear can lead to adverse health outcomes.

What actions can be taken to avoid or mitigate any negative impact or to better advance equality and foster good relations?

To ensure the physical environment supports confidence in use for example the street is well maintained free of litter and graffiti, well lit, and any 'hidden corners' are addressed;
To consider ways to support confidence of use for all groups by, for example, provision of wardens or other officers at certain times of day;

Sex

To consider wayfinding that might provide choice of routes;
To monitor crime and fear of crime, and respond to any negative findings;
To consider access permission for health support/carer vehicles.

Sexual Orientation and Gender Reassignment [Double click here to add impact / Hide](#)

Check box if NOT applicable ☐

Key borough statistics – suggested sources include:

- [Sexual Identity in the UK – ONS 2014](#)
- [Measuring Sexual Identity – ONS](#)

NB: These statistics provide general data for these protected characteristics. You need to ensure you have sufficient data about those affected by the proposals – see below under “additional equalities data”.

[Double click here to show borough wide statistics / hide statistics](#)

Sexual Orientation and Gender Reassignment

Additional Equalities Data (Service level or Corporate) *Include data analysis of the impact of the proposals*

Statistics on sexual orientation and gender reassignment were not collected as part of the 2011 Census, however the ONS provides a figure that in 2017, 2.6% of people in London were likely to identify as lesbian, gay or bisexual.

What is the proposal’s impact on the equalities aims? Look for **direct impact** but also evidence of **disproportionate impact** i.e. where a decision affects a protected group more than the general population, including **indirect impact**

Reducing vehicle traffic using the street is likely at certain times of day / night to reduce the number of ‘eyes on the street’.

People LGBTQ have been found to feel increased fear for personal safety, and are more frequently victims of intimidation, and crime and so may be disproportionately adversely affected by proposals.

As well as a risk of personal injury, fear can lead to adverse health outcomes.

What actions can be taken to avoid or mitigate any negative impact or to better advance equality and foster good relations?

To ensure the physical environment supports confidence in use for example the street is well maintained free of litter and graffiti, well lit, and any ‘hidden corners’ are addressed;

To consider ways to support confidence of use for all groups by, for example, provision of wardens or other officers at certain times of day;

To consider wayfinding that might provide choice of routes;

To monitor crime and fear of crime, and respond to any negative findings.

Marriage and Civil Partnership [Double click here to add impact / Hide](#)

Check box if NOT applicable ☒

Key borough statistics - sources include:

- [The 2011 Census contain data broken up by local authority on marital and civil partnership status](#)

NB: These statistics provide general data for these protected characteristics. You need to ensure you have sufficient data about those affected by the proposals – see below under “additional equalities data”.

[Double click here to show borough wide statistics / hide statistics](#)

Marriage and Civil Partnership

Additional Equalities Data (Service level or Corporate) *Include data analysis of the impact of the proposals*

Marriage and Civil Partnership	
N/A	
What is the proposal's impact on the equalities aims? <i>Look for direct impact but also evidence of disproportionate impact i.e. where a decision affects a protected group more than the general population, including indirect impact</i>	What actions can be taken to avoid or mitigate any negative impact or to better advance equality and foster good relations?
N/A	N/A

Additional Impacts on Advancing Equality & Fostering Good Relations [Double click here to add impact / Hide](#) [Check box if NOT applicable](#) ☒

This section seeks to identify what additional steps can be taken to promote these aims or to mitigate any adverse impact. Analysis should be based on the data you have collected above for the protected characteristics covered by these aims. In addition to the sources of information highlighted above – you may also want to consider using: Equality monitoring data in relation to take-up and satisfaction of the service	- Equality related employment data where relevant - Generic or targeted consultation results or research that is available locally, London-wide or nationally - Complaints and feedback from different groups.
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[Double click here to show borough wide statistics / hide statistics](#)

Additional Impacts on Advancing Equality & Fostering Good Relations	
Additional Equalities Data (Service level or Corporate) N/A	
Are there any additional benefits or risks of the proposals on advancing equality and fostering good relations not considered above?	What actions can be taken to avoid or mitigate any negative impact on advancing equality or fostering good relations not considered above? Provide details of how effective the mitigation will be and how it will be monitored.
N/A	N/A

Conclusion and Reporting Guidance

Set out your conclusions below using the EA of the protected characteristics and submit to your Director for approval.

If you have identified any negative impacts, please attach your action plan to the EA which addresses any negative impacts identified when submitting for approval.

If you have identified any positive impacts for any equality groups, please explain how these are in line with the equality aims.

Review your EA and action plan as necessary through the development and at the end of your proposal/project and beyond.

Retain your EA as it may be requested by Members or as an FOI request. As a minimum, refer to any completed EA in background papers on reports, but also include any appropriate references to the EA in the body of the report or as an appendix.

This analysis has concluded that...

...the proposals could have the potential to negatively impact certain groups of people, particularly those aged over 65, with disabilities, with infants and/or in pregnancy and maternity. Given the existing narrow and uncomfortable environment and the anticipated increase in pedestrian and bicycle traffic during peak times, this could affect those who use mobility aids or buggies. It could make manoeuvring more difficult and users could be more fearful of the street. Issues could also arise should access for essential support be limited by the blocked-off roads and alternative routes have to be taken (e.g. vehicles belonging to district nurses, doctors and carers).

In addition, the reduced traffic along Beech Street is likely to reduce the number of 'eyes on the street' at quieter times of the day and could therefore increase crime and fear of crime. This could have a negative impact on the above groups in addition to residents and users of Beech Street from non-white backgrounds, minority religious groups, females and/or people from the LGBTQ community.

Outcome of analysis - check the one that applies

☐ **Outcome 1**

No change required where the assessment has not identified any potential for discrimination or adverse impact and all opportunities to advance equality have been taken.

☒ **Outcome 2**

Adjustments to remove barriers identified by the assessment or to better advance equality. Are you satisfied that the proposed adjustments will remove the barriers identified?

☐ **Outcome 3**

Continue despite having identified some potential adverse impacts or missed opportunities to advance equality. In this case, the justification should be included in the assessment and should in line with the duty have 'due regard'. For the most important relevant policies, compelling reasons will be needed. You should consider whether there are sufficient plans to reduce the negative impact and/or plans to monitor the actual impact.

☐ Outcome 4

Stop and rethink when an assessment shows actual or potential unlawful discrimination.

Signed off by Director:

Name:

Date:

Appendix B

Healthy Urban Planning Checklist

Theme 1: Healthy Housing				
Issue	Key questions	Yes /No / Not relevant Comment	Policy requirements and standards	Why is it important
a. Healthy design	Does the proposal meet all the standards for daylight, sound insulation, private space and accessible and adaptable dwellings?		London Plan Policy 5.2 Minimising carbon dioxide emissions and Housing SPG Standard 35: zero carbon residential buildings from 2016 and non-domestic buildings from 2019. Housing SPG Standard 29 on dual aspect and Standard 32 on daylight and sunlight. Housing SPG Standard 4 on communal open space, supported by London Plan Policy 2.18, Standards 1 and 2 on defining good places, and Standard 3 on public open space. Housing SPG Standards 26 and 27 on minimum provision of private (amenity) open space. London Plan Policy 3.8 Housing choice and Housing SPG Standard 11 on access require 90% of new homes meet Building Regulation M4(2) 'accessible and adaptable dwellings'. Sound insulation and noise - London Plan Policy 7.15 and Housing SPG Standard 30 on noise. Housing SPG Standards 8 and 9 on entrance and approach.	Satisfying these standards can help meet carbon dioxide emissions targets. Good daylight can improve the quality of life and reduce the need for energy to light the home. The provision of an inclusive outdoor space, which is at least partially private, can improve the quality of life. Improved sound insulation can reduce noise disturbance and complaints from neighbours.

Theme 1: Healthy Housing				
Issue	Key questions	Yes /No / Not relevant Comment	Policy requirements and standards	Why is it important
b. Accessible housing	Does the proposal provide accessible homes for older or disabled people? Does the proposal ensure that every non-ground floor dwelling is accessible by a lift that can accommodate an ambulance trolley?		London Plan Policy 3.8 and Housing SPG Standard 11 on access require 10 per cent all new housing to be designed to be wheelchair accessible or easily adaptable such that they meet Building Regulation M4(3) 'wheelchair user dwellings'. Housing SPG Standards 15 and 16 relate to the provision of lifts. Good practice standard - the provision of an ISO standard 13 person lift in a configuration which can accommodate a trolley bed (see Department of Health Technical Memorandum 08-02: Lifts).	Accessible and easily adaptable homes can meet the changing needs of current and future occupants. One of the main methods of transportation of immobile patients is by trolley bed. Non-ground floor dwellings should be accessible by a lift that can accommodate an ambulance trolley.
c. Healthy living	Does the proposal provide dwellings with adequate internal space, including sufficient storage space and separate kitchen and living spaces? Does the proposal encourage the use of stairs by ensuring that they are well located, attractive and welcoming?		London Plan Policy 3.5 (Table 3.3 - minimum space standards for new dwellings) and Housing SPG Standard 24 on dwelling space standards. Housing SPG Standard 25 - dwellings should accommodate the furniture, access and activity space requirements relating to the declared level of occupancy. Also, Housing SPG Standard 28 on privacy and Standard 31 on ceiling heights. Housing SPG Standards 12 to 16 relate to shared internal circulation, cores and lifts.	Sufficient space is needed to allow for the preparation and consumption of food away from the living room to avoid the 'TV dinner' effect. Rather than having lifts at the front and staircases at the back of buildings, it is preferable to have them located at the front to encourage people that can to use them.

Theme 1: Healthy Housing				
Issue	Key questions	Yes /No / Not relevant Comment	Policy requirements and standards	Why is it important
d. Housing mix and affordability	Does the proposal provide affordable family sized homes?		London Plan Policy 3.8 Housing choice. London Plan Policy 3.11 Affordable housing targets seeks to maximise affordable housing provision and to ensure an average of at least 17,000 more affordable homes per year in London over the term of the London Plan. 60% of the affordable housing provision should be for social and affordable rent and 40% for intermediate rent or sale. The Mayor's Homes for Londoners: Affordable Homes Programme 2016-21 is a £3bn fund to help start building at least 90,000 affordable homes by 2021.	The provision of affordable housing can create mixed and socially inclusive communities. The provision of affordable family sized homes can have a positive impact on the physical and mental health of those living in overcrowded, unsuitable or temporary accommodation. Both affordable and private housing should be designed to a high standard ('tenure blind').

Theme 2: Active Travel				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important
a. Promoting walking and cycling	Does the proposal promote cycling and walking through measures in a travel plan, including adequate cycle parking and cycle storage?		London Plan Policy 6.3 (C) Travel plans London Plan Policy 6.9 Cycling. London Plan Policy 6.10 Walking. London Plan - Parking Addendum to Chapter 6 on cycle parking : Table 6.3 Cycle parking minimum standards. Housing SPG Standards 20 and 21 on cycle storage.	A travel plan can address the environmental and health impacts of development by promoting sustainable transport, including walking and cycling. Cycle parking and storage in residential dwellings can encourage cycle participation.
b. Safety	Does the proposal include traffic management and calming measures and safe and well lit pedestrian and cycle crossings and routes?		London Plan Policy 6.9 Cycling. London Plan Policy 6.10 Walking.	Traffic management and calming measures and safe crossings can reduce road accidents involving cyclists and pedestrians and increase levels of walking and cycling.
c. Connectivity	Does the proposal connect public realm and internal routes to local and strategic cycle and walking networks and public transport?		London Plan Policy 6.9 Cycling - Map 6.2 Cycle superhighways . London Plan Policy 6.10 Walking - Map 6.3 Walk London Network . Green Infrastructure: The All London Green Grid SPG (March 2012). Transport for London Legible London . Transport for London Bus Service Planning Guidelines .	Developments should prioritise the access needs of cyclists and pedestrians. Routes should be safe, direct and convenient and barriers and gated communities should be avoided. Developments should be accessible by public transport.

Theme 2: Active Travel				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important
d. Minimising car use	Does the proposal seek to minimise car use by reducing car parking provision, supported by the controlled parking zones, car free development and car clubs?		London Plan Policy 6.13 Parking - Table 6.2 Car parking standards (Parking addendum to chapter 6). Housing SPG Standards 17 to 19 on car parking provision.	Space for pedestrians and cyclists should be given priority over commercial and private vehicles. Maximum car parking levels allows for provision to be reduced as far as practicable. Car clubs can be effective in reducing car use and parking demand at new residential developments.

Theme 3: Healthy Environment				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important
a. Construction	Does the proposal minimise construction impacts such as dust, noise, vibration and odours?		London Plan Policy 5.3 Sustainable design and construction. London Plan Policy 5.18 Construction, excavation and demolition waste. The Control of Dust and Emissions During Construction and Demolition SPG (July 2014). Housing SPG Standard 34 on environmental performance.	Construction sites can have a negative impact on an area and can be perceived to be unsafe. Construction activity can cause disturbance and stress, which can have an adverse effect on physical and mental health. Mechanisms should be put in place to control hours of construction, vehicle movements and pollution. Community engagement before and during construction can help alleviate fears and concerns.
b. Air quality	Does the proposal minimise air pollution caused by traffic and energy facilities?		London Plan Policy 7.14 Improving air quality. At least 'air quality neutral' - Housing SPG Standard 33 on air quality. London Plan Policy 5.10 Urban greening. London Plan Policy 5.3 Sustainable design and construction.	The long-term impact of poor air quality has been linked to life-shortening lung and heart conditions, cancer and diabetes.

Theme 3: Healthy Environment				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important
c. Noise	Does the proposal minimise the impact of noise caused by traffic and commercial uses through insulation, site layout and landscaping?		London Plan Policy 7.15 Reducing and managing noise, improving and enhancing the acoustic environment and promoting appropriate soundscapes. Limit the transmission of noise to sound sensitive rooms - Housing SPG Standard 30 on noise.	Reducing noise pollution helps improve the quality of urban life.
d. Open space	Does the proposal retain or replace existing open space and in areas of deficiency, provide new open or natural space, or improve access to existing spaces? Does the proposal set out how new open space will be managed and maintained?		London Plan Policy 7.1 Lifetime neighbourhoods. London Plan Policy 7.18 Protecting open space and addressing deficiency, Table 7.2 Public open space categorisation. London Plan Policy 7.19 Biodiversity and access to nature. Housing SPG Standards 3 and 4 on communal and public open space.	Access to open space has a positive impact on health and wellbeing. Living close to areas of green space, parks, woodland and other open space can improve physical and mental health regardless of social background. To maintain the quality and usability of open spaces an effective management and maintenance regime should be put in place.

Theme 3: Healthy Environment				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important
e. Play space	Does the proposal provide a range of play spaces for children and young people?		London Plan Policy 3.6 Children and young people's play and informal recreation facilities. Shaping Neighbourhoods: Play and Informal Recreation SPG (Sept 2012) - quantity Benchmark Standard of a minimum of 10 square metres per child regardless of age (4.24) and accessibility to play space Benchmark Standard (Table 4.4). Housing SPG Standard 5 on play space.	Regular participation in physical activity among children and young people is vital for healthy growth and development. The location of play spaces should be accessible by walking and cycling routes that are suitable for children to use.
f. Biodiversity	Does the proposal contribute to nature conservation and biodiversity?		London Plan Policy 7.19 Biodiversity and access to nature. Table 7.3 - London regional Biodiversity Action Plan habitat targets for 2020. Housing SPG Standard 40 on ecology.	Access to nature and biodiversity contributes to mental health and wellbeing. New development can improve existing, or create new, habitats or use design solutions (green roofs, living walls) to enhance biodiversity.
g. Local food growing	Does the proposal provide opportunities for food growing, for example by providing allotments, private and community gardens and green roofs?		London Plan Policy 5.10 Urban greening. London Plan Policy 7.22 Land for food. London Plan Policy 5.11 Green roofs and development site environs.	Providing space for local food growing helps promote more active lifestyles, better diets and social benefits.

Theme 3: Healthy Environment				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important
h. Flood risk	Does the proposal reduce surface water flood risk through sustainable urban drainage techniques, including storing rainwater, use of permeable surfaces and green roofs?		London Plan Policy 5.3 Sustainable design and construction. London Plan Policy 5.11 Green roofs and development site environs. London Plan Policy 5.13 Sustainable drainage. Flooding and drainage - Housing SPG Standards 38 and 39.	Flooding can result in risks to physical and mental health. The stress of being flooded and cleaning up can have a significant impact on mental health and wellbeing. It is likely that increasing development densities and building coverage coupled with more frequent extreme weather events will increase urban flood risk.
i. Overheating	Does the design of buildings and spaces avoid internal and external overheating, through use of passive cooling techniques and urban greening?		London Plan Policy 5.3 Sustainable design and construction. London Plan Policy 5.9 Overheating and cooling. London Plan Policy 5.10 Urban greening. London Plan Policy 5.11 Green roofs and development site environs. Overheating - Housing SPG Standards 36.	Climate change with higher average summer temperatures is likely to intensify the urban heat island effect and result in discomfort and excess summer deaths amongst vulnerable people. Urban greening - tree planting, green roofs and walls and soft landscaping can help prevent summer overheating.

Theme 4: Vibrant Neighbourhoods				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important
a. Health services	Has the impact on healthcare services been addressed?		London Plan Policy 3.17 Health and social care facilities. NHS London Healthy Urban Development Unit Planning Contributions Tool (the HUDU Model). Social Infrastructure SPG (2015).	Poor access and quality of healthcare services exacerbates ill health, making effective treatment more difficult. The provision of support services and advice on healthy living can prevent ill health.
b. Education	Has the impact on primary, secondary and post-19 education been addressed?		London Plan Policy 3.18 Education facilities.	Access to a range of primary, secondary and post-19 education improves self-esteem, job opportunities and earning capacity.
c. Access to social infrastructure	Does the proposal contribute to new social infrastructure provision that is accessible, affordable and timely? Have opportunities for multi-use and the co-location of services been explored?		London Plan Policy 3.16 Protection and enhancement of social infrastructure. London Plan Policy 7.1 Lifetime neighbourhoods. Social Infrastructure SPG (2015).	Good access to local services is a key element of a lifetime neighbourhood and additional services will be required to support new development. Not doing so will place pressure on existing services. Future social infrastructure requirements are set out in Borough infrastructure plans and developments will be expected to contribute towards additional services and facilities.

Theme 4: Vibrant Neighbourhoods				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important
d. Local employment and healthy workplaces	Does the proposal include commercial uses and provide opportunities for local employment and training, including temporary construction and permanent 'end-use' jobs? Does the proposal promote the health and wellbeing of future employees by achieving BREEAM health and wellbeing credits?		London Plan Policy 4.12 Improving opportunities for all and London Plan Policy 8.2 Planning obligations. London Plan Policy 7.1 Lifetime neighbourhoods. Workplace environment - BREEAM health and wellbeing credits.	Unemployment generally leads to poverty, illness and a reduction in personal and social esteem. Employment can aid recovery from physical and mental illnesses. Creating healthier workplaces can reduce ill health and employee sickness absence.
e. Access to local food shops	Does the proposal provide opportunities for local food shops? Does the proposal avoid an over concentration or clustering of hot food takeaways in the local area?		London Plan Policy 4.7 Retail and town centre development. London Plan Policy 4.8 Supporting a successful and diverse retail sector. London Plan Policy 4.9 Small shops. London Plan Policy 7.1 Lifetime neighbourhoods.	A proliferation of hot food takeaways and other outlets selling fast food can harm the vitality and viability of local centres and undermine attempts to promote the consumption of healthy food, particularly in areas close to schools.

Theme 4: Vibrant Neighbourhoods				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important
f. Public realm	Does the design of the public realm maximise opportunities for social interaction and connect the proposal with neighbouring communities? Does the proposal allow people with mobility problems or a disability to access buildings and places?		London Plan Policy 7.1 Lifetime neighbourhoods. London Plan Policy 7.2 An inclusive environment. London Plan Policy 7.5 Public realm. Shaping Neighbourhoods. Accessible London: Achieving and Inclusive Environment SPG (Oct 2014). Housing SPG Standard 10 on active frontages.	The public realm has an important role to play in promoting walking and cycling, activity and social interaction. It also affects people's sense of place, security and belonging. It is a key component of a lifetime neighbourhood. Shelter, landscaping, street lighting and seating can make spaces attractive and inviting. Implementing inclusive design principles effectively creates an accessible environment, in particular for disabled and older people.