Newham Character Study

December 2017

Contents

Executive Summary

Good urban design, taking into account important cues from the local context or 'development canvas' is a fundamental building block for regeneration and the development of sustainable communities. Such cues include things that don't work and things that do, assets and opportunities, and weaknesses and threats: all things that together add up to the identity of a place, or its character.

The Character Study provides an assessment of the quality of the topography, historic development, urban form, individual townscapes, landscapes and views distinctive to the London Borough of Newham. This revised version builds on the original, published in 2010, and responds to current requirements for urban design set out in the National Planning Policy Framework, the London Plan, guidance by design bodies such as Historic England, and the Council's own Sustainable Communities Strategy 2012-30 (2012) and 'Quid pro quo, not status quo' Resilience Strategy (2011). It is intended as an evidence base document to support the revision of design-specific policies through the Local Plan Review. It is further expected that the study will assist officers and elected members in decision-taking, and developers and communities in the preparation of high quality proposals.

More specifically, the purpose of this study is to analyse Newham's development canvas, to:

- Understand Newham-wide components of character; (Chapter 2)
- Identify character typologies comprising the key features of different types of development in the borough (Chapter 3);
- Identify how these relate to different parts of the borough contributing to local distinctiveness (Chapter 3);
- Assess them against principles of good design and other components of quality through SWOT analysis to draw out cues for development to address as part of good design (Chapter 4);
- Help understand where there are local heritage assets which could be further protected and enhanced (Chapter 4);
- Help understand where and how taller buildings may be suitably located (Chapter 4); and
- Make appropriate recommendations for further work, new policy directions and guidance (Chapter 5).

Overall it is intended that the Study should provide a good indication of what kind of change needs to happen and where in order to fulfil design and heritage objectives to help contribute to the creation of successful places and sustainable communities. As such it should be of use by the Council and others with an interest in development in Newham, particularly those concerned to reduce population churn.

The methodology is primarily desk-based using urban design and heritage expertise, supported by selective site visits and wider local knowledge of the borough.

The study notes that Newham has many character assets including built and landscape heritage, award-winning new buildings, waterscapes, parks and lively, diverse town centres such as Stratford, Green Street, Forest Gate. However, other aspects of its character are poor when assessed against key

design principles – particularly the degree of connectivity, integration and coherence as well as individual developments of disappointing quality. A number of character typologies, and associated character areas are identified in Newham, which help to generate appropriate design cues for different places in pursuit of good design when assessed against design principles.

Character typologies derived are broadly:
- Victorian and Edwardian
- Garden City, Art Deco, Inter-War and Early Post-War
- Post War 1960s and 1970s
- 1980s to mid 1990s
- Late 1990s-2010
- Post 2010

In general, older development and greater concentrations of heritage assets are found in the north of the borough, and broad character areas derived are:
- Character Area 1: Northern part of Newham: Manor Park, East Ham, Forest Gate, Green Street, parts of Stratford and West Ham, and Plaistow;
- Character Area 2: South western part of the borough – including much of Canning Town and Custom House, parts of Plaistow and West Ham;
- Character Area 3: Lower Lea Valley, north of the District Line including parts of Stratford and West Ham (currently within LLDC);
- Character Area 4: Lower Lea Valley: South of the District Line towards the Thames including parts of Canning Town;
- Character Area 5: Southern part of the borough, around the Royal Docks (Silvertown, North Woolwich, Royal Victoria, Royal Albert, and south part of Gallions Reach);
- Character Area 6: Beckton housing estate (between Prince Regent Lane, Newham Way, Royal Albert Way and Royal Docks Road);
- Character Area 7: Beckton, east of Royal Docks Road, including Beckton Sewage Treatment Plant, former Gasworks, industry and Gallions Reach out of centre retail park.

The Olympic Park and legacy development area is identified as a distinct character area in evolution, with its own place-making priorities – Character Area 3. The legacy development area constitutes a separate local planning authority.

As part of the analysis of the borough's character and associated design/heritage quality the following recommendations are arrived at:

1. **A high priority should be given to design to help create successful places and sustainable communities -** design policies and associated practices such as master-planning need to be prominent in Newham's plans for the future. They will be needed at a strategic level in the Core Strategy and in area-based plans, addressing building, street, public space, site and area design. In some cases, more detailed guidance may also be appropriate, including use of existing support mechanisms such as expert officers and Design Review Panels, and regarding the combination of good design principles with flood risk minimisation/mitigation best practice.

2. **Adding value to generic guidance to create locally-distinctive-successful places -** such design policies need to reflect not only accepted generic principles of

good urban design, but also a requirement for developers to respond to the specifics of local character or context, good and bad, and the over-arching corporate objective to reduce population churn. The Building for Life12 principles, supported by this study, are a good combination of the two, and developers could be encouraged to respond to them in their Design and Access statements.

3. **Community Engagement –** should also be acknowledged in policies and guidance to have an important role in creating responsive design, particularly in areas of sensitivity to change

4. **Connectivity, coherence and integration** should be promoted as key borough-wide design priorities alongside more localised and typology-specific cues.

5. **Most innovation and the greatest degree of change should be directed to the Arc of Opportunity,** within a framework of local and borough-wide design cues, generic principles of good design, and the encouragement of site and area-based masterplans. This should include consideration of high quality meanwhile uses which should be deployed carefully ensuring they help bridge the gap between the present state of an area and the vision for its future.

6. **Innovation in design should be recognised as an important mechanism to address the under-performance of assets to create sustainable regeneration -** whilst taking into account their sensitivity to change, relevant local design cues and the need to arrive at shared, economically viable visions for their future. Such assets may be cultural, historical, infrastructural or natural.

7. **A strategic approach to tall buildings[1], to be reflected in Core Strategy and more detailed policies and guidance, linked to good design practice and analysis of contextual capacity and sensitivity, should be advanced as follows:**
   - All new tall buildings in the borough must be of an excellent quality of design which makes reference to the SWOTs identified in this study, and it must be demonstrated that the approved design including facing materials and detailed surface design will be carried through to completion.

   - Parts of the Stratford Metropolitan area (should be the key location for the tallest buildings in the borough (20 storeys plus) with Canning Town central as a secondary focus for these;

   - Other locations at Strategic Sites designated in the Local Plan are identified as suitable for taller buildings of up to 20 storeys (but typically around 8-12 storeys) where they will contribute to legibility and place-making objectives; an initial site analysis will generate indicative heights to form part of the site allocations.

   - Elsewhere, locations will be more sensitive to taller buildings, though there may be some opportunity to increase height in areas of good PTAL (not less than four) but such buildings shall be located, scaled and

[1] See definition on p 42

designed according to local context and sustainable communities objectives.

- That further work on more precise suitable locations and formations within this framework in areas of change through 3D-modelling will be expected of developers and development managers.

8. **Heritage assets (designated and non-designated) should be acknowledged alongside other cultural, infrastructural and natural assets,** recognising their role and potential in regeneration and helping to create a place where people choose to live, work and stay**.** As part of this, the potential for further designation of conservation areas should be investigated in line with legal obligations in the areas of search identified.

CHAPTER 1 - Introduction

Creating a place where people choose to live, work and stay is the key objective of Newham's Sustainable Community Strategy. Good design, as required and promoted by national and London-wide policy is an essential component of this aim, and this document supports the design process by providing an analysis of Newham's character. This recognises the opportunity for new development to influence change for the better, enhancing the good, and addressing the not so good.

Newham's design context

Newham has a number of nationally and locally listed buildings, conservation areas and areas of townscape value, mainly dating from Victorian and Edwardian times, but also earlier.

A number of more recent developments have also won awards from for example, the Civic Trust, such as Upton Village, a Peabody Trust affordable housing scheme on the site of the former Plaistow Hospital. Other assets include the borough's waterscape, notably the Lea river and expanse of enclosed water in the Royal Docks, and a wide cultural diversity that manifests itself in the way in which spaces are used and the social and economic characteristics of Newham's places (for example Green Street, where the specialist Asian shopping draws customers from across London).

Yet despite these qualities, a range of existing policies that promote good urban design in Newham, and the instigation of design review processes, we continue to be presented with some poorly-conceived proposals, which fundamentally affect the delivery of good design. This is all the more significant given the large amount of development land in Newham, which needs to create successful new places.

Likewise, parts of our existing town centres and neighbourhoods are visibly suffering from a legacy of poor design, often referred to as part of the more complex 'need for regeneration', ironically often in areas that have been redeveloped previously to improve them. This legacy has particularly impacted on the public realm, making it less enjoyable to visit town centres or live in some neighbourhoods, affecting population turnover[2], and business viability[3]. Council surveys continue to show that residents see much more value in Newham's people and functional assets (e.g. association with people in their neighbourhood, access to shops, public transport accessibility) than its environment at present, and many rank environmental improvements, together with measures to address crime and anti-social behaviour, as the key priorities for change[4]. All of these, together with health, and resource efficiency can be supported by better design, which also achieves higher residual values for developers[5].

[2] ONS annual internal migration data indicate continuing high rates of population turnover (see Headline Spatial and Strategic Monitoring Bulletin AMR); Council's Annual Population Survey and research work shows people's aspirations to move out of Newham to a 'better area'

[3] See Newham Town Centre and Retail Study 2016; also CABE (2001, 2005, 2007a)

[4] Newham Survey 2016

[5] See GLA (2015), Greater London Authority Housing Standards Review: Evidence of Need

The link with character

Successful regeneration and the successful development of new places do not mean working from a blank slate: there are important cues to be taken from the local context, otherwise known as components of character. Such cues include things that don't work, and things that do, assets and opportunities, and weaknesses and threats: all things that together add up to the identity of a place. English Partnerships, at the time, the Government's key regeneration agency established good practice guidance to this end, which continues to be relevant[6]. It states that for new development, an analysis should be undertaken to provide an understanding of place as a 'canvas' for regeneration and new development.

The scope of such an analysis it states, should include an examination of the place's*:*

- ***Regional identity and links to surroundings*** *- its relationship with the wider area, barriers and connections;*
- ***Socio-economic profile*** *– demographics and traditions that may affect how people use space;*
- ***Topography and ecology*** *- physical constraints and opportunities such as views, flood risk, attractive and/or protected areas of natural habitat, landscape and waterscape;*
- ***Morphology*** *- urban structure comprising street patterns and arrangement of settlements and buildings, including building height;*
- ***Historic assets*** *– listed or locally recognised older buildings and monuments, historic parks and gardens and conservation areas; and*
- ***Other aspects of local character and distinctiveness*** *– both in the form of a place and the way it is used, together with an appraisal of quality.*

Recognising these cues is of heightened significance given the tendency for design homogenisation today, with ubiquitous templates and materials applied everywhere and anywhere. This not only means that places may begin to lose their distinctiveness and appeal, but also that mistakes may be repeated, or new ones created as what works in one context, may not work in another. In other words, design that doesn't respond to character is bad design: the short hand for what we are aiming for is 'responsive design'.

Purpose of this study

Acknowledging Newham's design context and the opportunity to improve it through carefully guided new development points to the need for more sophisticated policies and guidance based on a thorough understanding of the positives and negatives of its character as defined above. These will help define what good design means in the local context – applying generic principles to Newham to address its relevant cues. In turn, there is the NPPF requirement that policies and development should respond to local character and history and reflect the identity of local surroundings, while supporting appropriate innovation. This is translated into the ethos of the London Plan, which for instance, requires local authorities to identify areas suitable for tall buildings on the basis of an understanding of context and

[6] English Partnerships (2000, 2007); English Heritage (2011)

capacity. This study seeks to fulfil both these needs, and should be of use by the Council and others with an interest in development in Newham. It is envisaged it will be taken forward in more detail through masterplans and the development of Local Development Framework policy and guidance.

More specifically, the purpose of this study is to analyse Newham's development canvas, to:

- Understand Newham-wide components of character;
- Identify character typologies comprising the key features of different types of development in the borough;
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- Assess them against principles of good design and other components of quality through SWOT analysis to draw out cues for development to address as part of good design;
- Help understand where there are local heritage assets which could be further protected and enhanced;
- Help understand where taller buildings may be suitably located; and
- Make appropriate recommendations for further work, new policy directions and guidance.

Overall it is intended that it should provide a good indication of what kind of change needs to happen and where in order to fulfil design and heritage objectives.

Methodology

The study has been primarily undertaken as a desk-based exercise using historical maps, aerial photographs, digital archives, existing design evidence bases (studies, masterplan and area action plan evidence bases etc) and books on local history, with some targeted site visits. This has been supplemented by local knowledge of Newham gained in the course of planning work, including other site visits, and ongoing engagement work with local communities, concerning for example, things they value in their local area.

Structure of the study

- Chapter 2 NEWHAM-WIDE COMPONENTS OF CHARACTER introduces Newham-wide components of character - its wider context, demography and historical-geography as relevant to today's Newham.

- Chapter 3 LOCAL CHARACTER provides a summary of the borough's character typologies and explains how they relate to different parts of the borough contributing to more localised distinctiveness.

- Chapter 4 DESIGN CUES - explains more detailed principles of good urban design, and uses these to evaluate the different typologies and how well they are integrated, to help identify key weaknesses/threats that need to be addressed, and strengths and opportunities that can be enhanced or connected with, in different parts of the borough. It goes on to examine particular components of 'quality' within typologies that may merit further attention from a heritage perspective. Capacity for change and innovation, and sensitivity to change is gauged.

- Chapter 5 CONCLUSIONS AND RECOMMENDATIONS - provides conclusions and recommendations derived from the analysis, concerning priorities for different areas, and suggested policy directions for particular issues such as tall buildings, connectivity and heritage management.

CHAPTER 2 – Newham-wide components of character

This chapter introduces Newham-wide components of character - its wider context, demography and historical-geography as relevant to today's Newham. Further detail on the history of Newham can be found in Appendix 3.

Topography and Ecology

Newham lies within the Thames Basin, a syncline of chalk overlain with London Clay and alluvial deposits. The land rises gradually from the formerly marshy Lea and Thames floodplains, to 15m above sea level on Wanstead Flats, permitting limited long views across the borough from higher structures.

The Lea Valley forms a strong natural boundary between Newham and the neighbouring boroughs of Hackney and Tower Hamlets to the West. The braided waterways are a result of the construction of competing tidal mills and navigations on what was a busy working river. The natural boundary is reinforced by infrastructure following its course including railway lines and the major Blackwall Tunnel Approach / M11 Link Road.

The River Thames forms the southern boundary of the borough. Its wide floodplain, which extends approximately halfway across the borough, comprised low-lying marshy land and infrastructure such as Gas Works, the Northern Outfall Sewer, Docks and Railways, (from the mid 19th century) until the early 1980s, when it was finally drained for development. The Docks were however built on land raised above tidal reaches in the 19th and early 20th centuries.

The River Roding forms the eastern boundary of the borough and is navigable from the Thames as far as Barking. The river is bounded on its western side by a bund to prevent flooding, and is also the A406 North Circular Road corridor. As with the River Lea, the Roding Valley is largely undeveloped for housing and employment due to the flood risk, making it an ideal infrastructure corridor.

The flat land (ranging from 4 metres above ordnance datum in the south, to 8 in the north) and presence of rivers on three sides of the borough means that strategic flood risk and surface water flooding in critical drainage areas continues to be an issue, particularly in the west and south of the borough,[7]. Designing to minimise and mitigate flood risk, including surface water flooding, thus becomes an important consideration in these areas. Beckton Alps and the Greenway represent the only, man-made, elevated topographic features and they represent the only public vantage points in the borough.

Ecologically, the river and railway corridors provide the most valuable semi-natural habitats in the borough. A total of 133 existing Sites of Importance for Nature Conservation (SINCs) including aquatic habitats, brownfield land, churchyards, open grassland and cemeteries are found within the borough. Other valuable green assets include tree-lined streets and open spaces including parks, allotments and neighbourhood greens and

[7] LB Newham (2017), London Borough of Newham Level 1 & 2 Strategic Flood Risk Assessment

amenity spaces, currently totalling 563.89 ha[8] of protected green space, with more likely to be added as the Local Plan is reviewed and development continues apace.

Historical-Geography and Urban Morphology

Newham's early development continues to define the routes of several of the borough's streets, which coincide with many areas identified as priority locations for archaeological investigation. The most significant ancient route in the borough is the Roman road that follows the alignment of Romford Road to a point east of Stratford as part of its route between Colchester and London. Over a period of several centuries such roads came to provide routes between the hamlets and villages of what was a rural, agricultural landscape. In places, remnants of original village street patterns remain intact, notably at West Ham, where the original village church is surrounded by several streets that still follow their original alignments.

The River Lea was also an important thoroughfare and focus for industrial activity. The river channels were extensively used as mill streams and for navigation, with river barges bringing raw materials to the mills for processing. As industry grew alongside it, the river became an important navigational route for industrial raw materials including coal. In being located outside the City's jurisdiction, it was also a logical place for more noxious industries to locate, a pattern which elsewhere in the borough brought cemeteries and Bazalgette's sewer outfall.

From the mid-1800s, the new railways spreading across the borough into Essex had a significant impact on urban form in the borough. Development followed the coming of most of the new railway lines and stations: early stations were quickly surrounded by large houses for wealthy commuters and later by rows of modest terraced houses for workers. The layout of new streets was influenced by curves and junctions that were originally constructed in rural areas, with relatively few crossings provided due to the lack of existing streets that needed to be maintained. The railways also provided an important impetus for the continued development of riverside wharves and docks, with heavy industry and shipping-related activity. By the 1920s, the vast majority of the borough north of today's A13 was developed, together with the area to the south around the docks.

Bombing during World War II resulted in substantial damage, particularly in the south of the borough where the target was the industry and docks. During the post-war period, the local authorities comprehensively developed housing across large areas of Canning Town, West Ham and North Woolwich, with infill development elsewhere.

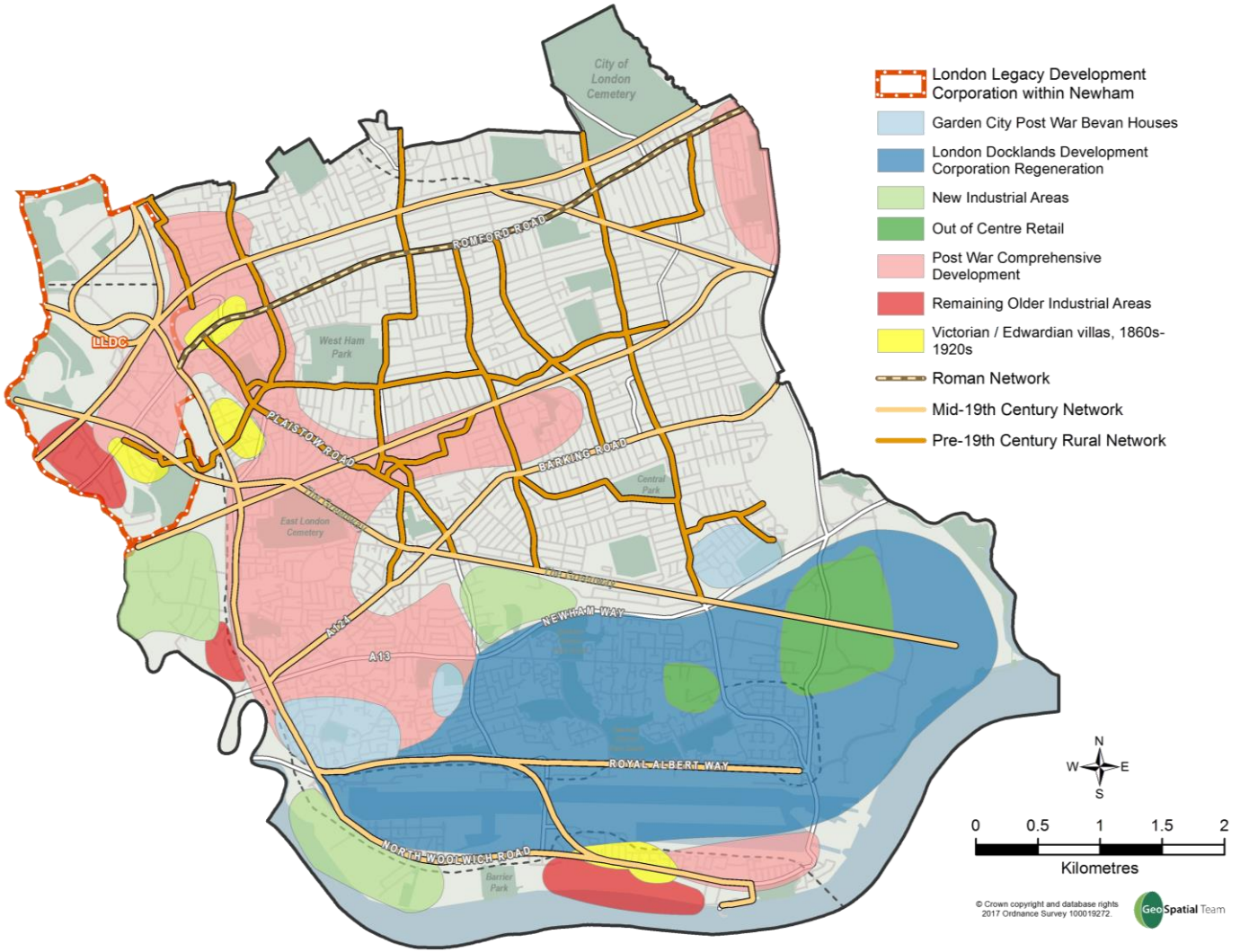
Following the closure of the Royal Docks in the late 1970s the London Docklands Development Corporation cleared former industry, railway lines and warehouses to prepare land for redevelopment, leaving only fragments of warehouses and industrial buildings. The Corporation developed new areas of housing from the early 1980s by draining the remaining marshes and demolishing the derelict parts of Beckton Gas Works. A mix of contemporary residential and employment uses (including out of town retail) have begun to fill other empty spaces, though large areas of vacant land remain. Much of this is oriented to more car-based travel, incorporating large amounts of space for car movements and parking.

[8] Newham's Local Plan, Detailed sites and Policies DPD 2016, Appendix 5

Overall, Newham is a borough where the northern part is in general the most historic, with intact buildings and street patterns, and in the south and west there is greater evidence of most post-war change. In turn, this is reflected in the distribution of its currently-recognised historic assets, with most listed buildings and monuments, historic parks and gardens, and conservation areas and areas of townscape value to be found in the north of the area.

Figure 1 adjacent illustrates this historical evolution of Newham: broad 'zones' of historical development which can be seen later to give rise to broad 'character areas' today. A more detailed history of the borough is to be found in Appendix 3.

Figure 1: Broad 'Zones' of Historical Development



Newham Today: regional context and identity - challenges and opportunities

Newham's regional identity is defined largely by its role as the principal regeneration hub of London, including the largest land-share of the 2012 Olympic Games site. In fact, Newham has the greatest concentration of existing and potential regeneration projects in Europe as a result of the historic rise and fall of industrial, rail and docks activity, attractive waterside sites and excellent transport connections. It is situated within the east London sub-region and at the confluence of the London-Stansted-Cambridge-Peterborough and Thames Gateway Growth Areas, and benefits from a multitude of major road, air and tube and rail links to this area and beyond and ongoing investment in further improvements.

Newham's mid-2016 population is estimated at around 338,600. The population is unique in many respects: along with Brent, Newham is the local authority with the most diverse population in the UK. Whilst many residents are long-established, Newham, in common with other inner-London boroughs is also a well-known place of arrival for immigrants to the UK, and partly as a consequence, has high rates of population turnover. However, diversity is more positively reflected in many of its vibrant town centres, new places of worship and use of public spaces.

Yet alongside this connectedness and opportunity, and in spite of socio-economic progress being made over the last decade, Newham continues to be one of the most deprived local authority areas in the country, according to the Index of Multiple Deprivation 2015. Poverty, overcrowding and extensive private renting contributes considerably to the poor state of much of Newham's privately owned housing stock. Moreover, connectedness also brings severance due to the infrastructure barriers that add to natural barriers such as rivers, and historic structures such as the docks. A key challenge or contradiction within its identity therefore, is to marry its benefits and opportunities with those people and places which don't currently see much of them.

Whilst Newham today is not known for its wealth of historic assets compared to other, even immediately neighbouring London boroughs[9], this would seem to be a key aspect of its offer that should be re-evaluated, alongside its diversity. Given that the borough has not been comprehensively surveyed since the late 1970s, it is likely that a significant number of buildings on the local list may now be worthy of Grade II listing. Since that time, the principles of selection for listing have evolved, giving greater consideration to buildings from the late Victorian and Edwardian period, when Newham underwent its rapid transformation from a series of small rural villages to a fully-fledged suburb of London and a burgeoning industrial hub. On similar grounds, it is possible to envisage that its relatively few conservation areas (9) and areas of townscape value (9) could be added to.

This chapter has introduced Newham-wide components of character that provide a broad context for responsive design. The next chapter examines how these broad components of character are translated into more local distinctiveness through their particular combination.

[9] Newham has 127 heritage assets on the statutory list (122 buildings), compared with some 550 in Hackney and around 930 in Tower Hamlets.

CHAPTER 3 Local Character

This chapter provides a summary of the borough's recognisable character typologies and explains how they relate to different parts of the borough contributing to more localised distinctiveness.

Built form character typologies: summary components

Note: a more detailed appraisal of character typologies can be found in Appendices 1 and 2.

Victorian, Edwardian

- **Housing -** is arranged in terraced perimeter blocks of narrow, at modestly high densities (5m frontage). Houses are situated on long slender plots consistent with the width of the frontages. A sense of composition achieved through the application of repeated building styles and uniform front boundary treatments, though this was partially lost when metal railings were removed during the war and subsequently replaced by a mix of personalised treatments. Densities are typically around 60-70 dwellings per hectare (dph) but can be as high as 90dph – fairly modest sizes aimed at commuters, artisans and industrial workers.
- **Variants -** include semi-detached and detached triple-fronted villas in the now Woodgrange conservation area, achieving much lower densities (c. 23-31 dph). There are also fragments of four-storey Georgian town house development on Romford Road, and purpose built flats in (made to look like houses) in several streets around Kildare Road, Canning Town (which achieve densities of 136 dph).

- **Local shops and services** – including workshops, churches, parks, cemeteries and so on are interspersed amidst housing, giving rise to mixed use high density development.

- **Town centres** – are based around high streets, which also form the principal streets in the area. Forest Gate is a good example - where conservation work has restored many of the original shop fronts.
- **Urban structure** – is focused around connected grids of streets; old land ownership boundaries can be seen where different grid patterns collide. Traditional town centres and markets are focused on railway / Underground stations and significant junctions. Formal parks and the routes across them are defined by the surrounding street grid structure—in effect, rows of terraces are replaced by grass and trees. Older buildings and medieval street pattern absorbed into the grain, and likewise fragments left by subsequent re-development of poorer quality buildings from this era.

- **Legibility** – is assisted by the treatment of corner buildings, the presence of water fountains, clocks, public art and breaks in the built frontage including parks, communal gardens and squares.

- **Building heights -** within town centres and on major corridors, building heights rise from the typical 2-3 storeys, to 4-6 storeys, though this is not consistent, with 2-3 storeys continuing to be dominant on some wide streets (Romford Road, parts of Barking Road).

- **Industrial development** - fragments remain of Victorian and early 20th Century. Buildings are typically brick-built, simple structures with metal framed windows and simple slate or metal roofs, and shaped to fit onto constrained sites. To accommodate taller ceiling heights without support, older buildings have reinforcing buttresses on the outside.

Garden City and Art Deco, early post-war and inter-war terraced

- **Housing –** schemes takes design cues from William Morris's cottages, creating 'suburban' pebble-dashed semi-detached or apartmented houses (notable example, 'Hameway' in East Ham). The houses here have large hipped roof structures which descend to become integral with porches at the front of the houses. Densities vary, depending on the length of terraces/size of dwellings, but are typically around 40-50 dph.

- **Variants** – include plain brick fascias, arched doorways and passageways and the use of false half-timbering. More modest designs feature pebble dash rendering to the top storeys, and unhipped roofs that do not descend over porches. Also some low-rise mansion-flat blocks mimicking houses - which achieve higher densities as part of the mix (up to 60 dph)

- **Urban Structure and Legibility** – in most cases, these developments are constructed around new street patterns, with circles and culs de sac, in areas of early slum-clearance, and entirely new development. Front gardens and street landscaping including verges contribute to spacing and a greater impression of greening in the more suburban areas. However, legibility begins to be compromised by an increase in car-orientation.

- **Building heights** – are typically 2-3 storeys, though prominent community and commercial buildings are the equivalent of 3-4 storeys.

- **Arrangement of community facilities** – a number of institutional and community buildings were constructed alongside housing, although many e.g. cinemas are no longer in existence. Overall the emphasis was more on residential development and was smaller scale than earlier and subsequent development, reducing the mix of uses.

- **Industrial development** – mainly involved the evolution of existing industrial sites, although newer techniques and structures are evident (e.g. brick, corrugated iron, concrete).

Post-war 1960s-70s

- **Housing** – reflects a period of fast-paced state-led systematic development, and comprises a mix of unembellished walk-up flats, tower or point blocks and some houses including bungalows. These were constructed either from brick and concrete, or from concrete 'parts' manufactured off-site in kit-form. Some of these developments are extensive, largely due to comprehensive redevelopment of war-damaged and slum dwellings (e.g.

Canning Town, West Ham). Many achieve high densities (50 dph plus) both as individual buildings and as compositions arranged around taller blocks and open spaces, with designated play and clothes drying spaces (up to around 160dph in a combination of point blocks and lower rise housing).

- **Variants -** include 1970s infill development notably in Manor Park comprising two storey row houses with white-painted weatherboarding, wide frontages and square porches beneath tiled roofs. These buildings are set back on their plots to accommodate front garden parking or garages attached to the front of the houses. In many respects these are more closely related to earlier Victorian-Edwardian developments, with better internal space standards and larger windows when compared to others built at this time.

- **Urban structure and legibility** – the street is no longer a key structuring element, with the distinction between fronts and backs blurred. Pedestrian traffic and motor traffic are segregated, and in most cases, the pedestrian network is more extensive than the motor traffic network (Radburn principles). However, pedestrian routes are not connected, and often suffer from poor natural surveillance and can be somewhat illegible. Areas of incidental green space, usually fenced, not always an integral part of the structure, though some larger parks provided.

- **Tall buildings** – in this typology comprise blocks of up to 25 storeys, placed within housing estates and surrounded by lower-rise five storey walk-up blocks, culs de sac and semi-public spaces. Lower rise include bungalows built for elderly residents at the foot of tower blocks, 2 storey houses, and 4-6 storey walk-up flats.

- **Local services** – comprise sparse parades of purpose-built shops on the ground floors of walk-up blocks of flats, either as stand-alone local centres or extending / replacing existing centres. In some instances, associated with more important centres, developments also accommodated markets, shopping centres, car parks and bus stations, moving away from a linear high-street format. Occasional pubs also constructed within the estates.

- **Industrial development** – mainly involved the evolution of existing industrial sites, as above (increasing use of concrete and steel).

1980s- Mid 1990s

- **Houses** – are fairly uniform and placed on plots incorporating car parking at the front, and have small rear gardens, many of which back onto public spaces such as Beckton Park. Front boundary treatments are minimal, with front 'gardens' usually incorporating car parking spaces. Densities achieved across areas are lower than earlier typologies, (due to spacing for cars and public and private green space) but have typically been around 60-70 dph at the plot level due to the small size of units.

- **Variants –** include the Britannia Village development at West Silvertown, which includes a mixture of town house style low rise flats and houses, again incorporating significant car parking and small areas of amenity space but at higher densities (up to 90 dph).

- **Urban structure and legibility** – development was consciously based around anticipated high levels of car use, with layout based on the Government's Design Bulletin 32 – providing for heavily engineered spaces (distributor roads, wide sight lines etc) and lots of parking. Legibility is limited as places designed to be navigated by car, not on foot. Attempt in design of layouts to replicate 'village' style, with 'organic' arrangement of houses around culs de sac. Spacing provided by ongoing 'greenfield' nature of development and some early large scale brownfield development (draining of extensive marshes, clearance of gas works and dockside areas).

- **Building heights –** typically 2 storeys, taller buildings are up to 4-6 storeys.

- **Local centres** – take the form of large format stores and car parks, or a mix of services and retail units thinly strung out along a distributor street.

- **Industrial development** – mainly involved the evolution of existing industrial sites, although newer forms started to become evident (see below).

Late 1990s to 2010

- **Taller buildings (variety of uses)** - most development has been mid to higher rise, high-density residential, hotel and office buildings (av. 6-12 storeys, with several towers of up to c. 20 storeys, and one 43 storey), mainly focused around Stratford, with examples also found at the Royal Docks and Canning Town. The developments have in common the use of regular concrete and steel frames with cladding treatments, and increasing use of curvilinear shapes linked to computer-aided design techniques. Balconies tend to be added in residential blocks. Composition generally on a site rather than area basis.

- Some **limited lower-rise apartment development** is also present, mainly in the Royal Docks. Here, new streets have been formed with blocks typically 4-8 storeys in height with undercroft parking. Some designs have tried to reflect local character or create distinctiveness, for instance, picking up on nautical themes in their shape and formation.

- **Variants** – include converted industrial and other attractive buildings such as Warehouse K (at the western end of ExCeL - offices) and Three Mills (currently a museum and film studios), and infill promoted by national policy emphasis on brownfield land. Also 'wide' fronted, narrow-sided buildings of around 12 storeys in height also exist, notably at the western end of ExCeL.

- **Densities –** monitoring[10] shows that a combination of high land cost infill and high rise typologies were achieving very high densities. Average densities of new build residential completed across the borough ranged from 168 dph in 2006/07 to 300 in 2007/08. In 2008-09, site based densities ranged from 21 dph to 785 dph[11].

- **Urban structure and legibility –** is typically disjointed, given the piecemeal pattern of development layered upon

[10] Newham background analysis from the London Development Database.
[11] These include high rise blocks of several hundred flats, so actual plot densities per hectare are also much higher than equivalent 1960s compositions, though smaller infill blocks would achieve plot densities closer to the prevailing average.

older typologies, and new identities that have yet to be settled.

- **Community facilities and workspace** – is partially mixed in with residential areas, given that these are infill/redevelopment of areas that were more predominantly industrial and commercial, remnants of which continue to exist. Some new commercial and community spaces have been provided as part of mixed use blocks or larger developments, though many have struggled to find occupiers.

- **Industrial development** – reflects the shift towards service industries, distribution logistics and technology. These operate from large landscaped parkland business campuses (e.g. ProLogis Park) which have their own network of streets and controlled access. Buildings tend to be large-scale, constructed from steel and concrete. This post-modern 'industrial style' has transferred across to recent residential and office development.

Post-2010

- **Tall Buildings** – The most striking characteristic of this period, in common with other parts of Inner London has been the continued emphasis on very high-rise residential towers, some of which are in excess of 20 storeys in Canning Town and Royal Victoria Docks, and up to 30 storeys and upwards in Stratford, on Strategic brownfield sites with good public transport accessibility; proposals for relatively tall buildings are also emerging in more traditional, low-rise parts of the borough. The presence of the airport in the Royal Docks has had a limiting effect on the height schemes can achieve here.

  Generally the new tall buildings are of high design quality with a design style based on a re-interpretation of London Georgian architecture characterised by austere symmetric facades, sharply punched inset window and door openings which are punctuated by prominent glass entrance lobbies. The designs typically featuring generous integrated balconies/terraces, reflecting new London Plan space standards. Sustainability and accessibility have also been improved by new building regulations and policy standards. Some are standalone but many form part of an overall composition including lower buildings. Even the lower elements of a development typically have a greater height than equivalent developments in previous periods. There is a much greater use of brick rather than render, which gives a more durable, quality finish, better referencing local character (e.g. brick dockside buildings and London brick housing).

- **Housing** – Housing developments are dominated by flats; where new dwellinghouses are proposed as part of a large development, these tend to be integrated in schemes as a 'buffer' to existing terraces. Ground floors at large scale developments are increasingly providing maisonettes, or retail/commercial uses in town centres. Typically buildings now address the street at all levels, with consequent improvements in natural surveillance and animation.

- **Variants** – Housing developments at one-off infill sites in the borough have seen an improvement in architectural quality. Such schemes are now often imaginative proposals which maximise the potential of individual sites and benefit an area's appearance and character, respecting existing heights with some increases on corner sites. The trend for the re-use of older buildings has also continued with imaginative refurbishment of some notable buildings in the borough such as the East Ham Civic Campus which restored Grade II and Grade II* listed buildings, and the re-use of the former Plaistow Hospital for housing; in addition the façade of the former bus garage has been refurbished and incorporated into a new shopping centre in Green Street.

- **Density** – densities of approved schemes have increased further in this period, ranging from 7 dph, up to 1374 dph in 2011, 1005 dph in 2012, 1250 dph in 2014, and 1101 dph in 2015.

- **Urban Structure and Legibility** – The surveillance of public realm and ground floor animation is emphasised, with new developments generally having strong orientation to existing streets, and in the case of larger schemes the creation of new streets and connections. There is an emphasis on communal open space overlooked by residential accommodation, with some private front gardens. Reduced parking provision on accessible sites has allowed reconsideration of layouts to increase densities.

- **Community facilities** – Large scale new community facilities such as Atherton Road Leisure Centre and East Ham Customer Service centre and Library have been located on key corridors in the borough and are emerging on large scale Strategic Sites such as in the new town centre at Canning Town. Many schools have been renewed and expanded within the existing urban structure. Newer community uses notably places of worship and free schools have struggled to find sites and in some cases have appeared in inappropriate locations (residential areas, employment areas) though direction of community uses to town and local centres and key corridors has had some success helping to consolidate local identity. A significant extension to Stratford town centre has opened in the form of a part enclosed mall, part pedestrianised street based vertical mixed use emphasising the role of the street as public open space, a pattern also emergent in Canning Town's town centre extension.

- **Green Space** – The Queen Elizabeth Park has been completed as part of the Olympic legacy. The Leaway connecting the Royal Docks to the park via a riverside/pedestrian path over a series of new bridges is nearing completion.

- **Industrial development** – Has focused on intensification of existing sites and some limited redevelopment of brownfield sites to modern enclosed metal shed formats focused on logistical efficiency. Additionally, smaller creative and high tech spaces are starting to be provided as part of mixed use blocks on larger developments and through refurbishment of older industrial spaces within the urban grain (e.g. Forest Gate Arches), though demand for these units remains uncertain.

The next section explains how these typologies combine to create distinctive parts of the borough, mapped in Figure 2 (overleaf) and summarised in Table 1 (see p30). Further detail by community neighbourhood area is included in Appendix 2.

The distribution and combination of typologies across Newham

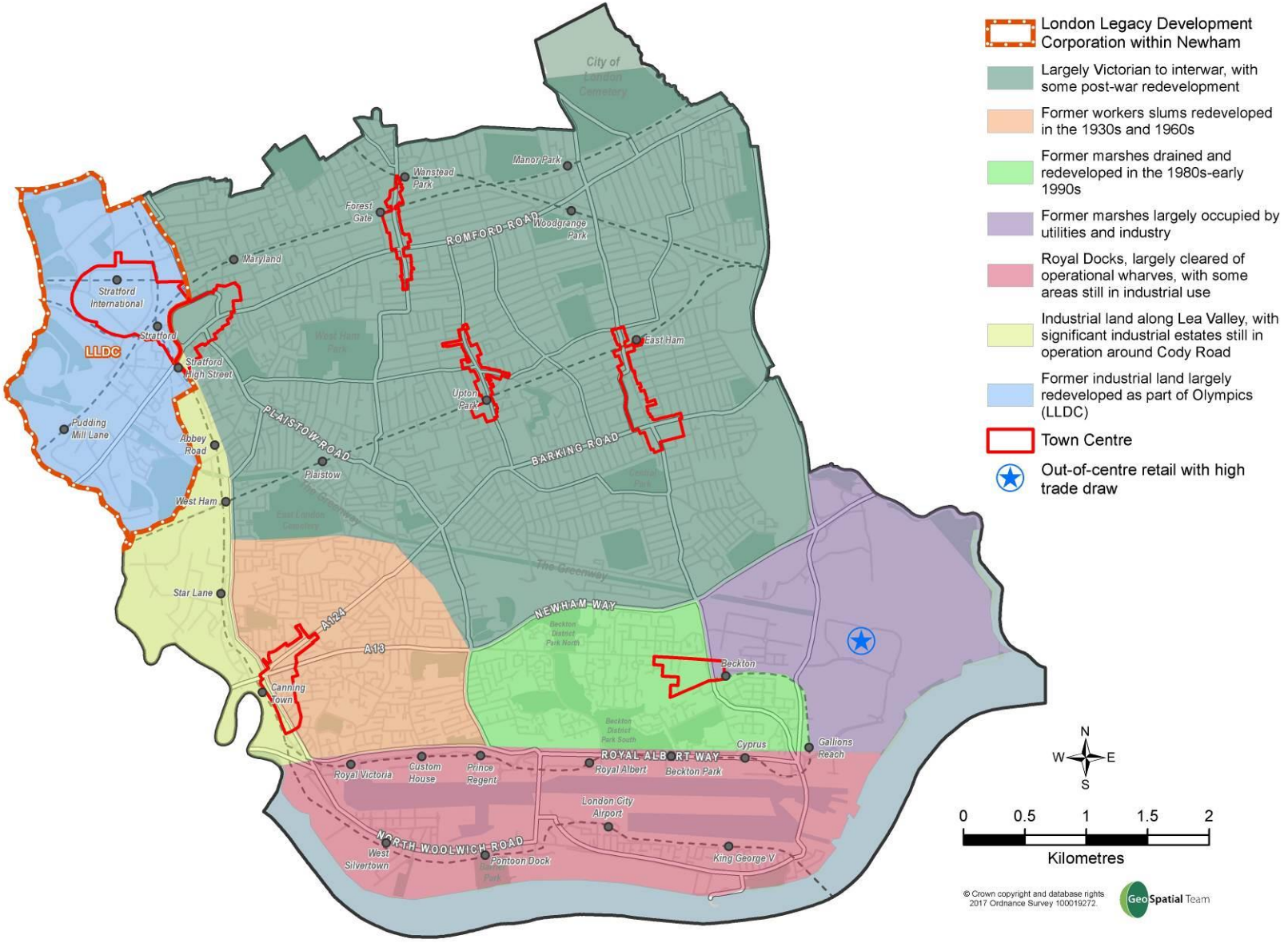
Character Area 1: Northern part of Newham: Manor Park, East Ham, Forest Gate, Green Street, parts of Stratford and West Ham, and Plaistow.

Key features: the area is predominantly residential, with other prominent buildings including libraries, churches and schools, and a number of local and town centres focused on main roads.

Principal typologies: Late 19th Century Victorian and early 20th Century terraces of houses and high streets with predominantly independent shops and other businesses reflecting multi-cultural needs.

Sub-typologies: Post-war housing estates including walk-up blocks, tower blocks and 1970s houses built into the older fabric; Victorian villas on large plots near Forest Gate station. Small scale contemporary infills. Sparsely distributed community infrastructure.

Figure 2: Summary of Typology Distribution



Principal urban structure: Gridded networks of streets, perimeter blocks, front and rear gardens. Victorian parks, cemeteries and institutions (schools, banks, churches) built into the structure.

Secondary urban structure: A mix of distributor and access streets, pedestrian walkways associated with post-war redevelopment areas such as the Jack Cornwell Estate.

Heritage and change: Most of the features that established the area's late 19th Century and early 20th Century typologies are intact, though the removal of railings during World War II and subsequent alterations and building replacements have had an influence on character, bringing some variety.

Most of the houses were built by private land interests, on former Essex farmland. However, the 1890 Housing Act made it the responsibility of local councils to provide decent homes for local people, and the local boroughs were fairly active in this.

The area contains six of the borough's conservation areas, notably the Woodgrange estate, which is markedly different to its surroundings, since it was built for wealthy city bankers rather than artisans. On the Romford Road, there are fine examples of Georgian houses, built speculatively in the 18th Century, the Technical Institute and Museum (now University of East London), built in 1895 (Grade II*). A number of historic public houses also exist in the area, notably the 15th Century Spotted Dog (Grade II), and the King Edward (early 18th Century, listed Grade II). The area also contains a number of important parks, including West Ham Park, Central Park and Manor Park Cemetery and the City of London Cemetery (a grade I Historic Park) which fit into the urban structure.

Recent change has included estate-based renewal, redeveloping high rise point blocks and other problematic post-war housing to lower rise, high density housing. Other change has tended to be incremental – making the most of infill opportunities as they have arisen, (e.g. on surplus railway land and former small scale industrial sites) often increasing local densities due to an increase in taller, flatted development. This pattern is likely to increase with the arrival of Crossrail, improving accessibility in key places such as Forest Gate[12], and with the re-development and re-use of important public sector sites to realise asset value and wider regeneration benefits.

Character Area 2: South western part of the borough – including much of Canning Town and Custom House, parts of Plaistow and West Ham

Key features: residential development dominates, together with some large scale infrastructure such as the Canning Town flyover, and some notable public buildings including churches and libraries.

Principal typologies: Post-war 1960s/70s redevelopment across large areas of Canning Town and West Ham extending from Stratford to Custom House and including the A13 flyover.

Secondary typologies: Substantial fragments of Victorian and Edwardian terraced housing on gridded streets particularly in Plaistow and towards Stratford. Barking Road also retains some rows of taller (5-6 storey) Victorian and interwar development of

[12] Forest Gate SPD (LB Newham 2010c) sets out a design and regeneration response to this.

flats and offices above shops, and institutional uses such as Canning Town Library. New development comprising new residential towers and vertical mixed use town centre formats based on pedestrianised streets is emerging

Principal urban structure. A loose and confused street network, due to development occurring without a clear idea of block structure, accommodating older and new layouts and being disrupted by major natural and infrastructure barriers. Unclear definition of fronts, backs and public and private spaces, and a poor relationship between buildings and street spaces.

Heritage and change*:* Whilst the area has no conservation areas, fragments of important historic development are pepper potted throughout the area. Examples include the Church of All Saints, built from the 12th Century onwards, and Grade I listed, seven Grade II listed gasholders at the former Bromley-by-Bow gasworks site in the north, and industrial heritage such as warehouses and cranes by Royal Victoria Docks. The Victorian Church of St Luke in Canning Town has a spectacular spire, visible from the 1930s Silvertown Way viaduct, (in itself notable for being the first 'flyover' in Britain) though it is surrounded on all sides by industrial development, post-war housing and contemporary flats. Parts of Barking Road in this area are also distinguished by a small number of buildings of local historic interest, forming the Barking Road (West) Area of Townscape Value that includes the former Canning Town library, one of a number of buildings established by John Passmore Edwards (a wealthy philanthropist) in the late 19th Century, and the adjacent Public Hall.

The Canning Town and Custom House area is undergoing extensive regeneration guided by a masterplanning process[13] to provide new housing, an extended town centre and two new main streets linking Canning Town and Custom House — a 'residential street', and an 'activity street' running through parkland. The A13/Silvertown Way roundabout has been removed and the road layout adjusted to allow for reduced traffic and extensively improved public realm experience for pedestrians and cyclists. Extensive redevelopment of the town centre along Barking Road has delivered high quality residential accommodation and a renewed Rathbone Market space, together with the start of a southward extension. New and emerging tall buildings around the town centre make use of high public transport accessibility, and are more strategically placed than those in 1960s/70s typologies. Change elsewhere in the area has included more limited renewal and infill.

Character Area 3: Lower Lea Valley, north of the District Line including parts of Stratford and West Ham (currently within LLDC)

Key features: Older industrial development together with large scale infrastructure, notably railway lines and sidings, plus waterways and a variety of residential and commercial development.

Principal typologies: Areas of older industrial development focused around the River Lea. The typology comprises industrial buildings of broadly similar size: larger Victorian warehouses and

[13] See LB Newham (2008b), Canning Town and Custom House Masterplan SPG

factory buildings, together with post-war structures in brick, corrugated metal and concrete.

Approximately equal in scale is the area covered by residential development, including fragments of Victorian and larger areas of post-war development.

Secondary typologies: Area has undergone rapid change, kick-started by Olympic developments and continuing investment in the area. A rapidly growing typology of new, taller residential and office buildings of different architectural styles is emerging in two areas—Stratford City, north of Stratford town centre, and Stratford High Street, where there has been some redevelopment of former Council housing and gap sites. These typically have retail / business units on ground floors, though many are have struggled to find occupiers. Parking is provided under buildings, with direct access via lifts to flats above.

Also typical of the area are historic industrial buildings and infrastructure including those related to sewage and milling, with clear links to the River Lea. Some in the Three Mills area are converted to residential and/or studio use and act as heritage attractions.

Large new logistics-related buildings include the Stratford Jubilee Line Extension depot and West Ham bus garage in the east of the area.

Principal urban structure: City-scale railways, rivers, sewerage infrastructure and roads are key structural elements, creating large pockets of isolated development, notably Sugar House Lane.

Secondary urban structure: The local-scale street network is partially disconnected because of the Greenway, the former Channelsea River and the river channels. However, for the most part, there is a clear distinction between residential streets and streets serving industrial areas.

The Olympic Park and related legacy buildings provide a major high-value urban leisure space and tourist destination while also improving connectivity across the river. The Greenway provides a green link towards Beckton, and the river corridors form the basis of Lea River Park/Leaway running down to the Royal Docks and providing connections to Bromley-By-Bow and Poplar.

Heritage and change: Historic industrial buildings are small in number but significant in scale and influence. Bazalgette's Northern Outfall Sewer, (upon which the Greenway sits), and Abbey Mills pumping station are perhaps the most important features of the late 19th Century, with Three Mills is arguably the most attractive asset. These, together with the wider cluster of older industrial buildings are recognised as the foci for Sugar House Lane, and Three Mills conservation areas.

Another conservation area is found along Stratford Broadway, the historic heart of Stratford Town Centre, which has long been an important thoroughfare, and incorporates a range of historic commercial, religious and residential buildings. Other important historic fragments include early row cottages at Maryland and around Abbey Gardens (remnants of an Abbey).

Major change has taken place in the north of the area through large scale projects, including the Olympic Park, Athlete's Village (now East Village) flatted development, Stratford International Station, and the Stratford City retail-led development. Other major mixed-use high density developments are in the pipeline.

Crossrail will also bring further change to Stratford and Maryland, with opportunities for intensification to realise the benefits of improved accessibility. As noted above, high rise development has already spread along Stratford High Street in several 'statement' towers, reflecting rising development values. This has dramatically increased dwelling densities and building heights in the area, but created a street lacking coherence and legibility. Elsewhere, change has comprised more limited infill and renewal, notably around West Ham station.

Character Area 4: Lower Lea Valley: South of the District Line towards the Thames including parts of Canning Town

Key features: riverside industrial development together with large scale infrastructure, notably railway lines.

Principal typologies: post-war and modern industrial park development, comprising industries located in 'sheds' and offices of varying sizes, usually constructed in concrete and steel with coated or painted steel cladding. The newer industrial units appear in a 'parkland campus' setting, with planted, private streets.

Secondary typology: small scale industry and waste processing activity between the railway lines and the river Lea, along Bidder Street and Stephenson Street. Change of use partly through permitted development rights has resulted in pockets of residential around Canning Road.

Substantial remnants of Victorian industry—former railway land, river quays, Bow Locks and a set of listed gas holders.

Large areas of vacant land in the north around former Bromley-by-Bow gasworks, and south of Canning Town Station, although these sites form the basis of strategic allocations with emerging proposals.

Principal urban structure: City-scale road and rail infrastructure crosses the River Lea on large engineering structures, creating barriers to north-south movement along the riverside. The River Lea is navigable but largely unused. The DLR and Jubilee Line run north south and, with the river and M11 Link Road further west, create barriers to east-west movement.

Secondary urban structure: A single spine street, Cody Road, part privately-owned and gated, with orthogonal loops. Access to the area over the River Lea via Bow Locks, over the railway line at West Ham, and from the A13 bridges. Pockets of green space, largely inaccessible.

Heritage and change: A large area of listed gas holders stands in the north western corner of the area (Grade II listed, 1872), providing a dominant feature in the flat urban landscape, whilst having a visual relationship with other industrial infrastructure, including the rivers and canals. Pylons run south from Cody Road substation to the Royal Docks.

Change in the area has to date been limited to renewal of industrial estates, notably the 'ProLogis Park' development, and ongoing improvements to the local infrastructure such as the DLR, and bridge connections over Lea River. However, development impetus is picking up with emerging proposals for large scale high density mixed use schemes on the former Parcelforce site in the north and the strip between rail lines and Silvertown Way in the south. Redevelopment of Limmo peninsula is expected to occur following conclusion of Crossrail works.

Table 1: Presence of dominant typologies by Community Neighbourhood area

Typology	Residential Development Periods						Industrial / other non-residential (excluding shopping and small businesses)
	Early, Victorian, Edwardian, early 20th Century	Inter-war, immediately post-WW2 Garden City	Post-war 1960s-70s	1980s-mid 1990s	Late 1990s-2010	Post 2010	
Typical Structure (correlates with car-orientation)	Connected street grids, high streets	Connected street grids, high streets	Dis-connected streets, shopping centres	Culs de sac, out of town retail	Culs de sac and gated enclaves, few services	orientation to streets	
Community Neighbourhood							
Manor Park	D	F/N	S	F/N	F/N	F/N	F/N
Forest Gate	D	F/N	S	F/N	F/N	F/N	F/N
Green Street	D	F/N	F/N	F/N	F/N	F/N	F/N
East Ham	D	T	S		F/N	F/N	F/N
Plaistow	S	F/N	D	F/N	F/N	F/N	F/N
Stratford and West Ham (excluding Olympic site)	S	F/N	D	F/N	F/N	F/N	F/N
Stratford and West Ham (Olympic site)	F/N	F/N	F/N	F/N	S	D	F/N
Canning Town (north of DLR, excluding regeneration area)	F/N	S	D	F/N	F/N	F/N	T
Canning Town (south of DLR & Regeneration area)	F/N	F/N	D	F/N	S	T	F/N
Royal Docks	F/N	F/N	F/N	F/N	S	T	D
Beckton	T	F/N	F/N	D	F/N	F/N	S

D - Dominant typology; **S** - Secondary typology; **T** - Tertiary typology (where significant);
F/N - Trace/ few instances / no dominant typology.

Character Area 5: Southern part of the borough, around the Royal Docks (Silvertown, North Woolwich, Royal Victoria, Royal Albert, and south part of Gallions Reach).

Key features: the Royal dock basins (from c-1885), airport and River Thames, industrial development around the Tate and Lyle factory and Thames Wharves and modern service industry development at ExCeL (hotels, exhibition centre); ex-railway lands (some incorporated as the modern road network); the DLR and emerging Crossrail route.

Dominant typologies: For the most part there is no obvious dominant typology, although there are some extensive areas of housing of particular types:

- 1980s-1990s housing built in Cyprus and Britannia Village (West Silvertown)
- Post-war council estates at North Woolwich, incorporating tower blocks, walk-up blocks and terraces. Local centre integrated into development, extending the original centre.
- Contemporary developments including walk-up flats of 4-6 storeys, towers of around 20 storeys, and 12-storey long blocks around the ExCeL, Barrier Park and emerging at Minoco Wharf. Sparsely distributed community infrastructure as part of 'mixed use' and no definable local centres.

Secondary typologies: For the most part, there is no obvious secondary typology. What exists is in fragments, and makes no contribution to the composition of the urban landscape, including:

- Fragments of late 19th Century terraced housing as perimeter blocks on short orthogonal streets.
- Clusters of factory buildings (e.g. Tate & Lyle), modern warehouses and small businesses focused mainly between Silvertown and Woolwich and at Thameside West - remnants of docks industry and more recent ad-hoc development.
- An exhibition centre and associated hotel infrastructure (ExCeL).

Principal urban structure: City-scale roads, including dual or wide carriageways, road/rail viaducts, large expanses of water, and segregated networks of pedestrian and vehicle routes in the 1960s housing states.

Secondary urban structure: Local centre at North Woolwich has migrated north from its original position at the junction of Woolwich Manor Way and Pier Road, signified by the Police station.

Urban parks developed by the Victorians (Royal Victoria Gardens) and Tate and Lyle philanthropy (Lyle Park), set within the fragments of orthogonal street grids. Post-war incidental open spaces associated with comprehensive redevelopment projects; contemporary large open space at Barrier Park. Other open spaces are incidental to adjacent land ownerships, for example alongside the dock walls and under the DLR viaduct at Royal Albert.

Heritage and change: Following the closure of the docks in the late 1970s, the London Docklands Development Corporation engaged in the wholesale clearance of former warehouses, railway lines and industry, leaving an almost entirely blank canvas for redevelopment. Some of this was redeveloped for housing early on – as in the Britannia Village development.

The older features that remain are a shadow of the former industrial landscape of large warehouses, railway lines, factories, busy shipping activity and worker housing that dominated the area until its decline, but notable remnants include the royal docks themselves, and the listed cranes and the monumental Millennium Mills alongside the Royal Victoria Dock.

Whilst there are currently no conservation areas, at North Woolwich, the former railway station, police station, and the entrance to the foot tunnel are high quality buildings (mainly listed) that make a positive contribution to their surroundings. Several local terraces of houses are also of interest, including fragments of terraced housing in Silvertown and North Woolwich; and two terraces and a single Victorian house at the eastern end of Royal Victoria Gardens.

Beyond this, a new era of modern hotels, apartment blocks and offices is spreading gradually along the old Royal Victoria and Albert docksides, and parts of the Thames including Newham Dockside (Building 1000), hotels to the east of ExCeL and new residential developments at the eastern end of the docks and around Pontoon Dock DLR station. Many are mid-high rise (typically 8-12 storeys, some up to 18) resulting in high densities, making use of waterside views, but not necessarily contributing to legibility.

Character Area 6: Beckton housing estate (between Prince Regent Lane, Newham Way, Royal Albert Way and Royal Docks Road).

Key features: Suburban, extensive low-rise, car-focused development, sitting in matured landscaped environment.

Dominant typologies: 1980s-early1990s estate.

Secondary typologies: Pockets of Victorian/Edwardian terraces and the expansive district park. Also present are pockets of industrial estates and larger buildings occupied by community uses, and district centre formed by large superstore and car park. Main topographical feature of significance is the former Beckton Alps, constructed out of landfill material.

Principal urban structure: Distributor roads serving culs-de-sacs.
Secondary urban structure: Segregated pedestrian routes, often running at the rear of properties and tree lined.

Heritage and change: The estate was developed under the London Docklands Development Corporation on areas of undeveloped marshland and the former East London gas works site. Pockets of Victorian/Edwardian terraces remain in the west of the area, towards Prince Regent Lane, and in the east notably 'Gas workers' cottages in Winsor Terrace, now an Area of Townscape Value. The 1980s estate remains uniform and has seen little change.

Character Area 7: Beckton, east of Royal Docks Road, including Beckton Sewage Treatment Plant, former Gasworks, industry and Gallions Reach out of centre retail park.

Key features: Riverside location occupied by large scale utilities infrastructure – including extensive strategic sewage treatment works – transport infrastructure, industrial warehouse

development, and pockets of vacant land, with some emerging residential development in the south along Armada Way.

Dominant typologies: Beckton sewage treatment plant, and contemporary large industrial warehouses

Secondary typologies: Out of centre retail park, out of centre leisure park. DLR depot. Some emerging taller residential development.

Principal urban structure: City-scale road and rail infrastructure creating barriers to east-west movement. Thames riverside access, but only used as part of the sewage treatment works. Spine road (Armada Way) with orthogonal loops.

Secondary urban structure: Vacant land, including some marshland.

Heritage and change: The area has long played an important role for development of utility infrastructure. In Victorian times it was the site of an extensive gas works plant and also the location of the eastern outlet of Bazelgette's sewer system, which later became the Sewage Treatment Plant that now covers much of the area's northern half and serves a strategic pan-London role. The 1990s saw the extension of the DLR to Beckton, including new depot in the area. The late 1990s saw the development of out-of-centre retail at Gallions Reach Shopping Park and leisure development at Jenkins Lane, both featuring extensive car parks.

Further vacant land around Gallions roundabout was partly taken over in the mid-2000s by industrial development being relocated from the Olympic site, and further east, the Gemini Business Park development. It is only in recent years that residential development is beginning to emerge between the Albert Basin dock and Atlantis Avenue.

This chapter has unpacked multiple elements of local distinctiveness, and how they combine in places and to create identifiable character-based typologies. Many of these elements are relevant design cues for design that is sensitive to the local context, but the following chapter seeks to direct attention to them with a more careful, evaluative eye.

CHAPTER 4: DESIGN CUES

This chapter explains more detailed principles of good urban design, and uses these to evaluate the different typologies and how well they relate to each other, to help identify key weaknesses/threats that need to be addressed, and strengths and opportunities that can be enhanced or connected with, in different parts of the borough. These are identified as a series of design cues and associated priorities for places, to be combined with the understanding of borough-wide components of character in Chapter 2.

It goes on to examine particular components of quality within typologies that may merit further attention from a heritage perspective.

Capacity for change and innovation, and sensitivity to change is thereby gauged.

The analysis provided in this chapter is intended to give an overview of quality and consequent design cues – a starting point for more detailed appraisal work in areas of change (e.g. as part of master planning). Information has been sourced from the two-level character study in Appendices 1 and 2, including a SWOT analysis carried out for each.

Urban Design Principles

Good development requires a 'ground-up' approach to design, from the level of streets, spaces and plots, to the orientation and animation of building frontages. Key principles and design that is responsive to them are widely accepted to work as follows[14]:

- ***Sensitivity to/integration with the historic environment**:* new development proposals recognise and respond sensitively to the existing context, including the setting of historic buildings and conservation areas and the urban structure they sit within, resulting in designs that contribute to the conservation and / or enhancement of heritage assets. This doesn't mean that design has to be conservative, or pastiche, but it should take cues from historic assets in terms of scale, massing, orientation so as not to overwhelm them, whilst also creating an urban structure that is coherent and well-composed.

- ***Visual Unity and Composition:*** creating the impression of a related group of buildings and spaces that can be taken in as one, contributing to a sense of 'place' and somewhere that is pleasing to the eye. Key considerations include harmonious proportions, linear linkages, and a key focal point. Responsive design means making sure a building fits within the existing composition and does not disrupt visual unity where this exists. Larger / taller buildings are sensitively integrated into their surroundings using tools such as layout, set backs, changes to edge condition, skyline composition and so on.

[14] See e.g. English Partnerships (2000, 2007); CABE (2008); ACPO (2016); BREEAM (2012).

- ***Permeability and legibility**:* the creation of networks of frequent streets and short blocks that are connected and activated by a mix of adjacent uses, easy to navigate because of their layout and the presence of markers/ landmarks, (particularly on corners) and provide permeability at the walking scale. Responsive design would seek to provide links with existing streets and improve permeability where it is lacking.

- ***Continuity and enclosure (connectedness) and clear delineation of public and private space**:* the creation of continuous street frontages and park edges where the enclosure of space by development is appropriate in terms of the ratio of public space and building height and mass. Frontages create a clear distinction between public and private space and emphasising security and natural surveillance of public spaces, with clarity as to building entrances and intended use of spaces. Responsive design would take into account existing building heights, achieving the right ratio of street width and height, repair broken frontages and maintain or establish strong building lines and edge treatments.

- ***Character and local distinctiveness**:* the creation of places with their own identity—either new places, or places that respond to and reinforce locally distinctive patterns of development, landscape and culture, to accentuate the positive aspects of these. Responsive design means not rolling out identikit housing, high streets etc., but creating and reinforcing distinctiveness and landmarks, attending to the hierarchy of places and their function within the wider network of neighbourhoods. Landmarks can be buildings, public art, heritage assets etc.

- ***Diversity**:* the creation of a mix of compatible uses that work together to create places that in the round respond to local needs, in terms of community infrastructure (education, leisure, worship and so on) and employment. In turn, such mixing stimulates vibrant streets and public spaces, and enables people to walk easily between different activities (work, rest, play). Responsive design would identify what kinds of uses can be accommodated within mixed use areas locally, according to local lifestyles, economic growth sectors etc. to everyone's benefit, whilst also enabling personalisation of spaces and buildings.

- ***Adaptability:*** places and buildings that can change and adapt to different uses, social, economic and technological conditions, for example, offices that can be converted to flats. This usually relates to a combination of building technologies, and considerations such as internal space standards and arrangements, and building orientations. Responsive design will be aware of potential likely pressures for adaptability in the local context – for example, in relation to changes in local demographics (increasing numbers of older people, growing families, or increasing numbers of smaller households for instance) and changing environmental and economic circumstances. However, this design principle also means designing in flexibility in the face of unexpected change.

- ***Physical and visual integration with adjacent areas:*** ensuring that the above principles of permeability, legibility, connectedness, visual unity and composition, plus sensitivity to local character, distinctiveness and historic assets are applied at a strategic level between places as well as within them. This means for example, that assets such as watersides and town centres are accessible and enjoyable by

more than the immediately local population. It also means that aspirations of development should be aligned with place character, including its role in the wider network of neighbourhoods.

Since good urban design principles are a proven proxy for the delivery of good, sustainable development, they have been used as the baseline for the quality SWOT analysis of the borough's various character typologies.

Performance of typologies against urban design principles and resultant design cues and priorities for places

Overview

Table 2 overleaf provides an overview of the quality of the various typologies based on the accompanying series of urban design principles. The table demonstrates that in pre-war development, the principles were broadly adhered to; subsequently, in redevelopment areas, they were almost completely disregarded, with some partial recovery from the 1990s onwards. This applies both within individual typologies and in terms of how they respond to each other in different parts of the borough.

Indeed, this study notes that there is a clear division in particular, between the earlier development that mainly occurred in the 'north' of the borough and that that occurred later in the 'south', with the A13 providing the main division, and a significant barrier, between the two. This illustrates that in areas developed after the World Wars, the distinction between typologies extends to the failure to provide integrated and connected places, leading instead to the reinforcement of existing barriers, made worse by lack of variety of uses and tenures.

There is also a lack of visual integration between typologies. Areas of connected orthogonal street layouts and perimeter blocks with a vibrant mix of uses quickly give way to areas with disconnected streets and fragmented development, where buildings fail to address the street or other public spaces. There is often no continuity of building lines or orientation, either between areas or between individual plots, leading to a disjointed and discordant townscape.

This contrasts with periods of development that took place between the mid 19th Century and early 20th Century, where the distinctively different building typologies of the Victorian, Edwardian and inter-war periods nevertheless continued the same basic, planned approach to urban structure, that is, the development of buildings along connected streets, continuing established building lines, boundary treatments and, to a large extent, plot widths.

Looking at the typologies individually, we can draw out more specific design cues and opportunities (more detail on these can be found in Appendix 1). Such cues will be appropriate both in creating entirely new places in areas of large scale development, and in seeking to achieve good quality infill or regeneration and other improvements in areas of established character. Finally, it is useful to apply a similar approach to an understanding of how tall buildings can be designed to achieve the best possible outcomes in design terms. It is appropriate to do this outside the typologies as tall buildings are by definition, somewhat distinct from particular typologies because they are taller than the prevailing context.

Table 2: Application of established urban design and sustainable development principles in existing typologies

Principle (based on and in addition to Secured by Design)	Periods					
	Victorian, Edwardian	Garden City & Art Deco; interwar terraced	Post-war 1960s -70s	1980s -mid 1990s	Late 1990s - 2010	Post 2010
Sensitivity to / integration with historic environment	🟡	🟡	🔴	🔴	🟡	🟡
Emphasis on continuing or creating visual unity and composition (individual buildings in context)	🟢	🟡	🔴	🔴	🔴	🟡
Permeability, legibility connectedness (refers to presence of continuous streets)	🟢	🟡	🔴	🔴	🔴	🟢
Clear delineation of public and private space and building entrances	🟢	🟡	🔴	🟡	🟡	🟡
Orientation of buildings and plots responds appropriately to public spaces.	🟢	🟢	🔴	🔴	🟡	🟢
Continuity of frontage	🟢	🟡	🔴	🔴	🟡	🟡
Character and local distinctiveness; diversity	🟡	🟡	🔴	🔴	🔴	🟡
Adaptability to new uses; ability to accommodate mixed uses	🟡	🟡	🔴	🔴	🟡	🟢
Physical and visual integration with adjacent typologies	🟢	🟢	🔴	🔴	🔴	🟡

Key: Principles relate to typology rather than individual buildings or places.

🔴 Urban design principles generally not applied (suggests that future development should seek to improve).

🟡 Urban design principles partially applied (suggests that future development should seek to improve but take cues from where the principle has been met).

🟢 Urban design principles generally applied in full, with caveats and exceptions (suggests that future development should comply and seek to improve further without being a pastiche of what exists)

It should be emphasised that this is a general table, and there are exceptions in each case. A 'caveat' might mean for instance that a perimeter block has been applied, but the streets formed are not to a walking scale.

Victorian and Edwardian

This typology generally provides the clearest demonstration of the application of good urban design principles until more recent development, although it had the advantage of being applied across extensive land-ownerships rather than needing to co-ordinate across small sites. The best aspects of the typology which new development could emulate are:

- Connected and permeable streets.
- Perimeter blocks providing active building frontages and secure, private rear elevations and gardens.
- Internal space standards and gardens in some developments allowing flexibility of use and the possibility of extensions.
- Scattered mixed uses, reducing impacts of employment uses, whilst ensuring they are accessible (albeit not without environmental etc. problems).
- Integration of activities such as parks, high streets and community infrastructure within a high density grain, ensuring they are well-frequented.

New development could however improve on the typology in the following ways:

- Arrange street space and blocks to maximise social activity, walking and cycling, ensuring that adequate green and social infrastructure is included within them. Ensure adequate bus accessibility while minimising car space. Reduce reliance on high street parking and move loading to side streets.
- Introduce more variety and interest by avoiding monotonous building design: innovation and imagination can be applied provided that key structuring elements are maintained, such as building and boundary lines.
- Incorporate new technologies and inclusive design principles to improve sustainability.

In addition, management measures such as increased enforcement against fly tipping, inappropriate subdivisions of dwellings and conversion of front gardens to driveways. Where justified, (see below) new conservation areas with restrictions on permitted development rights (Article 4 directions) may be appropriate in some places.

Garden City and Art Deco, early post-war and inter-war terraced

This typology is similar in many ways to Victorian and early 20th Century development (above), except that it provides more building frontage space and introduces an architectural style that is not typical of most of Newham. The best aspects of the typology which new development could emulate are:

- Connected streets, permeable networks, natural surveillance (as above), inter-linked with earlier development.
- Wider frontages and more generous internal dimensions, plus outdoor space integrated with the development, (both private, public and semi-public) creating attractive family neighbourhoods.

New development could however improve on the typology in the following ways:

- Introducing high quality buildings of iconic design that provide variety and interest in the urban landscape, without appearing discordant or un-composed with surrounding development.
- Introducing streets where cars are less dominant without reducing permeability.
- Introducing a greater mix of uses, and ensuring adequate community infrastructure is included within easy access of homes.
- Other comments as per Victorian and Edwardian typologies.

Post-war 1960s-70s

This model of development fails to deliver on many urban design principles. However, new development could emulate the best aspects of the typology, namely:

- Good internal space standards.
- Innovation in design and good build quality.
- Introduction of (higher quality, better designed and maintained) public open spaces and some landscaped wide foot / cycle streets with good natural surveillance.
- Protection from excess through traffic (streets hierarchy).

New development, including regeneration projects within such estates could improve on the typology in the following ways:

- Apply established urban design principles – repair can be achieved through selective redevelopment along these lines, tackling homes and infrastructure.
- Encourage community ownership of spaces between buildings, and ensuring appropriate ongoing management of the public realm is provided for.
- Achieve a mix of tenures, preferably across the site.

The Canning Town and Custom House Regeneration programme is in many ways an exemplar of this.

1980s-mid 1990s

This model moves almost completely away from established urban design principles. However, new development could emulate the best aspect of the typology, namely designing safe streets where children can play.

New development, including regeneration and enhancement projects could improve on this typology by applying established urban design principles, particularly in relation to layouts, mix of uses and permeability. Within the existing fabric, repair opportunities include:

- Connecting culs-de-sac together to create permeable and legible streets (for pedestrians and cyclists, not necessarily motor vehicles). This could be achieved for example via garage courts between one cul-de-sac ending and another.
- Adding new small scale infill development to provide active frontages and resolve exposed back gardens.
- Strengthening community infrastructure, ensuring it is accessible without a car within local areas.

Late 1990s to 2010

The extent to which new development from this era follows design principles has varied – and in general has occurred more within developments rather than addressing their relationship with the wider area. As such, new development could emulate the best aspects of the typology, namely:

- Introduction of iconic and innovative/imaginative design styles with some consideration of local context (e.g. local history, lessons learnt).
- Re-using older buildings for new uses, rather than demolishing them.
- Meeting contemporary needs, including higher standards of energy efficiency, inclusive access and ease of incorporation of new technologies used in day to day life and work.
- Structural characteristics allowing speedy construction.
- Integration of features such as roof gardens enabling more efficient use of space.

New development, including enhancement projects could improve on this typology in the following ways:

- Apply urban design principles consistently; paying particular attention to visual composition, legibility and integration with

neighbouring buildings, streets and areas that creates permeability (within site as well as with neighbouring areas).
- A more comprehensive and robust approach to the sustainability performance of buildings (energy use and sourcing, materials selection etc.) should be applied.
- Avoiding gated developments except in building conversions where gating is unavoidable: for the most part, perimeter blocks provide adequate security through the natural surveillance designed in.
- Improving the public realm on main streets to encourage development to address these rather than turn inwards.
- Better consideration of the location of non-residential uses, including ground floor retail, to ensure it has enough passing footfall to be viable, whilst not creating undue disturbance to residents.

Post-2010

In this period, urban design principles have been promoted at the national level with an expectation that poor design is not be acceptable. Government and London Plan guidance, including space standards transmitted to the local level has emphasised high quality developments which are sustainable and accessible. The resulting uplift in design of developments in Newham has been variable with good or excellent schemes balanced by some poor quality schemes continuing to come forward particularly at one-off housing sites and householder developments. Much of the good aspects from the Mid 1990s to 2010 period have continued, including significant improvements in energy performance, movement towards pre-fabrication construction methods, and adaption of older buildings.

The best aspects of the typology which new development could emulate and build on are:
- Applying or exceeding space standards and accessibility standards, including provision of private amenity space
- Car-free development where PTAL is good/excellent
- The continued trend for imaginative re-use of older buildings.
- Use of durable, character referencing brick
- Greater variety of ground floor treatments to secure activation and deal with flood risk

New development, including enhancement projects could improve on this typology in the following ways:
- Place-making by paying particular attention to visual composition, legibility, mix of uses, landscaping and successful integration with neighbouring buildings, streets and areas.
- Promote permeability and public realm improvements both within the site (where appropriate) and the wider area.
- Recognising the design impact and cumulative effect on the character and attractiveness of an area of minor developments such as one-off housing sites and householder developments.
- Careful management of location, height and design of tall buildings.

Tall Buildings

The London Plan defines tall buildings that are noticeably taller than their context and/or have a visible effect on the skyline. Clearly the perception of what is 'tall' in a local context will vary quite considerably across the borough. Appendix 2 provides an analysis by Community Neighbourhood Area which is mapped in Figure 3 overleaf. Overall in Newham, a borough mainly characterised by large areas of low rise two-storey housing within a predominantly flat landscape, a 'tall building' is generally considered to be:

- Any building of 6 storeys or more in height, or
- Any building of 18-20m or above in height.

In considering design cues for tall buildings, it is worthwhile to consider the positive aspects of tall buildings which make them an attractive development from several perspectives. Tall buildings offer the opportunity to build to higher densities around public transport nodes/key routes and in town centres, helping to support their viability and vitality. They may accommodate significant numbers of new homes and employment-generating uses/community facilities in an intensely used and vibrant development that activates the surrounding area. They can also help secure the redevelopment of to small sites with high land values, or sites which need to 'give' land to open space, view or route corridors or buffer industrial uses, roads and rail infrastructure..

Tall buildings can be excellent works of architecture, and some of the best post-war examples are now statutorily listed. The introduction of a prominent visual feature into an existing townscape can change its character and appearance and present a better perceived 'offer' for the area to the rest of the borough and London: tall buildings can also be iconic buildings that define a strong sense of regeneration, economic vitality and status of place, creating new views and landmarks and helping to improve legibility by marking for instance, town centres and transport hubs. Tall buildings can thus play a role in creating successful places.

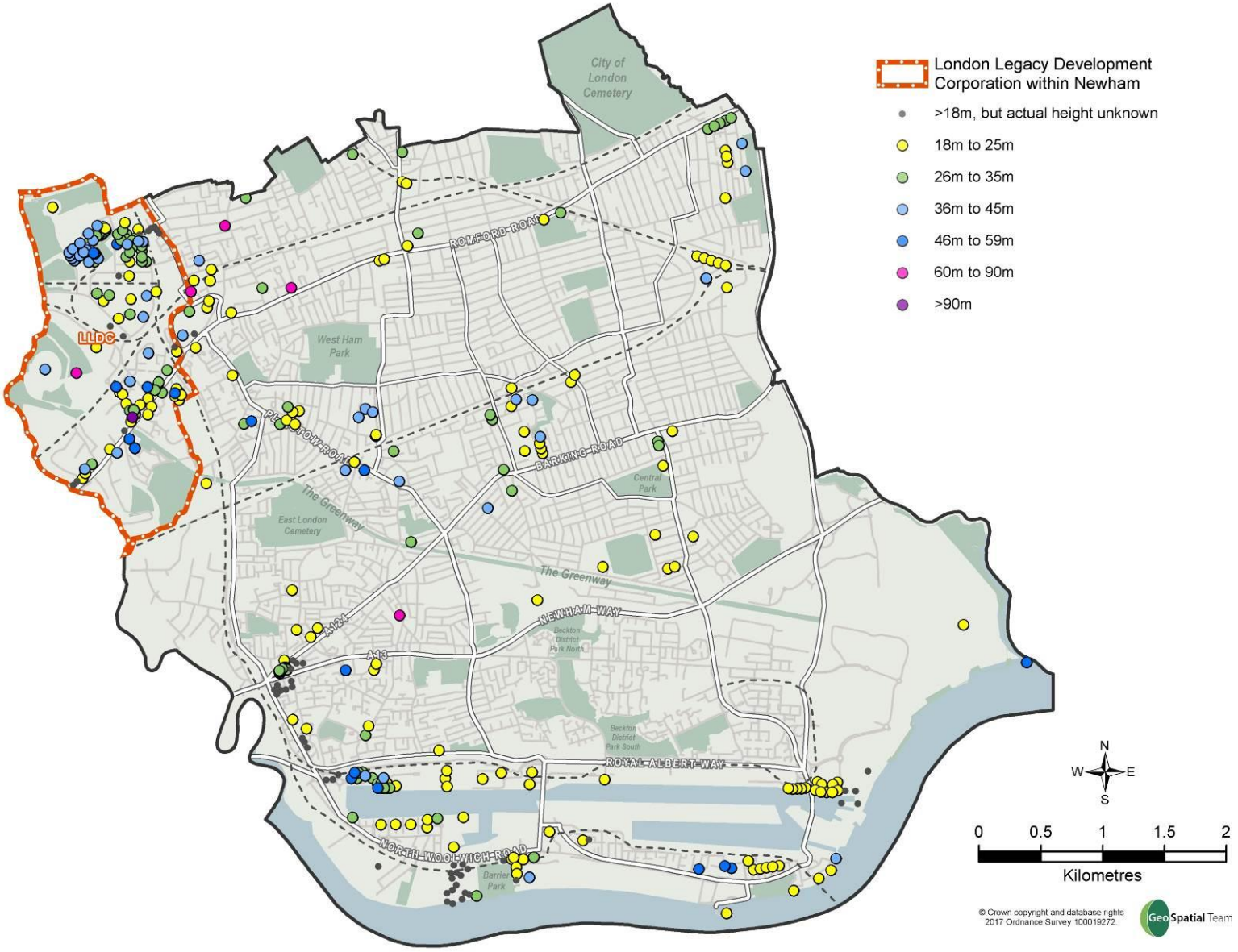
Importantly however, many of these benefits can be achieved in buildings that are 'taller' by just a few storeys than the prevailing height locally, but not necessarily 'tall' in the increasingly common sense of the word – 18-20 storeys plus.

Conversely, a poorly designed tall building may create an isolated mono-community with little social interaction within the building and with the wider community in the area. The economics of building a taller building with its higher service charges may not necessarily optimise the housing opportunities available to residents in the borough. There may also be problems of 'ownership' and intensity of use of communal areas if not designed in such as way as to secure communal responsibility and ensure durability.

A principal failing with tall buildings can be a lack of understanding of the nature of the area around them. Issues of local wind flow disruption, temperature reductions at pedestrian level around tall buildings, over-shadowing and street pollution flushing effects will have implications for the amenity of those living or working in or around the buildings.

Perhaps most importantly, a tall building if not in the right place and if not well designed including treatment of the surrounding public realm, will by virtue of its size and widespread visibility,

Figure 3: Location of Tall Buildings



can seriously harm the qualities that people value about a place, disrupting rather than enhancing place character.

Therefore, taking the above considerations into account and an understanding of the weaknesses of some tall buildings in the borough (notably in the Royal Docks and Stratford) and the performance of the Local Plan Core Strategy tall buildings policies to date[15], the points below help to define what an updated strategic approach to tall buildings in Newham needs to address:

- **Clear definition of what a tall building is** in different parts of Newham – and hence those that fall within the policy remit

- **Location and focus:** Taller than normal buildings are appropriate only at focussed locations which have been identified as opportunities in town centres, at transport nodes and along major routes rather than scattered within the urban grain.

- **Design quality** of the tall building development is of utmost importance.

- **Public Realm and neighbourliness**: The tall building must be integrated into the public realm at its ground floor and lower levels. The treatment of public space, landscaping, entrance points, street furniture and car parking and improvements of the existing streetscape will be important considerations. The tall building should be 'giving something back'.

- **Local environment**: Consideration of the impact on the local environment is also important, including microclimate, overshadowing, night-time appearance, light pollution, vehicle movements, the environment and amenity of those in the vicinity of the building, and the impact on the pedestrian experience.

- **Active ground floor uses and streets**: tall buildings like other buildings need to provide for active ground floor frontages and the formation of animated streets and external spaces. This is all the more important in tall buildings given that natural surveillance may be reduced by the vertical distance of inhabitants from the street.

- **Security of internal spaces:** extensive communal internal spaces require the application of appropriate secure by design principles and management typically applied to external spaces to ensure ownership and surveillance, rather than a sense of insecurity and encouragement of anti-social behaviour. More recently, the issue of fire and evacuation safety has come to the fore.

- **Existing tall buildings**: a tall building may not be appropriate simply because other tall buildings currently exist in the locality, as many of these are poorly integrated with the local context. This is particularly true with regard to the borough's stock of Council tower blocks which should not be seen as setting a precedent.

- **Master planning**: a key means to achieve coherence and mitigation of impacts (including negative impacts on microclimate) will be the masterplanning of large development sites/areas which have been identified in the

[15] LN Newham (2017), Local Plan Evidence Base: Tall Buildings (2017)

local plan as strategic locations where tall buildings are otherwise appropriate. In particular, the one-off development of an individual plot with a tall building within a larger strategic site should be avoided.

- **Retrospective mitigation**: in areas where piecemeal tall buildings development has occurred, it may be appropriate to seek to raise the average height of buildings on the street to maintain enclosure. However, this also needs to be balanced against the potential for over-shadowing and a tunnelling effect at street level.

- **Composition and legibility**: not all tall buildings should be iconic or the same height – overall composition and legibility is important and clustering and staggering of heights around an important focal/activity point can help achieve this. This needs to include consideration of cross boundary spatial integration. Scale and clustering considerations should relate to a hierarchy of places (more and taller tall buildings in more important centres, and a clear distinction between centres and their hinterlands).

- **Residential standards**: Provision of high-quality living accommodation that meets or exceeds national standards in terms of space standards, daylighting and private amenity space.

- **Security of internal spaces:** extensive communal internal spaces require the application of appropriate secure by design principles and management typically applied to external spaces to ensure ownership and surveillance, rather than a sense of insecurity and encouragement of anti-social behaviour.

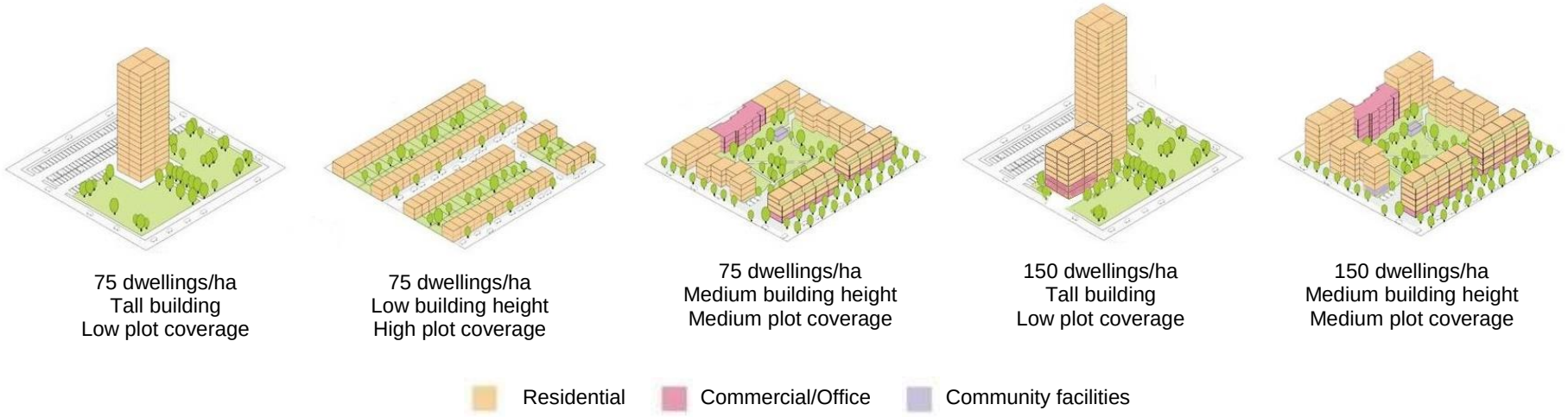
- **Amenity space:** innovative means of incorporating amenity space may be required, including roof top community gardens, large balconies, and flexible public open space at the base of towers. The latter needs to be designed alongside the building itself to avoid microclimate problems.

- **Alternative high density formations**: similar densities can be achieved at lower heights: this has been applied in the redevelopment of some post-war tower blocks, creating lower rise high density estates. Figure 4 overleaf demonstrates that on a one hectare urban block (with appropriate amenity space) equivalent densities can be achieved in both low, medium and high rise, meaning that building tall should not be the only expression of high density (around 75 dwellings per hectare is typical of much of Newham). This is particularly relevant in seeking to create sustainable mixed communities with an adequate proportion of family housing that also adequately address and integrate with the character of the surrounding area.

- **Overall impact**: The use of three dimensional modelling and visual aids can fully assess a proposal's impact on the surrounding area.

Discussion as to what this means in spatial terms is to be found in the last section of this chapter, where areas of capacity for and sensitivity to innovation and change are identified.

Figure 4: Density Configurations on one hectare, Layouts and Massing Options



Priorities for Places

Having analysed the spatial distribution of typologies in Chapter 3, it is possible to combine these typology-related design cues with elements of local distinctiveness to arrive at priorities for places as follows (a more detailed community forum based analysis can be found in Appendix 2):

Character Area 1: Northern part of Newham Manor Park, East Ham, Forest Gate, Green Street, parts of Stratford and West Ham, and Plaistow)

Priorities related to urban design principles for this area are to:

- Retain the existing linked street pattern, reconnecting any lost links.
- Address poor building quality in places, particularly on the high streets.
- Greater sensitivity to historic assets, both designated and non-designated, particularly at key locations (see heritage cues section below).
- Identify the potential for creating further public open space.
- Address the poor urban realm quality of high streets, including shop front design and quality, the quality of the pedestrian experience (potentially reclaiming space for pedestrians) and sprawl beyond designated boundaries.
- Resist buildings higher than 6 storeys except in town centre sites with very good public transport accessibility.

Character Area 2: South western part of the borough (including much of Canning Town and Custom House, parts of Plaistow and West Ham)

Priorities related to urban design principles for this area are to:

- Revitalise and re-connect Canning Town centre with its residential hinterland, including emerging neighbourhoods and Leamonth Peninsula in Tower Hamlets.
- Address the poor legibility of the street network and major local barriers, particularly the railway lines, and A13 corridor.
- Provide high quality pedestrian and cycle connections to and past the docks.
- Address poor building quality and poor townscape through new development and redevelopment;
- Identify and enhance higher quality areas, including green spaces, both within areas of redevelopment and in areas where the historic fabric is retained
- Promote vibrant streets between the Custom House and Canning Town stations and beyond, including through new, more direct, legible routes.
- Using the scale of development potential as a lever to secure high sustainability standards across the area, with opportunities to share associated infrastructure (e.g. a district heat network).

Character Area 3: Lower Lea Valley, north of the District Line including parts of Stratford and West Ham (currently within LLDC)

Priorities for cross-boundary cooperation related to urban design principles for this area are to:

- Improve east-west and north-south connectivity with new streets and bridges to provide local links, across river, main road and railway corridors particularly for public transport, pedestrians and cyclists.
- Repair the street network, seeking to reduce the size of blocks to increase permeability and legibility, 24 hours a day, and extend the Lea Valley Park walking and cycling routes southwards.
- Continue to support the development of a new character and design typology for sustainable mixed use development in the area, focusing on creating a series of distinct neighbourhoods each served by accessible local shops and services, with a key node around an integrated Metropolitan Centre at Stratford.
- Ensure tall buildings are of high quality, appropriately integrated in their neighbourhood and contributing to street legibility an character
- Integrate key heritage assets into designs, enabling their conservation and enhancement.

Character Area 4: Lower Lea Valley: South of the District Line towards the Thames including parts of Canning Town

Priorities related to urban design principles for this area are to:

- Activate the Lea River by delivering the vision to extend the Lea River Park down to the Royal Victoria Dock, including through appropriately sized and activated green spaces, walking and cycling routes and new bridge links.
- Address the poor connectivity and permeability of the street network and major local barriers, particularly the railway lines, and A13 corridor.
- Develop a new character and design typology for sustainable mixed use development in the area, focusing on creating a series of neighbourhoods integrated with Canning Town Town

Centre/Station and West Ham Station; deliver a new community focus at West Ham Station through creation of new local centre.

- Address neighbourliness issues between strategic industrial land at Cody Road and emerging residential neighbourhoods while ensuring the success of both.
- Using the scale of development potential as a lever to secure high sustainability standards across the area, with opportunities to share associated infrastructure (e.g. a district heat network).

Character Area 5: Southern part of the borough, around the Royal Docks (Silvertown, North Woolwich, Royal Victoria, Royal Albert, and south part of Gallions Reach)

Priorities related to urban design principles for this area are to:

- Enhance or provide new street-based local centres, notably in North Woolwich, Silvertown and Thames Wharf, including public realm improvement.
- Address the poorly connected street network and missing links between development sites to improve permeability, legibility and accessibility to and along water fronts.
- Contribute to public transport improvements, including through DLR capacity improvements and new stations, and improved bus route penetration.
- Address the need to balance industry/employment space, traffic circulation needs, visitor attractions and residential space, and edges between them
- Realise the potential of attractive waterside locations, ensuring access for all, and creating/maintaining key through views and attending to flood risk without compromising ground floor activation and the need for focused centres.
- Attention to scale, massing and composition that reflects the status of the Royal Docks as one of the main growth areas of London, but also consider layout, quantum and use mix of development in relation to neighbouring sites and the successful functioning of the whole Royal Docks area.
- Integrate parks into development by providing active frontages and streets facing onto them, together with cycle routes to activate and connect open spaces.
- Using the scale of development potential as a lever to secure high sustainability standards across the area, with opportunities to share associated infrastructure (e.g. a district heat network).

Character Area 6: Beckton housing estate (between Prince Regent Lane, Newham Way, Royal Albert Way and Royal Docks Road).

Priorities related to urban design principles for this area are to:

- Address the poorly connected street network and major barriers, particularly the A13 Newham Way and Royal Docks Road, and missing links between development sites to improve permeability and legibility.
- Consider the potential to provide active frontages and streets facing onto parks and pedestrian walkways, together with cycle routes through and connected with parks and open spaces to animate and overlook the spaces.
- Where possible, address the town centre environment by delivering more street-based mixed use development to provide legibility and focus.
- Bring underused heritage assets, community facilities and open spaces (including the Beckton Alps) into active use.

Character Area 7: Beckton industrial and utility area (mostly east of Royal Docks Road, including Beckton Sewage Treatment Plant, former Gasworks, industry and Gallions Reach out of centre retail park)

Priorities related to urban design principles for this area are to:

- Address the poor connectivity and permeability of the street network, and major barriers, particularly the North Circular, A13 Newham Way.
- Re-format the out of centre retail into a more sustainable, vertical mixed use design based on public transport and walk in access to become a town centre for the area.
- Contribute to public transport improvements and connectivity across rivers and other barriers
- Address the need to balance industry/employment space, traffic circulation needs, utility infrastructure and residential space, and edges between them
- Using the scale of emerging development potential as a lever to secure high sustainability standards across the area, with opportunities to share associated infrastructure (e.g. a district heat network).

Other Design Cues: The Heritage Dimension

The National Planning Policy Framework at paragraph 126 states that local planning authorities should recognise that heritage assets are an irreplaceable resource and conserve them in a manner appropriate to their significance. In developing this strategy, local planning authorities should take into account:

- The desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation
- The wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring
- The desirability of new development making a positive contribution to local character and distinctiveness; and
- Opportunities to draw on the contribution made by the historic environment to the character of a place

Designated heritage assets in the borough include listed buildings, conservation areas, scheduled monuments and registered parks and gardens. All of these are designated by the Secretary of State for Culture, Media and Sport, with the exception of conservation areas which are designated by the Council. There is a legal duty in the Planning (Listed Buildings and Conservation Areas) Act 1990, for the Council to periodically review whether further areas should be designated as conservation areas. Moreover, there is also a shift to recognise that 'non-designated' assets are also important considerations in local planning. Non designated heritage assets include buildings or areas of good local character that are of heritage significance but not at a level that would merit national designation. This section examines heritage assets and their distribution in Newham in more detail, followed by a brief explanation of what this means in terms of design cues.

Listed and other important buildings, parks and gardens, monuments and structures

Listing occurs if the building, park, garden, monument or structure meets the following national criteria:

- **Architectural interest:** The list is meant to include all buildings which are of importance to the nation for the interest of their architectural design, decoration and craftsmanship. Important examples of particular building

types, and buildings displaying technical innovation or virtuosity in building methods and techniques or significant internal layout plan forms, are included in the list.

- **Historical interest:** this includes buildings which represent important aspects of the nation's social, economic, cultural, technological or military history.
- **Close historical associations** with nationally important people or events.
- **Group value,** especially where buildings comprise together an important architectural or historical unity or a fine example of town planning (e.g. squares, terraces or model villages).

The older a building (or park layout, monument etc.) is, and the fewer the surviving examples of its kind, the more likely it is to have historic importance and be listed. The selection criteria for more recent buildings, etc., are more stringent. However, as discussed in Chapter 2, as time passes, this means buildings, structures, etc. from the Victorian and Edwardian eras, (when development peaked in Newham) are more likely to be listed in the future. The importance of many of such buildings (listed and non-listed) in the local context is examined by community forum area in Appendix 2.

Overall it can be seen that many listed and important buildings and other structures are local landmarks, because of their age (a difference in style, materials, and so on), fenestration (substantial decoration on fascias, building heights and / or use of materials that make the buildings stand out), or size and location. Of the latter, a good example is St John's Church in Stratford. Located on an island, the church can be seen from three main directions. The listed iron railings that surround the churchyard, the church building itself and the elaborate Victorian memorial in the churchyard, together form a memorable landmark in the centre of Stratford. However, other important historic buildings are simply good examples of their surrounding typologies.

As well as churches, the range of listed buildings and structures in Newham include 18-19th century mills at Three Mills, Abbey Mills pumping station - the 'Cathedral of Sewage', Warehouses K and W, cranes and Silo D (Millennium Mills) along the Royal Docks, buildings in the civic centre at East Ham, Gas Holders at Bromley by Bow, the Passmore Edwards libraries in Manor Park and Forest Gate, and various pubs, memorials and stations. In addition, historic parks and gardens of national significance in Newham include the City of London Cemetery and West Ham Park.

In the period since the character study was first published in 2011, another eight buildings or artefacts have been added to the statutory list including notably a number of war memorials in the borough, a variety of buildings and a notable piece of sculpture:

- The Sculpture to the front gable wall of the Forest Gate Methodist Church by Lazlo Peri (1961).
- John Travers Cornwell VC Memorial at Manor Park Cemetery
- No 224 Romford Road an 1878 Suburban House designed by John Thomas Newman
- Crockett's Leathercloth Works War Memorial, Mitre Road, West Ham
- Central Park War Memorial, East Ham
- St Margaret's Chapel, Bethell Avenue, Canning Town
- Canning Town library
- Alice Billings House, Stratford

Conservation Areas, Areas of Townscape Value and other groups of Heritage Assets

The National Planning Policy Framework at paragraph 127 states that when considering the designation of conservation areas, local planning authorities should ensure that an area justifies such status because of its special architectural or historic interest and that the concept of conservation is not devalued through the designation of areas that lack special interest.
Newham currently has 9 Conservation Areas[16]. With the exception of the East Ham conservation area, all the borough's conservation areas have been the subject of a detailed appraisal and had have management plans in place. . In addition, the Local Plan designates a further 9 Areas of Townscape Value (ATV). These are defined as being 'an area of heritage value, with potential for designation as a Conservation Area, which the Council designates, protects and enhances'.

Conservation areas in Newham are mainly in the north of the borough, reflecting historic development patterns. They contain the best available examples of their typologies, and often several listed buildings, structures etc. The list of conservation areas is as follows:

1. Manor Park - Durham Road
2. Forest Gate - Woodgrange Estate
3. Stratford and West Ham - Three Mills
4. Green Street/Forest Gate - Romford Road
5. Forest Gate - Town Centre
6. Stratford and West Ham - Stratford St Johns
7. Stratford and West Ham/Forest Gate - University
8. East Ham - East Ham (civic centre)
9. Stratford and West Ham - Sugar House Lane

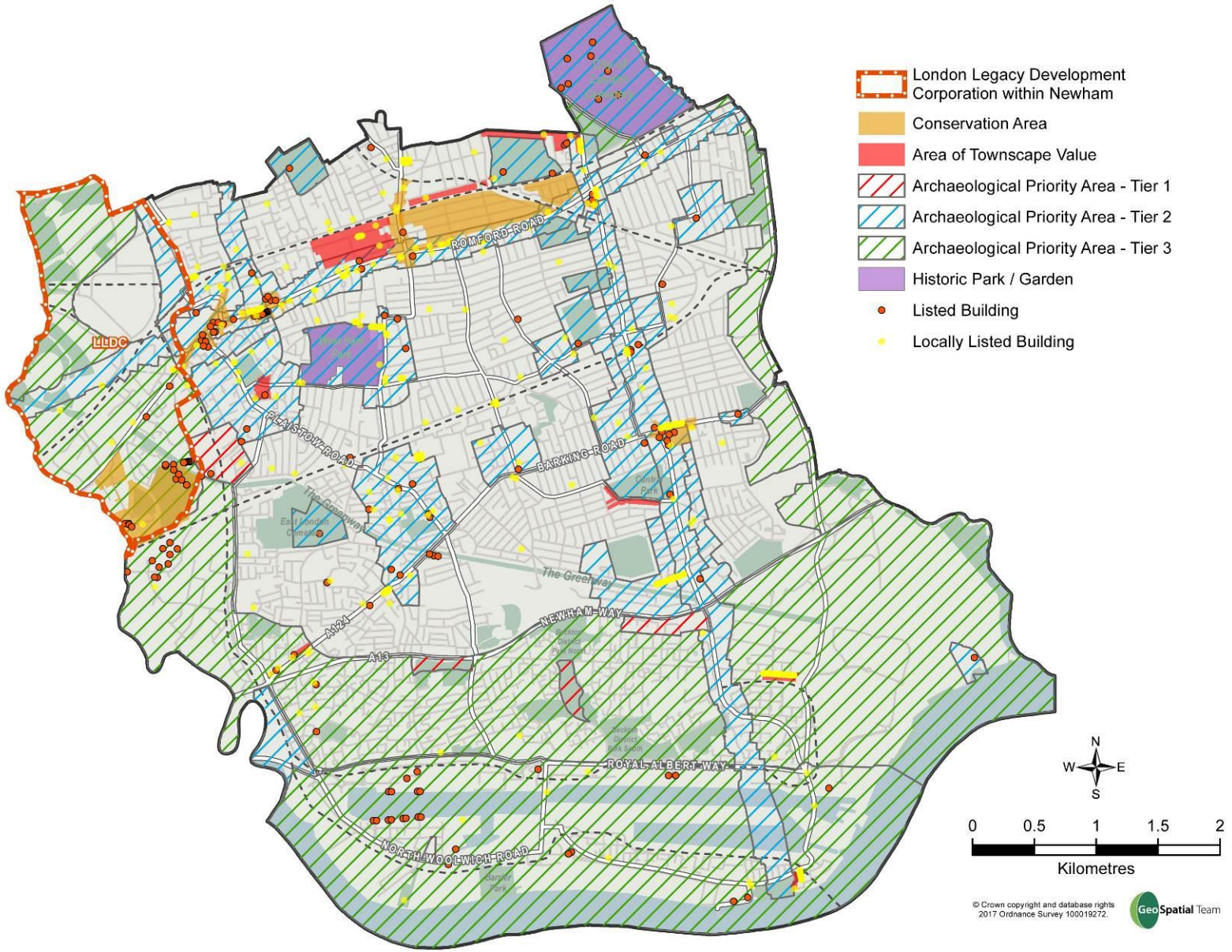
The list of Areas of Townscape Value, which have a greater spread throughout the borough and which move into some areas of 20th Century development in the centre and south of the borough, is as follows:

ATV1 Wanstead Flats
ATV2 Sebert Road
ATV3 Manor Park
ATV4 Forest Gate
ATV5 All Saints Church, Church Street North
ATV6 Cheltenham Gardens / Henniker Gardens / Rancliffe Road
ATV7 Canning Town
ATV8 Winsor Terrace
ATV9 Bargehouse Road / Woolwich Manor Way

The contribution that these designations make is important, in terms of creating a sense that Newham has a strong and interesting history of development related to its role in London, particularly from the 18th century onwards. Conservation areas can also enhance the sense of ownership and pride in a local area, with careful development and restoration work often creating some of the most desirable areas in a borough to live and work. Similarly, designation as an Area of Townscape Value recognises the special characteristics of an area which may be deserving of conservation area status at a future date, and which for the moment distinguish the area as deserving of special care.

[16] Further information, including conservation area appraisals and management plans can be found at: https://www.newham.gov.uk/Pages/Services/Conservation-areas.aspx

Figure 5: Heritage Assets



In the course of their work in the borough, including this study, design officers have identified a number of other areas that may warrant recognition through designation as either Conservation Areas or Areas with Townscape Value due to their special architectural or historic character. Further work would be required to confirm or dismiss this on a case by case basis, and there may need to be some acknowledgment of the need to move beyond a self-perpetuating cycle of insensitive alterations and erosion of character. However, in many cases, such areas are already recognised as contributing to local distinctiveness, way-finding and so on, and follow the pattern of under-recognition discussed in Chapter 2. Such areas, in addition to the Areas of townscape Value and Conservation Areas above are:

- Stratford – Manbey St/Lavender St – early Victorian row cottages
- Stratford/Forest Gate - West Ham Park, setting and around: park is remnant of the Ham House estate; terraced housing provides a high quality edge to the park; other heritage assets include the Palazzo style Park Tavern and Park Cottage. (NB Conservation Area quality)
- West Ham –Bakers Row: notable railway workers' cottages.
- Canning Town – 'Bevan Housing': post-war Garden City style Council housing; the park opposite and a Victorian church.
- North Woolwich: Royal Victoria Gardens, the foot tunnel entrance, listed North Woolwich Station and Police Station together with the existing ATV (NB Conservation Area quality)
- East Ham – Hameway and Brooks Avenue: pebble-dashed early Council housing, suburban style; hipped roofs (Hameway). Long row of municipal dwellings—Cottage flats (now converted to houses) in red and yellow brick (Brooks Avenue).
- Manor Park - Elsenham Road: Edwardian terraces.

Whilst such areas are mostly in the north of the borough, there is a greater spread than is exhibited by the current range of Conservation Areas and Areas of Townscape Value. It should be noted that several of these, (Wanstead Flats, Winsor Terrace, West Ham Park/Portway and North Woolwich) were consulted on in 2015 as potential new Conservation Areas, work that will be progressed when capacity allows.

Archaeological Priority Areas

Other heritage assets or potential heritage assets are demarcated by the Archaeological Priority Areas set out in the Development Plan, following advice from the London Archaeology arm of Historic England (Greater London Archaeology Advisory Service). These are defined as areas having particular interest or value, or as sites where it can reasonably be shown that remains of archaeological importance may survive. As such they are areas where heritage assets below ground may be present, as well as above-ground survivors. Again, these are mainly found in the north of the borough.

Design Cues in relation to heritage assets

As stated above, recognition of heritage assets in design does not mean that sites in their vicinity cannot absorb innovative design, and that such assets must be preserved unchanged, but that change should be sensitively managed. Indeed, development and design that precedes it brings the opportunity to enhance such assets, through making new uses of them possible, and providing income streams to cross-subsidise repair, restoration and enhancement projects. This may include removal of incongruous or ill-conceived additions, inclusion of new forms of technology to reduce the costs of building management, and

broader enhancement schemes that better reveal the significance of an asset, improve their settings or make them more pleasant to visit.

The key design cues here therefore, are objectives relating to:
- sustainability;
- viability of initial investment as well as future use and management;
- public access, visibility (contributing to legibility) and enjoyment;
- spreading the regeneration value of heritage assets; and
- retaining the integrity of heritage assets and their settings, including through innovative techniques such as BIM.

In relation to archaeological remains, appropriate responses may include supervised excavations before foundations are dug, with removal of material to off-site archives, or record making and careful preservation in situ (e.g. through raised floors, perhaps with viewing window).

Beyond this, other cues which design may wish to consider in relation to heritage assets include their:
- height,
- scale,
- rhythm,
- massing,
- building lines,
- roof lines
- spaces between buildings/street and block pattern etc.
- materials, colours and other design details.

In some cases however, research into how such assets were previously integrated into the built environment will also be relevant (e.g. adjoining building heights of now demolished buildings). Likewise, in areas of comprehensive demolition, what worked in the past, particularly in Dockside and waterway environments can also give us relevant design cues as regards proportions etc. for development on the now blank slate.

Further guidance in relation to specific Conservation Areas is given by the Council's Conservation Area Appraisals and Management Plans[17]. Additionally, Historic England, formally English Heritage, offers varied and detailed guidance, including technical guidance, on many of the issues raised above and more. 'Heritage Works - A toolkit of best practice in heritage regeneration'[18], published in 2017, offers important guidance on how conservation and development can work together to transform the built environment.

Responding to these cues should enable very contemporary designs to sit comfortably alongside or even become part of, much older assets to create new compositions and successful places.

[17] Available online from LB Newham website
[18] Available from Historic England,

What does this mean for different parts of Newham in relation to their sensitivity to, and capacity to absorb, change and innovation, including tall buildings?

As identified above, all typologies manifest in Newham present scope for improvement, and responsive design should mean that it is sensitive to these cues, as well as place-based priorities linked to particular geographical opportunities and threats (as described above, plus in Chapters 1-2, and Appendix 2). Arguably all areas are sensitive to change therefore, because poorly conceived change will not address past problems or ensure that the full potential of assets is realised. What we should be aiming for, is to create the conservation areas of the future, not buildings that will be pulled down as unfit for purpose in 20 years' time or less.

Beyond this, a reasonable proxy for sensitivity to change is whether people will notice it or, conversely, embrace it in any form. As such the most sensitive places to change are those where it is most obvious – the most densely developed and comprehensively composed and where lots of people value fundamental elements that are difficult to replace (e.g. particular well-used spaces or distinctive buildings, but also qualities such as peacefulness). Conservation areas and other tools such as listing seek to ensure that development occurs with enhanced care and attention in such places. This means that it is not just areas of heritage assets that are the most sensitive to change, but, particularly in a diverse borough such as Newham, meeting places, or places valued for cultural reasons, including markets and community centres, as well as many areas where people are currently living[19].

In contrast, the areas that have most straightforward capacity for innovation are generally those where there are large development sites providing the space and spacing to enable comprehensive master-planning, and absorb well-conceived departures in various dimensions from patterns evident elsewhere in the area (e.g. significantly taller buildings). In Newham, this equates to most of the Arc of Opportunity, and some urban Newham town centre sites, although innovation should always be designed within the context of the other design principles above, paying particular attention to integration, legibility and edges. It is also important to note that whilst meanwhile uses can be attractive ways to temporarily activate sites, they may often prevail in themselves. As such, high quality design even for proposed temporary uses/structures will be crucial, ensuring that it helps bridge the gap between the present state of a site or area and visions for its future.

Returning to the matter of heritage assets above, it is also clear that innovation is demanded where there are assets that are currently under-achieving, or hidden, or perhaps at risk from deterioration. Such asset-opportunities include accessibility, green spaces, water spaces and sides, heritage buildings and

[19] Appendix 2 identifies places that are important to local communities by community forum area based on community engagement work. Recent engagement as part of Newham Mayor's Show 2017concerning the qualities and challenges of Newham's neighbourhoods reaffirmed that parks, as well as historic landmark buildings were particularly valued by people. This also highlighted the value people placed on local diversity, and neighbourhood qualities such as, accessibility, peacefulness and safety.

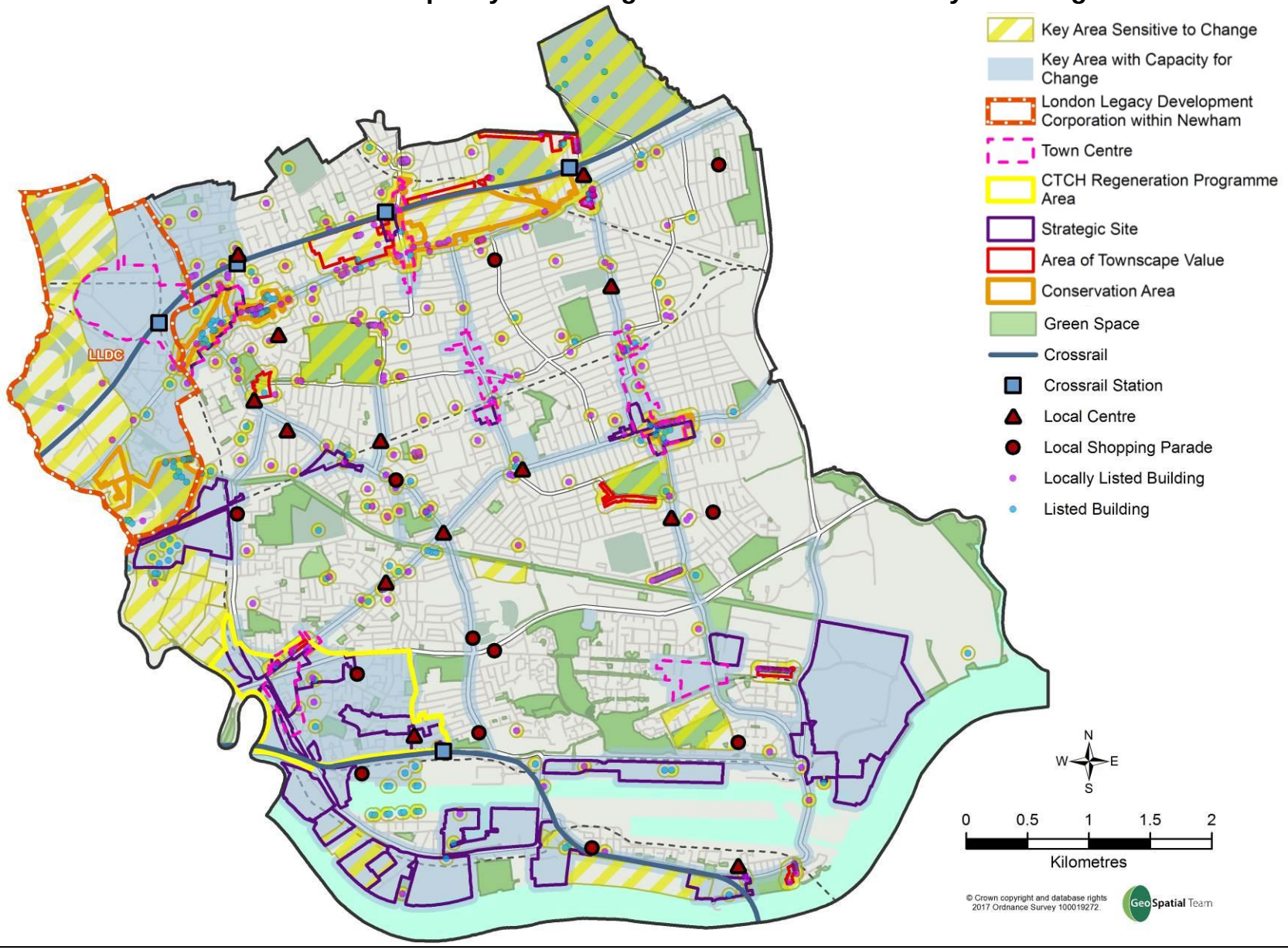
structures, markets, high streets, community facilities (e.g. schools, places of worship) and so on, with the degree of underperformance equating to a certain amount of capacity for change. From this perspective, capacity to absorb innovation also exists within 'Urban Newham', although some of these places are also some of the most sensitive to change. Continuing the circle, in some of the areas most sensitive to change, change and innovation may be embraced[20] if the current design doesn't work for people – if they are scared, inconvenienced or even made unwell by it for instance. This emphasises that capacity and sensitivity to change is about people as well as place, and responsive design must also respond to local needs and wishes as articulated by people.

The figure 6 below highlights the distribution of areas with capacity for change, and areas of sensitivity to change, and their overlap. More detailed analysis can be found in Appendix 2.

The next chapter distils recommendations for design policy and practice from an overview of this picture.

[20] A recent survey of resident's views on the strengths, weaknesses, opportunities and threats of borough neighbourhoods as part of Newham Show 2017 (that has informed Appendix 2) also suggested that they are supportive of contemporary design, including tall buildings, when it provides good space standards, including amenity, are well built and improve the character of the area.

Figure 6: Distribution of Areas with Capacity for Change and Areas of Sensitivity to Change



CHAPTER 5 – Conclusions and Recommendations

This study confirms that Newham has a diverse layering of character, from Newham-wide physical, cultural, demographic and economic attributes, through to local variants of particular building and structural typologies. It has identified how these relate to different parts of the borough, contributing to local distinctiveness, and different strengths, weaknesses, opportunities and threats ('design cues') that need to be addressed by development as part of good design alongside borough-wide components of character. This provides us with a solid basis on which to make recommendations concerning design policy, guidance and practice (including further work) learning from what works, and what doesn't and relating design back to Newham's resilience regeneration and sustainable community objectives.

General Design Policy and Practice

Good design and successful regeneration of areas large and small are fundamentally linked: design policies and associated practices such as master-planning therefore need to be prominent in Newham's plans for the future, to create better and more sustainable places and stronger communities that are resilient to change. Such design policies need to reflect not only accepted generic principles of urban design, but also a requirement for developers to respond to the specifics of local character or context, good and bad – the manifestations and contraventions of such principles locally. In the case of the bad, this includes the associated problems of population churn: people's desire to move to vaguely specified 'better' area, as well as transience associated with people renting properties with inadequate management[21]. Design policies formulated in this way should permit, enable and encourage, innovation, variety, imagination and conservation and enhancement. Building For Life12 principles[22] are a useful starting point[23] in combining both generic urban design principles, and requirements to consider character and context and incorporate flexibility and innovation.

Such policies need therefore to be both robust and flexible, and also give a 'Newham' perspective on the wealth of existing national advice publications that are available, addressing the particular need to create places where people choose to live, work and stay. They are required at a strategic level in the Local Plan any more detailed area or Neighbourhood-based plans. In some cases, more detailed guidance may also be appropriate, including support from appropriate expert officers and design review panels (already in place), and ensuring harmonisation with relevant highways, flood risk mitigation/prevention and infrastructure and other design standards. Design and Access Statements, and for EIA applications, Townscape, Built Heritage and Visual Impact Assessments are key tools for developers to demonstrate their robust examination of local context and

[21] Council surveys (e.g. Newham Household Panel Survey wave 8, 2015; Newham Survey, 2016) – there is some reference to a desire to move to areas with better quality, larger family housing, and clear indications that dissatisfaction with the area predominantly relates to crime and other environmental issues that better design could address.

[22] See Design Council, Building for Life 12

[23] BREEAM's Communities Technical Standard (BREEAM, 2012) covers similar ground in a more regimented checklist,

creation of responsive design. Equally however, the role of community engagement in creating responsive design, particularly in areas of sensitivity to change, is highlighted, and this also needs to be reflected in policies and guidance.

Character Typologies and Areas

Character typologies relevant to a character-based approach to design derived from this study are broadly:

- Victorian and Edwardian
- Garden City, Art Deco, Inter-War and Early Post-War
- Post War 1960s and 1970s
- 1980s to mid 1990s
- Late 1990s-2010s
- Post-2010

In general, older development and greater concentrations of heritage assets are found in the north of the borough. Beyond this, broad character areas derived are:

- Character Area 1: Northern part of Newham M(anor Park, East Ham, Forest Gate, Green Street, parts of Stratford and West Ham, and Plaistow)
- Character Area 2: South western part of the borough (including much of Canning Town and Custom House, parts of Plaistow and West Ham)
- Character Area 3: Lower Lea Valley, north of the District Line including parts of Stratford and West Ham (currently within LLDC)
- Character Area 4: Lower Lea Valley: South of the District Line towards the Thames including parts of Canning Town
- Character Area 5: Southern part of the borough, around the Royal Docks (Silvertown, North Woolwich, Royal Victoria, Royal Albert, and south part of Gallions Reach)
- Character Area 6: Beckton housing estate (between Prince Regent Lane, Newham Way, Royal Albert Way and Royal Docks Road), and
- Character Area 7: Beckton industrial and utility area (mostly east of Royal Docks Road, including Beckton Sewage Treatment Plant, former Gasworks, industry and Gallions Reach out of centre retail park)

Character Area 3, which includes the Queen Elizabeth Olympic Park and legacy development area is identified as a distinct character area in evolution, with its own place-making priorities, but which now rests within the LLDC boundary.

Key Priorities – Connectivity, Coherence and

Integration

Whilst design priorities and cues vary between different parts of Newham and in different ages and types of development, as detailed in Chapter 4, a prominent theme across the borough is the need to attend to connectivity, coherence and integration. This is relevant at all levels: from designing an individual building within an existing street, through designing improvement schemes in existing street and estates, to designing whole new communities that relate to existing neighbourhoods.

Connectivity

One of the main findings of the study is that, through the decline of application of a grid and perimeter block urban structure and due to investment in road and rail networks, the borough has become progressively less connected. Connectivity therefore requires attention to both barriers and existing and potential

routes and desire lines reflecting access needs in terms of shops, services, facilities and places of employment, both local and more strategic. As well as generally emphasising attention to connectivity, it is appropriate for the Local Plan Review to identify missing links – potential new or enhanced paths/streets and other transport links - that will 'stitch' together parts of the borough that are not currently well connected, as well as improve connections to places beyond the borough's boundaries. This includes proposals such as new Thames crossings, new east-west links across the River Lea, Jubilee Line / DLR and M11 Link corridors, and street connections across the A13 and A406. Rail and water freight opportunities could also be explored, as could new river service passenger piers.

Coherence and Integration

Coherence and integration are partly about connectivity, but also concern the composition of buildings, public spaces and other structures and assets, along streets and in places as well as on particular development sites. This will ensure for instance, that there are fewer obvious 'edges' between areas and sites, and that transitions between different land use types are managed to enable the creation of mixed use areas that meet a variety of needs. It should also mean that both contemporary and older buildings sit together within places, rather than either looking incongruous. Coherence also means that the height, massing and formation of buildings and structures are designed to help people navigate their way around the borough, their local neighbourhood and sites, with buildings not competing with each other – other within the area or in the wider network and hierarchy of places – but relating to each other spatially and functionally to create routes, define important foci and so on.

Capacity for, and Sensitivity to, Change and Innovation

A simplistic view of Newham would be to assert that the Arc of Opportunity and highly accessible town centres within Urban Newham have the most capacity for change and innovation, and conservation areas and other areas of heritage assets (including the vicinity of individual buildings) are by definition the most sensitive to change. Conservation areas and other tools such as listing are designed to ensure that development occurs with enhanced care and attention in relation to these, yet arguably this extra care is also needed in other areas, in relation to other types of assets, notably in town centres and other important meeting/community places, but also successful residential areas, waterside areas and more natural areas. These are also sensitive to change, as change within them is highly visible, and could compromise their viability as community assets. Creation of shared visions and appropriate policies and strategies will be important in these areas.

Equally however, it is not the case that innovation should be permitted to disregard context, or that innovation should not be allowed in areas of sensitivity to change. Careful design, based on masterplanning and an understanding of heritage, context and other design cues is required, with the aim to create the conservation areas of the future, rather than buildings that will be pulled down in 20 years' time or less. This consideration may also be relevant in relation to 'meanwhile uses' which often prevail, and hence should be deployed carefully to ensure they help bridge the gap between the present state of an area and the vision for its future.

Tall Buildings

The importance of connectivity, coherence and integration; and change and innovation as discussed above comes to the fore in consideration of how tall buildings will continue to be developed in the borough.

The trend for tall buildings in the borough is growing as part of a London-wide pattern with a total of 23 schemes having been approved in Newham since 2012. A number of these developments have not been in ideal locations but were justified by factors of design quality, proximity to public transport nodes and local character which already included tall buildings.

Given this, a clear, updated and strengthened strategic steer is required which takes account of:

- the areas with capacity for change identified by community neighbourhood in Appendix 2
- an examination of the current distribution of building heights in the borough (see fig 3 on p 42, and Appendix 2) and an understanding of the range of visual, environmental and social challenges presented by tall buildings proposals (design cues in Chapter 4) and the performance of the policy to date

The following strategy is therefore recommended:

1. A preference for mid-rise densities (four to six storeys, 8 to 12 in the Arc) are generally preferred over tall standalone towers as the resulting built form reflects Newham's prevailing norm and more readily provides family housing; as such, design iterations should show what a tall building 'gives back' when compared to a mid rise development on a site.

2. A plan-led approach to tall buildings is adopted which identifies opportunities for tall buildings at specific locations in the borough, and which recognises the adopted hierarchy of town centres in the borough in defining appropriate scales and numbers of tall buildings. Broadly:

    i. The tallest buildings (20 storeys plus) should continue to be directed to Stratford, reflecting its accessibility and role as a Metropolitan Centre, drawing on previous master-planning work which should help to manage their distribution and impacts to secure integration and coherence.

    ii. A secondary focus will be the highly accessible Canning Town central area around the station and the newer parts of the town centre, which is also undergoing comprehensive managed change.

    iii. Taller buildings of up to 20 storeys (but typically around 8-12 storeys) should also be directed to other accessible locations within the Arc of Opportunity, where they will contribute to legibility and place-making objectives.

    iv. Elsewhere, appropriate locations for taller buildings will be less common and will be scaled and designed to relate to an already dense and often heritage-rich context, and the strengths, weaknesses, opportunities and threats identified by this study.

v. An initial site based analysis should be provided to generate indicative heights and arrangements as part of Strategic Site allocations, taking into account the above and local and historic context and character but also the degree of public transport accessibility, place hierarchy.

3. Emphasis of the role of master planning to secure comprehensive, composed development taking into account cumulative impacts and 3D modelling, CGI, BIM work and Design Review of detailed proposals, including demonstration of feasibility of the design quality to secure adequate scrutiny of designs and their integration with the local context.

Heritage and Other Assets

In exploring character and associated design cues, this study has noted that heritage is generally undervalued in Newham both by statutory agencies such as English Heritage, and others responsible for change in the borough, from home owners through to large-scale developers. This is partly due to Newham's relatively recent development when compared to some areas and partly the inevitable result of incremental changes in neighbourhoods which add up to more significant ones, eroding character. As such Newham currently has relatively few conservation areas and listed buildings, with knock on effects such as a failure to realise the value of heritage assets in creating places people like to visit and spend money in, and neighbourhoods that people like to invest and stay in.

However a growing interest in the historic value of Victorian and Edwardian development may enable a larger number of buildings to be listed and conservation areas to be created. In addition to these, the borough has a limited number of council-built inter-war suburban houses which may have an intrinsic townscape value. Whilst the extent of alterations to the appearance of buildings, site redevelopments and so on makes it more difficult to justify conservation areas on conventional grounds, other considerations could be taken into account. These include the need to make the borough a place where people choose to live, work and stay[24] and an evolving locally-specific approach to heritage that takes account of the need to address where we are and move onwards and upwards, recognising undervaluation to date. It is recommended therefore, that the potential for designating further Conservation Areas, with associated controls on sub-divisions etc. is explored within the areas of search identified in Chapter 4, reflecting the legal obligation to do so in the Planning (Listed Buildings and Conservation Areas) Act 1990.

A more holistic approach to heritage, – both designated and non-designated – recognising the value of a wide variety of historic assets in regeneration, community building and more localised way-finding is also indicated. This would place them alongside other, positive aspects of character (natural, cultural and infrastructural assets) which regeneration aims to realise the potential of, securing their viability and enjoyment as part of successful places by all. Returning to sensitivity to, and capacity for, change and innovation, it is recommended that innovation that helps to sustainably realise the value of assets, without undermining their cultural and historic integrity, or natural value

[24] Larkham (2000) found for instance, that residents of conservation areas tended to stay living in the same property for longer than the national average.

(e.g. biodiversity) is embraced within a design framework that creates responsive design. This further continues the theme of integration and coherence.

Summary of Recommendations

1. **A high priority should be given to design to help create successful places and sustainable communities -** design policies and associated practices such as master-planning need to be prominent in Newham's plans for the future. They will be needed at a strategic level in the Core Strategy and in area-based plans addressing building, street, public space, site and area design. In some cases, more detailed guidance may also be appropriate, including use of existing support mechanisms such as expert officers and Design Review Panels, and regarding the combination of good design principles with flood risk minimisation/mitigation best practice.

2. **Adding value to generic guidance to create locally-distinctive-successful places -** such design policies need to reflect not only accepted generic principles of good urban design, but also a requirement for developers to respond to the specifics of local character or context, good and bad, and the over-arching corporate objective to reduce population churn. CABE's Building for Life principles, supported by this study, are a good combination of the two, and developers could be encouraged to respond to them in their Design and Access statements.

3. **Community Engagement –** should also be acknowledged in policies and guidance to have an important role in creating responsive design, particularly in areas of sensitivity to change

4. **Connectivity, coherence and integration** should be promoted as key borough-wide design priorities alongside more localised and typology-specific cues.

5. **Most innovation and the greatest degree of change should be directed to the Arc of Opportunity and highly accessible town centres within Urban Newham,** within a framework of local and borough-wide design cues, generic principles of good design, and the encouragement of site and area-based masterplans. This should include consideration of high quality meanwhile uses which should be deployed carefully, ensuring they help bridge the gap between the present state of an area and the vision for its future.

6. **Innovation in design should be recognised as an important mechanism to address the under-performance of assets to create sustainable regeneration -** whilst taking into account their sensitivity to change, relevant local design cues and the need to arrive at shared, economically viable visions for their future. Such assets may be cultural, historical, infrastructural or natural.

7. **A strategic approach to tall buildings[25], to be reflected in an updated Local Plan policy and more detailed strategic site allocation height specifications,** linked to good design practice (understanding of SWOTs) and analysis of contextual capacity and sensitivity, should be advanced

8. **Heritage assets (designated and non-designated) should be acknowledged alongside other cultural, infrastructural and natural assets,** recognising their role and potential in regeneration and helping to create a place where people choose to live, work and stay**.** As part of this, the potential for further designation of conservation areas should be investigated in line with legal obligations in the areas of search identified.

[25] See definition on p 42

Appendices

Appendix 1 - Table of Typologies: strategic (borough-wide)

Residential

Victorian and Edwardian

This character typology is principally found in northern parts of the borough where higher quality housing stock was developed during the periods. Wartime damage and some slum clearance, together with opportunity gap sites have resulted in infill development, particularly during the post-war period. There is unity in the presence of features such as bay windows, but differences in visual character caused by development being undertaken at different times by different developers. Large blocks of housing are interspersed with landmark corner buildings, schools and churches, with more recent additions including temples. In most cases, these additional features were successfully implemented as part of the original street and development plan, giving a sense of unity. Development took place after the coming of the railways, so street patterns and crossings were influenced by the railway routes and junctions, and the availability of crossings.

Good examples are as follows:

			Urban structure
Woodgrange conservation area: Victorian villas built on the Woodgrange Estate. Over 1,000 were developed between 1883-1892	**Durham Road Conservation Area** Late Victorian properties still retaining their original character, built by one developer to a plan.	**Chesterton Road / Barrington Road** Edwardian terraced houses: square fronted bay windows or projecting gable ends. Ornate detailing	

Description	Strengths
• Predominance of narrow row houses fronting the street, with small front gardens or doors opening directly onto the rear of the footway. • Streets are largely tree lined, with pollarded London Planes. Public realm treatments of note include planting on street narrowings (buildouts) and the use of white stone cobbles in some areas. • Closed urban blocks, with segmented defensible space to the rear of buildings. • Some areas of larger, single or double-fronted terraces, mainly in parts of the borough initially defined as conservation areas. • Typically located in the north east of the borough, north of Newham Way (A13) and also north of the undrained marshland that was present at the time of development. • Fragments remain in West Ham.	• Strong orthogonal grid structure of streets, providing permeability. • Insertion of ornately fenestrated landmark corner buildings, places of worship, schools and other features, together with their interface with the public realm, adds character, variety and local distinctiveness. • Variety of uses throughout the area, providing employment and animation to most residential streets: areas are not strongly zoned to particular dominant non-residential uses. • Strong definition of fronts and backs • Active frontages • Front gardens provide space for storage of refuse and opportunities for greening and personalisation. • Generally good enclosure of streets, with mainly two-storey dwelling houses and higher buildings on wider, more important streets. • Street widths accommodate modern requirements, despite being designed before the advent of the car. Cars are stored on the street, rather than on-plot; the street is a natural constraint on car ownership. • Density and grain allow for the provision of local high streets, with shop units occupied by independent traders. • Robust building form allows adaption to different uses and patterns of living. • Flexible housing that provides opportunities for extensions at the rear.
Urban structure	**Weaknesses**
• Permeable orthogonal grid structures, edges influenced by older railway infrastructure. • Grids collide at edges of individual estate developments, demonstrating different orientation, street lengths and	• Long repetitive streets of terraces produces a single character over a wide area, reducing legibility, character and visual interest. • Individual properties and frontages not generally accessible for people with disabilities, though most can be adapted easily.

permeability for pedestrians, adding variety and texture to the townscape. • Development has largely formed around and in response to railway lines, with exception of section of line between Woodgrange Park Station and the northern borough boundary, where the railway was constructed subsequent to housing development. Infrequent rail crossings provided. • Public open space comprises formal parks and gardens punctuating the urban structure, typically featuring wide walks lined with trees, pavilions or other buildings and modern play / activity spaces, and usually in the form of 'large squares'. Notable parks include Central Park, Victoria Gardens. Smaller urban squares have not been provided. • Town centres are focused on 'high streets'—usually the busiest routes through the area. In some cases (e.g. East Ham), motor traffic has been diverted around the core of the centre. • Primary schools, large institutions churches and other community facilities originally integrated within the urban structure; however larger schools and other facilities have been accommodated by creating larger gaps in frontages—the removal of housing and gardens. More recent development of a diversity of religious venues, some of which are successfully integrated with the original urban form. • Mix of uses includes small workshops, shops, public houses, meeting places, schools, etc, integrated across the urban structure, adding landmarks, character and variety. • More significant or larger institutional uses (such as the University of East London, and East and West Ham town halls) accommodated in larger town centres or on high streets in grand buildings. • Bus services operate on principal and local distributor routes.	• Cottages are often cramped in size; unsuitable for larger families without overcrowding, though it is generally possible to add extensions to alleviate the problem. • Grid structure is less permeable for pedestrians than for vehicles. • Narrow, cluttered high streets result in narrow footway areas (although, arguably, the carriageway could be narrowed through footway widening and time-limited inset loading bays). • Narrow streets with car parking either side are intimidating for cyclists, especially on rat-run routes. Car parking also results in congestion. • Large areas suffer from public open space deficiency, particularly the more densely developed areas of Manor Park. • Poorly designed modifications by owners have weakened the attractiveness of the buildings (especially on the front elevations), particularly where subdivision has taken place. Aesthetic decline is particularly prevalent on high streets, where older shop fronts have been replaced by inappropriate signage and clutter to the frontage, destroying the unity and rhythm of the set.
Key design characteristics	**Opportunities**
• Strong vertical rhythm with limited design variety. The two	• Repair continuity of street frontages where broken

development periods are unified by continuation of sash window construction. • Pitched roofs with repetitive chimney stacks providing skyline interest. • Most original sash windows subsequently replaced by UPVC, much of which is of inappropriate design. • Usually L-shaped plan form • Typically two-storey heights in residential streets; flats above shops on high streets, taking building heights to 3-5 storeys. • Typical bays extend to first floor level only. Some properties have no bays, but instead have porches that are not of uniform design. • Elegant detailing with limited range of materials • Clear distinction between Victorian and Edwardian detailing, particularly with regard to bay windows. More decoration on Edwardian frontages.	• Repair orthogonal / permeable block pattern where possible through redevelopment of post-war housing estates. • Resist loss of fine grain to development of large impermeable urban blocks. • Resolve issue of property subdivision • Introduce new conservation areas where well preserved areas of housing remain; and • Consider the introduction of wider spread of Article 4 directions to prevent inappropriate permitted development. • Introduce CPZs to control amount of on-street parking. • Create modally filtered transport networks to reduce convenience of car use compared with walking, cycling and public transport use. • Consider higher buildings of three to five storeys on main streets, such as Romford Road, Barking Road, where the width of the streets and the resultant sense of enclosure would be appropriate.
Influence of local topography and historical context on this typology • Existing Victorian and Edwardian housing built to provide dwellings for commuters to the City of London. • Large-scale post-war slum clearance took place in West Ham, including Canning Town and Silvertown, with the result that only fragments of original Victorian development remain, absorbed into the existing, coarser grain. • Absorption of older buildings, such as St John's Church in Stratford and All Saints Church, West Ham and medieval street pattern, into the grain. • Street patterns and names often reflect the historic plot boundaries of farms and country estates	**Threats** • Continued erosion of strong orthogonal block patterns by new development • Opportunity missed to reconnect orthogonal / permeable blocks. • Continued sub-division of properties, often without planning permission and to a poor standard, resulting in urban decline, poverty, social exclusion and transience. • Inappropriate alterations to individual houses under permitted development • Inappropriate building types (e.g. towers) introduced into area that is predominantly two-storey.
	Local variants Some short terraces, larger detached villas and paired dwellings, particularly Woodgrange conservation area. Larger Edwardian terraced

	houses around Central Park. Remnants of Georgian terraces. Some purpose built flats made to look like houses in Canning Town.

Garden City and inter-war/early post-war housing

Typology scattered across the borough in small pockets, notably in East Ham (Hameway) and Prince Regent Lane, featuring an overall typological style, but with distinctively different detailing. The character of these pockets is reinforced by the pattern of streets—in particular circular streets and round cul-de-sac turning circles. Buildings, the design of which was influenced by William Morris, feature high, hipped roofs extended to incorporate entrance porches, gable ends turned to face the street and horizontally oriented window openings. Front edge treatments are usually wooden fences with box hedges. The overall impression is of houses being more spacious than in previous periods, the orientation of buildings providing a wider plot frontage.

Good examples of the type can be found as follows:

			Urban structure
Hameway Large family terraced houses built around a circus and culs de sac.	**Prince Regent Lane** Large family terraced houses built on existing street pattern		

Description	Strengths
• Cottage-style short terraces (typically three dwellings), terraced blocks and semi-detached houses built between the two world wars. • Some houses of outstanding design and quality, typically pebble-dashed unpainted render, high hipped roofs, variety of roof orientations and shapes, simple ornamentation using tiles, bowed windows and woodwork • Larger plots and frontages, giving a greater sense of place than with Victorian and Edwardian terraced housing. Circus-shaped street patterns allow for semi-private communal public space in the centre (example: Hameway, East Ham) • Short terraces and semi-detached houses at lower density than Victorian or Edwardian terraced housing; more suited to families. • Longer terraced blocks are similar density to higher density Victorian and Edwardian terraces, on similar block structure. • Short terraces and semi-detached houses constructed as local authority housing; however in some areas there are very few visual cues in the design to suggest a difference between private and public housing types. Longer terraces privately built. • Short terraces and semi-detached houses typically located in Canning Town, East Ham. Terraced urban blocks situated in east of borough, on edges of adjacent Victorian / Edwardian blocks.	• Strengths of longer terraces similar to Georgian / Victorian (see above). • Short terraces / semi-detached style is more suburban with more living space; potential conversion of larger properties to permit lifetime homes standard. • Larger windows allow more light into dwellings • Larger front and rear gardens, suitable for families • Buildings set back from street, reducing impact of proximity to traffic • Less sensitive to aesthetic impacts of modern UPVC window and door replacements, which can also successfully mimic period window designs. • Adds variety and local distinctiveness by introducing differentiation in building typologies.
Urban structure	**Weaknesses**
• Short terrace / semi detached streets of houses often laid out in geometric patterns, with squares and circles surrounded by houses; also some culs de sac, a move away from the orthogonal grid structure of earlier estates. • Earlier (1920s) garden city development arranged as long	• Weaknesses of longer terraces similar to Georgian / Victorian (see above). • Less vibrant street frontage arising from single uses and building setbacks: in commuter areas this leaves streets empty during the day with little natural surveillance.

terraces on extensions of Victorian / Edwardian orthogonal street networks. • In more suburban development, footways are set back behind a grass verges (now usually covered by hardstanding) • Less mixing of uses; emphasis is on providing housing. Local shops and services would be situated in one location (however there are no instances of this in Newham).	• Less natural surveillance generally due to building setbacks. • Lower area-based density, also negatively affecting street vibrancy. • Gardens sufficiently large to allow conversion to car parking. • Less permeable and legible street layout, with more emphasis on providing for car use in some areas (e.g. East Ham), although the importance of the street as a context for development is still high.
Key design characteristics • Strong horizontal emphasis with party walls below continuous roofline. • Single design approach throughout individual developments with limited variations. • Hipped roofs, often with sufficient space to insert loft conversions. • Brick or rendered pebble-dash treatment to frontages (larger dwellings have pebble dash). • Rounded bay windows where they exist, or square fronted gable ends projecting from frontage, giving an L shaped floor plan to some houses. Alternatively no bay windows but instead a square floor plan. • Mixture of vertical and large horizontal windows • Open concrete porches, or small bay windows with roof continuing over front doors. • Larger front and rear gardens. • Typically two-storey height	**Opportunities** • Opportunities for longer terraces similar to Georgian / Victorian (see above). • A good model for medium density family housing with access to gardens.

Influence of local topography and historical context on this typology • Pockets of this type of inter war housing constructed to replace slums and improve living conditions from the early 1930s. Subsequent development of this type of housing between and shortly after the World Wars. • Further development of type, with less detailing, in the form of flatted blocks constructed during the 1950s.	**Threats** • Threats to longer terraces similar to Georgian / Victorian (see above). • Deterioration of buildings (lack of maintenance of render in particular), loss of original boundary walls and fences to parking, loss of greenery from front gardens, addition of unattractive and inconsistent doors, windows and porches. • Subdivision of private properties, resulting in further loss of family accommodation, an increase in neglect, particularly of building exterior render, paintwork, etc, and gardens.
	Local variants • Canning Town has smaller and simpler design of brick houses with hipped rooflines and a mix of L-shaped and square plan dwellings plus some low rise mansion blocks (3 storey). • In East Ham, short terraces are much larger with a variety of roof treatments. Most have unpainted 'pebble dash' render. • Also in East Ham, significant development of longer terraces on extensions of Victorian orthogonal grid. • Opposite Lyle Park, a street of white-painted semi-detached houses following the line of the street, with red-painted brick arched inset porches.

Post-war 1960s-70s (houses)

Typology is constructed on traditional streets, scattered across the borough, where war damage or slum clearance has taken place. In places, infill development has created new streets. Bungalows were built at the foot of tower blocks and walk-up blocks for elderly and disabled residents.

Good examples of the type can be found as follows:

<table>
<tr><td>  </td><td>  </td><td></td><td rowspan="2">Urban structure</td></tr>
<tr><td>Post-war terrace on the edge of the Jack Cornwell Estate</td><td>Bungalow on the Hathaway Estate</td><td></td></tr>
</table>

Description	Strengths
• Post war reconstruction and new social housing development following the end of the War. • Generally good quality with gardens to front and rear (front gardens typically converted or constructed for car parking).. • Terraced family houses and bungalows constructed to accompany flatted developments (such as in Hathaway Estate).	• High to medium density short terraces, providing good internal space standards, and wider frontage to street. • Good overlooking of street from dwellings, sense of community on pedestrian streets. • High internal space standards • Wide frontages obviate the need for built-in rear extensions, enabling entire house to be accommodated within rectangular footprint. • Rectangular footprint and horizontal windows maximise light penetration inside building. • Bungalows compatible with needs of elderly and disabled residents, and are clearly well-loved by their occupants, judging by the quality of front gardens. • Houses more readily convertible to lifetime homes than previous house types. • Construction method (concrete floors) may reduce opportunity for unwanted subdivision.
Urban structure	**Weaknesses**
• Generally constructed as infill within existing urban structure (either layout provided for flatted post-war development or within older street patterns) • No specific street layout, since this typology is not extensive enough to have been formed around new streets.	• Lack of variety and embellishment within house type • Loss of opportunity for personalisation of properties except in case of bungalows. • Radburn layouts (where used) result in inactive frontages onto footways and areas where there is a high perception of crime. Loss of traditional streets increases overall maintenance liability, reduces permeability for all modes and also reduces legibility and natural surveillance. • Dominance of parking courts, garages etc • High potential for front gardens to be used for car parking; higher dependence on cars generally due to layout and lack of mixed use. • Can be visually associated with "Council estates" due to

	uniformity of building type.

Key design characteristics	Opportunities
• Simple hipless tiled pitched roof, small chimneys (or none) • Porches internalised; on 1970s dwellings, typically a strip of white painted weatherboarding from roof to ground, incorporating first floor window and front door. • Square floor plan • Front and rear garden • Lower density than many Victorian/ Edwardian terraces due to higher internal space standards and side-on orientation of frontages. • Some houses built in Radburn form—front doors onto footway network; rear doors onto parking courts, though the opportunity for this is limited in existing built areas. • Typically two storey height • Strong rhythm through repetition of simple design elements • Very strong horizontal emphasis, exacerbated by absence of strong division between individual houses, narrow uninterrupted roofline and elongated horizontal window frames. • No mixing of uses.	• Retain internal space standards for future development, resulting in decent homes • Maintain higher densities by adjusting depth of properties (front to back), adding floors and building longer terraces. • Install lifetime homes standard from outset, without requiring future alterations. • Improve visual and physical relationship with the street
Influence of local topography and historical context on this typology	**Threats**
• Constructed as part of wider housing programme—which was otherwise flatted—to suit family groups. • Part of the programme of slum clearance. • Housing incorporated as part of development of social housing estates, or to provide infill elsewhere.	• Replacement of properties with new houses and bungalows with poorer space standards. • Subdivision (though this is less of a threat in existing local authority properties)
	Local variants Cuboid concrete houses in Silvertown, adjacent to DLR; houses and bungalows with mono-pitched roof structures, some with hanging

	bays, Canning Town.

Post-war 1960s-70s (flats)

Typology is principally found in the west and south west of the borough, with large pockets scattered elsewhere, for example North Woolwich and Manor Park. Wartime damage to traditional terraces and slum clearance necessitated a major building programme.

Good examples are as follows:

Tower block, Manor Park

Walk-up blocks, Manor Park

Point block, North Woolwich

Urban structure

Description	Strengths
• High rise (6+ storey) tower blocks, walk-up (up to five storey) blocks with lift access. • Semi-public open space associated with tower block construction. • Untidy and impermeable / illegible street and route network with 'unplanned' appearance, except in isolated examples, such as parts of North Woolwich (see photo of 'well-overlooked street'). • Major shift away from development that is framed by and addresses the street • Introduction of privacy strips and parking garages • Segregation of pedestrians from motor traffic, often on special 'pedestrian streets'.	• Generally good internal space standards • Walk-up flats and maisonettes usually of good build quality. • Good overlooking of public realm from habitable rooms • Safe environment away from motor traffic for walking and cycling.
Urban structure	**Weaknesses**
• Mixture of access roads and segregated pedestrian streets • Car parking courts and garage courts • Areas of incidental green space, usually fenced, not always an integral part of the structure. • Designated play and clothes drying areas • Rules and regulations—no ball games. • Poor permeability for all modes, but good permeability for pedestrians • Poor legibility: often a lack of orientation along streets and spaces, though key routes are well defined. • Coarse grain—buildings stand alone in space • Buildings not related to road and access route structure; often there is a fenced 'privacy strip' between the road and adjacent buildings. • Very little street frontage except in the case of	• Personal security issues, lack of neighbourliness / community except in pedestrian streets with continuous terraced house frontages. • Strong 'Council house' stigma: people move out as soon as they can afford to, or they have no choice but to remain as tenants. • High maintenance and servicing liability • Poor permeability and legibility of visually disorganised street pattern built around vehicular access. • 'Pedestrian streets' often places where people perceive high threat from crime, particularly at night. Residents concerned about antisocial behaviour including drug-taking, gatherings of young people, and illegal cycling and motorcycling in pedestrian streets. • Large areas inadequately overlooked due to high fences and walls; numerous "hiding places" in and around buildings and places where people may feel intimidated, such as narrow 'streets in the sky', alleyways, etc. • Partially impermeable, illegible network of streets and routes (permeability limited to pedestrian movement) • Little evidence of a sense of community ownership or use of public spaces;

some walk-up blocks (e.g. Hathaway Estate). Other walk up blocks are constructed along pedestrian walkways, their gable ends presented to roads. • Very limited interface with surrounding street network: often access points are limited to one or two that feed into an internalised road network. • Strong reliance on existing shops and services in existing areas outside the single-purpose estates. Occasionally a small shop or single public house is provided for use by residents. • No mixing of use: estates are wholly residential. • Relationship of buildings to streets becomes more tenuous through the post war period.	evidence of vandalism, e.g. ring-barked trees, graffiti. • Areas zoned for single dominant uses, though mixing of residential and retail uses occurs in town / local centres • Often development has inadequate provision of small independent shops, community infrastructure and public houses, though older estates are provided with small community buildings and spaces. • Coarse grain (high density, but within few buildings). • Plentiful open space, but this is often largely unused, or is a magnet for antisocial activity. • Poor, quickly deteriorating public realm, often poor standard of design, use of unattractive utilitarian equipment. • Little or no sense of ownership of the public realm by the community because the place they live, often several floors up, in is unrelated to the spaces around it. Evidence of vandalism of trees and equipment. • Segregation of pedestrians and motor vehicles by separate networks of 'pedestrian streets', often at above first floor level (long balconies). • Blank frontages including visually impermeable walls and fences reduce natural surveillance • Zoning of uses concentrates street activity to within local centres and immediate hinterland. • Poor relationship between development and adjacent public open spaces and other uses outside of the estate; poor edge conditions—regarding the interface of estate and surrounding areas and buildings and public spaces within the estates themselves. • Inward-looking development layout that is not well associated with surrounding areas. • Garage courts and building undercrofts encourage antisocial behaviour and are largely unused for storage of motor vehicles. The problem is more acute where garages have been built into ground floors of walk-up blocks. • Parking dominated layouts • Poor definition of public/private/semi public/semi-private space

Key design characteristics	Opportunities
• Walk-up or tower blocks accessed from common entrance, with lift or stair access. • Walk-ups are up to five storeys; towers are higher. • Variety of construction and design styles; usually each flat has a balcony used for clothes drying. • Mix of flats and maisonettes • Strong horizontal orientation of windows and balconies on each floor; strong vertical orientation of taller buildings. • Grouping of tower blocks provides a rhythm, which can be reinforced by landscaping and tree planting. • Minimalist detailing and embellishment. Some instances of decorative rendering, ornamentation and building name signage on older buildings (1950s)	• Identify larger sites as potential strategic redevelopment land, enabling a mix of tenures, housing affordability and uses to be introduced. • Identify incidental under used land for development. • Repair street pattern to increase permeability and legibility through the area. Extend permeability of pedestrian and cycling networks, in particular to provide access to parks (such as Victoria Gardens). This may require the removal of some ground floor flats or terraced houses to create the necessary gaps. Extend permeability to neighbouring areas to encourage through movement. • Improve the relationship of buildings to the street by addressing privacy strips: good practice includes provision of front gardens and the creation of new public realm with opportunities for introducing biodiversity through defensive planting on areas formerly grassed. • Redevelop worst blocks, making sure that new frontages address the street, and active uses such as shops and workshops are incorporated into the fabric. Generally increase levels of natural surveillance from adjacent buildings and encourage people to make use of walking routes, for example, by introducing public realm improvements and providing 'draw' attractions (such as markets) in local centres. • Generally reduce the height of new residential buildings, whilst designing sites to achieve an equivalent density to that currently existing. • Increase the mix of housing and employment uses on the estates. • Develop ground floor uses, remove high walls and improve sight lines along alleyways. • Improve quality of public realm • Permit cycling on suitable routes.

Influence of local topography and historical context on this typology	Threats
• Estates developed to replace bomb-damaged housing and / or slum developments, particularly in former flood risk areas. • Comprehensive redevelopment means that few older buildings are incorporated into the grain. In North Woolwich, however, remaining Victorian terraced houses are retained at the edges of the estates.	• Failure to learn lessons from the type and layout of development present in these estates • Permanent 'alley gating' to minimise policing requirements, reducing permeability

Housing: 1980s-2010 (Flats and houses)

Typology is principally found in the south of the borough, particularly around Beckton and the Royal Docks. Clearance of former dock and gas works related buildings and infrastructure, as well as the draining of remaining marshy pasture by the London Docklands Development Corporation enabled the development of speculative new housing, without planning permission, in the Docklands Enterprise Zone.

Good examples are as follows:

<table>
<tr>
<td>  </td>
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<td>  </td>
<td rowspan="2">Urban structure</td>
</tr>
<tr>
<td>1980s houses in Silvertown

Front garden parking and integral garages; emphasis on access by car.</td>
<td>1980s post-industrial pastiche housing in North Woolwich

Front garden parking. Emphasis on access by car, contrasting with properties opposite.</td>
<td>Britannia Village: 1990s ‘Enquiry by Design’ development.

Parking off street in front garden parking bays or under buildings.</td>
</tr>
</table>

Description

- A mixture of architectural styles developed from the 1980s, layouts informed by layout of distributor roads, access roads and culs de sac (Design Bulletin 32).
- Attempt in design of layouts to replicate 'village' style, with 'organic' arrangement of houses around culs de sac.
- Small houses, usually detached or semi detached; few terraces. Minimal,or 'nailed-on' detailing, no chimney stacks.
- Schools, shops and public services provided as a condition of planning consent; however generally no mixing of uses except in recent (1990s onward) development.
- This typology is typical of areas south of the A13.

Strengths

- Houses and gardens provided—suitable for families
- Safe environment for street play; segregation of pedestrians and cycles from motor traffic.
- Provision of a range of services to meet planning requirements.
- Cul de sac streets providing shared space for pedestrians and cycles
- Arrangement of houses promotes natural surveillance of culs de sacs.

Urban structure

- Development is based around culs de sac linked to access roads and / or local distributor loops.
- Open space often accessed from back of culs de sac
- Strong segregation of pedestrian / cycle movement and road traffic, though public transport access is from access / distributor roads.
- Coarse grain of development, discontinuous street frontages..
- Recent trend towards establishing connected streets is not yet reflected in Newham; most recent housing development turns its back on connected street patterns and is 'inward looking' or even 'gated'.

Weaknesses

- Cul de sac layout is impermeable to all modes including pedestrians, where pedestrian linkages are not provided, increasing distances and embedding car dependence.
- Parking in front gardens and in communal courtyards blurs distinction between public and private space, undermines the quality of street frontages, reduces amount of space for planting
- Undercroft parking with direct access to buildings reduces the amount of outdoor street life, reducing animation and natural surveillance of public areas.
- Culs de sacs facilitate criminal activity from the unprotected rear of properties—via pedestrian access alleyways that are often convoluted with poor forward visibility. It has been shown that burglary is more likely in culs de sac layouts (leading to pedestrian-only routes) than in traditional street grids.
- High walls and blank gable ends reduce natural surveillance on access / distributor streets in particular, resulting in a strong sense of 'inward-facing' development that fails to relate properly with its context.
- Lower density (area based) reduces scope for provision of local

	services within walking distance due to space given over to roads, parking etc.
Key design characteristics • Small windows, horizontal emphasis. • Smaller room sizes than equivalent local authority housing. • Informal layout, houses grouped around cul de sac ends; no particular rhythm except in design style.	**Opportunities** • Connect cul de sac ends to create permeable networks of streets • Improve lighting and forward visibility on pedestrian connections • Improve edge condition of Beckton Park by implementing additional housing / mixed use development at its edges.
Influence of local topography and historical context on this typology • New development over former marshes, drained in 1981 • Redevelopment of Cyprus • Significant amount of private housing included in developments, accessed from DLR and A13	**Threats** • Continuation of this pattern of development, locking in car dependence and poor public transport, walking and cycling accessibility. • Failure of new buildings to properly address the street, due to the need to raise ground floors away from potential flood levels.

Post 2010

Typology is principally found in the Arc of Opportunity including developments at Stratford High Street, Stratford City, Canning Town, West Ham, and Silvertown, around Excel, the Royal Docks, and former industrial areas along the Thames.

Good examples are as follows:

Canning Town

Royal Victoria Dock

Royal Wharf

Urban structure

Description	Strengths
Revival of high-rise residential towers, some even in excess of 20 storeys. Generally of high design quality. Some are standalone but many form part of an overall composition including lower buildings. Few individual houses but significant quantum of maisonettes and large flats suitable for family accommodation. Improvements in design quality have extended to materials which now most commonly are brickwork. Prevailing design style is re-interpretation of a new London vernacular which draws from the city's heritage of Georgian domestic architecture. Austere symmetric facades, sharply punched	Improved energy efficiency due to Code for Sustainable Homes introduced in 2006 and now consolidated in the revised building regulations. Accessible for people with physical and sensory disabilities. Capable of accommodating a range of uses. High density providing increased custom for local shopping areas and sited to take advantage of good accessibility to public transport. Secure, generous and legible entrances, often with concierge or 'smart' access systems.

inset window and door openings which are punctuated by prominent glass entrance lobbies. Typically featuring generous integrated balconies/terraces. Developments are often supplemented by highly developed public realm and communal areas. Ground floors typically maisonettes in residential developments but some retail/commercial uses particularly In town/local centres. Typically buildings address the street at all levels with consequent improvements in natural surveillance and animation. Developments are increasingly car-free, or providing very limited parking (mostly disabled spaces). Increasingly buildings are constructed for the private rented sector (PRS) featuring stand-alone cores, high-rise, focus on small units (1-2 beds) with communal amenities such as café or gym.	Internalised undercroft car parking wrapped with active residential/commercial/community uses. Minimised visual impact of car parking on street frontages. . On street car parking integrated with landscaping and overlooked by flats. Open surface car parking minimised.

Urban structure Developments since 2010 generally have strong orientation to existing streets and in the case of larger schemes the creation of new streets. Surveillance of public realm emphasised. Car parking may be provided in undercroft form with on street parking and limited surface level parking integrated with landscaping. Emphasis on private balconies and communal open space overlooked by residential accommodation Ground floor animation emphasised. If not a commercial premises ground floor residential units tend to have private front gardens and front doors. Buildings constructed as infill development on existing street frontage with heights matching surrounding buildings or higher on corner sites.	Weaknesses Stand alone architecture - particularly tall buildings - does not always successfully integrate with existing development, create streets or respond adequately to the public realm. Buildings can appear to be 'competing' with each other for attention, and the result is a discordant townscape without a clear sense of composition, a clear hierarchy of elements and visual unity. Ambitions for every tall building to be 'iconic' can contribute to this disharmony. 'Value engineering' post planning can undermine architectural quality and ambition. Privatised areas associated with grouped blocks of flats are often inaccessible at night, and highly controlled, stifling vitality and communal life. The layout of such spaces and lack of outdoor furniture reinforces perception that spaces are meant to provide a view and outlook for the development but are not intended to be used. This is particularly true of gated communities which in addition are not permeable developments. Housing type addresses the needs of a limited market (mostly young professionals, without children), and does not adequately address demand for family housing which requires access to a range of facilities.

Key design characteristics	Opportunities
Tall buildings in the borough take a variety of forms reflecting the London trend for each tall building to be an 'iconic' development. Within larger schemes, taller elements are integrated with the lower blocks to provide townscape variety and a legible built environment. . Larger schemes in the Royal Docks and Thameside area follow idiom of robust mansonry facades with sharply defined door and window openings reflecting the city's traditional Georgian era architecture. Communal entrances tend to be generous and legible, sometimes expressed as glass atriums which provide a focal point at street level and clear sense of address. Block form of larger flatted developments retains post-war style "inward looking" format on small internalised grids of streets. At the same time, new development is street-orientated with emphasis on active frontages. Densities have notably increased in line with land values.	Significant potential to deliver high-density development to high standards in terms of design, public realm, and living conditions including space standards. Tall buildings can be integrated into their surroundings in a way that cumulatively contributes to borough-wide place-making and London's skyline. Car free development and lower parking requirements provide opportunity to establish more active uses on the ground floor (where undercroft parking is no longer required) and more imaginative use of public realm which would otherwise be taken up with car parking. Opportunity to create safe, attractive walkable and cycle-able neighbourhoods. Built form of street based perimeter blocks creates the opportunities to successfully integrate new areas of the city/borough across ownership boundaries. Comprehensive mixed-use development of large sites throughout the Arc of Opportunity, together with provision of infrastructure, community facilities etc. Comprehensive redevelopment of under-performing post war housing estates. Opportunity to innovatively integrate family housing of mixed tenure / size units within high density developments whilst ensuring family housing having gardens and access to communal publicly accessible green space. Opportunity to generate genuine mix of uses, including offices, workshops, B1 uses to meet and stimulate local demand.

	Emphasis on local centres intended to address danger of isolated residential developments.
Influence of local topography and historical context The greatest concentration of new buildings is in the Arc of Opportunity extending from Stratford through Canning Town to the Royal Docks and the Thames side industrial areas. The Arc area is low lying and mostly lies within the flood risk zone. The river and the docks themselves are to a large degree been addressed in the layout of new development. Much of this development has been brought forward with the support of the Mayor of London through densification policy and development management practices (most developments are of a size appropriate for referral to the Mayor).	Threats Inappropriate location of residential uses close to functioning industrial areas resulting in poor living conditions and implications for continued presence of employment. Uncoordinated location of tall buildings and excessive height could damage appearance and character of borough, legibility and hierarchy of centres and set precedents for further poor developments, and impede delivery of high-quality schemes. Purchase of new units as investments may mean non-occupation, and failure to address housing need in the borough. High densities at approved schemes may cumulatively create an oppressive character of overdevelopment in parts of the borough and set precedent for ever increasing densities.

Non-residential

Industrial land (older concentrations of industry)

Typology is principally found at the northern end of the Lower Lea Valley (for example Sugar House Lane), between the A13 and Cody Road (generally poor quality) and Thameside West. Fragments of the typology can be found in the vicinity of the Docks, and large scale examples include the Tate and Lyle factory on Factory Road, Silvertown.

Good examples are as follows:

			**Urban structure**
Sugar House Lane Largely Victorian industrial development built around a sugar beet factory. Development was high density, and squeezed into gap sites with access to the river.	**Thameside West** A jumble of industrial uses some of which use river transport	**Tate and Lyle factory, Silvertown** The original factory was built in late Victorian times. It has been progressively extended over time.	

Description

- Agglomeration of smaller enterprises including small scale manufacturing, waste management, off-site construction and storage, scrap recycling, car maintenance and distribution of building materials.
- Apparently random collection of buildings and yards of varying

Strengths

- Provides accommodation for small and medium sized enterprises
- Provides local employment that is often within walking distance of workforce
- Often incorporates buildings of historic significance—warehousing, workshops, chimney stacks and so on.

design and scale. • Some older industrial buildings may be listed or worthy of protection, or • Older large-scale manufacturing plants, such as Tate and Lyle's sugar factory.	• Adaptable to a wide range of uses. • Some buildings can be converted to studios and flats.
Urban structure • Permeability is variable depending on the site. • Medium grain of development, with higher intensity employment in many smaller units. • Older areas still have cobbled streets. This type of street surfacing is almost uniquely confined to older industrial areas. Most cobbled streets have been resurfaced (over the cobbles) using asphalt.	**Weaknesses** • Suitability of some buildings for non-industrial uses may undermine availability of premises for employment (though addition of some residential and studio development adds vibrancy and natural surveillance) • Untidy appearance, cluttered townscape. • Safety undermined by lack of control over access points and vehicular movement • Vehicles drive and park along footways on narrow streets. • Older areas with limited commercial viability tend to attract low value 'dirty' uses such as scrap processing, recycling and waste transfer. • Unattractive for smaller scale inward investment: wholesale redevelopment would attract investment in campus style business and industrial parks. • Dominated by motor vehicular movements, in particular heavy goods vehicles (including waste carriers). These vehicles have a negative effect on the local surrounding areas. • Environmental effects including ground and water pollution, air pollution and dust.
Key design characteristics • Variety of construction materials, from brick to metal sheeting on steel frames. • Some buildings of historic interest (including listed and unlisted structures) • Larger urban blocks than can be found in residential development, with densely developed industrial buildings. In	**Opportunities** • Potential in some areas for wholesale redevelopment as industrial and business parks, which should be well served by public transport and accessible to the local community on foot and cycle. • Encouragement of creative industries in attractive (potentially listed) warehouses and old workshops.

Victorian areas (such as Sugarhouse Lane), these were 'squeezed' into plots producing regular and irregular floorplans and considerable variety in the appearance of street frontages. • Variety of designs of building, usually with pitched roofs, some brick-built, others brick on the ground floor; metal sheeting on structural frames above. • No particular rhythm of design, but considerable variety within the typology.	• Encouragement of mixing of uses—residential and business, and including some leisure and retail uses, such as river activities, cafés and galleries to bring vibrancy and natural surveillance to these areas. • Restore cobbled streets (remove top layer of asphalt and repair old trenches where cobbles have not been relaid) • Strictly control the amount of residential and leisure development to maintain primacy of employment use. • Replace poor quality buildings with new buildings that respect the design and rhythm of older buildings and / or seek to improve the quality of the townscape. • Designate conservation areas on valuable older employment areas, with Article 4 directions to control design.
Influence of local topography and historical context on this typology • This type of industrial development remains concentrated in the older industrial areas of the Lea Valley and the Royal Docks, though substantial tracts of industry have been lost to other uses. Significant areas of vacant and often contaminated land are left over from demolitions. • Multiple branches of the river Lea provided ideal setting for industrial buildings of the 18th ,19th and 20th century at Three Mills, that also exploited the cheap marshy land in close proximity to city of London	**Threats** • Loss of employment where pressure for residential development displaces business. • New employment uses not matching local skills.
	Local variants Gas holders at Canning Town, Bromley by Bow and Beckton remain an important feature on the landscape—as do Three Mills, Abbey Mills--a clear link with old dirty industrial heritage in the borough. The sewage processing plant at Beckton is Europe's largest, focused on the historic Northern Outfall Sewer, which itself remains a dominant engineering feature.

Non-residential

Industrial land (concentrations of newer industry)

Typology is principally found on Cody Road, Twelve Trees Crescent, with new industrial development emerging at Beckton on the site of the former gas works. Some smaller industries have been relocated to Beckton, to a purpose-built facility.

Good examples are as follows:

			Urban structure
Twelve Trees Crescent	**Beckton relocated industry**		

Description

- Larger units for industrial use, incorporating ancillary offices.
- Good quality design and construction using pre-fabricated metal structures and cladding. Buildings not designed for long life use but can easily be dismantled or modified.
- Size and shape designed to suit internal uses; uniformity only achieved in speculative development.

Strengths

- Large businesses encouraged to invest in Newham where there is land to develop large premises.
- Potential for high-density employment uses
- Land available at Beckton for large-floorplate factories.

Urban structure

- Permeable or semi-permeable street networks based on a loose grid.
- A coarse grain of very large buildings are likely to be developed in Beckton in particular.
- Public open space associated with industrial development may have been provided by industry, such as Lyle Park in the Royal Docks, provided by Tate and Lyle.

Weaknesses

- Development pressure for low-intensity employment uses (B8 warehousing) on available land near to major road and river infrastructure
- Poor accessibility from the public transport network at Beckton and Thames Wharf.
- Unattractive design of large industrial 'sheds' in the urban environment.

	• Increase in lorry movements through the borough (can be controlled by containing lorry movements on principal road network)
Key design characteristics • Few windows onto the street • Poor relationship of buildings to street structures • Bulky buildings on coarse grid • Rhythm of similar buildings likely in individual developments of more than one unit • Little variety in design or materials • Low density	**Opportunities** • A variety of good quality industrial buildings could be developed in the borough, housing the range of industrial uses—from light industry compatible with residential areas in mixed use development, to heavier industry with access to the principal road network, railheads and wharves. • New industrial buildings are likely to meet modern standards for reducing and mitigating environmental impacts and addressing health and safety requirements.
Influence of local topography and historical context on this typology • Location of B2 (general industrial) development is likely to become concentrated at Beckton and Thames Wharf where there is a history of similar development.	**Threats** • Failure to attract investors to construct new buildings due to land prices and accessibility • Continued decline of manufacturing industry • Consolidation of industrial activities elsewhere rather than in Newham.

Non-residential

Retail development/high streets: traditional, markets, shopping centres (malls) and 'out of town'

Typology is principally found in the west and south west of the borough, with large pockets scattered elsewhere, for example North Woolwich and Manor Park. Wartime damage to traditional terraces and slum clearance necessitated a major building programme.

Good examples are as follows:

				Urban structure
Green Street town centre	**Queen Street Market**	**Beckton retail park**	**Stratford shopping centre**	

Description

- Traditional high streets with small, predominantly independent shops, complemented by a number of smaller 'district' and 'local' centres established as terraces of shopfronts or purpose-built shopping parades.
- Markets: either outdoor under shelters (moveable or permanent), indoors with moveable stalls, or indoors with permanent small units.
- Shopping centre (mall): Indoor streets with doors at either end,

Strengths

- Small scale shops, allowing variety in the streetscape and providing opportunities for smaller businesses to become established.
- Within walking or cycling distance of a dense population where high streets are situated in older areas of the borough
- Personal, friendly service from smaller retailers
- Offers diversity and interest, an asset to the borough in terms of attracting visitors from a wider catchment (e.g. in response to a concentration of specialist Asian products in Green Street).
- Opportunities for living above shops
- Vitality and animation of the street after retail hours. Diverse offer including restaurants, public houses, clubs.

Market

with shops lining the streets. Purpose built with car parking attached on other floors and in some cases integral bus stations. Large footprint building may have replaced several older streets. • Out of town style retail park or shopping centre. Large-format 'sheds' fronted by car parking. Access from signal junction or roundabout. Each shop accessed individually off the car park, or provided together within a single shopping mall accessed from the car park. Oriented to car use.	• Strong community focus, adds vibrancy, colour and variety to urban town centres making them a focus for visitors • Specialist markets attract a wider catchment which also benefits the surrounding town centre • Widens the range of goods that might otherwise be available in the town centre • Supports businesses in immediate vicinity that provide a service to market traders and the public. • High quality or 'famous' markets attract a visitor economy • Small-scale employment opportunities • Low cost goods available due to low rents. • Stimulates fledgling businesses: an opportunity for new traders to test the market for new products and services. *Shopping centre* • Covered, secure, warm and safe for the public, with limited opening hours and security personnel acting as a deterrent to vandalism, antisocial behaviour and other crime. • Internal streets free from motor traffic • Convenient, accessible car parking in purpose-built facility • Stratford Shopping Centre facilitates a direct link between Stratford Station and the rest of the town centre. *Out of town shopping centres, retail parks and supermarket-based district centres* • Easily accessible by car from the main road network • Provides for sales of bulky products (such as DIY material) to the public

Urban structure	**Weaknesses**
Traditional high street (excluding shopping malls, markets, etc) • Small-format shops with breaks for side streets leading to residential areas. • Fine grain of development with considerable variety of retail and other uses. Clearest expression of cultural and population diversity. • Two footways (2-3m width) and typically 8.0m carriageway • Bus services operate on these streets which are local arterials. • Pedestrianised area with bus access at southern end of High	*Traditional high street (excluding shopping malls, markets, etc)* • Dominated by motor traffic movement, kerbside activity and congestion which delays public transport. • Lack of street trees in many of these areas • Significant air pollution, possibly exceeding EU NOx limits at times. • Narrow obstructed and cluttered footways • Limited parking availability except in areas temporarily or permanently cleared for the purpose, resulting in

Street North, enabled by Ron Leighton Way. *Market* Small format moveable stalls or mini-shops gathered in purpose built building or open air shelter. • Focused use within set aside area (LB Newham does not have street markets). The area may be used for other activities such as car parking when the market is absent. • Fine grain use, suited to areas with a local walkable catchment. Traders typically move from one market to another over a wider area, depending on limited opening days. However, 'mini-shop' traders may be open for business full time. *Shopping centre* • Large single development block replacing older streets, or • Entirely new urban form built on brownfield land (Stratford City) • Very coarse grain of development with single overall use occupying a large site. • Permeable during the daytime, with exits to various parts of town centre • Not permeable at night, requiring long walk around the block, often through narrow pedestrian-only streets. • Inward looking, limited frontage to surrounding streets • Strong culture of surveillance and control. • Car parking integral to shopping centre design, with infrastructure emerging onto surrounding streets. Main focus of design is to attract car traffic from surrounding areas to increase catchment. *Out of town shopping centres, retail parks and supermarket-based district centres* • Characterised by large open air car parks on the frontage, and served directly from the primary distributor road network. • Very coarse grain of development: a single use spread over a few buildings, with a large car park and no street frontage. • Closed to the public at night, though they may be accessible due to absence of perimeter fences. • May be used as 'overspill' parking by local residents and	fragmentation of urban grain. • Poor conditions for pedestrians and cyclists. *Market* • Space required for storing delivery vans and other vehicles. • Poorly-managed markets may appear tatty and down at heel. • Potential health and safety issues regarding storage and sale of meat, fish and dairy products that may not be refrigerated. *Shopping centre* • Privatised land—public access determined by land owner, and may be conditional. • No permeability after opening hours • Large format creates impermeable superblocks • Focus for car-borne shopping trips as a result of provision of dedicated shoppers' car parking • Large areas with dead frontages onto the street: public space may be dominated by service accesses, car park access and blank walls (example: west side of Stratford Shopping Centre) • Focuses main shopping areas away from high streets and into a smaller area. Surrounding shops may find it difficult to maintain market share and so decline to secondary shopping area status. *Out of town shopping centres, retail parks and supermarket-based district centres* • Specifically designed to attract car borne trips • Creates increase in motor traffic on the surrounding road network, affecting its efficient function • Poorly served by public transport which operates on periphery of frontage car parks. • Increases number of turning movements on major road junctions. • Draws trade from traditional town centres • Dilutes overall borough retail offer where viability may otherwise be improved within tight town centre boundaries.

businesses, if car park use is not strictly controlled.
- Relatively difficult to access on foot, cycle or public transport from the surrounding areas, with these modes having a low status within the development.
- Large plots reduce and result in a coarse, impermeable grain.
- Large supermarket and other retail uses may undermine viability of competing centres with independent stores.

Key design characteristics

Traditional high street (excluding shopping malls, markets, etc)

- Potential for strong rhythm of shop design based on use of original features (Victorian and Edwardian areas). These features have been successfully restored in Forest Gate.
- Contemporary uncontrolled treatment of shop frontages emphasises horizontal orientation and produces a jumbled, cluttered confused and unattractive streetscape.
- Quality of built form is retained above the shopfronts, with vertical detailing, original window openings (albeit with replacement windows and extensive problems of neglect).
- Shopfronts often open onto private frontage land which is used for awnings and 'market-style' pavement retail space.

Market

- Usually covered, either fully or partially, (as in Rathbone and Queen Street) or incorporated in an existing shopping centre (Stratford).
- Open stalls or lock-up shops
- Open air stalls with tarpaulin roofs, temporary structures placed on land otherwise used for car parking.

Opportunities

Traditional high street (excluding shopping malls, markets, etc)

- Constrain size of town or district centre to area best served by existing public transport or the core of the existing shopping area.
- Assist potential businesses in identifying gaps in the market, providing advice on planning constraints regarding shopfront design—with the objective of achieving an uplift through environmental quality improvements
- Improve the public realm: reduce carriageway widths, control parking, loading and kerbside activity, reduce kerb heights, reduce amount of clutter, provide cycle parking, review bus stop locations and improve bus priority.
- Restore historic shopfronts, reduce extraneous signage and clutter
- Improve routes to town centres: public realm improvements on key walking and cycling links
- Increase intensity of development around public transport nodes and around the town centres, including a mix of uses that increases footfall during the day.
- Reduce motor traffic speeds to under 20mph.

Market

- Improve quality of stalls and mini-shops through refurbishment and provision of uniform design
- Improve public realm, including: new paving and lighting, areas for sitting out, designated refreshment stalls (including coffees, lunches

Shopping centre

- Stratford: Redevelop shopping centre to restore network of wider public streets fronted by shopping and accommodating a market.
- General: Increase opening hours of shopping centre to improve permeability

Shopping centre • No clear tie with the rhythm of the existing high street. • Strong horizontal orientation exacerbated by large plate windows and continuous unsupported loggia. • Internalised streets with continuation of shopfronts characterised by large plate glass panels and glass doors. • Building height varies with presence of uses above the shopping centre including car parking (up to 8 storeys). The overall height is not clear from the street due to restricted views. *Out of town shopping centres, retail parks and supermarket-based district centres* • Isolated or grouped buildings, large format retail floorspace and rear storage. Dispersed land use. • Frontages onto large surface car parks or internalised streets. • Illuminated signage in projecting boxes • Flat roof construction • Uniform building height: 'kit form' of building design.	later into the evening. • Increase attractiveness of public transport access generally through strengthening of development travel plans • Consider reconfiguring car parking areas to accommodate replacement uses such as shopping centre extensions (good example: Canary Wharf shopping centre). *Out of town shopping centres, retail parks and supermarket-based district centres* • Consider potential of consolidating uses on a single site that is highly accessible on foot, cycle and public transport, whilst accepting that some uses (for example DIY) will continue to require access by car. In doing so, take account of the likely impact on competing traditional town centres. • Consider whether the out of town shopping centre itself has scope to become a new town or district centre with a finer grain (achieved by redeveloping shops over parking areas) that can serve a potential neighbourhood hinterland, developed on land formerly used for car parking • Consider what other uses could replace an out of town shopping area.
Influence of local topography and historical context on this typology • Some evidence of conversion of former dwellings into shops with flats above (particularly Green Street and Romford Road). • Absorption of historic listed buildings into older high street frontages	**Threats** Traditional high street (excluding shopping malls, markets, etc) • Continued decline of the public realm and shopfronts make the town centre more unattractive and less successful over time. • Major improvements to the town centre result in independent businesses being pushed out by multiples. • Increase in takeaways, drinking establishments and other noisy venues results in

• Villages existing before urbanisation still retain vestiges of 'centres'—in the form of shopping parades, churches, and so on.	an increase in antisocial behaviour, litter and other effects • Expansion of competing centres (including out of town shopping, development of large format shopping mall, or relocation of a major employer away from the town centre. *Market* • Proposed redevelopment of (declining) market for other uses • Continued decline of market as result of failure to invest and promote the asset • Loss of revenue from pitches results in shrinkage of market • Market fails to respond to contemporary shoppers' expectations • General loss of trade to competing retailers elsewhere. *Shopping mall* • Completion of competing mall leads to traders moving out and subsequent failure to let vacant units • Failure to maintain and refurbish mall on regular basis leads to loss of quality retailers and dominance of lower-end retailers. *Out of town shopping centres, retail parks and supermarket-based district centres* • Competition from competing town centres and out of town centres leads to vacant units and loss of trade • Congestion on road network undermines viability of retail park • Insufficient local population combined with competing development leads to underutilisation of supermarkets and retail parks.

Urban Structure

Street patterns: Connected orthogonal grid (typically Victorian / Edwardian)

Typology is principally found in the north and north eastern parts of the borough, particularly Manor Park, Green Street, Plaistow and Forest Gate. These connected patterns are highly permeable—but not to a walking scale.

Aerial photo	**Urban structure**

Description	**Strengths**
• In the north and north east and around North Woolwich: connected grids of streets defining perimeter blocks with clear distinction between public and private space. • In the south west: remnants of 'messy' but permeable slum street patterns which were retained following slum redevelopment in the inter-war period. • Absence of urban squares • Some variation on grids, usually to accommodate railway curves (Shakespeare Crescent) or reflecting older street patterns (original villages—West Ham, Plaistow)	• Connected street patterns achieve both permeability and legibility in the urban environment. People have a choice of routes. • The streets tend to be lined with windows and doors, achieving natural surveillance and street life. • High streets in particular have high levels of natural surveillance and animation, from shop owners, passing pedestrians and traffic.

Urban structure	Weaknesses
• Highly permeable for public transport, motor vehicles and cyclists; less permeable for pedestrians due to elongated perimeter blocks. • Public open space provided within the block structure, with boundaries strongly related to the continuation of streets • Accommodates a fine grain of development, typically two-storey Victorian and Edwardian row cottages.	• Elongated blocks are less permeable for pedestrians. • Street widths of under 8m are too narrow for effective two-way working, so many streets have been converted to one-way operation. The problem is acute where there is parking stress. • Parking stress makes it difficult to justify contraflow cycling where there are no opportunities for drivers or cyclists to pull in and let each other pass. • Cyclists are intimidated by faster and impatient drivers on one-way streets, especially where there are rat-runs. • Parked vehicles obstruct visibility of pedestrians attempting to cross the street: this is particularly problematic for children and disabled people. Combined with the narrowness of the remaining carriageway, the effect of one-way streets is to create a 'traffic tunnel' that encourages speeding. • Parked vehicles and general domination of street spaces by cars undermines their social role removing the potential creation of street play areas, home zones and so on that would improve the residents' feelings of wellbeing and community cohesion, encouraging walking and cycling.
Key design characteristics	**Opportunities**
• Typical carriageway width 7.5m • Simple use of materials (usually in poor condition): granite kerblines except where replaced with concrete, and asphalt carriageway and footway finishes. • Street trees line most streets, comprising pollarded London planes and limes. • Most streets are 'full' with parked motor vehicles.	• Increase pedestrian permeability when opportunities arise (for example partial redevelopment of blocks) • Provide, as part of general maintenance and regeneration programmes, an improved public realm for the street, including features to reduce motor traffic speeds to below 20mph. • Introduce CPZs and car-free developments to reduce dominance of the car. • Provide mode filtering to reduce amount of through motor traffic and encourage walking and cycling on key routes. • New development should provide smaller permeable blocks to encourage and facilitate walking

	• New development should demonstrate clear strategy for managing car parking.
Influence of local topography and historical context on this typology • Old land ownership boundaries and historic development patterns are evident in collision of different grid patterns, for example along either side of High Street North. • The much 'messier' street pattern in the south is due in part to the persistence of old slum street patterns which were subsequently redeveloped.	**Threats** • Continued increase in car ownership exacerbates parking stress, undermining quality of urban environment • Continued increase in car ownership and parking stress results in continued suppression of walking and cycling, and undermines efficiency of public transport routes within residential areas. • Failure to deliver higher quality public realm undermines wider efforts to regenerate areas and make Newham a place where people choose to live, work and stay.

Urban Structure

Street patterns: Connected suburban street networks (Interwar, post-war)

Typology is found in two small areas of the borough: East Ham (Hathaway) and Canning Town ('Garden City' developments immediately post-war).

Good examples are as follows:

Aerial photo	**Urban structure**

Description

- Carriageway width typically 7.0-7.5m (narrower than Victorian and Edwardian streets)
- Development of larger interwar housing inserted within existing urban fabric—resulting in use of circles and culs de sac.
- Culs de sac end in circular (or T-shaped) turning and parking areas; houses with front gardens wrap around the circle.
- 'Circus' street pattern allows for houses with private rear gardens and a further communal semi-private space at the centre of the circle of houses (example: Hameway, East Ham)

Strengths

- Connected street patterns achieve both permeability and legibility in the urban environment. People have a choice of routes.
- The streets tend to be lined with windows and doors, achieving natural surveillance and street life.
- Circular or curved street pattern reduces motor traffic speeds, reducing danger and intimidation of pedestrians and cyclists.
- Size of blocks is conducive to walking as well as cycling. However, there are early signs of emphasis being given to accommodation of motor vehicles, for example, an acceptance of

	culs de sac as part of the urban structure.
Urban structure • Good permeability and legibility where streets are integrated with surrounding development, though the use of culs-de-sac does impact on the *amount* of permeability. • Creation of semi-private communal open space within circle of development (Hameway).	**Weaknesses** • Parked vehicles obstruct visibility of pedestrians attempting to cross the street: this is particularly problematic for children and disabled people. • Parked vehicles and general domination of street spaces by cars undermines their social role removing the potential creation of street play areas, home zones and so on that would improve the residents' feelings of wellbeing and community cohesion, encouraging walking and cycling. However, the culs de sac do mitigate this issue to an extent. • Emergence of culs de sac reduces permeability of the street network to a degree.
Key design characteristics • Carriageway width typically 7.0-7.5m • Cul de sac ends provide sufficient space for parking and turning. • Simple use of materials (usually in poor condition): granite kerblines except where replaced with concrete, and asphalt carriageway and footway finishes. • Street trees line most streets, comprising pollarded London planes and limes. • Most streets are 'full' with parked motor vehicles	**Opportunities** • Increase permeability where feasible. • Introduce home zones, CPZs and so on to manage motor traffic and create conditions that encourage community use of the street.
Influence of local topography and historical context on this typology • Street patterns here are influenced by adjacent land ownership and older development—which creates or limits opportunities for through connections to have been made.	**Threats** • Continued increase in car ownership exacerbates parking stress, undermining quality of urban environment • Continued increase in car ownership and parking stress results in continued suppression of walking and cycling, and undermines efficiency of public transport routes within residential areas. • Failure to deliver higher quality public realm undermines wider

	efforts to regenerate areas and make Newham a place where people choose to live, work and stay.

Urban Structure

Street patterns: Access hierarchy and segregation (post-war)

Typology is principally found in the west and south west of the borough, with large pockets scattered elsewhere, for example North Woolwich and Manor Park. Wartime damage to traditional terraces and slum clearance necessitated a major building programme.

Good examples are as follows:

Aerial photo	**Urban structure**
Description	**Strengths**

Urban structure	Weaknesses
• Streets and paths arranged around buildings, with no spatial structure but nevertheless a clear functional hierarchy. • Roadways are a mix of through routes serving all parts of the estate and providing access to it from more than one point, and cul-de-sac routes serving the buildings with parking provision at each end. The culs de sac are terminated by public open spaces.	• High level walking routes culminating in communal stairwells and lifts can be intimidating, providing opportunities for antisocial behaviour and limited escape routes. • Garage courts, building undercrofts, public spaces and routes with poor sight lines can be magnets for antisocial behaviour and acquisitive crime, creating an intimidating environment. • Street networks within estates can be inward -looking, creating poor permeability through the estate (example North Woolwich)
Key design characteristics	**Opportunities**
• Carriageways of inconsistent width—between 7.0 and 8.0m • Footpaths generally 2.0m, but wider where they connect the ends of culs de sac. • Car parking provided in parking courts or garages under buildings or in separate garage courts.	• Conversion of some footways into shared cycle and pedestrian routes • Removal of garages and redevelopment for housing; provide open air parking areas nearer to dwellings. • Provide through street connections where this would increase natural surveillance and personal safety. • Provide flush kerbs to allow cycles to ride between ends of culs de sac.
Influence of local topography and historical context on this typology	**Threats**
• Estates developed to replace older slum developments, so fragments of older street patterns remain. Alternatively, new development provided on land previously used for other functions, such as the Hathaway Estate, built in a former railway junction.	• Failure to address areas where antisocial behaviour and crime is a problem leads to continuation or exacerbation of the problem and decline of estates. • Continued increase in car ownership and parking stress results in continued suppression of walking and cycling, and undermines efficiency of public transport routes within residential areas. • Failure to deliver higher quality public realm undermines wider efforts to regenerate areas and make Newham a place where people choose to live, work and stay.

Urban Structure

Street patterns: Access roads and culs-de-sac (early 1980s to 2007)

Typology is principally found in the west and south west of the borough, with large pockets scattered elsewhere, for example North Woolwich and Manor Park. Wartime damage to traditional terraces and slum clearance necessitated a major building programme.

Good examples are as follows:

Aerial photo	**Urban Structure**
Description • Clear expression of car-based street hierarchy, with access roads and culs-de-sac ('loops and lollipops') • Access roads and culs de sacs have different speed limits. • Dwellings typically front the culs de sacs and back onto the access roads.	**Strengths** • Each cul de sac is formed of several dwellings and an effective public open space that is quiet and free of through motor traffic, resulting in a theoretical community 'cell'. • Segregated network for pedestrians (and in some instances cyclists) away from motor traffic, fed from the rear of culs de sac. • Main through routes would be free of parked vehicles which are

	parked in the culs de sac, permitting easier access for buses.
Urban structure • The access roads are not designed to receive building frontages (though in a dense urban environment such as Newham, the access roads are lined with buildings, albeit the backs of the buildings or 'high street' uses) • The culs-de-sac are designed to accommodate residential development and avoid the problems of higher speed through motor traffic, resulting in a safe environment for children's play and social activity. • Culs de sac ends may or may not be linked together by alleyways. Where these connections do not exist, residents are obliged to make longer walk trips than would otherwise be necessary to visit adjacent culs de sac.	**Weaknesses** • Poor permeability and legibility due to disconnected street patterns, also resulting in longer-than-otherwise-necessary walking routes. • Segregation of pedestrians and cyclists onto routes that receive only limited natural surveillance since buildings back onto the routes. • Fear of crime in areas away from routes and spaces fronted by development (example Beckton District Park) • Reported higher incidence of burglary in culs de sac due to availability of secluded escape routes. • Longer walking routes (using streets) to reach destinations or other culs-de-sac: development is not at a walking scale. • Lack of sense of local distinctiveness and place creates a bland environment that discourages walking and cycling. • Fear of crime results in increase in car dependence.
Key design characteristics • Access roads typically 7.5-8.0m (depending on their distributive function), with a higher speed limit (30mph) than the culs de sac (under 20mph). • Culs de sac typically 7.5m • Parking provided off-road or in parking bays • Minimal provision of footways, with some streets having footways on one side only. • Poor permeability for pedestrians and cyclists, and poor legibility.	**Opportunities** • Provide new connections to link cul-de-sac ends (even if modal filtering remains to prevent through access by motor traffic) • Provide new streets to serve frontage development overlooking parks and other spaces • Permit cyclists and mopeds on all suitably-wide pedestrian routes, to increase through movement and natural surveillance.
Influence of local topography and historical context on this typology • Large areas of Beckton received new development following the draining of the remaining marshes in the early 1980s.	**Threats** • Continuation of 'loops and lollipops' type urban structure further embeds problems created by it, with disproportionate disbenefits to households without cars.

• Some interwar Council housing developments are built around a similar formation of streets.	• Failure to address need to create development that provides a frontage to park spaces leads to continuation of fear and reality of crime and antisocial behaviour.

Urban Structure

Public open space (Victorian, Edwardian, interwar)

Typology is found mainly in the northern part of the borough, where they are surrounded by original Victorian streets and building character typologies. In Stratford, West Ham and North Woolwich, the original parks remain, surrounded by post-war residential development.

Good examples are as follows:

Royal Victoria Gardens

Riverside gardens in North Woolwich.

Royal Victoria Gardens: edge condition

Gardens have a hard, impermeable edge condition as a result of post-war redevelopment of housing and industry.

Plashet Park: entrance treatment

Ornate gates mark the entrance to this Victorian park.

Urban structure

Description

- Formal public spaces 'let into' the surrounding street pattern or formed on areas of undeveloped land.
- Parks, cemeteries (the latter privately operated but permissively accessible to the public).
- Some linear open space, such as Joseph Bazalgette's sewer (the 'Greenway').

Strengths

- Successful parks provide routes through for pedestrians that are open 24 hours a day and link various trip generators
- Local parks within walking distance encourage physical activity and outdoor leisure, contributing to health, community and wellbeing.
- Public spaces provide permeability where main walking routes

	interface with adjoining streets. The importance of the walking route is largely dependent upon the presence of trip attractors beyond the park boundaries and the availability of alternative routes. • Parks provide relief from the built up area, but they also supplement the availability of small gardens and provide outdoor space for people without gardens. • Parks contribute to sense of place, though the range of attractions and equipment tends to limit their uniqueness.
Urban structure • Parks 'let in' to existing street patterns and are defined by them (example: Plashet Park) • Parks may also have been provided on undeveloped land, so their edges are not defined by pre-existing streets. • Parks that are open at night provide 24 hour permeability. • Parks are usually fenced, with a clear delineation between streets and the open space. Fencing is provided as both a safety (preventing children running out into the street) and security (enabling park closure at night to minimise vandalism).	**Weaknesses** • Night time parks closures reduce permeability and create barriers to movement on foot and cycle. • Insufficient parks have been provided in some parts of the borough (for example Manor Park). • The rear of properties adjacent to parks may be subject to intrusion.
Key design characteristics • Grand wrought iron entrance gates for at least one entry point, giving strong definition of place. • Tree lined pathways laid out in formal patterns (often not desire lines), usually with mature London plane trees • Large grassed areas, often with playing fields for football, rugby and other sports • Formal planted flowerbeds • Cafes, toilets, pavilions, bowling greens, tennis courts, multi-use games areas, children's play equipment. • Cemeteries have ordered rows of graves, chapels and small crematoria, site offices and lodges. They are also accessible by car, with broad sweeping drives. • Churchyards with burial areas: some have been turned over to	**Opportunities** • Provide key walking and cycling routes leading to trip generating destinations • Regenerate parks, providing a good range of facilities for exercise and leisure; restore cafes and increase the number of regular events, such as themed markets (example: London Fields, Hackney). • Provide new public open spaces in areas of deficiency, when opportunities arise.

nature as formal reserves (such as the Grade-1 listed St Mary Magdalene Church in East Ham)	
Influence of local topography and historical context on this typology • Often provided by the Victorians as a paternalistic gesture to provide outdoor healthy places for the poor who lived in otherwise overcrowded and unsanitary conditions.	**Threats** • Increase in population puts pressure on available parks spaces, reducing their value as a local amenity and introducing problems regarding maintenance, litter and overcrowding.

Urban Structure

Public open space (post war)

Typology is principally found in the west and south west of the borough, with large pockets scattered elsewhere, for example North Woolwich and Manor Park.

Good examples are as follows:

Post-war public open space in Hathaway Estate

Bleak and surrounded by high fences.

Incidental post-war public open space

Small areas of open space between blocks, and often used to 'plug' through streets.

Urban structure

Description

- Small incidental and formal public spaces provided as an amenity for surrounding residents
- Larger parks provided as part of post-war Council house building programmes (example: Custom House).
- Small spaces incidental to buildings and highway land

Strengths

- Larger parks take opportunity presented by creation of gaps in existing urban fabric to address open space deficiency.
- Smaller incidental spaces provide green space relief from built up areas and increase biodiversity.
- Spaces are generally well overlooked by adjacent buildings, and provide very local spaces for social activity including children's play
- Spaces provide a 'modal filter' for pedestrians and cycles, away from cars, and address potential rat runs.

	• Spaces provide walking and cycling routes and access to active play opportunities (such as multi use games areas).
Urban structure Spaces may have been provided: • At the ends of cul de sac streets • Around buildings • Adjacent to the highway • Alongside walking routes • As an integral part of major estate development	**Weaknesses** • Edge conditions meant that many spaces do not receive sufficient natural surveillance from adjacent buildings in areas where antisocial activity and crime are a problem. • The lack of 'ownership' by local people means that spaces are often underused and neglected • Spaces fail to provide the conditions in which people want to use them, such as routes through sites, semi-private areas for public sitting out, active facilities such as cafés and pavilions, community gardens.
Key design characteristics • Parks fit into gaps in development and existing street pattern. Paths are not related to the presence of streets. • Less formal pathway layouts, with circles and loops • Large areas of grassland, limited formal planting except in designated areas, where formal landscaping and shrub parking is prevalent. • Post-modern building typology for pavilions, changing rooms, toilets (low, flat roofed structures). • Informal playing areas, focus on sports (football etc) • Low 'hop-over' wooden fences within parks • Simple unornamented metal fences around perimeter.	**Opportunities** • Increase involvement of local people in taking care of their spaces and designing them to increase intensity of use. • Increase through-put of pedestrians and cyclists by providing good quality links and encouraging development of potential trip attractors. • Increase the range of uses within the area so that there is movement through the public spaces all day. • Redevelop poorly performing public spaces for housing and other uses that will reduce people's perceptions of crime and remove unsightly little-used spaces. • Add new development where opportunities arise in a way that will result in natural surveillance and animated frontages.
Influence of local topography and historical context on this typology • Park layout and shape influenced by presence of gap sites in older fabric, created by wartime bombing or slum clearance.	**Threats** • Continuing problems of vandalism and antisocial behaviour in some areas.

Urban Structure

Public open space (early 1980s - 2000s~~7~~)

Typology is principally found in the south of the borough, at Beckton Park (1980s), the Royal Docks (1980s) and Barrier Park (1990s)

Good examples are as follows:

			**Urban structure**
Beckton Park 'Naturalistic' public open space built into new urban fabric.	**Hard-landscaped spaces around Royal Docks**	**Barrier Park**	

Description

- Large areas of parkland established as part of comprehensive development of Beckton and Cyprus in the 1980s.
- Features formal walks, ponds and pavilions. Utilises historic alignment of former Beckton railway.

Strengths

- Large parks provide a significant 'green lung' in heavily urbanised areas, providing relief from the built up area.
- Plenty of space for woodland, areas of outdoor play and sports space.
- Good network of walking and cycling routes.

Urban structure

- Large parks, with residential development backing onto them. Access is from the rear of culs de sac or from the local distributor road network.

Weaknesses

- Poor natural surveillance caused by the size of the park, the lack of built frontage and poor edge conditions, and the presence of strips of woodland that create secluded areas.

• Informal 'natural' layout of footpaths and routes, except for old railway line which is a formal tree lined avenue. • Strips of woodland with paths running along the lines of trees. Areas of grassland between. • Large lake at the northern end with a pavilion. • Designated cycle routes through the parks.	• Poorly utilised areas increase the sense of seclusion and lack of animation. • Lack of significant trip attractors reduces the amount of 'people traffic' through the park, adding to the sense of seclusion. • Lack of permeability across the A13 further reduces demand for trips across the park.
Key design characteristics • Large areas of grassland punctuated by strips of woodland containing paths through. • Edge condition is the rear of buildings and gardens providing the edge of the park. • Unfenced interface with the road network: the park is open 24 hours a day. • Areas allocated for field sports (football, rugby) and multi-use games areas.	**Opportunities** • Create larger gaps in the woodland to increase natural surveillance. • Permit park edge development to provide natural surveillance from new building frontages. • Identify potential for trip attractors that would increase the number of people walking through the park during the daytime and evening. This includes adding to the mix of uses available in the adjacent housing estates. • Increase the range of attractions, for example a golf course that would result in more activity taking place within the park. • Provide a crossing of the A13 to reconnect Boundary Lane and provide an additional route for pedestrians and cyclists that would help to animate the northern end of the park and the lake.
Influence of local topography and historical context on this typology • The former Beckton Railway provides a spine route between the park, surrounding residential areas and Beckton district centre. • The position of, and routes through the park may have been influenced to an extent by the old Boundary Lane running north-south.	**Threats** • Failure to address the fear of antisocial behaviour and other crime would result in a continuation of risks to the public.

Urban Structure

Public open space (early 2000s - today)

Typology is principally found in the south of the borough, at Beckton Park (1980s), the Royal Docks (1980s) and Barrier Park (1990s)

Good examples are as follows:

			**Urban structure**
Beckton Park 'Naturalistic' public open space built into new urban fabric.	**Hard-landscaped spaces around Royal Docks**	**Barrier Park**	

Description

- Large areas of parkland established as part of comprehensive development of Beckton and Cyprus in the 1980s.
- Features formal walks, ponds and pavilions. Utilises historic alignment of former Beckton railway.

Strengths

- Large parks provide a significant 'green lung' in heavily urbanised areas, providing relief from the built up area.
- Plenty of space for woodland, areas of outdoor play and sports space.
- Good network of walking and cycling routes.

Urban structure

- Large parks, with residential development backing onto them. Access is from the rear of culs de sac or from the local

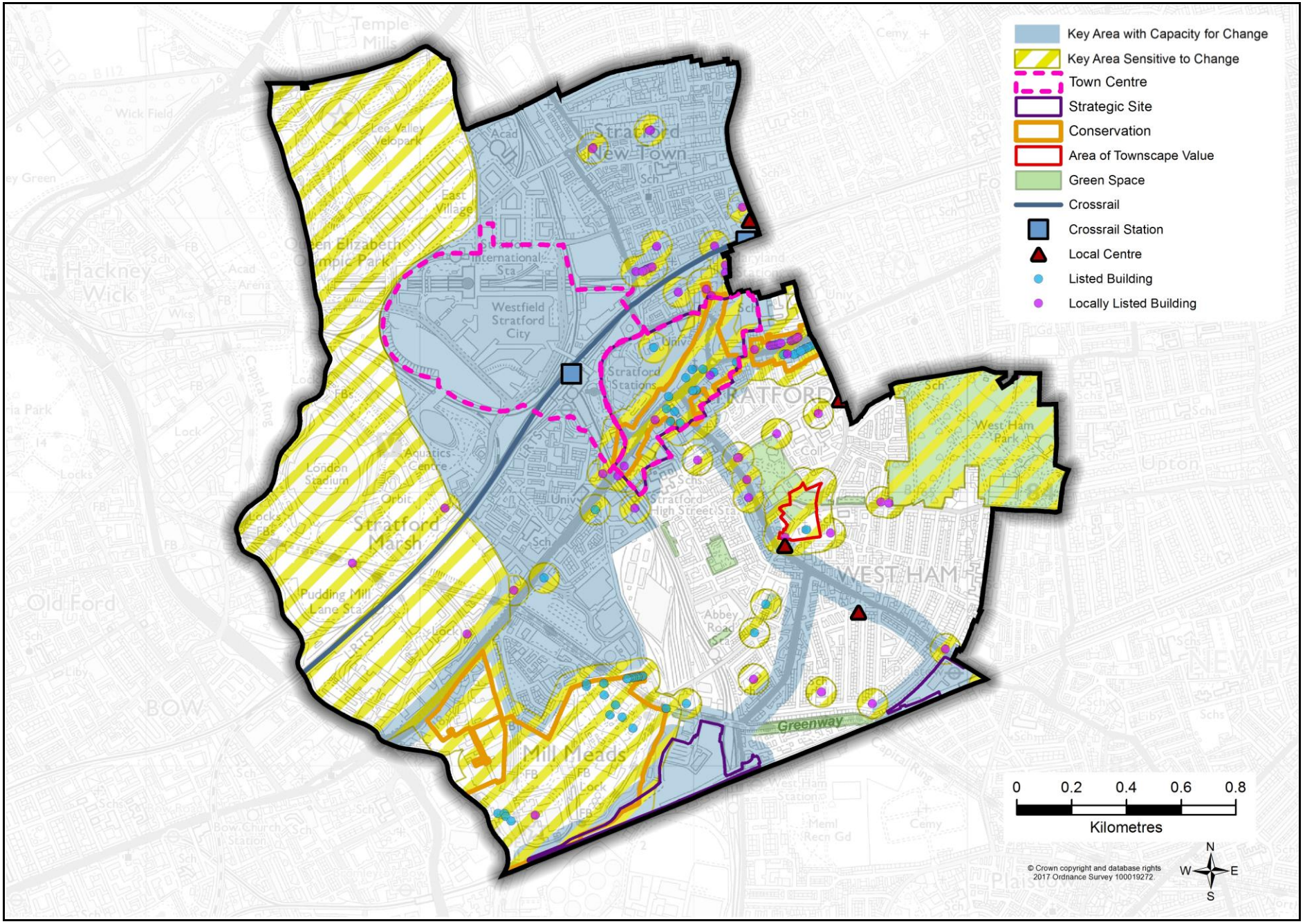
Weaknesses

- Poor natural surveillance caused by the size of the park, the lack of built frontage and poor edge conditions, and the

distributor road network. • Informal 'natural' layout of footpaths and routes, except for old railway line which is a formal tree lined avenue. • Strips of woodland with paths running along the lines of trees. Areas of grassland between. • Large lake at the northern end with a pavilion. • Designated cycle routes through the parks.	presence of strips of woodland that create secluded areas. • Poorly utilised areas increase the sense of seclusion and lack of animation. • Lack of significant trip attractors reduces the amount of 'people traffic' through the park, adding to the sense of seclusion. • Lack of permeability across the A13 further reduces demand for trips across the park.
Key design characteristics • Large areas of grassland punctuated by strips of woodland containing paths through. • Edge condition is the rear of buildings and gardens providing the edge of the park. • Unfenced interface with the road network: the park is open 24 hours a day. • Areas allocated for field sports (football, rugby) and multi-use games areas.	**Opportunities** • Create larger gaps in the woodland to increase natural surveillance. • Permit park edge development to provide natural surveillance from new building frontages. • Identify potential for trip attractors that would increase the number of people walking through the park during the daytime and evening. This includes adding to the mix of uses available in the adjacent housing estates. • Increase the range of attractions, for example a golf course that would result in more activity taking place within the park. • Provide a crossing of the A13 to reconnect Boundary Lane and provide an additional route for pedestrians and cyclists that would help to animate the northern end of the park and the lake.
Influence of local topography and historical context on this typology • The former Beckton Railway provides a spine route between the park, surrounding residential areas and Beckton district centre. • The position of, and routes through the park may have been influenced to an extent by the old Boundary Lane running north-south.	**Threats** • Failure to address the fear of antisocial behaviour and other crime would result in a continuation of risks to the public.

Appendix 2 - Community Neighbourhood Area Analysis of Typologies and Character


Welcome to Newham London
STRATFORD STATION
GREEN WAY
London Borough of Newham
STRATFORD & WEST HAM
COMMUNITY NEIGHBOURHOOD
THEATRE ROYAL
City of London
West Ham Park
SOUTH GATE
Dedicated to the public in 1874 and since maintained by the City of London


Key Area with Capacity for Change
Key Area Sensitive to Change
Town Centre
Strategic Site
Conservation
Area of Townscape Value
Green Space
Crossrail
Crossrail Station
Local Centre
Listed Building
Locally Listed Building
Stratford New Town
Westfield Stratford City
Stratford Stations
STRATFORD
West Ham Park
WEST HAM
Stratford Marsh
Mill Meads
Greenway
0 0.2 0.4 0.6 0.8
Kilometres
N
W E
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Stratford and West Ham

Character typologies present

- Mixture of post-war 1960s/70s residential (maisonettes, houses and flats) and Victorian & Edwardian terraces; remnants of Georgian residential.
- Contemporary high rise mixed use development in much of the western half of the CFA (predominantly within London Legacy Development Corporation – LLDC)
- One high street along the Broadway, including 1970s shopping mall.
- Contemporary office, leisure and retail developments
- Olympic Park and venues

feasibility

Analysis

Overview of structure (permeability, grain, presence of open space and so on)

- Significant impacts of roads (A13, North Circular), railways, the Greenway, waterways and extensive industrial land fracturing residential neighbourhoods
- Patchwork of typologies resulting in disconnected streets with many segregated pedestrian routes lacking passive surveillance; week legibility and permeability in places
- Traditional residential area densely developed with uneven distribution of open space. Some green space provided amidst post-war residential development in the south of the area, but the effect is often counteracted by extensive paved areas for cars.
- West Ham Park and Queen Elizabeth Olympic Park and venues present large scale open spaces.
- The Prescott Channel, Channelsea River and Three Mills Wall River all act as barriers to movement, but also as attractive green corridors; some recent investment in pedestrian/cycling bridges as part of the Leaway.
- 'Stratford Gyratory' (Great Eastern Road/the Broadway) is being remodelled (2017-2019) to reallocate space for pedestrians, cyclists and busses, reducing the now-intense traffic flows through the historic town centre.
- Pockets of large scale industry and transport infrastructure in the north and west

Local distinctiveness

- Important historic river crossing ('Stratford'=street of the ford) for the historic route to Colchester, also meeting the road north to Cambridge. Coaching inns and wishbone street structure in centre of Stratford reflect this, as it became a strategic gateway into London.
- Historically area was part of Stratford Langthorne Abbey, with landholdings including pasture/marshland and mills on the river (hence Abbey Road, Abbey Lane). Gatehouse recently discovered at Bakers Row

Building Heights in the Area

- Most residential buildings are 2-4 storeys in densely developed terrace and maisonette blocks – this is the dominant form across most of the area, including the old town centre (the Broadway).
- Some post-war blocks of 10-25 storeys, dispersed across the area
- Very high rise blocks of 20+ storeys and some over 30 storeys, along High Street/Burford Road (in the LLDC) and Great Eastern Road (north side in LLDC); also some 4-10 storeys.
- Stratford City (in the LLDC) average around 10 storeys, with some taller blocks, tallest over 30 storeys

(Scheduled Ancient Monument). Also remnants within All Saints Church, West Ham, the former parish church dating from the 12th century.

- Mills later became a mini centre of industry, added to by a series of navigation cuts, a distillery, a distinctive pumping station as part of Bazalgette's sewerage system (nicknamed the 'Cathedral of Sewage') and the borough's (West Ham's) power station. Location was outside the limits of the City of London's more strict regulation. Mill buildings and associated features are listed and the whole area including some 19th century residences is now a conservation area (Three Mills).
- Railways also cut through the land from 1839 (the Eastern Railway and North Woolwich line) with part of the area becoming railway land, (carriage works, marshalling yards etc) and a wholesale market. The North Woolwich railway co built speculative housing from 1843, as did the Eastern Railway co (Hudson's Town, later Stratford New Town).
- Stratford grew as a smart residential town in the 18th century, growing from hamlets at Maryland and Stratford Green. Stratford St Johns Conservation area along the Broadway reflects this historic evolution – continuous historic frontage built up against the pavement on the south side (Victorian commercial and civic, plus earlier remnant residential).
- University conservation area to the west has a preserved block of larger Georgian/Regency houses and taller Victorian houses, whilst also reflecting a particular period of civic architecture and development (late Victorian to mid 20th century) – as the town expanded and West Ham gained municipal borough status.
- West Ham Park, a remnant of the Ham House estate, is another municipal asset from this period, albeit looked after by the City of London Corporation. A particularly good group of larger, well preserved

Key locations for the community (meeting places, local shopping parades, parks, and so on)

- Stratford City
- Stratford Shopping Centre
- Theatre Royal
- Town Hall
- The Discover Centre
- Community Centres across the area
- Stratford Health Centre
- Stratford Library
- House Mill café - community meeting place
- Queen Elizabeth Olympic Park, Stratford Park, West Ham Park, West Ham Recreational Ground, and Clapton Football Club, Abbey Gardens, Allotment gardens adjacent to Abbey Mills and Three Mills Green Park, Sandal Street Open Space, Chandos Road Open Space
- Channelsea Path, the Greenway and Leaway
- Various churches (including St John's, Stratford, All Saints, West Ham) schools, cafes and pubs.
- Conservation Areas

Strengths

- Stratford's town centre designation as a Metropolitan Centre enhances its London wide profile, attracting development and investment.
- The area is generally well served by major roads and has a high PTAL rating with a major local/regional and an international station at Stratford.
- Good range of housing stock ranging from traditional large family terraces and townhouses to large quantum of modern apartments close to the town centre.
- Much of the community neighbourhood area remains characterised by 2-4 storey row houses with some relief from built form in incidental open spaces.
- Attractive waterways, parks and historical mill buildings, including the imposing Grade II* Abbey Mills pumping station (frequently used as a film location).
- Listed civic and religious buildings give identity and focus to Stratford's old town

Victorian housing is found on the south side of the Portway, along with other distinctive heritage assets including the Palazzo style Park Tavern and Park Cottage (now designated as ATV)

- During the Victorian period the western end of the High St became more industrial, making use of the local waterways, now marked by the Sugar House Lane conservation area with its distinctive chimneys, warehouses, and informal/piecemeal form of development.
- West Ham was a small settlement around All Saints Church from the 12th century. The medieval street pattern around the church is still evident.
- Growth also escalated in 19th century, with smaller terraced housing for industrial workers. A satellite of notable early Victorian housing is to be found around Bakers Row/Lavender St/Manbey St. Other non-designated heritage assets in the area include the former Angel PH and Kings Head pH and adjoining terrace
- The area continues to have a mixture of land uses. Railway land has given way to large scale regeneration opportunities, notably the Olympic Park and Stratford City. Stratford serves as the major shopping and leisure location for the borough. West Ham is a residential neighbourhood, although emerging proposals for the former Parcelforce site, together with other strategic allocations nearby, will see the area round West Ham Station develop into a local centre. The area west of Manor Road is dominated by industrial uses and transport infrastructure.
- Largely flat topography; elevated infrastructure (DLR, the Greenway) and tall buildings afford extensive views.
- Other designated heritage assets and landmarks include the Theatre Royal, Channelsea River and Twelvetree Crescent Bridges, Log Cabin, High Street, centre: Town Hall, St John's Church and Martyrs' Memorial
- Quality open space landscaped to award winning standard provided by Queen Elizabeth Olympic Park . More significant open space at West Ham Park, West Ham Recreational Ground, and Clapton Football Club
- Public art around Three Mills and Stratford High Street adds interest. Olympic venues and the ArcelorMittal Orbit are landmarks.
- Greenway, Leaway and Channelsea Path provide connectivity, green corridors and views. Elevated nature of the Greenway gives views across East London
- General positive aspects of Victorian/Edwardian terraces, many of which are well kept
- Important cultural resources. Theatre Royal Stratford East has an international reputation. Stratford Picturehouse is an art house cinema.
- New developments have added value to Stratford by introducing examples of high quality design and place-making; increased population density has resulted in investment in local economy and community vitality.

Weaknesses

- Railways, waterways, Greenway and major roads (including Stratford High Street and Bow Flyover) create barriers to movement.
- Dominance of roads and space for cars some post-war estate designs.
- Lack of coherence to High St design. New buildings have not followed a common building line along Stratford High Street, undermining legibility and sense of enclosure.
- Post-war tower blocks scattered across the area, and poorly integrated with surroundings
- Large blocks of the mall, Stratford City, carparks, and industrial sites to the west, create local barriers.
- Poor quality streetscape and housing stock in parts of the area, including permeability issues - dead ends or poorly designed walkways.
- Isolation of certain pockets of development, affecting perception of safety and levels of usage, as well as access out of the area.
- Persisting inefficient use of land in central locations, e.g. parts of Stratford Island, Morrison's carpark.
- Limited open space in north east and south east neighbourhoods.
- Lack of smaller community foci to the south
- Lack of step free access or appropriately graded access in many areas of public realm, including the Greenway

whilst those of more local importance include schools, churches, pubs and station buildings.

Strategic Site Allocations Status

- S5 – Central Stratford – several emerging proposals on parts of the site, particularly around Morgan House, and discussions on other sites.
- S10 – Abbey Mills – no proposals
- S29 – Plaistow North – consented scheme for Valetta Grove section, discussions for Ford site.

Opportunities

- Ongoing masterplanning of historic town centre and environs (including significant public land holdings) to enhance its performance, improve key streets and public realm, and achieve integration with surrounding areas, including Stratford City and the rest of the Olympic Park.
- Emerging night-time and visitor economy in Stratford based around Olympic Park, Westfield, and cultural and entertainment offerings (Theatre Royal, Picturehouse, pubs and bars)
- Good and improving transport connections, including Crossrail and HS1 at Maryland and Stratford. Enhancements to the Stratford Gyratory will reduce traffic through the historic centre from 2019.
- Committed major developments (mostly within LLDC operation area).
- Potential to create community foci in the south through new local centres at West Ham and Plaistow stations as part of emerging redevelopment schemes on strategic sites. Crossrail will bring opportunities around Maryland Local Centre
- Further enhancement of Greenway as linear greenspace (and views from it) providing connections between areas with open space deficiency and the Olympic Park. Enhancement of the Lea River Park and the Leaway walking and cycling route towards the Royal Dock.

Threats

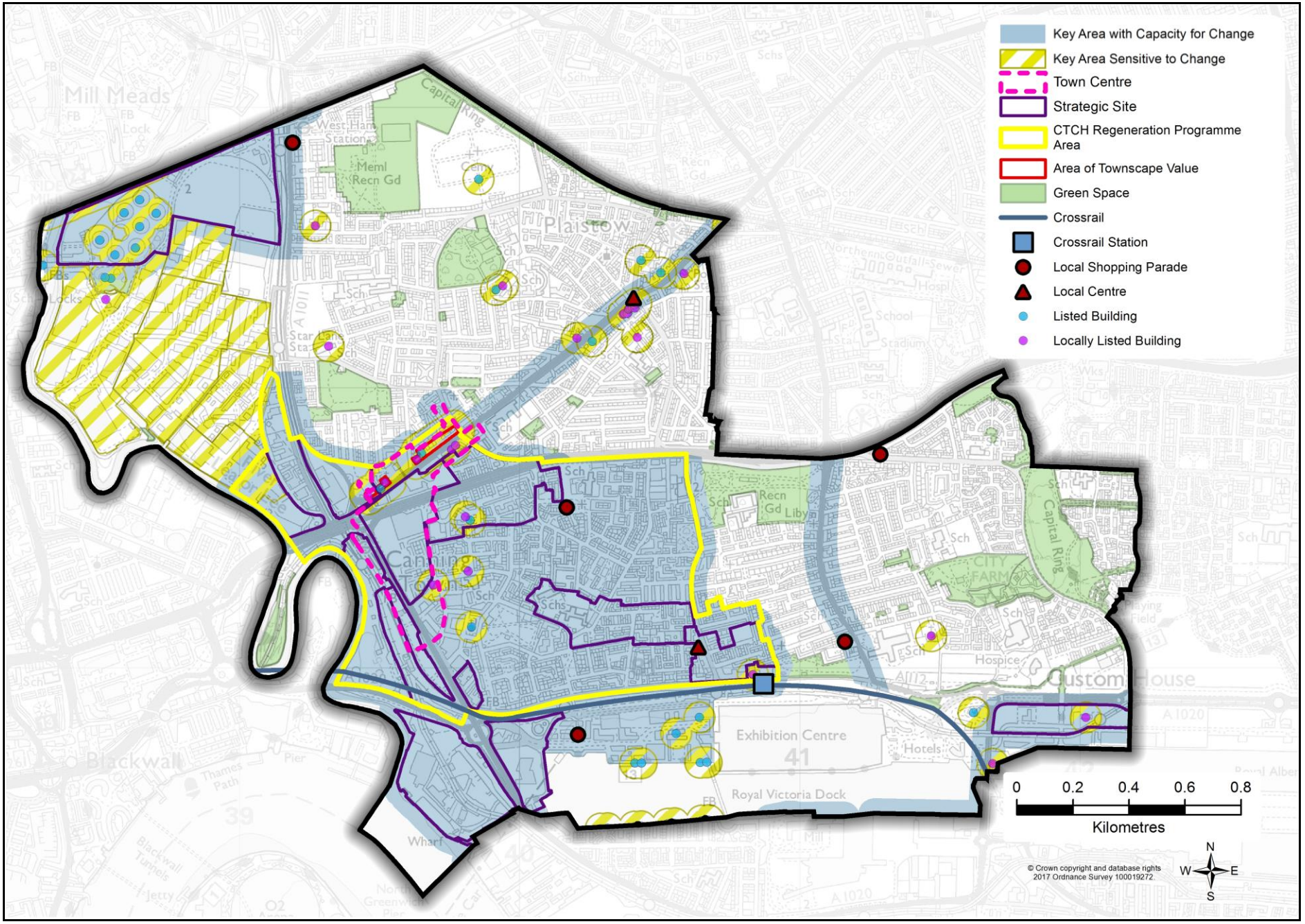
- Crime/ASB or at least fear of these on the Greenway.
- Dominance of traffic in centre of Stratford, and in 'gateway' area obstruct evolution of a positive identity and character for Stratford.
- Tall buildings competing with each other along the High Street, leading to loss of hierarchy supporting legibility, and general lack of an integrated townscape. Threat of tunnelling effect due to clustering of tall buildings.
- Loss of family housing to flats/bedsits and large number of apartments undermine

	community initiatives. • Stratford City designed to be a self-contained entity, with only limited links to the existing historic centre; excessive expansion in this area threatens to undermine the vitality of the historic centre. • Higher density development is ribboning out along key routes so places are losing their identity e.g. edge of Stratford Village and Maryland

Conclusions

Significant features to attend to in place-making	**Areas of sensitivity to change**
• Generation of focus for Stratford town centre, building on heritage assets and positive aspects of recent major development. Ensuring Stratford City and the original town centre work as one centre. • Improved connectivity across major barriers, opening up land to the west • Focus on integration of new development along major roads, comprising High Street (in the LLDC) and Romford Road, and around Stratford Station. High Street can accommodate further tall buildings, but proposals will need to better resolve the transition between scales to address the existing 'canyoning' effect. • Integration of significant heritage assets and views towards/of them, including those in the vicinity of West Ham Park, All Saints Church, West Ham, Abbey Mills pumping station, Bakers Row, and Leytonstone Road, Maryland • Need to create new community foci to south. • Further integrate development around the Olympic Park • Enhance residential quality of established housing area in the south	• The 4 conservation areas (University, Stratford St Johns, Three Mills, Sugarhouse Lane) • Stratford High Street is a particularly important gateway in danger of generating poor streetscape due to competing buildings creating a tunnelling effect with no clear hierarchy or focus. Integration of new and existing developments along this important corridor presents particular challenge. • Setting of West Ham Park and other designated and non-designated heritage assets, including waterways. • Other important locations for the community (as identified above).
	Areas with capacity for change / innovation
	• Existing town centre and environs – given numerous potential development sites which can be masterplanned to address place-making objectives and absorb innovative designs, including taller buildings, managing their distribution and addressing their impacts. Many of these sites are within the LLDC. • Key routes such as Romford Road, and northwards from the town centre to Maryland, can absorb selective change to help address lack of focus/coherence. Scope for selective redevelopment of post-war estates as opportunities arise, to rectify design mistakes.


London Borough of Newham
CUSTOM HOUSE &
CANNING TOWN
COMMUNITY NEIGHBOURHOOD


Key Area with Capacity for Change
Key Area Sensitive to Change
Town Centre
Strategic Site
CTCH Regeneration Programme Area
Area of Townscape Value
Green Space
Crossrail
Crossrail Station
Local Shopping Parade
Local Centre
Listed Building
Locally Listed Building
Mill Meads
Plaistow
Canning Town
Custom House
Blackwall
Exhibition Centre
Hotels
Royal Victoria Dock
Capital Ring
CITY FARM
Hospice
0 0.2 0.4 0.6 0.8
Kilometres
N
W E
S
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Canning Town and Custom House

Character typologies present

- Mostly 1960s, 70s plus early Post War.
- Fragments of Victorian/Edwardian terraces
- Tall buildings in Canning Town Town Centre, along the A13, and along docks and Silvertown Way, some from the early 2000s, but most emerging Post-2010.
- New Office and hotel development in Prince Regent - Royal Albert Docks area, and emerging in Canning Town town centre.
- High Street including redeveloped market space
- Large warehouse-style Exhibition Centre
- Extensive industrial estate

Analysis

Overview of structure (permeability, grain, presence of open space and so on)

- Bounded by River Lea in the West, docks to South, railway to the north.
- Significant barrier effects of the A13, Silvertown Way flyover, DLR/Underground rail lines and pylon power line corridors to the south and west; also industrial/disused land to the west blocking river access.
- Reasonable distribution of open spaces, but low access to metropolitan/district parks in area between Barking Road and the A13.
- Patchy development and prevalence of 60s-70s era design based around cul-de-sacs and segregated car and pedestrian environments continue to be the dominant layout and have led to a fragmented, illegible urban structure, with permeability dependent on segregated pedestrian routes and spaces often lacking passive surveillance.
- Redevelopment of areas along Silvertown Way, Barking Road and A13 are continuing to redefine and reconfigure the town centre and wider area with contemporary high and mid-rise developments and more permeable and legible layouts.

Local distinctiveness

- Area was originally marshland, gradually drained and laid out for housing from early Victorian times, spreading out from the station and Barking Road, with the growth of the docks, railways and Lower Lea industry. Prince Regent Lane follows a historic route across the marshes.
- Industry continues to be located in its traditional waterside location, (evolved from Medieval times – tanneries, textiles etc) reflecting also the historic out of London location where there was freedom from regulation for noxious industries.

Building Heights in the Area

- Prevailing suburban character, at 2-4 storeys.
- Recent urban redevelopment typically 8 to 16 storeys, with higher elements of 22 storeys in Canning Town town centre and 24 storeys in Royal Victoria Docks.
- Custom House local centre area dominated by the mass of the Excel Centre, with only other taller buildings being the Custom House Hotel at 6 storeys and the Flying Angel block of flats at 8-9 storeys.

Key locations for the community (meeting places, local shopping parades, parks, and so on)

- Much early housing was poor quality slum development, though some small pockets of better quality earlier development remain. Of particular interest is the Mayflower Docklands Settlement (now the River Christian Centre).
- Across much of the area slum clearance began in the late 1930s, with comprehensive redevelopment continuing into the post-war period, also tackling extensive bomb damage. Rathbone Market is the 1960s relocation of Rathbone Street Market. Some of this post-war housing proved unfit also (e.g. Ronan Point and other high rise blocks) and has been cleared since the 1970s. The final stage is currently underway in the south of the area, acknowledging the major problems of this type of development, being rectified by large scale master-planning and intervention.
- Memorial Ground is the original location of West Ham football club, (then the Thames Ironworks FC) founded for the workers by a local philanthropist. Gates from this time still exist.
- South west of the area - characterised by the immediate post-war 'Garden City' type development of the Keir Hardie estate, which has better withstood the test of time; south eastern edge of the area reflects later drainage and redevelopment of a greyhound track in the 1980s; in-between is a patchwork of 1950s-70s development, with most high rise blocks now demolished (Ferrier Point is the only remaining, refurbished tower)) being in the vicinity of the A13.
- North of Barking Road is a patchwork of different ages/styles of post war development, some modern infill and redevelopment and remnants of older terraces.
- Between Barking Road and the A13, the western wedge of the town centre has been redeveloped. Further east some more extensive Victorian era

- Canning Town town centre, including a reconfigured Rathbone Market and new LibraryPlus
- Local shopping provision on Barking Road (Abbey Arms), Freemasons Road, and Cundy Road.
- Custom House Library
- Community Links, Anchor House
- The River Christian Centre, and other community centres across the area, including youth clubs
- St Luke's Medical Centre (St Luke's Church), Celia Hammond Animal Trust (CHAT)
- Memorial Recreation Ground, Keir Hardie recreation ground, Fords Park, Canning Town Recreation Ground and Star Park
- Cody Dock
- The Siemens Centre
- Various churches, schools and pubs.

Strengths

- West and south areas highly accessible due to West Ham Station, Canning Town Station, and Custom House DLR and Crossrail (from 2018)
- A13 roundabout removed and traffic through area streamlined
- Cable car from Greenwich to Royal Victoria Docks
- Continued investment in roads to improve junction safety, and pedestrian and cycling environment.
- Waterside access created along Royal Victoria Dock and River Lea with new development
- Area adjoins both the Leaway path connecting to the Olympic Park, and the Greenway
- Attractive Victorian shop frontages and other heritage buildings along Barking Road.
- Durability of Garden City styles and Victorian/Edwardian terraces – mainly low rise development with provision of local green amenity space amidst estate buildings or in private gardens, plus reasonable distribution of larger open space.
- Good quality high density redevelopment in Canning Town town centre, of the Keir Hardie estate, and along Silvertown Way; renovation of 60s-70s housing stock elsewhere within the estate south of A13 along with small scale infills.
- Canning Town Town Centre being revitalised through acquiring critical mass (new, larger-scale retail floorspace and other community uses) and improvements in public realm.

terraces remain, with post-war estates at the eastern edges.
- The very southern edge reflects the opportunity of the decline of the docks – attractive waterside setting, and large warehouse sites, resulting in a high rise hotel and residential offer hemmed in between the railway lines/power lines and the docks, plus some warehouse conversions (to offices) and a major warehouse-style exhibition centre (ExCeL).
- St Luke's Church, Tarling Road (Grade II listed) acts as a local landmark, although recent development has eroded its legibility.
- The north side of Barking Road near Canning Town Station comprises of a good group of late 19th century/early 20th century development now designated as an Area of Townscape Value, including a long terrace with reasonably well preserved features and details and consistent cornice line, Canning Town Library and Public Hall, St Margaret's Church, Royal Oak (Grade II), 51-53 Barking Rd
- Flat topography limits views internally, making configuration and layout of buildings important – working to improve views towards the town centre and docks is important.

Strategic Site Allocations Status

- S8 – Thames Wharf – no progress
- S11 – Parcelforce – emerging proposal
- S13 – Manor Road – under discussion
- S14 – Canning Town Central – under construction
- S15 – Canning Town East – Fife Road scheme largely delivered, discussions and site assembly on rest of the site
- S16 – Silvertown Way East – Royal Gateway scheme delivered, discussions on rest of the site

- Important employment land at Cody Road/Bidder Street is largely separated from residential areas, and is well occupied and continues to see investment.

Weaknesses

- Historic poor permeability and legibility across most of the area created by infrastructure barriers (railways, strategic roads, power lines) and building/street configuration (numerous cul-de-sacs and reliance on unattractive segregated pedestrian routes).
- Space for cars is in some places over-bearing, with little effort at mitigation (e.g. tree planting along main roads)
- Poor quality streetscape and housing stock remain an issue in some areas; limited heritage assets to enhance local character.
- Poor mix and distribution of uses across area (including night time economy uses/leisure), and lack of satellite centres particularly away from Barking Road; Canning Town town centre continues to under-perform but this is expected to improve as recent developments.
- Poor environmental quality in older industrial areas, particularly along Bidder Street.
- Accessibility (step free access) varies considerably across the area.
- Poor links across and along River Lea

Opportunities

- Riverside and dockside locations – currently under-exploited
- Accessibility improvements through Crossrail at Custom House, from 2018
- Extensive land with redevelopment potential remaining, some due to come forward in the near future;
- Continued redevelopment of poorly designed housing stock (largely council owned), revitalisation of town centres (being expanded and re-oriented) and improvements to connectivity through masterplanning and Canning Town and Custom House Regeneration Programme.
- Potential Thames river crossing improvements associated with Silvertown River Crossing safeguarding
- Extension of the Leaway down into the Royal Docks as part of developments coming forward

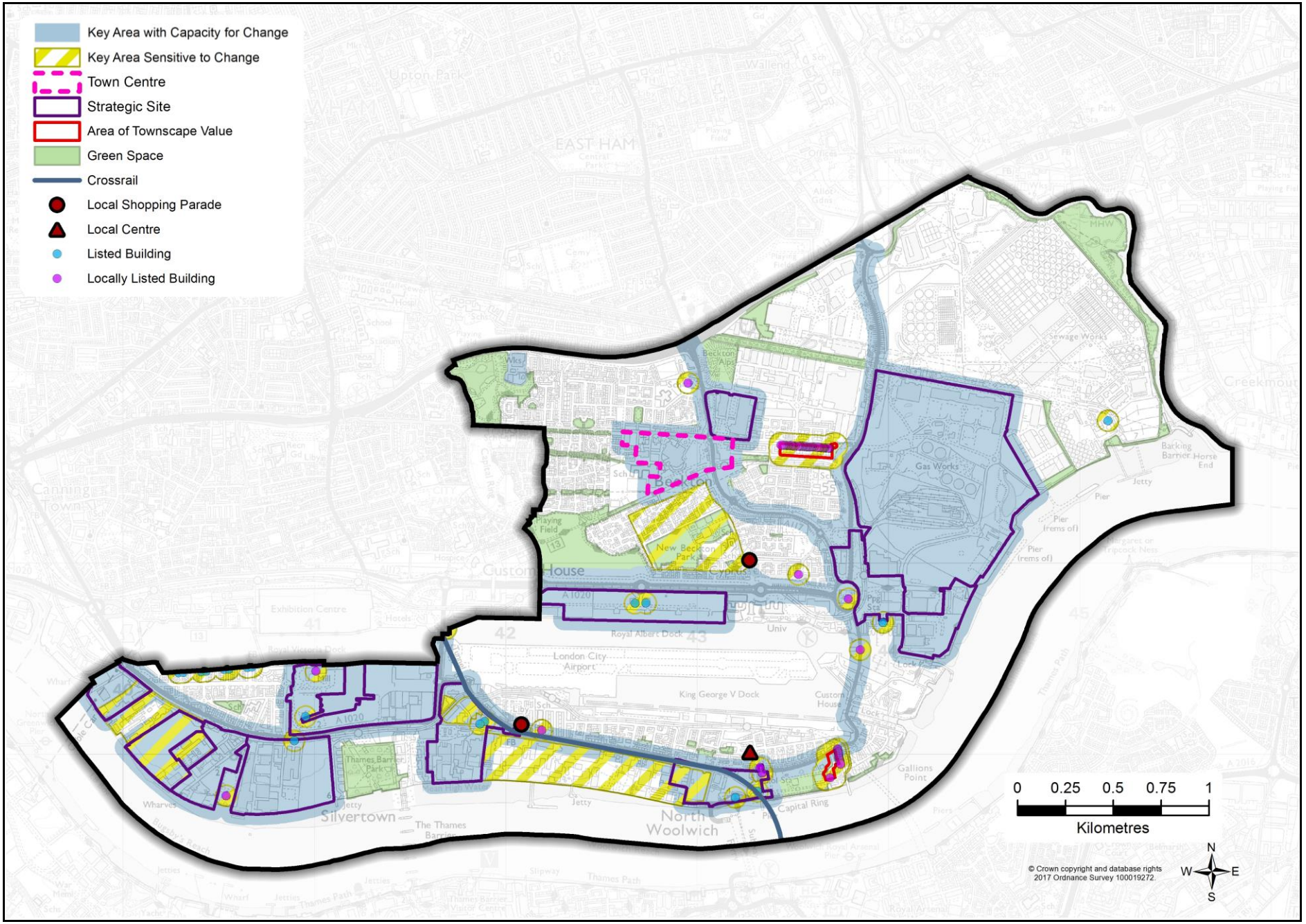
• S17 – Silvertown Way West – consented scheme • S18 – Limmo Site – under discussion • S28 – Custom House/Freemasons Road – discussions and site assembly • S30 – Royal Victoria – largely built out, some emerging proposals and discussions	• Land values uplift from ongoing regeneration, and contributions towards improved local green spaces, education, healthcare and other services • Bidder Street/Cody Road industrial area has potential for location of creative and high tech businesses
	Threats • Poor maintenance of public realm, including some green spaces • Crime and fear of crime –many areas feel unsafe, lacking surveillance, including segregated pedestrian routes. • Perceived imbalance between regeneration of Canning Town and Custom House centres and remainder of the area which continues to suffer from urban decline • Intrusion of traffic noise close to main roads. • Congestion on main roads – impact on air quality • Difficulties associated with undergrounding power lines. • Uncertainties regarding river crossings and safeguarding • Macro-economic cycles interrupting long term projects

Conclusions

Significant features to attend to in place-making	**Areas of sensitivity to change**
• Canning Town town centre is a key focus, continuing to need revitalising and re-connecting with its suburban hinterlands, not only through realignment of streets but also through careful consideration of massing and height of buildings. Custom House/Freemasons local	• Attractive Victorian shopping parades and other buildings along Barking Road. • Garden City style Bevan Houses in south of the area • Employment areas where there are both businesses in operation and vacant land/buildings – needing to achieve a compatible mix of uses. • Other important locations for the community (as identified above).

centre is another focus which urban interventions should revive, and there is the aspiration to create a new local centre at West Ham Station in the north through the adjacent strategic site allocations. • Messy routes network, lacking permeability and legibility, particularly a lack of a clear through-link between Canning Town town centre and Custom House/Crossrail. Core Strategy policy targets the latter through proposals an 'Activity Street'. Connections also need to be addressed with new bridges and better bus routes penetration. • Lack of local centres/community foci east of Prince Regent Lane. • Waterfront opportunities and views. • Heritage assets as set out under 'Local distinctiveness' • Expanding the Leaway into the Royal Docks	**Areas with capacity for change / innovation** • Due to the increased transportation links as well as large projects within and adjacent, Canning Town and Custom House is undergoing a lot of physical change, bringing opportunities for innovation. • Outside of the Canning Town and Custom House Regeneration Programme Area and Strategic Sites elsewhere, much of the neighbourhood area could absorb change, should the opportunity to re-develop it at an appropriate scale arise.


London Borough of Newham
BECKTON &
ROYAL DOCKS
COMMUNITY NEIGHBOURHOOD


Key Area with Capacity for Change
Key Area Sensitive to Change
Town Centre
Strategic Site
Area of Townscape Value
Green Space
Crossrail
Local Shopping Parade
Local Centre
Listed Building
Locally Listed Building
0 0.25 0.5 0.75 1
Kilometres
N
W E
S
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Royal Docks

Character typologies present

- Victorian and Edwardian (vestiges dockland terraces
- Contemporary industrial
- Heritage industrial (remnants)
- Post-war 1960s/70s residential (mainly flats)
- Garden-City style development (limited)
- 1980s-2010 estates (Britannia Village)
- Post-2010, emerging Minoco Warf and other smaller sites
- City Airport

Analysis

Overview of structure (permeability, grain, presence of open space and so on)

- Significant impacts of roads, railways, docks and river – development squeezed and over-extended in linear, comb-like formation, lacking central focal points.
- Significant, but underutilised open spaces along the Docksides, Thames, (Barrier Park, Royal Victoria Gardens, Lyle Park); limited pocket parks in North Woolwich.
- Poor permeability and legibility in most parts – several isolated residential enclaves have been created through poor integration with existing neighbourhoods, and whilst segregated pedestrian/cycling routes contribute to permeability, they are isolated and not overlooked, with safety/security implications, especially at night.
  Absence of clear composition of development, leading to fragmentation of many typologies and associated routes.

Local distinctiveness

- River Thames forms distinctive boundary to south, which newer residential development has sought to capitalise on through building tall to benefit from views. This continues the mid Victorian pattern, which saw Royal Victoria Gardens developed as a day-trip destination likewise capitalising on this asset.
- North Woolwich and Silvertown developed as isolated township settlements, with most other land in the area industrial/dock/railway related. Subsequent residential development occurred as part of post-war reconstruction programmes and opportunist development of waterside sites as these have been

Building Heights in the Area

- 2-4 storeys prevalent historic development, with some contemporary taller buildings of 6-8 storeys, and the tallest reaching to 12-16 storeys
- Recent major developments approved on former industrial land adjoining the river Thames include significant tall buildings of up to 18 storeys
- Proximity to London City Airport prohibits tall buildings in a lot of the Royal Docks
- Nevertheless tall buildings of more than eight storeys are now characteristic of new development in this area.

Key locations for the community (meeting places, local shopping parades, parks, and so on)

released from dock/industrial uses (e.g. Gallions Point to the east, a late LDDC development; Britannia Village in the west – deliberately introverted due to proximity to industrial area/major road still in use).
- Potential conservation area identified around the N. Woolwich Foot Tunnel entrance Station Gardens and cottages
- Millennium Mills and Silo D – large, dockside buildings, remnant of past dockside activity, where most grain processing in the UK used to occur – the docks were excavated and activity massively increased in the mid-to late 19th century and early 20th century.
- Dockside cranes and docks themselves – largest enclosed water space in the world at the time.
- Tate and Lyle works – landmark, long associated with the borough, the largest sugar refinery of its type in the world,
- Thames Barrier and Barrier Park – landmark
- Some modern marina/boatyard development
- St Mark's Church (Brick Lane Music Hall) –Grade II listed

Strategic Site Allocations Status

- S21 – Silvertown Quays – extant permission
- S22 – Minoco Wharf – Royal Wharf under construction, recent permission for Deanston Wharf

- Royal Victoria Gardens and Lyle Park
- Barrier Park - as a tourist destination
- Publicly accessible (privatised) space alongside Royal Docks at West Beckton
- Britannia Village Hall and Green
- St John's Community Centre and Sports Hall, and other community centres in the area, including youth clubs
- Various schools, some pubs
- North Woolwich library
- ASTA Centre, Silvertown
- Fight For Peace Academy
- Drew Road MUGA and Play area
- Albert Road shopping parade
- Britannia Village Market
- Pier Parade shops/North Woolwich local centre
- Nth. Woolwich Police Station
- Access to leisure (cafes etc) on north side of docks at Excel etc.

Strengths

- Riverside and dockside locations have a unique character which provides a focus for new development
- Separation from urban Newham by the docks gives opportunity for innovative approach to development to create distinctive contemporary neighbourhoods building on proximity to river Thames
- Accessibility (step free environment) relatively good, reflecting age of development

Weaknesses

- Need to 'knit' with the rest of Newham, but docks a major barrier (together with major roads, rail lines, over ground power lines). Crossings that are available are largely dominated by heavy road traffic. Poor bus link connectivity.
- Caught between being functional (industry, airport) and residential – identity and focal points not clear/well developed; neighbourliness issues of adjacent areas of different character, particularly in the west, giving rise to a disjoined urban landscape.

	• Residential development located under the functional airspace of London City Airport and thereby subject to significant air and noise pollution • Restricted public access to Thames waterfront areas due to industrial uses and, at Woolwich, ferry traffic. Better access alongside Royal Docks, though also privatised. • Modern industrial uses pay little regard to riverside location (apart from Tate and Lyle which still actively uses the river). • Dominance of roads and car-space in post-war and 1990s development; traffic congestion especially in North Woolwich • Poor permeability, integration and legibility, (lots of cul-de-sacs, some isolated residential enclaves, large single use industrial areas etc.) • Under-used open space in post-war developments (mainly undeveloped bomb sites) and 1980s-2010 estate developments, including important waterside spaces. • Lyle Park entrance obscured from view from nearby residential areas. • Cold/windy microclimate due to exposed spaces near river and dock.
	Opportunities • Riverside locations and docks provide unique physical assets for area as basis for place-making • Accessibility of large area of enclosed water and riverside parks could be enhanced – underutilised open space could, in some instances, be enhanced by providing routes leading through the spaces between trip generators. • Extensive dockside/riverside sites lend themselves to high quality masterplanning and introduction of a clear typology and composition of development, new character areas and improved connectivity and permeability. • Showcase location from air (flights, elevated DLR, cable car). The docks have a rare combination of overhead vantage points. City Airport makes Newham the point of arrival of international visitors. First impressions should be positive. Important that development is viewed from above as well as from ground level. • Complement the 'charm bracelet' of Barrier Park and the developments either side of it, the iconic Millennium Mills building, and attractive marinas as part of a chain extending up to the Leaway and the Olympic Park whilst ensuring that resultant built form is more coherent and connected. • Under-valued heritage assets including buildings that could be re-used in particular Millennium Mills an important East London landmark, Silo D (grade II listed) and Woolwich Station (grade II listed). • Improving transport connections and substantially improving public realm, including

	spaces below DLR viaduct, to provide a backcloth for excellent urban design, and to encourage walking and cycling. An 'activity street' upgrade of North Woolwich Road as a spine connecting residential neighbourhoods, and north-south connections to improve permeability, create focal points and improve accessibility of docks and riverfront; potential to better connect green spaces to create a greater impact (e.g. Lyle Park/Britannia Green) • Further managed release of industrial land that would result in better integrated uses and innovative solutions to the juxtaposition of viable industrial parks and residential neighbourhoods • Further Thames river crossings at Silvertown and North Woolwich • Consolidation/enhancement of Airport operations on current site
	Threats • Intrusion of major transport links (including airport) visually and audibly as well as significant air pollution. • Piecemeal redevelopment leading to poorly designed schemes in terms of linkages where buildings across sites do not relate to each other coherently (through layout scale, massing, as well as mix of uses), have a poorly conceived public realm and lack connections to movement networks, and block east-west access. • Continued dereliction of key buildings (Tate institute, Millennium Mills) • Uncontrolled proliferation of tall buildings that result in negative micro climate and poor urban composition • Risk of access to waterfronts being privatised
Conclusions	
Significant features to attend to in place-making • Integration of development ensuring neighbourliness of different uses (residential, industry, tourism etc.), connectivity, and permeability through as well as in-between sites • Building infrastructure capacity to support the vision for growth, including public transport improvements	**Areas of sensitivity to change** • Former industrial locations adjacent riverside. Continued desirability of employment uses, now including an Enterprise Zone, mean sites have to be handled carefully to ensure that residential and industrial uses area compatible. • North Woolwich local centre, West Silvertown area, and particularly remnants of Victorian and Edwardian development (including heritage assets around the Woolwich foot tunnel portal and Royal Victoria Gardens) are areas with weak

• Creating accessible and high quality local centres and other points of interest, connected to each other and to waterfronts and open/green spaces • Promote views of and access to the waterfronts • Heritage assets should be integrated physically and functionally, ensuring their potential is maximised. • Attention to scale, massing and composition that reflects the status of the Royal Docks as one of the main growth areas of London, but also consider layout, quantum and use mix of development in relation to neighbouring sites and the successful functioning of the whole Royal Docks area. • Development heights are affected by airport safeguarding in Public Safety Zone	identities which risk being over-whelmed by new development. **Areas with capacity for change / innovation** • Large former industrial dockside and riverside sites large enough to be masterplanned to absorb innovation, including managing the effects of taller buildings • Much of the area could absorb redevelopment to make it work better as a place and regenerate post-industrial character of the area.

Beckton

Character typologies present

- 1980s/90s estates with mix of low-rise flats and houses
- Contemporary industrial and retail warehouses
- Post-war 1960s/70s flats
- Remnants of Victorian terraces (Winsor Terrace, pub in Cyprus)
- Campus University (University of East London)
- Contemporary Office Park (emerging)
- Purpose built District Centre (1980s, East Beckton).

Analysis

Overview of structure (permeability, grain, presence of open space and so on)

- Significant impacts of roads, railways, parkland, retail/industrial estates and infrastructure (sewage, gas, DLR depot) affecting permeability and creating some relatively isolated residential enclaves.
- Beckton not well-connected to rest of Newham, including North Woolwich, Canning Town and East Ham.
- Cul-de-sacs prominent across the area affecting permeability and legibility
- Some pedestrian/cycling routes segregated from roads contribute to permeability, but many are isolated and not overlooked.
- Substantive open space only in the south and west – pockets and linear space elsewhere, 'incidental' space, but overall suburban design means greenery prominent in many areas from private gardens etc.

Local distinctiveness

- Flat former marshland, remained largely un-developed until the 1980s as was ear-marked for further Port of London development that never came forward.
- Partially developed in Victorian times as an extensive gas works by a Mr Beck – ironwork gates and workers' cottages on Winsor Terrace remnant of this. Was also the location of the eastern outlet of Bazelgette's sewer system.
- Early estate (Cyprus) was largely demolished due to poor build quality (1 pub remaining, now empty).
- Low rise housing with private/private communal gardens, (deliberate LDDC strategy to provide private

Building Heights in the Area

- Prevailing heights are 2-4 storeys.
- Emerging ribbon of taller buildings south of Royal Albert Way/Atlantis Avenue - University of East London and Newham Dockside up to 7 storeys; Great Eastern Quays up to 13 storeys and ABP's business park development up to 15 storeys, are under construction.

Key locations for the community (meeting places, local shopping parades, parks, and so on)

- New Beckton Park, Beckton District Park and Beckton Creekside Nature Reserve
- Royal Albert Dock
- William Thorne Pavilion

sector housing in a market dominated by social rentals, to realise their asset – land – once drained ground – pumping station in south east corner) • Retail parks and industrial estates built on part of former extensive gasworks site • Area to East continues to be dominated by sewerage works. • Views to Shooters Hill, docks and river to South, partially blocked by new development. • Main topographical feature of significance other than of water is the former Beckton Alps, constructed out of landfill material. • Extensive landscaping of public realm throughout Beckton residential areas in 1980s and later has now matured greatly to the benefit of the area. • Post-industrial feel to the east of Royal Docks Road comprising large patches of vacant wasteland between the long established sewage works other industrial/business parks, Gallions Reach Retail Park, and emerging residential neighbourhoods to the south.	• Beckton Globe Library and Youth Zone • St Mark's Church and Community Centre, and other community centres in the area, including youth clubs • Docklands Equestrian Centre • Shops in retail parks and Beckton district centre • Kingsford Community School • East London Gymnastics Centre • Tollgate Road and Royal Docks health centres • University of East London • Various schools, some churches and pubs • Gallions Hotel (recently renovated) **Strengths** • DLR, bus routes and cycle routes • Access to Roding and Thames rivers and the Royal Albert Dock • Exceptionally well landscaped and mature public realm which extends across most of the community neighbourhood • Winsor Terrace Area of Townscape Value • Good supply of family housing with private gardens and reasonable access to public play space and other amenities. • Accessibility (step free environment relatively good, reflecting age of development). • Recent development is bringing the waterfronts into use **Weaknesses** • Detachment of the suburban estate from the waterside: extensive barriers with the DLR and major roads to south, sewage works and industrial development in east. • Dominance of roads and car-space in 1980s-1990s development, including out-of-centre retail parks and industrial buildings with extensive car parking. • Beckton detached from rest of Newham by Newham Way (A13) and Beckton District Park • Intrusion of busy roads (air pollution), sewage works (odour/visual) and marshland (subsidence). • Land in area is heavily contaminated due to previous industrial use. • Large single-use retail/leisure/industrial parks deserted at night, and inefficient use of

space.

- Discontinuity and lack of connectivity between different housing estates; lack of local centres or points of interest – all neighbourhoods are reliant on East Beckton District Centre, which is largely inward facing, and drive-to retail parks.
- Lack of defensive private space in some areas – poor consideration of relationship between public and private space leading to lack of ownership/maintenance of spaces
- Beckton District Park lack natural surveillance from adjacent properties due to back gardens facing onto park. This also presents a security issue for adjacent properties; the owners respond by building higher fences.
- High proportion of rented properties results in poor maintenance and degraded appearance

Strategic Site Allocations Status

- S19 – Albert Basin – various proposals emerging/ under construction
- S31 – Royal Albert North – consented scheme for business park covering the majority of the site, construction started

Opportunities

- Extensive development site on former gas works land to east,
- Emerging large scale development alongside docks to south.
- Also opportunities to intensify development in existing single storey, single use retail and industrial areas, by given over the extensive car parks to development.
- Gallions Reach Shopping Centre to be promoted as new town centre to support emerging residential development in the area
- Waterside location and views – potential to become more of a destination with improved public access and visitor facilities in new local centre at emerging Gallions Quarter.
- Scope to convert major roads into urban 'streets', improving pedestrian and cycle linkages between different areas, and improve permeability by joining up cul-de-sacs —with extended streets or wide pedestrian / cycle links. Cycling and walking could also be encouraged across green spaces, to activate them.

Threats

- Intrusion of noise disturbance and air pollution from airport and main roads in area.
- Air pollution odours emanating from sewage works
- Homogenous design and complex land ownership limit opportunities to rectify layouts to improve connectivity/permeability or legibility.

Conclusions

Significant features to attend to in place-making

- Reduce prevalence of car-oriented development
- Improve enclosure and legibility,
- Reinforce places where accessibility is good.
- Balancing industry/employment/retail space and residential
- Address isolation from the rest of Newham
- Views and public access to docks and rivers
- Promote redevelopment of Gallions Reach Shopping Park as a new town centre to diversify uses in the area, make better use of land, and support growth in Beckton
- Enhance Beckton town centre by developing/ diversifying community offer
- Maintain suburban character north of Royal Albert Way and west of Royal Docks Road, with taller buildings up to eight storeys acceptable where there is clear urban design and townscape justification for them. Buildings higher than eight storeys acceptable at strategic sites to south of Royal Albert Way and east of Royal Docks Road

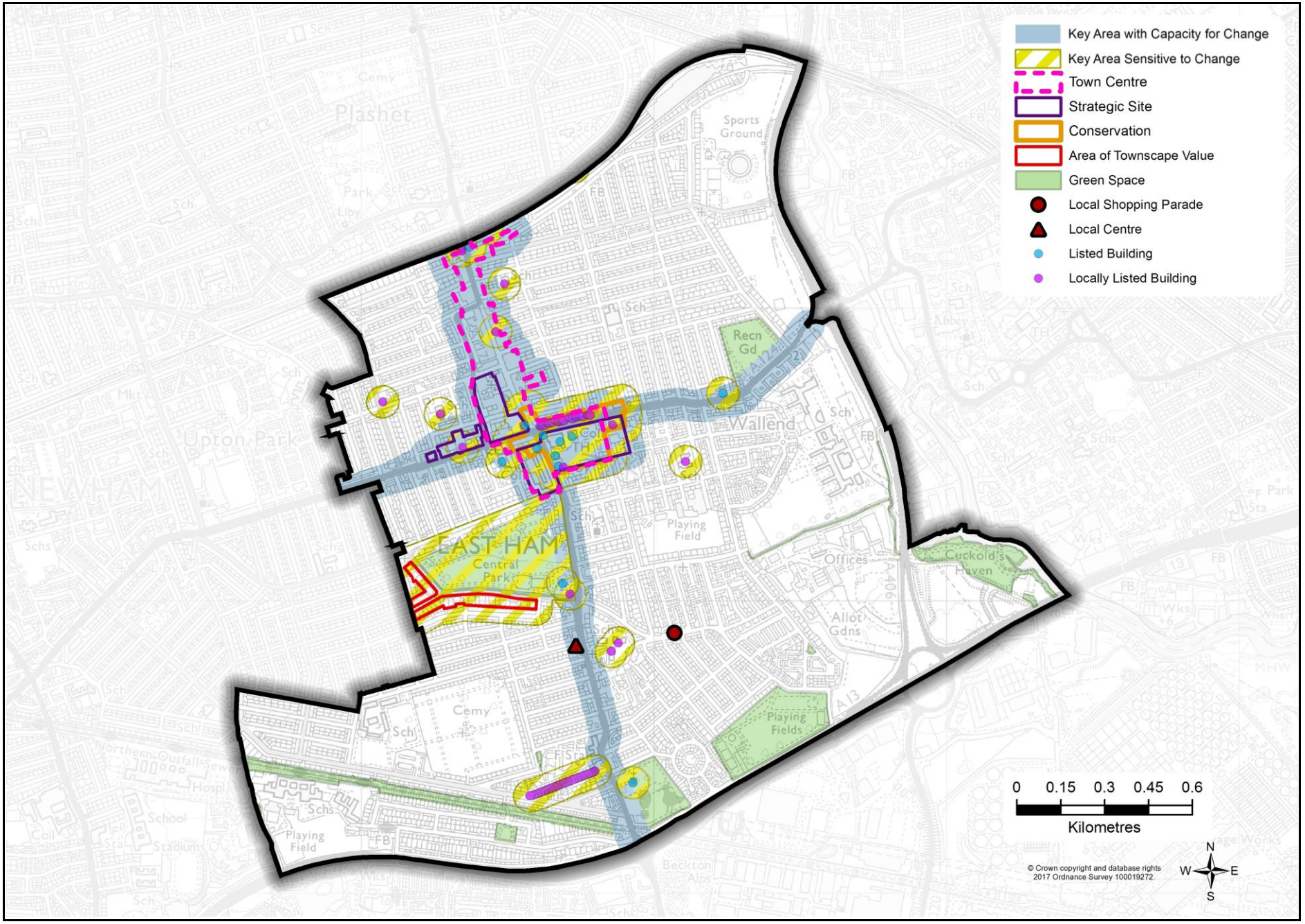
Areas of sensitivity to change

- Area around New Beckton Park – village green feel
- Other important locations for the community (as identified above).
- Area of townscape value (potential Conservation Area) at Winsor Terrace – particularly given limited local heritage assets

Areas with capacity for change / innovation

- Large former industrial dockside and currently industrial riverside sites – large enough to be masterplanned to absorb innovation, including managing the effects of taller buildings, with spacing provided by the water.
- Release of Gas Works site for redevelopment
- Also retail parks – sizeable enough to create new identities, and scope for more efficient land use.
- Much of the area could absorb innovation to make it work better as a place, addressing existing weaknesses.


EAST HAM STATION
London Borough of Newham
EAST HAM
COMMUNITY NEIGHBOURHOOD
50p £1
EAST HAM MARKET HALL


Key Area with Capacity for Change
Key Area Sensitive to Change
Town Centre
Strategic Site
Conservation
Area of Townscape Value
Green Space
Local Shopping Parade
Local Centre
Listed Building
Locally Listed Building
Plashet
Sports Ground
Recn Gd
Wallend
Upton Park
NEWHAM
EAST HAM
Central Park
Playing Field
Offices
Cuckold's Haven
Allot Gdns
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Playing Fields
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Playing Field
0 0.15 0.3 0.45 0.6
Kilometres
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East Ham

Character typologies present

- Victorian and Edwardian terraces dominate
- Small groups of medium-high rise post-war 60s/70s flats and contemporary infill development
- Inter-war housing to east and south (including typology exemplars at Hameway and Brook Avenue)
- High Street typology town centre
- Early 20th century civic centre complex

Analysis

Overview of structure (permeability, grain, presence of open space and so on)

- Significant impacts of roads (A13, North Circular), railways and the Greenway limiting easy pedestrian access on three sides to other parts of the borough and beyond.
- Localised block barriers also created by large sites – Jewish cemetery, Folkestone Rd depot and Langdon School, and the blocking effect of the town-centre by-pass.
- Good provision of open space within the area (other than the northern-central part) ranging from informal open space, through to allotments and playing fields. Central Park provides quality open space to the south.
- Linear high street; largely regular, orthogonal street network typical of Victorian/Edwardian terraced developments

Local distinctiveness

- High Street is a historic N-S route, while Barking Road developed as an important E-W turnpike in 1812. Original settlement focused on these routes and key intersections (firstly at North End and South End – roughly where the two local centres on the High St N/S are today) with pasture/marshland to south/south east, and the River Roding/Back River loop the natural boundary to the east. Church of St Mary Magdalene, High St South, dates from Norman times, a remnant of the medieval parish of East Ham.
- Some larger houses with significant estates emerged between 1750 and 1850. Only Fellowship House

Building Heights in the Area

- Prevailing 2-4 storeys (some taller Victorian houses, post-war maisonettes and schools etc.)
- Tallest currently is Newham FE College at 8 storeys, but buildings of up to 11 storeys have recently been approved on the former Co-op site/St John's Car Park.

Key locations for the community (meeting places, local shopping parades, parks, and so on)

- Most community facilities e.g. library and leisure centre are to be found in the civic centre complex at the centre of the area.
- Central Park, Plashet Park, Barking Road Recreation Ground, Flanders Playing Fields,

(formerly St Bartholomew's Vicarage) built 1830 remains from this period.

- The area remained relatively undeveloped until late Victorian times with the coming of the railway in the 1850s. The railway station (grade II listed) was built in 1858 for the London, Tilbury and South end Railway and given a new main building in 1902 when it became part of the District Line
- Demand for housing for industrial workers, estates included the Ynys Burges estate were developed for housing in this period and into the 1920s (hence Burges Road).
- High street and Central Park developed at this time also (Central Park out of the grounds of Rancliffe House) though the largest shop, the Co-operative department stores, was demolished in 1989. An interesting survivor is the faience clad Art Deco former Burtons store, which complements the well-preserved Edwardian terraces that make up much of the street. Lady Trower Trust fields, an important piece of informal open space were also donated for public amenity, (to the Mansfield Settlement) in 1925.
- Early 20th century civic centre complex (a designated conservation area, with listed buildings within it, considered one of the best preserved examples of its time by English Heritage) includes the East Ham town hall complex, former technical college and the library. Also, former fire station to rear, and police station opposite. Evolved with later Newham FE College opposite.
- Extensive bombing paved the way for significant municipal re-development in the post-war period around Barking Road and in the south of the area.
- Flat topography, meaning views are mainly from taller buildings, from raised Greenway, and along straight, tree-lined Victorian/Edwardian streets (e.g. in north of the area).

Brampton Park, Gooseley Playing Fields, Leigh Road Sports Grounds

- Bobby Moore Sports Pavilion
- Bonny Downs/The Well Community Centre and Flanders Community Centre
- East Ham town centre, High Street South local centre; independent shops along High St and in the market hall
- Various Churches, Islamic Centres & Mosques, most along Barking Road and High Street North
- Various schools and pubs
- East Ham Station

Strengths

- Excellent transportation connections, with high PTAL rating
- Legible grid pattern, with reasonably fine grain throughout the area.
- Low rise, high density linear terrace houses with private amenity space
- Well served by public open space: Central Park, Plashet Park, Flanders Playing Fields. Also non-public space at East Ham Jewish Cemetery, Plashet Cemetery and Council depot.
- Mature trees and good quality natural greenspace visible and accessible in Central Park and to the east; also most streets well populated with street trees.
- Attractive Victorian/Edwardian housing, including Rancliffe Road Area of Townscape Value as well as non-designated assets. Heritage assets such as the Town Hall, Old Fire Station and East Ham Police Station add to the character of the area.
- Vibrant high street serving the local communities and wider area
- Access to the Greenway

Weaknesses

- Car-oriented design of Ron Leighton Way encourages bad driving, speeding and presents road danger. This local barrier also affects local permeability and legibility. Bus and footway congestion and intensive kerbside activity on High Street.
- High Street congestion leading to unpleasant street environment, noise and air pollution
- Poor pedestrian connectivity to south and east.
- Greenway also acts as barrier at the southern tip of the area.
- Noise from main roads in the south and east (Newham Way, North Circular) and

- Local landmarks include the designated heritage assets of the Denmark Arms PH, Dukes Head PH and East Ham Station; and locally-listed assets such as the Former Grenada Cinema, Barking Road, various Victorian/Edwardian schools and pubs.

Strategic Site Allocations Status

- S25 – East Ham Market – various sites under discussion, consented proposal for St John Road Car Park
- S26 – Town Hall Complex – various non-intrusive schemes being implemented to support secondary school on site

railways to the north.
- Market Hall is hidden and doesn't contribute much to the street scene; town centre is very linear.
- Lack of step free access for most public area and pavements that are too narrow in the Town Centre.
- Insecure access to flats above shops at rear of commercial premises.
- High proportion of rented properties results in poor maintenance and degraded appearance
- Under used green space adjacent the North Circular Road

Opportunities

- Area has a very high PTAL rating, making it suitable for higher density, car-free development.
- Various vacant retail on High Street North and High Street South and under-used car park sites on Barking Road (next to Bingo hall & behind Sainsbury).
- Recent public realm improvements in East Ham town centre will support economic regeneration.
- Elsewhere, infill plots provide opportunities for redevelopment – some large sites on accessible High St South (e.g. Burgoynes)
- Metropolitan Open Land to the east of the area could be made more accessible; parks elsewhere could be activated through fitness and play equipment.
- Civic centre comprising Council offices, leisure centre and library set town centre character
- Opportunity to diversify leisure and night time economy (e.g. family-oriented restaurants, children's activity centres, cultural night time activities).

Threats

- Proliferation of takeaways and betting shops, large number of pound shops, and quality of shopping offer which is generally at the lower end of the market, all undermine the town centre's wider appeal.
- Congestion along Barking Road and High Street/Ron Leighton Way.
- Poor quality, cluttered public realm and some low quality buildings around East Ham Station undermining first impression of the town centre
- Insensitive alterations to individual houses and erosion of front gardens to driveways

	and poor management/maintenance of private rented stock • On street parking dominating some residential areas; road infrastructure reduces attractiveness of area for walking and cycling.

Conclusions

Significant features to attend to in place-making

- Improve through conservation and enhancement/redevelopment the existing civic centre and other civic/heritage assets, especially around Central Park.
- Attractiveness and identity of the town centre, notably public realm issues (including the poorly designed by-pass) and quality of retail and leisure offer (including night time economy); potential for greater attention to designated and non-designated heritage assets, such as well-preserved Edwardian terraces and interesting later infill such as the Art Deco former Burtons Store (Halifax).
- Enhance town centre attractiveness and function by redeveloping redundant/underused sited on East Ham High Street.
- Area around East Ham Station could accommodate taller elements of up to 10 storeys, subject to careful integration with its historic environment
- Preserve the residential character of area by protecting and refurbishing dwellinghouses and through sensitive infills
- Improve connectivity across the south (including isolated sector of forum area south of the Greenway) and east infrastructure barriers.
- Improve quality and accessibility of green space at east boundary of CFA to provide high quality amenity area.

Areas of sensitivity to change

- Civic centre complex including listed buildings and conservation area, and various other local and listed heritage assets.
- Setting of Central Park, including Rancliffe Road Area of Townscape Value
- Open areas to east of the area – Metropolitan Open Land and flood plain.
- Other important locations for the community (as identified above).

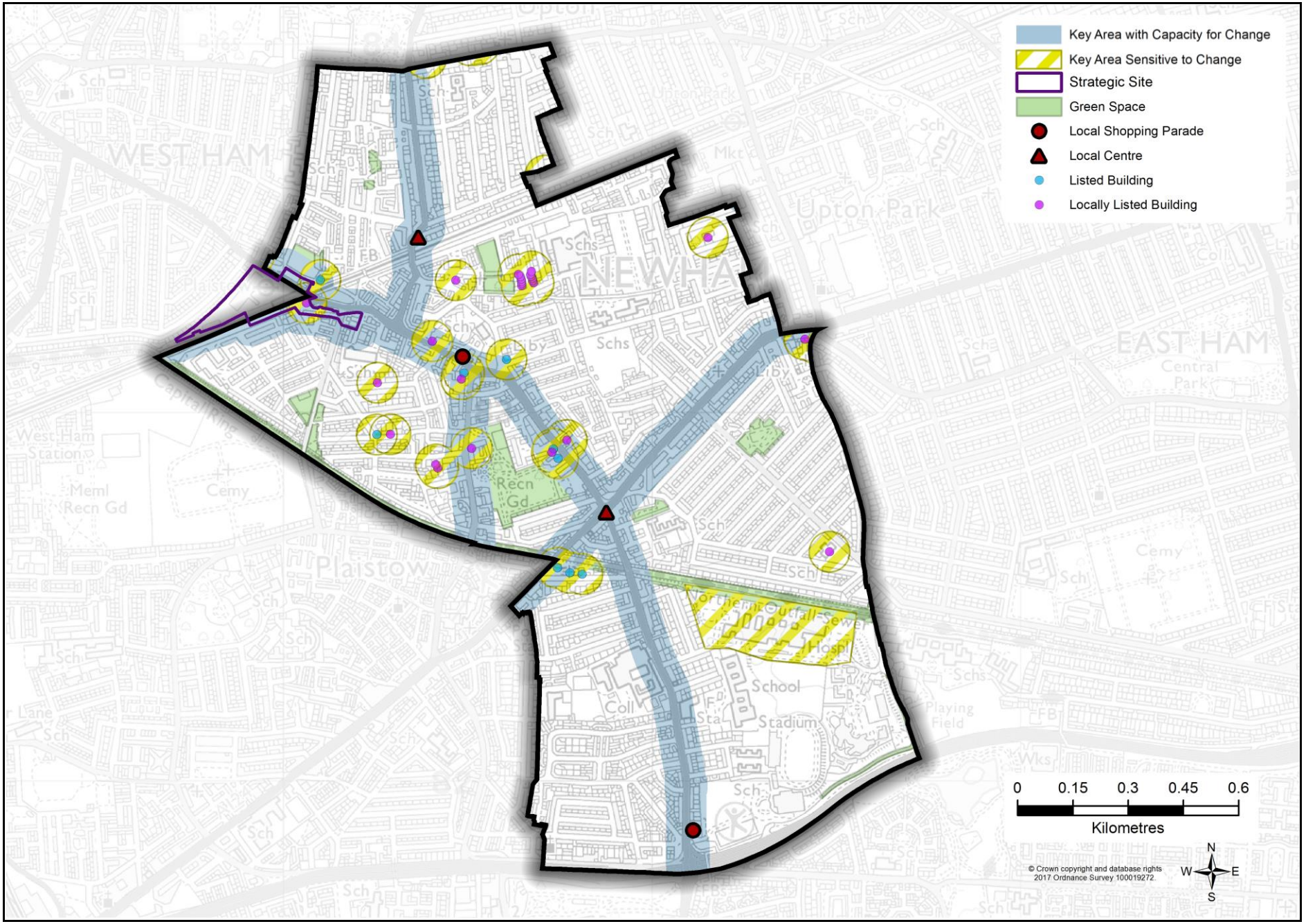
Areas with capacity for change / innovation

- Sizeable under-used sites in the town centre/edge of the town centre which could be more efficiently used and masterplanned to contribute to place-making objectives and absorb innovation; also Ron Leighton Way itself.
- Redundant sites on High Street South

London Borough of Newham

PLAISTOW

COMMUNITY NEIGHBOURHOOD


Key Area with Capacity for Change
Key Area Sensitive to Change
Strategic Site
Green Space
Local Shopping Parade
Local Centre
Listed Building
Locally Listed Building
WEST HAM
NEWHAM
EAST HAM
Upton Park
Plaistow
Recn Gd
Memi Recn Gd
Cemy
School
Stadium
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Plaistow

Character typologies present

- Victorian and Edwardian residential terraces are dominant feature; some Georgian remnants (Balaam Street, High Street, London Road)
- Inter-war residential (pockets); post-war 1960s/70s residential estate-based redevelopment - mainly in the north around the railway
- Small contemporary infill and redevelopment of post-War estates
- Large contemporary hospital (low density, campus-style), leisure centre and stadium site
- High streets typology shopping parades and local centre

Analysis

Overview of structure (permeability, grain, presence of open space and so on)

- Significant barrier effects of railway (in the north) and the Greenway (in the south-southwest), limiting north-south connectivity in key sectors of area; Newham Way/A13 limits connections towards Custom House in the south;
- Long terraces in northern part and to south of Barking affect permeability. Southern part has very limited permeability due to extensive stadium and school and hospital sites. Post-war estates are also disruptive of permeability – failing to provide through connections and lacking legibility.
- Reasonable provision of open space in mid-northern sector; otherwise access to larger spaces lacking, though some private greenery visible.

Local distinctiveness

- Historic north south route – Prince Regent Lane, Greengate St, High St. Barking Road, also historic - an important East-West route. Plaistow village was clustered to the north of this, along Greengate and Balaam St, (some remaining Georgian properties) and the junctions around St Mary's Church. Locally listed and listed buildings are largely clustered around these roads
- Black Lion – historic coaching inn (origins in 18th century)
- Coach and Horses, likely to date from late 18th

Building Heights in the Area

- Prevailing character is low rise 2-4 storeys
- Some taller post-war development in estates of 3-6 storeys or scattered tower blocks of 10-17 storeys.
- Recent tall buildings are absent apart from a cluster of modern examples on the High street (up to 6 storeys)

Key locations for the community (meeting places, local shopping parades, parks, and so on)

- Greengate local centre, Shopping parades on Terrace Road and High Street

century. Historic coach stop – used later by horse-drawn omnibuses taking people to London (from 1855)
- The adjacent Laurels is a locally listed house in coursed squared rubble with stone dressings
- Railway opened 1858, with a station at Plaistow Road, connecting northern part of the area E/W. Southern part remained underdeveloped marshland until the early 20th century (hence 'Greengate' to pasture).
- Remnants of Essex House estate (Essex Lodge, Greengate St); several larger houses abandoned and pulled down as proximity of manufacturing industry increased and labouring classes moved in late 19th-early 20th centuries, including Willow House. Willow Cottage remains as a former lodge to the larger house.
- Plaistow Hospital – pioneering fever hospital, 1901. Area had several hospitals and charitable institutions. Also former YMCA building, Greengate St.
- Passmore Edwards Library, North St (1902)
- West Ham Tramway Office, Greengate (remnant of larger tram depot)
- Memorial Baptist church (byzantine style, 1920s)
- Listed Earl of Derby PH, London Rd
- Listed St Andrews Church, Vicarage and ancillary buildings
- Some Victorian semis and taller townhouses (e.g. Crescent Road, Chesterton Road)
- Small cluster of locally listed gothic revival houses on Plaistow Park Avenue. (1-11 and 2-12)
- Flat topography, no notable views

- Plaistow Park Community Centre, Barking Road Community Centre, the Mix, Jeyes Community Centre, Queens Road West Community Centre
- Balaam Leisure Centre, Newham Leisure Centre
- Plaistow Park, Lister gardens, May Green, St Marys Allotment Gardens, New City Green, Lister School Playing Fields
- Plaistow Station
- Various schools, mosques and churches
- Various Public Houses (e.g. Black Lion, Prince Albert)
- Newham University Hospital

Strengths

- High density Victorian/Edwardian terraced housing with front and rear gardens; general positive streetscape aspects of Victorian/Edwardian terraces
- Pocket parks and green space in Post War development.
- The Greenway
- Presence of major institutions, Newham Hospital and Newham College of Further Education
- Good bus connections along Prince Regent Lane and northwards, also Barking Rd

Weaknesses

- Lack of a community focus/'heart' as important community buildings are dispersed or concentrated in town centres in adjacent CFAs (Green Street, Canning Town, Stratford).
- Permeability issues in the residential core
- Connections across Newham Way (in the south), the Greenway (in the west and middle) and the railway (in the north);
- Poor sense of enclosure and lack of natural surveillance along sections of key routes including Plaistow Road, High Street, and at Greengate crossroads; degraded streetscapes due to poor maintenance of some buildings, including vacancies.
- Deficient access to local parks in sections north of the railway and south of Barking Road
- Lack of step free access and generally poor pedestrian environment in many areas of public realm
- Road-space/car-space domination in post-war development, including 'dead' garage

courts
- Congestion on Prince Regent Lane and Barking Road

Site Strategic Allocations Status

- S29 – Plaistow North – consented scheme for Valetta Grove section, discussions for Ford site.

Opportunities

- Redevelopment around the station is bringing some sizeable opportunities, especially along High Street, including the creation of a new local centre
- Change of use/infill opportunities along Barking Rd
- Opportunity to improve efficiency of land use and connectivity/permeability around Newham Leisure Centre/Plaistow Stadium
- To enhance settings of listed/locally listed buildings and other community assets
- Scope to improving pedestrian environment, cycle linkages to the Greenway, and permeability by joining up segregated streets — with extended streets or wide pedestrian /cycle links.

Threats

- Intrusion of traffic noise and pollution from main roads
- Paving over of front gardens/removal of greenery and insensitive alterations to individual houses
- Poor quality shop fronts along High Street and Balaam Street

Conclusions

Significant features to attend to in place-making

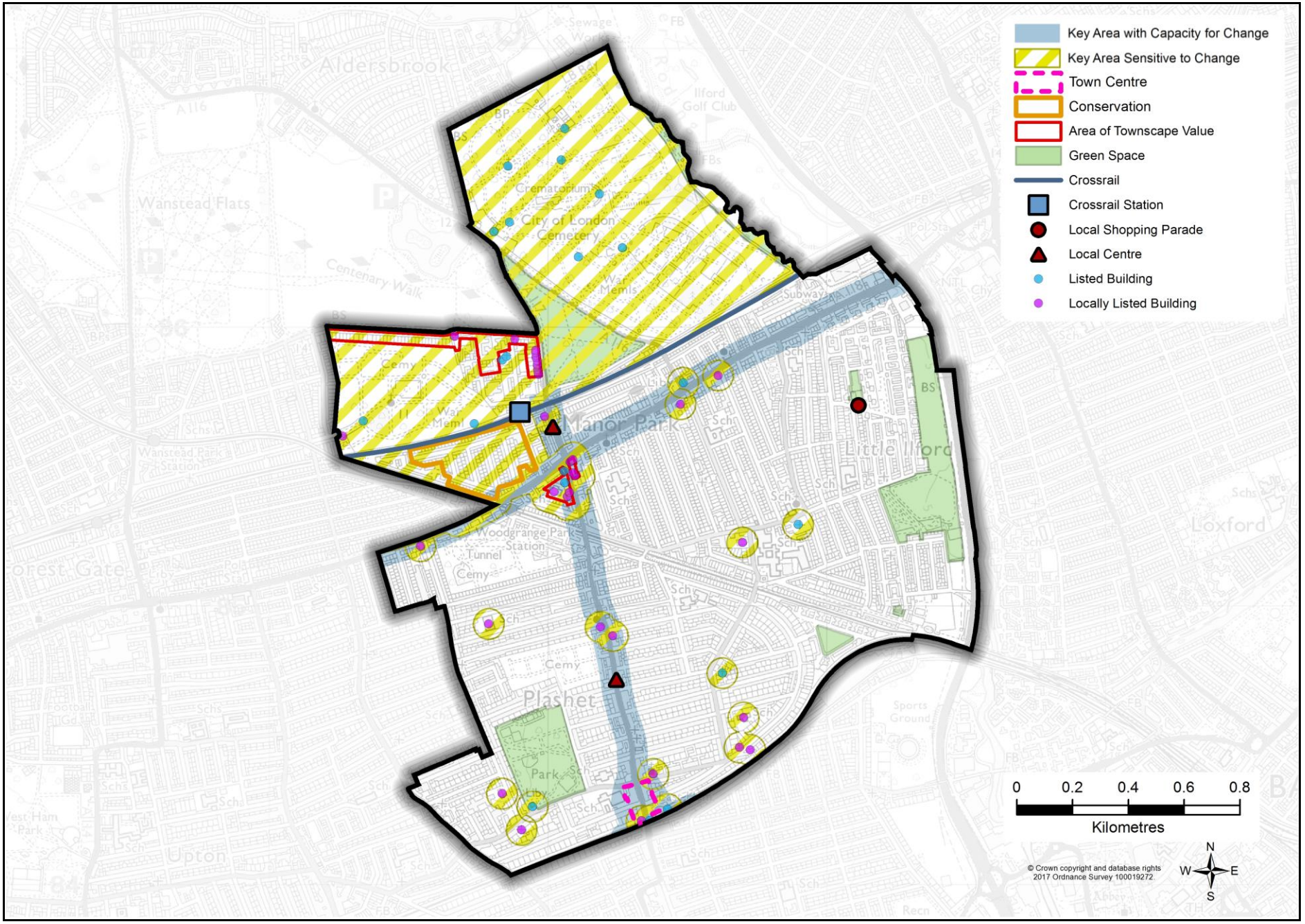
- Lack of a strong local centre – opportunity around Plaistow Station, including for inclusion of some tall buildings through masterpplanning of strategic site(s) to support placemaking principles;
- Placemaking/ streetscape improvements to London Road, and Greengate/Barking Road and Broadway/

Areas of sensitivity to change

- Victorian terraces – due to the importance of their continuity and uniformity, as well as their importance for providing family housing at the heart of the borough
- Plaistow Hospital site
- Other important listed/locally listed buildings and locations for the community (as identified above).

North Street/Balaam Street crossroads • Need to address disjointedness brought about by post-war estate development which created enclaves, and barrier effects of key land uses • Poor quality housing locally, lacking distinctiveness. • The need to secure a viable and appropriate use of the Newham Leisure Centre/Plaistow Stadium site while protecting the functionality of Newham University Hospital • Generally, reintegrate historic, currently neglected assets into the urban structure.	**Areas with capacity for change / innovation** • Much of the forum area could absorb change, should the opportunity to re-develop on an appropriate scale arise, that would address poor design performance and create wider benefits such as new routes • The station is a logical place for a local centre, which could absorb appropriate contributions to legibility in the context of the historic station building and adjacent High Street.


London Borough of Newham
MANOR PARK
COMMUNITY NEIGHBOURHOOD


Key Area with Capacity for Change
Key Area Sensitive to Change
Town Centre
Conservation
Area of Townscape Value
Green Space
Crossrail
Crossrail Station
Local Shopping Parade
Local Centre
Listed Building
Locally Listed Building
Aldersbrook
Wanstead Flats
Manor Park
Little Ilford
Plashet
Upton
Loxford
Forest Gate
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Manor Park

Character typologies present

- Victorian and Edwardian residential is dominant built form
- High street typology local centres
- Inter-war residential (pockets)
- Post-war 1960s/70s residential (mainly flats) - pockets of, plus two small estates
- 1990s to 2010 small infill estates
- Two large cemeteries: Manor Park Cemetery and Crematorium, and City of London Cemetery and Crematorium

Analysis

Overview of structure (permeability, grain, presence of open space and so on)

- Significant barrier impacts of major roads, railways, extensive green land and Roding River. Best outward connections are westerly.
- Week permeability across railways and long terraces to the west of Fourth Avenue
- Manor Park Cemetery and Crematorium creates a block-barrier.
- Good provision of open spaces, including Metropolitan Open Land to the east, and north in the London Borough of Waltham Forest.

Local distinctiveness

- River Roding/Alders Brook provides a natural, if channelised, boundary, reinforced by the North Circular. Area largely flat with key views being into it/outwards across the open space to the north.
- Romford Rd - historic east-bound route linking Romford and Stratford, though for many years main settlement was Little Ilford – church of St Mary the Virgin remains (12th century).
- A Cluster of designated heritage assets (Earl of Essex PH, Coronation Cinema) and non designated heritage assets (618-622 Romford Road, Broadway Chambers, Salisbury School, 495 and 499 High Street North) at the junction of Romford Road and High Street North indicates the historic importance of this road and

Local Building Heights in the Area

- Prevailing character is suburban low rise, 2-4 storeys; taller buildings are flats or community buildings (e.g. schools, churches) on distinctive plots
- Some high rise 1960s/70s blocks (8-14 storeys) along Walton Road, Grantham Road, Hathaway Cres.

Key locations for the community (meeting places, local shopping parades, parks, and so on)

- Plashet Park, Woodgrange Park, Manor Park, Little Ilford Park, Wanstead Flats (across the boundary in Waltham Forest)
- Manor Park local centre (Station Road) High Street North shopping parades
- Froud Community Centre Young Achievers Group (SEN), Little Ilford Centre
- Froud Community Centre, Jack Cornwell Community Centre, Manor Park Community

crossroads.

- Historic outer-London position – location for cemeteries, where many of the borough's designated heritage assets are to be found (including a listed WWII monument in Manor Park cemetery)
- Also suburban development - local people campaigned for a railway station to be opened. Main development in mid Victorian times, some poorly built, and hence slum clearance and redevelopment in the east in the 1960s. However, this period also saw important philanthropic investment – the Carnegie Library (Romford Road) and Passmore Edwards Library (1899, Plashet Grove).
- Remnants of older estates include Plashet Park, City of London Cemetery and Crematorium, Little Ilford Park are evident. Also the Manor House – that gives the area its name.
- More substantial Victorian/Edwardian villas and mature street trees on some roads (e.g. Claremont Rd, Windsor Rd, Forest Drive) – partly the edge of Woodgrange Conservation Area to west (see Forest Gate analysis) and also within Durham Road Conservation area, a small late Victorian suburb that retains much of its original charm and character. Developed in the 1880s, it was built by one builder to an overall plan, which gives it its distinctive sense of character and unity.
- Capel Road and the vicinity is an area of Townscape Value due to the number of well-preserved Victorian Houses, fine mature trees, designated heritage assets including the Burnel Manor House, and juxtaposition with open spaces of Wanstead Flats.
- Surplus railway land has given some opportunities for infill
- Influence of diverse ethnicity evident in, for instance, Sri Murugan Temple, Browning Road (Indian style, imported materials, 2005)
- Other local landmarks include the Church of St Centre, Queens Terrace Community Centre
- Various schools, churches, temples, gurdwaras, Islamic centres (notably Sri Murugan Temple, Browning Road)
- Manor Park Library
- Various public houses e.g. Ruskin Arms, Earl of Essex Romford Rd

Strengths

- High density Victorian/Edwardian terraced housing with front and rear gardens providing significant family housing; general positive streetscape aspects of Victorian/Edwardian terraces
- Mature trees and natural greenspace visible and accessible in cemeteries and parks (to the north this is designated Metropolitan green belt); accessible riparian environment along Roding Valley; railways lines recognised as green corridors.
- Infill has maintained the dominant pattern of development (low rise, rhythmic terraces)
- Attractive Victorian housing edging Wanstead Flats (Areas of Townscape Value).
- Durham Road conservation area is an estate of well-preserved Victorian detached and semidetached villas.
- Community neighbourhood has several notable buildings which form local landmarks such as the Earl of Essex PH and Sri Murugan Temple
- Manor Park is a Crossrail station which will commence operation in 2018.
- Romford Road and High Street North are a major routes connecting to the rest of the borough.

Weaknesses

- Lack of a community focus/'heart' for the community neighbourhood including poor local quality centre.
- Impermeable long streets and some infill cul-de-sacs
- Lack of public green space in interior of the area.
- Noise and visual intrusion of main roads (including elevated A406) and railways.
- Lack of street trees in places, particularly south of the area.
- Overhead power lines in Roding Valley.
- Lack of step free access in many areas of public realm.
- Romford Road is a major route through the borough but has many poor quality

Barnabas, Browning Rd), Ruskin Arms, Manor Park Church and Manor Park Tabernacle (High St North)

frontages in this area

Opportunities

- Small infill plots mainly or redevelopment of poor quality building stock; some potential for larger redevelopment along eastern end of Romford Road
- Crossrail likely to bring opportunities to upgrade and strengthen Manor Park Local Centre.
- Scope to improve access to open space in the area through improvements to permeability.
- Improve local employment offer through intensification at appropriate locations along High Street North and Romford Road

Strategic Site Allocations Status

- none

Threats

- Loss of continuity of frontage on Romford Rd
- Intrusion of traffic from main roads (congestion, noise, air pollution), particularly the North Circular.
- Paving over of front gardens/removal of greenery.
- Poor quality shop fronts
- Insensitive alterations to individual houses and poor management of private rented stock.

Conclusions

Significant features to attend to in place-making

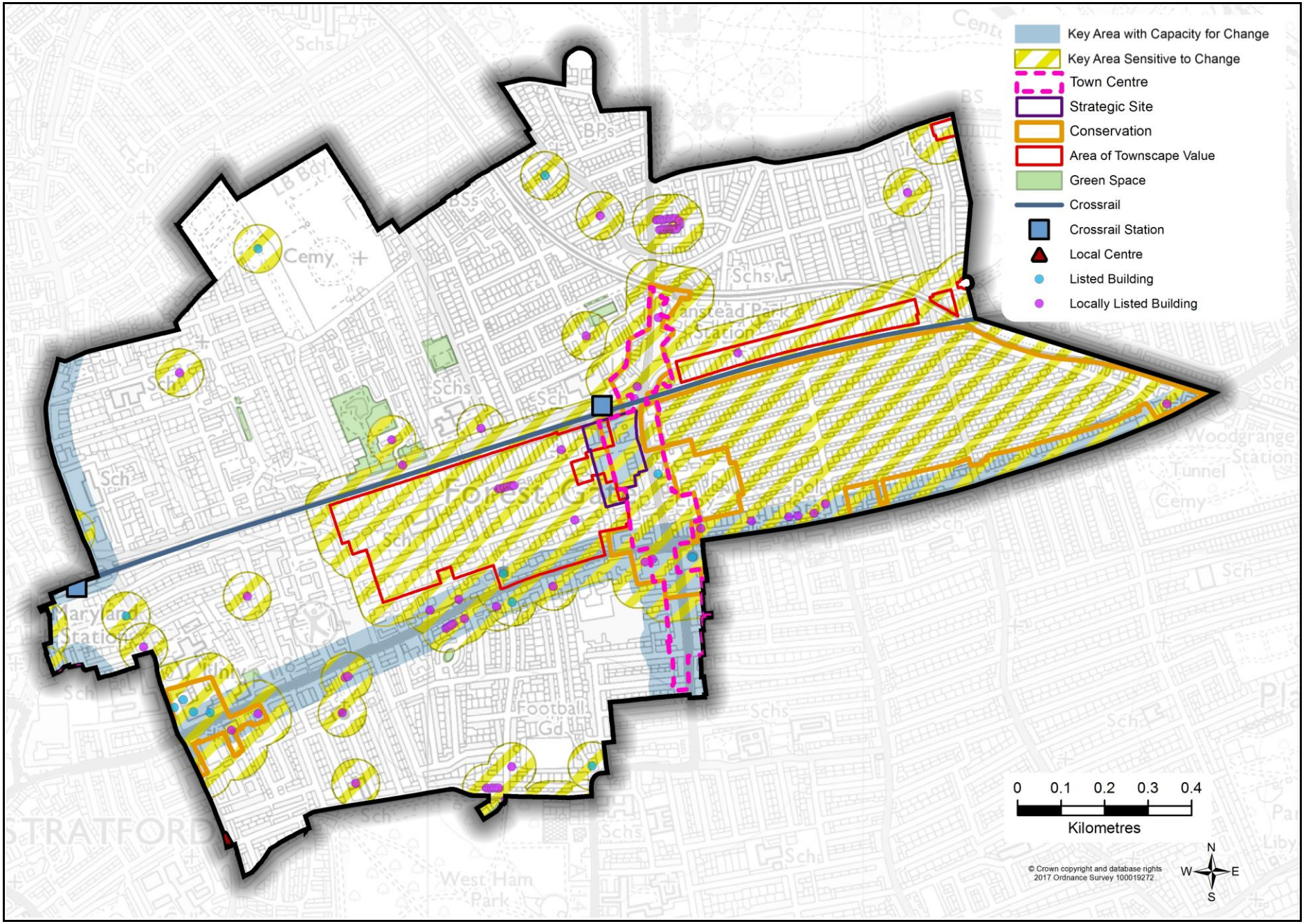
- Revitalisation of Manor Park local centre, optimising Crossrail opportunity
- Relationship with Wanstead Flats/Metropolitan Open Land
- Cluster of heritage assets in the Romford Road/High Street North area and Areas of Townscape Value.
- Preservation and enhancement of Durham Road

Areas of sensitivity to change

- Backdrop to Wanstead Flats (Capel Road, Forest Drive, Forest View and surrounding streets)
- Vicinity of heritage assets along Romford Road/High Street North and elsewhere.
- Capel Road Area of Townscape Value, High St. North Area of Townscape Value
- Durham Road Conservation Area.
- Other important locations for the community (as identified above).

conservation area. • Loss of enclosure on parts of main roads. • Promotion of Romford Road and High Street North as linear gateways.	**Areas with capacity for change / innovation** • Romford Road, High Street North and Station Road (inclusive of Manor Park local centre) have most capacity to absorb selective changes including taller buildings, as they have been subject to most mixing of uses and styles over time, with smaller building blocks as opposed to extensive terraces. They are also accessible, and offer opportunities to address problems of enclosure and legibility • Likewise post-war estates, which replaced earlier terraces in the east of the area, and along Greenhill Road (behind High Street North at Romford Road junction).


The Gate
0800 234 6242
ATHERTON
Forest Gate
London Borough of Newham
FOREST GATE
COMMUNITY NEIGHBOURHOOD


Key Area with Capacity for Change
Key Area Sensitive to Change
Town Centre
Strategic Site
Conservation
Area of Townscape Value
Green Space
Crossrail
Crossrail Station
Local Centre
Listed Building
Locally Listed Building
0 0.1 0.2 0.3 0.4
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Forest Gate

Character typologies present

- Victorian and Edwardian terraces are the dominant style, with an extensive area of larger villas within Woodgrange Conservation Area, and large Victorian houses along Earlham Grove.
- High street typology local centre along Woodgrange Road, including Forest Gate Conservation Area with attractive 19th century terraces
- Some post-war 1960s/70s re-development (mainly flats/maisonettes, some tower blocks – some commercial, especially in and around town centre).
- Pockets of contemporary infill

Local distinctiveness

- Partly built as a desirable commuter suburb in Victorian times with the opening of the railway stations from 1841, with smaller workers' terraces to the north west of the area. Reflected opportunity of flat land, away from mashes to south, closer to the more desirable Epping Forest – hence Forest Gate name - now Wanstead Flats (Woodgrange was originally a farm, and market gardening continued into Victorian times –hence Nursery Lane).
- Yellow Stock brick reflecting locally-available materials.
- Woodgrange Conservation Area includes

Analysis

Overview of structure (permeability, grain, presence of open space and so on)

- Best outward connections are from the eastern to western part of the area provided by Romford Road & Forest Lane, though one strong north-south connector – Upton Lane/Woodgrange Road in the centre, and Leytonstone Road/Water Lane to western edge.
- East-west railway is a key barrier parallel to Romford Road, reinforced by long linear east-west terraces in this vicinity; Gospel Oak-Barking line is more frequently bridged, but not to an accessible standard.
- Relative easy access to good quality open space at Wanstead Flats and West Ham Cemetery to the north and West Ham Park to the south. Pockets of open space are also provided such as Odessa Park and Forest Lane Park in the centre, plus general leafy-feel in the residential areas, due to larger gardens, street trees and straight roads, especially to the east.

Local definitions of taller building (according to current built form)

- Prevailing height is 2-5 storeys, with taller buildings being terraced residential units above shops along Woodgrange Road and Romford Road, some contemporary infills, and schools and churches
- Some higher rise blocks of 8-11 storeys in the town centre vicinity and elsewhere as small components of post-war estates (including one 22 storey tower), also a 8-9 storey office block on Romford Road, and some modern infill development in key locations (e.g. around Water Lane).

Key locations for the community (meeting places, local shopping parades, parks, and so on)

- Forest Gate Town Centre and associated amenities including 'The Gate' library and community centre and Durning Hall (although the latter may relocate in the near

distinctive triple/ quadruple-fronted Victorian villas with spacious front gardens and general uniformity due to continuity of land ownership through the development period: built by one developer, Cameron Corbett.
- Attractive shopping parades developed contemporaneously on Woodgrange Road, (also a conservation area) has maintained traditional façade in places, supported by recent restoration work. Religious views of landowner meant no pubs were allowed.
- Historic inn – Eagle and Child, outside of estate area, reflecting historic route pattern and toll gate location (Romford Road, Forest Lane, Woodgrange Road, Upton Lane)
- Several churches from same era.
- 1950/60s redevelopment reflecting WWII bomb damage, and Housing Act powers (especially to west of Woodgrange Road) had first tower block (11 storeys) in West Ham.
- SW edge of area is edge of original Stratford village (road The Green, marks the common). Is now part of the University Conservation Area, due to the important civic (some grade 2* listed) buildings built in the 1890s-1900s on the Green, and across from it (borough of West Ham Electricity Board offices), plus the later, 1950s Bow County Court. Pigeons Pub re-built in this period is the site of an older coaching inn on the historic Romford Road.
- Topography is largely flat, with limited views except along long conservation area streets.
- Local landmarks and distinctive buildings include both designated and non-designated assets - various pubs, churches, and larger villas. These are clustered particularly around West Ham Park, Romford Road, Earlham Grove, Sebert Road and Capel Road.

future), and various other community centres in the area
- Atherton Leisure Centre.
- Clapton Football Club.
- Smaller open spaces including Odessa Road Open Space, Forest Lane Park.
- Access to and views onto larger open spaces at boundaries: West Ham Park, Wanstead Flats in Waltham Forest.
- Various churches and schools (notably Forest Gate Community School, Methodist church and hall, Woodgrange Road)
- Various pubs.

Strengths

- Strong local identity focused on 'high street' comprising Woodgrange Road with distinctive Conservation Area (covering whole of town centre) features (e.g. façade with a strong rhythm on Woodgrange Road), including locally and statutorily listed buildings.
- Strong heritage estate identity (further details in Woodgrange Conservation Area Appraisal)
- Large family houses with private amenity space, front and back gardens.
- Mature trees and natural greenspace visible and accessible.
- Local employment provided in shops, offices, Hovis Bakery factory at Nursery Lane, and in small business units (railway arches/Sprowston Mews workshops)
- Railway providing important green corridor (SINC).
- Much of older housing stock in good condition and has not been subject to insensitive alterations, in part due to conservation area status
- Proximity to large scale metropolitan open space at Wanstead Flats.

Weaknesses

- Railway creates barrier to movement.
- Lack of local, smaller open spaces within urban grain.
- Some post-war and successive redevelopment, including schools and industrial buildings has resulted in disjoined street patterns and barrier effects.
- Post-war development sits uncomfortably in close proximity to conservation-area grade Victorian housing.
- Town centre offer is poorly developed and has a limited retail offer, affecting its

attractiveness. Takeaways and betting shops are prominent outlets on Woodgrange Road. Better north-south integration of the centre is needed, as opposed to ribbon development along Romford Road.
- Poor quality shop-fronts and poor quality hotels along Romford Road
- Backyards and alleyways in the town centre are inadequately overlooked and present a safety risk; Insecure access at rear of commercial premises.
- Lack of step free access in many areas of public realm and into buildings.
- Some cleared, vacant sites, currently allocated for housing and awaiting redevelopment.
- High proportion of rented properties results in poor maintenance and degraded appearance of some dwellings

Core Strategy Strategic Allocations Status

- S24 – Woodgrange Road West – emerging schemes for part of the site

Opportunities

- Attractive area with good and improving public transport connections and access to extensive green space.
- Sensitive development of and adjacent to existing stock of heritage assets can enhance the area's unique identity.
- Scope for enhancement and diversification/expansion of the town centre, particularly with coming of Crossrail. A range of sites that can provide significant aggregate impact (largely occupied by post-war buildings with potential for redevelopment) have been identified in Local Plan.
- Adjusting the town centre boundary to facilitate better north-south integration across Romford Road. Further develop the centre's 'urban village' feel, strengthening emerging leisure and night time economy and supporting grassroots independent shops and creative businesses.
- High quality innovative developments at small scale (e.g. one-off housing)
- Refurbishment of Victorian/Edwardian properties in the wider area

Threats

- Town centre at risk from cumulative impact of takeaways and betting shops, which undermine retail function and result in lower value urban realm. Relatively poor range and quality of retail offer, affecting vitality and leaking trade from its catchment.
- Cluttered public realm, particularly along Romford Road and Woodgrange Road
- Traffic and congestion on Romford Road and Woodgrange Road, spills into residential

areas.
- Threats to heritage assets from demolition, and poor quality developments or insensitive alterations to frontages.

Conclusions

Significant features to attend to in place-making

- Preserve and enhance heritage character of Forest Gate town centre, the strong Victorian/Edwardian residential estates, as well as sizeable Victorian villas on Romford Road.
- Need to reinforce the attraction of the town centre, attending to its detractors, and reinforcing a sense of place through a blend of old and new and through better north-south integration across Romford Road. Emphasis on building up the retail and leisure offer of the town centre to enhance its vitality and claw back trade. Support for the growth of grassroot creative, artisan-type businesses.
- Setting of West Ham Park and views from Wanstead Flats and area of Townscape Value around Capel Road (see Manor Park analysis)
- Romford Road can take taller buildings (perhaps not as tall as College Point - which is 22) up to 14 storeys near the Fire Station. 3-5 storeys should be maintained along Woodgrange Road

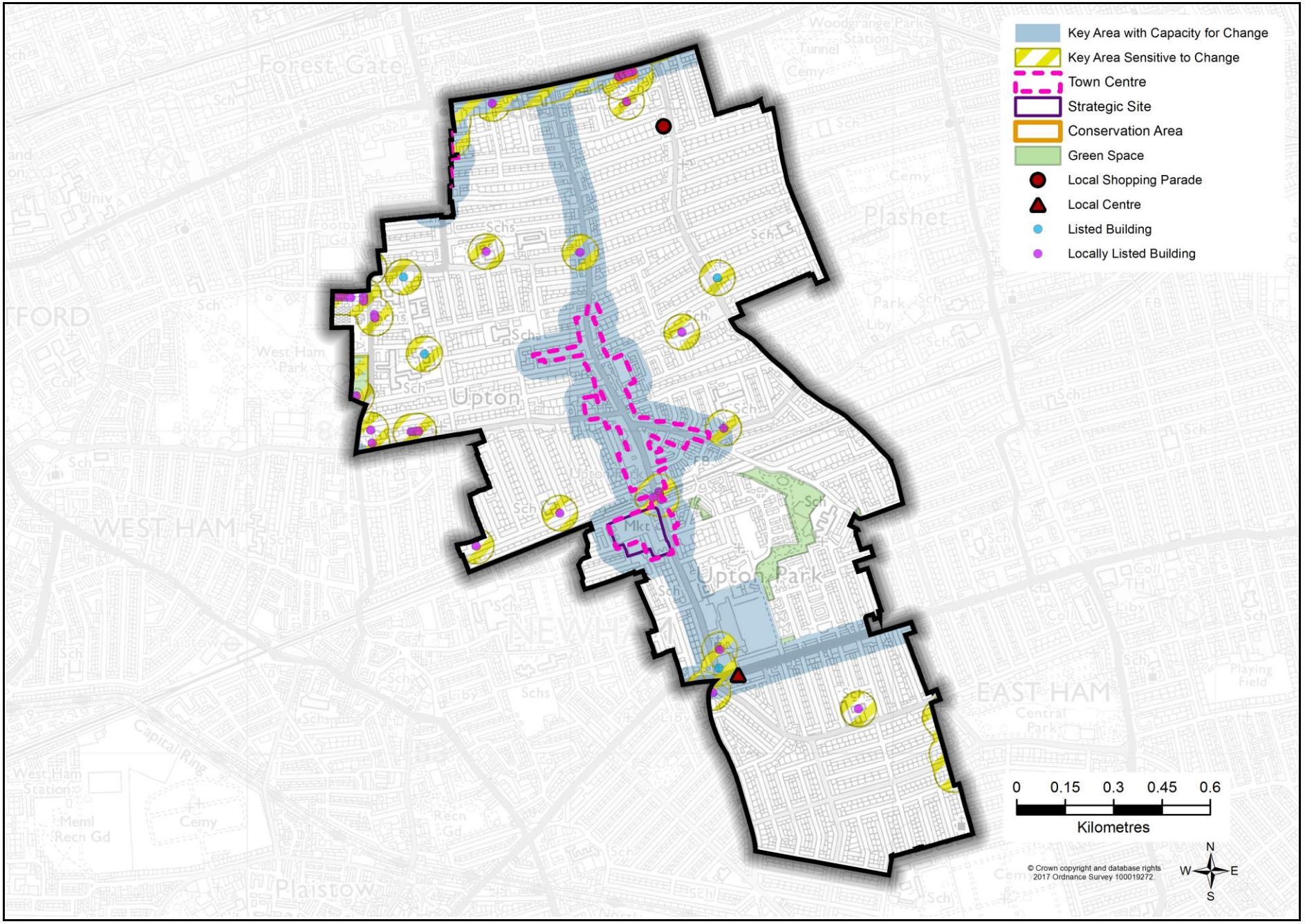
Areas of sensitivity to change

- The Conservation Areas (University, Woodgrange, and Forest Gate town centre) and other areas of heritage assets (Capel Road Area of Townscape Value, sections of Romford Road).
- Areas adjacent to important open space- West Ham Park, Wanstead Flats.
- Other important locations for the community (as identified above).

Areas with capacity for change / innovation

- The strategic site and other smaller allocations identified through the Local Plan as suitable for redevelopment, including several prominent sites on Woodgrange Road
- Previously re-developed estates (particularly post-War development) where these are poorly integrated with surrounding streets and amenities.


QUEENS MARKET
London Borough of Newham
GREEN STREET
COMMUNITY NEIGHBOURHOOD


Key Area with Capacity for Change
Key Area Sensitive to Change
Town Centre
Strategic Site
Conservation Area
Green Space
Local Shopping Parade
Local Centre
Listed Building
Locally Listed Building
Upton
Upton Park
Forest Gate
Plashet
WEST HAM
EAST HAM
Plaistow
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Green Street

Character typologies present

- Victorian and Edwardian residential streets are the dominant feature
- One high street typology centre at Green Street
- Famous Upton Park football ground now being redeveloped for large scale residential
- Post-war 1960s/70s blocks of flats, including tower blocks and some lower rise, along Romford Road.
- Some 1990s estates (small) (infill)
- Small infill contemporary developments

Analysis

Overview of structure (permeability, grain, presence of open space and so on)

- Northern area affected by long east-west terraces affecting permeability.
- South of Barking Road, a finer grid pattern exists
- Connectivity also affected by Boleyn Ground (although this will improve with ongonig redevelopment) and District Line railway.
- General lack of quality open space; Priory Park showing sign of wear & tear serving the whole area, together with West Ham Park on the north-western border to Stratford and West Ham CFA.

Local distinctiveness

- Green Street is a key north-south route and boundary (former East Ham/West Ham boundary). Little development other than large houses (Upton House, Red House, Green St House, Plashet Park) occurred until mid-Victorian times when estates began to be developed.
- Bounded to the north by Romford Road, a historic east-west route where a conservation area marks the value of 8 uniform semi-detached late Georgian houses, built to house agricultural workers of the Gurney estate, and once known as 'Irish Row'.
- Heavily bombed in WWII – providing space for post-war municipal re-development.

Building Heights in the Area

- Predominantly 2-4 storeys.
- Some 9-15 storey blocks as part of post-war development

Key locations for the community (meeting places, local shopping parades, parks, and so on)

- Priory Park
- Specialist Asian shopping/leisure destination
- Queens Market
- Various community centres across the area, including youth clubs
- Various pubs (e.g. The Queens, The Duke of Edinburgh, The Boleyn)
- Green Street Local Service Centre/ Library
- Various churches, Islamic centres and temples, and schools.

- Multicultural district with roots in Jewish international migrations, with ongoing influence of Asian, African and Eastern European populations. Has become a particular focus for the Asian community – wedding shopping etc.
- The commemorative statue at the Barking Road/Green Street junction is locally listed. Boleyn pub is also listed.
- Boleyn Ground/Upton Park (former West Ham United) is being redeveloped
- Flat topography, with limited views

- Barclay Hall

Strengths

- High density Victorian/Edwardian terraced housing with front and rear gardens providing significant family housing; general positive streetscape aspects of Victorian/Edwardian terraces. Some attractive Victorian terraces with locally distinctive porches.
- Mature trees in good condition on the edge of Priory Park, plus Priory Park itself
- Asian identity of town centre. Green Street is an international retail destination for Asian clothing, jewellery and accessories, particularly wedding related items. Also includes Queens Market, an important retail and community space, and other key retail clusters.
- Redevelopment of Upton Park stadium will bring an influx of new residents with consequent socio-economic benefits to the area

Strategic Site Allocations Status

- S27 – Queens Market – discussions

Weaknesses

- Queen's Market, other than as a colourful activity focus, contributes little to the street scene, with much hidden away in dark interior and poorly integrated backdrop of post-war buildings.
- General lack of green space in the northern part of Green Street.
- Some long, impermeable streets
- Green Street and Barking Road get heavily congested
- Much of the area's housing is in relatively poor condition, with insensitive alterations undertaken; flats above shops frequently have insecure access to rear of premises

Opportunities

- Redevelopment of Queens Market with a suitable scheme (that also re-provides the market) has the potential to considerably enhance the offer and attractiveness of Green St whilst improving its appearance and preserving community appeal.
- Potential for development of small infill plots in the town centre offering retail/mixed-use schemes that complement the existing retail & leisure offers
- Local entrepreneurship and specialised businesses and attractors on Green Street and in market, drawing customers from across London and beyond.
- Refurbishment of Victorian/Edwardian properties in the wider area

Threats

- General poor condition of public realm, including market, footways and front gardens.
- Proliferation of takeaways and betting shops, uncontrolled advertisements and lack of quality retail mix.
- Encroachment of commercial uses into residential areas outside town centre boundaries, some unlawfully. Dilution of town centre function.
- Poor quality environs stimulate poor quality development proposals where uplift is badly needed

Conclusions

Significant features to attend to in place-making

- Lack of a boundary definition to the town centre due to its encroachment northwards. General need to upgrade the town centre environment to befit its significance as a destination.
- Lack of open space/green space in CFA, although West

Areas of sensitivity to change

- Cultural sensitivity of schemes on Green Street, given its London-wide draw for Asian shoppers and also attractions for international visitors.
- Northern edge of area, adjoining Romford Road Conservation Area
- Other important locations for the community (as identified above).

Ham Park, Plashet Park, Central Park, Woodgrange Park and other smaller green spaces in close vicinity to the area's boundaries • Lack of distinctive/exemplar housing. • While Queens Market and environs could be redeveloped to better integrate into its surroundings, the market represents an important community asset that must be re-provided in a manner that sustains its position as a destination. A tall building would be acceptable at this location, close to the station.	**Areas with capacity for change / innovation** • Area near Upton Park tube station has most capacity to absorb selective changes including taller buildings, as there are existing taller blocks of flats and it is an accessible town centre location; innovation may also be required in relation to particular business needs locally, to ensure they can be accommodated within the town centre and not cause its dilution. • Likewise post-war estates, due to their incongruity and need for renewal. • Elsewhere, key routes - Barking Road and Romford Road could absorb selective change as befits their accessibility, where this aids enclosure and legibility (e.g. off key crossroads), and promotes their function as linear gateways.

Appendix 3 - Historic Development of Newham

Ancient history and archaeology

Modern Newham encompasses a rich archaeological resource, particularly along the river valleys. Across the borough, archaeological investigation has revealed a Bronze Age trackway on former marshes in the south of the borough and a settlement at Stratford; Palaeolithic hand axes and other pre-historic flint artefacts have also been found.

The Romans brought their new road from Colchester across the Lea at Stratford, which was for many centuries the most southerly crossing and therefore strategically important. Remains of Roman settlements and a cremation cemetery have been found to the north of Stratford High Street. The Saxons continued to use the Roman Road, and also began to reclaim the Lea Valley marshlands by digging channels. The name Stratford was mentioned first shortly after the Norman Conquest.

Middle Ages

By the time of the Domesday Book (1086), the area, then known as Hamme (meaning 'flat, low-lying pasture') comprised three separate manors—at Little Ilford, East Ham and West Ham. The communities were small and remote, and their livelihood was based upon the land and rivers. Despite this isolation, fine medieval parish churches were built at East Ham and West Ham and Little Ilford, which remain today. In addition to these churches was the important Abbey of Stratford Langthorne ('Long Thorne'), established in 1135, which was one of the largest Cistercian houses in England until its dissolution in 1538 and subsequent demolition.

The rural area was connected with London by Bow Bridge, constructed to replace a treacherous ford over the River Lea at Bow, in 1118. There were nine watermills recorded on the River Lea in the Domesday Book of 1066, the largest concentration in Essex. A small port was built to receive grain for processing at the mills.

Urbanisation from the 17th Century

In the 17th and 18th Centuries, the districts of Newham took on new identities with the arrival of the gentry that was more dependent on the commerce and institutions of the City for its livelihood than on the land. The age brought porticoed houses, the carriage and pair and landscaped gardens to Plaistow and Upton in particular.

However, it was the nineteenth century that most dramatically changed the face of the borough: the great entrepreneurial vigour of the late Industrial Revolution brought new roads, bridges, railways, docks and all manner of industry. The 1844 Metropolitan Building Act, had restricted dangerous and noxious industries operating in the metropolitan area, west of the River Lea, so this pushed industrial development eastwards, building on early development that made use of the waterside location. Industries that became prominent in the area included chemical and pharmaceutical manufacturing, together with food

processing (including sugar refining and slaughterhouses) and iron-making, ship and locomotive building. Beckton Gas Works, (named for its founder, Simon Beck) situated to the east of the borough was the largest gas manufacturing works in Europe, manufacturing coal gas for most of London north of the Thames, and with its own railway network, river piers and inter-linked chemical plants.

This industrial boom resulted in the arrival of almost a quarter of a million people to live in street after street of new housing, much of it of modest but good quality, but a significant proportion being built as slums with no sanitation and prone to flooding and disease. By the early 1860s, there was significant urban development focused around Stratford and Canning Town, with a marked difference in the quality of living conditions between the two areas—with Canning Town receiving the bulk of insanitary slum housing.

Population growth also brought diversity, with the area frequently being the first point of residence in the UK for newly-arrived migrants. The 1901 Census records that 1.5% of West Ham's population and 1.9% of East Ham's population were not British. Most were European, with a smaller number of people from Asia, Africa and elsewhere. By the 1920s, most of the shops in Barking Road were owned by continental Europeans.

The Northern Outfall Sewer

Joseph Bazalgette's Northern Outfall Sewer was built across the empty marshes of southern West and East Ham after the 'Great Stink' in the hot summer of 1858. It collects sewerage originating in Hampstead, Kilburn, Kensal Green, Ravenscourt and Hammersmith. The embankment enclosing the outfall sewer is raised along its length between Victoria Park and Beckton, making a distinctive feature of the borough. The route is open as the 'greenway', a strategic east-west walking and cycling route, with entrances and other features constructed from old sewage pipes. The greenway ends at the Beckton Sewage Works, the largest in Europe.

The Royal Docks

Newham's new Docks, commenced in the mid 19th century, became the largest in the world by the early 20th Century, and the first to be linked directly with the railway network. At the same time, Newham became the most important manufacturing centre in Southern England, with the docks being an important source of raw materials (such as coal) as well as a means of export.

Between 1910 and 1960, the Docks remained relatively prosperous. Their layout permitted the transhipment of goods from ship to rail or road transport, and allowed for deep sea trades, particularly from the British Commonwealth. There were even plans to construct a new dock on marshland at Beckton, north of the Royal Albert Dock.

The Post War period

Following the World Wars, large-scale slum and bomb damage clearance took place in the borough of West Ham, replacing it with modern housing and facilities. This was particularly significant in the south of the area which has suffered extensive war damage, affecting some 85% of dwellings in the borough of West Ham, a quarter of dwellings in Newham as a whole. This provided an opportunity for the authorities to undertake the

wholesale redevelopment of the former slum areas for social housing, principally in the Kier Hardie Estate. Newham Council provided some 30,000 housing units, most built after 1945 and many in tower blocks, 111 of which were built in all including 27 rising to 20-22 floors. Source: London Encyclopaedia.

Concurrently, many larger houses in the northern part of the borough were divided up to make room for several displaced families each, including hundreds of families from Canning Town and other parts of the borough that had been badly bombed.

East and West Ham's populations declined after the war, from almost 300,000 to 170,000—partly due to rising unemployment as new technologies required fewer workers, and due to population displacement to Essex during the war – many never returned. However, from the 1950s, many new families arrived from Asia and the Caribbean from where they were recruited to help with post-war reconstruction.

In the early post-war period, new housing development followed the 'Garden City' model, with high quality, relatively low-density housing. This new development was complemented by the provision of new libraries, cinemas, a Lido, new sporting facilities such as the cycle and motorcycle speedway in West Ham Park, and new public open space. But by 1959, only a third of the required housing had been completed. The need to speed up provision and resolve London's housing shortages resulted in the construction of point tower blocks, such as Ronan Point in Canning Town. Following the merger of East and West Ham into the new borough of Newham in 1965, sixteen new comprehensive schools were established and new housing was constructed firstly by London County Council and latterly by the Greater London Council.

Subsequently, following the collapse of one corner of Ronan Point in 1968 after a gas explosion, as well as social studies carried out in the 1970s, the 'tower block model' of housing began to be questioned. Many of Newham's remaining blocks were either demolished or reduced in height.

London Docklands Development Corporation and Regeneration in Newham

Technological change, containerisation and Britain's new membership of the EEC, resulted in rapid decline of the docks and associated industry and railway works. Following the discovery of gas in the North Sea, manufactured gas became also became uneconomic, and the Beckton gas plant had closed by 1970. The Royal Docks were finally closed together with other upstream docks in the in the 1980s, and other significant contractions included the withdrawal from railway land around Stratford. Significant jobs losses and vacant and derelict land resulted, changing the character of the southern and north western part of Newham considerably, together with the overall prosperity of its town centres and neighbourhoods.

In 1981, the London Docklands Development Corporation was established to regenerate Beckton and the Royal Docks. The corporation's activities resulted in the development of new housing in Beckton, on a marshy site that had, in part, been earmarked for a new dock and another area that had been occupied by Beckton Gas Works. All that remains of the latter are some operational gas holders, the route of the Beckton railway line, the Beckton Alp and remains of the together with some workers' cottages on Windsor Terrace. By the 1990s, a new road network, Dockland Light Railway extensions and London City Airport had been established, giving further impetus to

development in the area. The major exhibition centre, ExCeL London was built by Sir Robert McAlpine and opened in 2000, with an extension opening in Spring 2010.

In other parts of the borough, together with much of the remainder Royal Docks, transformative regeneration is ongoing, with major programmes of redevelopment in the Stratford (currently primarily through the LLDC), Canning Town and Custom House, the Royal Docks, and emerging in East Beckton. Redevelopment on a large scale scale is costly and takes many years, requiring major investment in de-contamination, new infrastructure and other improvements. However, it is gathering pace, and Newham's character in many respects is undergoing transformation.

Appendix 4 - References

ACPO (2016) *Secured by Design Principles* available at: http://www.securedbydesign.com/professionals/guides.aspx

BREEAM (2012) *BREEAM Communities Technical Standard* available at http://www.breeam.com/communities

CABE (2001) *The value of good urban design* available at: http://www.designcouncil.org.uk/sites/default/files/asset/document/the-value-of-urban-design_0.pdf

CABE (2005) *The Value of Public Space: how high quality parks create economic, social and environmental value* available at https://www.designcouncil.org.uk/sites/default/files/asset/document/the-value-of-public-space1.pdf

CABE (2007a) *Paved With Gold: The Real Value of Street Design* available at http://www.designcouncil.org.uk/sites/default/files/asset/document/paved-with-gold_1.pdf

CABE (2008) *Delivering Great Places to Live: 20 questions you need to answer* available at http://webarchive.nationalarchives.gov.uk/20110118133055/http://www.cabe.org.uk/publications/delivering-great-places-to-live

David Lock Associates (2015*), Greater London Authority Housing Standards Review: Evidence of Need,* available at https://www.london.gov.uk/file/22674/download?token=jeyIUk1L

David Mathewson (2016c), *Whither London's Skyline?*, Urban Design Group Journal 139:2016, p20-22 available at http://www.udg.org.uk/sites/default/files/publications/UD139_magazine.pdf

DCLG, Planning practice guidance available online at https://www.gov.uk/government/collections/planning-practice-guidance

Design Council (2012), Building for Life 12, available at http://www.designcouncil.org.uk/resources/guide/building-life-12-third-edition

English Heritage (2011), *Understanding Place: Character and context in local planning* available at https://historicengland.org.uk/images-books/publications/understanding-place-character-context-local-planning/

English Partnerships (2000) *Urban Design Compendium: design principles* available at http://webarchive.nationalarchives.gov.uk/20170130153122/https://udc.homesandcommunities.co.uk/urban-design-compendium?page_id=3892&page=2

English Partnerships (2007) *Urban Design Compendium 2: Delivering Quality Places* available at http://webarchive.nationalarchives.gov.uk/20170130153834/https://udc.homesandcommunities.co.uk/urban-design-compendium?page_id=3899&page=44

Hanley, L (2007) *Estates, an Intimate History* London: Granta Books

Historic England (2015), *Tall Buildings: Advice Note 4*, available at https://historicengland.org.uk/images-books/publications/tall-buildings-advice-note-4/

Historic England (2016), *Heritage at Risk: Latest Findings* available at https://www.historicengland.org.uk/advice/heritage-at-risk/findings/

Historic England (2017), Heritage Works, available at: https://historicengland.org.uk/images-books/publications/heritage-works/

Jacobs, J (1961) *The Death and Life of Great American Cities* New York: Modern Library

Jane Manning (2017), *Update: Tall Buildings*, Urban Design Group Journal 139: 2017, p3, available at http://www.udg.org.uk/sites/default/files/publications/UD141_magazine.pdf

Larkham, P.J. (2000*) 'Residents' attitudes to conservation'*, Journal of Architectural Conservation 6:1 pp. 73-88

LB Newham (1973) *Buildings in Newham: A survey of buildings of architectural, historic and local interest recorded in the borough in 1973*

LB Newham, Listed Buildings Register available at: https://www.newham.gov.uk/Pages/Services/Listed-buildings.aspx

LB Newham (2006a) *420-440 Romford Road Conservation Area: Character Appraisal and management proposals* available at https://www.newham.gov.uk/Pages/Services/Conservation-areas.aspx

LB Newham (2006b) *Woodgrange Estate Conservation Area: Character Appraisal and Management Proposals* available at: https://www.newham.gov.uk/Pages/Services/Conservation-areas.aspx

LB Newham (2006c) *Three Mills Conservation Area: Character Appraisal and Management Proposals* available at: https://www.newham.gov.uk/Pages/Services/Conservation-areas.aspx

LB Newham (2008b) *Canning Town and Custom House Supplementary Planning Document* available at https://www.newham.gov.uk/Documents/Environment%20and%20planning/CanningTownCustomHouseAdoptedSPD2008[1].pdf

LB Newham (2009a) *Forest Gate Town Centre Conservation Area Character Appraisal and Management Proposals* available at https://www.newham.gov.uk/Pages/Services/Conservation-areas.aspx

LB Newham (2009b) *Stratford St John's Character Appraisal and Management Proposals* available at https://www.newham.gov.uk/Pages/Services/Conservation-areas.aspx

LB Newham (2010a) *University Area Conservation Area Character Appraisal and Management Proposals* available at: https://www.newham.gov.uk/Pages/Services/Conservation-areas.aspx

LB Newham (2010b) *Sugar House Lane Conservation Area Character Appraisal and Management Proposals* available at: https://www.newham.gov.uk/Pages/Services/Conservation-areas.aspx

LB Newham (2010c) *Forest Gate Supplementary Planning Document* available at: https://www.newham.gov.uk/Documents/Environment%20and%20planning/ForestGateSPD[1].pdf

LB Newham: *Conservation Area Maps - East Ham, Sugar House Lane, University, Stratford St John's, Forest Gate, Romford Road, Three Mills, Woodgrange, Durham road* available at https://www.newham.gov.uk/Pages/Services/Conservation-areas.aspx

LB Newham, Heritage and Archive Service – *Newham Digital Archive* at www.newhamstory.com

LB Newham (2010) *LB Newham Community Infrastructure Study available at* https://www.newham.gov.uk/Pages/Services/Planning-policy.aspx

LB Newham (2010) *Newham's Biodiversity Resource: Evidence Base for the LDF* available at: https://www.newham.gov.uk/Pages/Services/Planning-policy.aspx

LB Newham/Mayor of London (2010) *Royal Docks – A vision for the Royal Docks prepared by the Mayor of London and the Mayor of Newham* available at http://www.newham.gov.uk/InformationforBusinesses/RegenerationProjects/RoyalDocks.htm

LB Newham (2011), *Stratford metropolitan Masterplan*, available at https://www.newham.gov.uk/Documents/Environment%20and%20planning/Stratford%20Metropolitan%20Masterplan%20(SMM)%20Development%20Framework.pdf

LB Newham (2015), Evidence Base: Areas of Townscape Value, available at https://www.newham.gov.uk/Documents/Environment%20and%20planning/EB08.%20Evidence%20Base%20-%20Areas%20Of%20Townscape%20Value.pdf

LB Newham (2015), Evidence Base: Archaeological Priority Areas, available at https://www.newham.gov.uk/Documents/Environment%20and%20planning/EB10.%20Evidence%20Base%20-%20Archaeological%20Priority%20Areas%20V2.pdf

LB Newham (2016) *London Borough of Newham Town Centre and Retail Study* available at: https://www.newham.gov.uk/Pages/Services/Planning-policy.aspx

LB Newham (2017) *LB Newham Level 1 & 2 Strategic Flood Risk Assessment* available at: https://www.newham.gov.uk/Pages/Services/Planning-policy.aspx

Lynch, K (1960) *The Image of the City* Cambridge MA: MIT Press
Mayor of London (2016) *Housing Supplementary planning Guidance* available at https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/supplementary-planning-guidance/housing-supplementary

Mitchell, V (1998) *Eastern Main Lines: Fenchurch Street to Barking* Midhurst: Middleton Press

New London Architecture (2017), *NLA London Tall Buildings Survey 2017: Annual Update*, available from https://payhip.com/b/Bb4V

Pewsey, S (1996) *East Ham in Old Photographs* Stroud: Sutton Publishing Ltd.

Powell, WR (1973) *A History of Essex, Volume 6* Victoria County History available at http://www.british-history.ac.uk/vch/essex/vol6

Sanders, D & Harris, N (1999) *Forest Gate* Stroud: Tempus Publishing Ltd.

Silverman, E et al (2006) *A good place for children? Attracting and retaining families in Inner urban mixed income communities* Joseph Rowntree Foundation: York available at http://www.jrf.org.uk/publications/attracting-and-retaining-families-new-urban-mixed-income-communities

Tim Catchpole (2016c), *London's Latest Tall Stories*, Urban Design Group Journal 139:2016, p18-19 available at http://www.udg.org.uk/sites/default/files/publications/UD139_magazine.pdf

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The following are Corporate Surveys, and more information is available from the Council's Corporate Policy and Research Team:

Newham Survey 2016
Newham Liveability Survey 2015
Newham Household Panel Survey 2015, wave 8