



## Glossary of Terms

Definitions of the following terms used throughout the TVIA have been included for ease of reference.

**Table A.12: Glossary of terms**

Term	Definition
Active Frontage	Uses within the ground floor of buildings fronting onto a street which make the street feel more lively and inviting e.g. cafes, shop windows.
Baseline	Also referred to as the 'baseline situation', this term describes the existing nature of the townscape and the visual environment within the study area at a fixed point in time, as well as any changes likely to occur independently of the proposed development, including the legislative and planning context and any relevant published guidance.
Construction	<p>Construction, also referred to as the construction phase, refers to the all activity on and offsite required to implement the proposed development.</p> <p>The construction phase is considered to commence with the first activity on site, for example the creation of site access or site clearance works, and ends with demobilisation.</p>
Continuity	The degree to which built form is continuous along a street or space.
Cylindrical projection	In assessing the impact of development on the landscape/ townscape it is often necessary to record a panoramic view. A panorama made up from planar photographs is not strictly a 'true panorama' due to distortion encountered from the rectilinear projection of the lens. This is best described by looking through the viewfinder as you rotate the camera, the objects near the centre get larger as they approach the edge of the frame. Accurate 'stitching software' overcomes this effect by distorting each image into a cylindrical projection before aligning and blending, to reflect as accurately as possible the experience of the human eye. In taking a panoramic photograph it is important to ensure the camera position is set horizontally level.
Development	Any proposal that results in a change to the townscape and / or visual





Term	Definition
	environment.
Effect	The nature of the change(s) likely to occur as a result of a particular impact.
Direct Effect	An effect that is directly attributable to the proposed development.
Indirect Effect	An effect that results from the proposed development as a consequence of a direct effect(s), often occurring away from the application site, or as a result of a sequence of interrelationships or a complex pathway.
Enclosure	The degree to which a street or space is defined and enclosed by buildings, structures and/or vegetation. The level of enclosure is determined by the height and continuity of the buildings and the width of the street or space.
Enabling works	Enabling works cover those activities and preparations required to make a site construction ready and include the creation of access routes, and installation of security fencing, hoarding, signage and site compound(s). Enabling works are considered to occur during the construction phase.
Enhancement	Measures that seek to improve the townscape of the application site and / or its wider setting beyond its baseline condition.
Formal	Townscape elements which are arranged in a way which produces an organised, ordered character
Human Scale	The use within development of elements which relate well in size to an individual human being and their assembly in a way which makes people feel comfortable rather than overwhelmed.
Landmark	A building or structure that stands out from its background by virtue of height, size or some other aspect of design.
Land Use	This term refers to what land is used for and is based on broad categories such as industrial, residential, agriculture or forestry.





Term	Definition
Landform	The shape and form of the land surface resulting from combinations of geology, geomorphology, slope, elevation and physical processes.
Legibility	The degree to which a place can be easily understood and traversed.
Magnitude of change	A judgement regarding the size and scale of the change, the geographical extent of the area that would be affected and the duration of the effect and its reversibility.
Mitigation	This term refers to those measures that are proposed to prevent / avoid, reduce and where possible offset any adverse effects.
Operation	Also referred to as completion, this term describes the operation phase of the completed development and is considered to commence at the end of the construction phase, after demobilisation. The duration of the operation phase is dependent on the nature of the proposed development.
Parameters	A limit or boundary which defines the scope of a particular process or activity.
Perception / perceptible	A term used to describe the sensory (i.e. received through human senses) with the cognitive (i.e. knowledge and understanding gained from many sources and experiences).
Permeability	The ease with which people can move around and through the urban environment
Rhythm	The arrangement or pattern of elements within the townscape or on an individual building.
Townscape Resource / Character Attributes	The distinctive spatial distribution of the elements of the physical urban environment which has resulted through the historic development of the city.
Townscape Character	A distinct, recognisable and consistent pattern of elements in the townscape that makes one part of townscape different from another.





Term	Definition
Townscape Receptor	The constituent features and elements of the townscape its specific or perceptual qualities and its character considered in relation to the proposed development.
Setting	The surroundings in which a place is experienced, embracing the relationship between a building or area and the townscape surrounding it. This relationship reflects both the conscious intent of the designer and the understanding of the observer.
Sensitivity (of a receptor)	A judgement regarding the susceptibility of a receptor to the change arising as a result of the proposed development and the value attached to the receptor.
Significance of effect	The level or importance of townscape and visual effects, determined by considering together sequentially the sensitivity of the receptor with the magnitude of effect.
Study area	The area within which it is considered that changes arising as a result of the proposed development would result in the highest and / or most important direct or indirect effects.
Viewpoint	The location from which photographs that describe specific or representative views toward the proposed development are captured.
Vista	An enclosed view, usually a long and narrow one.
Visual Amenity	The assembly of components that provides a composition in its own right or backcloth or setting for activities.
Visual Receptor	Individuals and / or defined groups of people who have the potential to be affected by the proposed development.
Urban Grain	The pattern of the arrangement of street blocks, plots and their buildings in a settlement. The degree to which an area's pattern of blocks and plot subdivisions is respectively small and frequent (fine grain), or large and infrequent (coarse grain).





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Term	Definition
Urban form	The way that buildings are positioned and designed to enclose public spaces, streets and squares.
Zone of Theoretical Visibility (ZTV)	Those areas of the townscape and landscape that theoretically are visually connected with the proposed development.





## APPENDIX 11.2 - TVIA PLANNING POLICY AND GUIDANCE

### NATIONAL PLANNING POLICY

#### The National Planning Policy Framework (NPPF)

The NPPF was published by the Department for Communities and Local Government in March 2012 and sets out the Government's planning policy for England and how it expects these to be applied. The Framework is concerned with the delivery of sustainable development, as stated in paragraph 14:

*"At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking.*

For decision-taking this means:

- *approving development proposals that accord with the development plan without delay; and*
- *where the proposed development plan is absent, silent or relevant policies are out of date, granting permission unless:*
- *any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or*
- *specific policies in this Framework indicate proposed development should be restricted."*

Paragraph 17 sets out the twelve 'Core Planning Principles' that should underpin plan making and decision taking. Those specific to landscape and visual issues state that planning should:

- *"always seek to secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings;*
- *take account of the different roles and character of different areas, promoting the vitality of our main urban areas, protecting the Green Belts around them, recognising the intrinsic character and beauty of the countryside and supporting thriving rural communities within it;*
- *contribute to conserving and enhancing the natural environment and reducing pollution. Allocations of land for proposed development should prefer land of lesser environmental value, where consistent with other policies in this Framework;*
- *conserve heritage assets in a manner appropriate to their significance..."*





In Section 7 'Requiring good Design', paragraph 58, the NPPF states that local planning policies and decisions should aim to ensure that developments:

- *“will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the proposed development;*
- *establish a strong sense of place, using streetscapes and buildings to create*
- *attractive and comfortable places to live, work and visit;*
- *optimise the potential of the site to accommodate proposed development, create and sustain an appropriate mix of uses (including incorporation of green and other public space as part of developments) and support local facilities and transport networks;*
- *respond to local character and history, and reflect the identity of local surroundings and materials, while not preventing or discouraging appropriate innovation;*
- *create safe and accessible environments where crime and disorder, and the fear of crime, do not undermine quality of life or community cohesion; and*
- *are visually attractive as a result of good architecture and appropriate landscaping.”*

Paragraph 60 continues:

“Planning policies and decisions should not attempt to impose architectural styles or particular tastes and they should not stifle innovation, originality or initiative through unsubstantiated requirements to conform to certain development forms or styles. It is, however, proper to seek to promote or reinforce local distinctiveness.”

Paragraph 61 continues:

“Although visual appearance and the architecture of individual buildings are very important factors, securing high quality and inclusive design goes beyond aesthetic considerations. Therefore, planning policies and decisions should address the connections between people and places and the integration of new development into the natural, built and historic environment.”

Paragraph 63 continues:

“In determining applications, great weight should be given to outstanding or innovative designs which help raise the standard of design more generally in the area.”

Paragraph 64 also states that:





“Permission should be refused for development of poor design that fails to take the opportunities available for improving the character and quality of an area and the way it functions.”

Paragraph 65 clarifies this point by stating that:

“Local planning authorities should not refuse planning permission for buildings or infrastructure which promote high levels of sustainability because of concerns about incompatibility with an existing townscape, if those concerns have been mitigated by good design.”

In Section 8 ‘Promoting Healthy Communities’, the Framework acknowledges the importance of public rights of way in paragraph 75, which states:

“Planning policies should protect and enhance public rights of way and access. Local authorities should seek opportunities to provide better facilities for users, for example by adding links to existing rights of way networks including National Trails.”

Section 12 Conserving and Enhancing the Historic Environment sets out the Government’s overarching planning policies put in place to conserve the historic environment and its heritage assets so that they may be enjoyed by future generations. In paragraph 131 it states that local planning authorities should take account of:

- *“the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;*
- *the positive contribution that conservation of heritage assets can make to sustainable communities including their economic viability; and*
- *the desirability of new development making a positive contribution to local character and distinctiveness.”*

In determining applications, LPAs should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. *“The level of detail should be proportionate to the assets’ importance and no more than is sufficient to understand the potential impact of the proposal on their significance”* (para 128). Paragraph 132 states that *“when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset’s conservation. The more important the asset, the greater the weight should be.”* Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Any harm or loss of significance should require clear and convincing justification.

Paragraphs 133-135 state that where a proposed development will lead to harm or loss, to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal. It is considered that *“substantial harm to or loss of a grade II listed*





*building, park or garden should be exceptional” and substantial harm to heritage assets of the highest significance, notably Grade II\* and Grade I listed buildings should be “wholly exceptional”. (para 132). Paragraph 133 states that proposals that would lead to substantial harm or loss of significance of a designated heritage asset will be refused consent “unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or that the following apply:*

- *“the nature of the heritage asset prevents all reasonable uses of the site; and*
- *no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and*
- *the harm or loss is outweighed by the benefit of bringing the site back into use.”*

Paragraph 134 states that where proposals will lead to “less than substantial harm” to the significance of a designated heritage asset then the harm should be weighed against the public benefits of the proposals and endeavour to secure its optimum viable use. In considering applications that affect non-designated heritage assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

### **The National Planning Practice Guidance (NPPG)**

The National Planning Practice Guidance (NPPG) sets out the Government’s guidance of specific planning related topics for England and how it expects these to be applied. Paragraph 007 Ref ID: 26-007-20140306 of the Planning Practice Guidance titled ‘Planning should promote local character (including landscape setting) states:

*“Development should seek to promote character in townscape and landscape by responding to and reinforcing locally distinctive patterns of development, local man-made and natural heritage and culture, while not preventing or discouraging appropriate innovation.*

*The successful integration of all forms of new development with their surrounding context is an important design objective, irrespective of whether a Site lies on the urban fringe or at the heart of a town centre.*

*When thinking about new development the Site’s land form should be taken into account. Natural features and local heritage resources can help give shape to a development and integrate it into the wider area, reinforce and sustain local distinctiveness, reduce its impact on nature and contribute to a sense of place. Views into and out of larger Sites should also be carefully considered from the start of the design process.*





*Local building forms and details contribute to the distinctive qualities of a place. These can be successfully interpreted in new development without necessarily restricting the scope of the designer. Standard solutions rarely create a distinctive identity or make best use of a particular Site. The use of local materials, building methods and details can be an important factor in enhancing local distinctiveness when used in evolutionary local design, and can also be used in more contemporary design. However, innovative design should not be discouraged.*

*The opportunity for high quality hard and soft landscape design that helps to successfully integrate development into the wider environment should be carefully considered from the outset, to ensure it complements the architecture of the proposals and improves the overall quality of townscape or landscape. Good landscape design can help the natural surveillance of an area, creatively help differentiate public and private space and, where appropriate, enhance security.”*

## **Local Planning Policy**

### Saved Policies of the Welwyn Hatfield District Plan (2005)

The Site is located within the administrative boundary of Welwyn Hatfield Borough Council. The Welwyn Hatfield District Plan, 2005 is the current adopted Local Plan and provides a framework for planning decisions in the borough. The following section is a summary of ‘saved policies’ that are of most relevance to townscape and visual considerations:-

#### *Policy R1 – Maximising the use of previously developed land*

The Site is brownfield land previously used for industrial purposes. Policy R1 recognises in order to make the best use of land, development should take place on land which has previously been developed.

#### *Policy R11 - Biodiversity and Development*

This policy requires all new development to demonstrate how it would contribute positively to the biodiversity of the Site through the retention and enhancement of existing natural features, the promotion of wildlife corridors, the use of locally native species in proposed planting, and help meet the priorities and targets set out in the Local Biodiversity Action Plan.

#### *Policy R17 - Trees, Woodland and Hedgerow*

The Site contains a selection of existing trees located on the Site’s eastern, western and northern boundaries along Broadwater Road, Bridge Road and the railway line. Policy R17





states *“the council will seek the protection and retention of existing trees, hedgerows and woodland”*.

#### *Policy R22 - Development in Conservation Areas*

The Site is not situated within a conservation area but is in close proximity to the Welwyn Garden City Conservation Area, separated by the East Coast Mainline Railway. The Welwyn Garden City Conservation Area covers a large area of the town centre to the west of the Site and its residential hinterlands. While not within the conservation area, any potential development in close proximity may impact on the conservation areas character and appearance. Whist policy R22 is largely concerned with development in the Conservation Area it does states *“the wider effects of demolition and redevelopment on the character of the Area will be assessed before consent is granted”*.

#### *Policy R25 - Works to Listed Buildings*

The Site features the former Shredded Wheat Factory, Grade II listed. The Heritage Chapter 9 of the ES found the 1926 -1928 parts of the listed building are of highest significance, architecturally, and historically. Much of the original 1920s production hall is hidden behind the later, less interesting buildings, including the 1930s manufacturing hall and the 1950s range of administrative offices. The closest listed building to the Site is the grade II listed Office Block (Buildings 1 to 4) To Roche Products Factory. Policy R25 relates to works to listed Buildings including extensions internally or externally and states *“permission will be refused for any proposal which would adversely affect the historic character or architectural quality of a listed building or its setting”*.

A comprehensive assessment of the historic development of the Site, the character, appearance and interest of the existing factory listed building to identify its overall significance and value is dealt with Chapter 9, Heritage, of the ES and should be read in conjunction with the TVIA.

#### *Policy R28 - Historic Parks and Gardens*

Hatfield House a Registered Historic Park and Garden, Grade I listed, is located 4.2km south from the centre of the Site and is considered in the visual amenity section 4.4 and visual assessment section 6.5. Policy R28 of the District Plan states *“development will not be permitted if it would lead to the loss of, or cause harm to, the historic character, appearance or setting of any part of a registered historic park or garden”*.





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#### *Policy D1 - Quality of Design*

The quality of design in parts of the Welwyn and Hatfield district is historically of a high quality and the Council will seek good quality design in all new developments as outlined in Policy D1. The policy states *“the council will require the standard of design in all new development to be of high quality. The design of new development should incorporate the design principles and policies in the plan and guidance contained in the Supplementary Design Guidance”*. As part of this policy the council requires new developments to take account of the context of the Site including the existing character and setting in which it is located and states *“new development should respect and relate to the area in which it is proposed”*.

#### *Policy D2 - Character and Context*

Policy D2 of the District Plan requires all new developments to respect and relate to the character and context of the area in which it is proposed. A detailed local townscape character assessment has been undertaken in Chapter 8, TVIA, of the ES report which explores the character of the Site and the surrounding townscapes.

#### *Policy D4 - Quality of the Public Realm*

The Site is currently private with public access restricted to Hyde Way which provides a pedestrian link from the east to the centre of town in the west. The proposed mixed use development will be incorporating new publicly accessible spaces within the Site as part of the landscape and open space strategy. Policy D4 requires new development to either create or enhance public areas and the public realm as part of their proposals.

#### *Policy D8 - Landscaping*

As part of new development proposals the council will require landscaping as an integral part of the overall design, reflecting the strong tradition of urban landscape design in the district. The policy states *“landscaping schemes will require the use of materials which respect the character of the area, the planting of trees, hedgerows and shrubs and details of future maintenance”*.

#### *Policy EMP3 - Mixed Use Development Site at Broadwater Road West*

The Site has been identified in the District Plan under Policy EMP3 - Mixed Use Development at Broadwater Road West. The Site is recognised as an opportunity area of planned regeneration for a mixed use development. A Supplementary Planning Document (SPD) outlines the Council's vision for the future of Broadwater Road and sets out a development framework and design guidance to steer the redevelopment of the Site.





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### *Policy OS1 - Urban Open Land*

Areas of landscape and open space designated under policy OS1 - Urban Open Land are located to the east and west of the Application Site, primarily within Welwyn Garden City town centre. These areas of land are considered vital to the form, character and quality of the built up areas of the district in terms of the urban open land criteria. Whilst the Site is not located within land designated Urban Open Land it is within reasonably close proximity and any new development should be of a scale which does not compromise the value of the open land.

### **Supplementary Planning Documents**

#### Broadwater Road West Supplementary Planning Document (2008)

The Broadwater Road SPD was produced to guide redevelopment of the Site and surrounding area. Broadwater Road West is identified as an area suitable for mixed use development. The area covered by the SPD is located to the east of Welwyn Garden City railway station and covers 16 hectares (40 acres) for which the development Site covers approximately one half. It was originally an industrial hub but over time has become largely redundant.

The SPD sets out a development framework, design guidance and parameters, to assist in the interpretation of the vision. The following section summarises design guidance from the SPD that is of relevance to townscape and visual amenity.

#### *Character*

The SPD guidance in relation to new development and character can be summarised as follows:-

- The industrial character of the Site should be interpreted in the design of new development creating a strong sense of local identity.
- Use the industrial heritage as a cue for form, character and identity - re-use listed structures and ensure sympathetic development.
- The listed structures present on the Site should be retained and refurbished and used to shape the development.

#### *Blocks*

The SPD guidance in relation to new development and development blocks can be summarised as follows:-

- Create an urban grain capable of supporting appropriate uses while reflecting the town centre morphology.





- The proposed urban grain of the Site should be characterised by large blocks, continuous building lines and active frontages.
- Perimeter block forms should predominate based on the block structure illustrated on the opposite page.
- The existing scale of the built form on the Site provides a context for the block sizes and scale to be achieved through redevelopment.

The SPD states ‘the proposed urban grain of the Site should be characterised by large block, continuous building lines and active frontages’. The SPD goes on to illustrate the council’s development framework for the Site which shows a block arrangements, as illustrated on figure 5.1 of the SPD. Section 6.13 of the SPD states ‘Perimeter block forms should predominate and should be based on the layout shown in figure 5.1’.

### *Continuity and Enclosure*

The SPD guidance in relation to new development continuity and enclosure can be summarised as follows:-

- Public, private and community spaces will be easily distinguished.
- Open spaces will be overlooked, defined or enclosed by buildings.
- It is imperative that blocks are formed to create active frontages on the surrounding streets.
- A robust perimeter block form is preferred for the majority of the block structures.

### *Building Height*

The SPD guidance in relation to new development and building heights can be summarised as follows:-

- Given the context of the listed buildings, it is generally considered that buildings on the Site should not be more than 5 storeys in height.
- Where new development on the Site is of 5 storeys (or more) the resulting scheme will be assessed with regards to both the contribution that such height could bring and any adverse impacts.

The development proposals including new buildings of more than 5 storeys will, in accordance with the SPD, be considered under the following criteria by the Council -

- Relationship to context of the Site and the wider area
- Effect on historic context of the Site and the wider area
- Relationship to transport infrastructure
- Architectural quality of the building
- Design credibility of the building





- Sustainable design and construction
- Contribution to public space and facilities
- Effect on the local environment and amenity of those in the vicinity of the building
- Contribution to permeability
- Provision of a well designed environment including fitness for purpose

### *Open Space*

The Local Planning Authority set out in the SPD how a well landscaped open space and planting, intrinsic to the character of Welwyn Garden City, should be a key feature of the development.

The open space provision should be in accordance with the requirements set out in Policy OS3 - Play Space and Informal Open Space Provision in New Residential Development. The policy states:-

*“Substantial new residential development (of 0.4 hectares or above) will be expected to make a contribution to the provision of children’s play space and informal open space, where the increased demands generated by the new households cannot be met by current levels of provision.”*

### *Public Realm*

Further design guidance is provided with regard to the quality of the public realm in the SPD where it states:-

*“The spaces between the buildings on Application Site should be considered as integral and equally important to the overall design concept in line with Policy D8 of the District Plan”.*

The SPD outlines the key features the landscape design of Broadwater Road should include:-

- Tree lined avenues
- High quality public green space
- Multi-functional community parks
- Attractive play spaces for young people of different ages
- Consistent approach to hard landscaping
- Active frontages
- Well lit public space; and
- Use of materials to define public and private space.





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## Planning Policy and Guidance Summary

A summary of the planning policy key issues relating to townscape, visual amenity and the Site; Policy and guidance at a national and local level relevant to these proposals comprise:

- The National Planning Policy Framework (2012), specifically Sections 7, 8 and 12.
- The National Planning Practice Guidance (2014), specifically Paragraph 007 Ref ID: 26-007-20140306 titled 'Planning should promote local character (including landscape setting)
- Saved policies R1, R11, R17, R22, R25, R28 D1, D2, D4, D8, OS1 and EMP3 of Welwyn Hatfield District Plan (2005).
- The design guidance outlined in the Broadwater Road West Supplementary Planning Document (2008).

In order to ensure compliance with specific and related townscape policy and guidance at a national, regional and local level, development proposals should:

- Protect the architectural quality and setting of listed buildings including the Application Site's Shredded Wheat factory buildings and the Roche Products office building.
- Preserve or enhance the historic character, setting and visual amenity of Hatfield House Registered Historic Park and Garden.
- Preserve or enhance the setting of Welwyn Garden City Conservation Area.
- Be of a high design quality that respects and relates to the surrounding townscape character, quality, features and setting.
- Create an urban grain capable of supporting appropriate uses whilst reflecting the town centre morphology.
- Use the industrial heritage as a cue for form, character and identity to ensure a sympathetic development.
- Be characterised by large blocks, continuous building lines and active frontages.
- Make reference to the existing scale of built form on Site to provide the context for the proposed block sizes and scale.
- Buildings should be no more than five storeys in height and where new development is proposed of 5 storeys (or more) the resulting scheme will be assessed with regards to both the contribution that such height could bring and any adverse impacts.
- Create high quality pedestrian links to the town centre and enhance existing routes through the Site to encourage pedestrian and cycle movement between the eastern side of the town to the town centre and station.





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- Provide children's play space and an open space provision in accordance with the requirements set out in Policy OS3.
  - Ensure the spaces between the buildings are considered an integral part of the overall design.





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## **APPENDIX 11.3 – VIEWPOINTS AND WIRELINES**



# Broadwater Road, Welwyn Garden City

## Wireline Assessment

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Document Reference No. V3D 150104

January 2018

Prepared on behalf of



## 1.0 Introduction

- 1.1. Verified View / Accurate Visual Representation
- 1.1.1.

A Verified View (VV) or Accurate Visual Representation (AVR) is “a still image, or animated sequence of images, intended to convey reliable visual information about a proposed development to assist the process of visual assessment”.<sup>1</sup>
- 1.1.2.

This document applies current good practice in preparing verified views of the proposed development. Views are from what is considered to be the most sensitive viewpoints.
- 1.1.3.

The current practice guides this process is informed by include:
  - Landscape Institute Advice Note 01/11
  - Guidelines for Landscape and Visual Impact Assessment 3rd edition (2013)
  - London View Management Framework (March 2012)
- 1.2. Viewpoint Locations
- 1.2.1.

The viewpoint locations used for the production of these wirelines duplicates those previously agreed with Welwyn Hatfield District Council and included in the Townscape & Visual Impact (TVIA) chapter of the Environmental Statement submitted in 2016 in support of the consented scheme proposals.
- 1.2.2.

Wirelines were not produced previously for TVIA viewpoints 4, 5, 8 & 9 and so have not been reproduced as part of this set.
- 1.2.3.

Additional wirelines have been produced as viewpoints 1a and 13a to demonstrate views through to the Silos and Production Hall from alternative locations on Bridge Road.

## 2.0 Methodology

- 2.1. Overview
- 2.1.1.

In preparing the verified views, accurate photography is required, with survey information recorded, and an accurate model of the application parameters prepared. In simple terms, this allows a 'virtual' viewpoint to be constructed that accurately reflects an actual photograph, which in turn allows a wireline (representing the outline of the proposed development form) or fully rendered image of the proposed development to be accurately superimposed on the existing photograph.
- 2.2. Photography
- 2.2.1.

In accordance with current guidance, on-site photography records the position (as a grid reference), height of camera lens, camera used, lens type and focal length, field of view, date and time. Photographs were recorded at 1.6 metres above ground level to reflect the pedestrian eye height. Photographs are taken with a fixed 50mm focal length lens attached to a SLR camera (canon EOS 5D MKII).

2.2.2.

In assessing the impact of development on the landscape it is often necessary to record a panoramic view. A panorama made up from planar photographs is not strictly a 'true panorama' due to distortion encountered from the rectilinear projection of the lens. This is best described by looking through the viewfinder as you rotate the camera, the objects near the center get larger as they approach the edge of the frame. Accurate 'stitching software' overcomes this effect by distorting each image into a cylindrical projection before aligning and blending, to reflect as accurately as possible the experience of the human eye. In taking a panoramic photograph it is important to ensure the camera position is set horizontally level.
- 2.3. Survey Information
- 2.3.1.

On site surveying is taken to record the position and height (Above Ordnance Datum) of the camera and its tripod alongside a range of 6-10 physical reference points per viewpoint (such as telegraph poles, road signs, or in the absence of sufficient existing reference points, ranging poles). To ensure the accuracy, the surveyed data was cross-referenced against OS information as well as the topographical site survey. This data is subsequently transferred into computer modelling software to produce an accurate 'virtual' view reflecting the actual panoramic photograph. Reference points are captured by a Total Station with an electronic distance meter (EDM) which reads slope distances from the instrument to a particular point. These points are used to align the computer image against the photography.
- 2.4. Scheme Parameters Modelling
- 2.4.1.

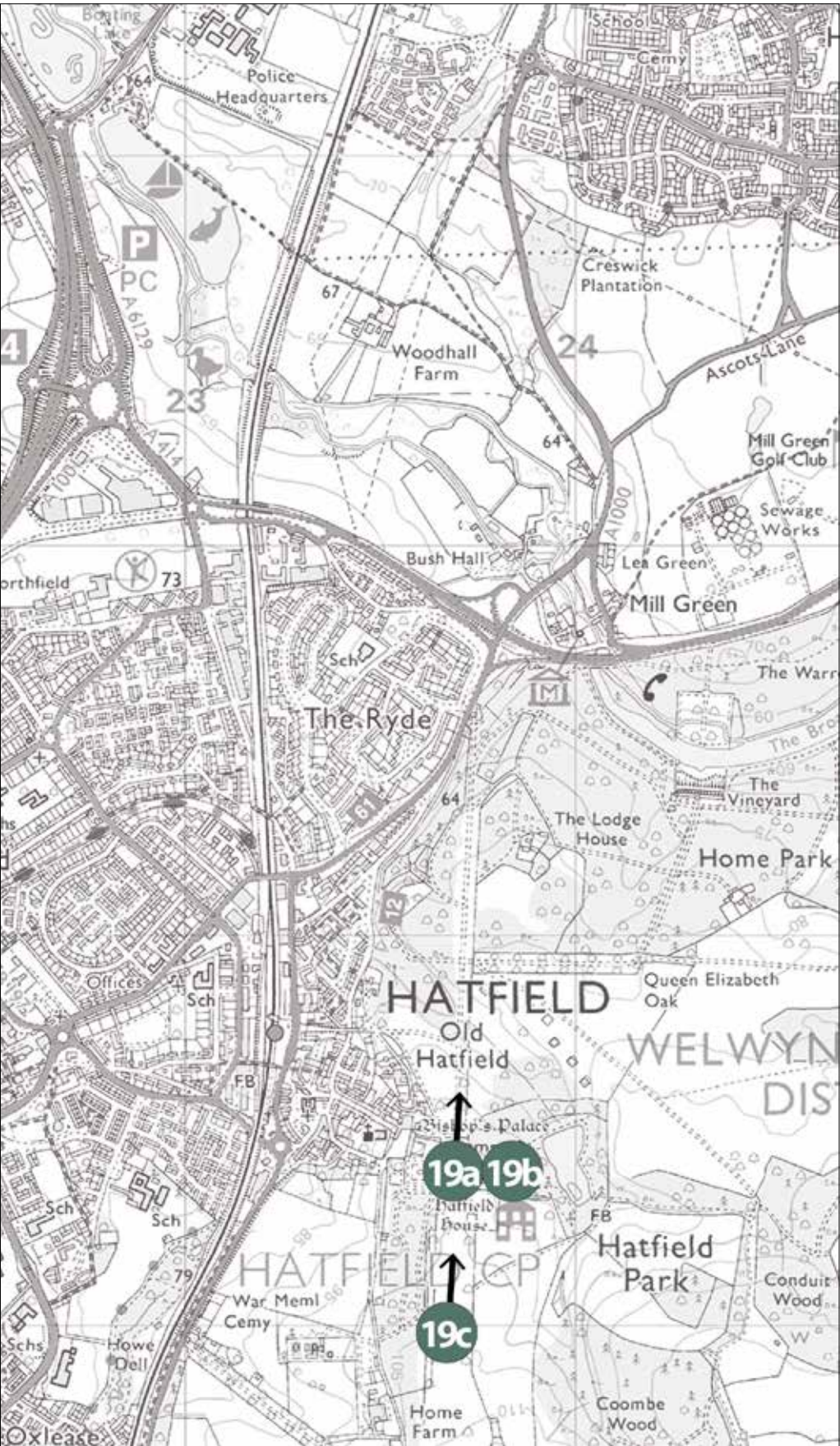
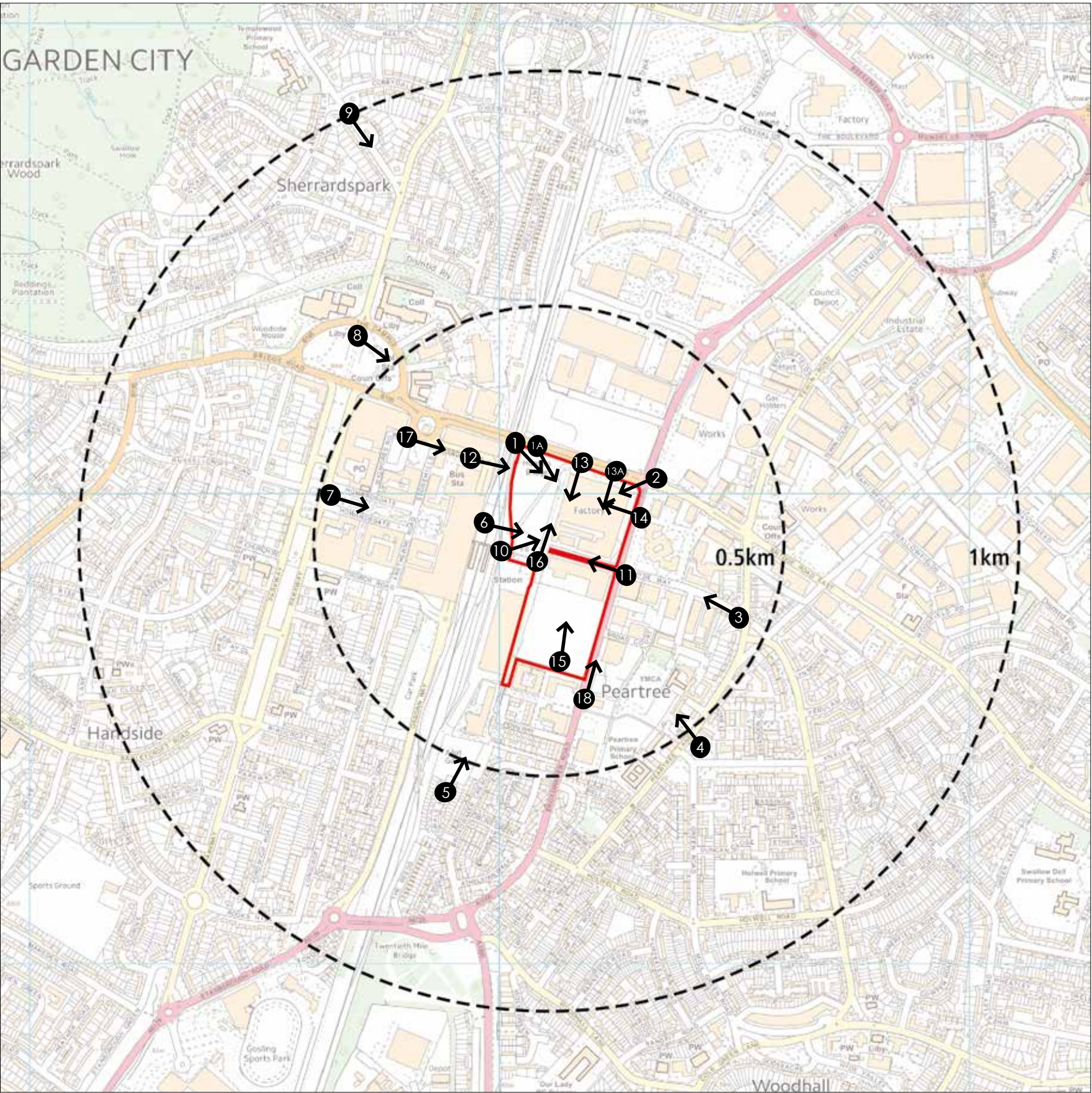
The 3D model by Collado Collins Architects provides a layout and scheme parameters that is reflective of how the proposed application could be realised, and is therefore considered to be an acceptable basis for verified view production.
- 2.5. Camera Matching
- 2.5.1.

Having accurately modelled the scheme, a series of computer generated images are taken from the exact viewpoint locations and have cylindrical projection applied before photo-stitching to match the panoramic photographs, thus creating a 'virtual' panorama of the proposed development. With the virtual and photographic images overlaid with each other, common (surveyed) reference points are used to aligned both the virtual and actual images before the wireline is drawn.

<sup>1</sup> London View Management Framework March 2012



Viewpoint Location Plan





Viewpoint 1 - BRIDGE ROAD (B195) LOOKING SOUTH EAST FROM RAILWAY BRIDGE



National Grid Reference:  
524008.553, 213112.649

Camera:  
SLR Canon EOS 5D MKII

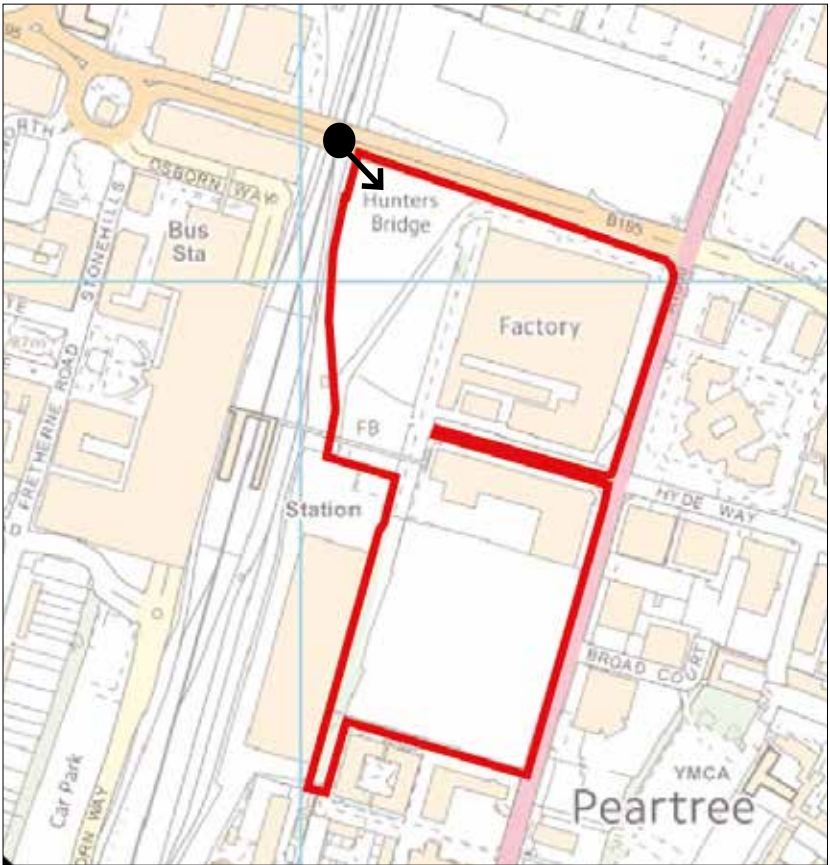
Lens:  
Fixed 50mm

Height of Camera Lens:  
94.08 AOD

Horizontal Field of View:  
152 °

Date:  
10.11.17

Time:  
12.32



Extended Panorama



Viewpoint 1 - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

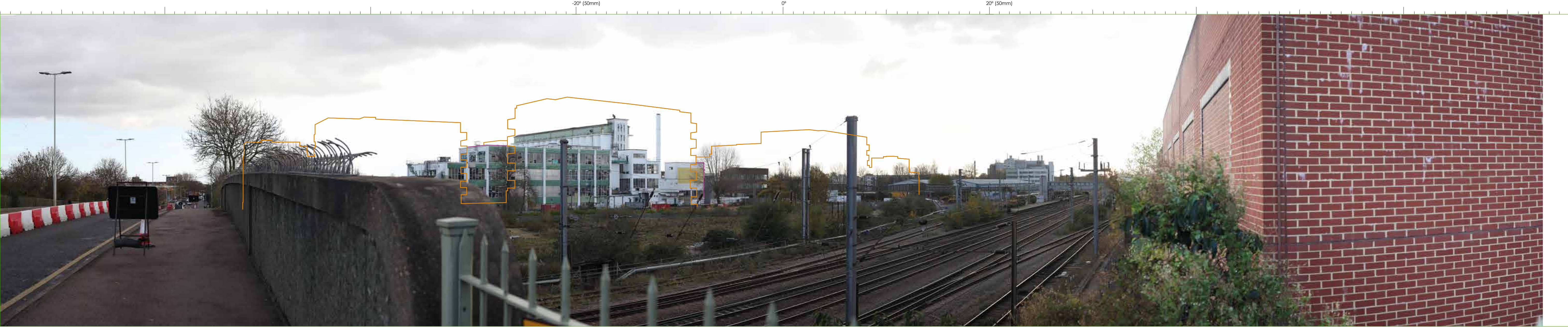




Viewpoint 1 - Existing baseline view with wireline of proposal

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

- Proposed Scheme (2018)
- Listed Buildings





## Viewpoint 1A - BRIDGE ROAD (B195) LOOKING SOUTH EAST FROM RAILWAY BRIDGE



National Grid Reference:  
524075.521, 213093.628

Camera:  
SLR Canon EOS 5D MKII

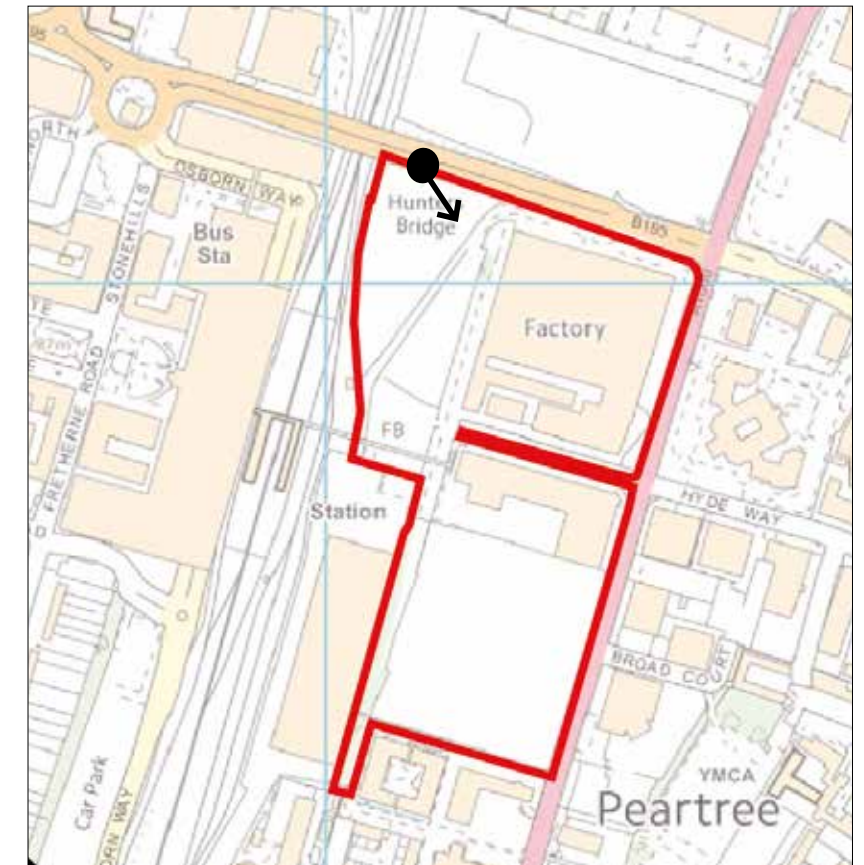
Lens:  
Fixed 50mm

Height of Camera Lens:  
92.65 AOD

Horizontal Field of View:  
152 °

Date:  
24.11.17

Time:  
10.14



Extended Panorama



Viewpoint 1A - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image





Viewpoint 1A - Existing baseline view with wireline of proposal

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

- Proposed Scheme (2018)
- Listed Buildings





## Viewpoint 2 - BROADWATER ROAD (A1000) AT THE JUNCTION WITH BRIDGE ROAD (B195)



National Grid Reference:  
524326.633, 213035.236

Camera:  
SLR Canon EOS 5D MKII

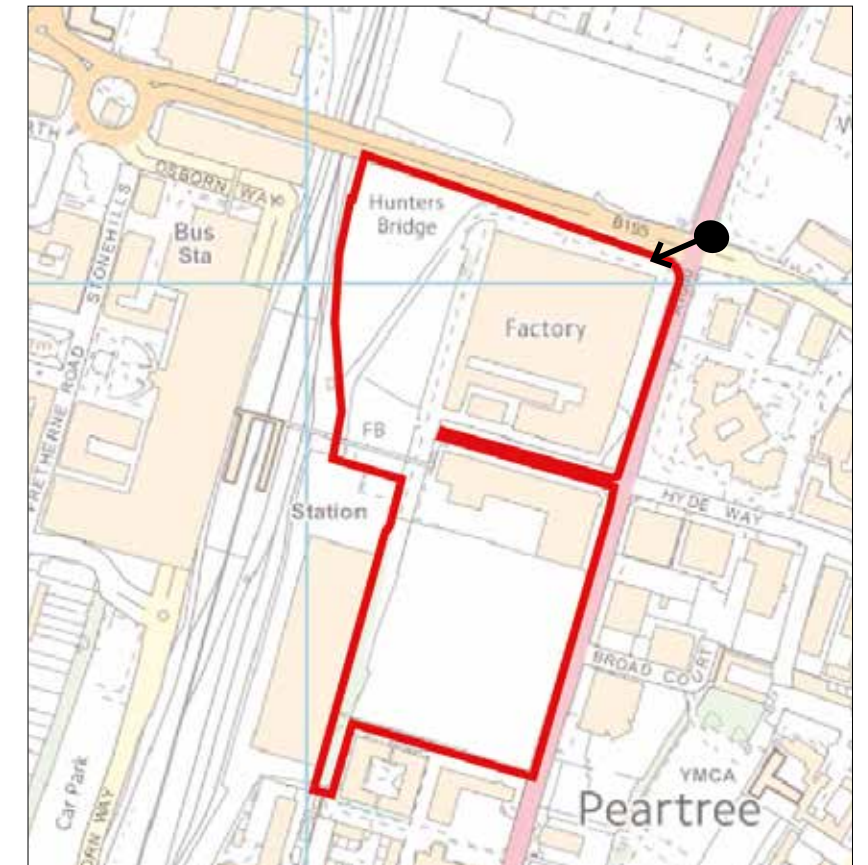
Lens:  
Fixed 50mm

Height of Camera Lens:  
86.45 AOD

Horizontal Field of View:  
152 °

Date:  
10.11.17

Time:  
12.58



Extended Panorama



Viewpoint 2 - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

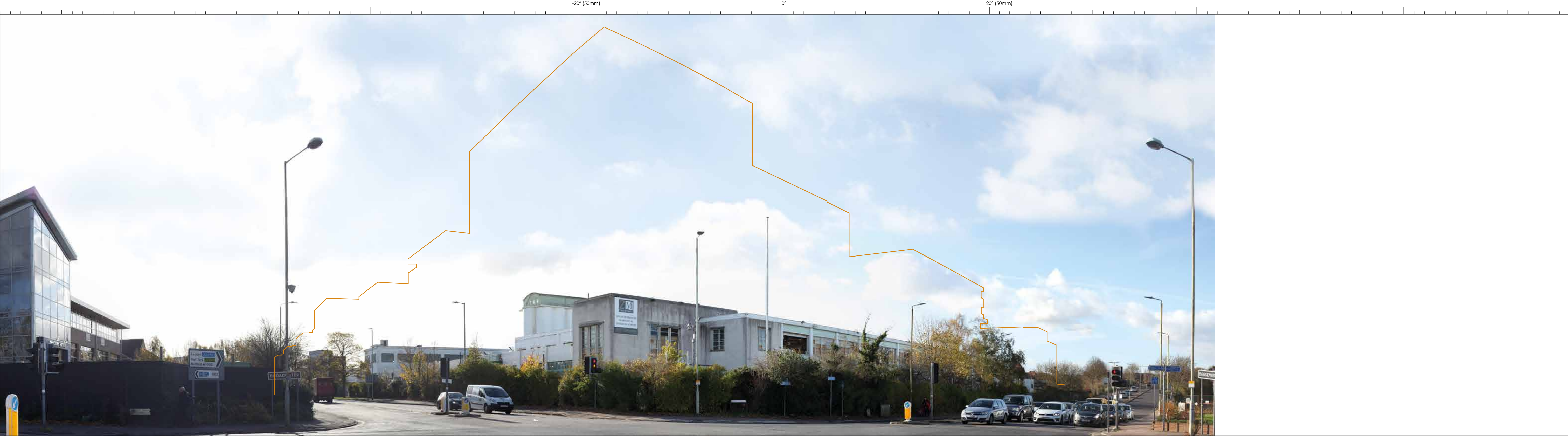




Viewpoint 2 - Existing baseline view with wireline of proposal

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

- Proposed Scheme (2018)
- Listed Buildings





## Viewpoint 3 - HYDE WAY LOOKING WEST



National Grid Reference:  
524518.722, 212743.454

Camera:  
SLR Canon EOS 5D MKII

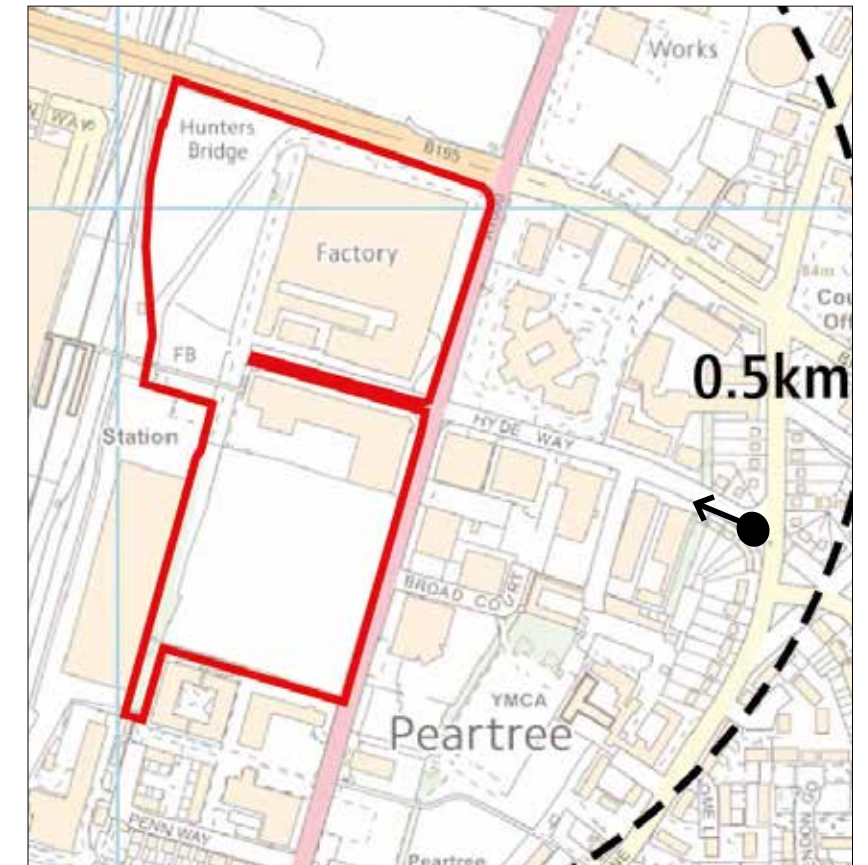
Lens:  
Fixed 50mm

Height of Camera Lens:  
84.63 AOD

Horizontal Field of View:  
152 °

Date:  
10.11.17

Time:  
09.54



Extended Panorama



Viewpoint 3 - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image





Viewpoint 3 - Existing baseline view with wireline of proposal

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

- Proposed Scheme (2018)
- Listed Buildings





## Viewpoint 4 - PUBLIC OPEN SPACE, KNELLA ROAD, PEARTREE



National Grid Reference:  
524435.025, 212469.714

Camera:  
SLR Canon EOS 5D MKII

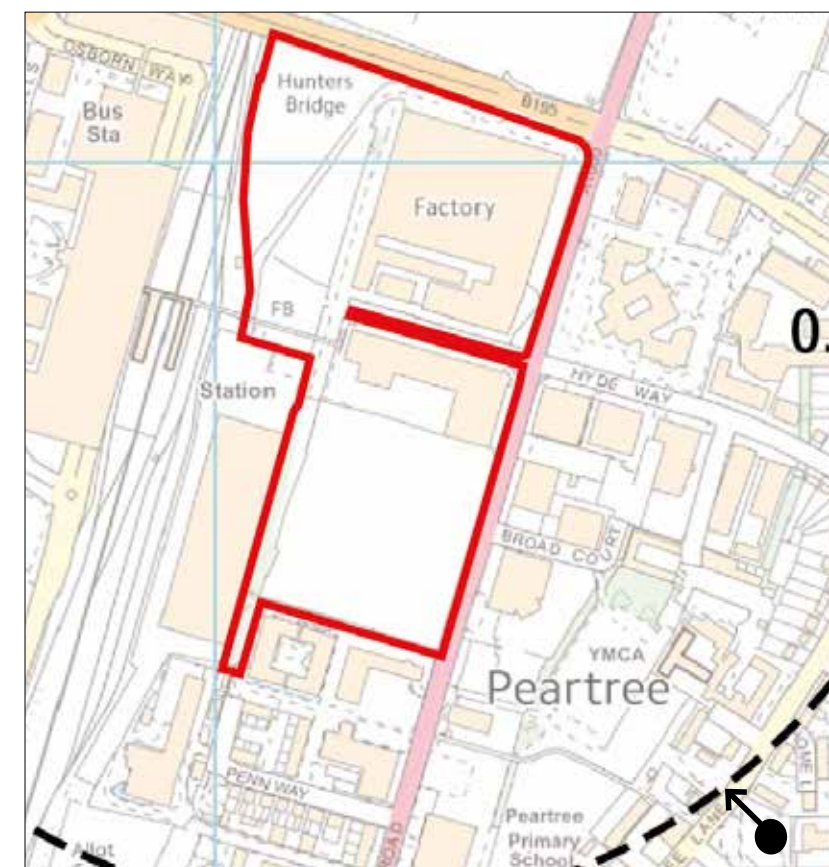
Lens:  
Fixed 50mm

Height of Camera Lens:  
87.67 AOD

Horizontal Field of View:  
152 °

Date:  
10.11.17

Time:  
09.40



Extended Panorama



Viewpoint 4 - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image



Note:  
A wireline has not been produced for this viewpoint.  
Wirelines were only produced for more sensitive viewpoints.



## Viewpoint 5 - CORALS MEAD, BROADWATER CRESCENT



National Grid Reference:  
523886.506, 212371.056

Camera:  
SLR Canon EOS 5D MKII

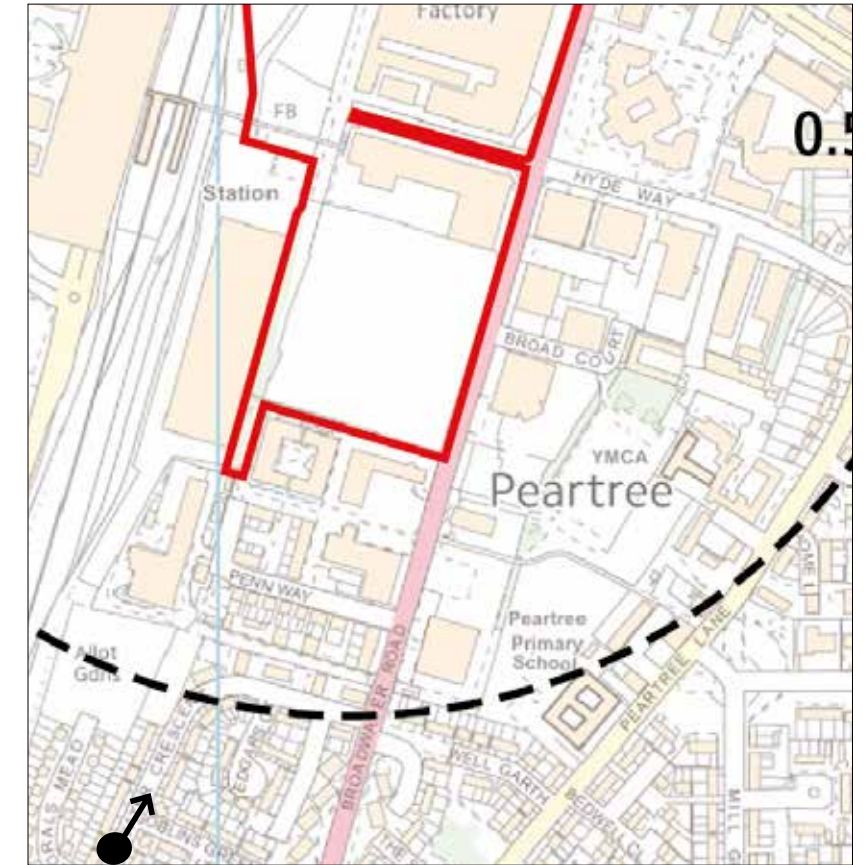
Lens:  
Fixed 50mm

Height of Camera Lens:  
90.31 AOD

Horizontal Field of View:  
152 °

Date:  
10.11.17

Time:  
10.21



Extended Panorama



Viewpoint 5 - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image



Note:  
A wireline has not been produced for this viewpoint.  
Wirelines were only produced for more sensitive viewpoints.



## Viewpoint 6 - WELWYN GARDEN CITY RAIL STATION



National Grid Reference:  
523962.808, 212914.959

Camera:  
SLR Canon EOS 5D MKII

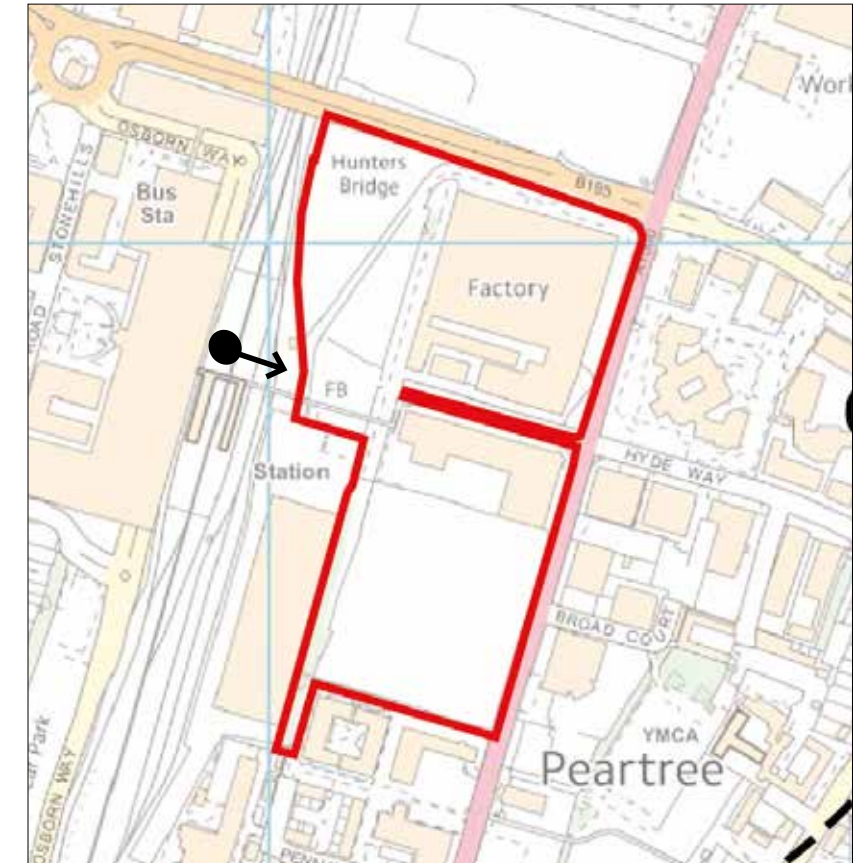
Lens:  
Fixed 50mm

Height of Camera Lens:  
88.30 AOD

Horizontal Field of View:  
152 °

Date:  
10.11.17

Time:  
11.53



Extended Panorama



Viewpoint 6 - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image





Viewpoint 6 - Existing baseline view with wireline of proposal

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

- Proposed Scheme (2018)
- Listed Buildings





## Viewpoint 7 - PARKWAY LOOKING EAST ALONG HOWARDSGATE



National Grid Reference:  
523633.113, 212998.576

Camera:  
SLR Canon EOS 5D MKII

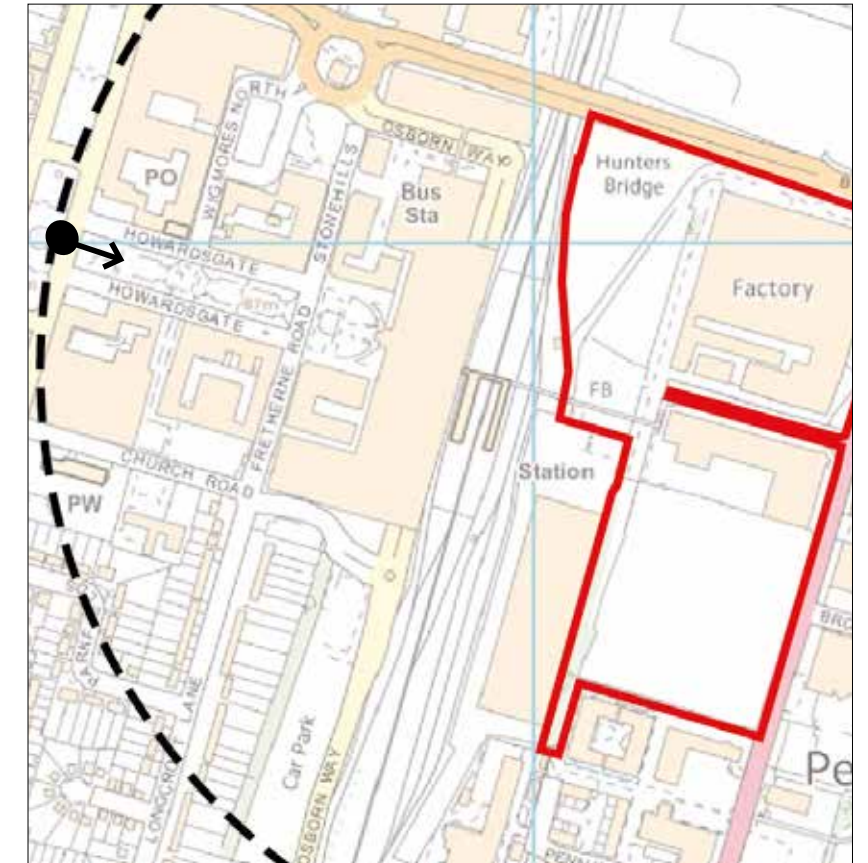
Lens:  
Fixed 50mm

Height of Camera Lens:  
92.84 AOD

Horizontal Field of View:  
152 °

Date:  
05.12.17

Time:  
13.27



Extended Panorama



Viewpoint 7 - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image





Viewpoint 7 - Existing baseline view with wireline of proposal

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

- Proposed Scheme (2018)
- Listed Buildings





Viewpoint 8 - THE CAMPUS, PARKWAY LOOKING SOUTH EAST TOWARDS THE HOWARD CENTRE



National Grid Reference:  
523703.779, 213344.157

Camera:  
SLR Canon EOS 5D MKII

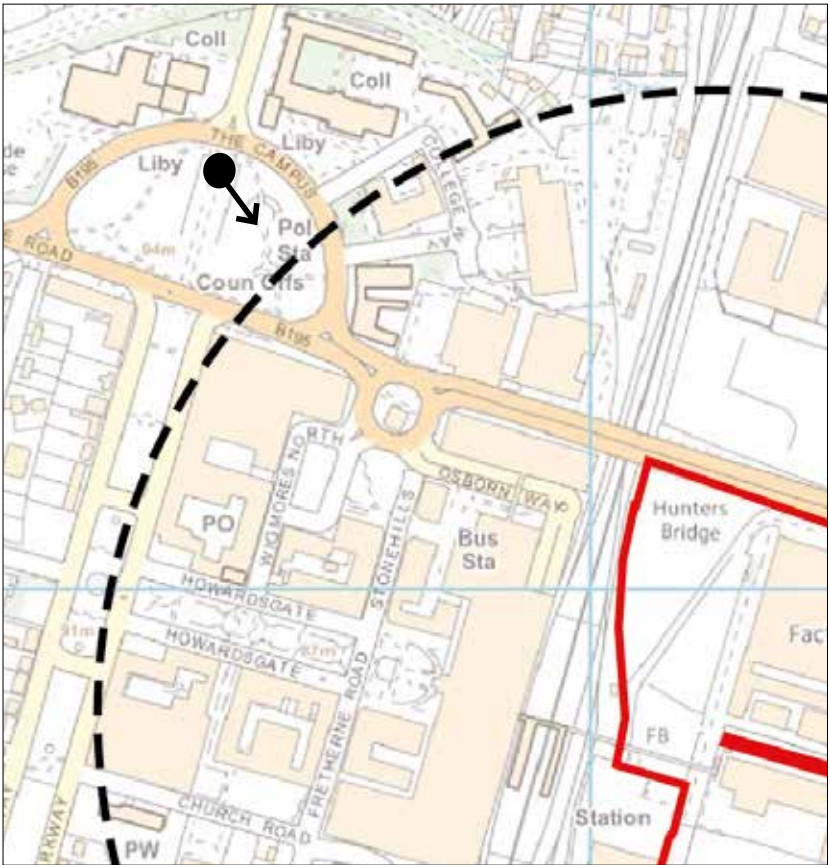
Lens:  
Fixed 50mm

Height of Camera Lens:  
97.88 AOD

Horizontal Field of View:  
152 °

Date:  
10.11.17

Time:  
09.00



Extended Panorama



Viewpoint 8 - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image



Note:  
A wireline has not been produced for this viewpoint.  
Wirelines were only produced for more sensitive viewpoints.



## Viewpoint 9 - PENTLEY PARK, SHERRARDS PARK



National Grid Reference:  
523685.894, 213800.818

Camera:  
SLR Canon EOS 5D MKII

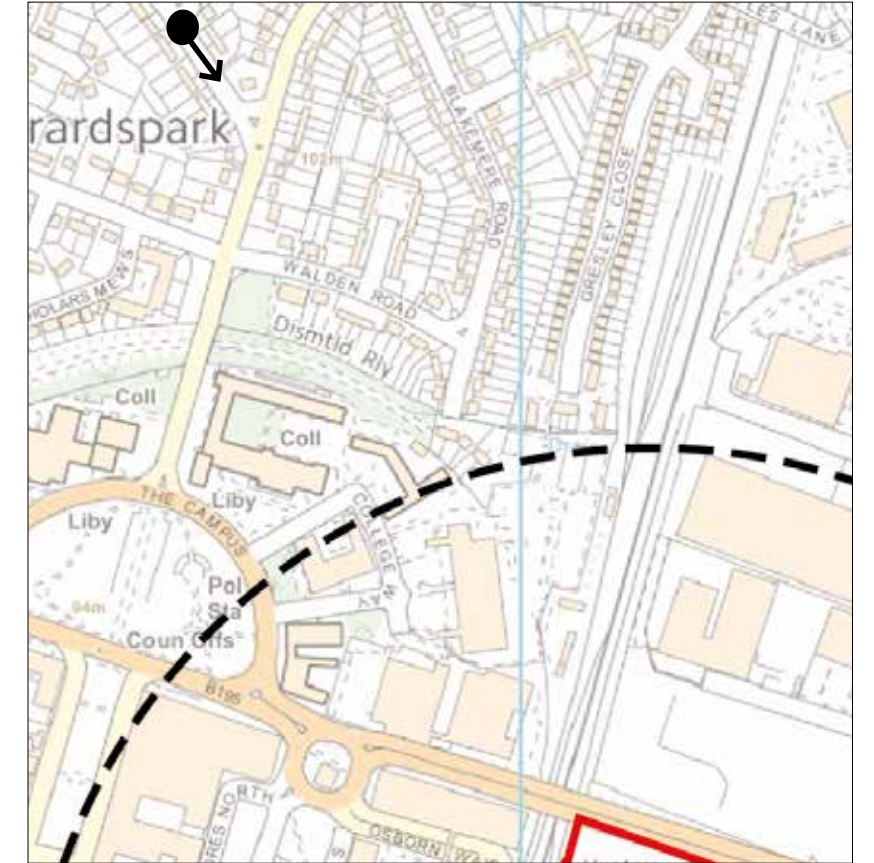
Lens:  
Fixed 50mm

Height of Camera Lens:  
112.58 AOD

Horizontal Field of View:  
152°

Date:  
10.11.17

Time:  
08.44



Extended Panorama



Viewpoint 9 - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image



Note:  
A wireline has not been produced for this viewpoint.  
Wirelines were only produced for more sensitive viewpoints.



## Viewpoint 10 - NETWORK RAIL FOOTBRIDGE - 1



National Grid Reference:  
523991.525, 212885.419

Camera:  
SLR Canon EOS 5D MKII

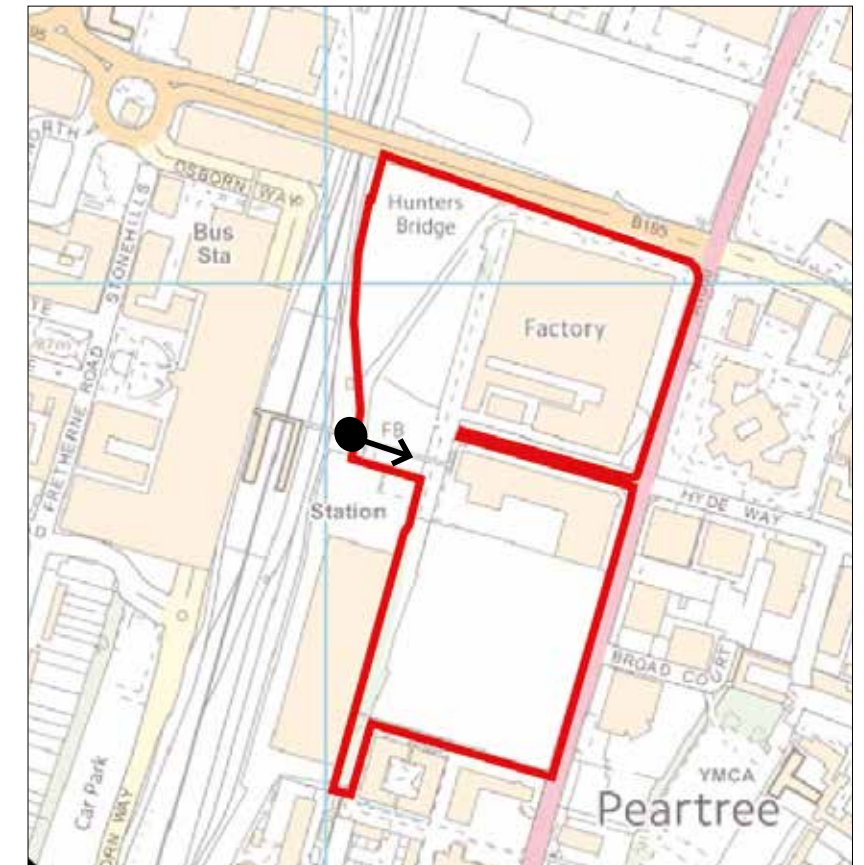
Lens:  
Fixed 50mm

Height of Camera Lens:  
92.10 AOD

Horizontal Field of View:  
152 °

Date:  
10.11.17

Time:  
11.44



Extended Panorama



Viewpoint 10 - Existing baseline view with wireline of proposal

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image





Viewpoint 10 - Existing baseline view with wireline of proposal

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

- Proposed Scheme (2018)
- Listed Buildings





## Viewpoint 11 - HYDE WAY / BROADWATER ROAD JUNCTION



National Grid Reference:  
523991.525, 212885.419

Camera:  
SLR Canon EOS 5D MKII

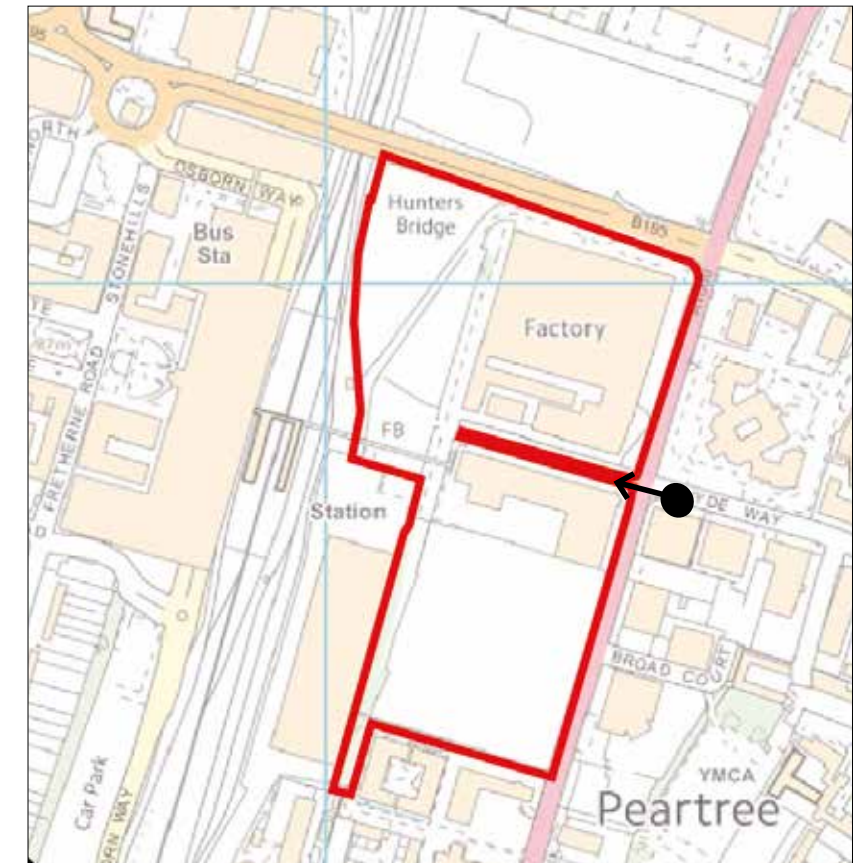
Lens:  
Fixed 50mm

Height of Camera Lens:  
92.10 AOD

Horizontal Field of View:  
152 °

Date:  
10.11.17

Time:  
11.44

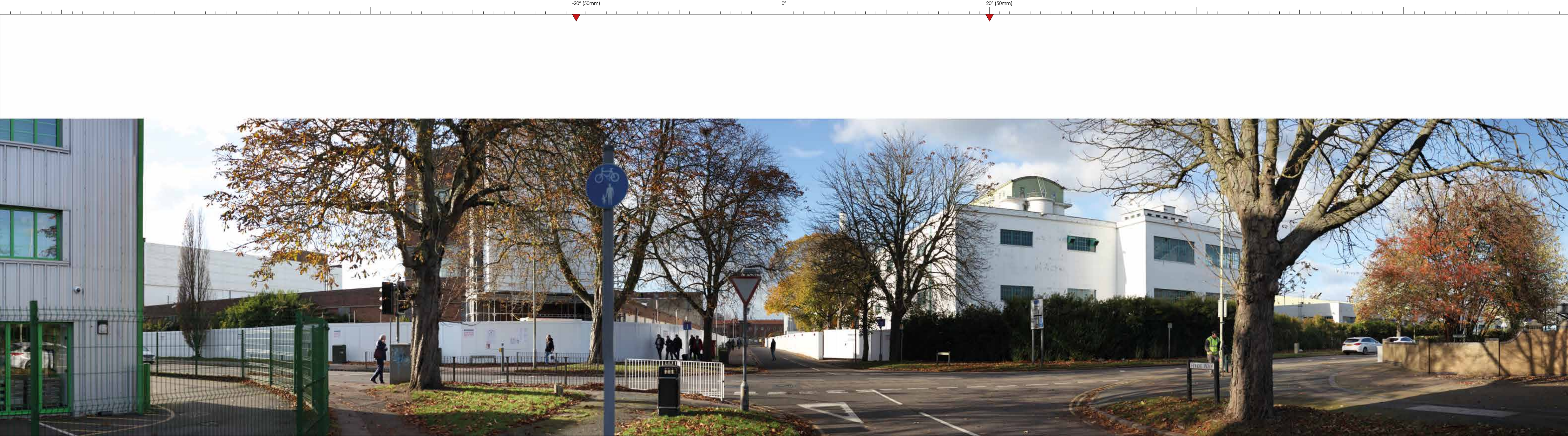


Extended Panorama



Viewpoint 11 - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image





Viewpoint 11 - Existing baseline view with wireline of proposal

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

- Proposed Scheme (2018)
- Listed Buildings





## Viewpoint 12 - OSBORN WAY FOOTBRIDGE



National Grid Reference:  
523944.353, 213079.871

Camera:  
SLR Canon EOS 5D MKII

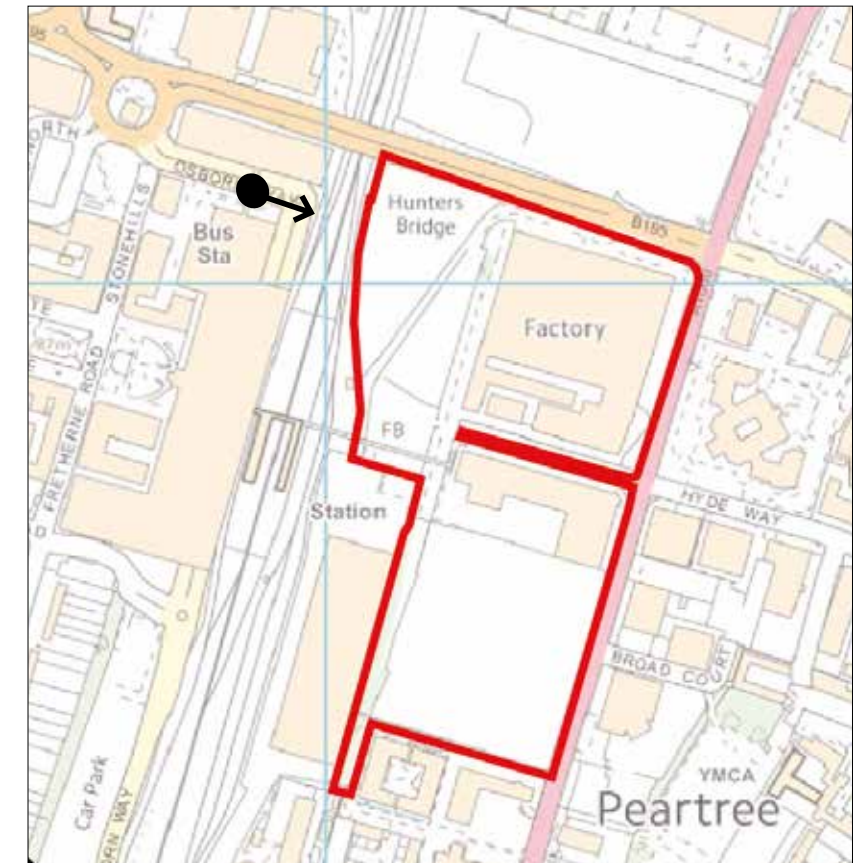
Lens:  
Fixed 50mm

Height of Camera Lens:  
92.97 AOD

Horizontal Field of View:  
152 °

Date:  
10.11.17

Time:  
12.09



Extended Panorama



Viewpoint 12 - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image





Viewpoint 12 - Existing baseline view with wireline of proposal

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

- Proposed Scheme (2018)
- Listed Buildings





Viewpoint 13 - BRIDGE ROAD (B195) LOOKING SOUTH



National Grid Reference:  
524174.704, 213080.292

Camera:  
SLR Canon EOS 5D MKII

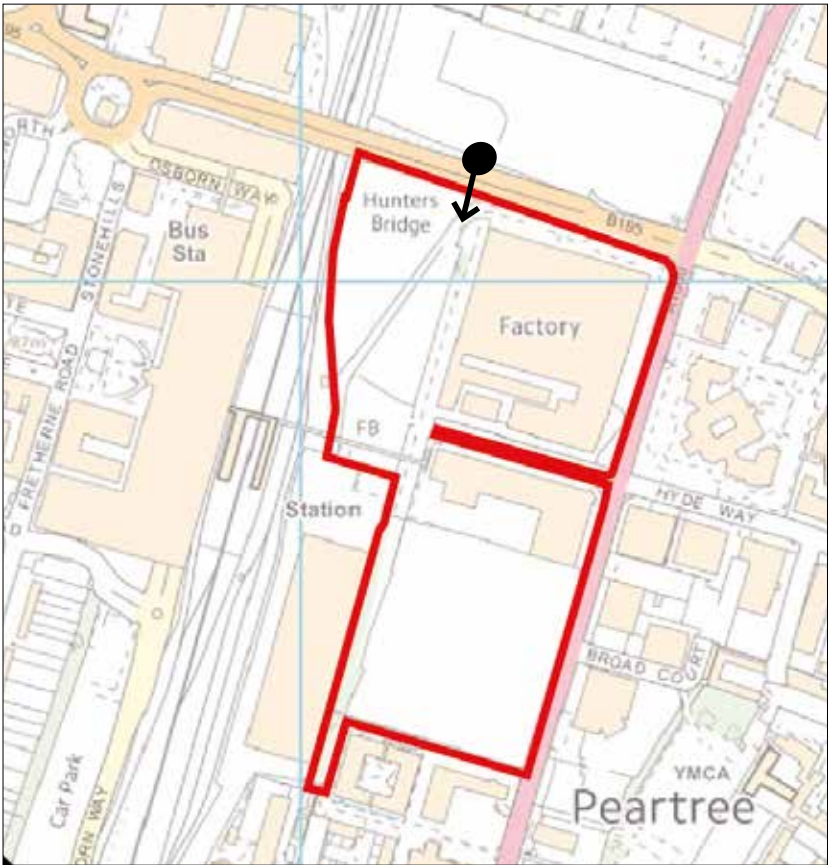
Lens:  
Fixed 50mm

Height of Camera Lens:  
88.24 AOD

Horizontal Field of View:  
152 °

Date:  
10.11.17

Time:  
12.45



Extended Panorama



Viewpoint 13 - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

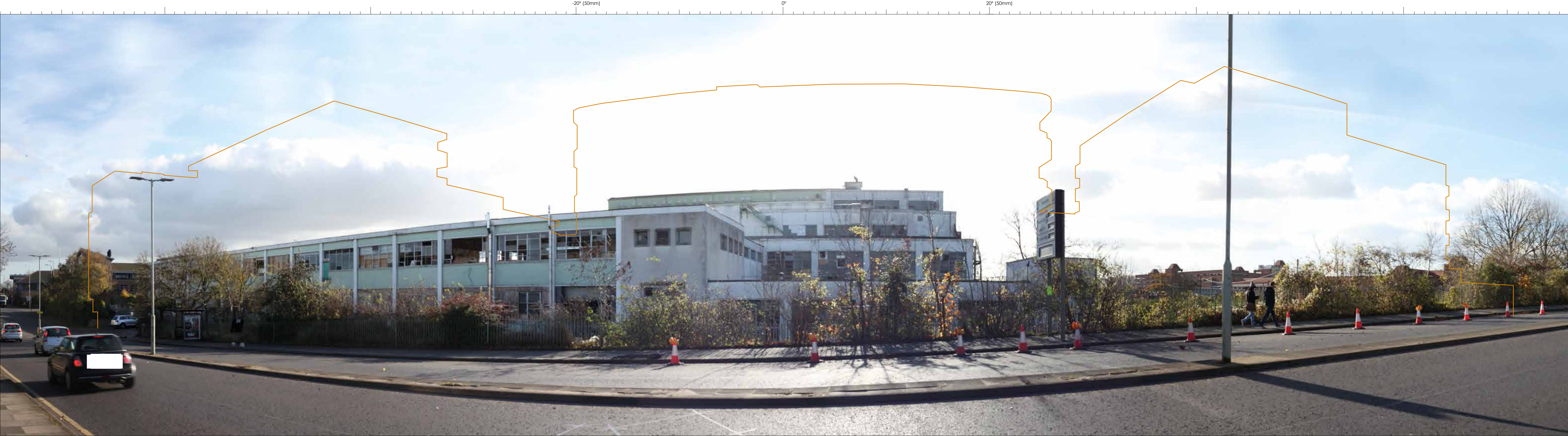




Viewpoint 13 - Existing baseline view with wireline of proposal

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

- Proposed Scheme (2018)
- Listed Buildings





## Viewpoint 13A - BRIDGE ROAD (B195) AT BUS STOP LOOKING SOUTH



National Grid Reference:  
524214.414, 213066.859

Camera:  
SLR Canon EOS 5D MKII

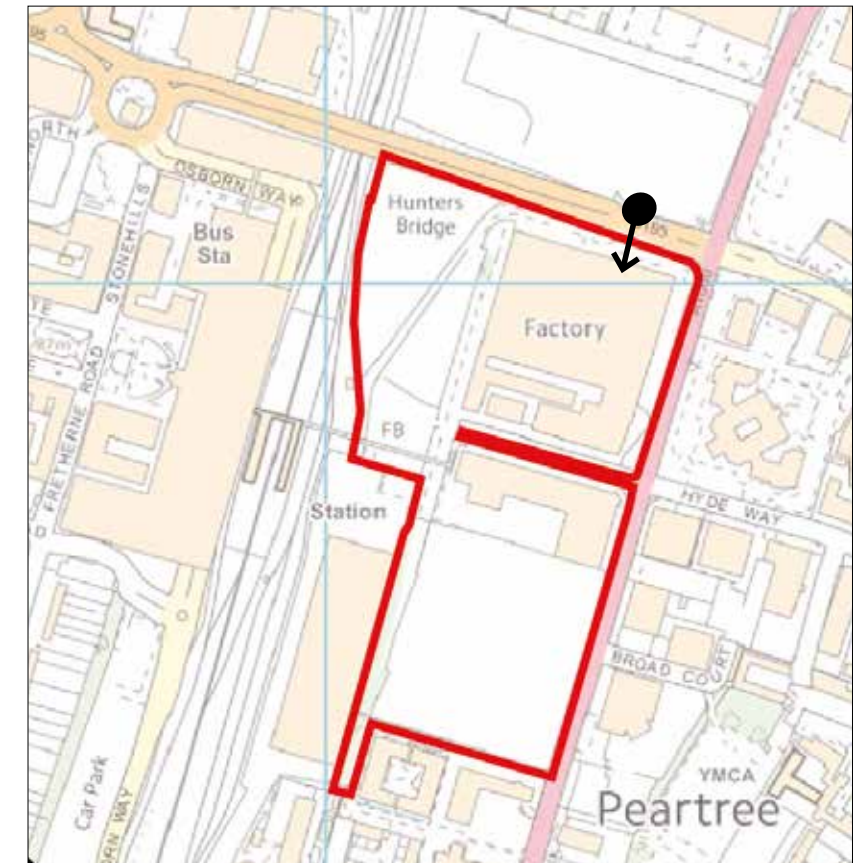
Lens:  
Fixed 50mm

Height of Camera Lens:  
86.43 AOD

Horizontal Field of View:  
152 °

Date:  
24.11.17

Time:  
09.06



Extended Panorama



Viewpoint 13A - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image





Viewpoint 13A - Existing baseline view with wireline of proposal

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

- Proposed Scheme (2018)
- Listed Buildings





## Viewpoint 14 - BROADWATER ROAD / MERCURY HOUSE / ALBANY PLACE



National Grid Reference:  
524291.257, 212940.791

Camera:  
SLR Canon EOS 5D MKII

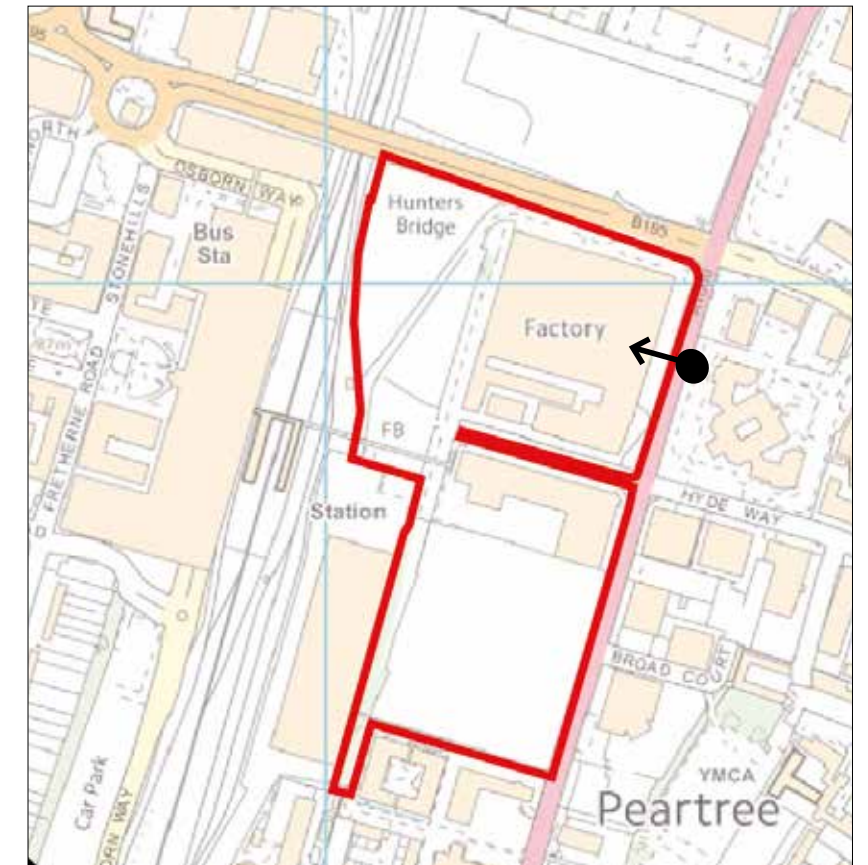
Lens:  
Fixed 50mm

Height of Camera Lens:  
87.52 AOD

Horizontal Field of View:  
152 °

Date:  
10.11.17

Time:  
13.06



Extended Panorama



Viewpoint 14 - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

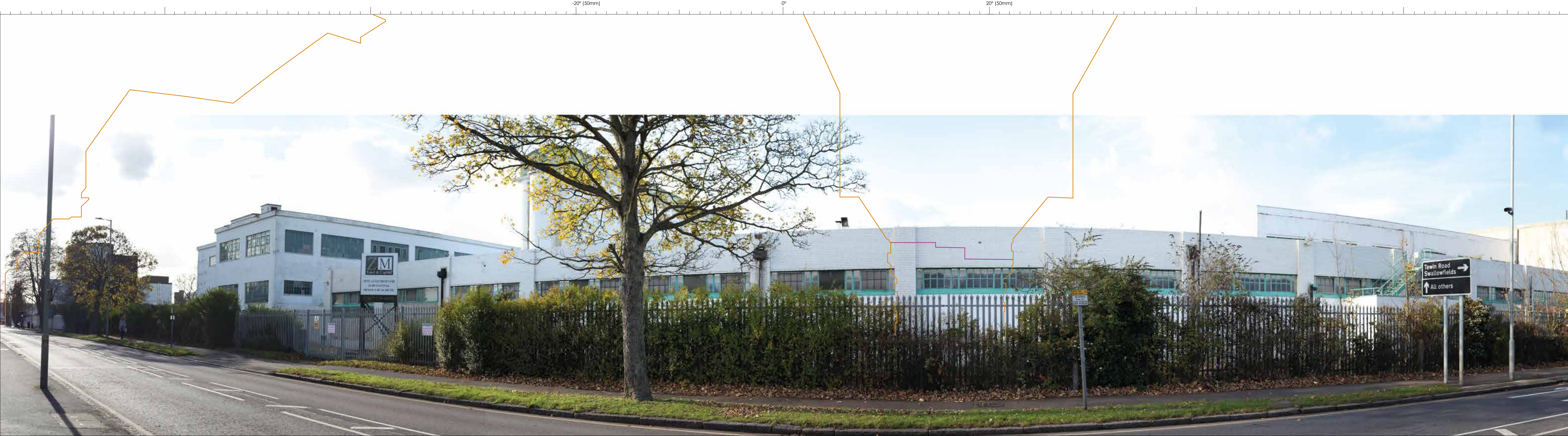




Viewpoint 14 - Existing baseline view with wireline of proposal

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

- Proposed Scheme (2018)
- Listed Buildings





Viewpoint 15 - OTTO ROAD / SOUTHERN SITE BOUNDARY



National Grid Reference:  
524130.1178, 212630.0494

Camera:  
SLR Canon EOS 5D MKII

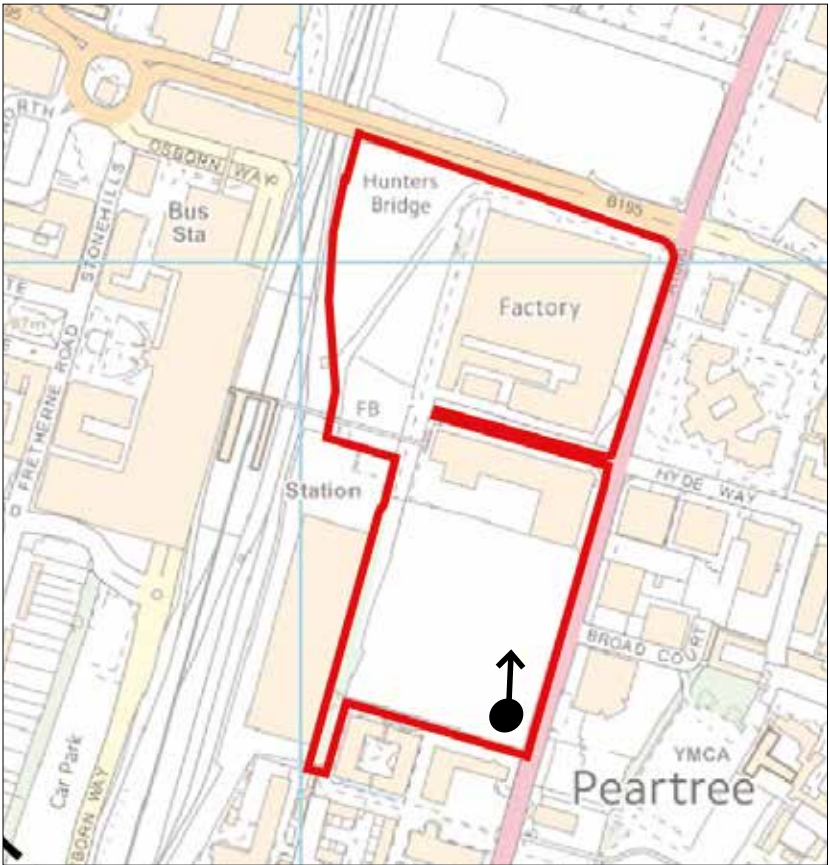
Lens:  
Fixed 50mm

Height of Camera Lens:  
86.97 AOD

Horizontal Field of View:  
152 °

Date:  
10.11.17

Time:  
11.26

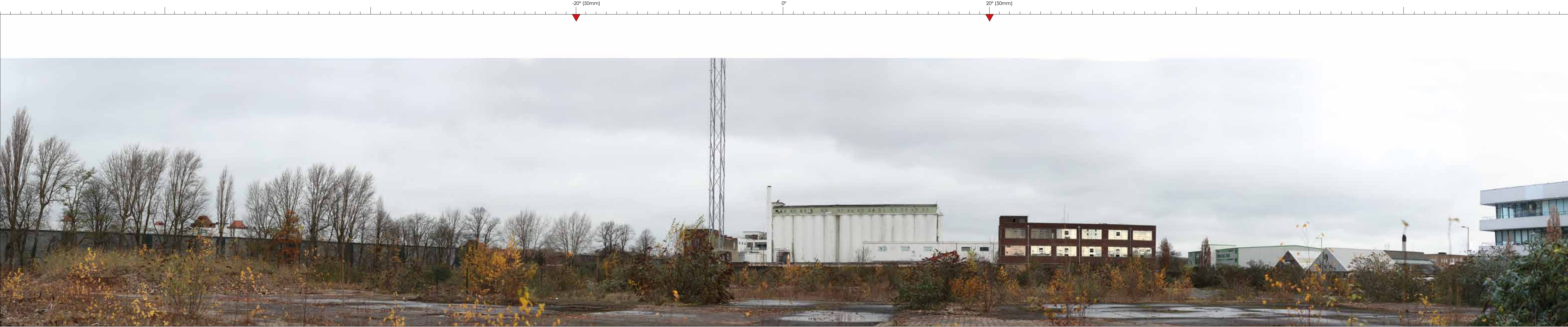


Extended Panorama



Viewpoint 15 - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image





Viewpoint 15 - Existing baseline view with wireline of proposal

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

- Proposed Scheme (2018)
- Listed Buildings





## Viewpoint 16 - NETWORK RAIL FOOTBRIDGE - 2



National Grid Reference:  
524085.862, 212858.522

Camera:  
SLR Canon EOS 5D MKII

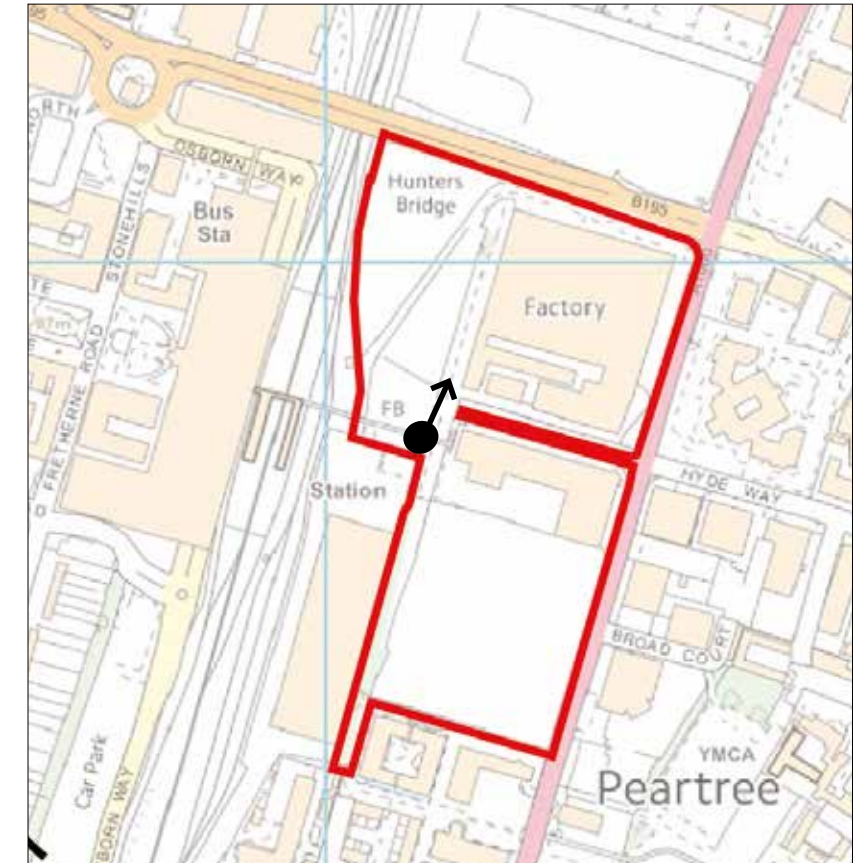
Lens:  
Fixed 50mm

Height of Camera Lens:  
92.27. AOD

Horizontal Field of View:  
152 °

Date:  
10.11.17

Time:  
11.36

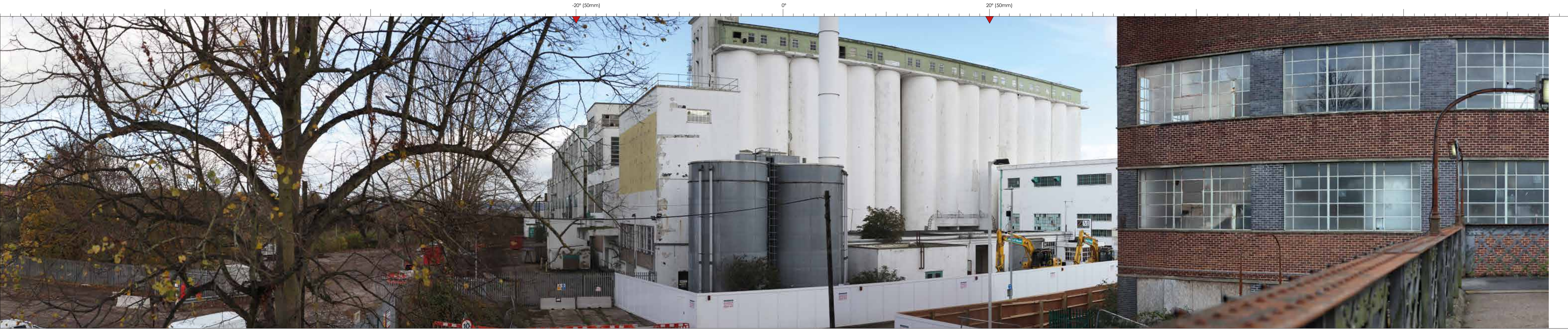


Extended Panorama



Viewpoint 16 - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image





Viewpoint 16 - Existing baseline view with wireline of proposal

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

- Proposed Scheme (2018)
- Listed Buildings





## Viewpoint 17 - WIGSMORE NORTH



National Grid Reference:  
523814.960, 213128.227

Camera:  
SLR Canon EOS 5D MKII

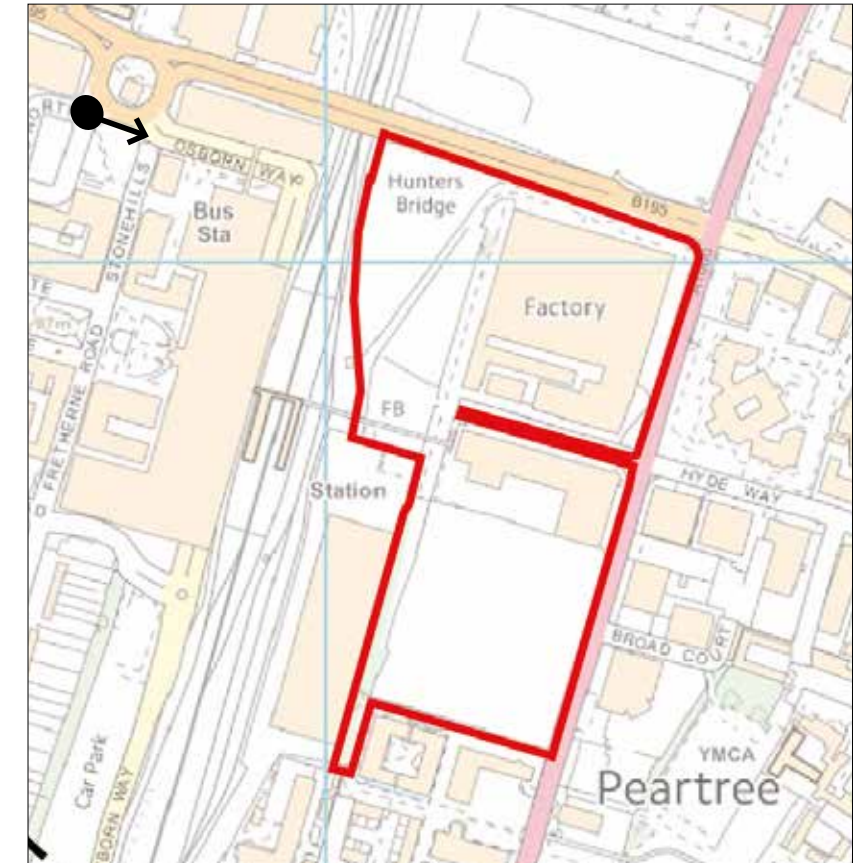
Lens:  
Fixed 50mm

Height of Camera Lens:  
90.06 AOD

Horizontal Field of View:  
152 °

Date:  
10.11.17

Time:  
12.22



Extended Panorama



Viewpoint 17 - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image





Viewpoint 17 - Existing baseline view with wireline of proposal

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

- Proposed Scheme (2018)
- Listed Buildings





## Viewpoint 18 - BROADWATER ROAD / PENN WAY



National Grid Reference:  
524155.257, 212479.240

Camera:  
SLR Canon EOS 5D MKII

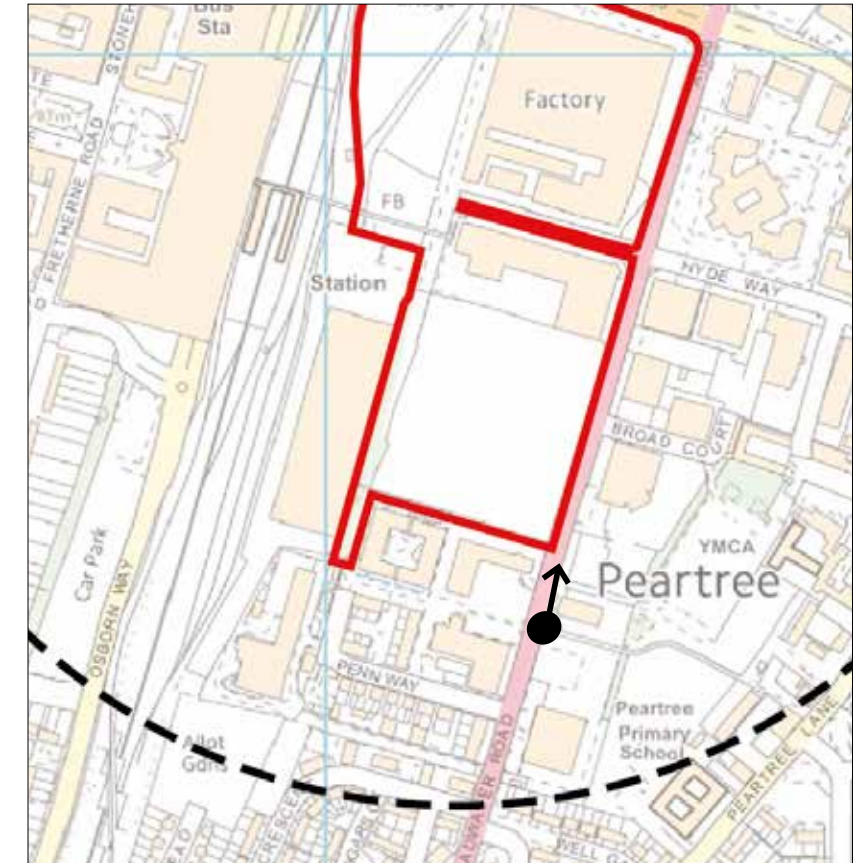
Lens:  
Fixed 50mm

Height of Camera Lens:  
87.10 AOD

Horizontal Field of View:  
152 °

Date:  
10.11.17

Time:  
10.06



Extended Panorama



Viewpoint 18 - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image





Viewpoint 18 - Existing baseline view with wireline of proposal

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

- Proposed Scheme (2018)
- Listed Buildings





Viewpoint 19a - HATFIELD HOUSE (1ST FLOOR)

National Grid Reference:  
523685, 208403

Camera:  
Nikon D3300

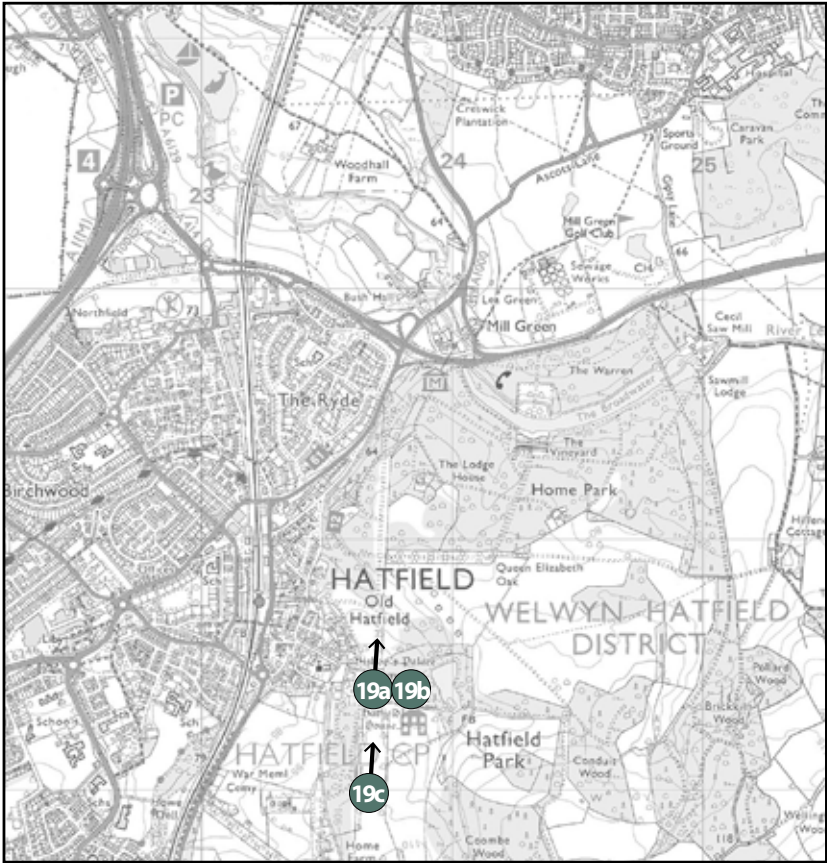
Lens:  
Fixed 35mm (x1.6)

Height of Camera Lens:  
104 AOD

Horizontal Field of View:  
152 °

Date:  
15.11.17

Time:  
14.55



Extended Panorama



Viewpoint 19a - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image





Viewpoint 19a - Existing baseline view with wireline of proposal

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

- Proposed Scheme (2018)
- Listed Buildings





Viewpoint 19b - HATFIELD HOUSE (ROOF)

National Grid Reference:  
523685, 208403

Camera:  
Nikon D3300

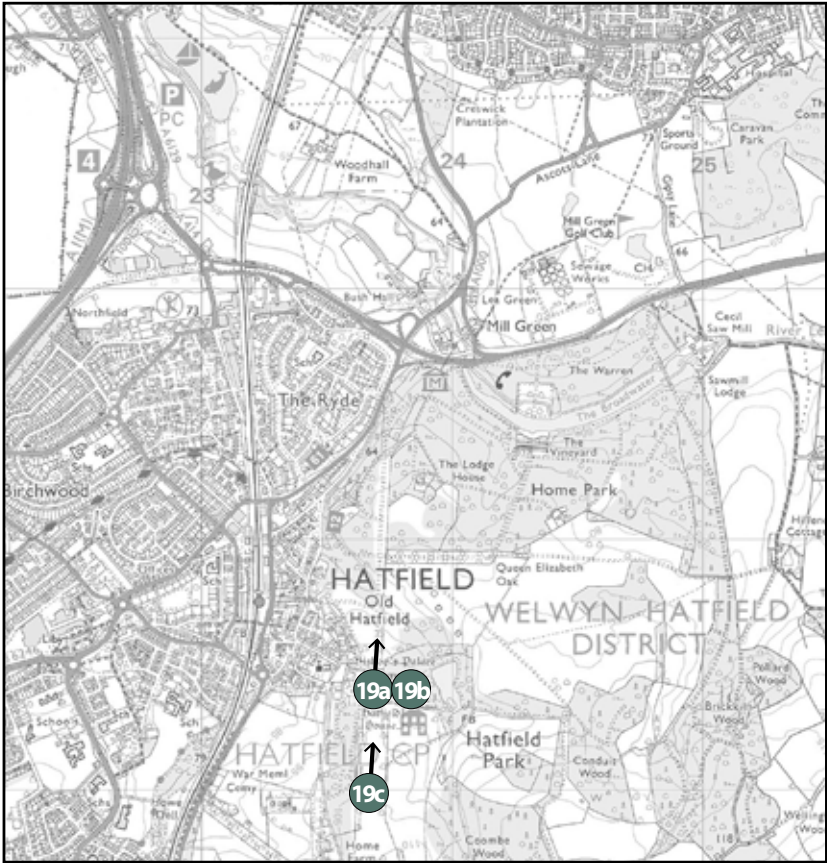
Lens:  
Fixed 35mm (x1.6)

Height of Camera Lens:  
113 AOD

Horizontal Field of View:  
152 °

Date:  
15.11.17

Time:  
14.30



Extended Panorama



Viewpoint 19b - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image





Viewpoint 19b - Existing baseline view with wireline of proposal

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

- Proposed Scheme (2018)
- Listed Buildings





Viewpoint 19c - HATFIELD HOUSE (SOUTHERN APPROACH)

National Grid Reference:  
523677, 207853

Camera:  
Nikon D3300

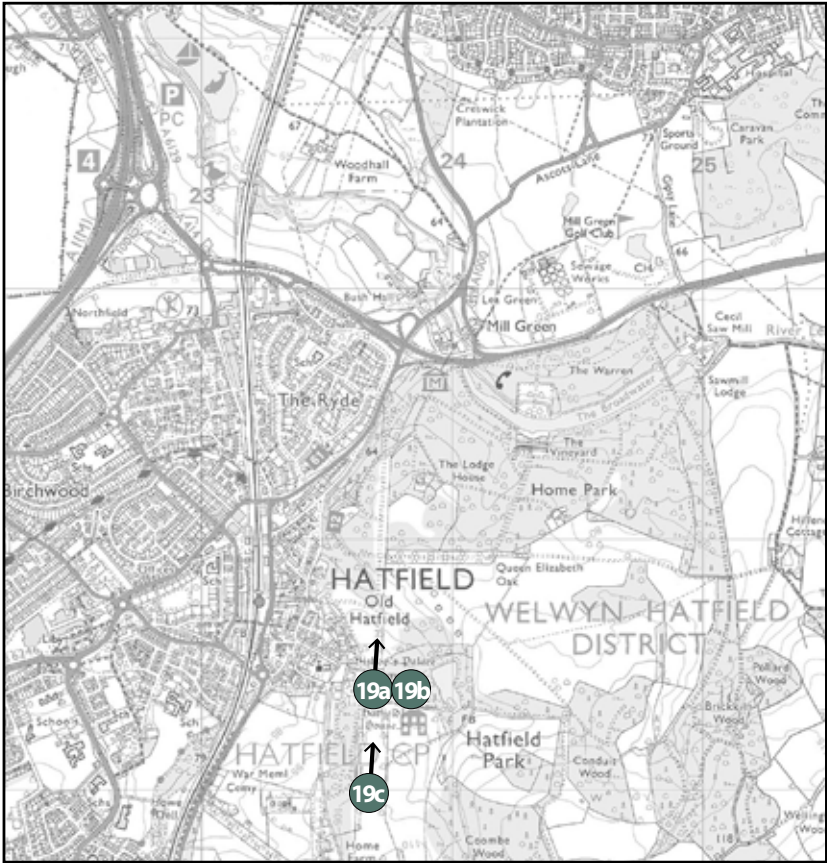
Lens:  
Fixed 35mm (x1.6)

Height of Camera Lens:  
113 AOD

Horizontal Field of View:  
152 °

Date:  
15.11.17

Time:  
14.30



Extended Panorama



Viewpoint 19c - Existing baseline view

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image





Viewpoint 19c - Existing baseline view with wireline of proposal

Viewing Distance **30cm** - This is the distance from eye to paper to gain a true representation of the image

- Proposed Scheme (2018)
- Listed Buildings



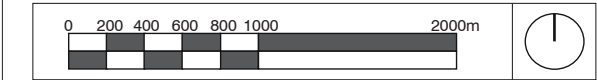




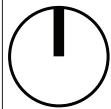
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## **APPENDIX 11.4 – TVIA FIGURES**





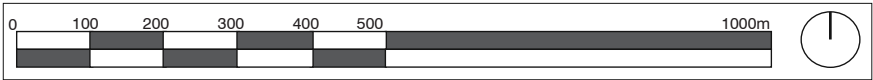
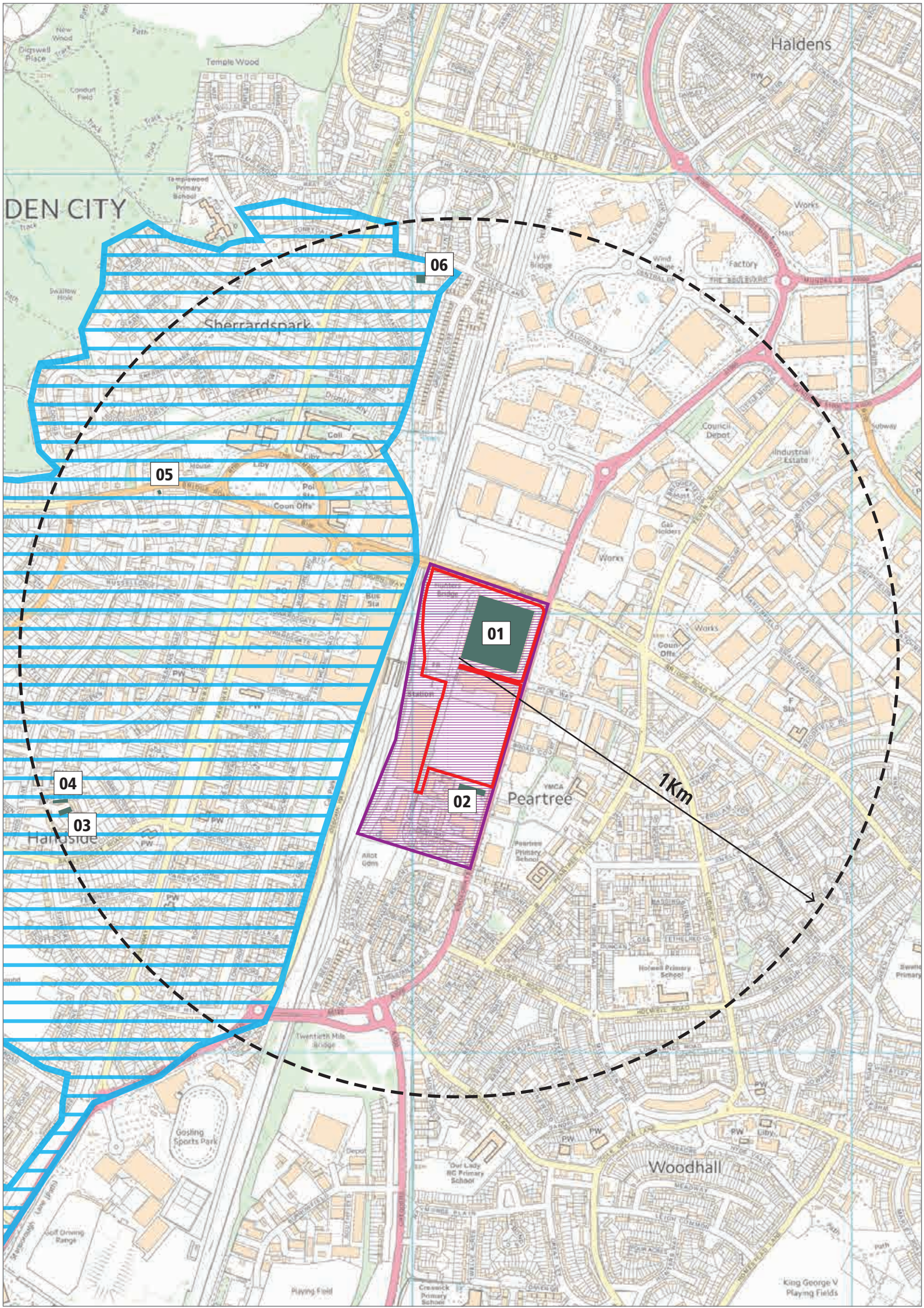
- SITE BOUNDARY
- DISTANCE FROM CENTRE OF THE SITE



Rev	Description	Date
Bradley Murphy Design Ltd 5 The Courtyard Hatton Technology Park Dark Lane Hatton Warwickshire CV35 8XB  t: 01926 676496 e: info@bradleymurphydesign.co.uk www.bradleymurphydesign.co.uk		
Client <b>Plutus Estates (WGC) Ltd &amp; Metropolitan Housing Trust</b>		
Project <b>Broadwater Road, Welwyn Garden City</b>		
Drawing Title <b>Figure 10.1: Site and Study Area</b>		
Drawn LC Job No. 17.023	Checked JP Scale NTS	Approved RW Sheet Size A3
Drawing Number BMD.17.023.TVIA.FIG10.1		Date 12/01/2018 Revision -



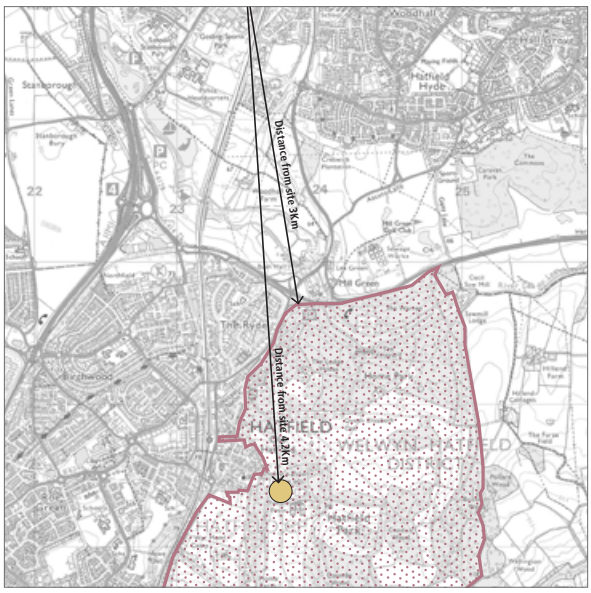




- SITE BOUNDARY
- DISTANCE FROM CENTRE OF THE SITE
- WELWYN GARDEN CITY CONSERVATION AREAS (POLICY - R22, R23 & R24)
- MIXED USE DEVELOPMENT SITE AT BROADWATER ROAD WEST (POLICY - EMP3)
- REGISTERED PARK AND GARDEN HATFIELD HOUSE - GRADE I (POLICY R28)

- LISTED BUILDING
  - 1. THE NABISCO SHREDDED WHEAT FACTORY - GRADE II LISTED
  - 2. OFFICE BLOCK (BUILDING 1 TO 4) TO ROCHE PRODUCTS FACTORY - GRADE II LISTED
  - 3. HAND SIDE FARMHOUSE - GRADE II LISTED
  - 4. THE BARN THEATRE - GRADE II LISTED
  - 5. THE OLD COTTAGE - GRADE II LISTED
  - 6. DIGSWELL LODGE - GRADE II LISTED
  - HATFIELD HOUSE GRADE I LISTED BUILDING
- SOURCE:
- WELWYN HATFIELD DISTRICT PLAN (2005)
  - BROADWATER ROAD WEST, SUPPLEMENTARY PLANNING GUIDANCE, WELWYN HATFIELD BOROUGH COUNCIL (2008)
  - MULTI AGENCY GEOGRAPHIC INFORMATION FOR THE COUNTRYSIDE (MAGIC) INTERACTIVE MAPPING ([WWW.MAGIC.GOV.UK](http://WWW.MAGIC.GOV.UK))
  - NATIONAL HERITAGE LIST FOR ENGLAND MAP SEARCH, HISTORIC ENGLAND ([WWW.HISTORICENGLAND.ORG.UK](http://WWW.HISTORICENGLAND.ORG.UK))

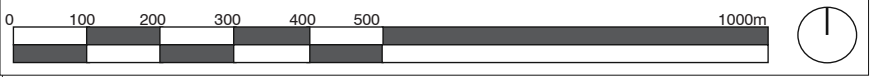
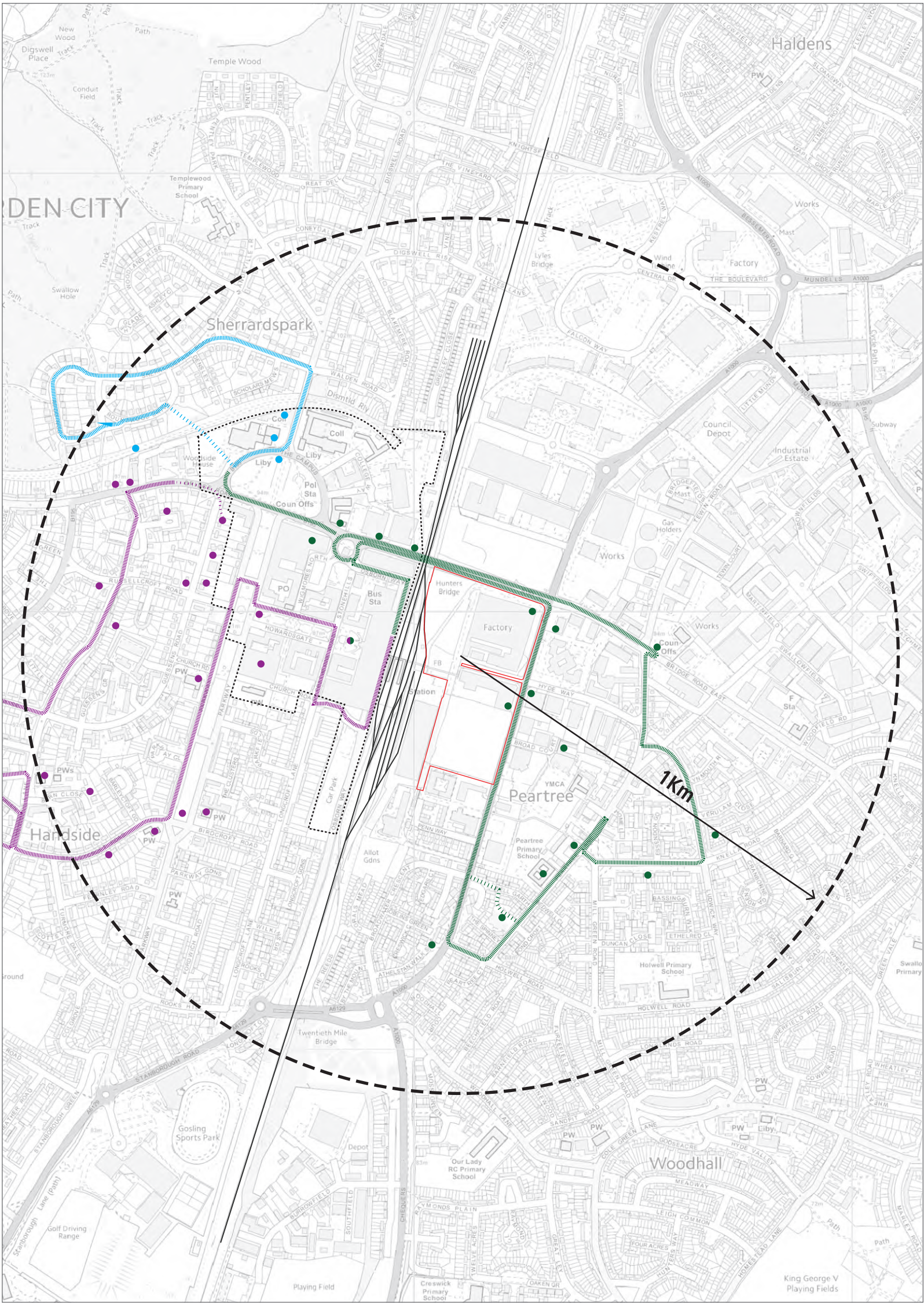
MAP INSERT



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Bradley Murphy Design Ltd 5 The Courtyard Hatton Technology Park Dark Lane Hatton Warwickshire CV35 8XB		
t: 01926 676496 e: info@bradleymurphydesign.co.uk www.bradleymurphydesign.co.uk		
Client <b>Plutus Estates (WGC) Ltd &amp; Metropolitan Housing Trust</b>		
Project Broadwater Road, Welwyn Garden City		
Drawing Title Figure 10.2: Planning Policy & Designations		
Drawn LC	Checked JP	Approved RW
Job No. 17.023	Scale NTS	Sheet Size A3
Drawing Number BMD.17.023.TVIA.FIG10.2		
Date 12/01/2018		
Revision -		







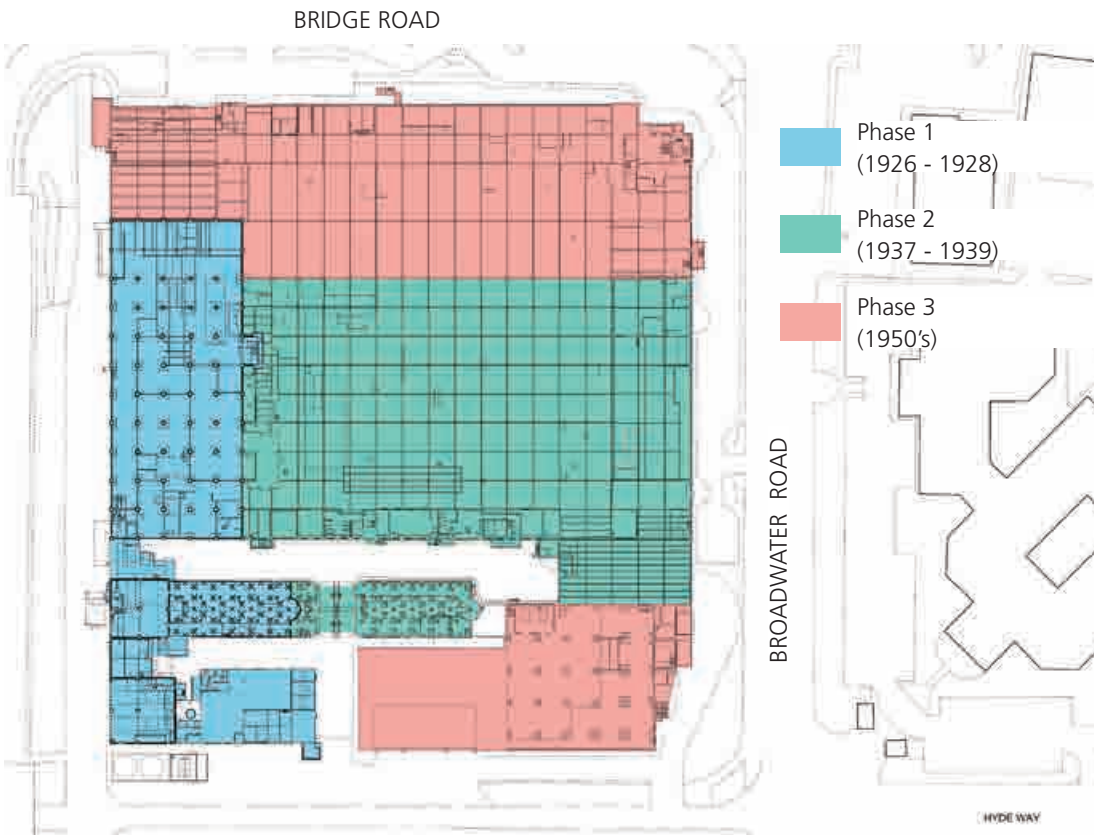
- |  |   |  |                                      |
|--|---|--|--------------------------------------|
|  | SITE BOUNDARY                           |  | ROUTE 1                              |
|  | 1KM FROM CENTRE OF THE SITE             |  | ROUTE 2                              |
|  | WELWYN GARDEN CITY TOWN CENTRE BOUNDARY |  | ROUTE 3                              |
|  | RAILWAY LINE                            |  | HERITAGE FEATURE IDENTIFIED ON TRAIL |

SOURCE:  
WELWYN GARDEN CITY HERITAGE TRAILS PRODUCED JOINTLY BY WELWYN GARDEN CITY SOCIETY AND WELWYN GARDEN CITY HERITAGE TRUST

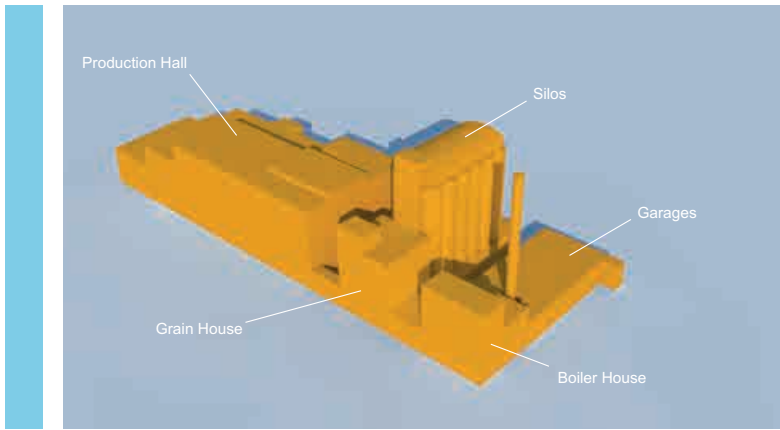
Rev	Description	Date
	Bradley Murphy Design Ltd 5 The Courtyard Hatton Technology Park Dark Lane Hatton Warwickshire CV35 8XB  t: 01926 676496 e: info@bradleymurphydesign.co.uk www.bradleymurphydesign.co.uk	
Client <b>Plutus Estates (WGC) Ltd &amp; Metropolitan Housing Trust</b>		
Project Broadwater Road, Welwyn Garden City		
Drawing Title Figure 10.3: Heritage Trails		
Drawn LC	Checked JP	Approved RW
Job No. 17.023	Scale NTS	Sheet Size A3
Drawing Number BMD.17.023.TVIA.FIG10.3		
Date 12/01/2018		
Revision -		

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LANDSCAPE  
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PLANNING



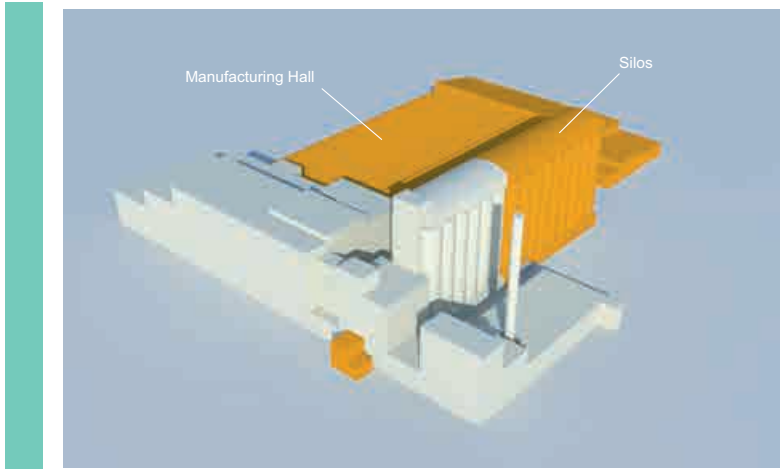


THE DEVELOPMENT OF THE LISTED FORMER SHREDDED WHEAT FACTORY CAN BE TRACED THROUGH THREE PRINCIPAL PHASES.



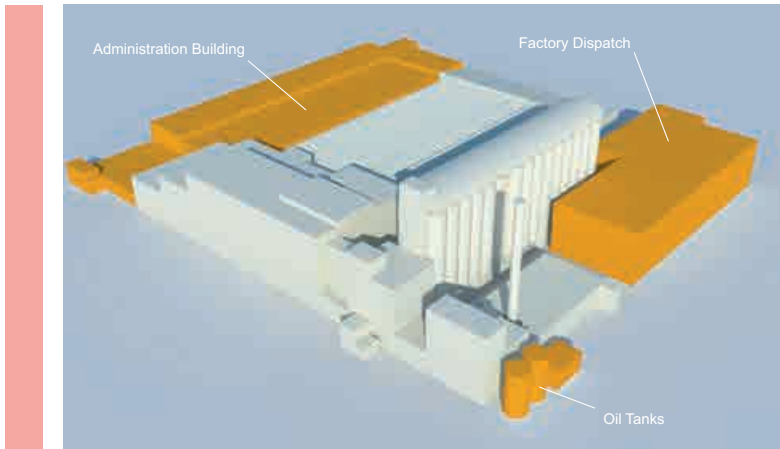
PHASE 1 (1926 - 1928) –

THE COMPLETION OF THE ORIGINAL FACTORY COMPLEX FOR SHREDDED WHEAT WHICH INCLUDED THE PRODUCTION HALL, BOILER HOUSE, EIGHTEEN SILOS, WHEAT ELEVATOR AND GARAGE.



PHASE 2 (1937 & 1939) –

A NEW SINGLE STOREY WAS FIXED TO THE EAST OF THE FACTORY AND ALSO ON THE ROOF OF THE MULTISTOREY ORIGINAL PRODUCTION HALL. THE NUMBER OF SILOS ALSO INCREASED FROM 18 TO 45. THE ADDITIONAL 27 STORAGE BINS WERE DESIGNED BY LOUIS WIRSCHING JNR (THE NABISCO COMPANY ARCHITECT) WHICH INCREASED CAPACITY TO 8,500 TONS. THE ADDITIONAL SILOS WERE A SEPARATE, INDEPENDENT STRUCTURE TO THE ORIGINAL 18 SILO, BUT APPEARED VISUALLY TO BE FULLY INTEGRATED.



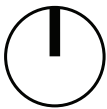
PHASE 3 (1950'S) –

FROM 1941 TO 1947 THE GOVERNMENT INTRODUCED A ZONING SCHEME WHICH EXCLUDED SHREDDED WHEAT FROM SELLING IN CERTAIN AREAS; LIMITING PRODUCTION. ONCE THIS ZONING CAME TO AN END, THE COMPANY STEADILY INCREASED ITS MARKET SHARE. A LARGE EXTENSION ON BROADWATER ROAD INCREASED PRODUCTION FACILITIES, BUT REDUCED THE RECREATION GROUNDS. IN 1957 & 1959 TWO FURTHER EXTENSIONS WERE ADDED, IMPROVING PRODUCTION AND PROVIDING INCREASED ADMINISTRATIVE FACILITIES.

SOURCE:

FORMER SHREDDED WHEAT FACTORY,  
BROADWATER ROAD, WELWYN GARDEN  
CITY: DESIGN AND ACCESS STATEMENT -  
EPR ARCHITECTS

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Client <b>Plutus Estates (WGC) Ltd &amp; Metropolitan Housing Trust</b>		
Project Broadwater Road, Welwyn Garden City		
Drawing Title Figure 10.4 History of Development for Shredded Wheat Factory		
Drawn LC	Checked JP	Approved RW
Job No. 17.023	Scale NTS	Sheet Size A3
Drawing Number BMD.17.023.TVIA.FIG10.4		
Date 12/01/2018		
Revision -		





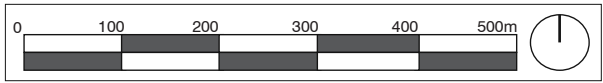
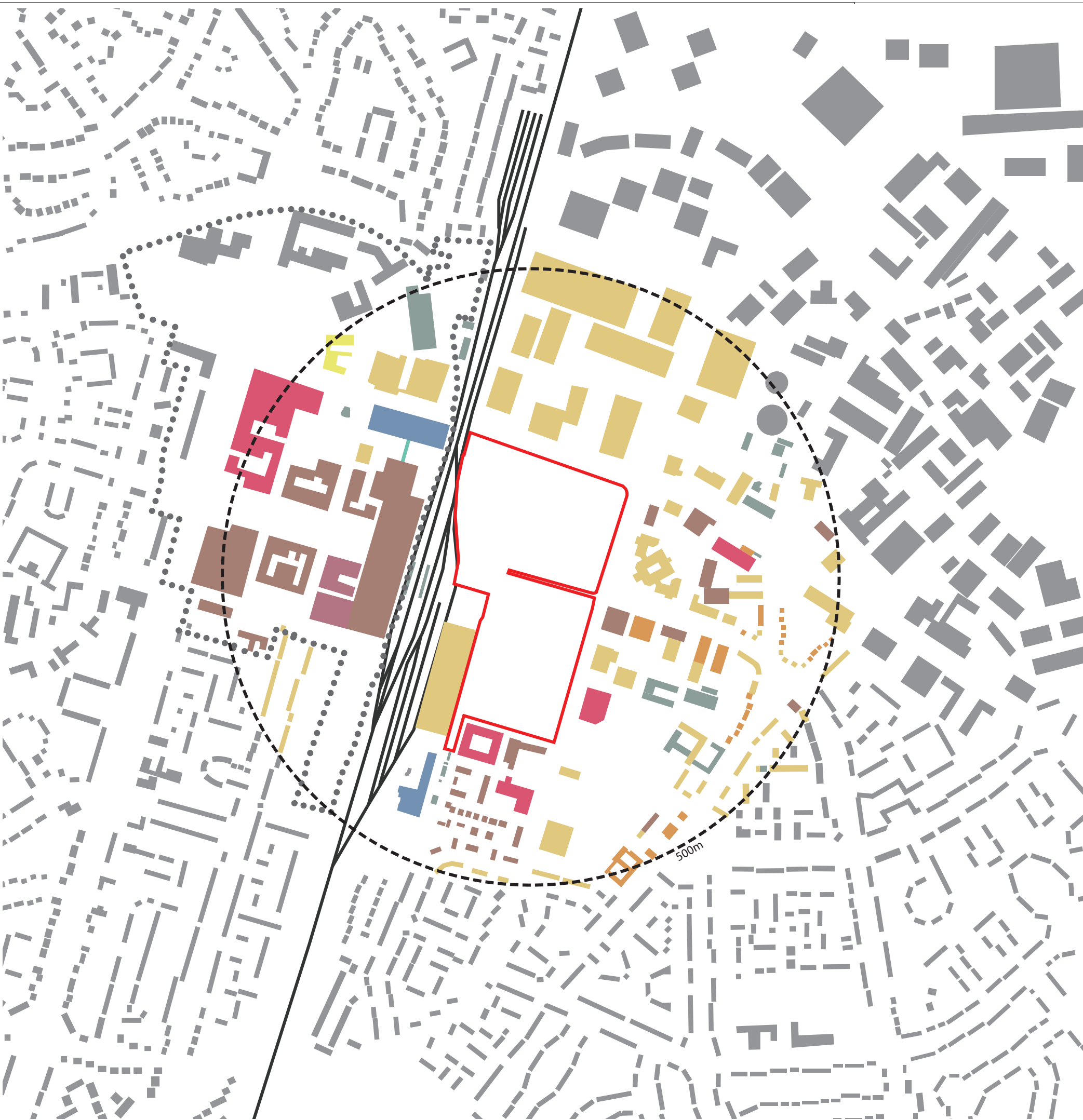













- SITE BOUNDARY
- TOWN CENTRE BOUNDARY
- RAILWAY LINE
- RESIDENTIAL
- INDUSTRIAL
- COMMERCIAL
- OFFICES
- RETAIL
- EDUCATION
- RELIGION

SOURCE:  
THE ADJACENT LAND USE SURROUNDING THE SITE IS ASSUMED FROM ONSITE OBSERVATIONS, AERIAL, AND ORDNANCE SURVEY MAPS

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Bradley Murphy Design Ltd 5 The Courtyard Hatton Technology Park Dark Lane Hatton Warwickshire CV35 8XB  t: 01926 676496 e: info@bradleymurphydesign.co.uk www.bradleymurphydesign.co.uk		
Client <b>Plutus Estates (WGC) Ltd &amp; Metropolitan Housing Trust</b>		
Project Broadwater Road, Welwyn Garden City		
Drawing Title <b>Figure 10.5: Land Use</b>		
Drawn LC	Checked JP	Approved RW
Job No. 17.023	Scale NTS	Sheet Size A3
Drawing Number BMD.17.023.TVIA.FIG10.5		
Date 12/01/2018		
Revision -		

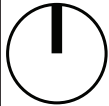




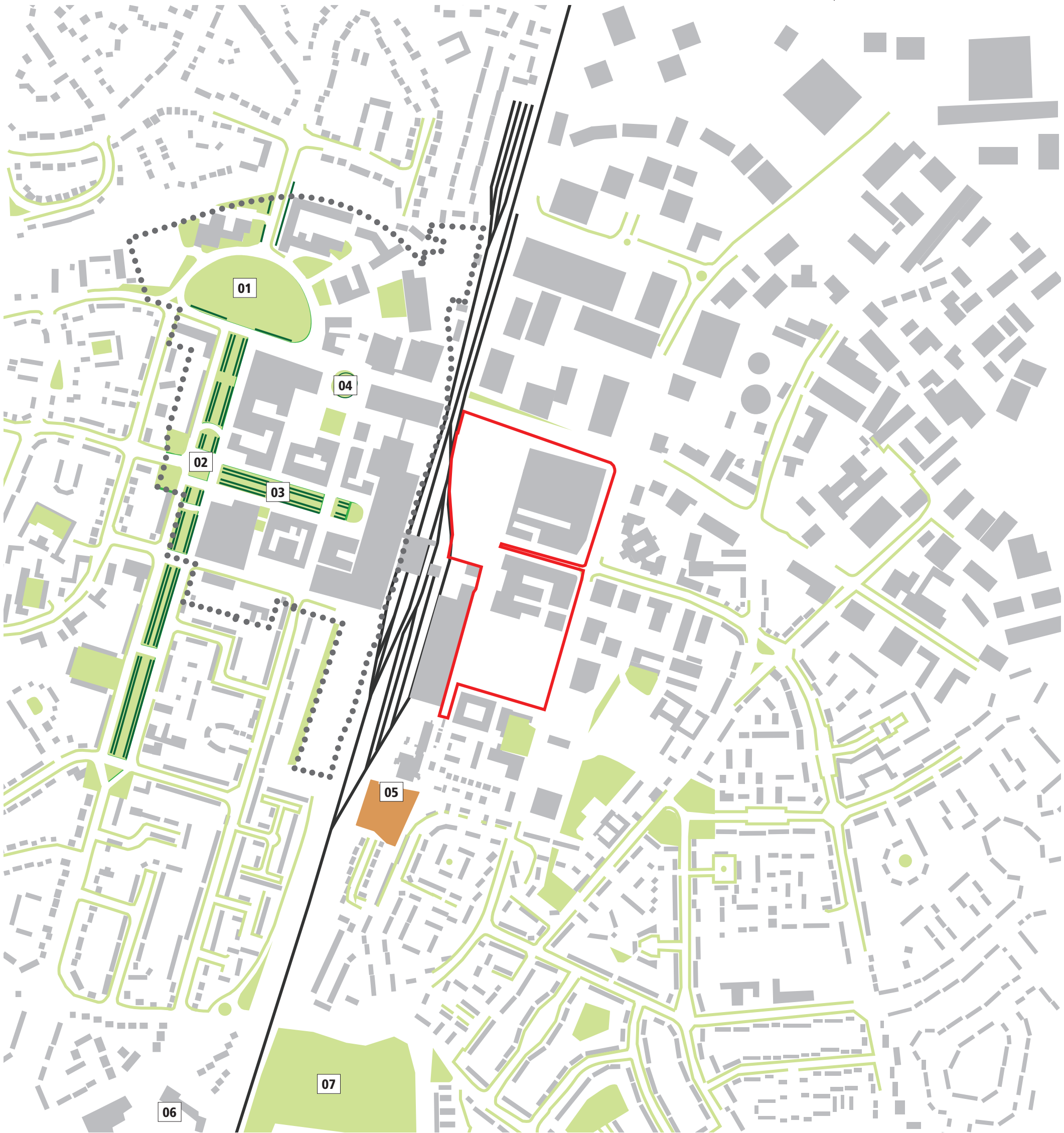
- |  |                      |   |            |   |            |
|--|----------------------|---|------------|---|------------|
|  | SITE BOUNDARY        |  | 1 STOREY   |  | 3 STOREY   |
|  | TOWN CENTRE BOUNDARY |  | 1.5 STOREY |  | 3.5 STOREY |
|  | RAILWAY LINE         |  | 2 STOREY   |  | 4 STOREY   |
|  |                      |  | 2.5 STOREY |  | 5 STOREY   |

SOURCE:  
THE ADJACENT BUILT FORM SURROUNDING THE SITE IS SET AT THE APPROXIMATE BUILDING HEIGHT ASSUMED FROM ONSITE OBSERVATIONS, FOLLOWING LANDFORM AND ARE VISUALLY IMPERMEABLE

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Client <b>Plutus Estates (WGC) Ltd &amp; Metropolitan Housing Trust</b>		
Project Broadwater Road, Welwyn Garden City		
Drawing Title <b>Figure 10.6: Scale</b>		
Drawn LC	Checked JP	Approved RW
Job No. 17.023	Scale NTS	Sheet Size A3
Drawing Number BMD.17.023.TVIA.FIG10.6		
Date 12/01/2018		
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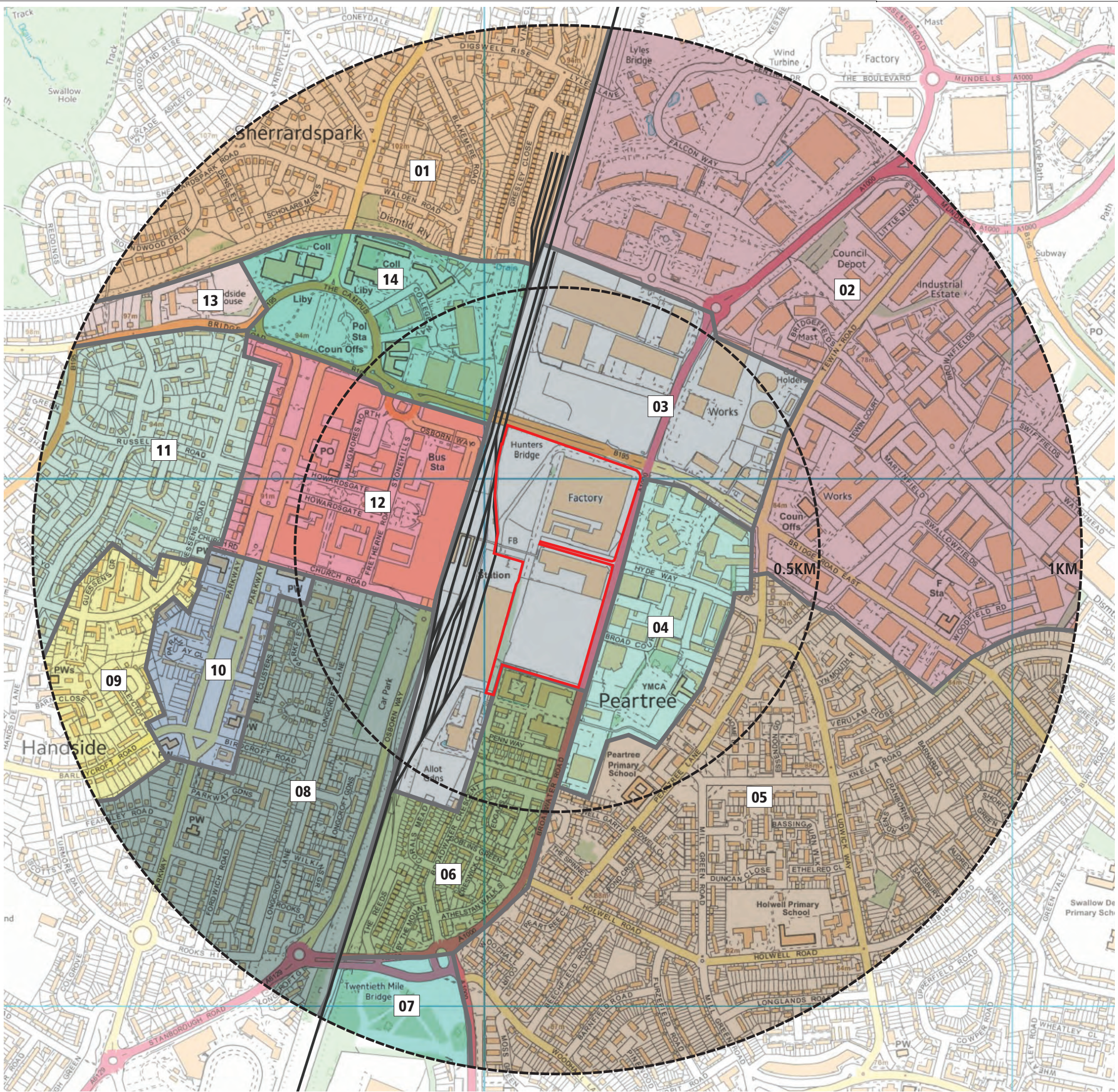


- |  |                      |  |                   |                         |
|--|----------------------|--|-------------------|-------------------------|
|  | SITE BOUNDARY        |  | BUILT FORM        | 01. THE CAMPUS          |
|  | TOWN CENTRE BOUNDARY |  | PUBLIC OPEN SPACE | 02. PARKWAY             |
|  | RAILWAY LINE         |  | ALLOTMENTS        | 03. HOWARDSGATE         |
|  | TREE BOULEVARDS      |  |                   | 04. WIGSMORES NORTH     |
|  |                      |  |                   | 05. ALLOTMENTS          |
|  |                      |  |                   | 06. GOSLING SPORTS PARK |
|  |                      |  |                   | 07. CHEQUERS PARKLAND   |

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Client <b>Plutus Estates (WGC) Ltd &amp; Metropolitan Housing Trust</b>			
Project Broadwater Road, Welwyn Garden City			
Drawing Title <b>Figure 10.7: Spatial Context</b>			
Drawn LC	Checked JP	Approved RW	Date 12/01/2018
Job No. 17.023	Scale NTS	Sheet Size A3	Revision -
Drawing Number BMD.17.023.TVIA.FIG10.7			

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LANDSCAPE  
DESIGN  
PLANNING





KEY

- SITE BOUNDARY
- DISTANCE FROM CENTRE OF THE SITE
- RAILWAY LINE

CHARACTER AREA	NAME
AREA 1	SHERRARDS PARK
AREA 2	SHIRE PARK BUSINESS AREA
AREA 3	BROADWATER ROAD INDUSTRIAL AREA (SITE)
AREA 4	PEARTREE MODERN BUSINESS & INDUSTRIAL AREA
AREA 5	PEARTREE RESIDENTIAL AREA
AREA 6	BROADWATER CRESCENT RESIDENTIAL AREA
AREA 7	CHEQUERS PARKLAND
AREA 8	LONGCROFT LANE AREA
AREA 9	BARLEYCROFT ROAD
AREA 10	PARKWAY RESIDENTIAL AREA
AREA 11	HANDSIDE LANE AREA
AREA 12	PARKWAY RETAIL AREA
AREA 13	BROCKSWOOD LANE AREA
AREA 14	THE CAMPUS

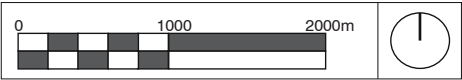
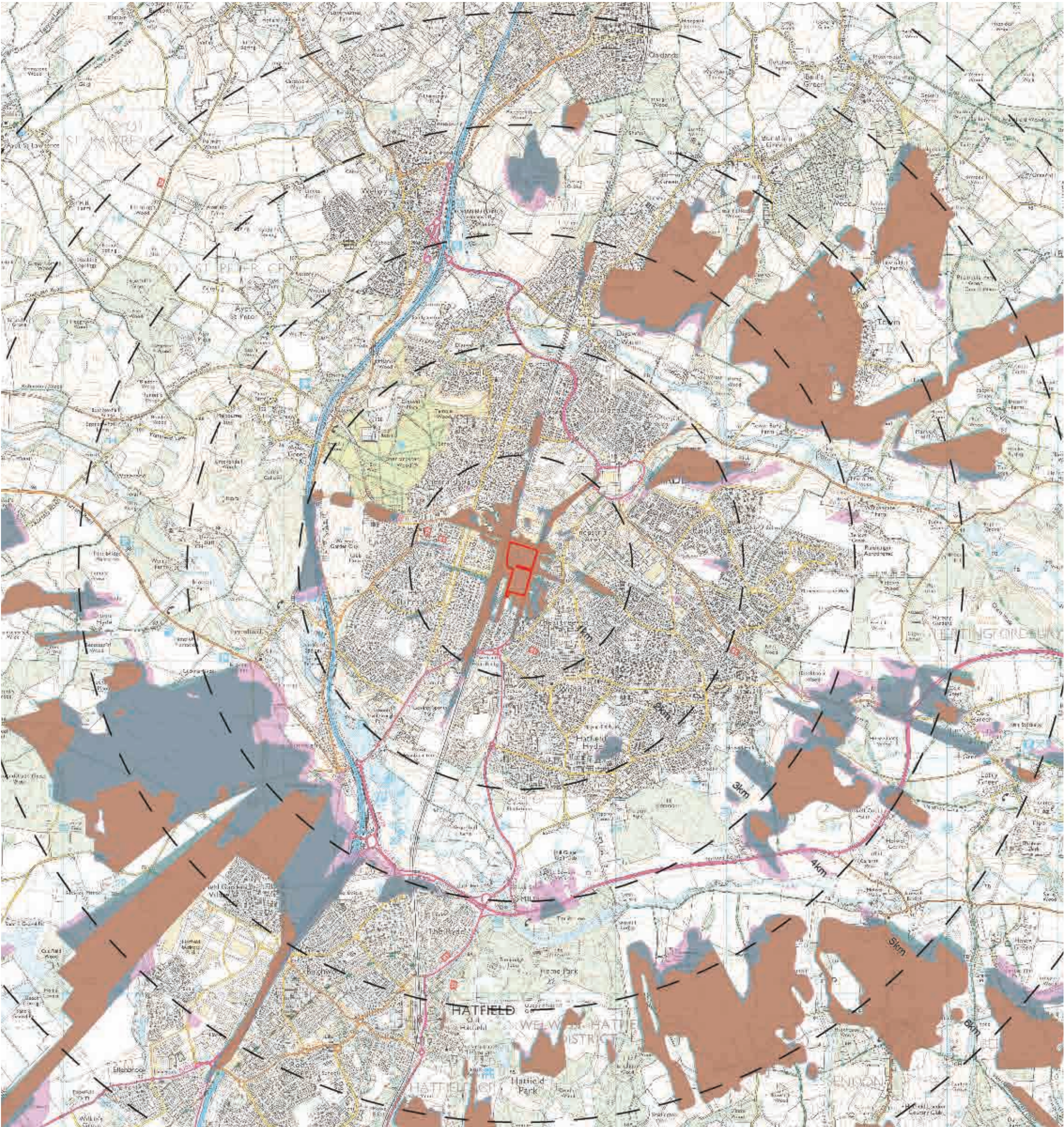
SOURCE:

THE LOCAL TOWNSCAPE CHARACTER AREAS WERE DEVELOPED SPECIFICALLY BY BMD FOR THE TVIA FOLLOWING THE GUIDANCE AND PRINCIPLES SET OUT IN THE GOVERNMENTS PLANNING AND DEVELOPMENT GUIDANCE ONLINE FOR 'LANDSCAPE AND SEASCAPE CHARACTER ASSESSMENTS' (NATURAL ENGLAND AND DEPARTMENT FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS, 2014).

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t: 01926 676496 e: info@bradleymurphydesign.co.uk www.bradleymurphydesign.co.uk		
Client <b>Plutus Estates (WGC) Ltd &amp; Metropolitan Housing Trust</b>		
Project Broadwater Road, Welwyn Garden City		
Drawing Title Figure 10.8: Townscape Character Areas		
Drawn LC	Checked JP	Approved RW
Job No. 17.023	Scale NTS	Sheet Size A3
Drawing Number BMD.17.023.TVIA.FIG10.8		
Date 12/01/2018		
Revision		

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KEY

 SITE BOUNDARY

 DISTANCE FROM CENTRE OF THE SITE

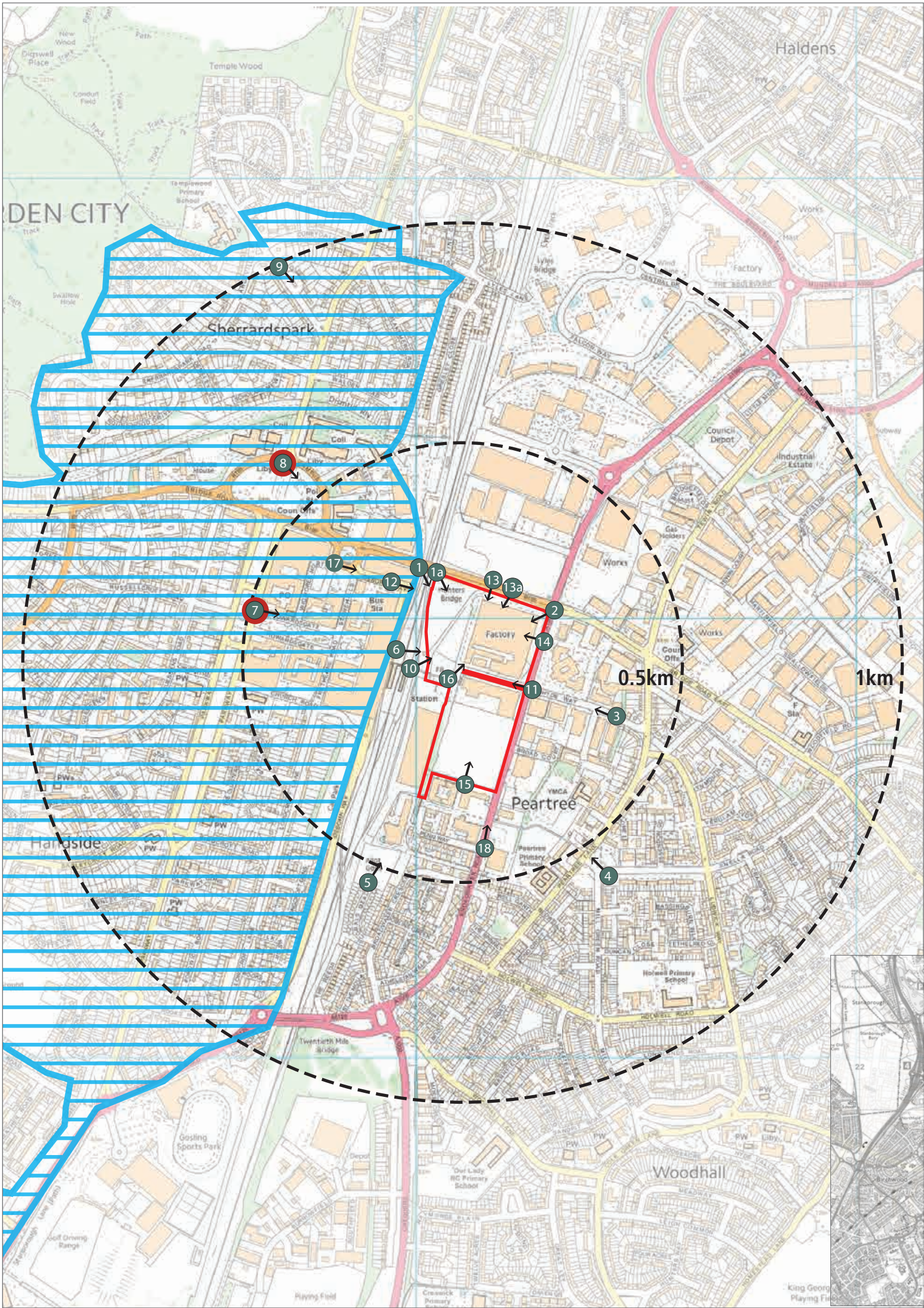
 **ZTV 1 (WITH VISUAL BARRIERS)**  
REPRESENTS AREAS WHERE ONLY THE EXISTING BUILT FORM WITHIN THE SITE, IS THEORETICALLY VISIBLE, BASED ON EXISTING BUILDING HEIGHTS, EXCLUDING THE CHIMNEY AND SILOS.

 **ZTV 2 (WITH VISUAL BARRIERS)**  
REPRESENTS AREAS WHERE ONLY THE EXISTING CHIMNEY AND SILOS ON THE SITE ARE THEORETICALLY VISIBLE, BASED ON EXISTING BUILDING HEIGHTS, SET AT CIRCA 36.5M FOR THE CHIMNEY AND 32M FOR THE SILOS, EXCLUDING THE REMAINING BUILT FORM WITHIN THE SITE

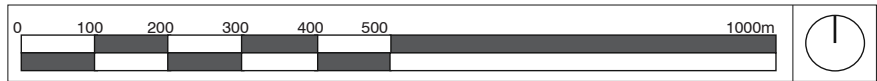
 **ZTV 3 (WITH VISUAL BARRIERS)**  
REPRESENTS THE PROPOSED BUILT FORM WITHIN THE SITE (EXCLUDING THE EXISTING BUILT FORM, CHIMNEY AND SILO WITHIN THE SITE) THAT WOULD THEORETICALLY BE VISIBLE, BASED ON THE PROPOSED BUILDING HEIGHTS AND PARAMETER PLANS.

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Bradley Murphy Design Ltd 5 The Courtyard Hatton Technology Park Dark Lane Hatton Warwickshire CV35 8XB  t: 01926 676496 e: info@bradleymurphydesign.co.uk www.bradleymurphydesign.co.uk		
<b>BMD</b> LANDSCAPE DESIGN PLANNING		
Client <b>Plutus Estates (WGC) Ltd &amp; Metropolitan Housing Trust</b>		
Project <b>Broadwater Road, Welwyn Garden City</b>		
Drawing Title <b>Figure 10.9: Zone Of Theoretical Visibility</b>		
Drawn LC	Checked JP	Approved RW
Job No. 17.023	Scale NTS	Sheet Size A3
Drawing Number <b>BMD.17.023.TVIA.FIG10.9</b>		
Date <b>12/01/2018</b>		
Revision -		





MAP INSERT



- KEY
- SITE BOUNDARY
  - DISTANCE FROM CENTRE OF THE SITE
  - WELWYN GARDEN CITY CONSERVATION AREA
  - VIEWPOINT LOCATION
  - KEY VIEW / VISTA (IDENTIFIED IN WELWYN GARDEN CITY CONSERVATION AREA APPRAISAL)

Wirelines have been produced for a number of these viewpoints. Refer to the Viewpoint Sheets and Wireline Assessment at Appendix 10.3

VIEWPOINTS

- BRIDGE ROAD (B195) LOOKING SOUTH EAST FROM THE RAILWAY BRIDGE (WEST SIDE)
- BRIDGE ROAD (B195) LOOKING SOUTH EAST FROM THE RAILWAY BRIDGE (EAST SIDE)
- BROADWATER ROAD (A1000) AT THE JUNCTION WITH BRIDGE ROAD (B195)
- HYDE WAY LOOKING WEST
- KNELLA ROAD / PEARTREE LANE, PEARTREE
- CORALS MEAD, BROADWATER CRESCENT
- WELWYN GARDEN CITY RAIL STATION
- PARKWAY LOOKING EAST ALONG HOWARDSGATE THE CAMPUS, PARKWAY
- PENTLEY PARK, SHERRARDS PARK
- NETWORK RAIL FOOTBRIDGE - 1
- HYDE WAY / BROADWATER ROAD JUNCTION
- OSBORN WAY FOOTBRIDGE
- BRIDGE ROAD (B195) LOOKING SOUTH
- BRIDGE ROAD (B195) LOOKING SOUTH (BUS STOP)
- BROADWATER HOUSE / MERCURY WAY/ ALBANY PLACE
- OTTO ROAD / SOUTHERN SITE BOUNDARY
- NETWORK RAIL FOOTBRIDGE - 2
- WIGSMORE NORTH
- BROADWATER ROAD / PENN WAY
- A- HATFIELD HOUSE (1ST FLOOR)  
B- HATFIELD HOUSE (ROOF)  
C- HATFIELD HOUSE AND GARDENS (SOUTHERN APPROACH)

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t: 01926 676496 e: info@bradleymurphydesign.co.uk www.bradleymurphydesign.co.uk		
Client <b>Plutus Estates (WGC) Ltd &amp; Metropolitan Housing Trust</b>		
Project Broadwater Road, Welwyn Garden City		
Drawing Title Figure 10.10: Viewpoint Location Plan		
Drawn LC	Checked JP	Approved RW
Job No. 17.023	Scale NTS	Sheet Size A3
Drawing Number BMD.17.023.TVIA.FIG10.10		
Date 12/01/2018		
Revision		





## **APPENDIX 12**

### **ECOLOGY AND NATURE CONSERVATION**





---

## **APPENDIX 12.1 – ECOLOGICAL ASSESSMENT**



**ECOLOGICAL ASSESSMENT REPORT  
LAND AT BROADWATER ROAD,  
WELWYN GARDEN CITY, HERTFORDSHIRE**

SPEN HILL DEVELOPMENTS LIMITED

BMD.219.EA.003  
Date: 11/02/15