Station area business district

A changing context

The Station Road area has changed beyond all recognition since the preparation of the Station Area Development Framework (SADF) adopted in April 2004. In additional to a new housing quarter and retail, 0.7 million sf of new office development has been built on Station Road and the Square since 2015, creating a unique bustling city quarter, focused around high quality public realm.

The development of world class offices and the renovation of the station has catapulted this area into being the most sought-after business location in Cambridge and created and new core city district. CB1 has evolved into a globally competitive business district, bringing a new dimension to the City's commercial offer. It is particularly attractive as a location for company headquarters and the profession, technical and research sectors. It has attracted tenants such as



Station Square has transformed the arrival experience in Cambridge

Microsoft, Amazon and Samsung, creating a new cluster of AI businesses, benefiting Cambridge and the wider UK economy.

The connectivity to public transport and urban commercial district with mix of uses and amenity has been successful with all new space being let in advance of delivery. The upgrading of the commercial offer and densification in the district is continuing with 10 and 20 Station Road having recently received planning consent. The limited supply and strong demand has led to significant increases in rent of 32% over the past 5 years. Prime office rents are the highest in Cambridge and are expected to continue rising.

The north side of Station Road provides a further development opportunity to continue the successful transformation of this part of the city and provide additional top quality offices to support the AI cluster.



The new buildings along Station Road at typically six storeys or more

Historical context



OS Map, 1888

The historic character of the station area represents both an unusual combination of industrial heritage and and 19th century residential expansion on the fringes of and the historic city. The substantial villas built in the 1870s, that at one stage lined both sides of Station Built Road, were intended for wealthy occupants and Reyr benefitted from service quarters and large front and but of

back gardens. The villas on the north side comprise

both Arundel (two pairs of semi-detached houses) and the Salisbury Villas (six detached properties), and the stand-alone house, St. Andrews.

Built to the designs of Cambridge architect, Richard Reynolds Rowe, in circa 1874, they are an eclectic, but correlated group, related by High Victorian aesthetics: they share common features and mostly





OS Map, 1904

Gothic detailing; most have prominent gables and end chimney stacks (except No. 13) and sash windows.

Rowe's repertoire is relatively limited – at least in terms of designated buildings – but does include the Grade II listed Corn Exchange in Cambridge of circa 1869-1875.



OS Map, 1952

The character of Station Road remained relatively intact until the early 1970s, when most of the villas on the south side were demolished and replaced by large office buildings, including the 'Three Deities' (Demeter, Leda and Jupiter Houses). The south is now once more being redeveloped, and the 1970s offices being replaced by larger commercial office buildings.



Station Road, 1924



Station Road, 1963



Hills Road, c.1924



Front elevation of 4 Salisbury Villas

PART 3

THE SITE AND ITS OPPORTUNITIES



Connectivity

A Transport Baseline Report has been prepared by Vectos, dated January 2020. Included here is a summary of its key findings; please refer to the full report for further detail.

Context

This is clearly an excellent location for development to ensure that mobility occurs in a sustainable way. There is an opportunity to provide the best possible facilities on site to encourage sustainable modes of transport. The proximity of the site to local destinations and amenities, are complemented by facilities afforded to pedestrians and cyclists. For wider travel, the railway station, nearby bus stops, Trumpington Busway and wider cycle infrastructure will facilitate mobility associated with a range of areas. Car clubs and cycle hire schemes add to the overall mobility offer.

There are a number of strategic schemes coming forward which will improve mobility in the area. Station Road is located in proximity to these schemes and will benefit from them, with improved links to key areas including employment zones



Key transport infrastructure (Transport Baseline Report, Vectos Transport, 2020)

there is an opportunity to remove all car parking and create a car free development

Opportunities

Given the excellent location of the site and its high accessibility, the mobility focus for the development proposals should be on maximising its potential by ensuring facilities are provided within the development.

The clear advantage in this regard is also that the sites high accessibility would justify low car parking provision or car free development.

Initial mobility considerations that should be incorporated within the development of the scheme, include:

- Enhanced public realm, improved quality footway and possibly wider footway provision along Station Road. A key component of the Hills Road opportunity area is to substantially enhance the safety and experience of cyclists and pedestrians.
- Rationalised vehicle access, principally from Station Road with opportunity to remove the access at the Station Road Tenison Road Junction.
- High quality covered and secure cycle parking within the site for residents, visitors and workers as appropriate to the scheme.
- Provision for e-bike charging and cargo bikes
- Changing washing and storage facilities to make cycling attractive
- Very low or zero car parking provision. Any car parking to consider disabled provision and maximise electric vehicle charging opportunities.





Cars currently dominate the site, double parking in many areas

Car club parking spaces

Jobs and the economy

An assessment of economic need for commercial floorspace in Cambridge and specifically in Station Road was undertaken to help in the preparation of this document. The main findings are included here; please refer to the full report for further detail.

Policy Context

National policy (NPPF) requires local planning authorities to support development that builds on economic growth, increases productivity and builds on a location's strengths. Cambridge's hi-technology clusters, particularly in AI, biotech, agri-tech are recognised in the UK Industrial Strategy as an essential element of the UK economy to supported, "...towns such as MK, Oxford and Cambridge have been hot spots for job creation. We must promote growth through fostering clusters and connectivity across cities, towns and surrounding areas."

These priorities are reflected in the Cambridgeshire and Peterborough Industrial Strategy:

- *"Improve the long-term capacity for growth in Greater Cambridge by supporting the foundations of productivity".* This will be achieved by 'investing heavily in housing; supporting supply chain development; delivering transformational transport and infrastructure; whilst leveraging the strengths and better connecting the Cambridge cluster"
- "Increase sustainability and broaden the base of local economic growth" .
- "Expand and build upon the clusters and networks that have enabled Cambridge to become a global leader in innovative growth".

Potential Benefits and Opportunities

Hi-tech industries such as those in Cambridge's clusters play a particularly important role as their business is all about improving productivity.

Growth needs to be good growth, that is clean, sustainable, inclusive, promote health and wellbeing, This means making the most of sites benefiting from public transport infrastructure and active travel opportunities and encouraging development that achieves the highest levels of environmental and social wellbeing.



Factors attracting R&D (source: Bidwell & Creative Places, YouGov)

development on this site will facilitate local economic growth, support AI clustering and boost jobs

1. Facilitates UK and local economic growth

Greater Cambridge's job growth is expected to be 34,400 between 2018 and 2041 (2017 EEFM). Projected job levels for 2018 have already been exceeded suggesting that job creation could be far higher over this period. Productivity growth is also essential for regional growth targets (doubling GVA between 2018 and 2043). The premises in the proposed development will enable existing firms to expand as well as attract new firms to the area.

2. Supports Cambridgeshire clusters

The site is located at the heart of Cambridge's newly emerged premier location for office development. This Core City District, centred along Station Road and Hills Road currently provides 16,500 jobs (15% of all jobs in Cambridge) within 1.5m sf of office space.

The area has seen job growth of 4% since 2015, much of which is focused along Station Road where 0.5million sf of offices has been built since 2013. The new occupants (such as Microsoft, Amazon, Samsung and Apple) have created a new AI business cluster. Such knowledge intensive industries tend to cluster together, pulled by the forces of agglomeration (easy access to knowledge, workforce, supply chains, markets).

To grow this cluster requires office development in close proximity to CB1. Physical proximity remains important in the age of ICT, which is great at data transfer but not capable of tacit knowledge transfer. However, future business development in the area is constrained by the lack of office space: current availability in this area is less than 1.5% with no grade A space. Increasing the supply of office stock can only be delivered through continued densification of existing sites. This site is the last location on Station Road that can provide appropriate premises at the heart of the cluster.

3. Delivers a healthy work environment

The proposed development delivers high class design of public realm and buildings that meet the WELL Building standards, create pathways through which health and wellbeing can be improved. They provide indoor and outdoor environments that enable individuals to take control their health irrespective of company policy. Improving worker health to reduce absenteeism and presenteeism (present but not working effectively) is an essential ingredient of improving the regions productivity.

4. Boosts high quality jobs

The proposed scheme will generate a range of new, long term, well paid employment, during construction and occupation of the buildings. Jobs will be created both on site and through the supply chain, supporting a broad range of business throughout the region and beyond. Jesus college is committed to encouraging inclusive and local recruitment which will feature heavily in its Social Value Strategy, discussed earlier.

Sustainability

Vision

Development on the site, with its close relationship to the station and the well utilised route to the centre of the city, has the potential to create a positive sustainability legacy for Cambridge and the College. Our vision speaks to a broad view of sustainability, exploring how the development might create positive impacts in a range of areas:

- Sustainable growth delivering additional capacity in the area, supporting economic prosperity and providing a range of social benefits such as training and jobs.
- Climate change strive for net zero carbon and support sustainable travel options, minimising the development's contribution through embodied carbon and operational emissions.
- High quality architecture deliver a place of high quality and responsibly limits its impact through the materials selected and the manner of construction.
- Biodiversity gain balance development with loss of ecological features alongside the ability to create enhancements elsewhere, resulting in a net gain.

Sustainability Opportunities

The development presents a range of exciting sustainability opportunities both in terms of the construction of new buildings and potential refurbishment of the existing villas, and in the sites ongoing operation.

There are clear opportunities to:

- Deliver a range of social benefits (jobs, training, support for SMEs and voluntary and social enterprise, etc)
- Reduce car use to ease congestion and reduce airborne pollutants through connections to both bus and rail public transport systems. The same measures offer opportunities to promote active travel choices (walking, cycling) to enhance user health and wellbeing.
- Enhance the health and wellbeing of building users and those utilising the improved public realm by the creation of spaces for informal and ad hoc gathering, access to more natural external spaces, and opportunities for experiences beneficial to mental health such as connecting with nature and enjoying art.
- Improve local water management to increase retention and mitigate the risk of localised flooding through the sustainable urban drainage techniques including making best use of ecological features.
- Make significant improvements to the quality of the existing accommodation in the villas as well as providing new high-quality space for a

range of future tenants in an area where there is unsatisfied demand for workplace buildings.

• Reduce the overall carbon emissions from the site compared to the existing by striving for a net zero carbon solution ensuring that the development does not contribute to rising emissions.



Climate change

The development will respond to the climate change agenda by addressing both mitigation – the reduction of emissions, and adaptation – dealing with the current and future impacts of climate change.

Mitigating climate change

There are two areas where the physical elements of the scheme (i.e. the buildings and associated landscape and public realm) directly impact; operational carbon emissions and embodied carbon.

Towards net-zero carbon

Reflecting the UK's legally binding target to achieve net zero carbon emissions by 2050, the UK Green Building Council (UKGBC) has defined what 'net zero carbon' means for buildings and illustrated a means to achieve this challenging level of performance. The aspiration is to minimise carbon emissions as far as possible and the project will actively seek to assess options to move toward net zero carbon by carrying out an assessment of operational emissions during design and a Life Cycle Assessment of embodied carbon to inform decision making.

The UKGBC definition of net zero carbon necessarily allows for remaining emissions tobe offset once all reasonable measures have been taken to reduce carbon in the design and operation of the development. The College will review the potential to invest in meaningful and robust offsets as part of the scheme.



Operational emissions

The aspiration is to achieve a level of in-use emissions at least as low as the existing villas and, if possible, lower. The approach to design will follow the Energy Hierarchy, a widely adopted approach to effectively reduce energy consumption:

- A 'fabric first' approach aims to reduce energy demand by creating a high performing building envelope, reducing demand on energy consuming services such as lighting, heating, cooling, and ventilation.
- Remaining energy demands are met through highly energy efficient systems, further reducing operational carbon emissions.
- Integration of low and zero carbon energy sources into new buildings presents a significant opportunity to minimise carbon emissions by generating energy on-site and reducing dependence on other sources of energy such as grid electricity.

In recent years the UK electricity grid has undergone decarbonisation due to reduced use of coal fired power stations and an increase in the amount of renewable energy generation. The result of this change is that the same electrically powered building systems have seen carbon emissions associated with their use fall rapidly. There is the opportunity for an all-electric solution to meet the heat demand of the building, thus reducing carbon impact and taking advantage of the continuing reduction in grid carbon intensity. Operational emissions of buildings include, indirectly, those emissions arising from associated activities, such as travel. There is an excellent opportunity to significantly reduce the use of fossil fuel driven private cars. Given the proximity to Cambridge station, cycle routes, and the city centre, the site would be designed to actively encourage a move away from private car use to active travel modes and public transport.

Embodied carbon

The move toward net zero carbon buildings means that embodied emissions must also be tackled to meet the UKGBC definition of net zero carbon. The selection of materials and construction methods used will be informed by a Life Cycle Assessment of embodied carbon.

Offsetting

The aspiration to achieve net zero carbon emissions, will require an exploration of the potential to meaningfully and robustly offset residual emissions from the scheme as part of developing the site.



Decarbonisation of the grid - National Grid Carbon Factor

1. ESTABLISH NETZERO CARBON SCOPE

1.1 Net zero carbon - construction

1.2 Net zero carbon - operational energy

2. REDUCE CONSTRUCTION IMPACTS

2.1 A whole life carbon assessment should be undertaken and disclosed for all construction projects to drive carbon reductions.

2.2 The embodied carbon impacts from the product and construction stages should be measured and offset at practical completion.

3. REDUCE OPERATIONAL ENERGY USE

3.1 Reductions in energy demand and consumption should be prioritised over all other measures.

3.2 In-use energy consumption should be calculated and publicly disclosed on an annual basis.

4. IN CREASE RENEWABLE ENERGY SUPPLY

4.1 On-site renewable energy source should be prioritised.

4.2 Off-site renewables should demonstrate additionality.

5. OFFSET ANY REMAINING CARBON

5.1 Any remaining carbon should be offset using a recognised offsetting framework.

5.2 The amount of offsets used should be publicly disclosed.



Adapting to climate change

Emissions already in the atmosphere are driving climate to change with higher temperatures, biodiversity loss, increased flood risk. New development must be made resilient to these challenges to ensure that the buildings and their immediate surroundings provide a sustainable legacy for many years to come. The key risks needing assessment:

Flood Risk

Whilst the flood risk at the site from both rivers and surface water is classed as low, the external space is majority hard landscaping, reducing control of surface water run-off. Improving resilience to flooding will prepare the development for a range of future climate scenarios and better manage the water runoff into the wider city drainage system. There is opportunity to explore the integration of measures such as green or blue roofs and sustainable drainage systems, in line with the Cambridge Sustainable Drainage Design and Adoption Guide.

Overheating Risk

With annual temperatures predicted to continue rising, reducing the risk of overheating is critical. This is best achieved through design measures which lower the cooling requirement, rather than relying on active cooling systems, which need maintenance, consume energy, and have shorter lifecycles. The design of new buildings on the site would incorporate a range of passive design measures such as solar shading and high fabric performance and retrofit measures will be integrated into the existing villas.

Water efficiency

Water availability in the UK is expected to fall due to growing populations and rising annual temperatures. Demand-side solutions, such as improving water efficiency, will be implemented as part of developing the site. Water efficient fittings and metering will be used in line with the requirements of the Cambridge Local Plan 2018 and systems which recover water will be considered.

Waste

Measures to minimise the volume as far as possible to be implemented. Through the careful selection of materials and the use of techniques such as offsite and modern methods of construction, material consumption, waste volumes, and product quality are all improved and will be actively investigated during design.

Landscape

We will carefully consider the balance between retention of existing ecological features, in particular trees identified as category A or B, and the broader value of development. This approach recognises that new green infrastructure presents opportunities to offer greater resilience to a warmer and drier climate than currently exists, to potentially provide a net gain in ecosystem habitats, and to provide broader ecosystem services such as forming part of a sustainable drainage system.

Heritage

An initial Heritage Significant Assessment was carried out by Bidwells in March 2019 and updated in January 2020. Included here is a summary of its key findings; please refer to the full report for further detail.

National Policy and Guidance

The primary legislation relating to Conservation Areas is set out in the Section 72(1) of Planning (Listed Buildings & Conservation Areas) Act 1990 which requires that, where development within Conservation Areas is concerned, *"special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area."*

Beyond this legislative requirement are the policies set out within the revised National Planning Policy Framework (NPPF). The NPPF states that heritage assets are "an irreplaceable resource, and should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations".

Within related policies, the NPPF requires a balance to be applied in the context of heritage assets, their significance, the impact of proposals and the recognition of potential benefits accruing from a development. It is possible for proposals, where suitably conceived and designed, to result in no harm to the significance of heritage assets.

In the case of designated heritage assets (such as

Conservation Areas and listed buildings), paragraph 193 explains 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". In the event that "less than substantial harm" would be caused, the policy requires this harm to be clearly outweighed by public benefits. In the event that substantial harm is caused, this level of harm should be "exceptional and could only be outweighed by substantial public benefits."

In the case of non-designated heritage assets, such as locally listed buildings or buildings of positive merit, Paragraph 197 requires a Local Planning Authority to make a "balanced judgement" having regard to the scale of any harm or loss of the heritage asset.

The NPPF therefore recognises the need to clearly identify relative significance at an early stage and then to judge the impact of proposals in that context, with the minimisation and mitigation of impacts as a first priority.

The Planning Practice Guidance (PPG) is a companion to the NPPF and provides further guidance on the historic environment and in relation to non-designated heritage assets: "Non-designated heritage assets are buildings, monuments, sites, places, areas or landscapes identified [...] as having a degree of heritage significance meriting consideration in planning decisions, but which do not meet the criteria for designated heritage assets."

It goes on to clarify that: "A substantial majority of buildings have little or no heritage significance and thus do not constitute heritage assets. Only a minority have enough heritage significance to merit identification as non-designated heritage assets." This statement clarifies the need to be judicious in the identification of non-designated assets and the extent to which this status should be applied as a material consideration and in accordance with PPG.

against the current Cambridge City Council Local Plan. The policies relevant to these proposals, in terms of heritage, are Policy 57 - Designing New Buildings, Policy 58 - Altering and Extending Existing Buildings, Policy 61 - Conservation and Enhancement of Cambridge's Historic Environment, Policy 62 - Local Heritage Assets.



Convervation area significance assessment (Heritage Assessment, Bidwells)

Heritage signficance

All the existing villas are 'Buildings of Local Interest' (and are therefore non-designated heritage assets). In addition, they are identified as 'Buildings of Positive Townscape Value' in the New Town & Glisson Road Conservation Area Character Appraisal (2012). Their significance has been assessed in the Initial Heritage Assessment prepared by Bidwells. This concludes that as a group, and in their contribution to the Conservation Area, these buildings hold a value ranging from *moderate to good* (although some buildings individually have a lower level of value as a result of lower original quality and adaptations to them). All the existing villas are 'non-designated assets' in their own right, and are therefore subject to the provisions of the NPPF. The buildings also contribute positively to the character and appearance of the Conservation Area (a designated heritage asset), requiring the application of the NPPF.



Building significance (Heritage Assessment, Bidwells)

Demolition

Proposals to demolish the villas would result in varying degrees of harm. In terms of the non-designated heritage assets individually, each demolition would result in total loss of the significance of each villa – which possess significance ranging from low to moderate.

Depending on the extent of proposals for demolition, the loss of individual villas within the Conservation Area would represent "less than substantial harm" to the character and appearance of the Conservation Area. As an individual demolition, this might be at the lower end of the scale of "less than substantial harm".



Ecology and biodiversity

A site-wide ecological appraisal and background desk study was completed by Ecology Solutions in December 2019. Included here is a summary of its key findings; please refer to the full report for further detail.

There are no statutory or non-statutory designated sites within or directly adjacent to the site. Provided standard construction safeguards are met, redevelopment works would have no effect on designated sites in the vicinity.

Habitats and Biodiversity Net Gain

The habitats within the site consist of common and widespread species as well as a variety of amenity planting and are of limited intrinsic ecological interest. Opportunities are present to enhance the site through a sensitively designed landscape scheme which could incorporate native species of local provenance and those of known value to native wildlife. Features such as green roofs and green walls, new hedgerow, shrub and tree planting, and wildflower strips in amenity areas could be incorporated to increase biodiversity. With good design there is good scope for redevelopment proposals to achieve a 10% Biodiversity Net Gain in line with emerging planning policy.

Bats

The buildings offer multiple potential opportunities for roosting bats. Owing to the potential roost features observed, and the high-quality foraging resources and dispersal routes within easy reach, the site is classed as having high bat roosting potential; as such, further surveys for bats are required. A single Horse Chestnut tree is present potentially providing opportunities for roosting bats. Overall there is good scope for providing enhancements for bats as part of any redevelopment.



Ecology appraisal plan

the redevelopment could achieve a 10% Biodiversity Net Gain

Hedgehogs

Hedgehogs were not observed during the survey work undertaken, but there is potential for them to be present. They will not present a significant constraint, and there is good scope to increase opportunities through increasing ground cover and providing features such as Hedgehog houses and gateways.

Birds

The site supports suitable nesting and foraging habitats for a number of bird species. Existing garden habitats could be bolstered to provide enhanced opportunities for foraging and nesting birds. Overall the redevelopment would provide good scope to increase opportunities for bird species.

Invertebrates

Currently the site has very limited opportunities for invertebrates, comprising mainly hard surfaces with little vegetation. In addition to new habitats, the redevelopment could include provision of new nesting opportunities such as bee bricks.

Conclusion

In conclusion, it is considered that there is no overriding ecological constraint to redevelopment. Further survey work pertaining to bats is required in order to determine the potential impacts of the development and to devise mitigation strategies. With good design, the proposals can incorporate opportunities for net gains for wildlife.







Trees

A Tree Survey and Constraints Plan was prepared by Haydens in January 2020. Included here is a summary of its key findings; please refer to the full report for further detail.

British Standard 5837

Categories according to BS 5837:2012 are as follows:

- *Category A.* Trees of high quality and value capable of making a significant contribution for 40 or more years.
- *Category B.* Trees of moderate quality or value capable of making a significant contribution for 20 or more years.
- *Category C*. Trees of low quality, adequate for retention for a minimum of 10 year
- *Category R.* Deemed to be of no value within 10 years of the assessment and should be removed.

Survey

Within the area specified for inspection, a total of sixty-nine individual trees, nine groups of trees and two areas of trees have been surveyed. These were found to be of mixed condition and age providing a variety of amenity benefits.

Three of the trees are identified as Category A trees (considered to be trees of high quality and high value). These are as follows:

- T012: Austrian Pine
- T059: Beech (this tree is located on neighbouring land, but due to its proximity to the boundary, it could nonetheless affect development proposals)
- T066: European Lime



Tree constraints plan

The majority of the other mature trees are classified as Category B (trees of moderate quality and value), with the remainder either category C or U.

All the trees along Station Road are Lime and classified as Category B. While the tree species in the back gardens are more mixed, they are mainly either Sycamore, False Acacia or European Lime.

Tree retention

Ideally, the development should ensure the retention trees considered most worthy or appropriate for retention. Development should take place outside the root protection area of the trees, thus allowing a traditional construction process. It is technically possible to build within a very limited portion of the RPA of one or more trees using specialist engineering techniques, but inevitably this is more difficult an expensive than traditional construction methods and may not be acceptable to the local planning authority.

Conclusion

It is recommended that the siting and design of the layout considers the presence of trees, particularly those of the highest quality, and seeks to incorporate them within any proposed development work to leaving a strong tree belt.





Social inclusion

Cambridge context

Social inclusion is "the process of improving the terms on which individuals and groups take part in society—improving the ability, opportunity, and dignity of those disadvantaged on the basis of their identity." (Worldbank). Inclusion is at the heart of the Council's vision of 'One Cambridge – Fair For All':

"A city which believes that the clearest measure of progress is the dignity and well-being of its least well-off residents, which prioritises tackling poverty and social exclusion, recognising that greater social and economic equality are the most important preconditions for the city's success".

The Anti-poverty strategy notes that "while the Cambridge economy continues to thrive, there are high levels of income inequality in the city, with Cambridge identified as the most unequal city in the UK by the Centre for Cities. There are also lower levels of social mobility for young people from poorer backgrounds".

Benefits / opportunities

Social value captures the full range of societal benefits arising from a development and its interventions, including direct (such as wellbeing, employment and financial spend), and indirect (such as benefits to society from reducing isolation and protecting of enhancing biodiversity). It is defined as "meeting the current needs of the industry and the communities in which we work; improving the quality of life for generations to come;"



The Social Value Strategy will cover eight key themes

'One Cambridge – Fair For All'

A Social Value Strategy

Jesus College is committed to delivering a scheme that maximises social value for local people. Working with the City Council, existing organisations and partnerships the college will undertake a Social Value Strategy (SVS) to inform, measure and monitor the social and economic impact on Cambridge. This will focus on achieving sustainable, long-term change, driven by outcomes, not outputs and maximising the social and socioeconomic impact of the development.

The Social Value Strategy will comprise:

- Social Impact Plan: setting out Social Value KPIs that can be achieved through the construction and operational phases
- The Social Value Outcomes Map: aligns the Social Impact Plan with wider long term outcomes social, health and wellbeing outcomes, relevant Sustainable Development Goals, and Councils' four Big Themes.
- The Social Value Delivery Plan: informing the delivery of the Social Value KPIs, timescales and roles/contracts available for new recruits.

Embedding social value

The potential to embed social value throughout the full project lifecycle will be explored by considering the following issues:

• *Procurement:* Including the SVS and aligned social value outputs and outcomes within the procurement process; clearly illustrating the outputs and outcomes to be delivered by the

Main Contractor during the construction phase. Discussing the SVS with prospective tenants and service providers to ensure that social value is embedded into the operation of the development.

- Social Infrastructure: Working with local partners including training providers, Voluntary Community & Social Enterprise (VCSE) organisations, educational establishments, and public-sector organisations to enable inward investors, local residents and businesses to secure the opportunities generated through the development.
- *Responsibility:* Taking a collaborative approach to ensure that the project delivers long term, sustainable outcomes for local residents that are beneficial, accessible and inclusive.

Future potential and innovation

- The use of technology to capture, collate and measure data on the wellbeing of tenants, their employees and residents.
- A robust procurement process that takes into consideration and measures the added/social value that can be generated through the use of Social Enterprise to deliver services and products for the College and its tenants.
- To embed evidence based social value monitoring and measurement processes and techniques into College processes and policy to transition from output data (number of people benefitting from interventions) to outcome data (what change has occurred for people due to the intervention).

Wellbeing



NOx Emissions as annual mean (January 2020)

Context

Delivering health and wellbeing is required by the planning system and necessary if the Cambridge and Peterborough economy is to grow and meet its ambitious productivity targets.

"To get to work on this productivity problem will involve increasing the output of businesses, improving skills (both in terms of levels, but also their relevance to local growth industries), and boosting health outcomes."

Overall the health of people living in Cambridgeshire is very good and, on most measures, is statistically significantly better than the UK national average. Areas of concern for Cambridge include:

- Pockets of deprivation in Kings Hedges, and Abbey wards,
- The gap in life expectancy between the least and most deprived areas in Cambridge is 10.4 years for males and 9.4 years for females
- relatively poor employment rates for those with long term health conditions
- High rates of self harm
- Cambridge has the second highest rate of childrens social cre referrals in the county
- 54,459 adults are overweight
- 15,000 adults have high blood pressure and
- 11,410 adults have depression

Benefits and opportunities

Health is determined by the interplay of many determinants including the built environment, local economy and lifestyle. The proposed development will contribute to healthy living through the delivery of high quality buildings on the site and through the creation of public realm along Station Road that will create valuable outdoor amenity space in an area where it is lacking.

Indoor air quality

The site is located with a designated Air Quality Management Area (AQMA) and in a high pollution area for emissions of both Nitrous Oxide (NOx) and PM10s There is opportunity to ensure that the internal environments created by the development will be of good quality and to reduce the presence of common indoor air pollutants, such as carbon dioxide, nitrogen dioxide (NO2) and volatile organic compounds.

Construction pollution

Care will be taken during construction to prevent dust intrusion and/or to clear the space of dust, chemical vapours and other debris to avoid significant aggravation of indoor air quality. Air duct protection, moisture and dust management, filter replacement and proper equipment selection are strategies that improve indoor air quality by limiting the exposure to an intense contamination period. Post construction, techniques such as building flush will be used to remove pollutants such as volatile organic compounds that were inadvertently introduced during construction.



Circadian lighting

Operational pollution

The project will explore the potential for:

- all-electric heating and hot water system to avoid the on-site combustion of fossil fuels and contribute to a reduction in local air pollution.
- Proper design, operation and maintenance of a ventilation system for supporting indoor air quality with a preference for natural ventilation where outdoor air quality allows.

Daylighting

Building design will focus on providing adequate daylight, reducing the need for artificial lighting, reducing energy demand, carbon emissions, and costs. High levels of natural day light support mental wellbeing by improving people's mood, reducing the symptoms of depression, stimulating the body's circadian system which regulates physiological rhythms such as hormone levels and the sleep-wake cycle.

Noise

Both too much and too little noise can have a range of adverse effects on building users, including inconvenience and annoyance, loss of concentration, decreased productivity and sleep disturbance. The accoustic performance of new development will be carefully considered to ensure rooms can be used as intended, without compromising soundsensitive spaces or activities. Noise impacts will be considered at an early stage and excessive noise avoided, as it would have a detrimental effect on the adjacent gardens and disrupt wildlife.

An appropriate location for office densification

Health and wellbeing benefits would be delivered because the location is appropriate for high density offices, due to the:

- Proximity to open space at the Botanic Gardens, which provides open space of a scale that can absorb a large number of people, thereby having the capacity to serve high density employment development. The health benefits derive from the opportunity for people to form social capital, induced feelings of relaxation and physical activity.
- Proximity to the train station and several bus service destinations encourages use of less polluting forms of transport and typically involves active travel at each end of the journey.
- The central location of the scheme and good cycle and pedestrian provision encourages active travel.
- Proximity to a range of places to eat and local supermarkets in the local area, which offer healthy eating choices.
- Proximity to local services and amenities bringing opportunities for social interaction and community development. Particularly important given a large number of employees will not be resident in Cambridge and have established local networks.
- Opportunity to reduce crime rates on Station Road through change of use (the majority of crime occurred at Education establishments) and better cycle security.



Summary of the site

The diagram opposite illustrates some of the key constraints.

In addition to the constraints identified in the previous sections, the redevelopment will also need to address potential overlooking and daylighting issues to the small scale residential buildings immediately to the north of the site.

Furthermore, being located next to a busy road, the design of the buildings will have to consider the mitigation of noise and air pollution that results from high levels of vehicular traffic, particularly during peak times.





scale in the context the other the public realm new development

to the 'gateway' character of the station road area

Opportunities

Contributing to the local economy

Station Road is the gateway into the city and the Station Road area forms a significant and thriving cluster of businesses. There is an opportunity to open up the site, currently somewhat isolated, to allow it to actively contribute to the hub of commercial buildings along Station Road.

Going car free

The site is currently dominated by a proliferation of car parking. There is an opportunity to remove all cars and create a car free development, encouraging sustainable modes of travel and reducing congestion.

Enhancing the public realm

There is an opportunity to significantly enhance the public realm along Station Road, by comprehensively re-landscaping the forecourt area as a new linear public amenity space. This would improve the experience for those passing through and add value to the site.

Sustainability, social inclusion and wellbeing

There is a significant opportunity to spearhead solutions around sustainability, social inclusion and wellbeing in the context of move to a net zero-carbon society.

Development opportunities

There is an opportunity for substantial development either within the back gardens or the redevelopment of the villas themselves.

opportunity for a new building to front on to Tenison Road



PART 4

EMERGING SCENARIOS

Scenario 1 Do nothing

This scenario represents the status quo.

The existing tenants would remain in place, only routine maintainance would be carried out to the buildings, and the rear gardens would remain largely hard-standing and car parking.

However, this also means that none of the potential benefits of redevelopment would realised either: the existing buildings would not be able to benefit from comprehensive renovation works to give them a new lease of life, nor could new floor space be created for businesses to grow, no additional jobs would be delivered, the public realm would not be revitalised, no biodiversity gains delivered, no social value added and, per person, it would remain a carbon-intensive site.

- 3,500m² of floor space
- no public realm improvements
- 170 jobs
- no major capital investment
- £8.9m GVA¹ (how much each person adds to economy)
- **0.75 carbon per person**² (tonnes of CO₂e per person per year)

1. Based on data from the from the ONS: £52,587 per year per full-time equivalent employed person (FTE).

2. Operational emissions intensity per year per person working on the site (CO2e/FTE) excluding embodied carbon. Taken from Hoare Lea's Initial Carbon Analysis.



Illustrative cross section