VISION STATION

December 2021

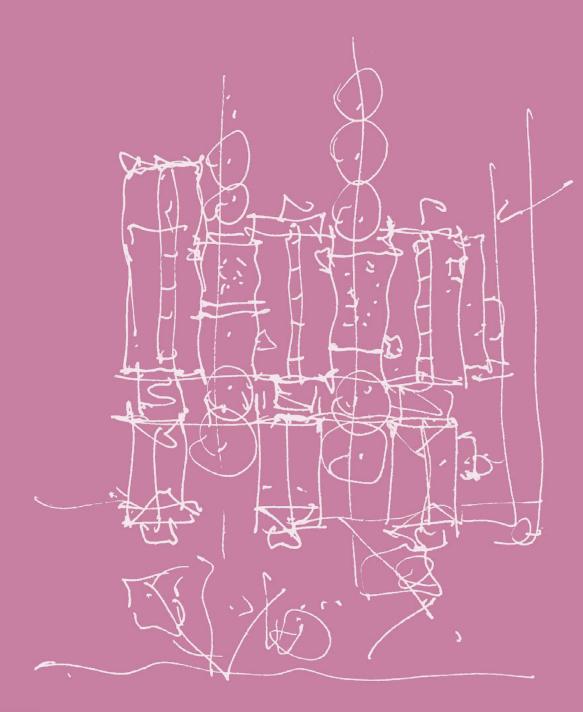












introduction

This document is part of the representation made on behalf of Jesus College, Cambridge, as landowner, to the 'First Proposals' (Regulation 18) Local Plan consultation. Submitted alongside this document, are also the following:

- Planning Statement (Bidwells)
- Sustainability & Social Value (Hoare Lea)
- Heritage Impact Assessment (Bidwells)

This document builds on the work from the Issues and Options stage to provide further consideration of the potential of the site. It therefore represents an addendum to the submission made to the 2020 Issues and Options Consultation (Local Plan Site Reference: 40133). Our vision for the north side of Station Road is to breathe new life into the site by transforming the public realm and supporting the clustering in the local area, which has proven so important to Cambridge's economy.

The site represents an opportunity to provide increased employment floorspace in a highly accessible and sustainable location and so help cater for needs of the emerging Local Plan. This would also help alleviate the acute lack of supply of office space in the local area.

The exact future of the site is yet to be established and the development scenarios illustrated here are intended to stimulate a discussion around the most appropriate long-term ambition for the site.

The site remains available and deliverable.



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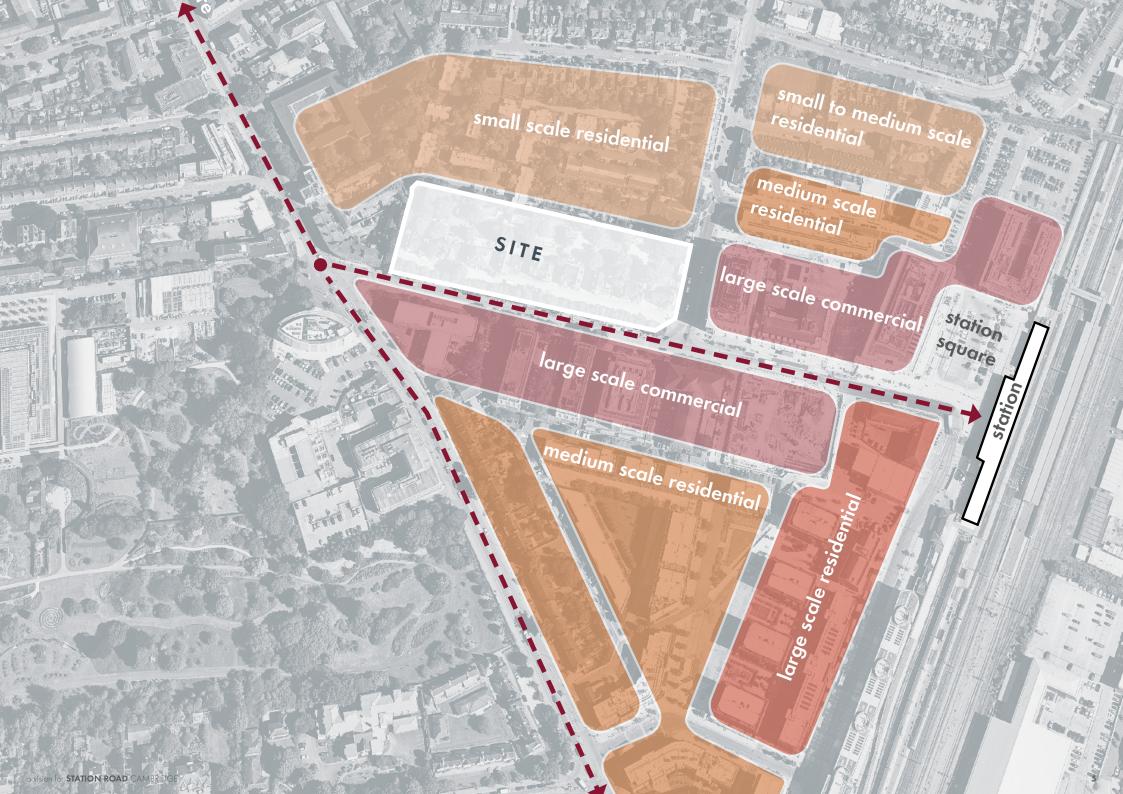
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context





1.1 shaped by the railway

The historic character of the station area represents an unusual combination of industrial heritage and 19th century residential expansion on the fringes of the historic city. The substantial villas built in the 1870s were intended for wealthy occupants and benefitted from service quarters and large back gardens. Built to the designs of Cambridge architect Richard Reynolds Rowe in circa 1874, they are an eclectic, but correlated group, sharing common features and mostly Gothic detailing; with prominent gables and chimney stacks.

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 are being replaced by larger commercial buildings.











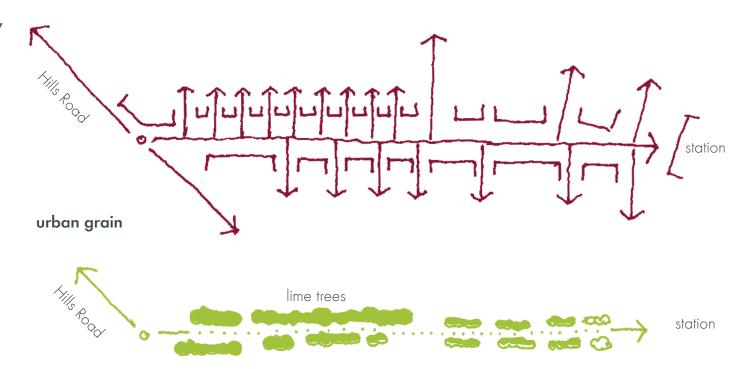




1.2 with a consistent character

On Station Road, the building line gives way to a row of mature lime trees framing the view of the station. The villas are set back approximately 16m from the pavement behind an access road with informal parking. Gaps in-between the villas create a porous urban grain.

This character of buildings set back from the road and behind a tree lined avenue distinguishes the site from its surrounding area. This allows different scales and styles of buildings to co-exist without significantly compromising the character of the street.



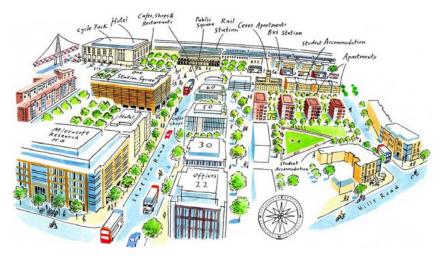
tree-lined boulevard

1.3 in an area that is rapidly changing

In recent years, the Station Road area has changed beyond all recognition. 0.7 million sqf of new office space has been built since 2015, creating a bustling city quarter.

The connectivity to public transport and mix of uses and amenity have proved very successful. The development of high quality offices has catapulted this area into a globally competitive business district, bringing a new dimension to the City's commercial offer. It is particularly attractive as a location for technical and research sectors attracting tenants such as Microsoft, Amazon and Samsung, creating a new cluster of AI businesses, benefiting Cambridge and the wider UK economy.

The north side of Station Road provides an opportunity to continue the successful transformation of this part of the city and provide additional high quality office space, albeit with a different character.









1.4 the need for a vision

In the context of the emerging Local Plan, it is imperative to consider the long term future of the site. With a proliferation of car parking, the site currently does little to add to the quality of the public realm and experience along Station Road. Nor is it helping the Council meet its planning and climate ambitions; not least to reduce vehicle movements in the city centre, improve air quality, reduce carbon emissions and improve the public environment.

The site offers an opportunity help deliver on the aims of the 'Cambridge Railway Station, Hills Road Corridor to the City Centre' Opportunity Area, including "linking CB1 Station Square to Hills Road, creating a high quality public realm" (Policy 25). This will bring real benefits to all that use Station Road.

The site lies in one of the most sustainable locations in the City and could provide more floorspace in a location where people can rely on sustainable transport options. With CB1 nearly complete, now is the time to consider how the site can best contribute to a more sustainable, useable and attractive Station Road.











2.2 a station promenade



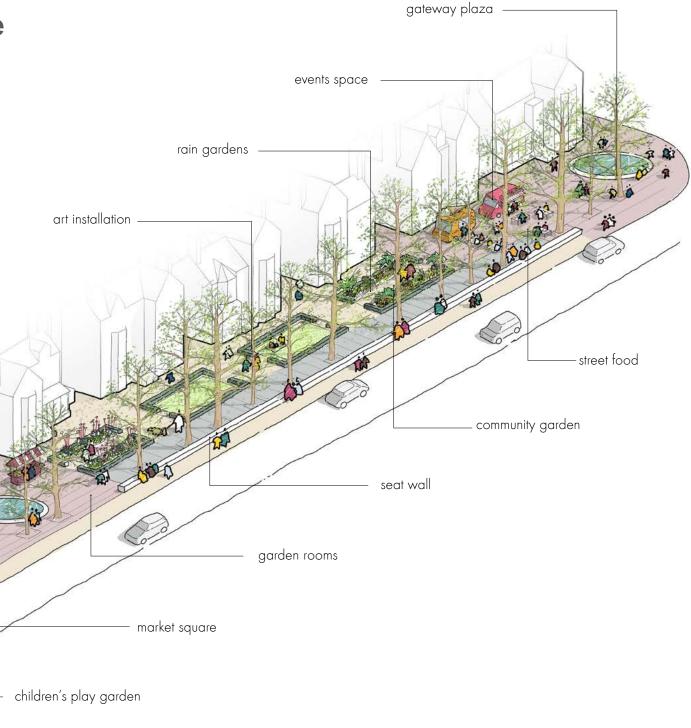
The site is on the main Station approach - a station that is used by 12 million people per year. Yet the vast forecourt area of site facing Station Road currently serves merely as car parking.

By removing the cars and opening up the front as public realm, the site has the potential to make a substantive contribution to urban life in Cambridge.

2.2 a station promenade

Our vision is to comprehensively re-landscape the forecourt area as a new linear public park: a station promenade. A piece of public realm, stretching along more than half of Station Road, it would transform the experience, enjoyment and safety of everyone using Station Road adding value to the site and the wider area.

The promenade offers the opportunity to introduce a variety of new uses that place people at the heart of the proposals. What is currently a completely private and walled site has the potential to be transformed into a true piece of public realm.





2.3 outdoor rooms and green spaces

Outdoor rooms and green spaces could establish moments of emphasis and connectivity along Station Road. Together, they could provide a family of open spaces with different uses and characters offering variety and flexibility.

Well-managed, high-quality landscaping with the benefit of natural surveillance will contribute to a sense of wellbeing and comfort not only for the users of the site but the wider community as well.











2.4 places for people

Placing people first, the outdoor rooms could be themed to serve as wide a community as possible. Themes could include play, art, food, relaxation, nature, water or sport: a place to relax or have a spot of lunch, a place to enjoy outdoor events or exercise groups, a place take in art installations or outdoor exhibitions.











2.5 responding to the special character

The particular character of this part of the New Town & Glisson Road conservation area make it special. Our aim is to allow proposals to come forward that deliver significant new development while nevertheless retaining the essence of what makes this character special.

To achieve this, proposals must be a direct and positive response to the character of the area, including its historical development, its urban structure, its tree-lined avenues, its consistent grain and its variety of architectural styles.

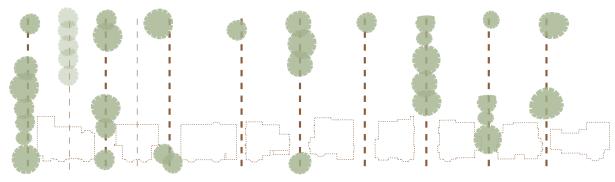




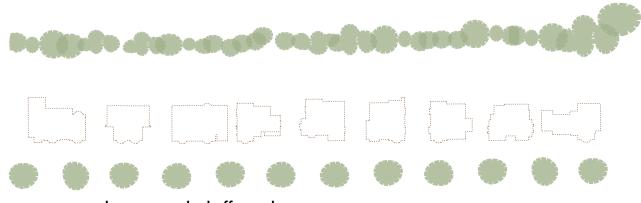
2.6 a rhythm of gardens

There are three traits in particular that make this part of the conservation area special. The traits also underpin our initial ideas for how the site should be respected:

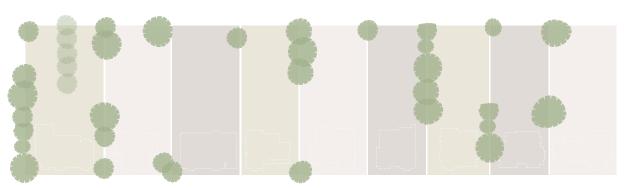
- Trees existing trees are typically located on the boundaries of the former residential plots. These boundaries should be respected and mature trees of value should be retained.
- Avenue the avenue character along Station Road should be strengthened by opening up the site and creating new public realm in the forecourt area. At the rear boundary, new trees should be planted to strengthen the planted buffer to the residential properties.
- Grain new development should be informed by the grain and rhythm of the former residential plots, for example by allowing glimpses between plots through to the spaces behind.



respecting the trees on plot boundaries



an avenue on the street and a buffer to the rear



the grain of plots - correlated yet individual

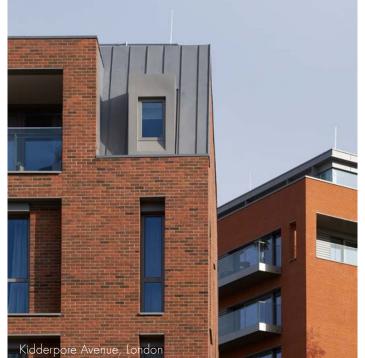
2.6 new buildings

A family of new buildings or extensions could be developed with forms that respond to the scale and massing of the existing buildings on site and in the area around Station Road.

Consideration could be given to the use of pitched roofs and gables to produce granularity of form and a layered silhouette. This might help create a character that sets it apart from the other more block-like new buildings on Station Road. A variation in roof form might also help to break down the overall massing and creates a rhythm that relates to the finer grain of the adjacent residential buildings.





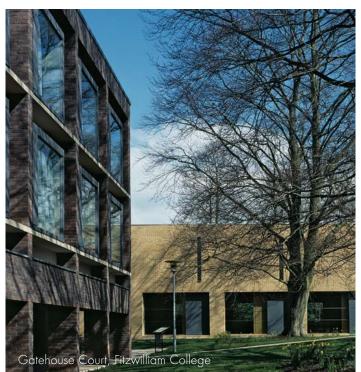




2.7 garden courts

New development could respond to the existing plot grain and trees by arranging the new buildings around a series of garden courts.

These garden courts would allow trees of value to be retained while creating planted outdoor amenity spaces for the benefit of the users of the site. A dual character of more formal courts at the heart of the proposals and informal green areas around the edges of the site could be established with landscaping that is richly planted and incorporates sustainable drainage features.







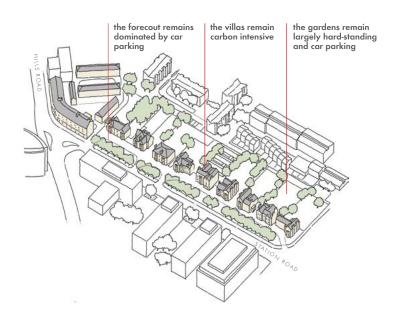




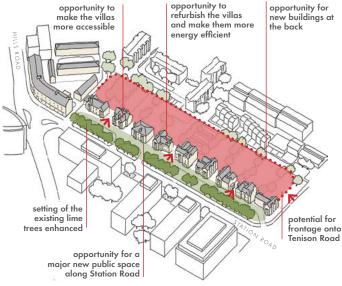
indicative scenarios

3.1 potential scenarios

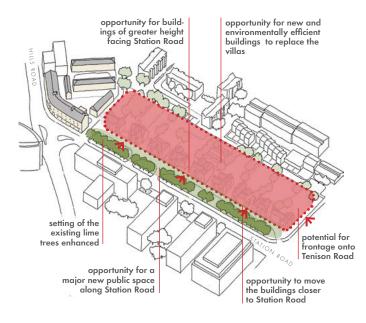
Below are possible scenarios for the future of site. The scenarios are not intended as an exhaustive investigation, but merely a sample of the most representative within a range of possible futures for the site. The two development scenarios have been explored further over the following pages.



do nothing



villas retained with development to the rear



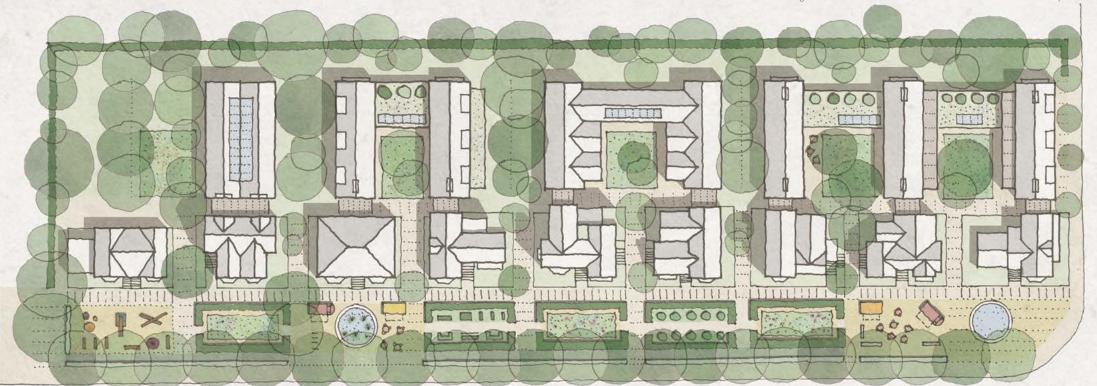
villas demolished and redeveloped

3.3 villas retained with development to the rear

This scenario retains and refurbishes the villas with new buildings placed in the back gardens arranged around garden courts. This would create flexible, newbuild floor area in an attractive and tranquil environment with a unique character.

Entrances could be in-between the existing villas allowing glimpses through to the courts beyond. The new extension buildings could be connected to the villas through linking elements with lifts that serve both the new and existing buildings, improving their accessibility.

- up to 13,000m² of floor space
- 3,000m² of public realm
- up to 1,000 jobs1
- £75m capital investment¹
- £50m GVA² (how much each person adds to economy)
- 0.16 carbon per person³ (tonnes of CO₂e per person per year)
- 1. Based on broad estimates of occupancy and build costs on a m2 basis.
- 2. Based on data from the ONS: £52,587 per year per person (FTE)
- 3. Operational emissions intensity per year per person on the site (CO2e/FTE) excluding embodied carbon. Taken from Hoare Lea's Initial Carbon Analysis.







3.4 heritage assessment (retention)

Retaining and restoring the existing villas will represent a benefit to their heritage values. New high-quality public realm along Station Road, replacing the car parking, also offers a significant enhancement.

The proposal to create 'pavilion' extensions to the rear will secure a viable use for the villas and also make good use of land in this sustainable location.

Some loss of existing openness within the rear would result from this, but public appreciation of these spaces is limited, and the new development could create a series of smaller-scale courtyard garden spaces amongst the high quality additions. The impact on the significance of the villas would be beneficial, including enhancements to their settings on the south side where their contribution to the Conservation Area is at its greatest. The partial loss of openness at the rear would be less appreciable in the context of the Conservation Area and impacts would be "less than substantial" at the lower end of the scale in terms of theNPPF heritage policies. This level of impact is markedly less than was concluded in the HELAA response.

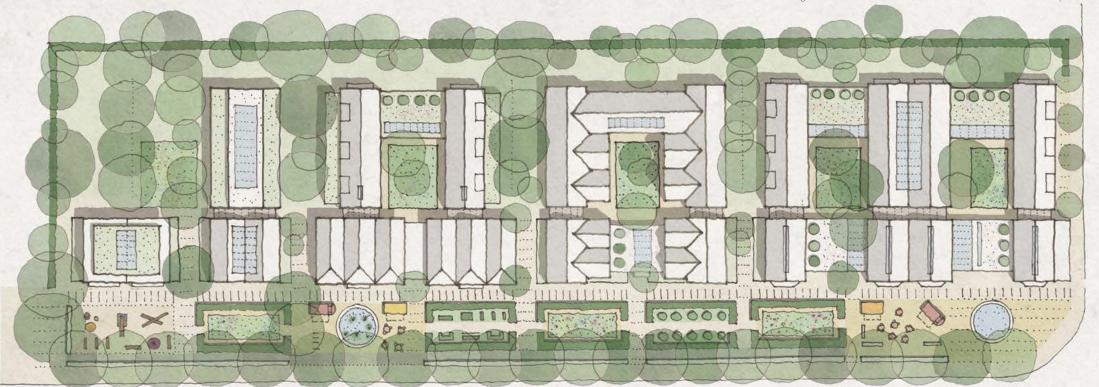


3.4 villas demolished and redeveloped

This scenario envisages the demolition of the Salisbury Villas to allow for the development of new buildings. This option delivers most new floor space overall, due to the potential for more height facing Station Road.

The new development could respond to the existing plot grain and trees, potentially by arranging the buildings around a series of garden courts. A varied form and massing might help create a character that sets it apart from the other more block-like new buildings on Station Road.

- up to 20,000m² of floor space
- 3,000m² of public realm
- up to 1,400 jobs1
- £100m capital investment¹
- £70m GVA² (how much each person adds to economy)
- 0.15 carbon per person³ (tonnes of CO₂e per person per year)
- 1. Based on broad estimates of occupancy and build costs on a m2 basis.
- 2. Based on data from the ONS: £52,587 per year per person (FTE)
- 3. Operational emissions intensity per year per person on the site (CO2e/FTE) excluding embodied carbon. Taken from Hoare Lea's Initial Carbon Analysis.





3.5 heritage assessment (demolition)

The removal of the existing villas would cause a loss of significance. That significance is at the level of between low and moderate/good in terms of the individual value of each villa and the collective value of the group in the Conservation Area. The loss of significance would represent "less than substantial harm".

Re-development has the potential to bring forward very significant improvements to the public realm along Station Road, with consequent benefits to the public experience and appreciation of the Conservation Area. The replacement built form, designed to a high standard and compatible with its context, could provide an alternative active

frontage to that new public realm, reflecting the rhythm of the villas and creating a strong and positive new architectural approach to the station.

The benefits to the overall townscape arising from enhanced public realm and design quality could be minor-moderate beneficial in their effect in heritage terms.

The overall level of impact, taking both heritage harm and benefit into account is less than was concluded in the HELAA response.





4.1 sustainability vision

Jesus College has pledged to achieve Net Zero Carbon for its financial investments by 2038 and its property investments by 2050, with buildings that are under more immediate control much earlier than 2050.

Station Road will be a key part of implementing this progressive policy, while making positive contributions to wider sustainability issues. The College's full Sustainability and Responsible Investment Policies can accessed via this link.

Redevelopment would enable the buildings to be made Net Zero Ready by replacing gas boilers with electric heat pumps, installing renewable technologies and applying Passivhaus methodologies to minimise energy demand.

The intention is also to exceed the new Local Plan policy on embodied carbon through the use of sustainable materials such as all-timber construction.











4.2 five themes

We have identified five themes to underpin the future proposals for Station Road, recognising that sustainability spans every aspect of our lives:

PHYSICAL

Excellent connectivity reduces carbon emissions, air quality and noise impacts



Our Social Value Baseline
Demographics Report helps us
understand how Station Road can
have a positive social impact



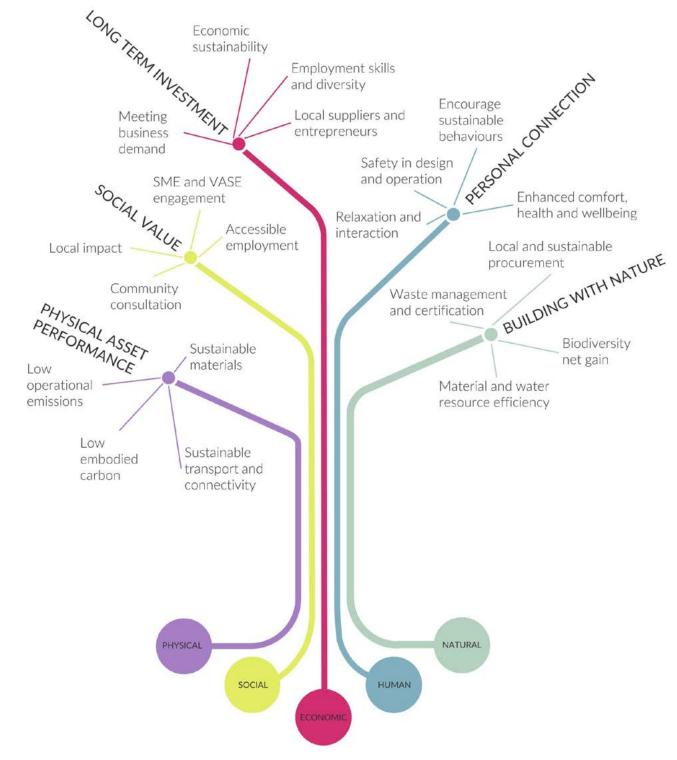
Supporting the continued demand for high-grade office space in the Station Road area and increasing job provision



Improving local air quality, encouraging active travel, and promoting interactions



20% biodiversity net gain, material and water efficiency



4.3 car-free connectivity

The site enjoys exceptional accessibility. Despite this, with over 130 parking spaces on the site, cars remain a main mode of transport.

The most significant opportunity therefore is to make the site as car-free as possible, while encouraging sustainable modes of travel, by:

- Transforming the provision for cyclists, with:
- High-quality, covered & secure cycle parking
- E-bike charging and cargo bike storage
- Changing, showering and storage facilities, to make cycling much more appealing
- Creating a largely car-free site, except for disabled parking and EV charging
- Enhancing the footway provision on Station Road to aid pedestrian safety
- Making the site safer by removing vehicle access at the Tenison Road junction









4.4 embodied carbon (net zero in construction)

Reducing carbon from construction is a critical factor in helping address the climate emergency. Station Road will achieve Net Zero Carbon in Construction, including good quality offsets. Our targets to limit embodied carbon will represent industry best practice and exceed the new Local Plan policy. To achieve this, we will consider a range of opportunities, including:

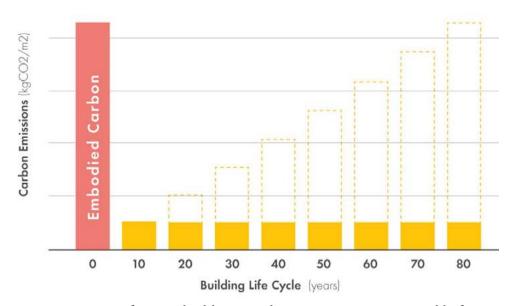
- structural timber
- concrete with cement replacement
- metals with highest recycled content
- whole lifecycle carbon to balance up-front embodied carbon with longevity and replacement impacts
- balance elements with higher embodied carbon, such as triple glazing, against reductions in operational emissions
- High performance fabric to reduce MEP plant

Retain/extend scenario:

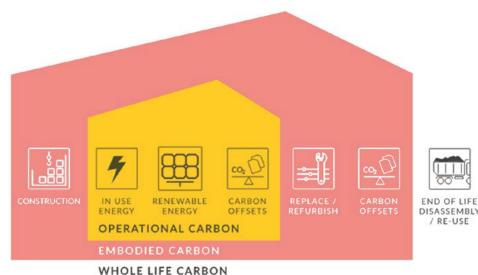
4,000 - 5,300 tonnes of embodied CO2e

All new-build scenario:

7,000 - 9,500 tonnes of embodied CO2e



Up to 50% of a new building's carbon emissions are emitted before it is even occupied



4.5 **net zero carbon** in operation

Station Road will be Net Zero Enabled, supporting future tenants to reduce emissions. We will set appropriate and ambitious Energy Use targets as recommended by industry (UKGBC, RIBA, LETI).

We will:

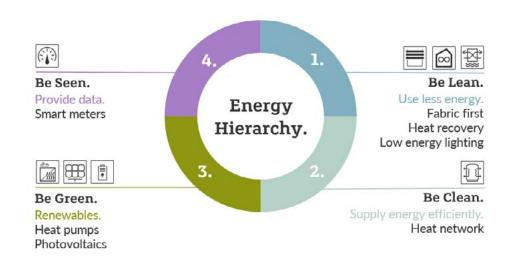
- Set an ambitious space heating target of < 20kWh/m2/yr
- Use passive design measures to drive down energy demand
- Upgrade the existing villas, if retained
- Invest in a high performance façade
- Natural ventilation wherever possible
- All-electric fuel source to capitalise on the decarbonisation of the electricity grid
- Heat pumps to lock in low-carbon
- On-site renewables such as photovoltaics

Retain/extend scenario:

0.16 tonnes of CO2e per person per year

All new-build scenario:

0.15 tonnes of CO2e per person per year



		Paris Proof Target
Scope	Metric	2035-2050
	kWh _e /m² (NLA) / year	70
Whole building energy	kWh _e /m² (GIA) / year	55
	DEC rating	B40
	kWh _e /m ² (NLA) / year	35
Base building energy	kWh _e /m ² (GIA) / year	30
energy	NABERS UK star rating	6
Tenant energy	kWh _e /m ² (NLA) / year	35

We will set ambitious targets, such as those recommended by the UK Green Building Council

Metric	Retain and extend	All new-build
Total energy demand (kWh/yr)	855,000	1,100,000
Energy Use Intensity (kWh/m2/yr)	63	55
PV generation (kWh/yr)	104,000	143,000
Annual operational emissions (tonnesCO2e/yr)	159 tonnes	203 tonnes
Emissions / person (tonnes CO2e/FTE/yr)	0.16 tonnes	0.15 tonnes

Initial estimate of the operational performance comparing the two scenarios

4.6 social value

We have prepared a Social Value Baseline Demographics Report to inform our approach. Our research indicates that improving the living environment, by enhancing air quality and reducing road traffic accidents, should be a key focus for the project. Our proposals for an allelectric scheme with significantly reduced or no parking will address both issues.

We will also:

- Provide employment and skills opportunities through the construction phase and target the deprived wards northeast of the site.
- Provide entry-level employment, training and qualifications, improving accessibility for local residents living in poverty.
- Pay a minimum of the Real Living Wage for all direct and indirect employment during the construction phase to reduce inequality.
- Collaborate with Cambridge 2030 to maximise the potential for social value; such as community engagement, volunteering, education, employment and skills.
- Engage with incoming tenants to encourage them to actively contribute to ongoing positive social value outcomes.





5.1 preliminary assessment

To inform discussions around the future of the site, we have set out the range of benefits that can be delivered, alongside the adverse impacts to be mitigated. The balance of these will help shape what the optimum approach to the site should be:

Benefits

- Optimising the use of a city centre site in a highly sustainable location
- Delivering a Net Zero enabled site to address the climate emergency
- Delivering major public realm enhancements to the Station approach
- Making Station Road safer for pedestrians
 Improving the living environment, by
- Substantially reducing car parking, making the site near car-free
- Encouraging sustainable travel, by transforming the provision for cyclists
- Increasing jobs from 170 up to 1,400 jobs
- Helping attract high calibre employers to the local area
- Growing the GVA from £9m to up to £70m

- Delivering a 20% net biodiversity gain
- A landowner with a long term commitment to the site with an ambition to
 deliver a legacy for Cambridge
- Reducing operational carbon per person from 0.75 to 0.16 (CO2e/FTE)
- Improving the living environment, by enhancing air quality and reducing congestion
- Opportunities for social value outcomes
- Beneficial impacts on the heritage significance of the villas (retention option only)
- Beneficial impacts on the overall townscape character

Adverse impacts

- Loss of the locally listed villas (demolition option only)
- Some loss of existing openness within the rear gardens
- Heritage impacts at the lower end of the "less than substantial harm" (retention option) and "less than substantial harm" (demolition option)
- Potential loss of some trees of lower value
- Temporary impacts resulting from construction work (noise etc)

5.2 conclusion

This document demonstrates that the Station Road site would benefit from having a considered and long-term development plan to make optimum use of a site in one of the most sustainable locations in the City.

While this document outlines two development scenarios, the exact future of the site is yet to be established. An important next step therefore will be engaging with stakeholders, including the local community, to inform the College's plans for the site.

With significant development taking place around the site, it is timely to consider what future role the site should play so it can more fully contribute to the Opportunity Area (Policy 25).

The site offers an appropriate and sustainable site to allocate for employment and economic generating development. Such an allocation would secure a long-term vision for the site and help deliver significant benefits, including the transformation of the public realm facing Station Road.





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