

Item

Report On Net Zero Carbon Pilot Schemes at Paget Road And St Thomas Road



To:

Councillor Mike Todd-Jones, Executive Councillor for Housing
Housing Scrutiny committee 23/09/2021

Report by:

Ben Binns, Project Manager
Housing Development Agency
Tel: 07702 605 689 Email: ben.binns@cambridge.gov.uk

Wards affected:

Coleridge, Trumpington

Key Decision

1 Executive Summary

- 1.1 Two garage sites have been identified for a proposed Net Zero Carbon pilot: St Thomas's Road Garages and playground (Coleridge) and Paget Road Garages (Trumpington).
- 1.2 The scheme is being brought forward because it represents an opportunity to redevelop existing garage sites to create new additions to the Councils rented housing stock, built in accordance with Net Zero Carbon Standards. It is hoped that the project will be seen as an exemplar for the region and will facilitate knowledge transfer of Net Zero Carbon technology.
- 1.3 The St Thomas's Road garage and playground site is adjacent to a number of Council owned properties. Evidence gathered at an ASB consultation in 2019, and reports made more recently suggest that the play park in its current form is under used and is subject to vandalism. Redevelopment of the site would be an opportunity to improve green spaces and access to them, and also to increase overlooking of the playpark and reduce anti-social behaviour.
- 1.4 The Paget Road garage site is also adjacent to council owned residential properties and is close to a recently developed site at Anstey Way.
- 1.5 The opportunity arises now also because of the availability of funding and Net Zero Carbon advice, together with support from the European Regional Development Fund (ERDF). A successful bid will result in funding to provide the capital cost uplift from Passivhaus to Net Zero Carbon.
- 1.6 The report seeks approval of a capital budget for the scheme, based on estimated costs provided by the Employer's Agent. Approval is also sought for the delivery route to be adopted.
- 1.7 The design is to meet to meet Net Zero Carbon if the ERDF bid is successful and Passivhaus standards if not successful.

- 1.8 It is recommended that the development is delivered as Council rented housing, subject to viability/grant funding. Homes will be owned and managed by Cambridge City Council and let on Cambridge City Council tenancies.
- 1.9 The proposed scheme will provide circa 15 new Council rented dwellings increasing rental income for the Council.
- 1.10 The two sites identified are subject to further review and pre-application planning consultation.

2 Recommendations

The Executive Councillor is recommended to:

- 2.1 Approve the scheme budget of £3,947,000. This is split between St Thomas's Rd Garages (£2,105,000) and Paget Rd Garages (£1,842,000). Part of the scheme budget totalling £265,000 (£141,000 and £124,000 respectively) is subject to a successful bid to the ERDF to cover the cost of the uplift from Passivhaus to Net Zero.
- 2.2 Authorise the Strategic Director in consultation with the Executive Councillor for housing to approve variations to the scheme including the number of units and mix of property types and sizes outlined in this report.

3 Background

- 3.1 This Development opportunity addressed a number of the Council's key Corporate Objectives:
- 3.1.1 Tackling the City's housing crisis.
- 3.1.2 Delivering sustainable prosperity for Cambridge and fair shares for all.
- 3.1.3 Protecting essential services and transforming council delivery.
- 3.1.4 Tackling climate change and making Cambridge cleaner and greener.
- The proposed Net Zero Carbon pilot will form part of the Council's commitment to build all new homes to Passivhaus certification from 2021 where possible, and to Net Zero carbon from 2030. The Net

Zero Carbon standard is a tough challenge, particularly within the constraints of delivering affordable housing.

- The Council defines Net Zero Carbon homes as dwellings that achieve a 100% carbon reduction above current building regulations. A Net Zero Carbon home therefore represents an additional 65% carbon reduction over a Passivhaus home (35% carbon reduction over Part L). In order to achieve this, Net Zero Homes will require ultra-high levels of energy efficiency, heat pumps for heating and hot water, solar technologies for energy generation and batteries for energy storage.

3.2 European Regional Development Funding

3.2.1 If the Council's bid for ERDF funding is successful, learning from the pilot will be shared and widely disseminated across the East of England. It is hoped that the development will be seen as a low carbon exemplar.

3.2.2 In order to meet the challenge, the Council are looking to collaborate with Eastern New Energy, who are conducting a collaborative research project seeking to overcome barriers to rapid decarbonisation. This collaboration will support the Council's bid for EDFR funding, and equally importantly, will allow the Council to benefit from ongoing research and innovation around Net Zero Carbon technologies, share best practice and engage with a range of SME's.

3.3 The scheme includes two sites: St Thomas's Road Garages, Coleridge and Paget Road Garages, Trumpington. Each site has distinct benefits and challenges in relation to redevelopment and it is possible that currently identified sites are not final and may be removed from consideration whilst further sites may be substituted.

3.4 Executive Councillors and Ward Councillors have been informed of the Councils intention to take this report to the September 2021 Housing Scrutiny Committee.

3.5 Local Housing Need

3.5.1 There is a recognised need for more affordable housing across the city. The table below demonstrates the number of households on the Housing Needs Register as of June 2021. There are currently 1,986 households in need of a 1, 2 or 3 -bedroom property across the city; progressing this scheme will help in meeting the needs of those on the waiting list.

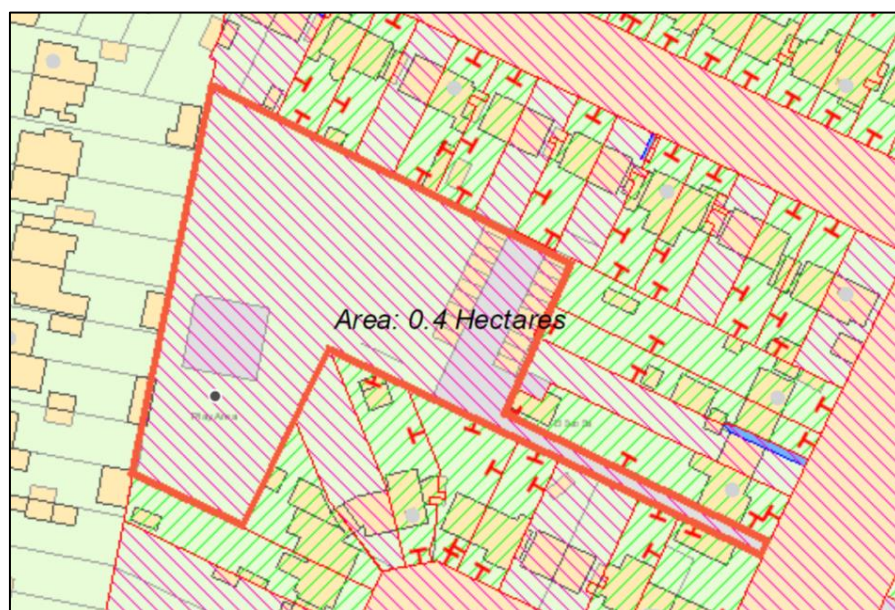
Cambridge City	1 Bed	2 Bed	3 Bed
	1,159	517	310

3.5.2 Located in areas of existing housing stock, the developments would bring some smaller units to the areas identified, supporting sustainable communities.

3.5.3 The anticipated overall net gain for the two sites is circa 15 Council rented homes. It is recommended that the development is delivered as Council rented housing, let in accordance with the Council rent policy (where rent and service charges together do not exceed Local Housing Allowance levels). Homes will be owned and managed by Cambridge City Council and let on Cambridge City Council tenancies.

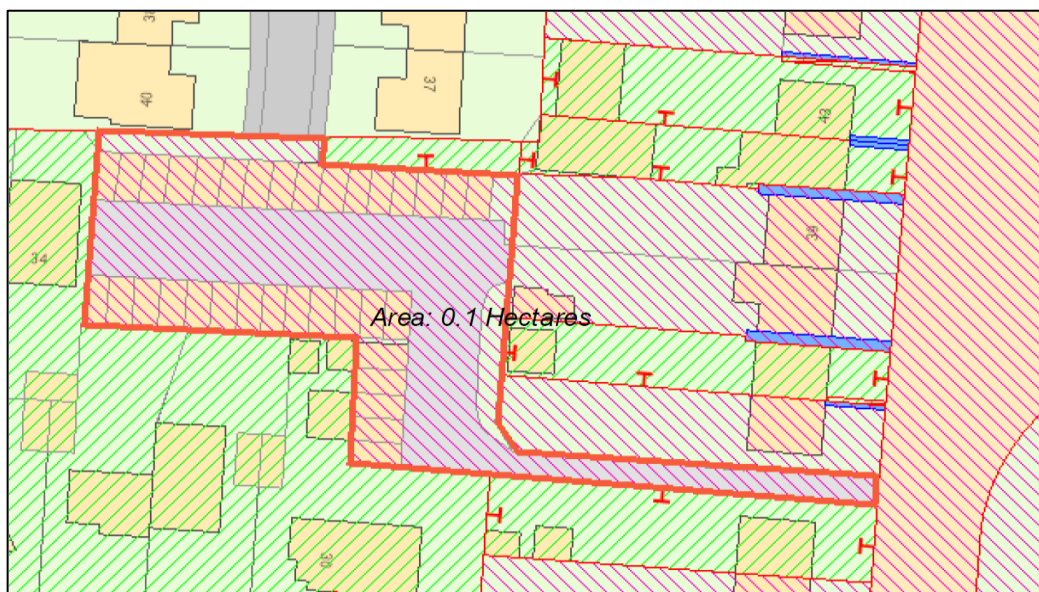
4 Site Details

4.1 Site A is at St Thomas's Road Garages and playground, Coleridge. A location plan of the site is attached as Appendix 1.



- The site is approx. 0.4 hectares in size
- Surrounding properties are residential
- Some Council owned properties to the North and East of the site
- Mature tree on site near to existing access point
- Site includes an area of play park which is protected open space
- Existing access is very narrow single-track drive

4.2 Site B is at Paget Road Garages, Trumpington. A location plan of the site is attached as Appendix 2.



- The site is approx. 0.1 hectares in size
- Surrounding properties are residential
- Some Council owned properties to the East of the site
- No substantial trees on site and general low ecological value

4.3 The following surveys and investigations are to be programmed as part of the feasibility work for investigating the viability of the site for development:

- Air Quality
- Arboriculture Impact Assessment
- Level 1 Contamination
- Flood Risk / Drainage Assessment
- Noise

- Preliminary Ecology Survey
- Party Wall
- Rights to light
- Topographical Survey
- Utility Mapping

4.4 There will be a need for further invasive ground and soil investigations as well as more detailed examination of the existing buildings for potential asbestos, prior to any demolition. Following early identification of the issues there are strategies in place to manage and mitigate any impact on timescales and costs.

4.5 Garages and Play Park

4.5.1 It is recognised that redevelopment will be disruptive to garage tenants hence the long notice period given. The existing garage tenancies will terminate but the tenants will be assisted in applying for alternative tenancies.

4.5.2 Similarly, the playpark will be out of use whilst the site is re-developed. Redevelopment does present an opportunity to greatly improve the green spaces and reduce anti-social behaviour.

4.6 Alternative site option: retain as existing

4.6.1 As part of the options analysis work undertaken in assessing the viability of delivering affordable housing on sites, the alternative option is to retain as existing.

4.6.2 There are 20 garage buildings at St Thomas's Road of which 18 are occupied. There are 34 existing garages at Paget Road of which 31 are occupied.

4.6.3 Whilst there is demand for the garages, the garage buildings at the Paget Road site have issues with ivy growth and water ingress that are anticipated to be costly to resolve. Fencing and gates at this location are also in need of repair.

4.6.4 The play park at the St Thomas's Road site has limited natural surveillance and suffers from incidents of anti-social behaviour in its current form.

4.6.5 From the options considered in this section, the option to develop for HRA housing only is recommended as the approach which responds directly to the corporate objective of tackling the city's housing crisis.

5 Design and Sustainability

5.1 Following on from January HSC 2021 meeting, it was approved to pursue a mix of delivery strategies to deliver the new 10 year programme. This scheme will be delivered through a design and build contract via a tender process.

5.2 An Invitation to Tender was issued on the 2nd August, with interested parties invited to bid on a Design Services contract. The Net Zero Carbon Pilot Scheme is one of two lots within the same tender, the other Lot being Design Services at 6 other sites.

5.3 The 6 sites that make up the second Lot form a programme of smaller sites to be delivered to through design and build contracts as approved at the January 2021 Housing Scrutiny Committee. These additional 6 sites are completely anonymised within the tender and ward councillors will be briefed prior to any of the 6 sites being brought forward to a future meeting of the HSC.

5.4 The plan is for the new homes on St Thomas and Pagets Road to be built to a Net Zero Carbon standard. This development is the first Net Zero Carbon scheme for the Council and it is important as a pilot from which the council can learn for future schemes.

5.5 ERDF Funding

5.5.1 Appendix 4 outlines, if the bid is successful, the type of ERDF support and funding that will be offered. It will include:

- Reviews in low carbon technologies, water conservation, biodiversity, Solar PVs, EV charging.
- Support for SMEs to enter the low carbon construction supply chain
- Embodied carbon analysis.
- Facilitating knowledge transfer of Net Zero Carbon Pilot across the Eastern Region.

- Facilitating best practice based on the learning of this pilot.

5.6 Design Challenges

5.6.1 Applying the targets on a site by site basis will mean challenges and constraints. Where there are financial, viability and or technical constraints in meeting Net Zero Carbon or other sustainability targets, design teams will be expected to justify why targets cannot be met and provide alternative sustainable design approaches.

5.6.2 The council is open to innovation and to alternative sustainable design approaches based on learning from council and other projects but should ensure that any sustainable design solution achieves the carbon emissions reduction, energy bills and annual maintenance costs to be the equivalent to Passivhaus standard.

5.7 The updated SHDG will require each new development to complete a matrix setting out the sustainability performance of the scheme against the key new targets providing clarity on how the targets will be met.

Development targets	
Sustainability Target	Net Zero Carbon
Units	15
PHPP kWh/m ² This measures energy use for running the building including heating and hot waterPHPP kWh/m ²	15
Water l/d	80
Biodiversity Net gain	20%
Car Parking ratios across schemes	<0.5
Are there technical constraints?	Passivhaus Planning Package (PHPP): This is a pilot scheme to deliver Net Zero Carbon houses and/or flats. These principles have been incorporated from the outset but will need to be tested by the appointed design team.
	Water: The target is 80lppd but the detailed design to deliver this has not yet been developed. The measures required and their impact on residents will be assessed as part of this pilot.
	Biodiversity: The opportunities for improvement are included and a 20% improvement is being targeted,
	Car Parking: The target is less than 0.5 subject to planning requirements-feedback has been for schemes with 3 bedroom homes this may need to increase.
Are there financial constraints	Estimated costs for the programme have included a cost allowance for Net Zero Carbon. The uplift from Passivhaus to Net Zero Carbon is dependent on ERDF funding.

Recommended Sustainability Target	Net Zero Carbon
Additional measures included to meet Net Zero Carbon in the future	None if Net Zero Carbon attained

6 Programme

6.1 The indicative programme for the development is as follows:

September 2021	Committee Report on possible redevelopment
November 2021	Pre-planning consultation
March 2022	Planning Submission
September 2022	Planning Approval
October 2022	Start on Site
March 2024	Practical Completion

7 Financial Implications

7.1 Budget / Funding

7.1.1 The total indicative capital budget is currently estimated at £3,947,000 based on estimated costs provided by Employers Agent. This includes decant, legal, and 106 costs, Clerk of Works and Employer's Agent fees and H.D.A project management allowance. This Budget includes delivery to Net Zero Carbon standards and is split between St Thomas's Rd Garages (£2,105,000) and Paget Rd Garages (£1,842,000). Part of the scheme budget totalling £265,0000 (£141,000 and £124,000 respectively) is subject to a successful bid to the ERDF to refund the cost of the uplift from Passivhaus to Net Zero.

7.1.2 It is proposed that the investment will be met from a combination of HRA resources, Homes England funding and funding from the ERDF.

If the funding applications are successful this will result in the following mix of funding:

Right to Buy receipts:	£0
Homes England Grant:	£1,500,000
ERDF Grant:	£265,000
HRA resources:	£2,182,000

Total: £3,947,000

7.1.3 The indicative capital budget is £3,947,000

8. Other Implications

(a) Staffing Implications

The development scheme will be managed by the Housing Development Agency.

(b) Equality and Poverty Implications

A scheme specific EQIA accompanies this report as Appendix 4.

(c) Net Zero Carbon, Climate Change and Environmental Implications

See section 5.

A Climate Change Rating assessment has been conducted and is attached as Appendix 5, indicating a Net Medium Positive impact from the development.

(d) Procurement Implications

A Design and Build contract to be let following a tender process, which could be either an open tender or a tender conducted through a public sector procurement compliant framework. The tender in this instance to be carried out at pre-application stage, in order to facilitate a high level of early design input.

This route is recommended as it allows the most appropriate contractor to be selected in order to meet the high levels of sustainability required. Utilising this route will encourage local smaller firms to tender for the design and contracting works.

The January 2021 Housing Scrutiny Committee approved the pursuit of a mix of delivery strategies to deliver the 10-year programme with a

programme of smaller schemes to be delivered through design and build contracts.

The intention is for these developments to be demonstrator schemes that will provide a body of learning to help the construction industry deliver zero-carbon housing in response to the climate emergency. As such, it is important that the opportunity to participate is open to all suitable applicants.

(e) Community Safety Implications

There are no recognised implications on Community Safety with the proposed developments. The scheme will be built in accordance to Secure by Design guidelines as set out within the City Councils Design Brief.

9 Consultation and communication considerations

- 9.1 There has been communication with garage tenants prior to this report being presented. The existing 54 garage tenants have been contacted and advised that due to potential redevelopment plans they may be required to relinquish their garage tenancies in approximately 12 months' time.
- 9.2 Once design work is further advanced and the viability of the two sites is established, there will be extensive communication with nearby residents. All adjacent tenants and property owners will be written to, with an offer to meet on an individual basis to explain what the Council is planning to do. These meetings will be offered at convenient or flexible times for the occupiers not tied to conventional working hours and follow current Government COVID guidelines.
- 9.3 There has been consultation with Ward Councillors about the proposals.
- 9.4 Consultation and communication with adjacent existing tenants and leaseholders will continue in accordance with the City Council's Home Loss Policy This policy along with National Policy sets out the Council's commitment to those affected by regeneration and the compensation and support available.
- 9.5 The HDA continues to liaise closely with colleagues in City Homes, to ensure timely and accurate information is made available to all parties affected by the proposal.
- 9.6 There will be formal consultation through the planning process

10 Risks

- 10.1 The following table sets out key risks associated with the project:

Description of risk	Likelihood	Impact	Mitigation
Design Risk – Constraints due to planning process and requirement to achieve Net Zero Carbon standard whilst creating a design that is efficient to build and maintain	Med - Regular meetings will take place with planning throughout the design process. Extensive ongoing support from the ERDF to be provided in order to achieve the high levels of sustainability and affordability required.	Med- Constraints on plot orientation required to achieve Passivhaus may mean it is challenging to maximise the developable area.	Extensive design requirements established at the earliest stage with Design Team once appointed. Suitable build contractor procured at pre planning stage to ensure a high level of design input. ERDF team is well resourced and can supply cost efficient technology options to meet required sustainability standards.
Site issues: Indicative costs have been set out in the report; these areas are currently utilised as garage sites and further work including intrusive site investigations remains to be carried out.	Low- There is a limited risk of issues associated with the results of the upcoming surveys	Low –Issues identified can be dealt with whilst site design is finalised.	HDA have a survey tracker. and will ensure accuracy of site surveys. Working around the existing garages will enable earlier site investigation and this will facilitate greater certainty on costs.
Managing Costs: Costs to be monitored scheme inception to Practical Completion.	Low- Increased build costs due to sustainability requirements have been costed for. Cost control whilst in contract will be achieved via a fixed price Design and Build contract.	Med-. Potential for delays to start on site and contract negotiations leading to the increase in costs. Design and Build contract minimises the risk of increased cost whilst in contract.	Collaboration and training will be essential. The Council will engage an Employers Agent (EA) to scrutinise cost throughout process. ERDF will provide additional sustainability support. HDA and EA will closely administer Design and Build contract.
Planning: The planning application will be subject to the observations of consultees, the assessment of planning officers, and ultimately the decision of the Planning Committee.	Med- There is a need to balance planning policy and views of the local people and ward members.	Med- Potential change in unit mix and reduction in numbers	Architect to be appointed early to work up detailed designs for submission. Services to include Planning Consultant services. Contractor to be appointed at pre-planning stage to capture their design input.
Compliance with ERDF Requirements required in order to receive grant	Med- There is a risk that requirements are unmet, this can be managed through close monitoring.	Med- Unable to claim ERDF grant for the project. Net Zero Carbon aspirations not achieved.	ERDF staff to sit on panel for selection of Design Services consultants and contractor(s). ERDF and CCC to meet fortnightly from project inception to completion to foresee any issues and ensure compliance.
Grant risk	Med – there is a risk that Homes England funding is not successful	Med – without grant funding this project may not be viable	Discussions with Homes England are continuing. Use of right to buy receipts can be considered but these are limited.
Tender - Initial tender exercise to procure design services, second tender exercise	Low- There is a low risk that the tender exercise does not result in contracts	Low- Low potential for delays to start on site, required sustainability standards not being	Design Team tender has been carefully worded to enable smaller local firms to tender, as well as larger firms. This

Description of risk	Likelihood	Impact	Mitigation
to procure build contractor.	being entered into with a design team and build contractor, or that the teams appointed do not deliver the results required.	met and ERDF funding bid unsuccessful.	has resulted in a high level of interest which should lead to a good range of bids. Bidders will be carefully scrutinised by the panel to assess their suitability.
Build market issues currently- Potential supply chain and labour issues	Low- There is a low risk that the reliable availability of some supply chain items, and employees to fill some roles on site will impact on costs and timescale.	Low-. Potential delays to progress on site due to the availability of labour. Potential increase in costs due to the need to substitute unavailable materials for alternatives.	Availability of labour needs to be managed by contractor but has not previously resulted in substantial delays to delivery. Design and Build contract is fixed price and increased labour and material costs are contractor costs.
Access-	Low- Current site access is narrow but is utilised by cars to access garages	Low- May restrict the use of very large construction vehicles but contractor will need to manage this as part of build.	Potential impact of construction traffic alongside adjacent properties will need to be managed. Potential for alternative access to Paget Road site if purchase of strip of land can be negotiated with landowner Greene King.
Negative local feedback - Adjacent Council tenants and private owners may object to redevelopment. Current garage owners are likely to object to having their licences terminated.	Med- There is a risk that site neighbours will be unhappy that development is happening in close proximity to them. Garage tenants may struggle to find convenient alternatives.	Low- Objections raised to be dealt with as part of the planning process.	Scheme design to take into account impact on surrounding properties with regards to right to light, access, overlooking, proximity of new homes. Regular communication to take place with neighbours before and during build, at their convenience.

9. Background papers

Key Facts- Strategic Housing No 33 April – June 2021

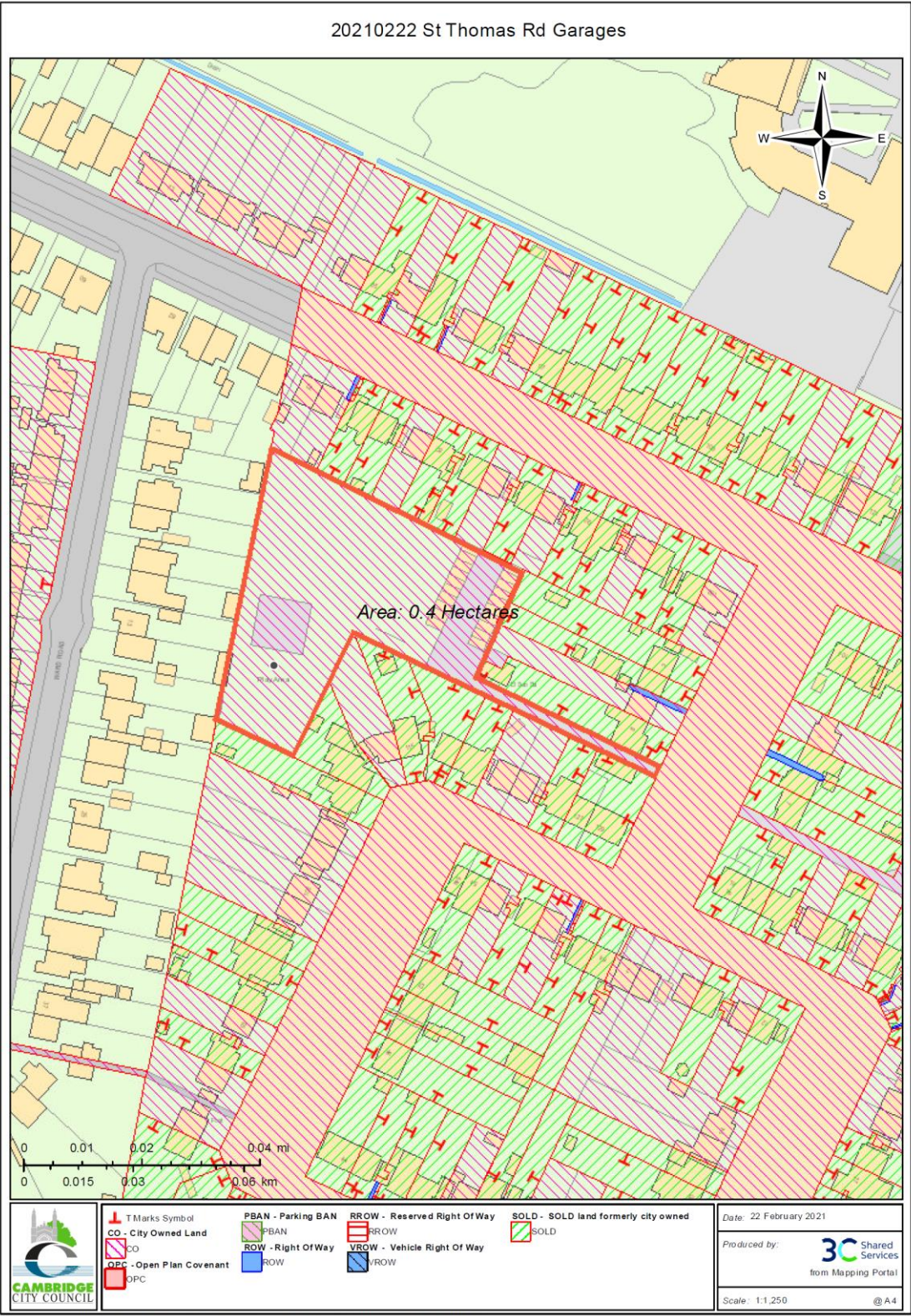
10. Appendices

- Appendix 1 – Location plan of St Thomas's Road Garages, Coleridge.
- Appendix 2 – Location plan of Paget Road Garages, Trumpington.
- Appendix 3 – ERDF support and funding
- Appendix 4 – Equality Impact Assessment
- Appendix 5 – Climate Change Rating Tool Assessment

11. Inspection of papers

To inspect the background papers or if you have a query on the report please contact Ben Binns, Housing Development Agency, tel: 07947 157707, email: ben.binns@cambridge.gov.uk

Appendix 1 – Location plan of St Thomas’s Road Road Garages, Coleridge.



Appendix 2 – Location plan of Paget Road Garages, Trumpington.

