SUSTAINABLE PROJECT OF THE YEAR 2026

ZERO IN DEVELOPMENTS - OVERVIEW

Executive Member: Jed Jordan

Property Name: Lower Farm Mews

Can you provide a brief description of the project and its intended impact on sustainability?

Lower Farm Mews is a development of nine energy-efficient homes created through the sensitive redevelopment of a former care home in Tittleshall, Norfolk. Located within a conservation area, the project demonstrates how an existing building can be given a new lease of life while delivering modern, attractive homes with exceptionally low energy demands. Rather than demolishing the existing buildings and starting again, our approach was to retain and reuse as much of the original structure as practically possible, reducing the need for new materials and preserving the character of the site. The homes combine high levels of insulation, air source heat pumps, underfloor heating, solar PV and battery storage, with EPC A performance as a key design objective. Our ambition was to demonstrate that sustainability need not come at the expense of architectural quality, comfort or commercial viability, and that the reuse of existing buildings can play an important role in delivering the next generation of low-carbon housing.

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How does the project reduce its environmental footprint (e.g., carbon emissions, resource use, waste)?

The development addresses environmental impact through both the construction process and the long-term operation of the homes. A central principle was to retain as much of the existing building fabric as possible, including structural elements and internal walls where practical. This reduced demolition waste, the demand for new construction materials and the associated embodied carbon. Where demolition was necessary, we took care to recover and reuse materials wherever possible. Bricks and roof tiles were salvaged for reuse elsewhere across the development, while existing hardstanding was crushed on site and repurposed as sub-base material for roads and patios. This reduced waste leaving the site, the need to import new materials and the associated transport emissions. In operation, the homes have been designed to achieve EPC A ratings, combining improved thermal performance with air source heat pumps, underfloor heating and solar PV with battery storage. The solar and battery systems enable residents to generate, store and use renewable electricity on site, reducing reliance on grid electricity and exposure to energy price fluctuations. Together, these measures reduce the environmental impact of creating the homes while helping residents benefit from lower energy consumption and running costs throughout their occupation.

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In what ways is the project innovative or creative in addressing sustainability challenges?

One of the project's most important innovations was finding a commercially viable way to combine the reuse of an existing building with the energy performance expected of a modern new-build home. Working within the constraints of an existing care home and a conservation area required a flexible approach to design and construction. Rather than allowing the original building layout to dictate the quality of the finished homes, we carefully adapted and reconfigured the structures to create attractive residential accommodation while retaining as much existing fabric as possible. A further innovation was our partnership with Gryd, which provides solar PV and battery storage through an alternative funding model. This enabled renewable energy technology to be incorporated across the development without the substantial upfront capital expenditure normally associated with purchasing the systems outright. Homeowners benefit from access to the technology, with the flexibility to purchase their system in the future. For a small independent developer, this approach helped make a higher sustainability specification commercially achievable despite increasing construction costs and a challenging housing market.

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Can this project be scaled up or replicated in other locations?

Absolutely. Although Lower Farm Mews is a relatively small development of nine homes, the principles behind it are applicable to a wide range of redevelopment opportunities across the UK. There are many redundant agricultural, commercial and institutional buildings that could be repurposed for residential use rather than demolished and replaced. The project demonstrates how developers can assess existing structures for reuse, adapt layouts to meet modern living requirements and incorporate energy-efficient technologies to achieve high standards of operational performance. The partnership approach to renewable energy is also replicable, particularly for smaller developers who may otherwise struggle to justify the additional upfront expenditure. While every existing building presents different technical and financial challenges, Lower Farm Mews provides a practical example of how thoughtful design, adaptive reuse and alternative funding models can work together to deliver sustainable housing on a commercially viable basis.

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What systems are in place to monitor, measure, and report on the project's sustainability performance over time?

The energy performance of the homes has been assessed through the Building Regulations SAP methodology, with Energy Performance Certificates providing a standardised measure of their predicted operational efficiency. Each home is equipped with a smart meter, enabling residents to monitor their electricity consumption and better understand their energy usage over time. The solar PV and battery storage systems provided through Gryd also offer opportunities to monitor renewable electricity generation, storage and consumption, helping homeowners understand how their systems are performing and make more informed decisions about energy use. Together, these systems provide residents with greater visibility and control over their energy consumption, encouraging more efficient use of energy and helping them maximise the benefits of the renewable technologies installed. As the homes become occupied, actual energy consumption and renewable generation data could also provide valuable insights into how the development performs in practice, subject to data availability and homeowners' consent.

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What challenges did the project face in terms of sustainability and how were they overcome?

The greatest challenge was balancing the environmental benefits of retaining the existing buildings with the technical complexity and additional costs associated with their conversion. Unlike a new-build development, where construction details can be designed and costed with greater certainty, working with an existing structure inevitably introduced unknowns. As works progressed, unforeseen conditions required us to adapt designs, construction methods and budgets while maintaining our original sustainability objectives. Achieving high levels of energy efficiency within the constraints of the existing buildings and conservation area also required careful consideration of how new technologies and building improvements could be integrated. Our decision to self-deliver the construction works through our own construction business proved particularly valuable. It allowed us to respond quickly to unforeseen issues, make practical decisions on site and adapt our approach without the delays and contractual complications that can arise from negotiating variations with an external main contractor. Rising construction costs presented a further challenge, particularly as achievable sales values did not increase at the same rate. Our partnership with Gryd helped address this by enabling solar PV and battery storage to be incorporated without the full upfront capital cost of purchasing the equipment. Ultimately, the project required a pragmatic balance between sustainability, design quality and financial viability. It demonstrated that retaining existing buildings can be more complicated and less predictable than building new, but that these challenges can be overcome through flexibility, careful decision-making and a commitment to the original objectives.

SUSTAINABLE PROJECT OF THE YEAR 2026

ZERO IN DEVELOPMENTS – PHOTOS









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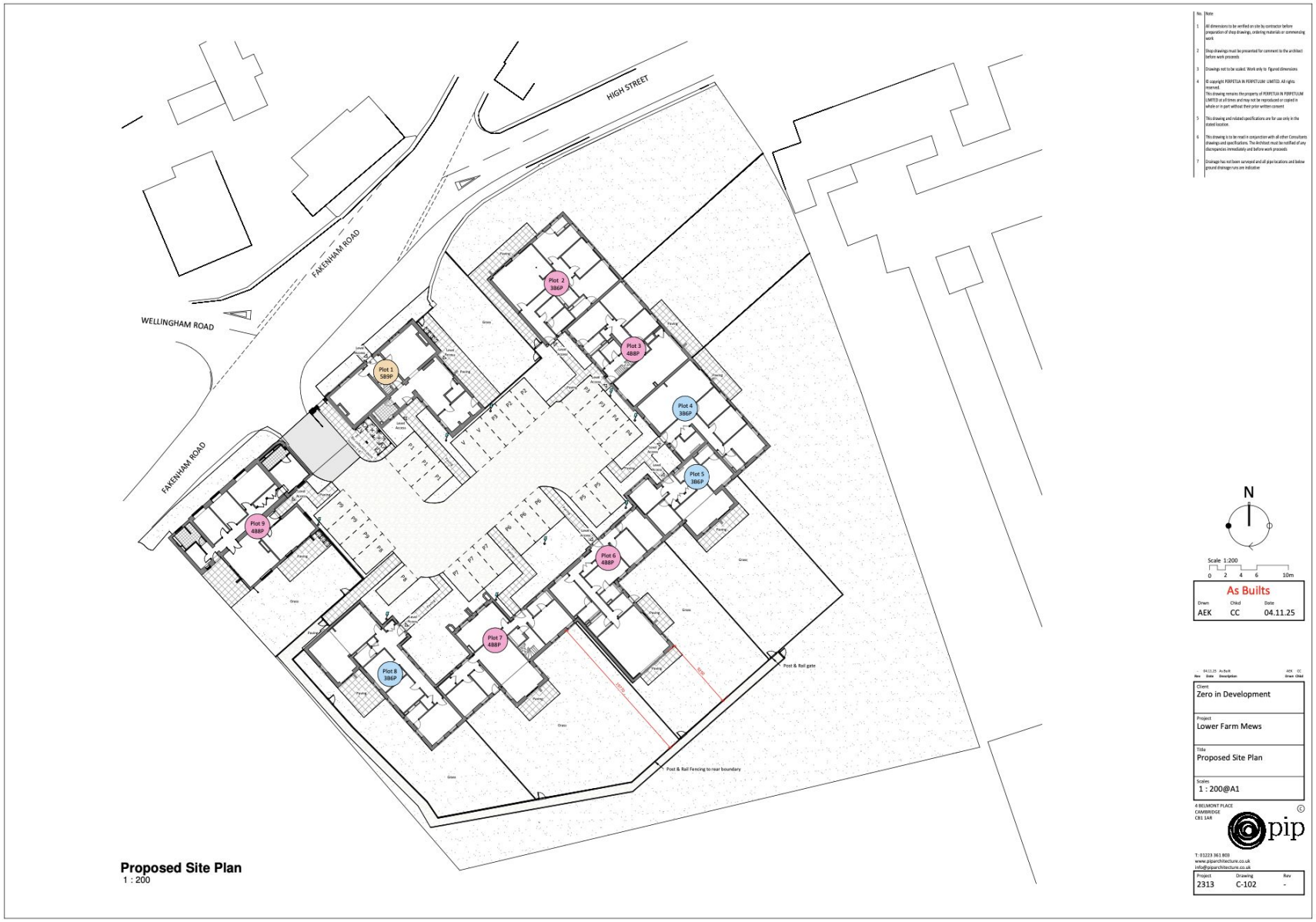






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ZERO IN DEVELOPMENTS – FLOOR PLAN



Proposed Site Plan
1 : 200