



Eastern Way Quarries

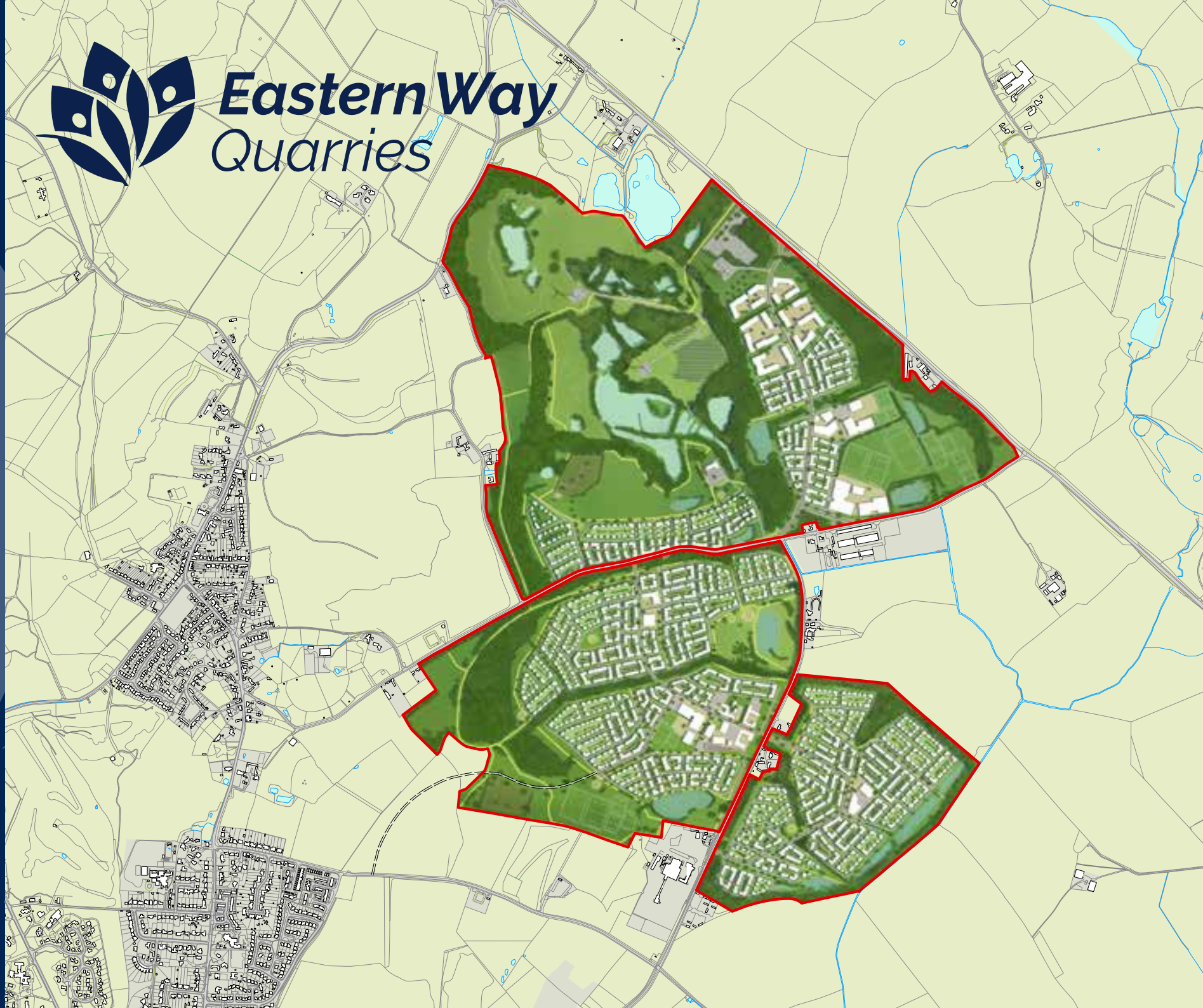
Central Bedfordshire

**A Blueprint for
Sustainable Living**
January 2025





Eastern Way Quarries





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A Blueprint for Sustainable Living

Sensitively and expertly designed, Eastern Way Quarries is an exemplar, renewably-powered development that sympathetically re-engineers and re-purposes damaged quarry land in the Grey Belt.

Responding to the needs of both the community and the environment, this scheme not only makes a significant contribution to Central Bedfordshire's housing supply, by providing a range of up to 3,400 energy-efficient homes over an 11-year buildout period, but also offers a truly sustainable community for the future, directly powered by its own onsite cutting-edge renewable wind and solar technology.

The Eastern Way Quarries scheme has been meticulously designed to work with the landscape, minimising the visual impact on the existing surroundings whilst preserving and enhancing open spaces for the benefit of all. The scheme provides an extensive network of accessible green spaces, promoting habitats for an abundance of wildlife, in a welcoming environment that residents and visitors can freely enjoy. Play areas will be a maximum of five minutes' walk from every home, and residential areas

will be interspersed with allotments, meadows and woodland.

At the heart of this community is connection. Connection between homes and neighbours, along corridors designed for walking and cycling. Connection with local schools, health facilities, shops, and businesses; bringing people together in vibrant centres for community life. Connection with the town of Leighton Buzzard, both its Narrow Gauge and mainline railways, and with the wider region. Vitally, and uniquely, a direct connection to the energy centre's micro-grid, with secure, local solar and wind generation, enough to power every home and business within the development, year-round, with excess energy exported to the local power network.

Eastern Way Quarries is a multi-mission model that provides solutions to some of the nation's most pressing issues. This landmark development represents a new way of living, delivering much needed housing and making Britain a clean energy superpower by putting renewable generation at the forefront of community design.



Renewable Energy Park



Up to 3,400 energy-efficient homes for all



Community, social, and commercial infrastructure



Significant employment area



Country Park and extensive green space



Exemplar active travel and public transport connections

A Grey Belt Proposal

Eastern Way Quarries' land has been used for the extraction of silica sand for over five generations. It has always been a dynamic landscape, reflecting the ever-changing needs of the quarrying process. Despite this, Eastern Way Quarries' now despoiled, depleted, industrial landscape is not formally recognised as Previously Developed Land.

Under the terms of the National Planning Policy Framework (December 2024) however, the land is Grey Belt. Positioned within the Green Belt, the land does not strongly contribute to any of the three key purposes:

- a) to check the unrestricted sprawl of large, built-up areas;
- b) to prevent neighbouring towns merging into one another;
- d) to preserve the setting and special character of historic towns.

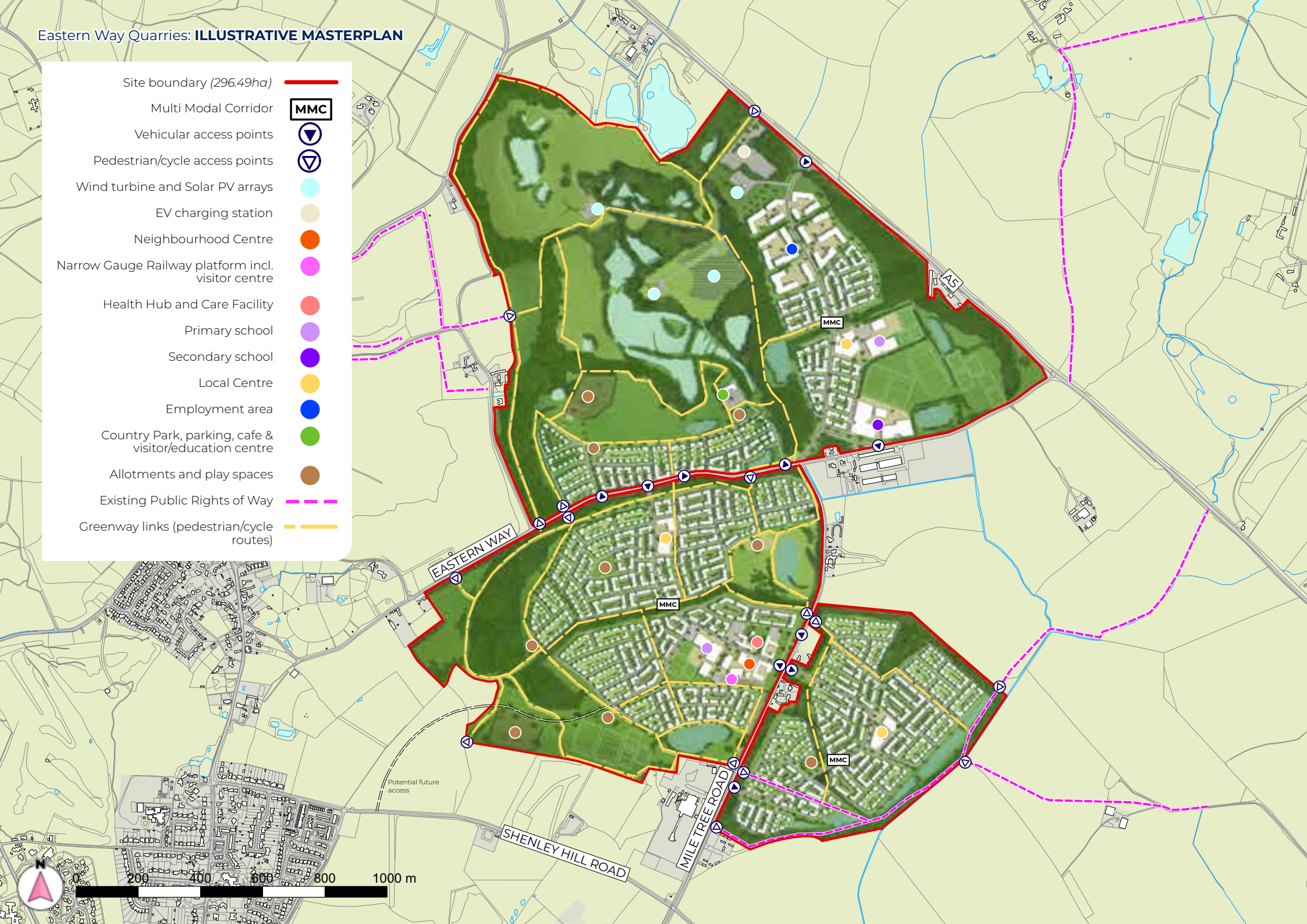
Eastern Way Quarries is proposed as a free-standing community that does not adjoin the large, built-up area of Leighton Buzzard. Whilst not remote, Eastern Way Quarries is not contiguous with, and does not extend the existing urban area, but is nonetheless very well connected to the surrounding transport networks.

A self-contained development on extensively quarried land, the scheme will not result in the merging of any neighbouring towns, nor will it affect the setting or special character of any historic towns.

This Grey Belt development provides for all the 'golden rule' contributions required of land within the Green Belt. It will accommodate much needed affordable housing, with the capability to provide up to 50% of the overall proposed housing numbers. With focus on connectivity, it will markedly improve local infrastructure with green transport provision, contribute to the nation's renewable energy commitments, and with over 60% (180ha) of the scheme being publicly accessible green spaces, Eastern Way Quarries will enable residents of both its own community, and those of Leighton Buzzard, Heath and Reach and further afield, to enjoy the benefits of time spent in nature, in its extensive meadows, woodlands and parkland.

Eastern Way Quarries: ILLUSTRATIVE MASTERPLAN

- Site boundary (296.49ha) —
- Multi Modal Corridor MMC
- Vehicular access points ▼
- Pedestrian/cycle access points ▽
- Wind turbine and Solar PV arrays ●
- EV charging station ●
- Neighbourhood Centre ●
- Narrow Gauge Railway platform incl. visitor centre ●
- Health Hub and Care Facility ●
- Primary school ●
- Secondary school ●
- Local Centre ●
- Employment area ●
- Country Park, parking, cafe & visitor/education centre ●
- Allotments and play spaces ●
- Existing Public Rights of Way - - -
- Greenway links (pedestrian/cycle routes) - - -



Land and Location

Eastern Way Quarries lies close to Central Bedfordshire Council’s boundary with Buckinghamshire and Milton Keynes. Convenient access to the A5 connects the site directly with key regional centres Milton Keynes and Bletchley to

the north and Dunstable, Luton, with the M1 to the south, making it an ideal location for future growth.

The development is near to the East West Rail corridor, enabling fast and

efficient connections to national rail services and facilitating onward travel to key destinations such as Oxford, Cambridge, and the wider UK rail network.





Eastern Way Quarries: **A Blueprint for Sustainable Living**

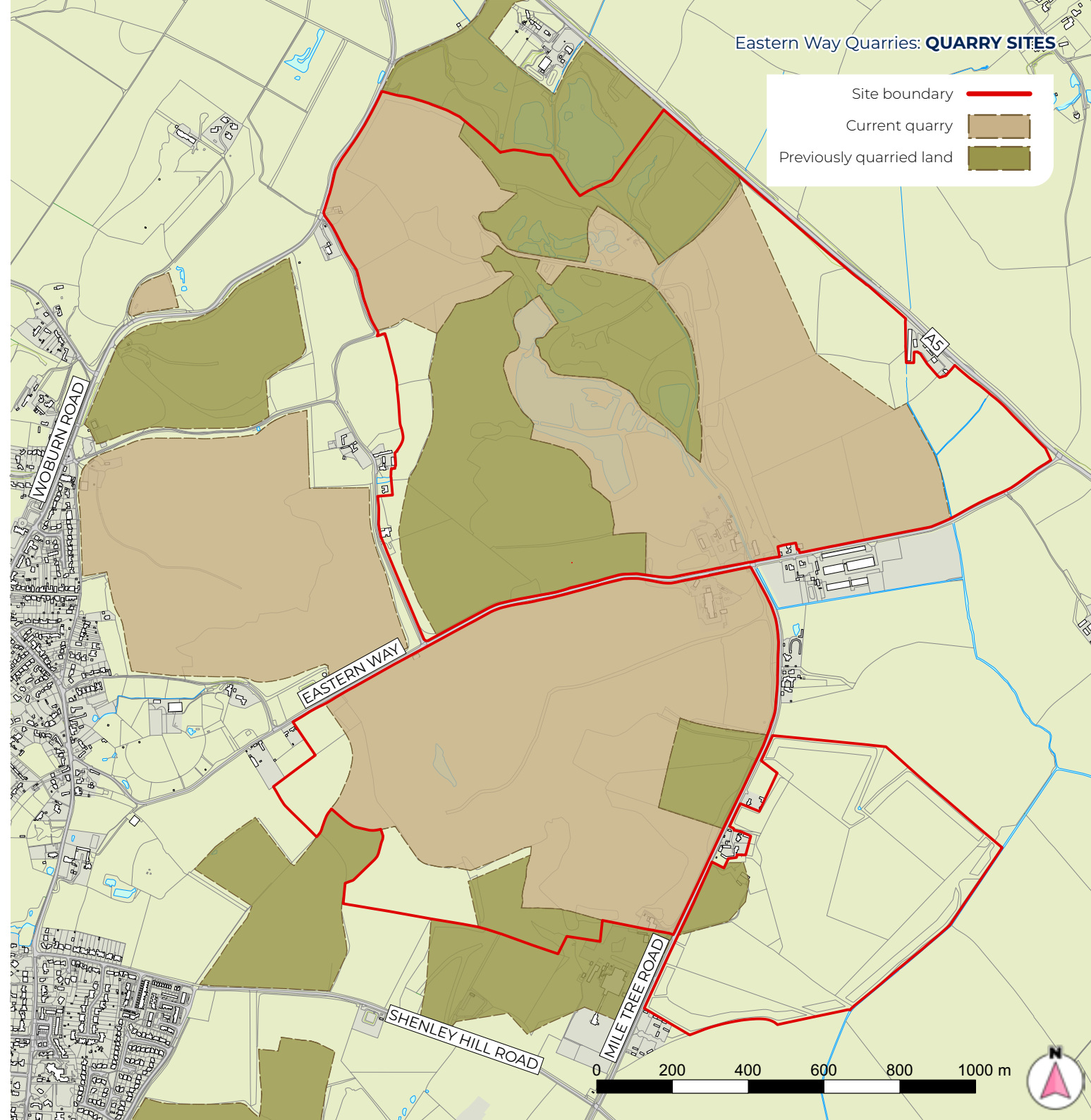
Eastern Way Quarries is a c.296 hectare site, comprising 75% formerly quarried land and existing quarry land. The site is approximately 1.2 km from the town of Leighton Buzzard, and falls within the administrative authority of Central

Bedfordshire Council. The land is depleted and damaged from decades of mineral extraction, and under the new National Planning Policy Framework also forms part of the Government's Grey Belt designation.

Already benefitting from two, high-capacity onshore wind turbines and a directly-wired EV and bus charging facility, Eastern Way Quarries is perfectly located for a new net-zero community.



AW Group wind turbine at Quarrendon





Renewable Energy Generation

Through AWGroup's installations at Double Arches and Checkley Wood, Central Bedfordshire has achieved a recognised track record in the development and operation of cutting-edge renewable energy technology. The area has long demonstrated its support for renewable infrastructure, in spite of the previous de facto ban of onshore wind in England.

AWGroup is a pioneer in the renewable energy industry. When built in 2014, the Double Arches wind turbine was the tallest in the UK, and the recent installations at Checkley Wood include for the most powerful wind turbine currently operating in England.

In a UK first, the Checkley Wood turbine is uniquely directly wired to an Electric Vehicle Charging station, supplying renewable energy straight to vehicles through its own private micro-grid network. This industry-defining

initiative represents proof of concept for larger, future micro-grid installations.

Eastern Way Quarries will utilise this proven micro-grid technology to supply the locally generated renewable energy directly to homes and businesses in the new community, harnessing the power of wind and solar with further, enhanced and repowered infrastructure. This renewable energy offering will ensure that the new community will be operationally 'net-zero'.



The Eastern Way Quarries micro-grid will be directly powered by:

Wind

- A new, 4.5MW wind turbine located within the Churchways Quarry complex.
- An upgraded and repowered (also to 4.5MW) wind turbine at Double Arches, providing additional generation for the Eastern Way Quarries scheme, whilst maintaining the current supply for existing communities.

Solar

- Two new solar arrays located on previously quarried land at Stone Lane and New Trees. These developments have been separately submitted as allocation proposals under the energy section of the Call for Sites.

Sustainable Buildings

Homes within the development will be meticulously designed to embrace the Future Homes Standard for energy efficiency and sustainability.

Rooftop solar will be incorporated where appropriate to the electrical network and building design and building orientation, alongside the provision of heat pumps and domestic Electric Vehicle chargers.

Community, social, and commercial infrastructure will be constructed to BREEAM standards to maximise energy efficiency, as far as practically possible.

Energy flows will be managed through the Eastern Way Quarries' micro-grid to ensure that renewable energy generation is matched to consumption, resulting in net-zero energy operation.

Estimated annual electricity production:

New wind turbine
12,518,000 kWh p.a.

Repowered wind turbine
12,518,000 kWh p.a.

25MW combined solar arrays
23,921,000 kWh p.a.

**Total generation
48,957,000 kWh p.a.**

Equivalent to:

13,296 average Bedfordshire households

Note 1: The average home in Bedfordshire consumes 3,682kWh of electricity per annum (BEIS, 2023)

Or equivalent to the annual energy consumption of:

5,440 fully electric homes, incorporating heat pumps and domestic EV charging

Note 2: Assuming annual domestic consumption of 9000kWh/annum



Living in Eastern Way

Regional Health and Wellness Hub

AWGroup recognises that the considerable constraints and limitations to the current healthcare provision in Central Bedfordshire are of increasing concern to residents. The Eastern Way Quarries scheme will make a substantial contribution to overcoming this deficit. The proposed Health and Wellness Hub located within the main neighbourhood centre will provide an extensive range of services, including medical, dental, and complementary therapies for the benefit of all within the wider region.

Primary and Secondary Schools

The proposed scheme provides for comprehensive education infrastructure, including two 3FE primary schools, ideally located within easy walking distance of all homes within the community. A further new secondary school is proposed on

10 hectares of land, with extensive, dedicated sports pitches available for community use. A local centre to serve the northern phase of the development is located next to these facilities.

Main Neighbourhood Centre

Located in the heart of the Eastern Way Quarries scheme is a lively neighbourhood centre. An important local community resource, the main neighbourhood centre can accommodate both social and commercial infrastructure, with shops, cafés, restaurants, and dedicated workplaces providing for all residents' needs, locally. The centre also plays a central role as the community transport terminus, offering residents easy access to buses, e-bikes and cargo, electric cars and commercial vehicles, charging facilities, vehicle storage and repair.

Intergenerational Care

Intergenerational care within the community goes to the heart of what it is to be human.

The Eastern Way Quarries scheme proposes a sensitively designed, fully integrated care facility where older residents and nursery children will have the chance to spend their days together, offering richness and improvement to all their lives.

Narrow Gauge Railway

A treasured part of Leighton Buzzard's heritage, the Narrow Gauge Railway line will be extended to Eastern Way Quarries' neighbourhood centre, terminating in a new platform with an enhanced museum and shop.

Flexible Local Centres

The Eastern Way Quarries scheme proposes three local centres across the development, offering easy access to these important community assets for all residents, and complementing the main neighbourhood centre. The centres can accommodate flexible spaces for work and social activities, including meeting rooms, a community hall, a café and shop.

