

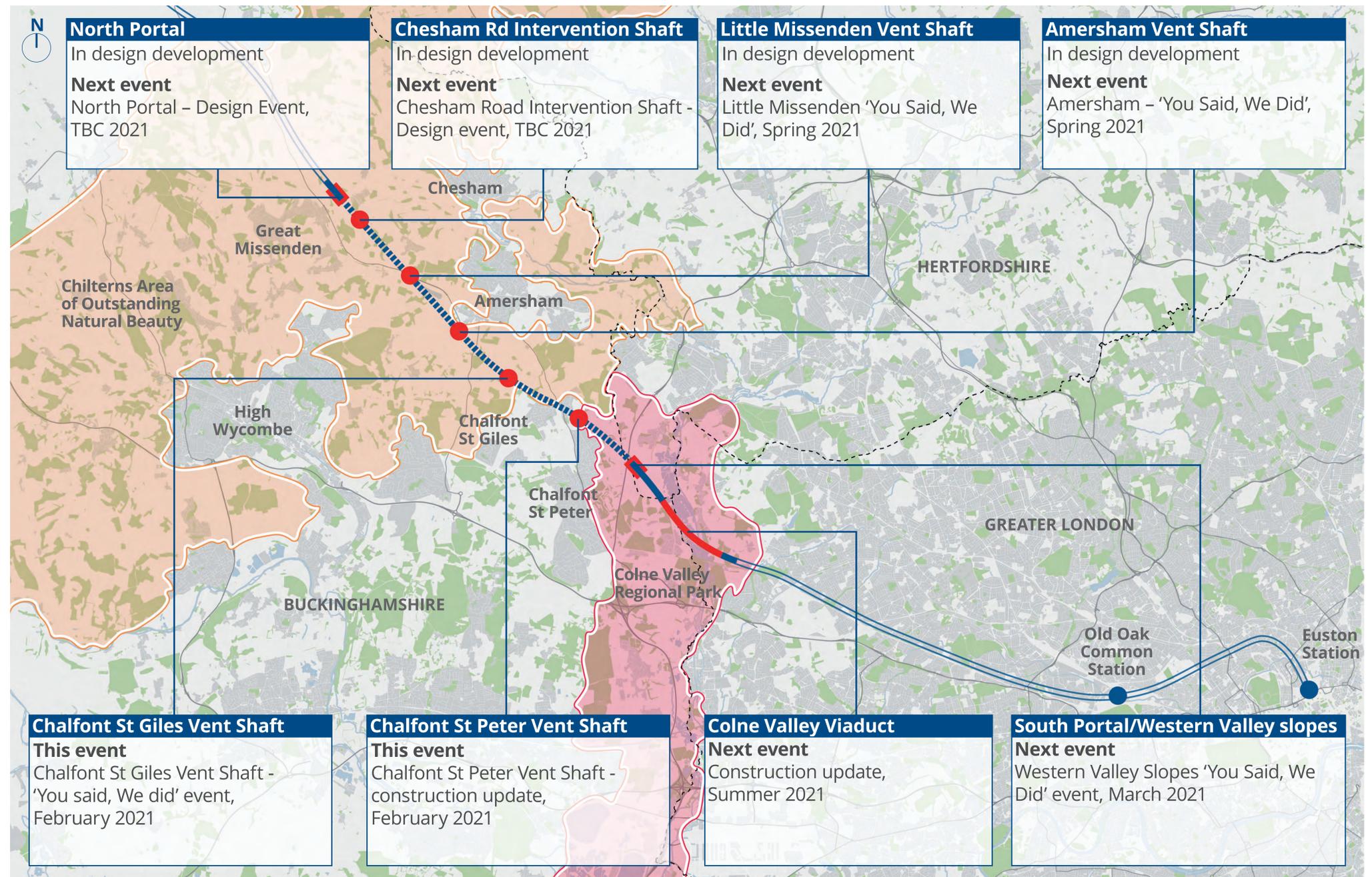
The HS2 route in the Chilterns and the Colne Valley

High Speed Two (HS2) is the new high speed railway for Britain.

What we are doing

Align are working on behalf of HS2 Ltd to build 22 kilometres of the high speed rail line, running between the Colne Valley and the Chilterns. It includes the 3.4 kilometre long Colne Valley Viaduct and the Chiltern tunnel with four ventilation (vent) shafts to regulate airflow, one intervention shaft and the shaft headhouses which contain electrical equipment.

Our main works programme is now underway and we are holding regular information events to share details on the progress of the designs, seek views and respond to feedback. Due to Covid-19 we have postponed all public face-to-face engagement events and meetings, but we will continue to find new ways to involve the community.



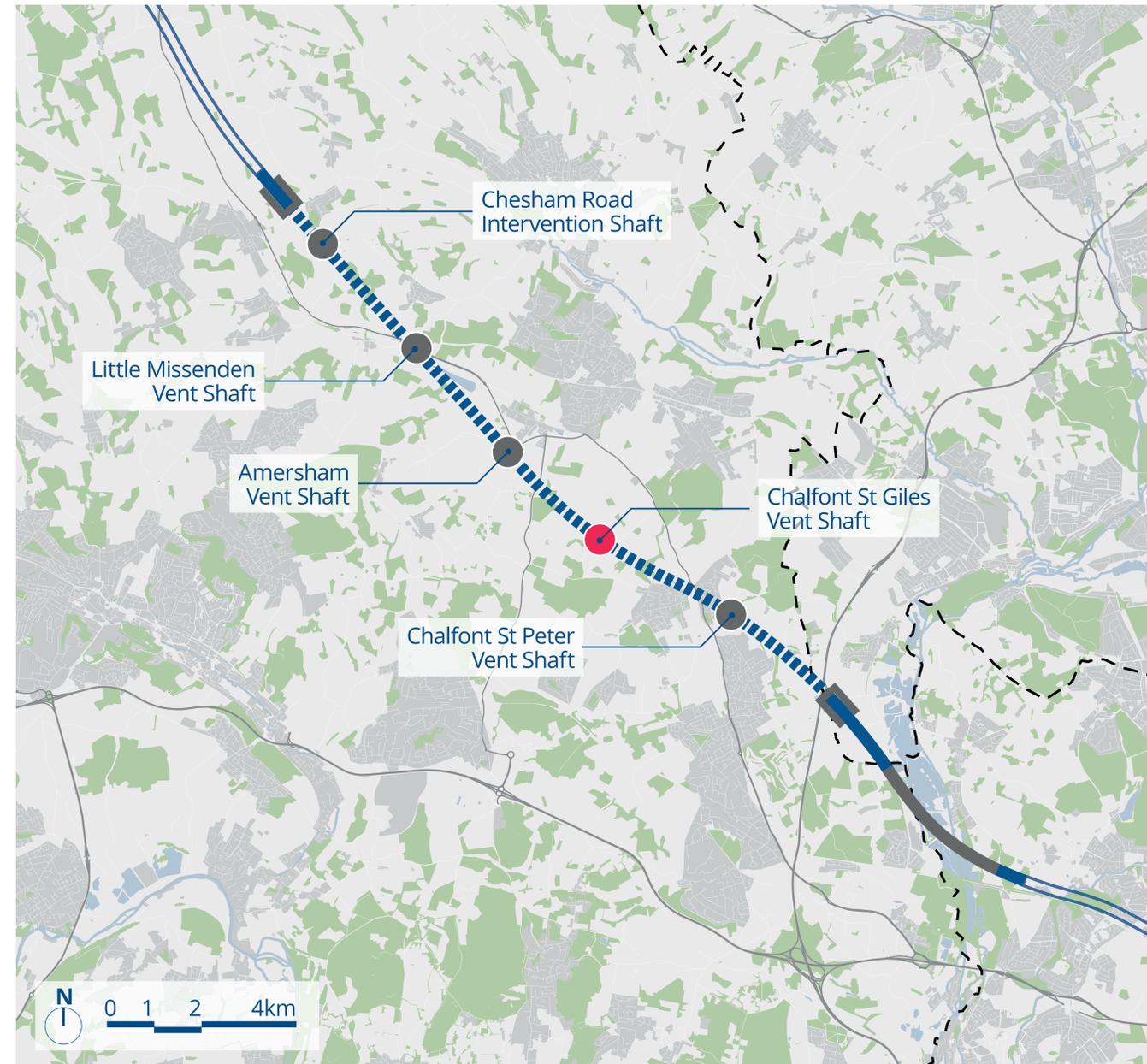
Introduction

Welcome to our 'You Said, We Did' event for the Chalfont St Giles vent shaft.

In February 2020 we held an event to share our plans for the Chalfont St Giles vent shaft, the construction processes, traffic management plans and the early plans for the design of the headhouse. Now we would like to:

- Show you the feedback that we have received during design development, which has influenced our approach
- Share the final designs we will be seeking consent on from your local authority
- Provide information on the construction of the vent shaft and headhouse
- Show you how we plan to reduce the impact of our work on residents

HS2 route through the Chilterns



The Chalfont St Giles vent shaft will provide air ventilation and access for emergency services. It is located off Bottom House Farm Lane.

ALIGN

Working in
partnership with

HS2

Public feedback

In February 2020, we held a public engagement event and you gave us feedback on four topics about our design. We asked you to rank our objectives in order of priority and provide comments. Your ranking of these objectives are shown below:

Landscape

- Reflect the rural character of the site and its surrounding landscape
- Use existing trees, hedgerows and new planting to conceal structures as far as possible
- Replace lost trees and hedgerows which must be removed during construction
- Find ways of reusing soil and materials excavated from the vent shaft in the new landscape
- Consider the long-term management of the site and appearance of the landscape
- Consider ways to enhance public experience in places where people get close to the site

Ecology

- Restore the area using planting or seeding of native and indigenous species
- Protect existing wildlife species on the site during construction
- Create habitats that support as many species as possible (biodiverse)
- Create habitats that are typical of the area but rare and declining – for example, chalk grassland
- Consider the long-term management of the site
- Create ponds to encourage new aquatic species to colonise the area.

Design of the headhouse

- Design structures that can be concealed or blend into the landscape
- Reduce visibility through lowering buildings where possible
- Maintain a familiar scale and form to local agricultural setting
- Keep the overall footprint (area) of the compound as small as possible
- Reduce the environmental impact of the proposed structure
- Add building colour and detailing to help blend into the local landscape

Construction

- Reduce movements of earth and dirt by road
- Return the construction site to how it was before construction started
- Reduce noise and vibration on the construction site
- Minimise any visible impact of construction
- Let people know when noisy works are occurring and keep residents regularly updated
- Minimise carbon footprint and reduce noise and air pollution across construction fleet

Landscape

You said: “Reflect the rural character of the site and its surrounding landscape.”
 “Use existing tree, hedgerows and new planting to conceal structures as far as possible.”

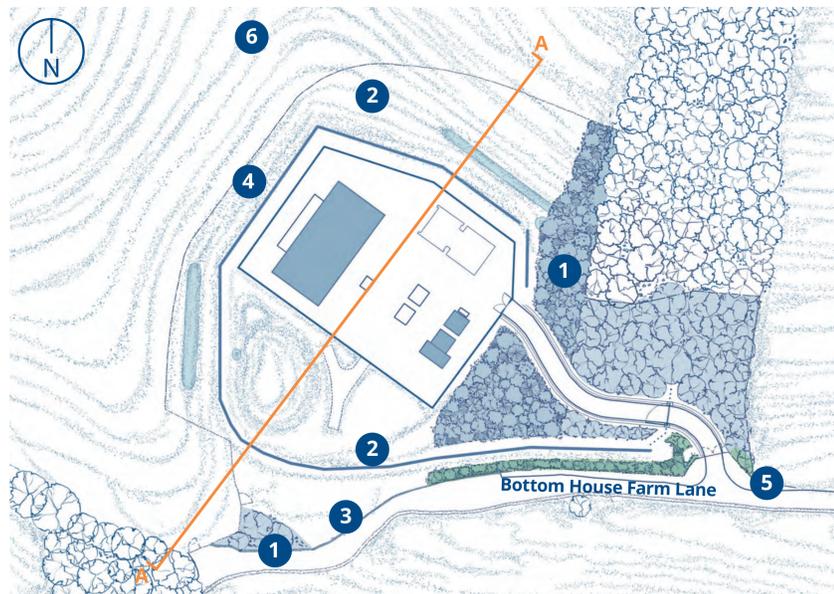
We did:

Maintain character of the valley

The landscape will be shaped to maintain the profile of the chalk valley, whilst planting and chalk grasslands will reinforce the rural setting.

Plant native vegetation

Native tree and hedgerow species will be planted throughout. We will retain as much of the existing woodland as possible to help screen the structures.

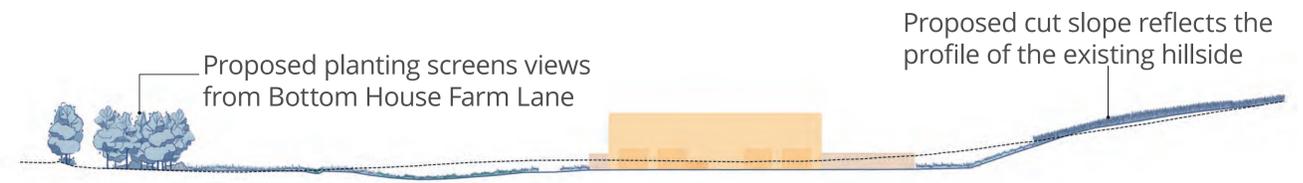


Landscape plan

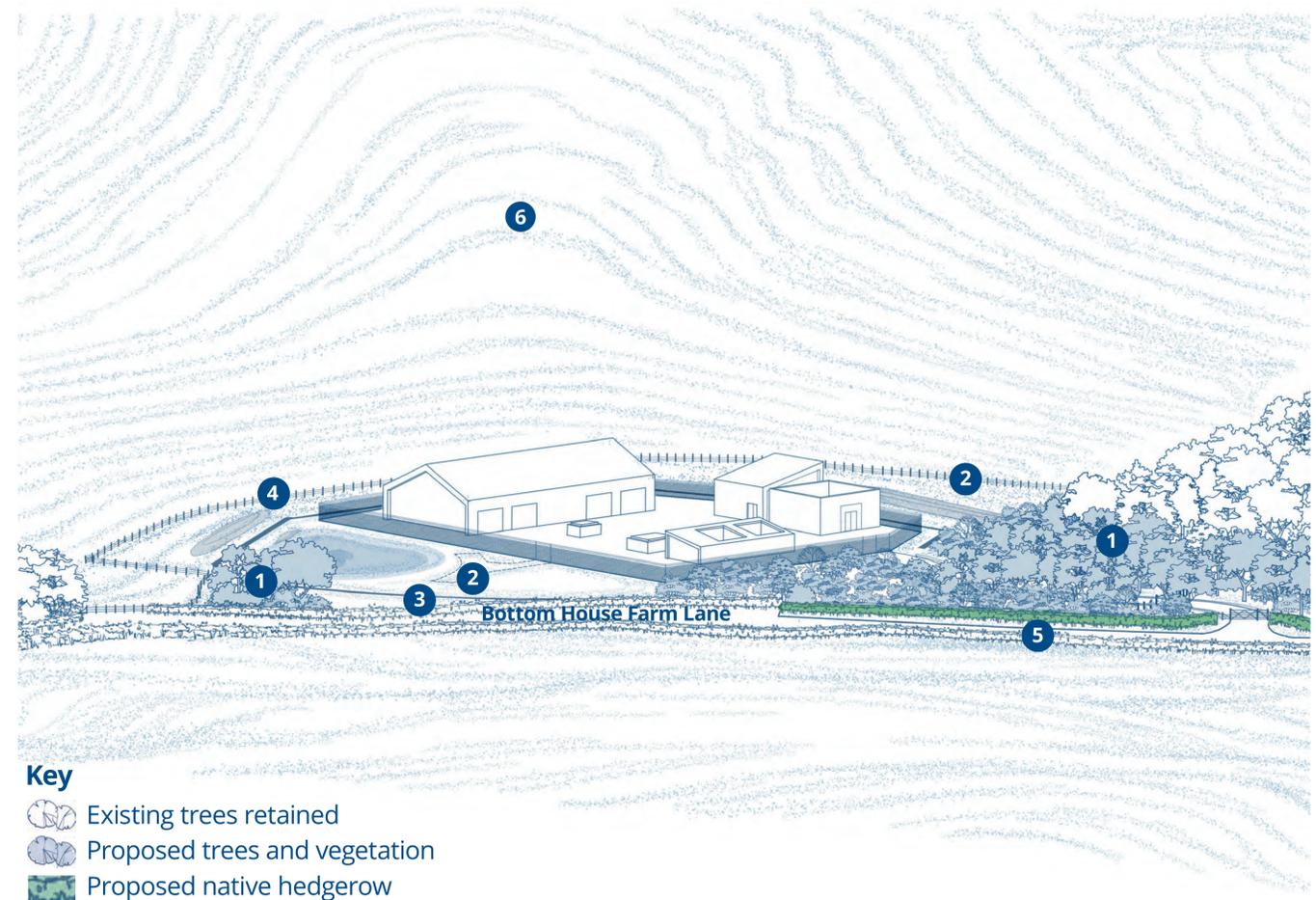
Key

- 1 Proposed woodland edge planting areas
- 2 Chalk grassland
- 3 Retained hedgerow
- 4 Agricultural style fencing compliments rural character of the site
- 5 Enclosed character of Bottom House Farm Lane maintained
- 6 Profile of chalk valley retained

Landscape proposals



Section A-A



Key

- Existing trees retained
- Proposed trees and vegetation
- Proposed native hedgerow

Illustrative view of the site

Ecology

You said: “Restore the area using planting or seeding of native and indigenous species.”
 “Protect existing wildlife species on the site during construction.”

We did:

Optimised biodiversity informed by local area

We will create habitats which contribute to the biodiversity value of the site and its surroundings. Our works will follow strict protocols aimed at protecting existing wildlife. Habitats will reflect local context and include:

- 1 Creation of calcareous grassland habitat reflective of Chilterns grassland
- 2 New wetland habitat
- 3 Proposed woodland edge and scrub planting
- 4 Integration with connecting habitats to encourage animal foraging and movement
- 5 Protection of existing mature vegetation on neighbouring boundaries
- 6 Incorporation of habitat features such as hibernacula and basking banks



1 Calcareous grassland (target habitat)



3 Woodland edge and scrub (target habitat)

Key habitat types



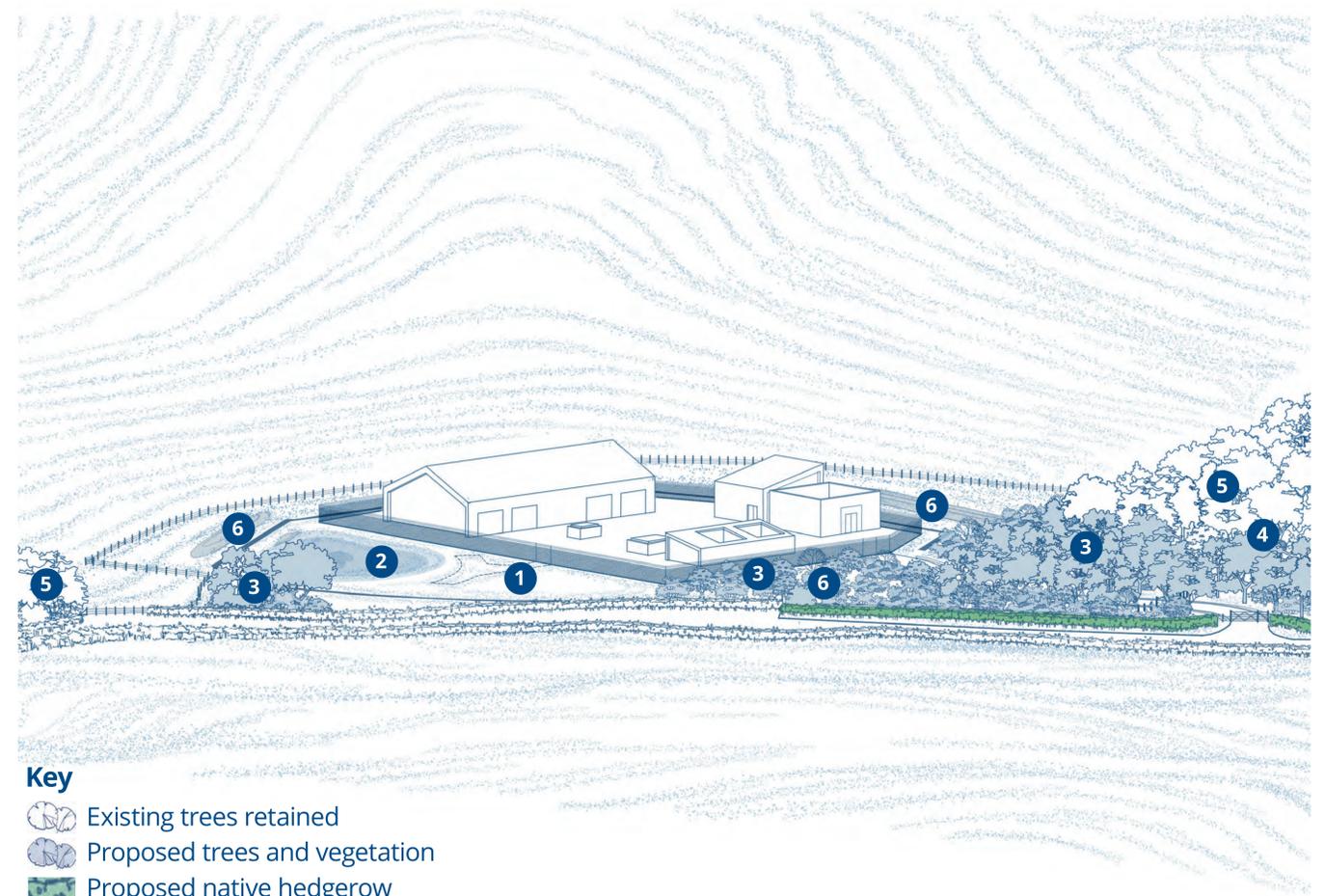
Calcareous grassland



Habitats for protected species



Scrub and woodland planting



Habitat creation proposals

Headhouse design

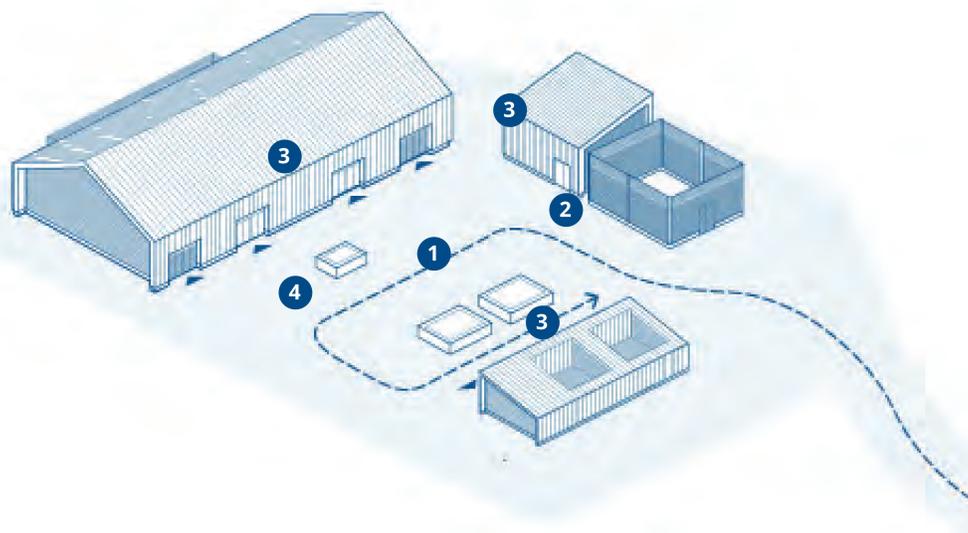
You said: "Design structures that can be concealed or blend into the landscape."
 "Can outbuildings be concealed better in short term?"

We did:

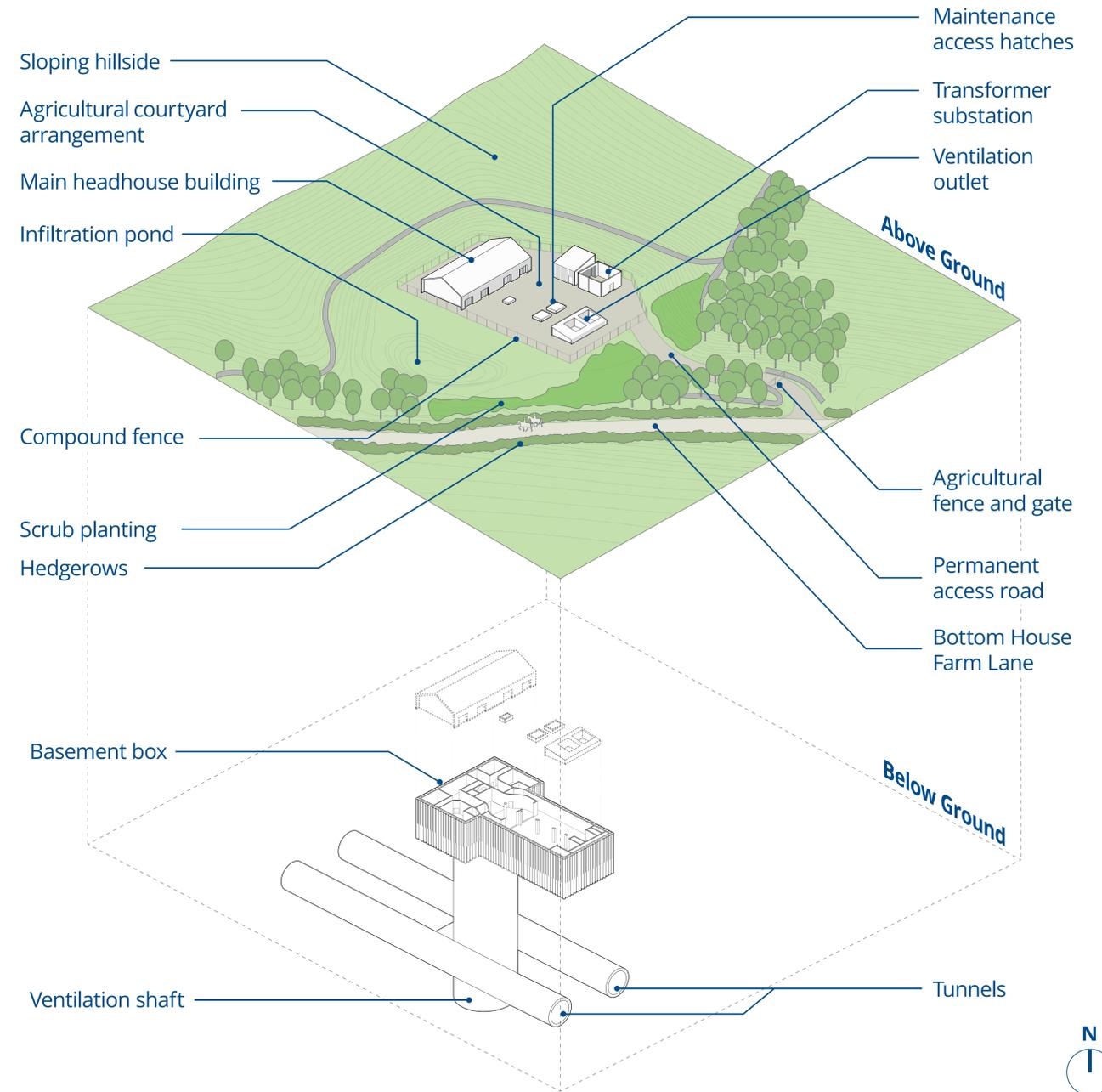
Headhouse buildings are arranged in an agricultural courtyard layout

The arrangement of the buildings is based on an agricultural courtyard layout, with doors facing the central space. The overall footprint of the compound kept to a minimum.

- 1 Central courtyard for access and manoeuvring
- 2 Doors accessed from the courtyard
- 3 Primary elevation of each building faces into courtyard
- 4 Ancillary structures kept low to reduce visual clutter



3D diagram - Building arrangement



3D diagram - Overall site arrangement

Headhouse design

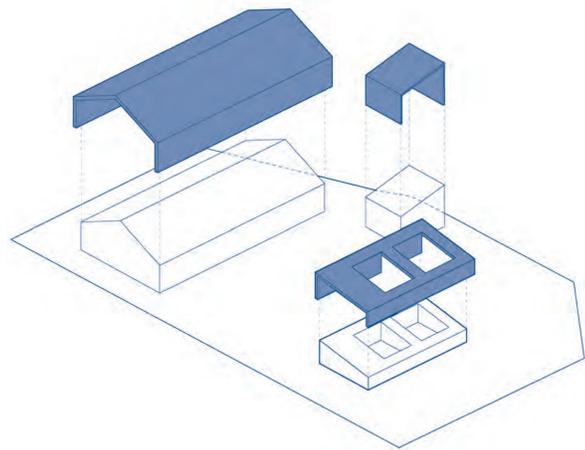
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“Can outbuildings be concealed better in short term?”

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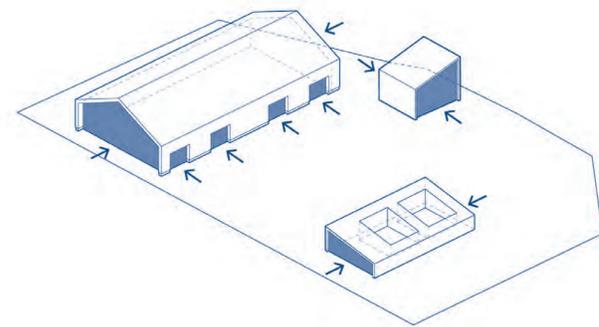
Design inspiration has been taken from the many local historic and industrial agricultural buildings.

The pitched roofs wrap around the buildings, creating simple agricultural barn forms. The stair and vents building has been consolidated into one mono-pitch form, simplifying its appearance and reinforcing the courtyard arrangement.

Openings are pushed in and treated in a different material, similarly to local agricultural buildings. The louvred screen to the transformer substation helps to break up the overall form and hide visual clutter associated with plant equipment.



3D diagram - Form and scale



3D diagram - Louvred openings

Visualisations



Key plan



Visualisation - Public footpath view looking north-east (Year 1)



Visualisation - Public footpath view looking north-east (Year 15)

Headhouse design

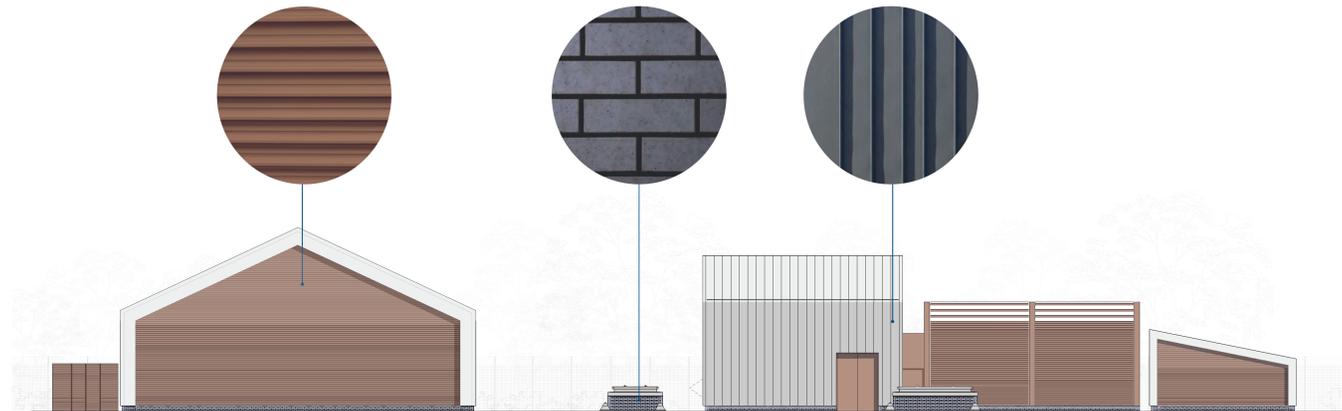
You said: "Can you conceal the outbuildings?"

We did:

Use a simple palette of robust materials

The zinc, painted steel and engineering brick will be durable and designed to age gradually over time without losing robustness and quality. Dark, neutral colours will ensure the buildings are visually recessive.

The building colour and detail has been designed to blend into the landscape, using a simple palette of materials inspired by local agricultural and industrial buildings.



Proposed elevation - Materials palette

Louvre colour



Colour palette - Red brown

Visualisations



Key plan



Visualisation - View from the public footpath, south of the site, looking north-east (Year 1)



Visualisation - View from the public footpath, south of the site, looking north-east (Year 15)

Traffic management and planning

We recognise that there are concerns regarding Heavy Goods Vehicles using local roads in Chalfont St Giles. The routes to each site are carefully planned to reduce our impact on local communities.

You said: “Reduce movements of earth and dirt by road.”
“Please manage Heavy Goods Vehicles (HGVs) on the A413 and control the traffic on Bottom House Farm Lane.”

We did:

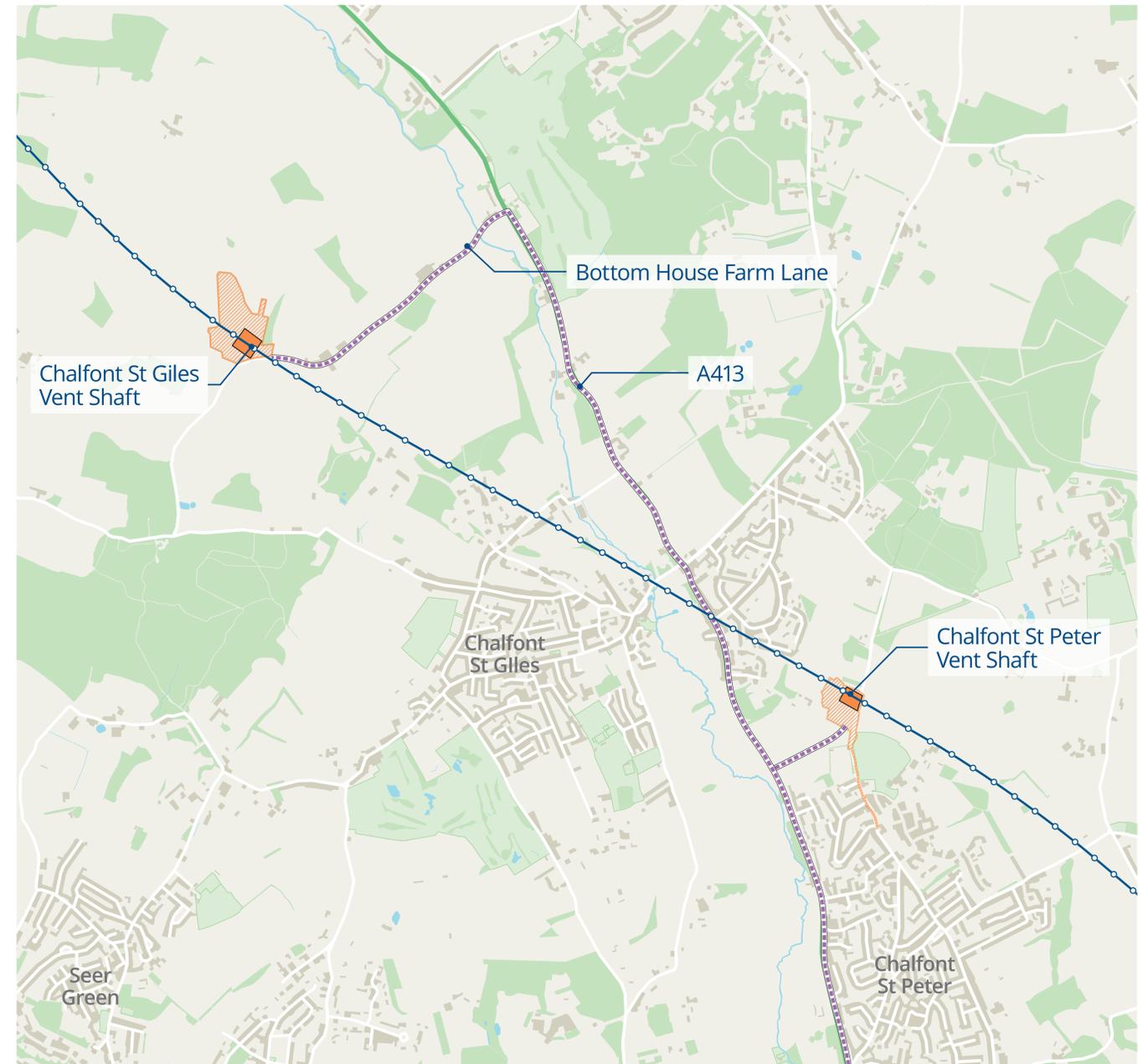
During stages of high activity on site – such as shallow shaft excavation, grouting and piling works – there will be a corresponding increase in HGV movements.

There will also be periods where the need for HGV movements will be lower.

We have been working closely with local stakeholders to review our traffic management strategies during construction.

We are:

- Reducing the number of HGV movements by reducing the size of the vent shaft excavation needed
- Building a temporary access road to the vent shaft site to remove HGVs and site traffic from Bottom House Farm Lane
- Signalising the junction of the A413 with the temporary access road
- Scheduling all deliveries electronically to prevent congestion near the site



Map showing HGVs routes to Chalfont St Giles and Chalfont St Peter vent shaft sites.

Construction site map

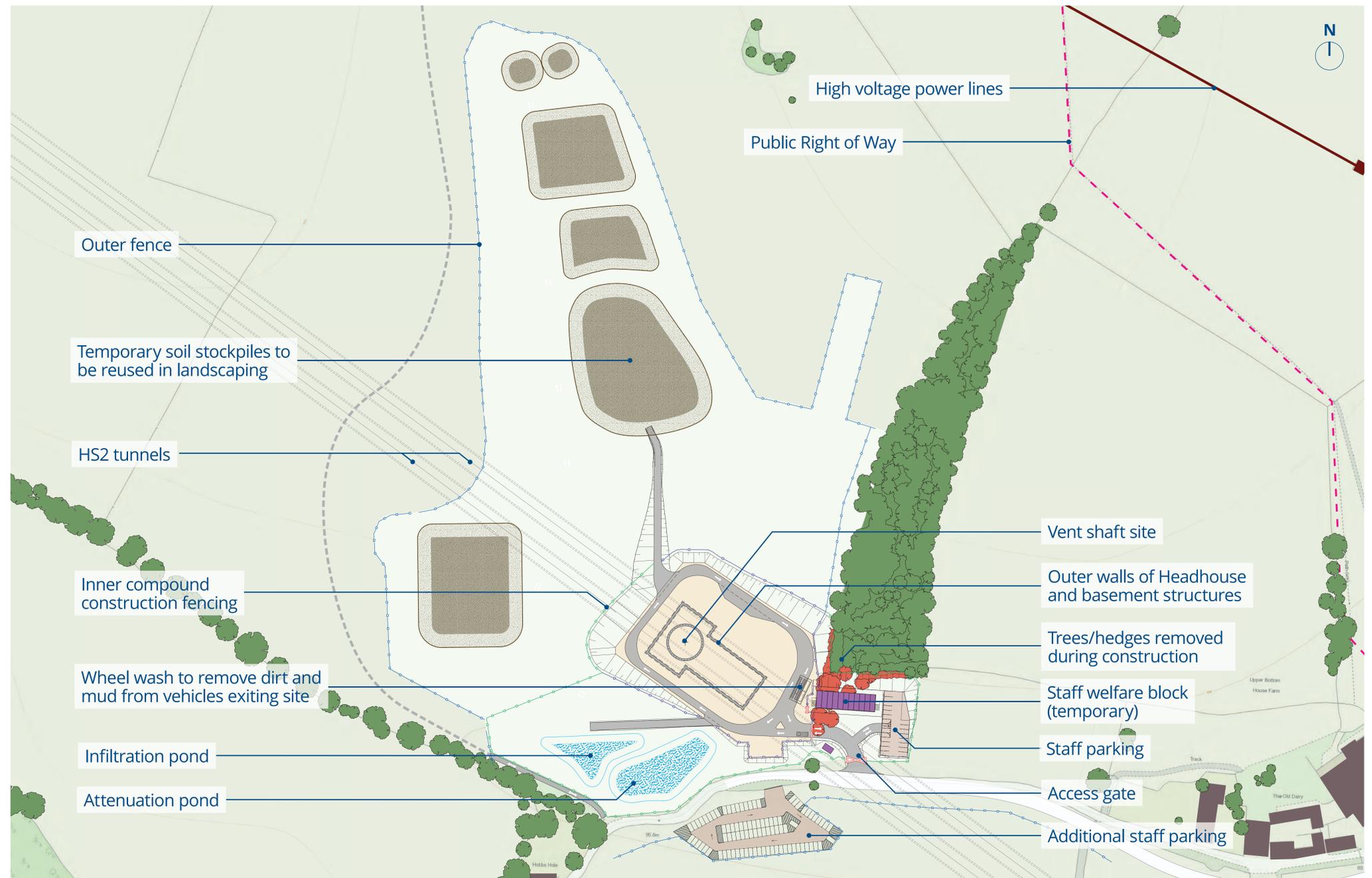
We will build the vent shaft as quickly and safely as possible, and minimise our impact on the local community.

You said: "Return the construction site to how it was before it started."

We did:

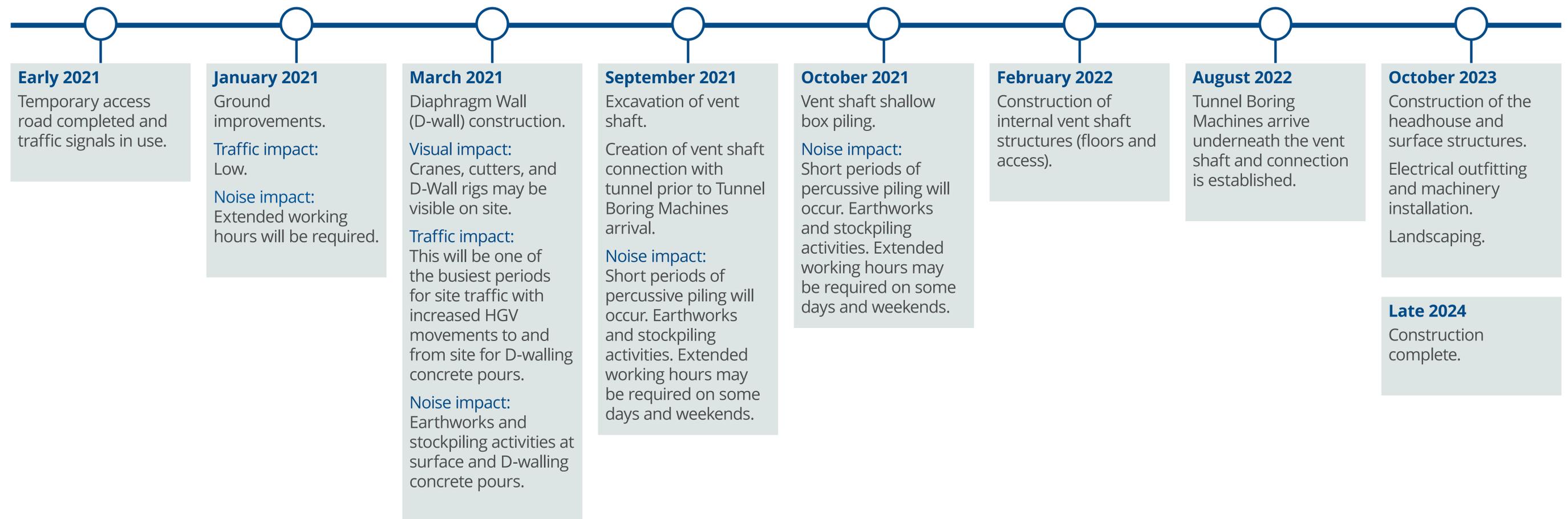
Material excavated from the site will be reused in the landscaping and restoration of the vent shaft site. The area around the vent shaft will be landscaped to blend in with the contours of the existing area.

The temporary access road linking the construction site with the A413 will be removed after construction, and the land restored to its former state.



Chalfont St Giles Construction Programme

To minimise our impact on the local community, we will build the vent shaft and headhouse as quickly and safely as possible. Below is an indicative timeline of construction activities. We have highlighted those which may be more noticeable to local residents.



Thank you

Thank you for viewing our online exhibition.

Next steps

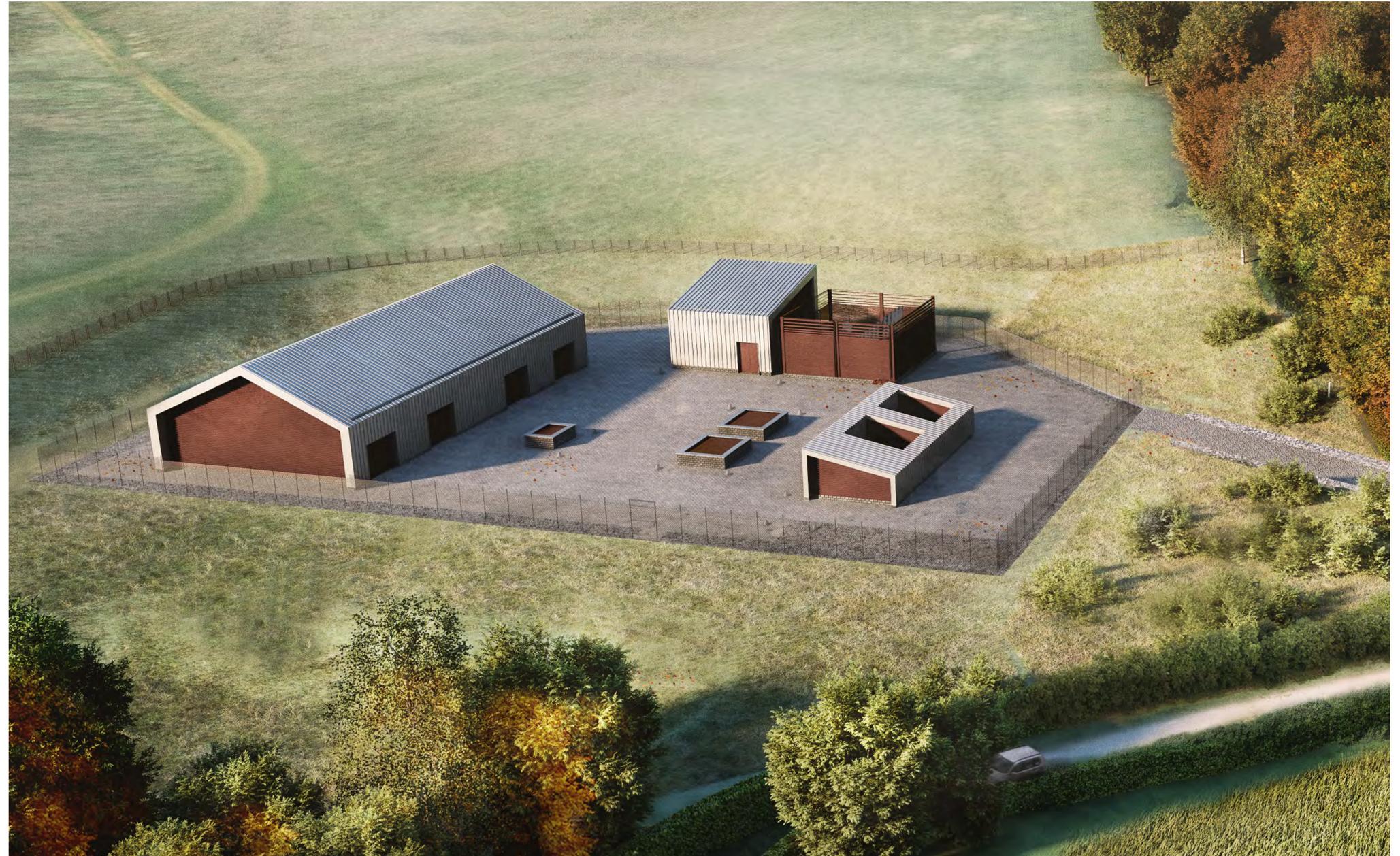
We will continue engagement with the local community to provide regular updates on the progress of construction.

Information events

As part of our commitment to keeping you informed, we are holding exhibitions and events for local residents at each vent shaft.

Due to the Covid-19 pandemic we are not currently able to hold face-to-face public events, to share information about the design and construction of the Chalfont St Giles vent shaft.

For more information and to find out how to receive regular updates, please visit: www.hs2inbucksandox.org.uk



Chalfont St Giles visualisation - Aerial view looking north-east (Year 15)