

SKANSKA



STRABAG

Working on
behalf of

HS2

Design update: Canterbury Works headhouse and compound

March 2021

Site Location

The Canterbury Works site is located in South Kilburn, behind Canterbury Road and Canterbury Terrace and next to the existing railway tracks.

The site sits within residential areas to the west and south. Locally listed Canterbury House is to the south and St Mary's Catholic Primary School is to the east.



What we will build at the Canterbury Works site

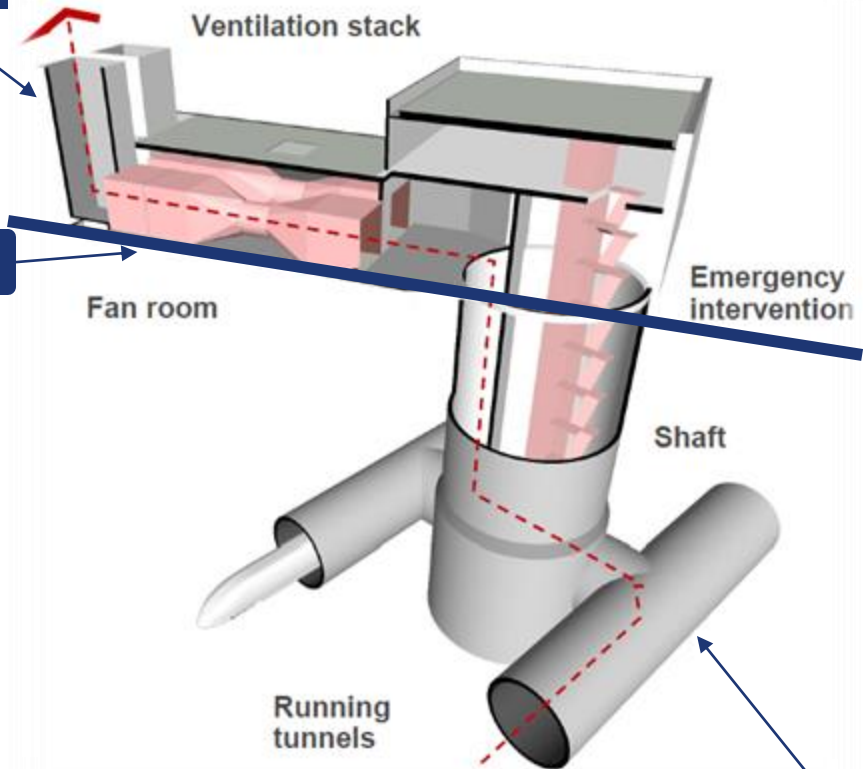
We will build a ventilation shaft and headhouse at the Canterbury Works site in South Kilburn.

The headhouse is the building on top of the vent shaft which contains the fire control and ventilation systems for the railway tunnels below. The headhouse will include a fan room.

The vent shaft, or ventilation shaft is a vertical opening that connects the tunnels to the surface and open air. It uses fans situated in the fan house to regulate air quality and temperature in the tunnels, provides access for emergency services and allows smoke to be extracted in the event of a fire.

The headhouse will be above ground

Ground level



The ventilation shaft and HS2 tunnels will be below ground

Indicative construction programme

Construction activity	Planned dates for this activity *
Site set up	Q3 2020 – Q2 2021
Construction of ventilation shaft	Q2 2021 – Q1 2023
Construction of headhouse	Q1 2023 - Q3 2024
External works including landscaping	Q3 2022 – Q3 2024
Completion of works	Q4 2025

Timeline of Canterbury Works design engagement

Engagement about scheme design:
during summer and winter 2018

Engagement about detailed design:
during November 2020

Engagement about You said, We did and final design update
Online community update
- March 2021

Submission of planning application to Brent Council –
planned in Q1 2021

Final design of Canterbury Works headhouse and compound*

Elevated view from St Mary's Catholic Primary School and the railway



Note: the buildings in white are existing structures

View from Canterbury Terrace



The Autotransformer outline (shown as a transparent grey box) is for location approval only – its design is subject to a future planning application

*Subject to planning approval from Brent Council. The inclusion of trees and vegetation is indicative only. This is to show how the Canterbury Works headhouse and compound might look in the future.

You can see more visualisations of the final design on the following information slides

You Said, We Did

During November 2020, we ran online community engagement events about our Canterbury Works headhouse and compound design. We asked for your feedback about:

Materials proposed for the headhouse

Future landscaping plans*

The type of boundary wall

We have considered your feedback and, where possible, have incorporated this into our final design. More information is included about this over the following information slides.

*Some of our future landscaping plans, including plans for the 'pocket park' area next to St Mary's Catholic Primary School remain subject to further discussion.

Future materials for the headhouse

You said

Incorporate natural material and include a living element in the final design to make the building visually appealing

We did

The vertical ventilation stacks have been reduced in size to the minimum required dimensions and height. We've also reduced the size of the chimneys following initial design

Decorative brickwork to add interest and texture

Green roofs on the headhouse building

This will be Accoya or similar modified softwood naturally weathered to silver grey colour

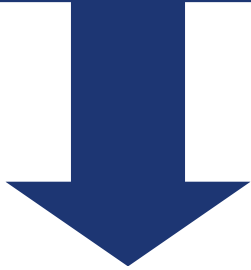
Decorative functional landscaping

Elevated view from St Mary's Catholic Primary School / Canterbury House

Future boundary walls and fencing

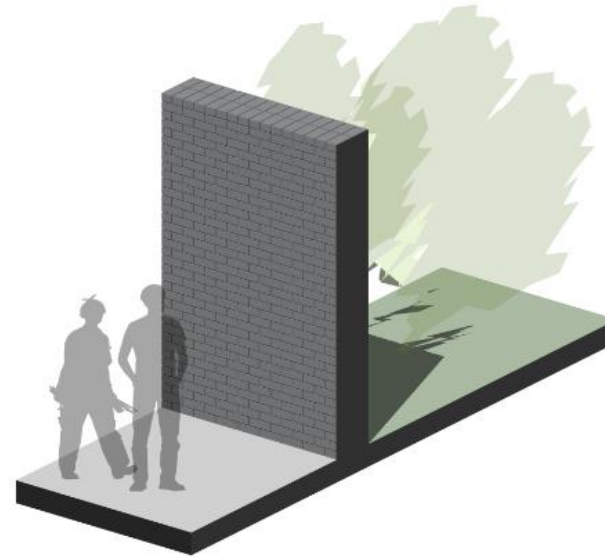
You said

The boundary walls and fencing should be a combination of brick with metal railings.



We did

We will use a combination of a solid wall with metal visually permeable railings. This combination will be installed along compound boundaries with Carlton House and Canterbury House.



This relates to the boundary fencing along these sections of the compound



Future landscaping plans

You said

There should be more screening between the residential buildings and the headhouse building

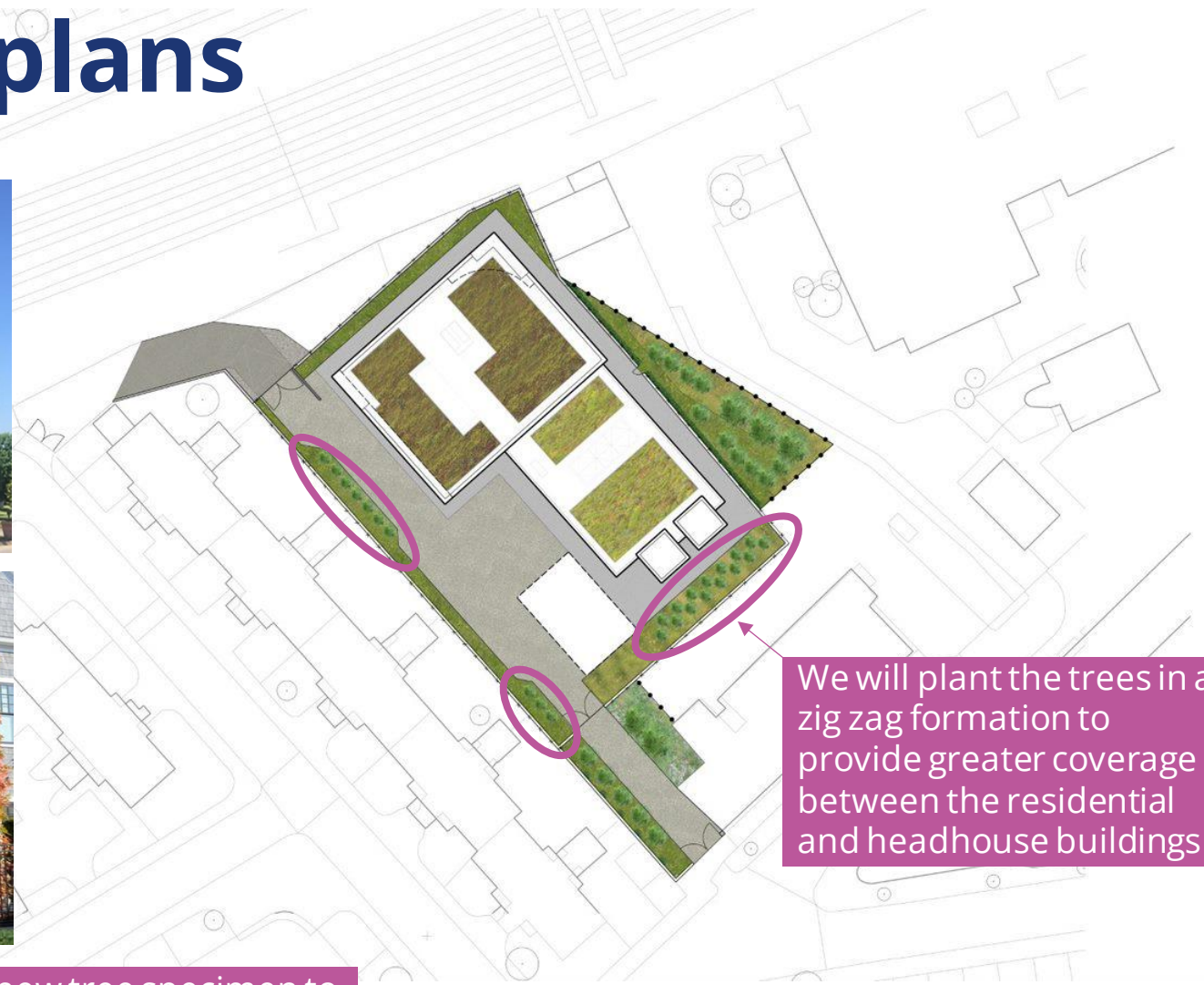


We did

Reviewed our landscaping plans to maximise the height of the tree screening between the headhouse and residential buildings on Canterbury Terrace and Canterbury House



We've added a new tree specimen to our future landscaping plans – see more information on the next page



We will plant the trees in a zig zag formation to provide greater coverage between the residential and headhouse buildings

Future landscaping plans

The green roofs have been adapted to maximise the aesthetic visual impact for residents in Canterbury Terrace and Carlton House



Acer campestre
'Streetwise'
Field Maple



Carpinus betulus
Common
Hornbeam



Betula
pendula
Silver Birch



Coryllus avellana
Hazel



Ilex aquifolium
Holly



Sorbus aria
Whitebeam

Grassland habitat
planting

Concrete block/
slab paving

Biodiverse green roof

Trees and scrub habitat planting

Low educational green wall

Grassland habitat planting

Deep substrate green roof

Brick pavers

Scrub habitat planting

Feature shrub planting

Access gate

We've added a new tree specimen to our future landscaping plans: Liquidambar styraciflua 'Slender Silhouette' – this is a columnar variety of Sweet Gum tree.
Mature height: 10-15 metres; mature spread: about 2



Canterbury Road entrance - Photomontages

Below are visualisations of the site from the Canterbury Road entrance. They illustrate the growth of vegetation after one year and 15 years of operation of the headhouse and compound.



● White shaded box = An outline of the Autotransformer station which is for location approval only - size and materials are subject to future planning application

Future external lighting plans

The headhouse and compound will be illuminated using a variety of fixtures in different zones. When the site is unoccupied the lighting lights will emit a low dim. The level of light in each lighting zone will increase in the situations listed below.

Key



Headhouse access point



Pink zone - 0 lux* when the headhouse is unoccupied and 20 lux in the following situations:

- during an emergency
- when switched on locally/remotely
- when vehicles are manoeuvring or gates are opening
- when intrusion is detected to assist CCTV surveillance



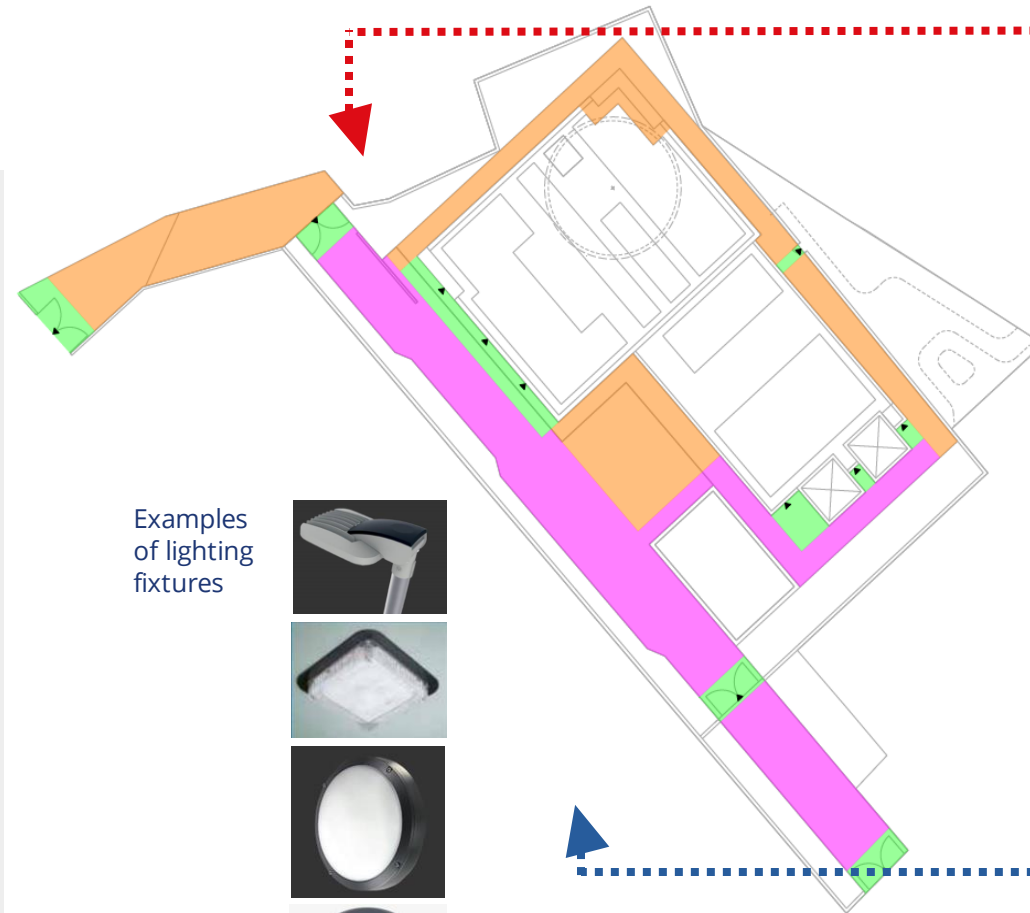
Orange zone - 0 lux when the headhouse is unoccupied and 20 lux in the following situations:

- when switched on locally / remotely
- when vehicles are manoeuvring or gates are opening
- when intrusion is detected to assist CCTV surveillance

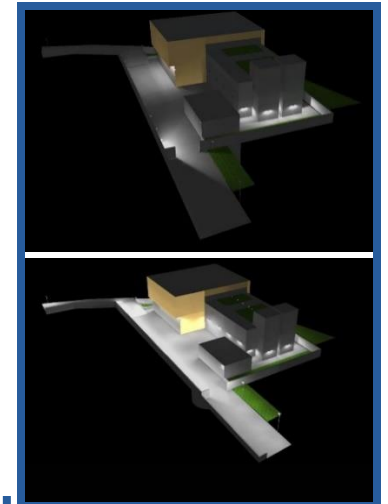
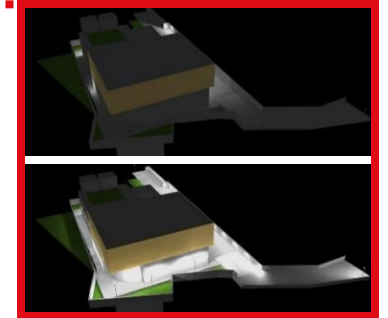
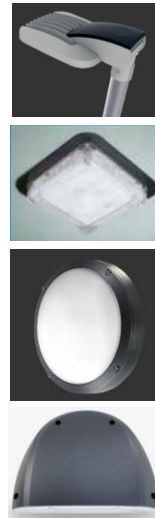


Green zone - 5 lux when the headhouse is unoccupied and 20 lux in the following situations

- during an emergency
- when switched on locally/remotely
- when vehicles are manoeuvring or gates are opening
- when intrusion is detected to assist CCTV surveillance



Examples of lighting fixtures

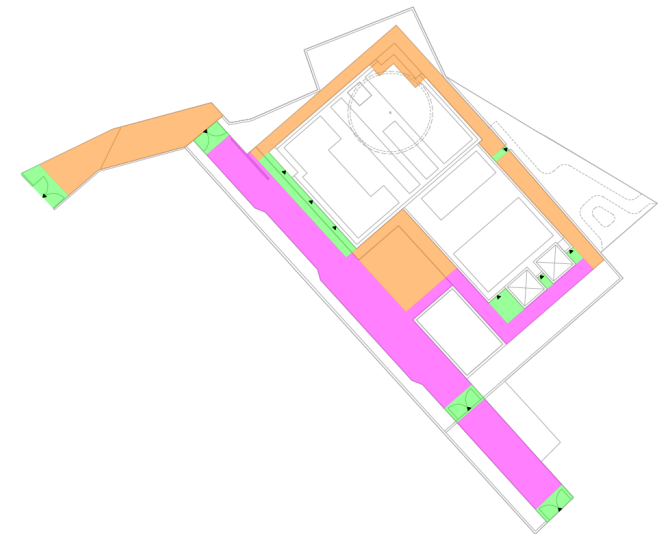
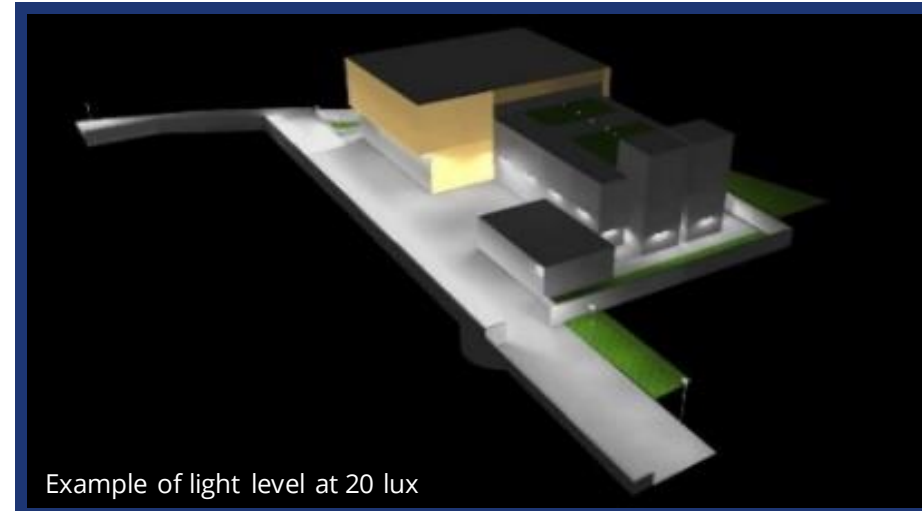
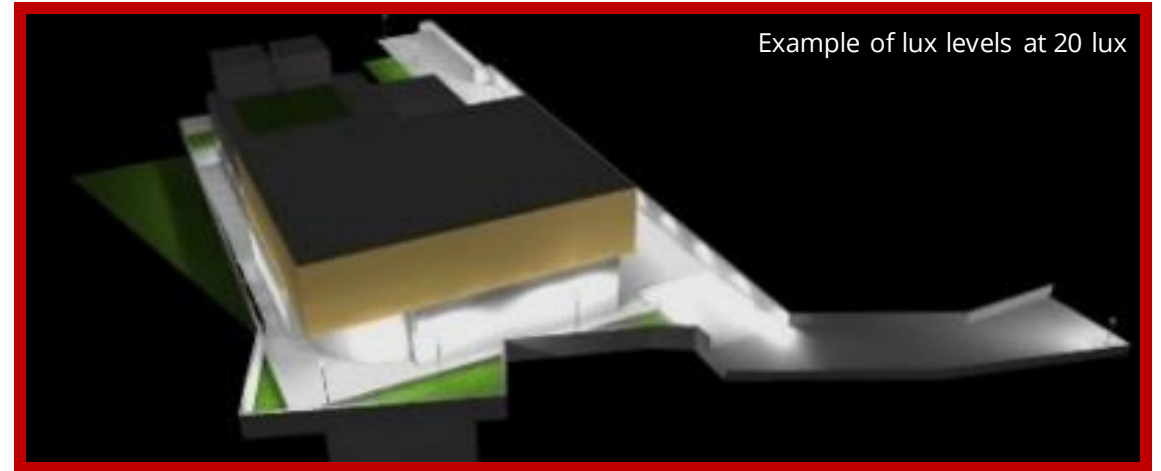
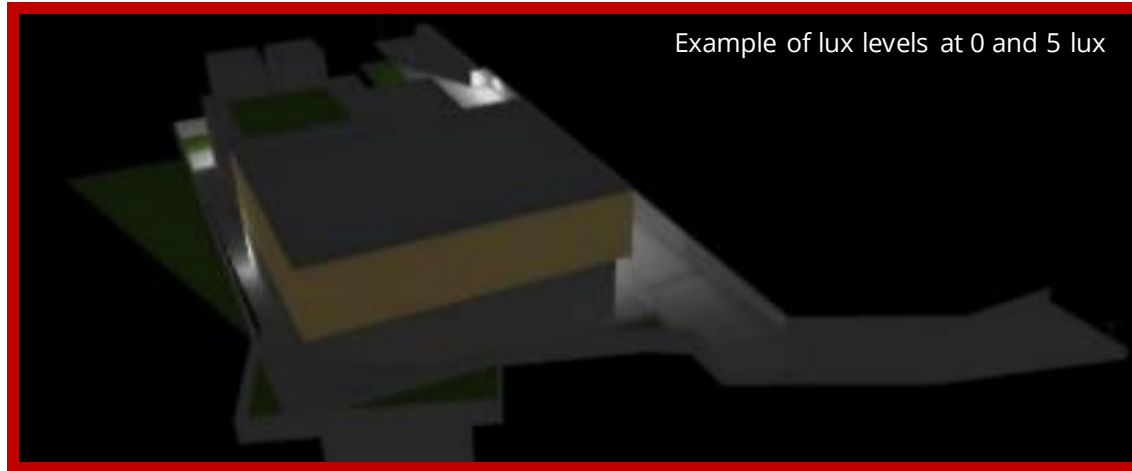


*More information about lux levels

Lux levels determine the illumination of an area at ground level. Levels of 5 lux are comparable to lighting levels on a city pedestrian walkway at night. Levels of 20 lux are comparable to lighting levels of city vehicle roads at night.

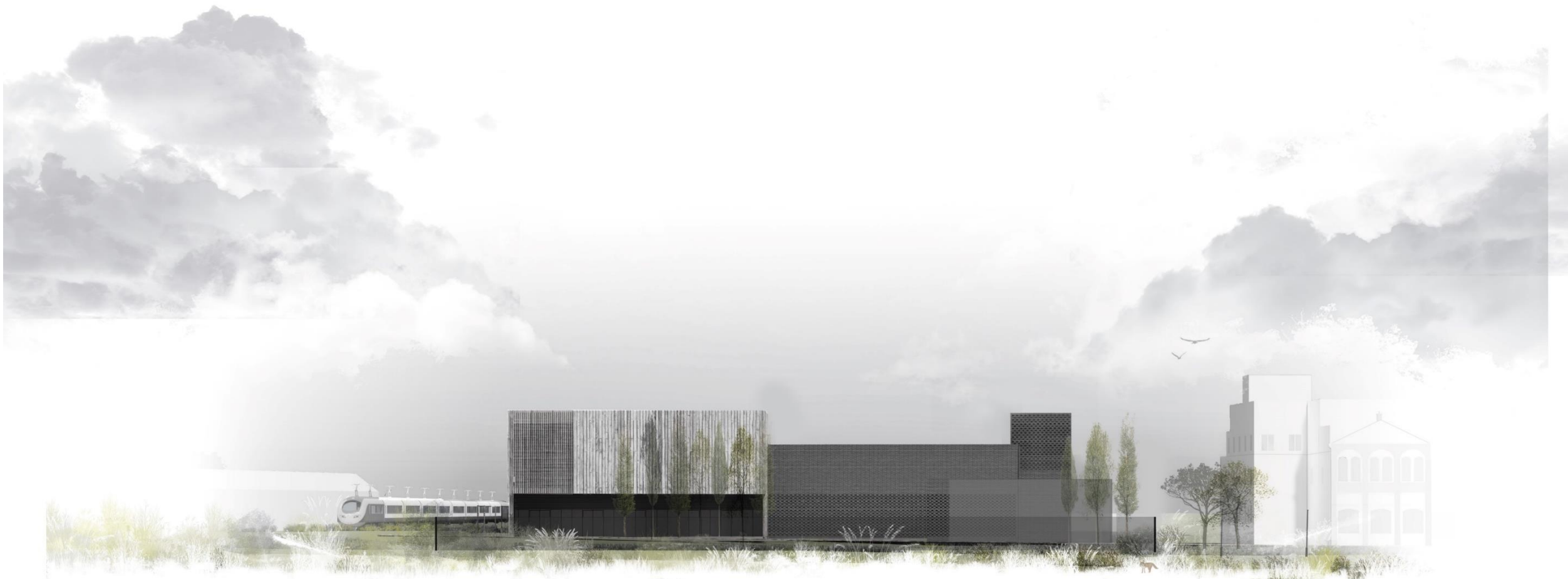
Future external lighting plans

These visualisations show the future external lighting plans when the headhouse is unoccupied and instances when lighting will be activated as stated on the previous page.



Final design of Canterbury Works headhouse and compound*

View from Canterbury Terrace



*Subject to planning approval from Brent Council.

The inclusion of trees and vegetation is indicative only. This is to show how the Canterbury Works headhouse and compound might look in the future.

Final design of Canterbury Works headhouse and compound*

View from Canterbury House



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Final design of Canterbury Works headhouse and compound*

View from St Mary's Catholic Primary School



*Subject to planning approval from Brent Council.

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Final design of Canterbury Works headhouse and compound*

View from railway



*Subject to planning approval from Brent Council.

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Current and ongoing works on site

Duration of works	Description of works
During late winter and spring 2021*	<p>Ongoing works to set up the Canterbury Works site for future construction of the headhouse and ventilation shaft</p> <p>These works include:</p> <ul style="list-style-type: none">• Set up of temporary welfare and offices• Removal of existing concrete• Utility connection works and surveys• Hoarding and fencing• Installation of working platforms• Setting up plant and equipment• Construction of muck bin• De-vegetation



12-month forward look

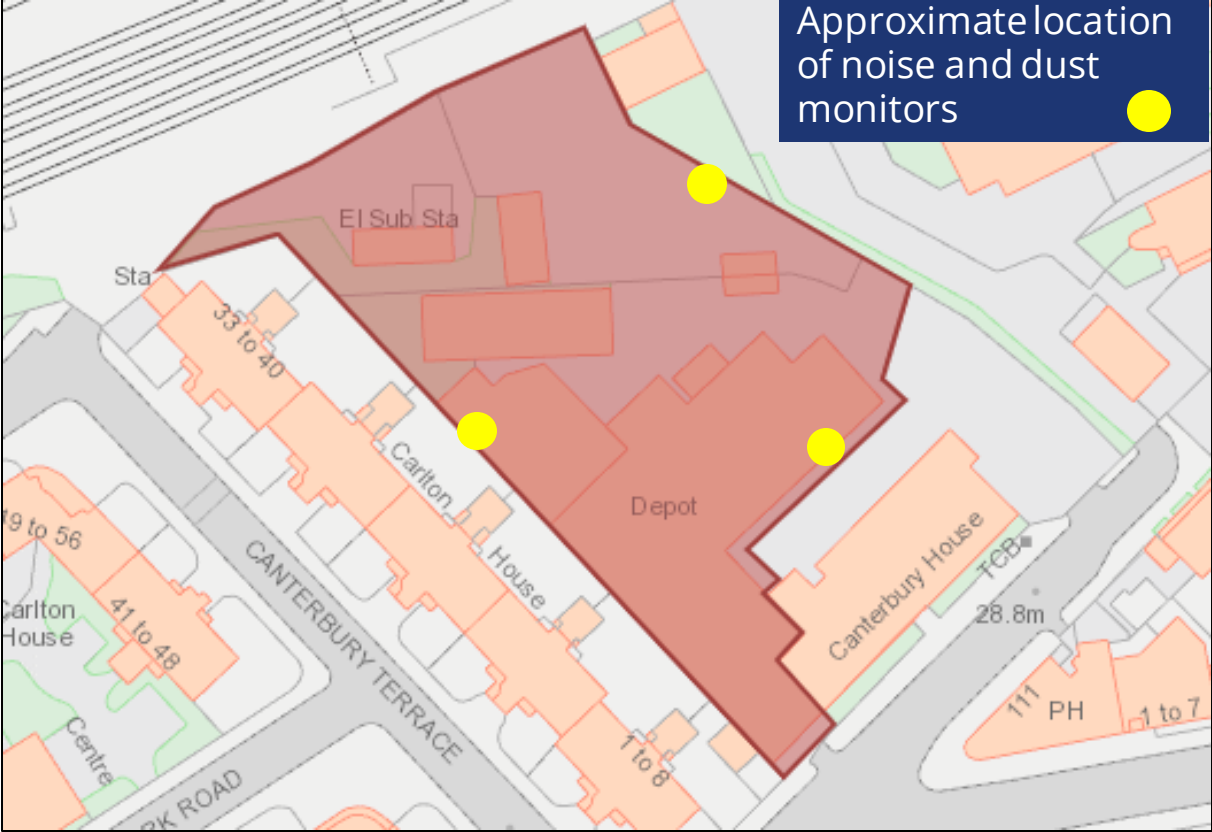
Duration of works	Description of works
Spring to summer 2021	Works to install permanent office and welfare facilities which will remain in place for the duration of our works at this site. These works will also include utility connections within the site.
Summer 2021 – summer 2022*	<p>Construction of ventilation shaft, which will include:</p> <ul style="list-style-type: none">• Sheet piling works• Excavation of the shaft and installation of concrete rings and sprayed concrete lining*• Construction of sprayed concrete lining adits (horizontal passages) for connection to the tunnels*• Excavation of the shaft to the base and construction of base slab and drainage <p><i>*Additional working hours will be required during these works.</i></p>



Measures to minimise disruption

Type of disruption	Measures in place
Noise	<p>Noise monitors located around site and vicinity to ensure that we keep to agreed levels</p> <p>Acoustic barriers used where possible</p>
Dust	<p>Dust monitors located around site and vicinity to ensure that we keep to agreed levels</p> <p>Water sprays/cannons where possible when commencing with work that may create excess dust (i.e. concrete breaking)</p>
Vibration	<p>A vibration monitor will be installed prior to the start of piling works on site</p>

We will continue to assess our working methods during our works to ensure we maintain good working practices and keep disruption to a minimum.



Find out more about works in your area

View our latest works updates

You can find out more about our ongoing and upcoming works at HS2inKilburn-Northolt.co.uk

Join our virtual drop-ins

From March 2021, we will be running virtual drop-ins where you can speak to SCSJV and HS2 staff. These will be held via Microsoft Teams. Find out more at HS2inKilburn-Northolt.co.uk

Contact us

You can contact the HS2 Helpdesk team all day, every day of the year on:

Freephone: 08081 434 434

Minicom: 08081 456 472

Email: hs2enquiries@hs2.org.uk

