

## 4 Options Study Summary

### 4.1 Overview

In order to arrive at a single masterplan arrangement that aligned with the aspirations and visions of the landowners and stakeholders, an assessment process was carried out. The following section summaries the process and outcomes of this process.

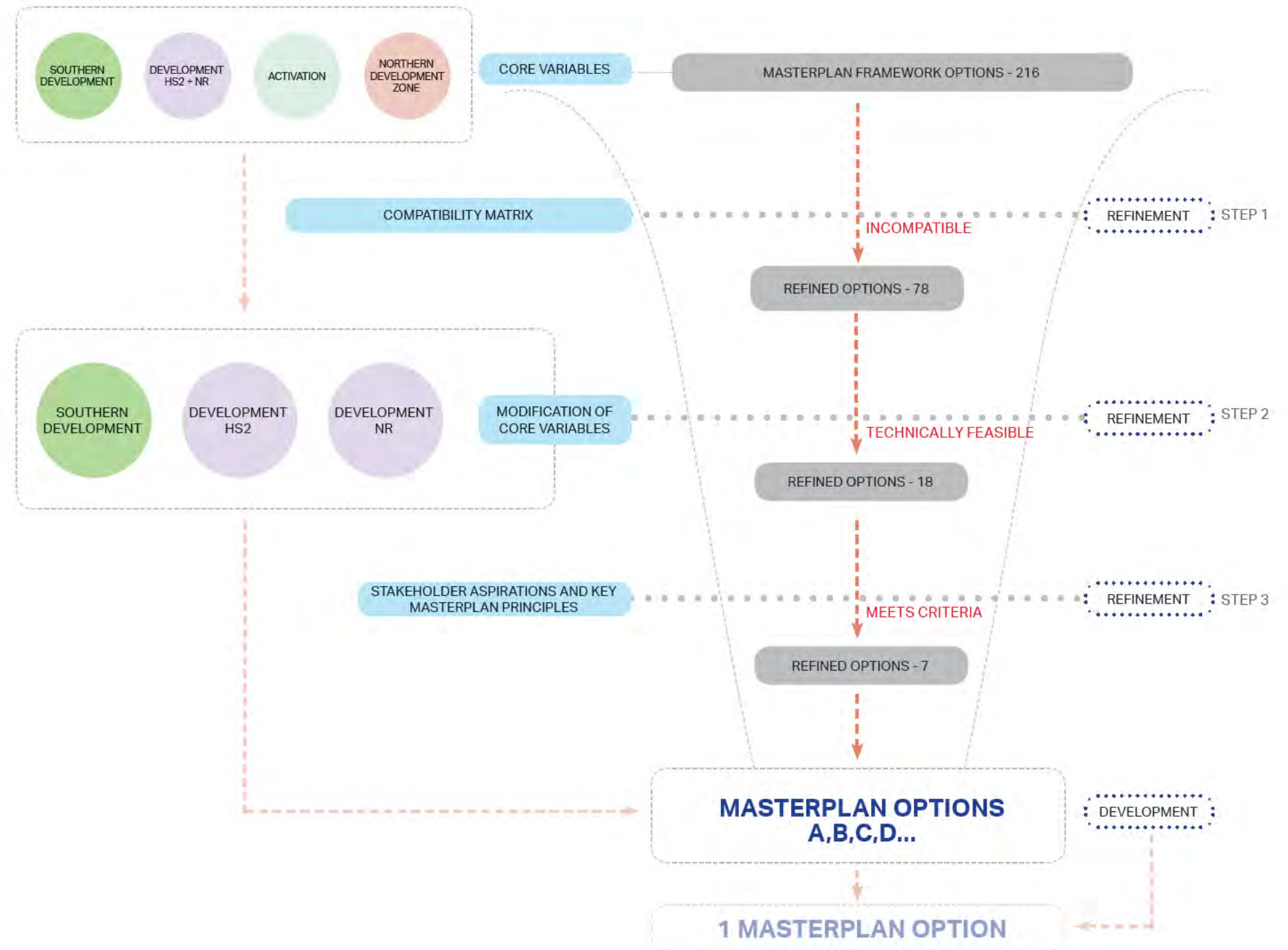
### 4.2 Assembling Options

The process of shortlisting the masterplan options can be defined by the list below. Landowners and stakeholders were involved in the process to ensure the objectives of all parties are realised. The baseline working assumptions was the common theme throughout all options.

The options considered public realm provision and location as well as development extents. These were considered the 'core variables' that had the most significant impact on the masterplan framework. All other 'sub-variables' such as buses and taxis were sufficiently space proofed during this process, and assessed after the preferred masterplan option was selected.

The core variables explored a minimum, medium and maximum development option and the associated public realm offering for the followings:

- Northern Development Zone over the station approaches
- Western Development Zone adjacent to Cobourg Street, above the HS2 station
- Southern Development Zone along Euston Road, including Euston Square Gardens
- Eastern Development Zone adjacent to Eversholt Street, above the NR Conventional Station



Options selection and compatibility flowchart illustrating the process of arriving at a single option masterplan

4.3 Shortlisted Options

The options outlined below explore development opportunities that seek to optimise the site’s development potential and make the best use of the new space above the station and approaches and regeneration of the wider area. These options considered the complex constraints of the site, such as LVMF views, proposed and existing infrastructure, as well as stakeholder requirements and vision,

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provision of public open space and the baseline masterplan working assumptions.

Seven options and one sub-options were agreed in July 2017 by the Euston Management Board, depicted diagrammatically below which range from ‘minimal development’ in option A to maximum development in option G

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## 4.4 Assessment Summary

The options were assessed against a range of criteria agreed by the stakeholders and landowners, including placemaking, planning, commercial viability, optimised interchange, technical, programme and deliverability and risk. For further detail on each options assessment refer to Appendix H.

### Placemaking Assessment

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e
- Reinstatement of Euston Square Gardens has the potential to create a grand entry sequence to the stations
- Reorientation of Euston Square Gardens has the potential to create a well defined and fit for purpose public space while enhancing legibility, permeability and a strong sense of place
- Increased development along the northern approaches strengthens connections to the northern communities and provides more public space opportunities
- **Perimeter development only (Options A-D)** does not optimise opportunity to provide a wider variety of land uses and public spaces associated with other options or the opportunity to provide activated connections associated with other options.
- **Development over all stations (Options E-E1)** optimises potential to connect existing new and existing communities, offers a variety of choice for station users and the public, a strong sense of presence and arrival to the development, a variety of land uses and contributes to 24/7 access and the cohesive development creates a destination in its own right.
- **Additional height (Options F-G)** has an overprovision of development which may require additional servicing potentially impact on traffic and streetscape quality. The excessive heights will potentially have an overshadowing impact on public open spaces

### Planning Assessment

#### Alignment with EAP:

- All options contribute to local economic growth and provide new jobs and homes
- All options provide new development and public realm around the station
- Options differ in the degree to which they meet employment and housing number aspirations
- Variety of land uses, contributing to 24/7 access

#### London Squares Preservation Act:

- Euston Square Gardens is a protected square and changing its configuration or location requires approval under the Act

#### High Speed Rail Act (2017)

- A number of elements of options sit outside of the LOD

#### Townscape and heritage:

- Perimeter only development massing needs to be considered given local townscape
- Over station development becomes a place in its own right
- All works to heritage assets that effect fabric or setting require justification
- All options challenge the LVMF corridors as the current massing will introduce a background element immediately behind St Paul's Cathedral in the Blackheath and Greenwich views

## Technical Assessment

All options are technically feasible although technical complexities increase A through G

- **Structures:** Increased structural complexities associated with building over tube and Crossrail 2 tunnels and decking over tracks
- **Ventilation:** Decking over options likely to preclude opportunities for natural ventilation within the station
- **Servicing:** Street level access required for all OSD options with additional servicing complexities associated with decking over options. Station servicing isn't a differentiator between development options. However the scale of development shall impact on flexibility of future station servicing and option G in particular may compromise grounding of the central building along Euston road.
- **Fire:** Decking over NR results in a subsurface station and will have significant implications on the station design
- **Utilities:** Options with significant uplift in development are not within future plans for utility companies. Likely to result in additional main sub-stations, pressure reduction stations and gas governors resulting in new constraints imposed on adjacent land.
- **Logistics:** Constructability challenges increase with each step change in development
- **Highways and traffic:** Increased development increases road congestion significantly

## Programme and Delivery Assessment

- Increased complexities and programme implications associated with development above the interior of the station
- Increasing OSD from mid to high rise creates a step change in construction complexity
- Design of full deck over B1 may require some RIBA2 redesign impacting on the design programme and possible station opening date
- Reorientating Euston Square Gardens will require a redesign of utilities. The potential impact of this is under consideration
- Agreement on building over B1, building height, and aspiration to reorientate Euston Square Gardens are required in 2017, in order to avoid delays in design and construction and the opening date of HS2

## Risk Assessment

Risk increases A through G (exception of E1);

- Planning – Alignment with local and regional planning policy and relevant Acts esp in respect of Euston Square Gardens and viewing corridors
- Programme risk increases alongside design and construction complexity
- Station operations – Construction over an operational railway impacts on station operations and services
- Construction impact – Managing logistics and impacts on local communities associated with multiple concurrent constructions
- Approvals and funding - Not gaining approvals or funding for redevelopment over t [REDACTED] Station or being able to successfully acquire [REDACTED]

## 4.5 Outcomes

Following the analysis, Option C scored highest. This option has been iterated, including aligning with elements from option E as below, to form option C1 - the Euston Stations Masterplan as depicted in this document:

- Perimeter development above the station on the HS2 and Conventional NR Station (aligned with masterplan Option C).
- Maximum development in the northern development zone over both the HS2 and NR approaches (aligned with Option E).
- Footprint of OSD on HS2 side to align with FSD scheme.
- FSD concourse and London Underground layouts.
- **Redacted under Regulation 12(5)(e)**
- Reorientated Euston Square Gardens



## 5 Surface Transport and Interchange Sub-Variables Study

### 5.1 Overview

A range of opportunities were identified early in the masterplan process for surface transport and interchange options. Following a series of technical reviews and stakeholder discussions the options were reduced in number to a shortlist.

A sub-variable shortlist mini-assessment took place with the stakeholders to consider the pros and cons of each option against the agreed masterplan evaluation criteria. The surface transport and interchange options depicted in the final masterplan take into account the stakeholder feedback, however do not necessarily represent a preferred option.

Base scheme requirements remain as per previous agreements at AP03 stage, subject to design development during RIBA 2 and into RIBA 3, unless and until alternative provisions are agreed by the necessary parties.

While all shortlisted options will be included within this report, the options do not represent agreed proposals for the relevant parties to proceed with. Agreed proposals would need to follow the standard statutory processes or formal decision or change control processes with NR or HS2. Moreover, the current HS2 design development has been considering surface transport provision in tandem to the masterplanning process, and represents the baseline, unless and until other requirements or provision is agreed.

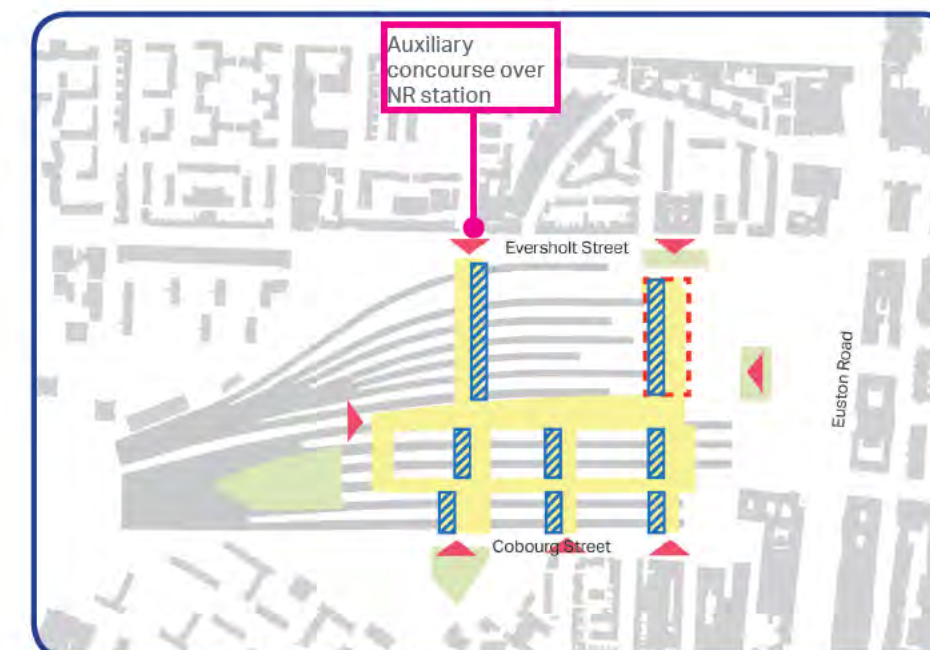
### 5.2 Concourse and People Movement

Ten concourse arrangements were considered as part of the initial opportunity studies, of which two options were taken forward into the sub-variable assessment. The shortlisted options took into account the emerging HS2 station design and options being considered by NR in feasibility work for the Conventional Station. The differentiation between the two concourse arrangements was the additional NR concourse over the centre of the tracks. The diagrams are simplified to illustrate:

- Entry and exit points to the station.
- Internal circulation space (unpaid).
- Paid concourse zones.
- Primary concourse areas, where relevant

**Selected Option 1 for depiction: Integrated concourse arrangement;**

- Whilst unfunded, better aligns with EAP objectives
- More challenging technically and with regard to programme/ deliverability
- Risk - should auxiliary concourse not be delivered – clarity required on who would deliver east-west link
- Option 2 (retain existing NR) – achievable but would not meet EAP objectives



Option 1: Integrated concourse arrangement (secondary auxiliary NR concourse)



Option 2: Retain existing people movement strategy (NR retains southern concourse with no secondary concourse)

#### Key

- |  |                                     |  |                   |
|--|-------------------------------------|--|-------------------|
|  | Station entrance                    |  | Paid Concourse    |
|  | Internal circulation space (Unpaid) |  | Public open space |
|  | Primary concourse                   |  |                   |



### 5.3 Crossrail 2 / London Underground

Six opportunities were considered for CR2/LUL interchange. The shortlisted options were refined to focus on entrances and surface level impacts.

Three options were taken forward cognisant of NR feasibility work and HS2 proposal for LU southern entrance

Option 1: Integrated LUL/CR2 surface strategy

Option 2: Retain current CR2/LUL surface strategy

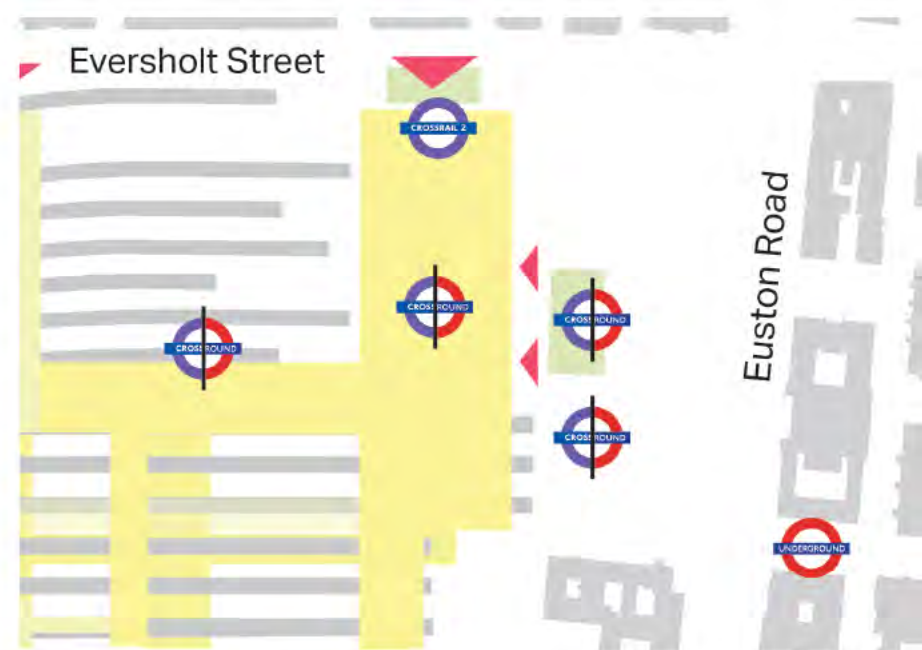
Option 3: Alternative dedicated eastern CR2 entrance

All options align with the current HS2 scheme. The diagrams were simplified to illustrate entry and exit points to the station and indicative vertical circulation points. The masterplan framework will also test the following variants:

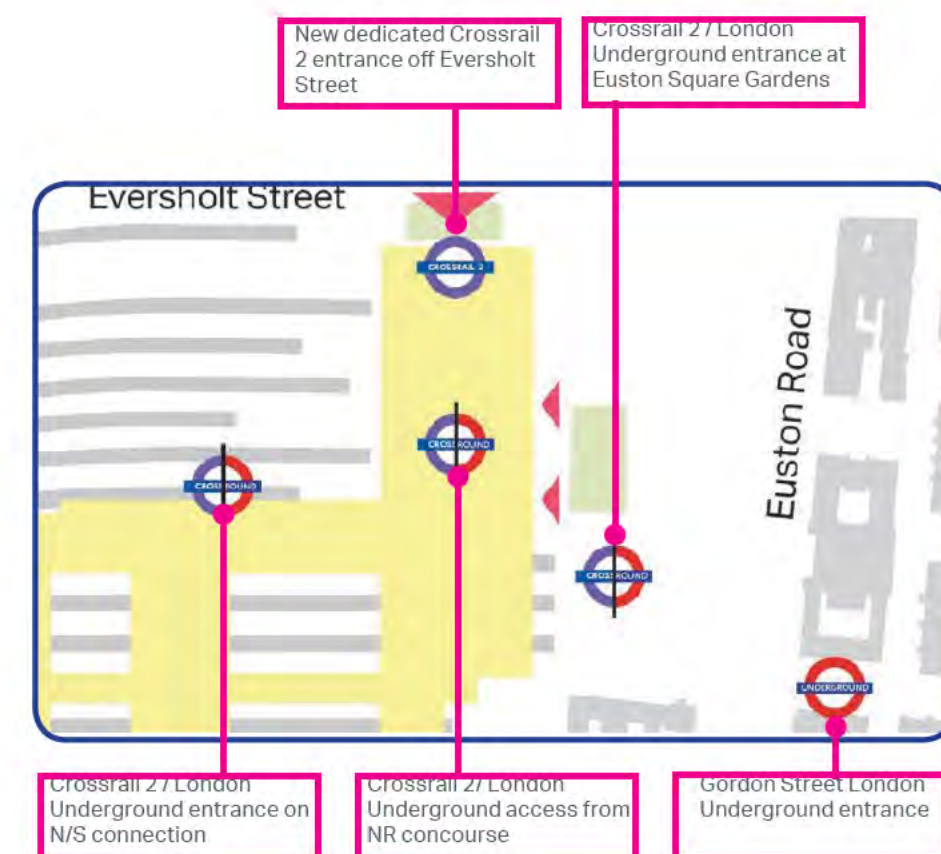
- No Crossrail 2 in the event that it is not approved;
- Retained NR station in which current CR2 and LU proposals will be illustrated.

**Selected Option 2 for depiction: Retain current Crossrail 2 and London Underground surface strategy:**

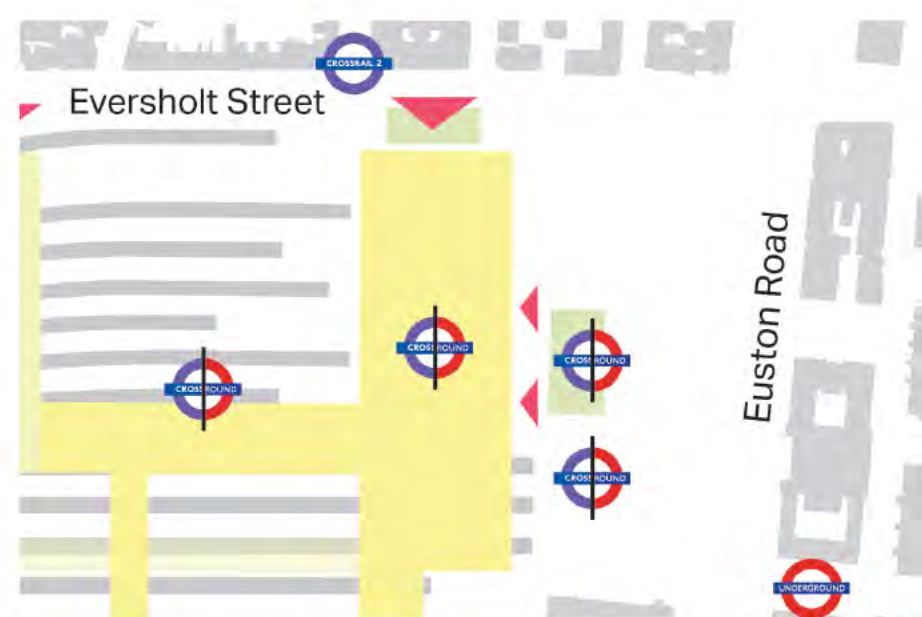
- Aligns with HS2 scheme, which provides external LU entrance in Stage A.
- NR feasibility work to inform option going forward.
- Phasing/constructability and below ground provision need to be considered.
- Further work is required to understand the impact of this Crossrail 2 option on the Conventional Station.
- Option 1 (integrated strategy) – issues regarding phasing/delivery of external entrances and cost implication
- Option 3 (dedicated entrance to east of Eversholt St) - concerns given impact on local residents, integration within wider station, impact on CR2 design and programme/phasing conflict.



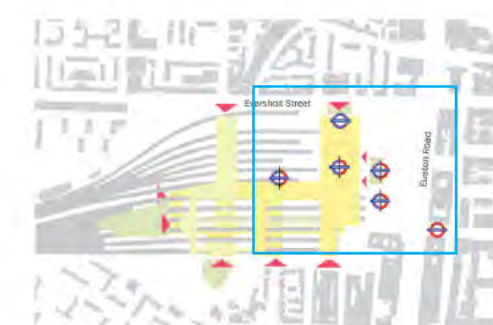
Option 1: Integrated LUL/CR2 surface strategy



Option 2: Retain current CR2/LUL surface strategy



Option 3: Alternative dedicated eastern CR2 entrance



Location Plan



Accepted

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## 5.4 Bus Strategy

The opportunity study resulted in six opportunities for bus stops and five opportunities for bus stands, primarily focusing the activity around the south-eastern corner of the site to suit existing bus routes. Taking into account the TfL surface transport presentation to ESB in July 2017 five options for the bus strategy were shortlisted for the sub-variable assessment, which considered the utilisation of the CR2 worksite.

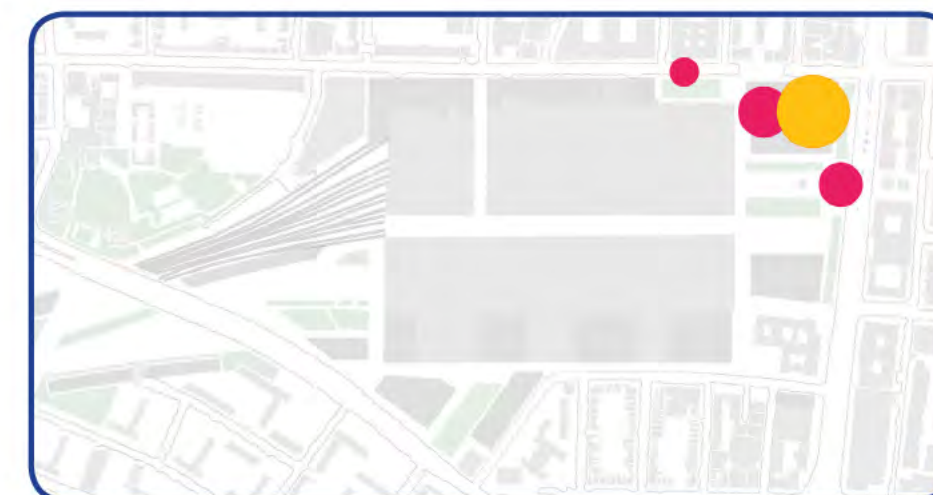
The shortlisted options include the linear bus arrangement in the current HS2 design, which reinstate the Euston Square Gardens.

**Option 2 selected for depiction – integrated station with through routes on Euston Rd & Eversholt St**

- Meets operational requirements, but requires further modelling to understand impact on public realm and highway
- Impacts on commercial viability of Block B. LBC/GLA concerns about interchange being a barrier and creating congestion. LBC consider dispersal of stops/stands may be more optimal
- Option 1 (fully integrated station) impact on public realm & congestion concerns
- Option 3 (additional stands in NW) would require additional driver facilities
- Option 4 (linear bus station) improvement on existing situation and carried forward if Euston Square gardens not re-orientated
- Option 5 (CR2 worksite) – potential impacts on residential amenity, delivery/phasing issues and impact on commercial viability of development site. Requires further consideration to understand feasibility. Potentially very promising



Option 1 - Fully integrated station in the south-east



Option 3 - Split interchange with additional standing at north-west location



Option 5 - Interchange facility at CR2 worksite

Option 2 - Integrated station with through routes on street



Option 4 - FSD design - Linear Interchange

### Key

- Bus stops
- Bus Stands

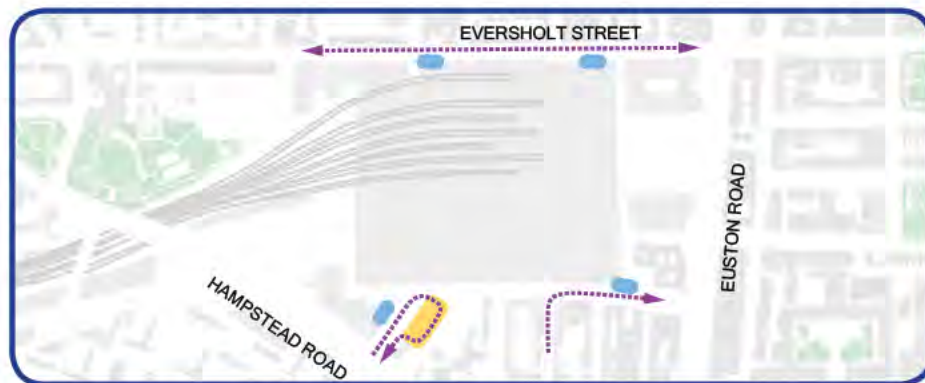


## 5.5 Taxi Strategy

Six taxi strategies were identified in the opportunity studies which were then shortlisted to align with FSD rank location on Cobourg Street with multiple set-down points around the site. The four options taken forward have varying rank provision of 15, 30, 45 or 60 ranked spaces with additional set-downs. The current HS2 taxis strategy adopts rank provision the same as proposed in AP03 scheme (rank capacity for 60 taxis). The current HS2 strategy also considers locations of pick-up, set-down and private hire spaces, whereas the masterplan only considers rank locations. Additionally, the masterplan arrangement shows the taxi rank located below a development plot.

### Option 3 selected for depiction – 45 ranks plus set-down

- Requires auxiliary NR concourse & need to consider way-finding
- Larger facility required to meet likely demand
- Concern about impacts on local residents from Cobourg Street set-downs
- Smaller rank would improve place-making potential, but increases waiting times, set-down points or informal hailing
- All options need consideration of operational management and impact on pedestrians and cyclists
- Risk – insufficient provision



Taxi strategy diagram

**Key**

- Set down
- Ranking bays
- Taxi movement

## 5.6 Cycle Strategy

The cycle opportunity study identified strategies for providing 2,000 cycle parking spaces as outlined in the HS2 Act, as well as the provision for an additional 500 spaces as stipulated by TfL. The strategy includes suggested locations for cycle hubs distributed across the site which offer a variety of parking options for passengers and visitors alike. The hubs could be enhanced with associated facilities, such as mechanics, lockers, showers and coffee shops. In addition, cycle hire, Sheffield stands are located around the site.

The masterplan depicts two enhanced north-south routes along Eversholt Street and Cobourg Street. In addition to the station generated requirement the OSD cycle parking requirements will be integrated into each plot. Further studies are needed to investigate opportunities to integrate passenger parking into station and to rationalise on-street parking to avoid clutter and impact on public realm.

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**Key**

- London cycle grid
- London friendly cycle routes
- Cycle route opportunity
- Cycle parking opportunity
- New cycle hire opportunity
- Existing cycle hire
- Entrance

## 5.7 Summary and Next Steps

Whilst masterplan considered alternative options to AP03 provision, these have been based on a certain set of assumptions, at a certain point in time, and are not necessarily exhaustive. They do, however, provide alternative technically feasible proposals which could be explored further.

Surface transport has a key interface with OSD and public realm and its provision needs to be considered carefully in order to maximise the potential to create a new piece of city and fantastic place that is appropriately serviced. Locating bus interchanges and taxi ranks under buildings is not an ideal solution from a development perspective, but space is a premium so they will need to be designed to a high standard and the interface between bus interchanges and taxi ranks and public realm also needs strong consideration.

Further work and next-steps can be summarised as follows:

### Interchange:

- Concourse options for the Conventional Station and the interface with the HS2 concourses and east-west links in particular
- The location for potential CR2 entrances and the interface with the NR

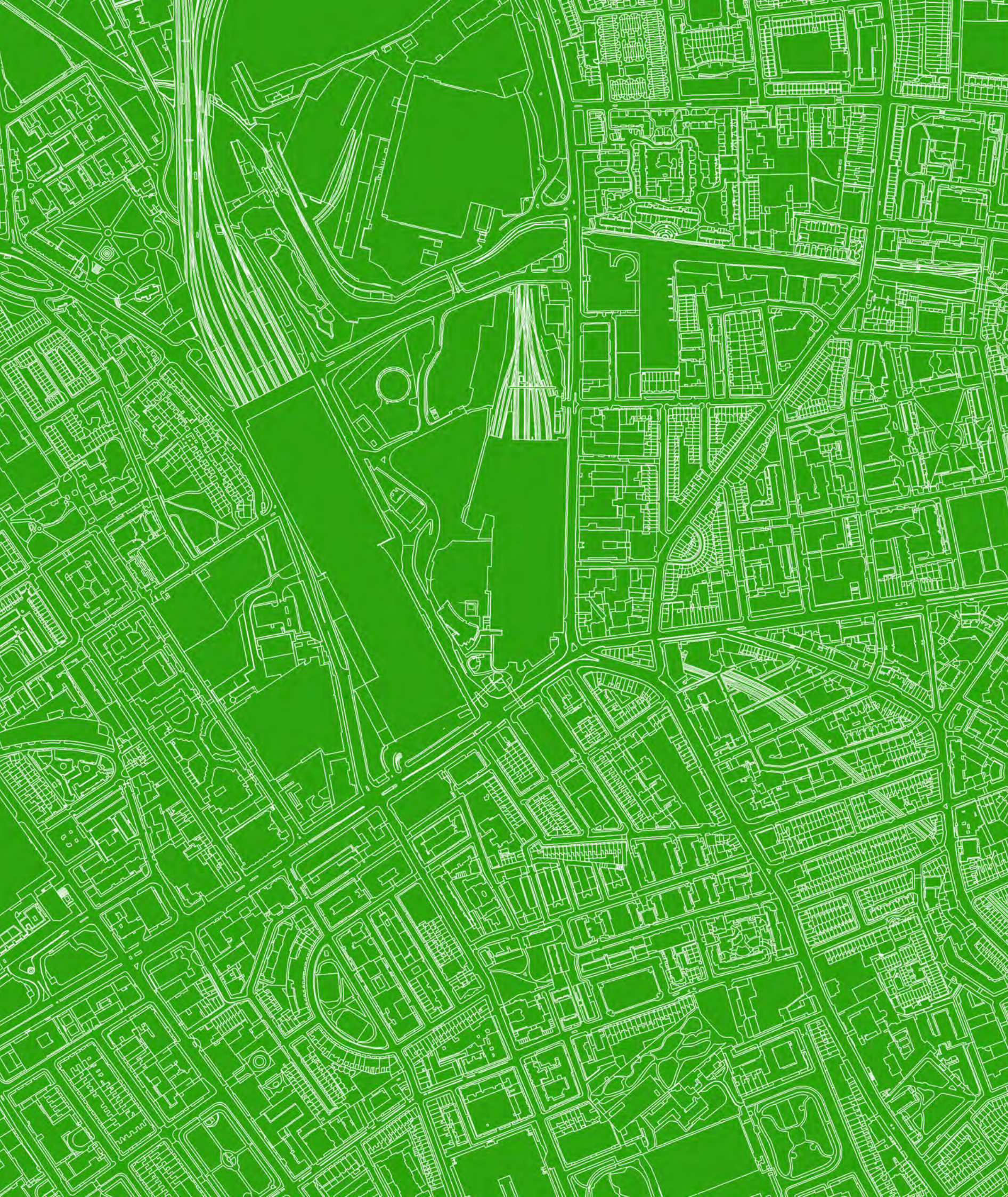
### Surface Transport:

- Bus routing in the future and whether alternate routing or provision could help to reduce standing requirements in particular
- The possible opportunity presented by the Crossrail 2 worksite for a bus interchange location
- Future possible taxi scenarios and optimal mix between distributed and informal and centralised and formal ranking
- Future cycling patterns linked to passenger profiling and cycle infrastructure to and from Euston









## Part E

# The Masterplan



# 1 The Masterplan

## 1.1 Overview

The Euston Stations Masterplan presents a once in a century opportunity to plan this central London neighbourhood into a vibrant piece of city and an industry leading station.

The five key principles, identified in the design process, played an integral part in developing the design of the masterplan and ensuring the vision of landowners, stakeholders and the surrounding community was realised. The masterplan was developed through a considered engagement and assessment process and takes into account a broad range of design aspects including placemaking, planning, commercial viability, optimised interchange, technical, programme, deliverability and risk.

The following section outlines the key components and features that make up the strategy. The images, drawings and diagrams depicted in this section should be read in conjunction with Part D for an outline summary of the additional opportunities that could significantly enhance the scheme.

Ground level plan illustrating the masterplan and the extent of the public realm around and within the station footprint.

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### 5 Key Principles

- 1** One station comprising of four stations, ensuring resilience for future operations and maintenance
- 2** Efficient interchange between all modes of transport
- 3** Improved legible public and open space for Euston
- 4** New active streets that provide easy, intuitive access as well as providing excellent north-south and east-west permeability
- 5** An optimised development strategy





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#### KEY FACTS AND FIGURES

- Circa 19,200 new jobs
- Circa 1,700 new homes
- Over 68,400sqm of public open space
- Over 450,000sqm of Gross Developable Area excluding station accommodation
- 22 new mixed use buildings

#### KEY FEATURES

- Activated station edges with perimeter development.
- Re-orientated Euston Square Gardens creating legible links.
- Improved network of streets throughout the new and existing surrounding neighbourhoods.
- New east-west and north-south links connecting across the station improving site-wide permeability.
- Development and parkland bridging across the Camden Cutting.

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- Phased delivery over the next 15+ years.



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## 1.2 A Flexible Masterplan

The Euston Stations Masterplan is a flexible masterplan. The masterplan brings together the vision and design framework established to present a plan for Euston. It seeks to support and complement the current station designs, aligning where scopes permit, and providing a plan for development that meets the landowners vision.

The plan brings together arrangements for development, public open space provision, intermodal transport connections and surface strategies and provides a supporting analysis for each of these. Over time the landowners may build upon this and consider further enhancements such as;

- Improved linkages across the site, including additional pedestrian and cycle routes, i.e.; bridging over busy roads instead of crossing at grade and outlining alternative opportunities for the realisation of these links.
- Realigning the Civic Heart facing on to Euston Road, to be centred on the wider axis of the Bloomsbury Georgian squares to the south. This alignment will vastly improve the presence of the new Euston station and associated development, and offer an opportunity to incorporate a new, reinterpretation or reinstatement, of the Euston Arch. This amendment would include relocating the existing Euston Lodges as well as the street level access to the proposed Crossrail 2 and London Underground.
- Increased opportunity for additional public open space in a variety of locations across the site including accessible terraces above the station footprint and planted decks over the tracks at the northern end of the site.



## 2 Development

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### 2.1 Overview

The sitewide development strategy is an integral part of establishing a sense of place for both the station and the wider Euston area. Several strategies have been developed which aim to achieve excellent design solutions include bringing Cobourg Street to Euston Road, creating an improved street address for the western developments, and reorientating the Euston Square Gardens to re-frame the public square, creating a fit for purpose space and increase the value of the Euston Road developments.

### 2.2 Land Uses

The masterplan land-use strategy results in a commercial led zone to the south, a blend of uses in the central zone and community and residential uses to the north. This approach is driven by factors such as:

- The surrounding neighbourhoods i.e. knowledge quarter, medical corridor, refer to the land use diagram in Part A.
- Euston Area Plan land use guidance, extract located in Part A of this report.
- Land use suitability illustrated in the Commercial Report.
- A comprehensive retail strategy will be a fundamental part of the Masterplan scheme, supporting unique and meaningful spaces, creating connections and drawing people in to the area.

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### 2.3 Area provision

The areas and massing arrangements illustrated within the masterplan have been agreed with HS2 Ltd as a baseline for developable area and represent the identified feasible development envelope for each plot. For a full list of qualifications and assumptions, refer to the Euston Stations Masterplan Appendix D, which was developed with specialist input from planning and commercial consultants. The adjacent diagram outlines the preliminary areas of each plot.





Cobourg Street view looking north with active edges (to the right) and shared surfaces for pedestrians and cyclists

## 2.4 Development Massing

The masterplan site has many challenges both above and below ground that inform the massing possibilities, as outlined in Part B of this report.

The masterplan development has been profiled by the above and below ground constraints, predominantly the LVMF. The intent is to not challenge any of the background, foreground or World Heritage viewing corridors. For a full analysis refer to the Planning, Place and Movement Report, which identifies a number of areas of concern which require further iteration and verification in the next design stage if this intent is to be carried through. Local townscape and heritage impacts also require more in-depth consideration and will potentially inform the final massing and development across the site.

The masterplan illustrates Plots T and V as being outside of the unified landholding zone. These have been included in the scheme as they add significant value to the masterplan. Plot T frames the approach to the western station entrance from the

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## 3 Character Areas

### 3.1 Character of Individual Areas

The masterplan extends over an approximate area of 34 hectares and borders a variety of neighbourhoods with diverse character offerings. The masterplan framework has been developed to draw from these areas and enhance and create new distinct nodes to complement the existing area.

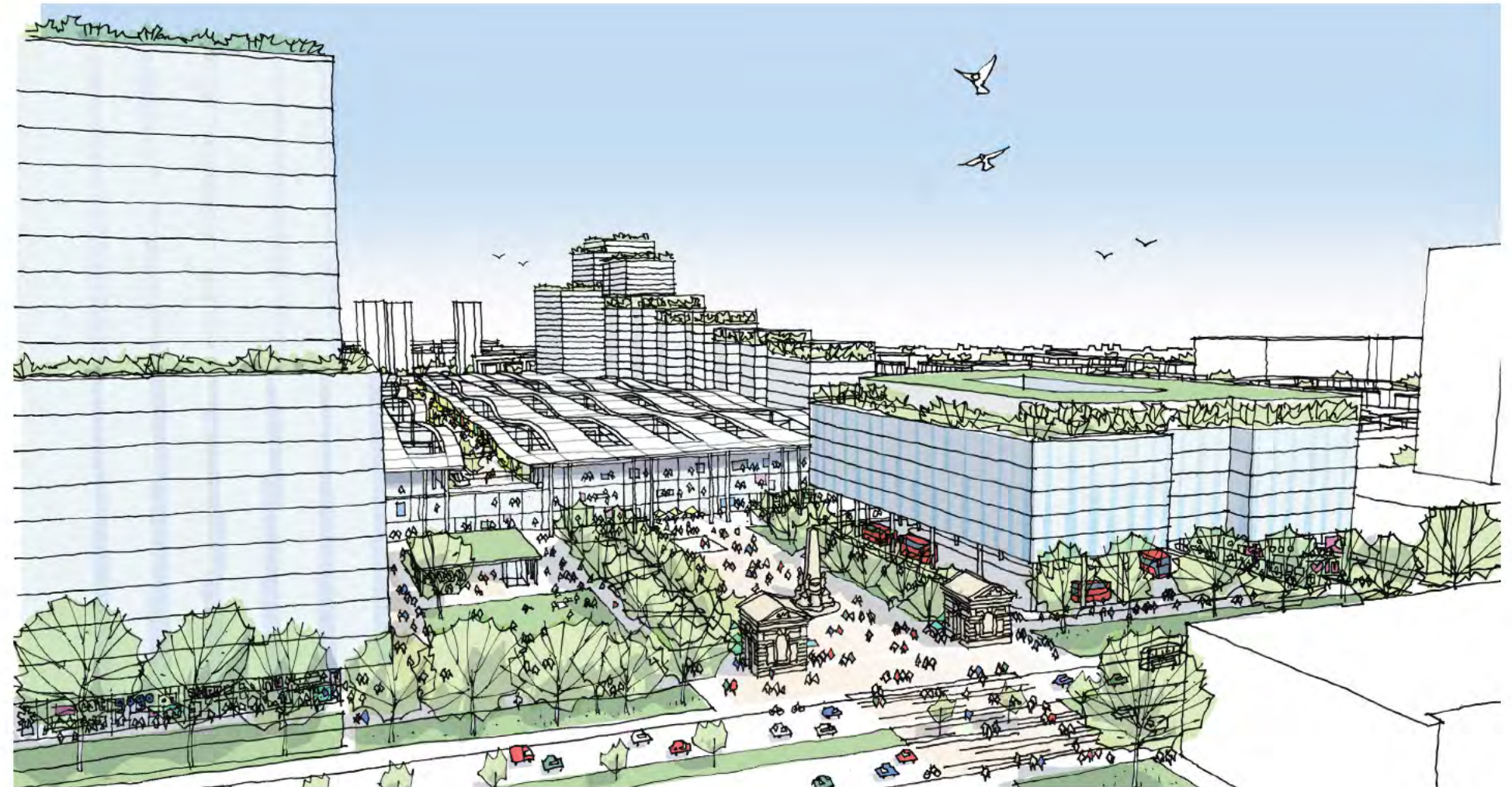
#### 3.1.1 Civic Heart

The southern square is an integral part of the masterplan, creating a vibrant and legible approach connecting Euston to Bloomsbury. The orientation of the square provides a fit for purpose centrepiece for the entire development. The square is framed with development to the east and west, with quality retail at its edges to encourage social and active spaces. Assets of historical significance, such as the Cenotaph and Euston Lodges, line the main station approach. The central space will address a rejuvenated Euston Road, bringing development to the front.

#### 3.1.2 Western Gateway

The Western Gateway is characterised by a cluster of mid-rise buildings of mixed-use surrounding a public space that serves as the western entry point to the station. This public space, which provides other facilities such as taxi drop off, builds upon the Robert Street connection to Regent's Park and frames the HS2 station. This is the primary station pick up and drop off point for all vehicular traffic, including taxis.

The entrance provides an anchor for the end of the green link along Robert Street to Regent's Park.



Civic Heart | Visual showing reorientated Euston Square Gardens with activated edges and a legible presence on Euston Road facing Bloomsbury to the south

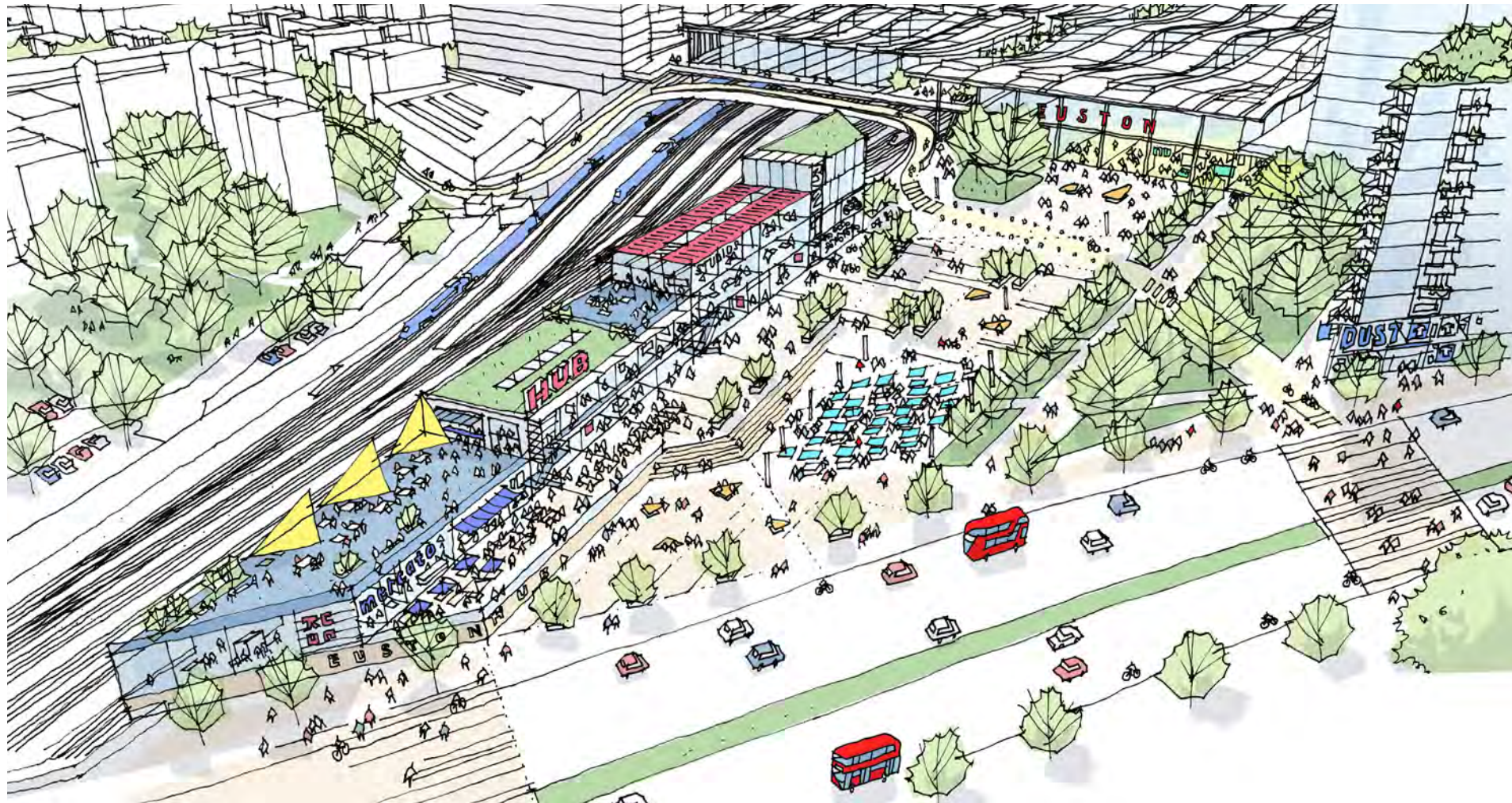


Civic Heart | Evening shot looking from the square approaching to the station



Western Gateway | illustrating the western approach to the station via Robert Street. There are additional opportunities to reduce the number of taxi ranks in order to provide a more generous public open space at the station forecourt.





North City Park | Image illustrating the opportunity for temporary and informal uses, such as pop up markets and events

### 3.1.3 North City Park

The North City Park provides a focal point for the community to the north. The southern side of this area is fronted by a new station entrance hall. By providing a large public space adjacent to this station, entry the link to Camden is strengthened and an area is created for temporary and informal uses, such as pop up markets.

Generous shared crossings are illustrated to facilitate a strong pedestrian connection link trough the northern park and beyond to Camden Town.

### 3.1.4 Commercial Corridor

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### 3.1.5 New City Street

Eversholt Street to the east is re-activated by building along its blank western edge. Retail will activate the ground floor, with commercial buildings above. The street is further activated with new station entrances and linkages across the station to the north, via the auxiliary NR concourse, south, and public routes across the station.



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New City Street | illustrating the entrance looking north -west up Eversholt Street and along the southern face of the station (left)

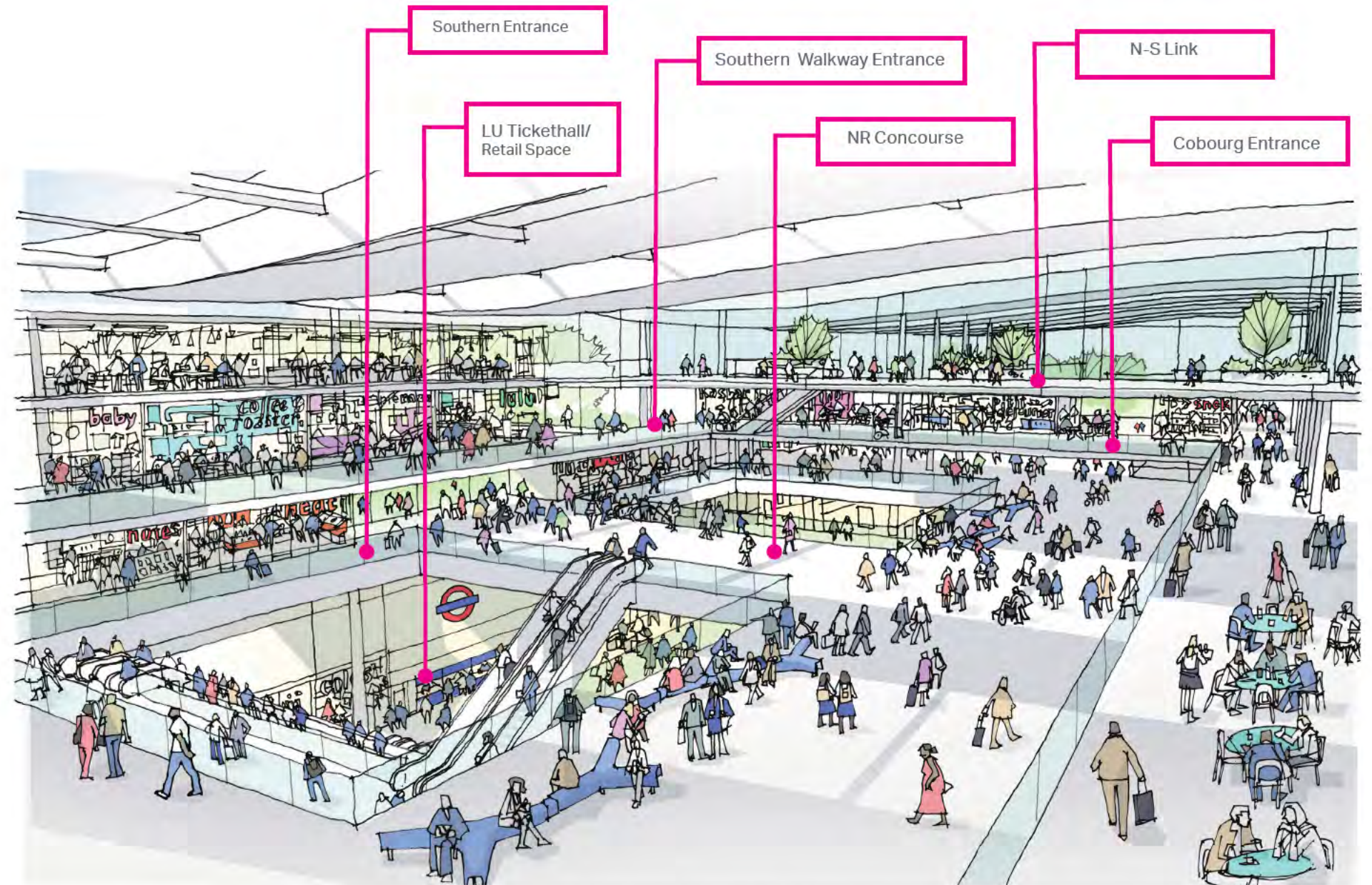


### 3.1.6 Parkland Community

The residential area to the north should provide quality residential apartments as well as strong green connections, both north-south and east-west. This will help strengthen ties not only between Euston Road and Camden but also stitching together two communities previously separated by railway tracks. Residential development should have a strong relationship with public open space and sustainable travel networks. Refer Commercial Viability report for details regarding affordable housing locations.

### 3.1.7 Activated Interchange

There is an exciting opportunity to re-imagine the interior landscape of the station by providing an extended public realm with a large light filled space, providing multi level activation and connection. It is a 24 hour space with good retail and access to the four stations on multiple levels.



Activated Interchange | Illustration depicting the activated interchange and triple height space which creates clearly visible links, assists wayfinding and legibility

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Parkland Community | A linear park illustrating pedestrian links north to south and east to west



## 4 Heritage and Culture

### 4.1 Euston Square Gardens and Heritage Assets

The intention of the Masterplan is to create a new part of the city, which recognises the historical development of the area within it is located and is integrated with its surrounding historic areas, including Camden Town to the north, Regent's Park to the west, Bloomsbury to the south and Somers Town and King's Cross to the east. Historically the pedestrian experience of the station has been focussed on the approach from Euston Square Gardens and the Masterplan seeks to resolve the current townscape weaknesses of this space, which have arisen over time.

Euston Square Gardens today include only the northern part of the original early 19th century Euston Square, the southern part having been developed in the 1920s and 30s.

The masterplan restores the central part of the gardens, improving the context of the Grade II listed lodges, the Grade II\* listed war memorial and the non-designated war memorial lamp-posts. It proposes to retain mature trees on the southern Euston Road boundary and re-instates the listed original railings to provide an appropriate boundary. It moves the Grade II listed statue of Robert Stephenson to its original position between the lodges, providing it with a more appropriate setting and allowing it to contribute to the axial formal approach to the station, lost in the 1960s, but re-provided by the proposals.



View 1. Opportunity to reinstate the Euston Arch within the Civic Heart with Cenotaph in foreground

The central part of the gardens would be enclosed on the west and east sides by way of substantial new buildings, reducing the visual relationship between the green space and the historical development beyond the gardens.

The re-orientation of the gardens to accommodate the two new buildings and the loss of trees, will give rise to harm to their significance, but there is the potential for this to be balanced by the benefits of the restored and landscaped central space. These benefits include the significant provision of usable space; the re-establishment of the formal route through to Euston Station; the pedestrianisation of the route and removal from it of buses; and the associated improvement in the setting of the war memorial, lodges, war memorial lamp posts and railings, which would be better appreciated in their context. The masterplan also includes the re-instatement of non-designated heritage assets moved during the HS2 works in appropriate places within the gardens and station. These include the Eduardo Paolozzi 'Piscator' sculpture and various commemorative plaques.

For further information and a detailed analysis on the masterplan approach to heritage and culture refer to the Place Planning and Movement Report. The below offers a summary of the approach in Euston Square Gardens and the various heritage assets.

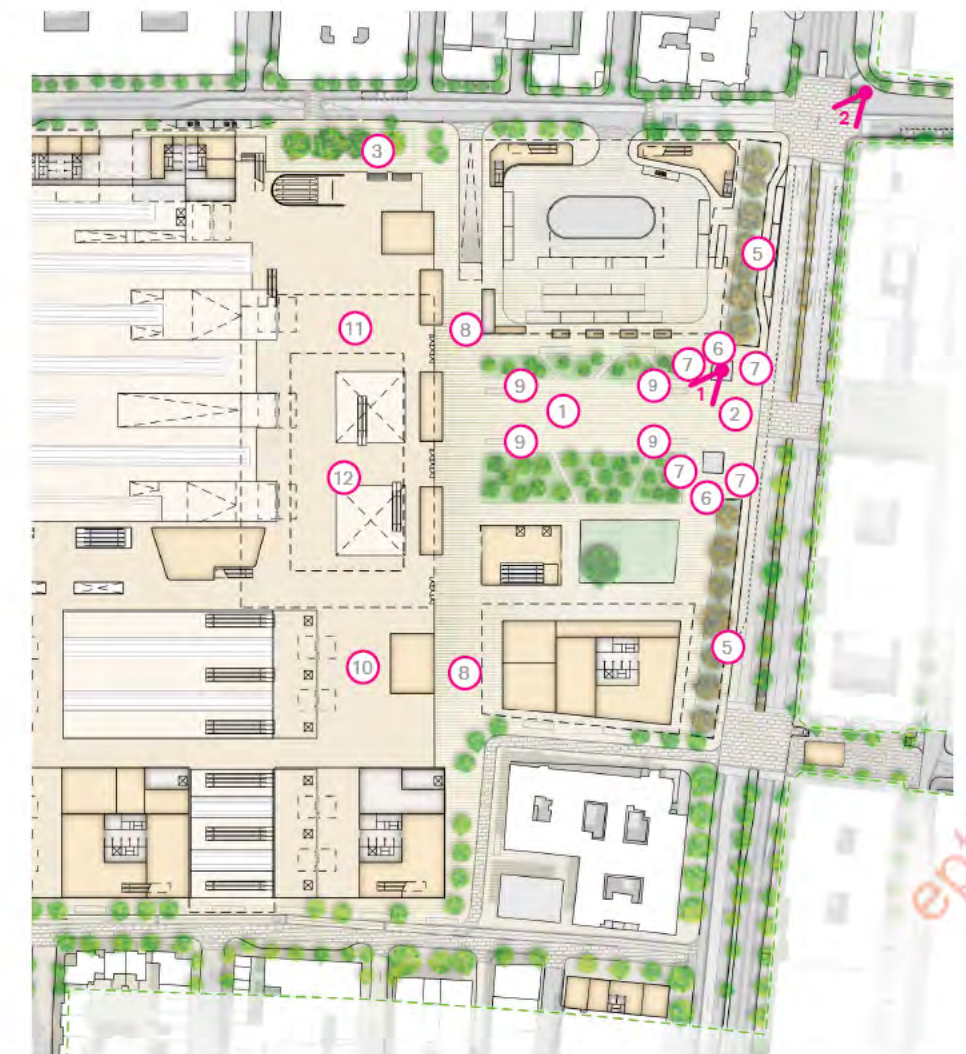


View 2. View of Euston Square Gardens from St Pancras Church

#### Key

1. War Memorial
2. Statue of Robert Stephenson
3. Piscator Sculpture
4. Statue of Captain Flinders (Moved to Northern Entrance)
5. Railings Around Euston Square Gardens
6. Euston Lodges, Walls and Underpass
7. 20th Century War Memorial Lamp Posts
8. Silver Jubilee Walkway Plaques
9. Four Stone 'Time Benches' With Stone Paving
10. Plaque to Asqish Xavier
11. Plaque to Lance Corporal John Alexander
12. Plaque to Public and Railway Workers

NB: There is also an option to scatter remnants of original Euston Arch around planted areas of the Gardens



Plan showing potential locations of Heritage Assets around the Civic Heart to the south of the site



## 5 Public Space

### 5.1 Landscape Strategy

#### 5.1.1 Masterplan Concept

The masterplan explores the key opportunities to connect the new development to the surrounding neighbourhoods and communities. The landscape and public realm concept is inspired by the context and the varied character of the existing surrounding open spaces: The interesting transition of character from the city grid and civic qualities of Bloomsbury in the south to the more fluid and informal spaces moving northwards to Camden. Developing northwards over the rail tracks opens a fantastic opportunity to create a new north - south link in the form of a linear park that can connect to Regent's Park and lock in with surrounding streetscapes along its length, providing a key piece of green infrastructure for this part of London.

#### 5.1.2 Open Space Strategy

The strategy has been developed to ensure that the focus is on creating a quality public realm and landscape where residents, workers, visitors and those passing through Euston are within a reasonable walking distance of different open spaces of varying scale and character.

Underpinning the landscape and public realm proposals is the ambition to;

1. Creating landscape and open spaces of real value; a positive structure and layout, good provision of facilities, excellent access and movement and a synergy with the surrounding built form and a quality tree legacy.
2. Creating a hierarchy of public spaces; a mix of gateway spaces, green streets and open spaces of varying character with a community park running through the heart.
3. An emphasis on connectivity; to create a successful mix of streetscapes and spaces that respond to the wider context and hierarchy of scale and use.
4. Retaining existing assets; wherever it is feasible and desirable within the proposed masterplan and its objective, it is a prime aspiration to retain and protect existing trees on the Site which contribute positively to the masterplan and a new planting strategy.



Landscape Concept Diagram

5. Providing for well-designed places where people feel safe and secure; where there is a sustainable and cohesive community.

A review of existing open spaces combined with an understanding of the wider connections between these spaces has enabled the development of a typology that responds specifically to the requirements of the proposed masterplan as well as the surrounding context.

A hierarchy has been proposed that provides a variety of civic gateway spaces around the four primary entrance forecourts to the Stations. Each Station Forecourt will have its own distinctive identity, enhanced by attractive paved surfaces and co-ordinated detailing and landscape elements including seating, feature lighting and planting to create a particular character and help to channel views and create focal points.

#### 5.1.3 Station Forecourts

The station forecourts will be of varying size dependent on location and intended use. Some of the spaces will incorporate new and/or existing trees that will help define their character and scale, and add to the vitality and attractiveness of the place. The Forecourt spaces will create inviting visual and physical connections into the various Stations.

At the heart of the proposed masterplan is a new linear park that spans the length of the masterplan linking Regent's Park to the north with Euston Square Gardens to the south. This will be a community park for the people of Camden and those living, working and/or visiting. It creates a continuous green thread that weaves its way over rail infrastructure and the Stations. It links important existing and proposed east-west connections and reinforces the network of streets and open spaces across the masterplan and beyond.

This major park will be complemented by smaller, more intimate open spaces and pocket parks distributed across the masterplan providing something for everyone, new residents and existing wider community.



Illustrative Masterplan Landscape Concept



Yorkville Park, Toronto | Spaces to meet



Queen Elizabeth Olympic Park, London | Linear Park



Neo Bankside, London | Roof top Amenity Space



King's Cross Granary Square, London | Civic Spaces with formal trees



New Road, Brighton Shared Street | Shared street



Hyde Park, London | Jogging and cycling in the park



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#### 5.1.4 Other Landscape Considerations

There are a variety of key considerations for a successful masterplan landscape strategy, summarised below. For further detail refer to the Planning, Place and Movement Report.

##### Play and community Provision

Play is placed at the heart of the Masterplan proposals to encourage the creation of happy and cohesive communities where children are welcomed into the urban environment.

The allocation of play space will ensure that there is a range of accessible play options across the entire Masterplan where appropriate. Elements of play are not only considered within the new residential areas to the north but also along the linear park and Euston Square Gardens. Providing a mix of play spaces around the streets, will help them become places, rather than just thoroughfares.

Community productive gardens are also provided within the linear park to give the opportunity for local community to explore the possibilities of urban farming and getting in touch with nature and the land.

##### Tree Strategy

The proposed tree strategy aims to create a landscape structure based on retention of as many of the best trees as possible/practical, enhanced with extensive new tree planting of varying character, sizes and species. Due to the extensive works (above ground and underground) around St James Gardens and Euston Square Gardens there will be a number of established trees that will require removal. The tree framework is based around retaining as many of the best existing trees and enhancing these with new tree planting where appropriate.

New tree planting will form an integral part of the tree strategy, providing added identity and depth of character to the Masterplan. New tree planting will aim to extend the tree canopy across and through the scheme as well as to surrounding areas, complementing and enhancing the existing tree structure.



Existing trees at Euston Square Gardens



Oxford Brookes University | Raised planters increase soil depth and create places to sit



Bryant Park, New York | Urban Parkland, places to sit



University of Sheffield, London | Rain gardens



Bundesplatz Zug, Switzerland | Signature tree



Ryerson Urban Farm, Toronto | Community productive gardens



Community gathering space



## 5.2 Public Open Space Provision

An important consideration when providing a significant quantum of development and regeneration of an existing area is to provide an appropriate level of public open space, that is both policy compliant and appropriately sited within a given context. The adjacent provision diagram illustrates the quantum of public open space provided within the masterplan scope boundary. Additional opportunities for increasing this provision is outlined in Part I of this report.

There is currently a shortfall of Public Open Space (POS) as part of this option. The proposal provides a significant amount of POS across the site and some adjustments to the bulk and massing of the proposals will need to be made in response to townscape and heritage impacts which are likely to reduce the overall floorspace of the proposals and reduce the POS requirement further. As such, it may be possible to meet the POS following these further refinements, however if not, a payment in lieu of any shortfall could be explored if there is no potential to provide additional POS on the site and subject to overall scheme viability. AP03 is considered the benchmark for the levels of re-provision and any expansion on the s106 payments and fact this does not discharge the need for LBC planning permission.



Euston Square Gardens illustrative section | Offering a significant amount of public realm

### Public Open Space Requirements by Land Use

- Existing public realm (Euston Square Gardens and St James) 20,012sqm
- Public realm requirement associated with residential development 29,985sqm
- Public realm requirement associated with commercial development 9,247sqm
- Public realm requirement associated with hotel development 11,371sqm
- TOTAL public realm requirement associated with site wide development 71,366sqm

Required public open space based on quantum of development. Refer Plot Analysis Report in the Appendices for further detail

Opted



## 6 Linkages

### 6.1 Overview

The masterplan enhances the existing road network by improving streetscapes, upgrades to existing public realm, providing new 'green routes' and activated street edges. New links are designed within the station footprint to stitch into the existing network of streets to create a highly permeable Euston area.

The adjacent diagrams illustrate how additional east-west and north-south connections for pedestrians and cyclists have been incorporated into the design to ensure clear and convenient routes are embedded in the scheme though and around the station.

This sections illustrates the links through a series of walkthrough visual studies.

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#### Pedestrian Linkages Key

- Primary Existing Pedestrian Routes
- Secondary Existing Pedestrian Routes
- Primary Unpaid Pedestrian Routes
- Secondary Unpaid Pedestrian Routes
- Vertical Connection
- Surface Transport Interchange
- Entrance

#### Cycles Key

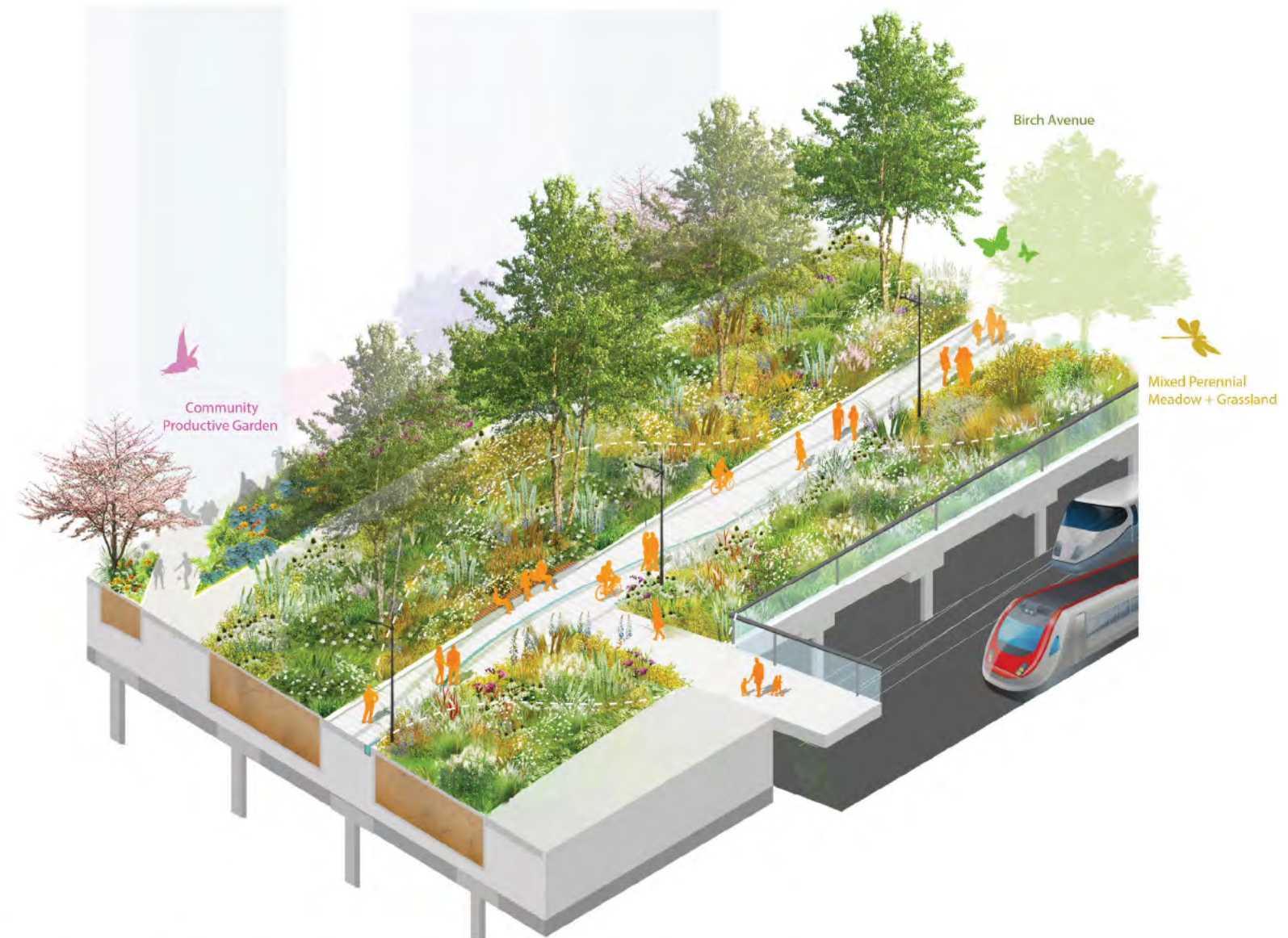
- London Cycle Grid
- London Friendly Cycle Routes
- Cycle Super Highway Opportunity
- Cycle Route Opportunity
- Cycle Parking Opportunity
- New Cycle Hire Opportunity
- Existing Cycle Hire

Exploded axonometric diagram illustrating the pedestrian linkages across the southern end of the site with level change nodes highlighted





North-south green spine illustrative run across the top of the hub building. The spine offers an alternative route across the vast station footprint, encouraging dispersal, with opportunity for Food and Beverage (F&B) to further active the link



Linear park illustrative cross section running through the residential lead northern development zone



Queen Elizabeth Olympic Park, London | Linear Park example of how the northern park could be activated



Sketch looking south along the north-south link | Roof activated terraces adjacent to the OSD commercial plots



Highline, New York | Elevated City walk surrounded by buildings and over existing infrastructure



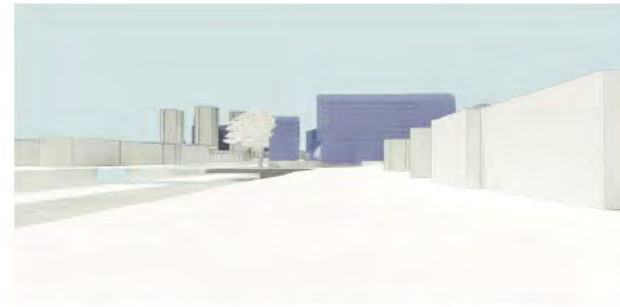
## 6.2 North – South Walkthrough

There are numerous pedestrian route choices when travelling from Bloomsbury in the south to Camden in the north. The following section looks at three of these key routes; through the station footprint, along Eversholt Street to the east and Cobourg Street to the west of the masterplan site. The key links are:

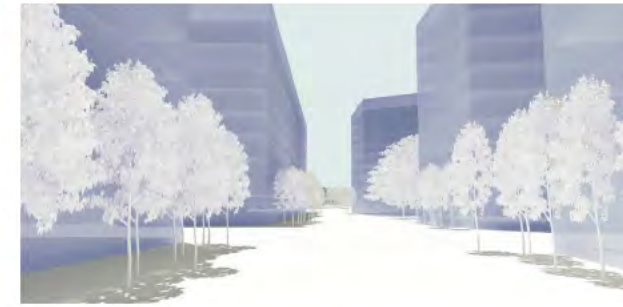
- North-south link from Bloomsbury to Camden, through the station
- Cobourg Street
- Eversholt Street

### Primary North South link from Bloomsbury to Camden

The north-south pedestrian link is bound by both the HS2 platforms and the Conventional Station. The street offers a variety of activities as well as acting as a vibrant thoroughfare for both station users and non-station users. The retail hubs have broken up into small masses to allow for clear visual connections across both stations to aid passenger way-finding.



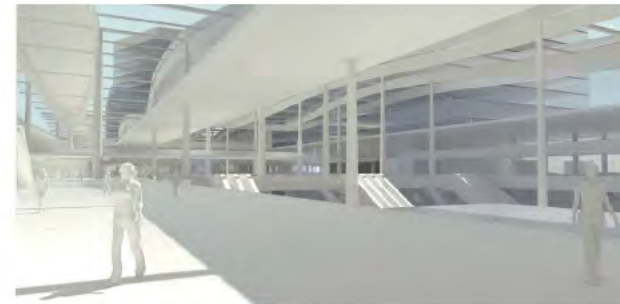
01 | Northern approach along Park Village East



02 | View through northern development zone



03 | Station entrance from north garden plaza



04 | Concourse looking south



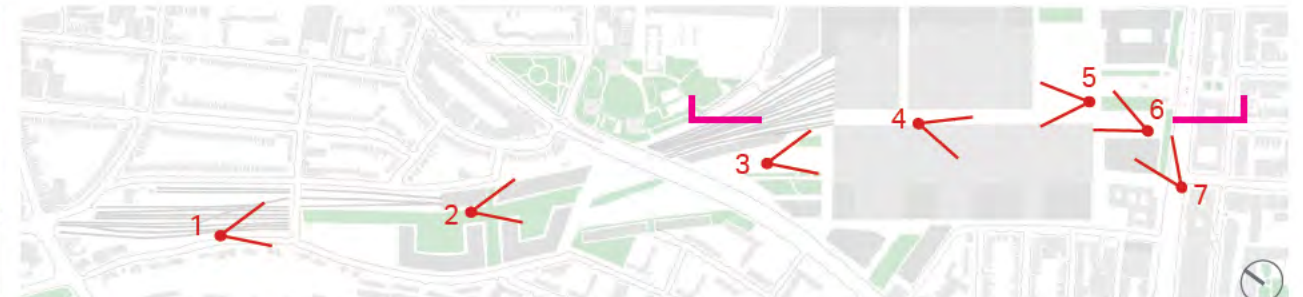
05 | NR concourse looking north



06 | Looking north from Civic Heart



07 | View of station across Euston Road from Gordon Street

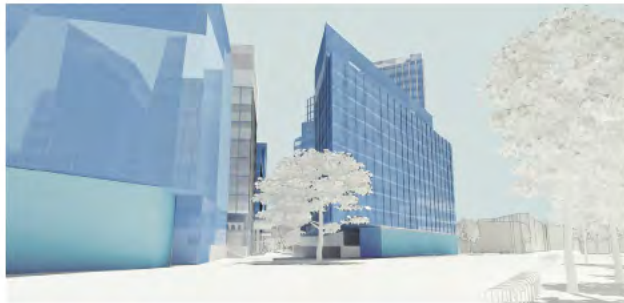


Key Plan



North-south section through the multi-level pedestrian link





01 | View south down Cobourg Street from Hampstead Road



02 | View of western entry (on left) from north with taxi rank beyond on right)



03 | Looking north at corner of Cobourg Street with Taxi rank on the left and station on right



04 | Looking north at intersection of Cobourg Street and Drummond Street



05 | Looking north at intersection of Cobourg Street and Euston Street



06 | View of Cobourg Street from Euston Road with Royal College of General Practitioners on right



Key Plan

### Cobourg Street

Cobourg Street will be a shared surface, prioritising cyclists and pedestrians, with restricted access to service vehicles and emergency vehicles. **Redacted under Regulation 12(5)(e)**  
**Redacted under Regulation**



01 | View north across Euston Road and down Eversholt Street from Street Pancras Church from Upper Wolburn Place



02 | View north up Eversholt Street from eastern entrance



03 | View north of intersection at Eversholt Street and Phoenix Road



Key Plan

### Eversholt Street

Eversholt Street will be a vibrant street scape, activated on one edge by a new offering of retail and office lobbies and on the other by existing local businesses.



04 | View south down Eversholt Street



### 6.3 East – West Walkthrough

In addition to the external street network improvements, including Euston Road, Euston Street, Hampstead Road, the masterplan provides three primary east-west links through the station. To the south of the platforms Doric Way is connected to Drummond Street at grade. Further north a link has been created from Robert Street through to Phoenix Street. The key east-west links include:

- Drummond Street and Doric Way
- Phoenix Street and Robert Street
- Euston Street



01 | View east from Cobourg Street



02 | View east from rear of Royal College of General Practitioners



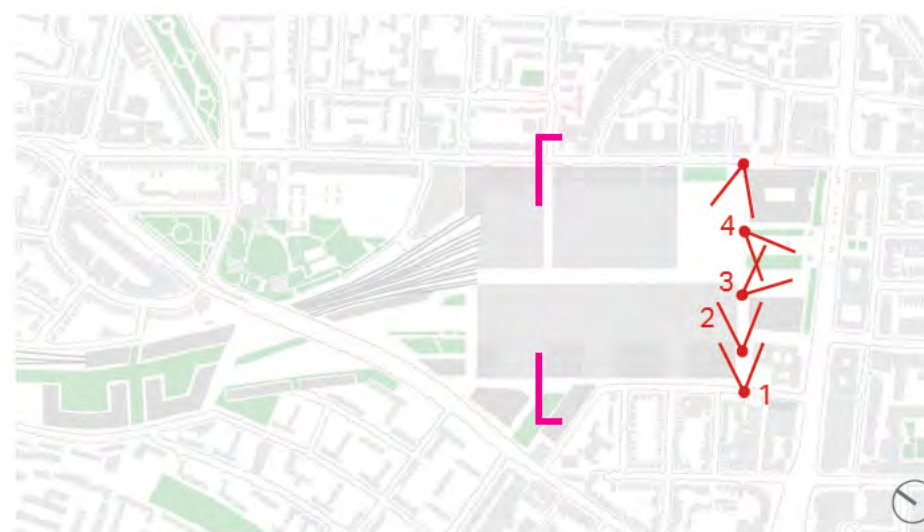
03 | View east from primary southern entrance



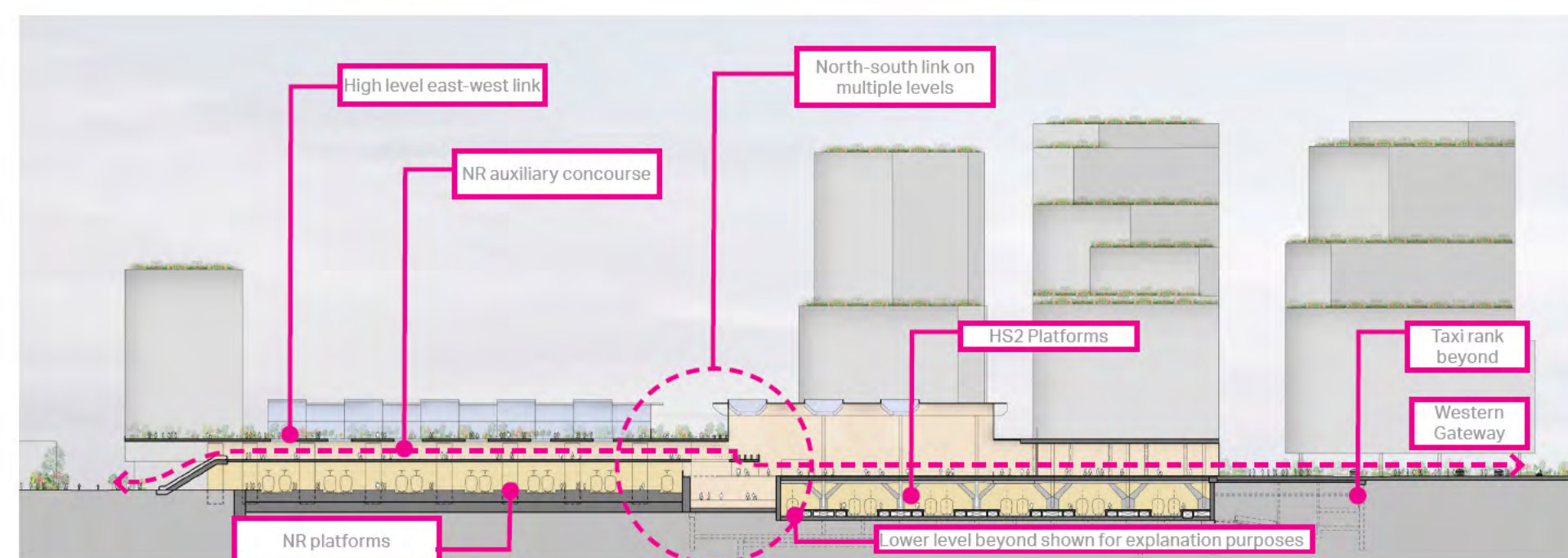
04 | View of Civic Heart from corner of bus interchange



05 | View from Eversholt Street of pedestrian link across front of station

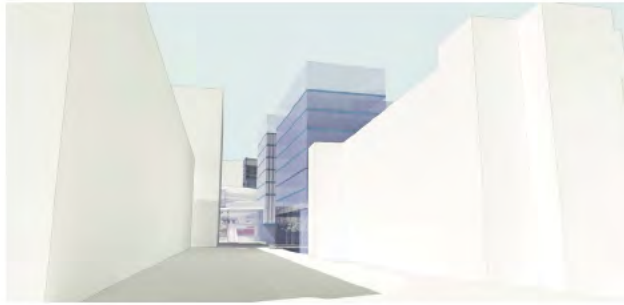


Key Plan | Euston Street Journey

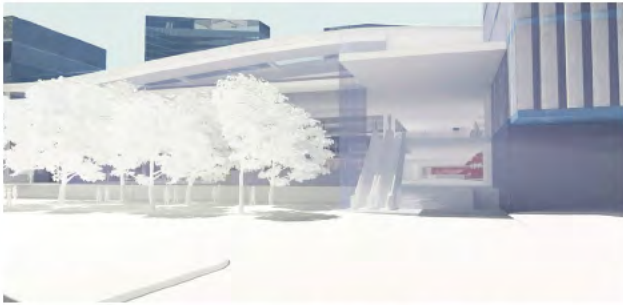


East-west section through the NR auxiliary concourse and the HS2 central concourse illustrating east-west links pink dashed

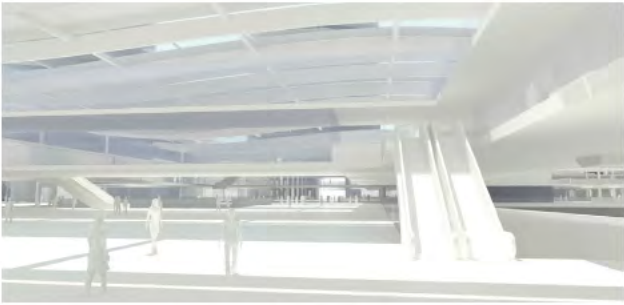




01 | Looking west down Doric Way



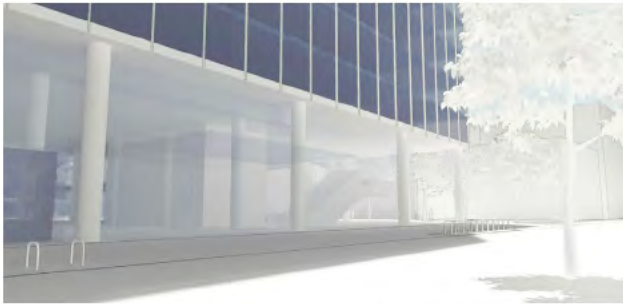
02 | View of Eversholt Street entrance from Doric Way



03 | Looking west towards HS2 from NR concourse



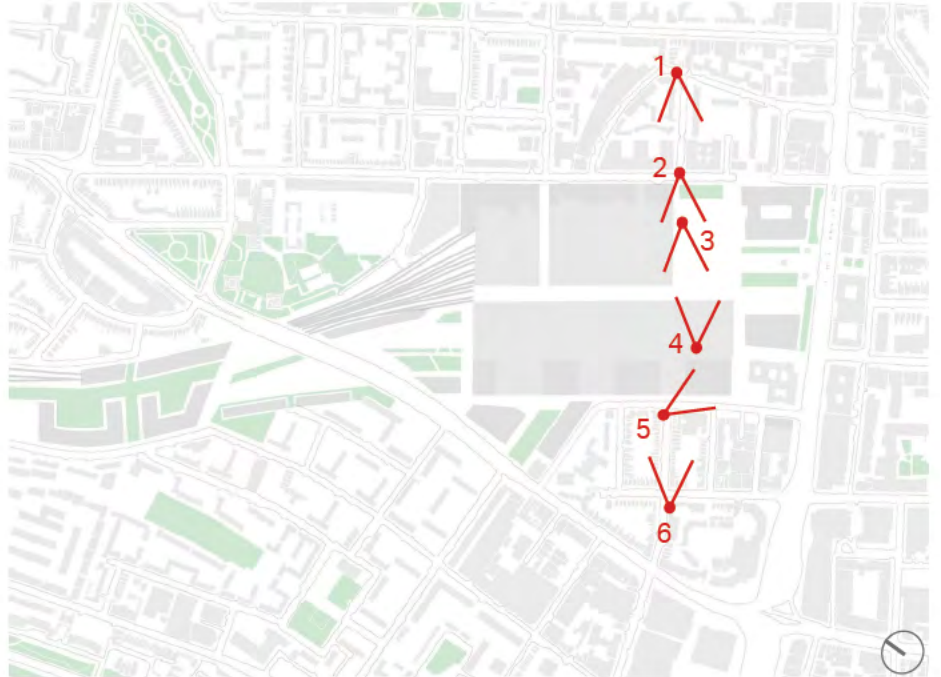
04 | Looking east from HS2 southern concourse towards NR



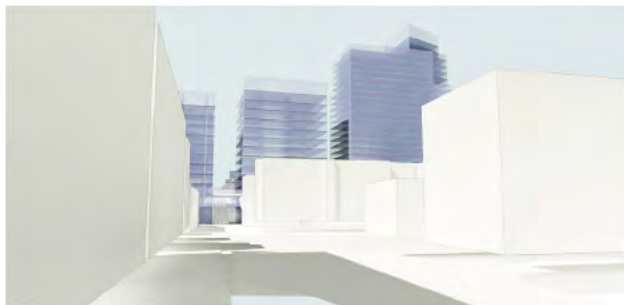
05 | View of Cobourg Street entrance from Drummond Street



06 | View east at intersection Drummond Street and North Gower Street



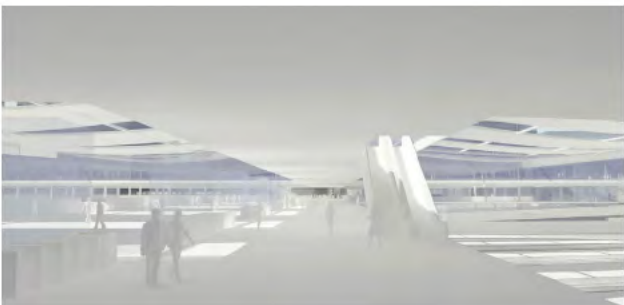
Key Plan



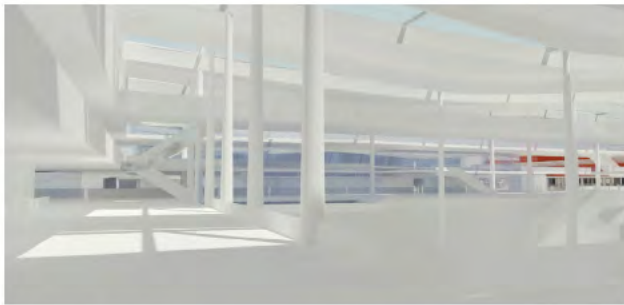
01 | Looking west down Phoenix Road



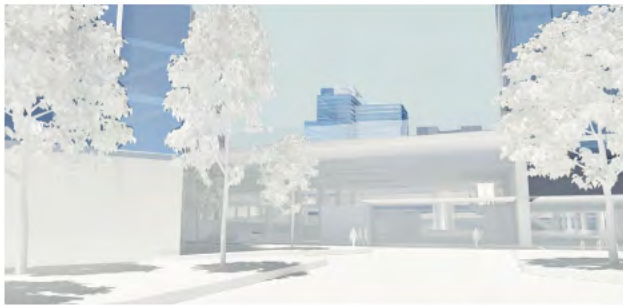
02 | View of entrance to east-west at intersection of Eversholt Street and Phoenix Road



03 | View from NR auxiliary concourse looking west



04 | View from HS2 concourse looking east



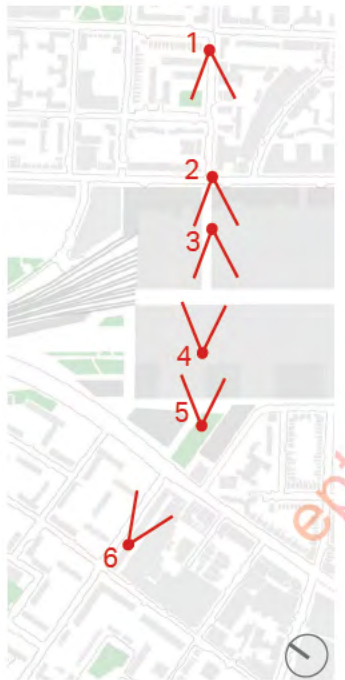
05 | View of western entrance from Western Gateway



06 | View of Western Gateway from corner of Robert Street and Hampstead Road



07 | Looking east down Robert Street



Key Plan



## 7 Optimised Interchange and Surface Transport

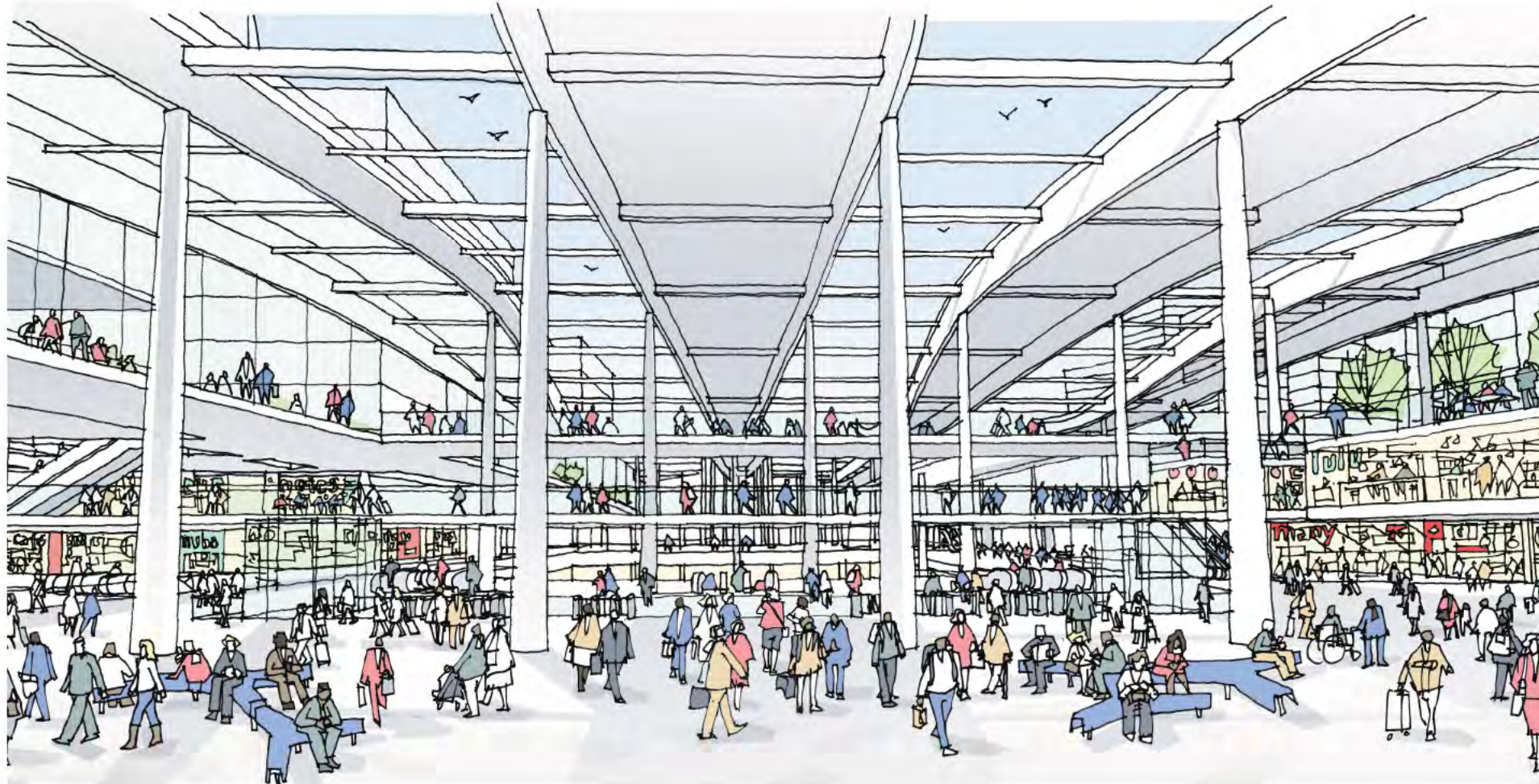
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### 7.1 Overview

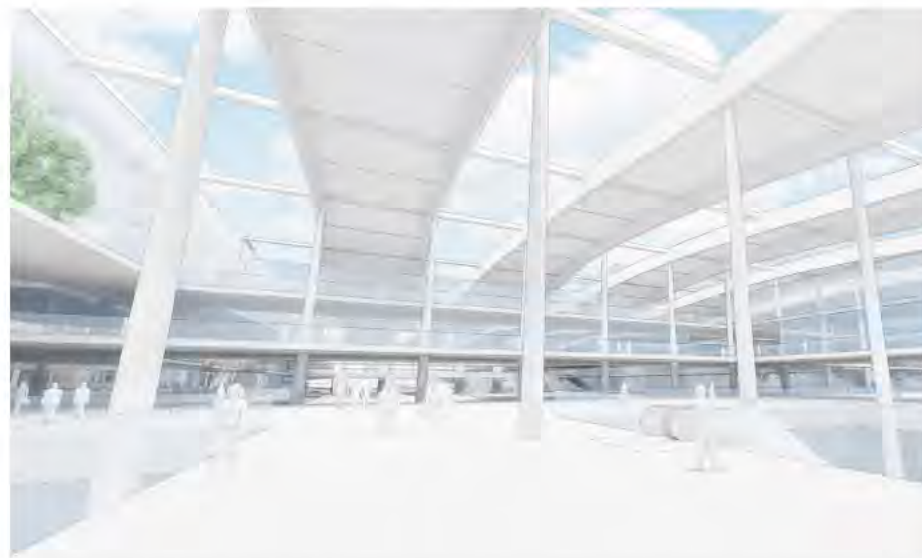
Essential to the masterplan framework is the arrangement of the interchange and the surface transport strategy, ensuring minimised journey times, intuitive way-finding, presence and strong sense of arrival. For further detail refer to the Place Planning and Movement Report.

An interchange that facilitates seamless connections between multiple modes of transport





Activated Interchange looking north from the southern entrance



Internal view from southern entrance showing triple height void to below and above (on the left and right)

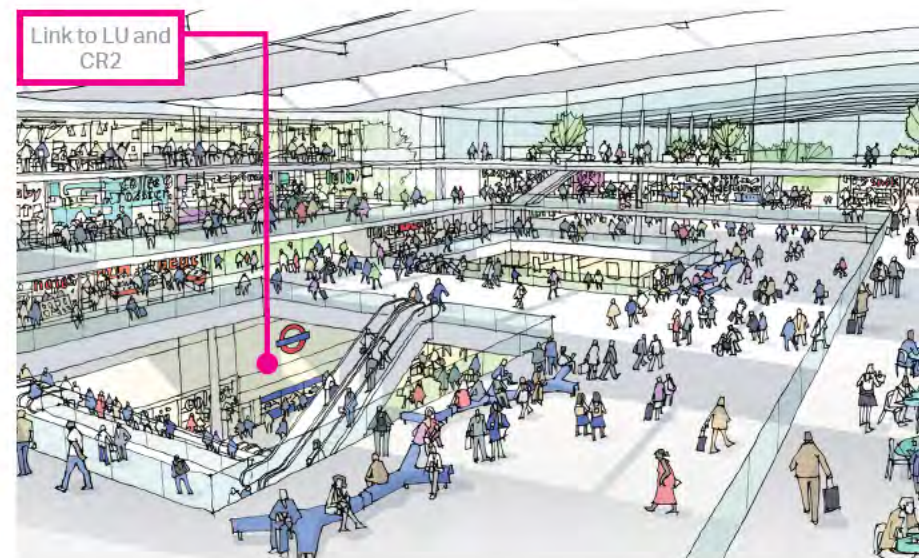
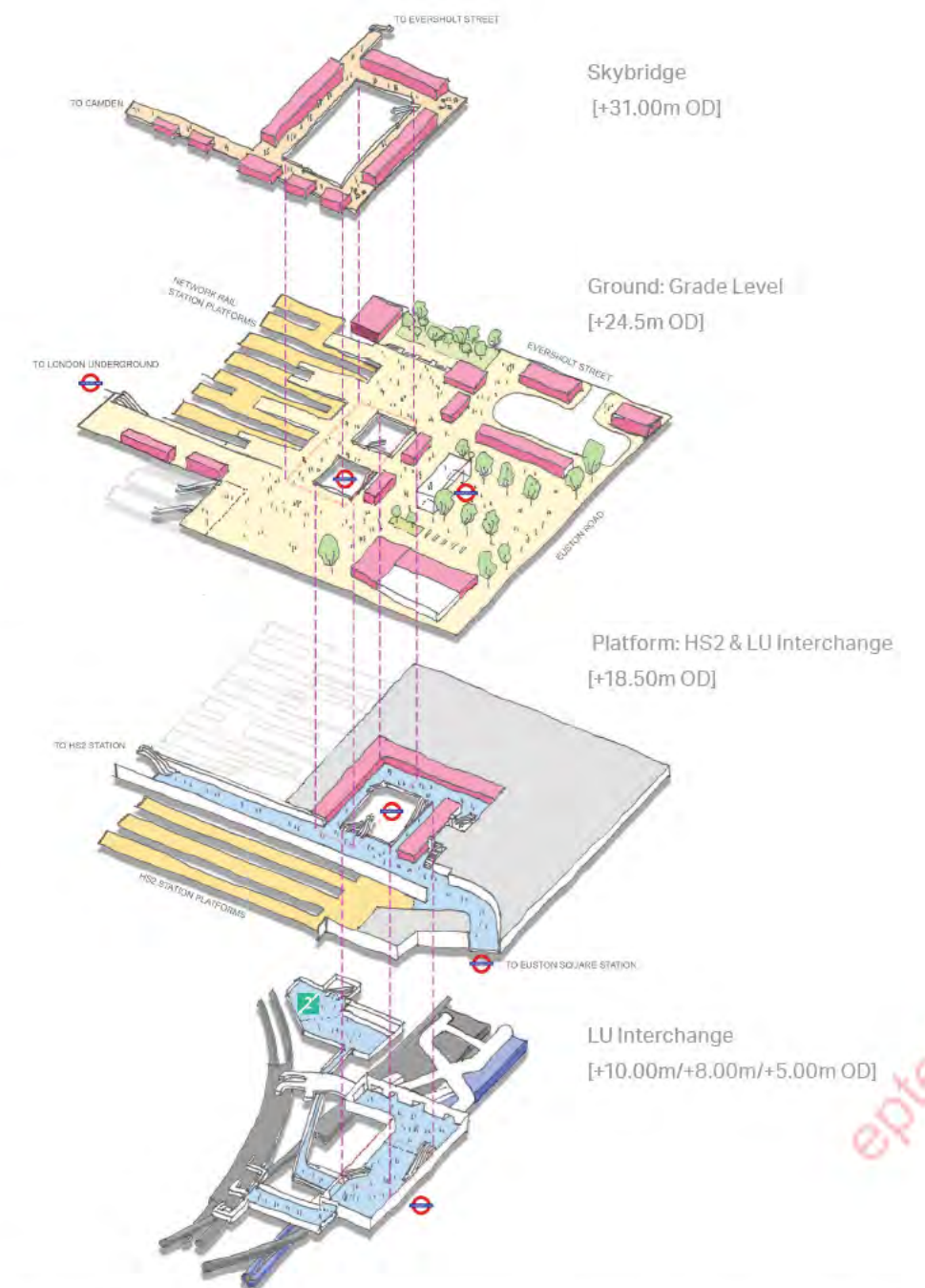


Illustration depicting the activated interchange and triple height space which creates visible links, assists wayfinding and legibility

## 7.2 Southern Interchange (LU/CR2 Connection)

The southern interchange boasts a triple height ticket hall, activated on all edges with retail. This design feature allows for strong visual connections between the numerous level changes required to navigate the London Underground from the Conventional Station concourse.



Axonometric Diagram Of London Underground Vertical Connection. The space also utilises an otherwise redundant existing carpark which was previously proposed to be left untouched in the AP03 'Act Scheme'.



### 7.3 Activating the Interchange

The interchange is a lively and sociable environment for passengers and non-passengers to utilise, with a continuous thread of retail, public realm and facilities stretching from the wider masterplan area, into the station interior.

The Civic Heart in the south is activated around the edges and flows into a lively station with an internal circulation street network supported by pockets of retail. Towards the north, bookending the station, there are opportunities for community uses to be created in the North City Park.

The Hub, running north-south between NR and HS2, contains a variety of retail and station accommodation that forms an active frontage to the stage B1 north south street. The Hub consists of two levels – concourse and upper level. At concourse level ticketing is located in a central location for ease of access.

The massing of the Hub is defined by three pavilions set apart to create a series of dwelling spaces. The design vision is to create permeability along the east edge of the station by breaking down the building form into a series of smaller pavilions that engage with concourse level.

The upper level is configured to allow for future east west permeability through the NR station by a series of strategically located vertical connection points.



View from internal hub upper level down to HS2 platforms and tracks - improving visual connections



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Key	
<span style="display: inline-block; width: 15px; height: 10px; background-color: #ff6b6b; border: 1px solid #ff6b6b;"></span>	Station retail
<span style="display: inline-block; width: 15px; height: 10px; background-color: #90ee90; border: 1px solid #90ee90;"></span>	Development associated retail
<span style="display: inline-block; width: 15px; height: 10px; border: 2px dashed #4682b4;"></span>	Markets, pop-ups, community uses





View looking south across the HS2 platforms



View from southern HS2 concourse looking north



Lower level Internal north-south link connecting HS2 platforms to LU and CR2

### 7.4 HS2 and NR

The HS2 and Conventional Station concourses and people movement zones occupy a significant footprint of the overall masterplan site. The HS2 concourse is bound to the west by Cobourg Street and can be accessed from multiple entry points.

The NR Conventional Station has a primary concourse located towards the southern interchange, with direct access to the London Underground ticket hall. An auxiliary concourse sits above the NR tracks mid-way down the platforms which can be accessed via Eversholt Street or the central north-south route. The HS2 station concourse seamlessly feeds into the NR primary concourse in the south, creating a large unified space.

The NR station benefits from an ancillary concourse. The existing platform access ramps in the south are congested during peak periods. A secondary means of accessing the platforms would improve platform clearance times and reduce train loading times. The concourse sizes have been determined from the resultant analysis and predictions for 2041 and 2041 plus a 20% uplift in demand to account for future increases in passenger loads. Forecasts suggests that the existing NR concourse would need to be 2.5 times larger than the existing to accommodate future demand.

Concourse Sizing			
	Existing	2041	2041 + 20%
Network Rail	1,800sqm	4,500sqm	5,400sqm
HS2	HS2	4,400sqm	5,300sqm

Number of Tracks			
	Stage A	Stage B1	Stage B2
Network Rail	18	13	13*
HS2	6	11	11

\* Subject to Network Rail station redevelopment strategy and track realignment



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## 7.5 Surface Transport Strategy

### Highways

The masterplan proposes a number of changes to the surrounding street network, focused on improving pedestrian, cycle, bus and taxi accessibility to and from Euston Station. Firstly it is important to highlight that Euston Station and the associated OSD will adopt the principles of a 'car-free' development. Car-free developments are supported by the National Planning Policy Framework, Mayor of London's Transport Strategy, London Borough of Camden and TfL.

Euston Station is one of the most accessible locations in central London by public transport, walking and cycling and therefore is an appropriate location for car-free development. Car-free development (and the removal of the existing underground car park) will minimise the developments impact on the surrounding road network.

Enhancements include:

- Wide, signal controlled shared surface crossings, accommodating pedestrian desire lines and encourage walking and cycling
- Greening along Euston Road is also encouraged, including the median strip, to minimise the barrier created by the existing road
- Creating pedestrian and cycle priority thoroughfares, such as Cobourg Street, with restricted vehicle access for taxis and servicing vehicles.

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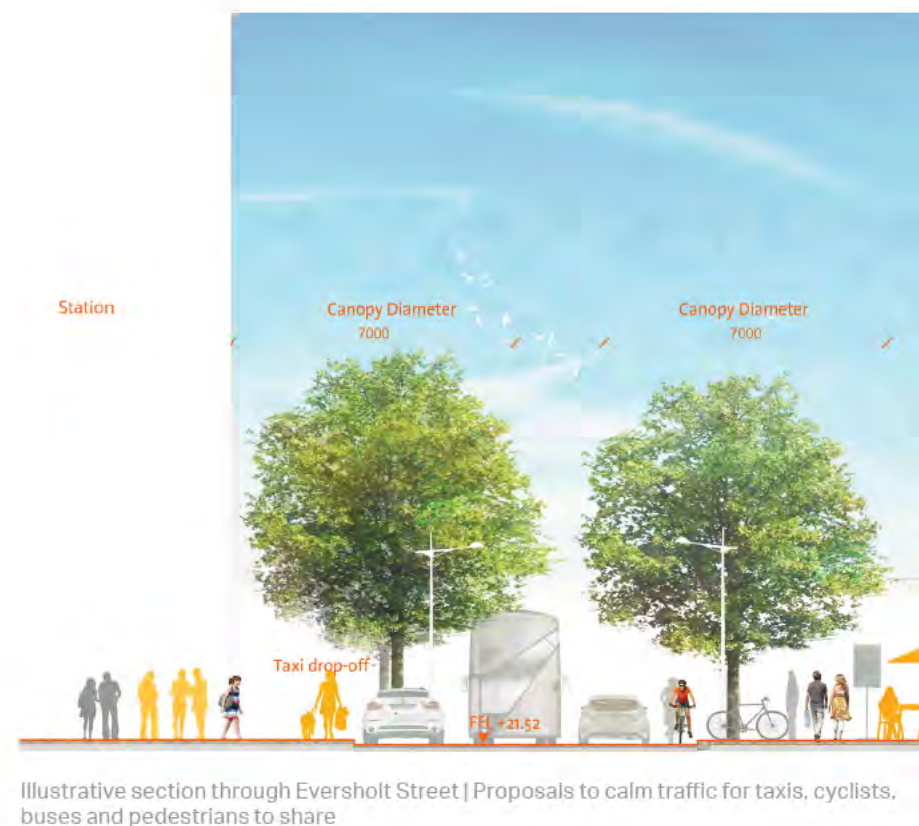


Illustrative section through Euston Road with the improved streetscape



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## Buses

The masterplan proposes to locate the bus interchange underneath the development in the south-eastern corner of the site. All 10 bus stands are located within the bus station along with 5 bus stops. One alighting bus stop is provided for the terminating bus services to drop-off passengers before proceeding to the bus stands. Four boarding /alighting stops are provided for south-east through routes and terminating services to pick up passengers.

Three bus stops are proposed on Euston Road within a lay-by facility, to serve the four eastbound through routes. This arrangement is similar to the bus stop provision for westbound services on Euston Road. Two bus stops are also proposed on Eversholt Street, located in a lay-by close to the main station entrance to serve north-south routes.

## Taxis

The taxi facility is located in the north-west of the site, accessed via a new signal controlled junction on Hampstead Road. The taxi rank provision has space for 45 taxi bays as well as 5 pick-up bays and 5 set down bays. The dedicated taxi pick up will be supported by additional set down facilities with the ability to cater for private hire and mobility impaired vehicles as well. These are proposed along the southern area of Cobourg Street adjacent a primary entry point and along Eversholt Street, close to the Phoenix Road entry.

The taxi facility will provide a drop-off facility adjacent to the western entry plaza. From the drop-off facility, taxis will be able to either exit the facility via Hampstead Road or continue on to a ranking area underneath OSD Plot T before moving to a dedicated pick up area which has strong visual connections to the western entrance of the station.

## Cycles

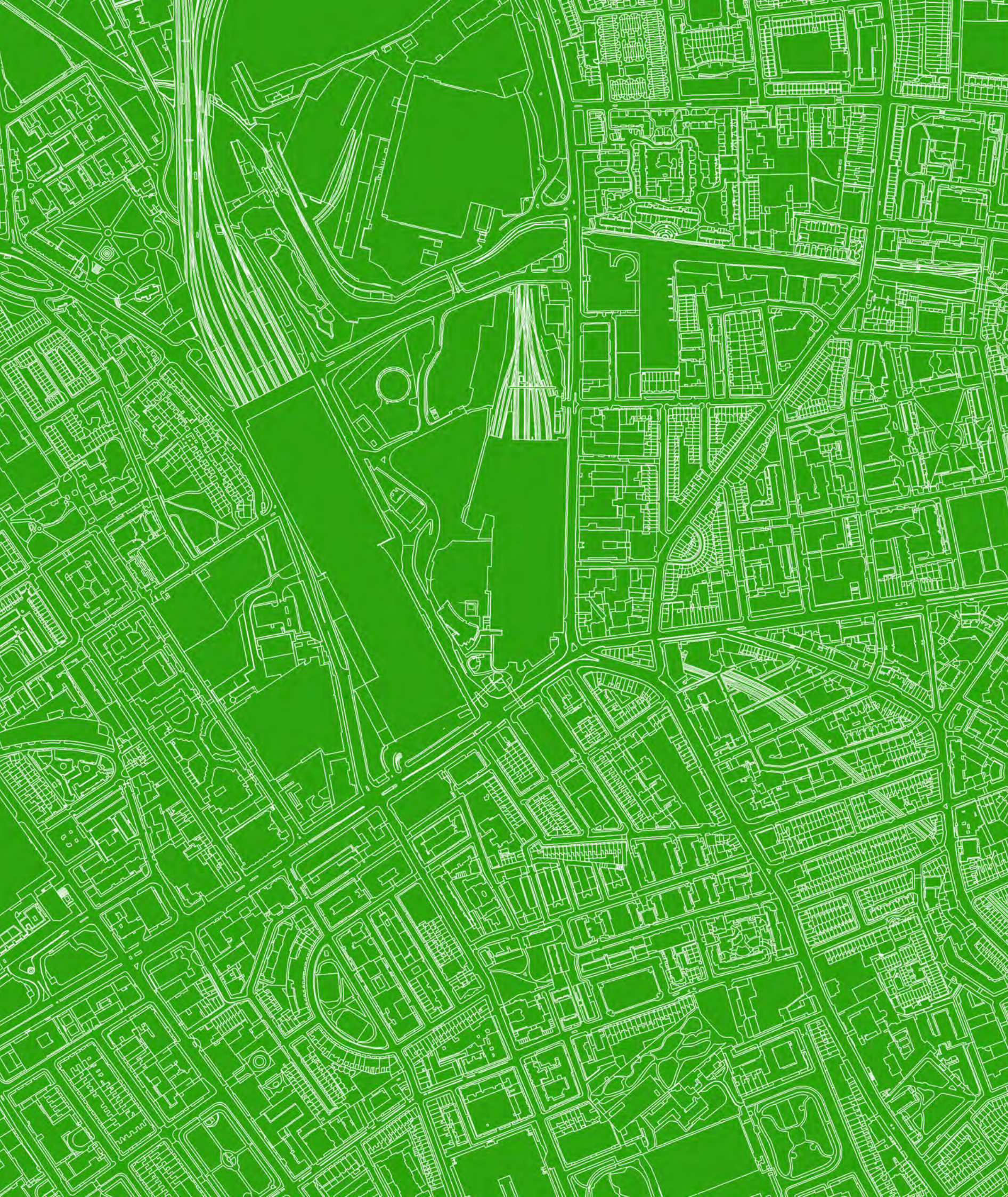
The cycles strategy looks at introducing additional designated cycle lanes along Cobourg Street, enhancing the north-south connections, in line with the highways strategy above.

The cycle storage strategy needs to consider both short-term and long term stands, which should be located within close proximity of all station entrances, as illustrated in the ground floor plan with potential locations.









## Part F Feasibility



# 1 Feasibility

## 1.1 Overview

This section provides a high-level summary regarding the feasibility of the Euston Stations Masterplan, and should be read in conjunction with the Euston Stations Masterplan Feasibility Report.

## 1.2 Structure

The OSD buildings above the HS2 and NR Conventional Stations are built on elevated 'construction decks'. Each deck comprises a steel grillage with a concrete slab, and is designed for typical construction loads (20kN/sqm). The decks allow the OSD buildings to be built and maintained - and subsequently, de-constructed and rebuilt - with minimal interference to the station operations underneath. The decks are not designed as transfer structures and so the grid of the building above matches the grid of columns passing through the stations. If the OSD requires a different grid the transfer must be carried out in the building superstructure.

In the Northern Development Zone the construction deck is not elevated but the long span over the tracks (up to about 40m) requires large steel trusses to carry the construction loads. In order to keep the weight of these trusses to a reasonable level their stiffness is enhanced by storey-height frames within the OSD structures. Other buildings, not above the stations or tracks, are constructed in a more conventional manner.

All OSD buildings require piled foundations, the layout of which is constrained by the NR and HS2 platforms and tracks, and by tunnels belonging to LU's Victoria Line, Northern Line Bank branch and Northern Line Charing Cross branch. If Crossrail 2 proceeds, its tunnels could also pass under Euston; there is no fixed alignment on these. Piles can only be installed outside a 3m wide clearance zone defined by LU standards. Where there are no piles the foundation slab must span over the tunnels. The slab deflects under the weight of OSD buildings which causes movement in the rail tracks; this can restrict the allowable height of the buildings.

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### 1.3 Ventilation, MEPH and Utilities

The HS2 station ventilation requirements are controlled by the station design. Four large fan rooms will be provided on the Stage A roof and will connect to a duct that runs along the station roof in a north / south direction. This duct provides the main smoke and heat exhaust from the station.

The NR station is currently naturally ventilated but there is a risk that the presence of OSD and the closure of their west station wall will make natural ventilation impracticable. It is therefore possible that a mechanical ventilation system will be required similar to the FSD proposal. Large ducts would be located above the platform to exhaust heat and smoke from the trackways. These ducts would connect to two large fan rooms located on the roof of their station. It is assumed that all OSD will have their own independent plant rooms.

From a general MEPH perspective there is no difficulty envisaged in delivering the masterplan. Some elements of the masterplan represent departures from the current HS2 scheme however the impact on the experience on HS2 platforms level would be small. There is envisaged to be a larger requirement for roof mounted photo-voltaic arrays at roof level to account for OSD shading, but sufficient roof space is considered available within the HS2 and NR areas to enable a robust design to be achieved.

It is anticipated that an effective MEP design could be developed for NR as well. The majority of MEPH services can be located in various formats, for instance in the new basement structure under the Euston Square Gardens or underneath the NR tracks. It is anticipated that an effective carbon strategy can also be developed at the next stage of design.

The utilities strategy for the HS2 station involves detailed design of new utility diversions of existing routes to facilitate the construction of the HS2 station. Two locations of interest are the triangle basement and the modified London Underground pedestrian tunnel, which runs under the Euston Road / Gordon Street junction. The masterplan has identified clashes between the proposed buildings and existing utility routes and the requirement for new utility corridor routes. This has been reviewed in the masterplan feasibility report.

For further information on ventilation, MEPH and utilities strategies, please refer to the Masterplan Feasibility Report.



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## 1.6 Servicing

The layout and design of each of the station service areas will provide an efficient layout and minimise the impact of servicing vehicles on the wider urban environment. They will deliver high levels of safety through maximising delivery and service vehicle segregation from pedestrians and private vehicle flows. Each service area will include waste provision and suitable security arrangements.

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Redacted under Regulation 12(5)(a)

Additional servicing opportunities are outlined in Part I of this report.

## 1.7 Waste

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The waste facilities provided to service each area of the development, will be sufficient capacity to segregate refuse (non-recyclable) and mixed recyclables, and where sufficient quantities are generated additional segregated waste facilities for food and glass. The waste facilities will be designed to ensure that they comply with national, regional and local planning guidance and specific guidance published by the relevant tenants (HS2, NR etc.).



## 1.8 Sustainability

The proposed Euston Stations Masterplan aims to meet the sustainability objectives of the local authority, landowners and stakeholders alike, while also providing the opportunity to be an exemplary vision of sustainability in the wider city context. It should be also considered that the sustainability strategy needs to be flexible enough to adapt to future and changing developments in approaches to sustainability. The brief for sustainability and climate change commitments have been developed by HS2 and some key points identified are as follows:

- Minimise Whole-Life-Carbon emissions
- Create a resilient, future-facing station
- Provide a healthy and inclusive environment
- Protect and support natural and historic environments

The proposed Masterplan generally enables compliance against the key requirements and objectives defined by the London Borough of Camden (LBC) and HS2. It is not anticipated that it would hinder the station from obtaining BREEAM Excellent certification.

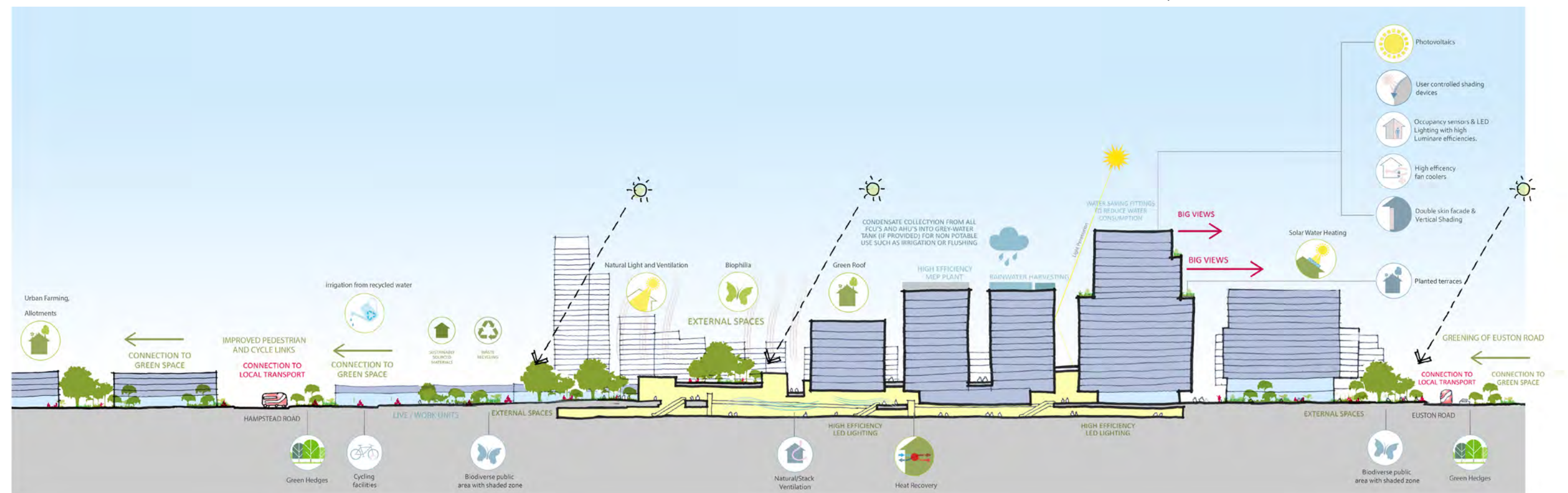
Specific aspects to be highlighted that require further investigation are:

- Addressing Camden's expectation for residential OSD to comply with Home Quality Mark and/or Passivhaus
- The impact of OSD on the station's ability to achieve net zero carbon status for regulated energy demand (a HS2 requirement) and specifically its impact on the location and performance of photovoltaic arrays
- Opportunities for the OSD to achieve Camden's energy efficiency and carbon reduction requirements on its own

- Sustainable Urban Drainage System (SUDS) requirements – Sharing of rainwater attenuation space in the station basement or OSD stand-alone attenuation

The masterplan can play an important role in connecting fragments of green space with ecological corridors and biodiversity, however the green infrastructure strategy should also attempt to maximise its secondary benefits such as improved urban ventilation, positive effects for human health and climate change adaptation.

Since the completion of the masterplan area is not programmed for at least another twenty years – with the surrounding area even further beyond – it is essential that the masterplan adopts future technologies and techniques and is flexible enough to be able to enable future ways of space and technology use. Specifically, the masterplan should be as much as possible future-ready for driverless vehicles and a fully electric energy supply. Refer to the Planning, Place and Movement Report for more details on the sustainability approach across the masterplan.



Section depicting sitewide sustainability strategy



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## 1.9 Acoustics and Vibration

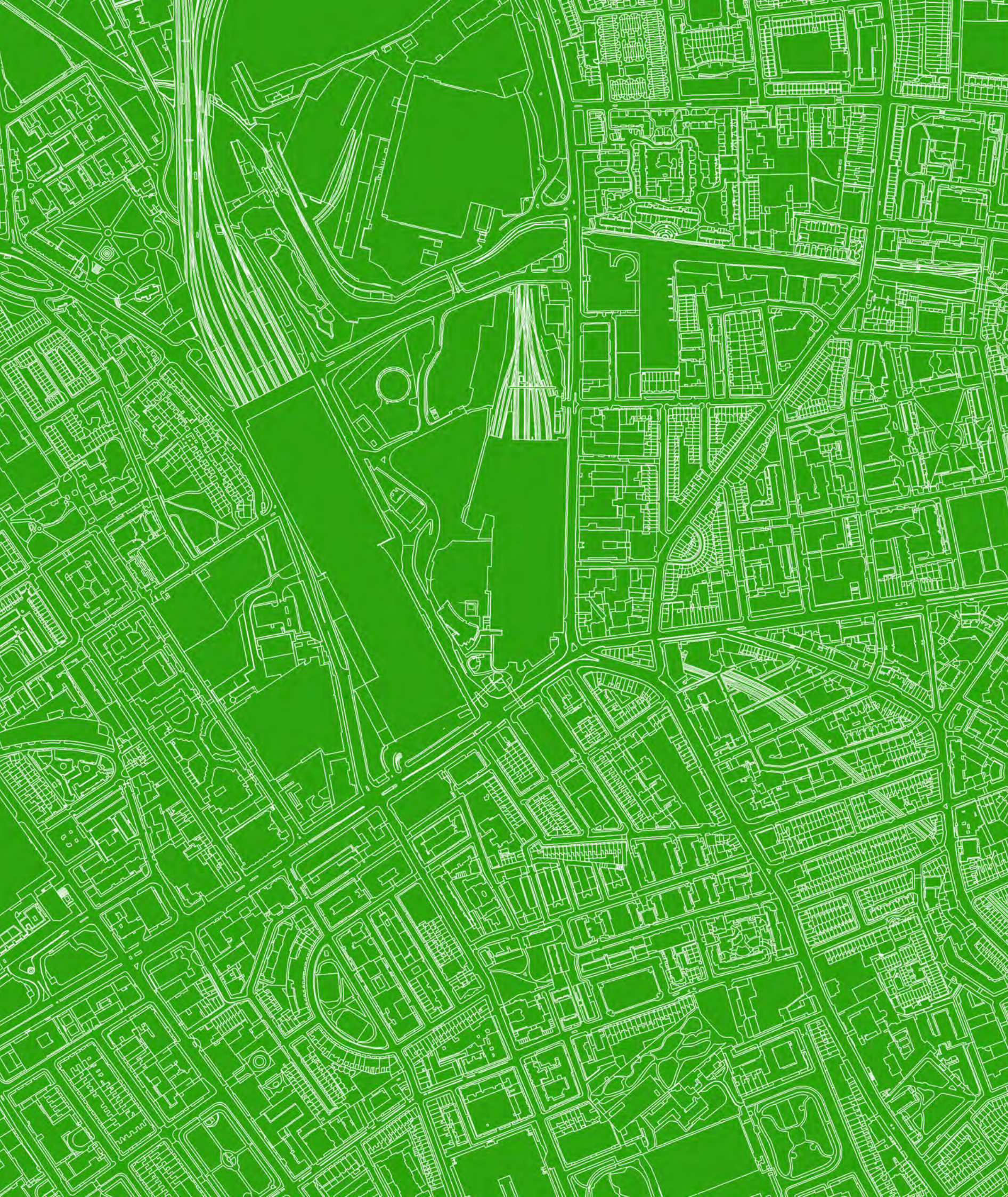
High level acoustic studies have been completed using 3D acoustic modelling to investigate existing and anticipated ambient noise levels arising from traffic noise. Noise from rail operations has also been accounted for. The key findings demonstrate that:

- Noise in the North City Park is likely to be significantly higher. Opportunities to provide acoustic barriers (which also act as green walls) have been investigated, in order to main reasonable noise levels in the public realm space.
- The need for vibration mitigation to control vibration arising from rail systems operations has been identified.
- OSD will be exposed to high levels of rail and traffic noise in some locations, and the need or specialise facade attenuation has been identified.









## Part G Delivery



# 1 Delivery

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## 1.1 Overview

This section outlines the deliverability aspects of the masterplan. The project time frames are evolving and are possible phased delivery projections which requires development with NR and Crossrail 2 which at present are uncommitted. This section covers:

- Phasing
- Programme
- Commercial viability
- Risks

For further information and detail on any of the above refer to the Masterplan Feasibility Report.

## 1.2 Phasing and Delivery

The aspiration to deliver the scheme spans over three complex stages for three different projects, HS2, NR and CR2, which include:

Stage A - the demolition of existing buildings and integration of the first stage of the HS2 station, ending in 2026.

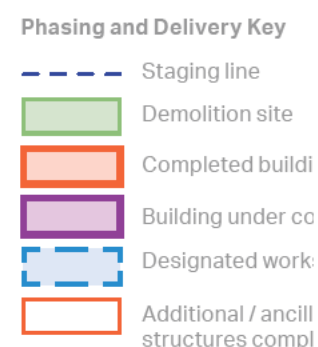
Stage B1 - part demolition of the existing NR station and completion of the HS2 station in its place; 2026 -2033.

Stage B2 - the full redevelopment or modification of the existing NR station; undefined from 2026 and subject to future investment decisions and approvals. The delivery of this phase requires further planning to ensure no delay to preceding phases.

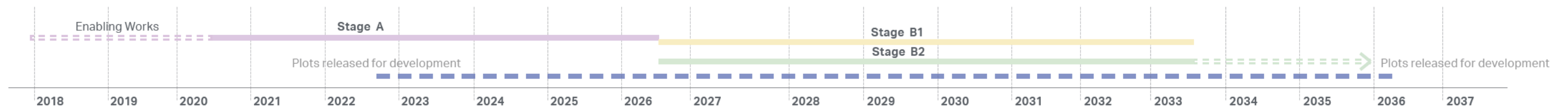
### 1.2.1 Masterplan Phasing

The phased delivery of the stations will commence in 2018. Consideration must also be made to the delivery of OSD, implementation of proposed Crossrail 2 on site as well as changes and additions to the existing London Underground network in tandem with the HS2 and NR stations.

The following series of diagrams provide a high level summary of the possible phasing masterplan process including demolition, worksites, station works, enabling works and delivery of individual buildings.







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## 1.2.2 London Underground Connection

A key consideration for the delivery of Euston Stations Masterplan is keeping the London Underground operational at all times. The masterplan scheme proposes a significant opportunity to create a vertical circulation space linking all four stations, lined with active retail and opening up of opportunities for strong visual connections with access to natural light. This opportunity to deliver a vastly improved station entry sequence requires careful consideration for the phasing strategy and is summarised below. The construction of this space would be in the middle of the existing NR concourse and would require appropriate phased delivery of the space. A possible plan is shown below.



3D diagram illustrating the possible phasing process of the below ground ticket hall

### Key

- Infrastructure built during Stage A - Aligned with FSD design
- Infrastructure built during Stage B1 - Aligned with FSD design
- New interchange and ticket hall built during Stage B2
- Existing London Underground Ticket Hall - To be demolished after Stage B2 complete

## 1.2.3 Northern Development Zone Delivery

The zone north of Hampstead Road bridge offers the majority of residential development for the masterplan scheme. There are significant phasing and constructability challenges to deliver this development, particularly when decking over a live railway.

The deck above the rail tracks which facilitates the construction of the Northern Development Zone is framed to enable these plots. The deck is constructed over the HS2 and NR tracks on a deck spanning between walls constructed between, or to the side of, the rail tracks. The deck is considered to be divided between the Stage B1 and B2 line and is assumed to be built in two phases. The deck spans approximately 40m over the HS2 tunnel approach; in other areas the spans are smaller but still substantial.

Long span steel trusses and a concrete transfer deck are required. The deck consists of a series of deep, heavy steel trusses spanning east-west and supporting secondary north-south steelwork and a concrete deck. The primary trusses are typically spaced at 10 or 15m centres and have an overall depth of 4m. The top deck is of a hybrid concrete construction.

The adjacent diagram illustrates the possible delivery process of the northern development zone. The phased split of NR and HS2 is possible, noting the significant uplift in complexity associated with delivering in two parts.

1. Stage A - London Underground links to existing LUL station, Euston Square station. HS2 platforms, new tunnels and entrances to underground platforms constructed as per FSD design with future-proofing connection at low-level.
  2. Stage B - Provide additional link along north-south internal street with connection to existing London Underground ticket hall as per FSD design.
  3. Demolish part of existing NR concourse and create triple-height void that connects to low-level London Underground ticket hall (shown in blue)
- Provide additional links to grade during Stage B2. Relocation of NR concourse would be required.

1. Build transfer structures over NR and HS2 tracks. Enabling works for the HS2 portion of the Northern Development zone to be completed during Stage A. Enabling for NR portion of Northern Development zone to be developed. Enabling will require temporary closure of tracks and replacement of overhead lines, signalling equipment etc. and dividing this into two parts (HS2 and NR sides) will provide additional complexities and logistical considerations.

2. Build deck over tracks with required openings.  
Supplementary station buildings to be completed within Stage A.

3. Build Plots  
Plots X,Y,Z1 and Z2 constructed between 2027 - 2031  
Plots X1 and Y1 constructed between 2031-2033

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#### 1.2.4 OSD Enabling Works

The enabling of development for plots A, N, L, P, R, K, Z1, Z2, X, Y and a portion of plot B is within HS2's scope and their release for development is controlled by HS2's station construction programme.

Further work is required to realise the other development plots across the site, associated public realm and any concurrent construction activity so as not to impact station construction.



### 1.3 Funding

The HS2 station and OSD enabling works for plots above the high speed station and approaches (as shown in yellow right) are a committed project with a funding plan in place.

The remainder of the masterplan is unfunded and requires work to identify and secure funding for delivery. This is summarised below.

#### Subject to future funding

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Regulation 12(5)(e)

- Plots X1, Y1, T, B, V, I, H, G, F, E, C
- Conventional NR Station redevelopment
- Crossrail 2
- Associated public realm
- New and upgraded highways work
- Landscaping and public realm apportioned per development

#### Within current [project scopes and funding envelope:

- Station works and associated public realm within the LOD
- Enabling works for X, Y, Z1, Z2, P, K R, L, N, A and a portion of plot B

### 1.4 Risks

This masterplan is extremely complex with many interested parties and years' worth of compromises to follow. In order to realise this masterplan the risks should be acknowledged and addressed, where possible, early on in the development process. Some of the key risks, relevant in different ways to a number of the landowners and stakeholders, that have been identified and should be acknowledged include the following:

- Key stakeholders losing support for the masterplan and the framework, which may result in a suboptimal development for the Euston area.
- The flexible masterplan framework may not be adopted by all parties.

- Stakeholder requirements may not be met and compromises may not be accepted by the stakeholders involved. The landowners are the decision makers for this masterplan, however there is need to recognise the aspirations of multiple stakeholders and be cognisant that development will be subject to future planning approvals and operational decisions are those of the infrastructure operators. The provision of public open space in general is hugely challenging on such as constrained site; this includes quantum of provision, location and quality of open space, the proposed reconfiguration of Euston Square Gardens and the phasing of delivery of open space.
- Masterplan implementation and future context may be affected by currently unknown proposals for development of the area considered.
- The opportunity to reconfigure Euston Square Gardens to enhance the gateway into site will be subject to planning risks and risks associated with the London Squares Act.
- The proposal to rebuild the Euston Arch and the effect this may have on the redevelopment.

- The phased delivery of the entire masterplan is incredibly challenging for a number of reasons including design, impact on the community and station users, commitments to dates to deliver working stations, policy changes over the period and development of areas to earn income.
- High speed or Conventional Station studies, design and construction necessitate changes to the masterplan configuration to achieve respective station or railway objectives.
- Redacted under Regulation 12(5)(e)
- Challenges identified for the enabling of key development plots such as A and B should be designed early in order to maximise flexibility for development in the future.
- There has been limited engagement with various stakeholders including, but not limited to Royal Mail Group, BCAAC, Historic England and the Euston Arch Trust. Future engagement may generate additional aspirations or constraints and opportunities.





- There are a number of heritage assets on and in close proximity to the site and the potential impact of the masterplan on these is a planning risk that requires justification.
- Deliverability of significant green space including the provision of trees on an extremely constrained site.
- There are significant challenges with servicing the entire site, including the station and development; servicing strategies will need to be developed early to influence the design so that it does not affect operations and has minimal impact on the surrounding area.
- Establishing a compromised solution for the surface strategy for the Euston area including the bus and taxi provision.
- The tight parameters of designing within the London View Management Framework (LVMF) creates challenges and constraints that need to be clearly understood and addressed throughout the upcoming design process.

- There is a significant risk if these LVMF corridors are challenged, thus early engagement is encouraged to address potential challenges before the design develops too far.

Finally, the huge opportunity that this masterplan offers for London and the United Kingdom needs to be accepted by the wider stakeholder community. The flexible masterplan framework, when overlaid with the vision, illustrates the potential for the Euston Area, but this should not be a constraint. The belief that this masterplan should be used as a flexible framework that can and should be developed further to create a fantastic and future-proof area of London. There is a risk that the development of Euston could become a diluted version of the vision, and this would be a significant loss for the area, London and the United Kingdom.

A master plan risk register has been developed (at a high level) addressing all of the above as well as other identified significant risks. Outline mitigation strategies have been identified and included in the register. These will need further development during the next stage of the master plan development and associated designs.

## 1.5 Summary

In summary, the deliverability of the scheme will be reliant on key coordination and communication between key landowners, stakeholders and development partners. Delivering four stations within existing complex and constrained conditions will have significant impacts on the use of surrounding spaces and streets until the masterplan is complete. Meanwhile uses and diversions of highways, public transport facilities, public realm and squares around the station will all be effected during the construction of the masterplan and will have to be appropriately managed and planned so that the existing stations can operate effectively. Integration of the large quantum of development will also have to be interfaced effectively alongside the delivery of the respective stations.

The northern development zone will also have a unique interface with the HS2 and NR tracks underneath its transfer deck structure, and will require a railway management plan to be put in place for the part-closure of tracks during construction so not to effect the operational use of the tracks. The proposed London Underground interchange will also have to be phased within the greater B2 workstage, and delivered alongside the redevelopment of NR concourse(s) and new station entrances.

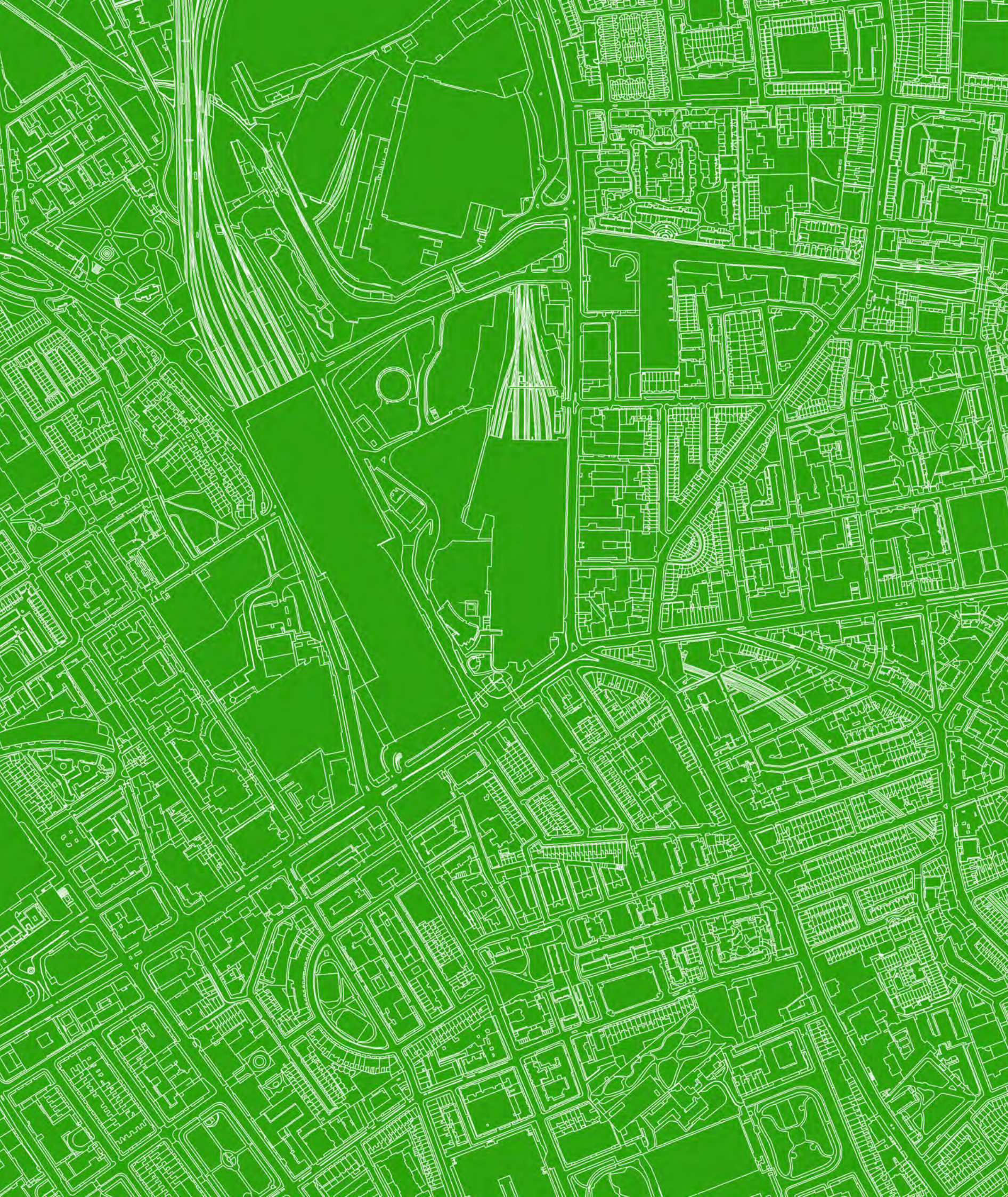
Further opportunities which may arise during the delivery of the masterplan will also have to be met with respect to cost and commercial viability, with due consideration placed on funding and future investment decisions.

The redevelopment of the NR station, re-orientation of Euston Square Gardens, **Redacted under Regulation 12(5)(e)** OSD outside of the designated HS2 plots will be subject to future funding agreements and investment decisions. This will be necessary in delivering the masterplan at Euston.









## Part H

### Scheme Variables



# 1 Scheme Variables

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## 1.1 Overview

The masterplan has significant complexities and variables, particularly surrounding the status of Crossrail 2 and the redevelopment time frames and extent for the Conventional NR Station. Coupled with this are the planning risks associated with numerous features of the masterplan such as the reorientation of a protected London Square. In order to ensure the masterplan proposal is robust, yet flexible, it is paramount that a number of scenarios are tested, these include the reinstatement of Euston Square Gardens to reflect the existing footprint, the NR Conventional Station is not redeveloped and if Crossrail 2 does not go ahead.

## 1.2 Reinstatement of Euston Square Gardens

Euston Square Gardens is a protected London Square and as such the masterplan proposal to reorientate the Gardens carries a planning risk. This study explores the impact upon the proposal should the gardens be reinstated. It is also worth noting that the Euston Square Gardens is not in its original arrangement. The end state will always be (re) constructed with large numbers of mature trees impacted and/or lost. Key considerations as follows:

- Structural and Constructability Considerations: Building C cannot be built in its entirety and the size of development would be smaller. The bus interchange as a result would have to be coordinated and designed appropriately. This simplifies the design of the HS2 station box and link to Euston Square LU station compared to the masterplan scheme, as such certain elements of the construction stage would be easier.
- Increased public open space offering, and reinstatement of existing green space within conservation area with no requirement to challenge the London Squares Act
- No impact on the current HS2 design or construction programme
- Station legibility and access compromised comparatively to proposed masterplan, particularly by introducing a road with buses, creating a barrier to the Gardens

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- Loss in potential future scheme flexibility i.e. utilisation of NR Basement.

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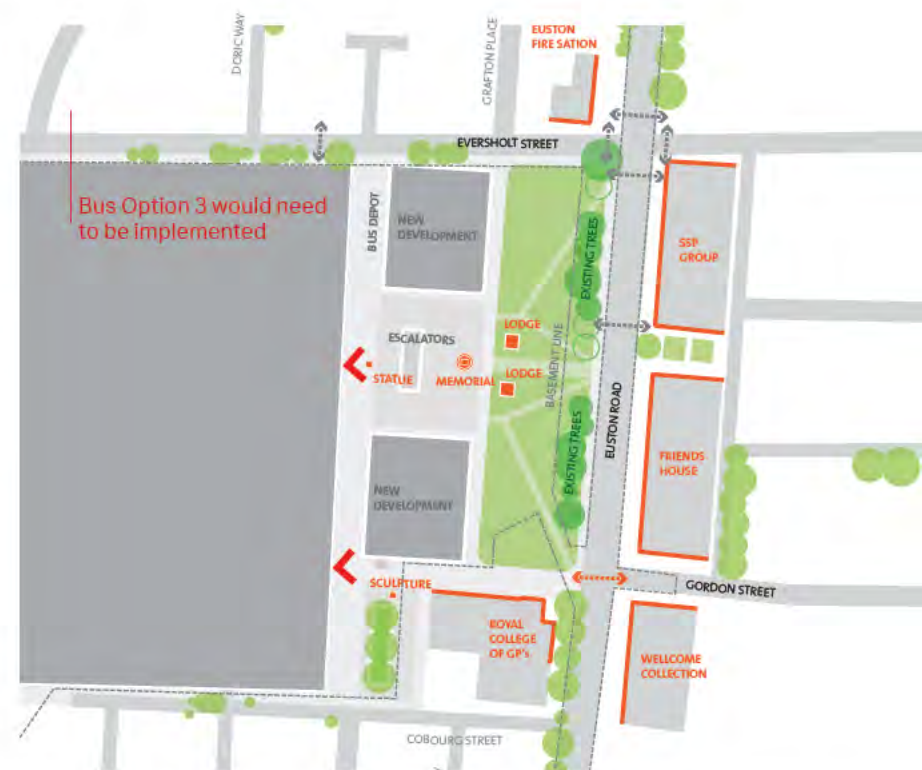




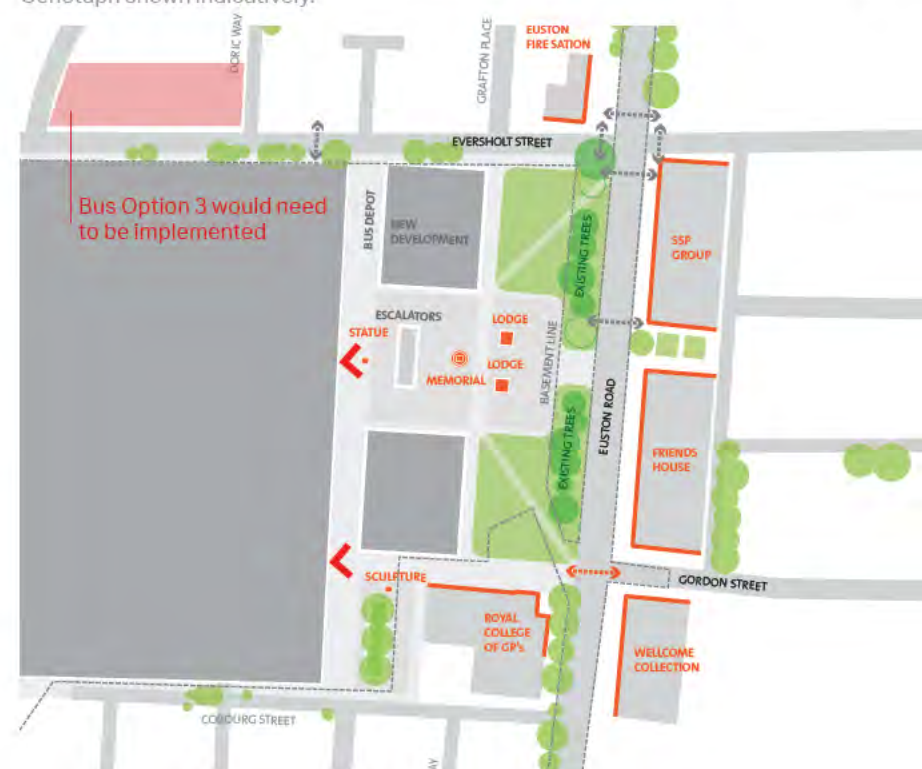
Existing Euston Square Gardens arrangement severed by the bus interchange circulating from Euston Road to Grafton Place



Landscape strategy 02 | Arrangement would require bus interchange to be relocated to improve pedestrian permeability and station legibility. Possible locations for the Lodges and Cenotaph shown indicatively.



Landscape strategy 01 | Arrangement would require bus interchange to be relocated to improve pedestrian permeability and station legibility. Possible locations for the Lodges and Cenotaph shown indicatively.



Landscape strategy 03 | Arrangement would require bus interchange to be relocated to improve pedestrian permeability and station legibility. Possible locations for the Lodges and Cenotaph shown indicatively.

## Impacts on Bus Strategy and Suggested Improvements to the Gardens

While the default layout for the reinstatement of Euston Square Gardens would be that documented in the current HS2 design, as depicted on the previous page, there are several alternative layouts for the garden arrangements. The reinstatement of Euston Square Gardens to its current boundaries imposes considerable constraints on the masterplan proposal to house the bus interchange entirely underneath the south-eastern plot and as such an alternative strategy would be required, as documented in the Place, Planning and Movement Report.

The level of reduction in this provision would depend on the final strategy; Strategy 02 could provide a greater provision as compared to strategy 01 and 03 due to the footprint of Plot C. Alternatively if a linear bus interchange was adopted, similar to The Act Scheme, the gardens could be reinstated to their existing extents however the quality of the public space would be compromised; The bus interchange would bisect the public open space, severing the gardens from the station entrance and removing the potential for any level of activation afforded by the OSD. This configuration would significantly detract from the station's sense of presence and arrival on the southern approach.

Accepted



### 1.3 Conventional Station Redevelopment

The image below illustrates what would happen should the NR Conventional Station not be fully redeveloped in the time frame outlined within this report. It is worth noting that the NR Station redevelopment is currently unfunded.

Generally, the cost and structural interfaces with existing and proposed underground infrastructure will be less stringent however the scheme would be negatively impacted for various reasons. The default arrangement would be to adopt the current HS2 design, which would see a reduction in area to south-western building (Plot B) to accommodate the linear bus interchange and reinstated Euston Square Gardens. Without the demolition of the buildings at the front of the Conventional Station the reorientated Euston Square Gardens would not be achieved. A lack of permeability across the site, particularly east-west to the centre of the site and lack of activation along

Eversholt Street would not meet the masterplan ambition to provide a  
**Redacted under Regulation 12(5)(e)**

cohesive design by combining four stations into one. Moreover the station legibility will be compromised with retention of buildings.

#### Pedestrian Flow Considerations

NR are currently developing the strategic business case analysis for improvements to the existing station as part of the Grip 2 - Feasibility Stage process. This is in addition to the HS2 FSD Enabling Works package, which will make some capacity enhancements to the existing station ahead of HS2 opening. The report analysis suggests that a secondary concourse will be required. NR are considering a short term and more cost effective alternative of extending the existing concourse into the plaza area and removing current retail units. In addition, the platform ramps would be widened and additional ticket gates added to cope with future year passenger growth. Initial NR

analysis indicates these station capacity improvements will be required regardless of HS2 before 2026.

#### Structural Considerations

If the NR station does not redevelop, it is assumed that plots along Eversholt Street will not be a feasible option unless the station undergoes a track realignment on the eastern edge of the station. This subsequently would remove the need to build foundations, columns and construction decks associated with buildings E-H. Building I could still be a feasible option for NR to enable, if existing infrastructure can be replaced. The north-west corner of block I would have to be trimmed back so that it is not above the NR tracks.. If NR do not redevelop their station, it has no effect on the structural viability of the other buildings in the masterplan.

If NR still proposed to enable the potential for buildings E-H even though the platform layouts, concourse etc do not change in the NR station beneath, the parcel deck and station roof would need to be cut back to the edge of the proposed construction deck and new columns might be needed to support the new edge of these structures.

In this instance it has been highlighted that it would be advantageous to realign tracks 1 and 2 into the large platform area between existing tracks 2 and 3, as it makes it easier to install new foundations, and build columns and the construction deck.



## 1.4 Proposed Crossrail 2 Scheme

Crossrail 2 is currently unfunded and is not yet a committed scheme. Government supports the need for investment in London and Crossrail 2 is an option for government investment. The masterplan assumes the existing TfL promoted scheme becomes committed, thus including the opportunities and constraints this brings on development within the design. However, it is also necessary to plan for a scenario where the scheme does not proceed. This section summarises the key considerations and impacts.

- It is critical to the HS2 business case that Euston Station, including the Underground stations, can operate without CR2 in the future in case CR2 is not constructed. The pedestrian modelling analysis for the current HS2 design looks at both with and without CR2 scenarios. Whilst the congestion relief and service redundancy benefits of CR2 are noted, it is not considered essential to the operation of the Underground Stations in the future.
- There are two scenarios regarding structural considerations, the first being the safeguarding for the tunnels and proposed ticket halls remain, but the project is delayed. In this case, the masterplan will have the same restrictions on pile locations, and these will lead to the same long-span foundation slabs, the same deflections under load and the same restrictions on building heights. Additionally, the safeguarding area would remain and limit the construction height for buildings E and F over the CR2 ticket hall, due to the safeguarding of the installation of a piled wall around the proposed Crossrail 2 ticket hall. If the Crossrail 2 project is delayed but the design is already advanced, there would be no opportunity to amend the foundations and so any benefits would not be realised. The second scenario is

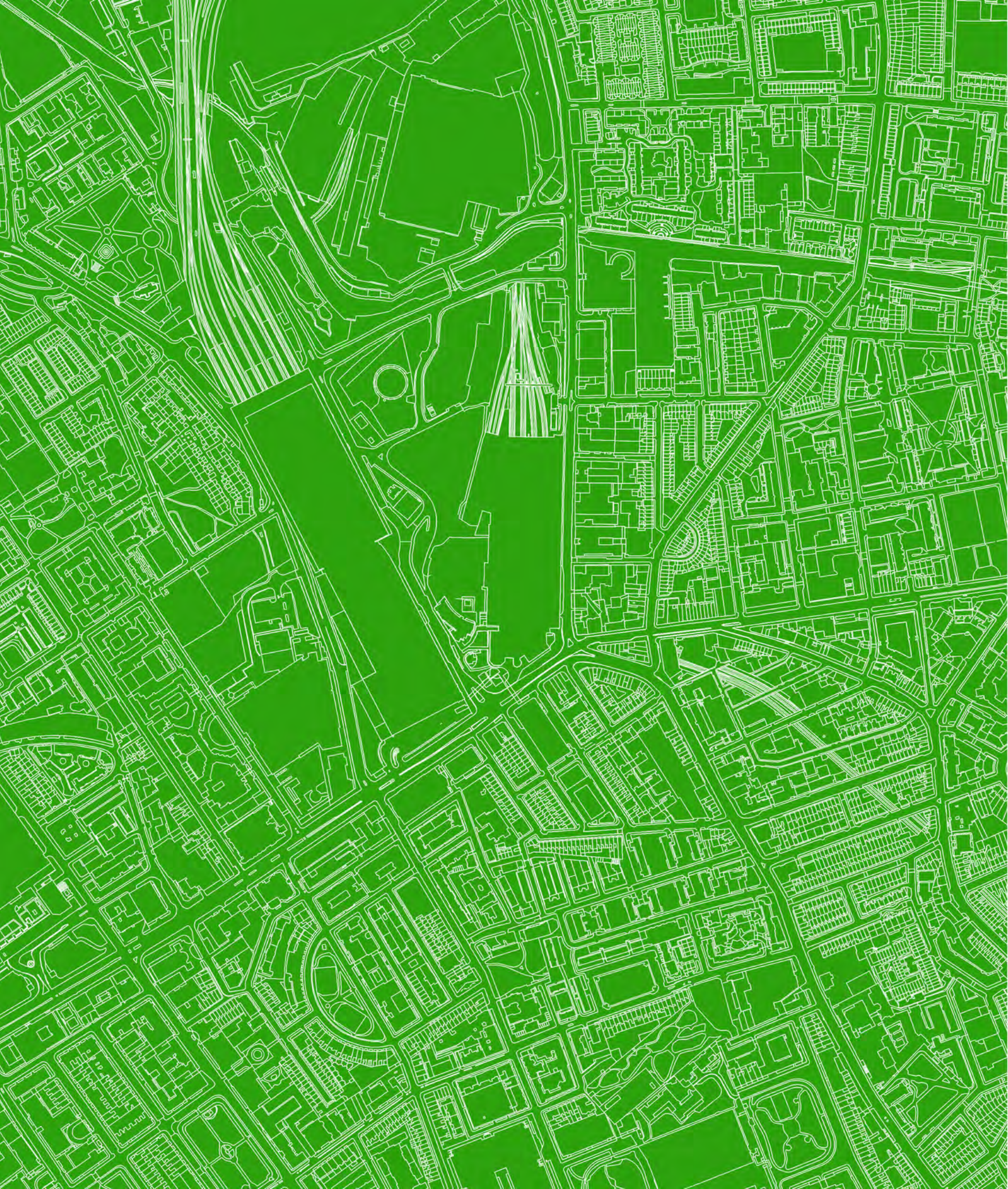
that all restrictions and safeguarding is lifted. Despite being a less likely scenario – safeguarding for CR2 assumed to remain in place - the following points would apply:

- The restrictions on pile locations would be lifted in the CR2 tunnelling and safeguarding zones – only existing LU tunnels would affect the OSD designs. This would mean that buildings L(R), E and F could all be increased in size from a structural point of view, as these are currently the plots effected by the CR2 tunnels.
- No below ground (paid) link with King's Cross.
- Opportunities for additional linkages and open space at the eastern entrance along Eversholt Street.
- An additional five bus stands would be required to the bus interchange. This will have a significant impact on the public realm if the stands are to be accommodated in the south-east corner as proposed. Alternative bus arrangements may need to be explored. Refer to Bus Opportunity Report for more information.
- Optimised interchange is compromised. Current passenger forecasts take into account the inclusion of Crossrail 2, designed to support and alleviate pressure on the existing London Underground network and the pressure would apply here.
- Lost opportunity for combined ticket halls and accommodation efficiencies with London Underground.









# Part I Further Opportunities



# 1 Further Opportunities

## 1.1 Overview

The Euston Stations Masterplan will hopefully guide future work at Euston. There are opportunities to build further on this masterplan and as previously described the underpinning framework was developed with this flexibility in mind to ensure the integrity of the plan as it is taken forward. Some further opportunities identified have been classed in three categories;

- variants to the masterplan which identify minor enhancements,
- additional opportunities which have larger impacts on design programme, construction programme and require additional funding,
- acquisition opportunities for prime sites located outside the unified land holding.

### Masterplan Variants

These opportunities identify minor enhancements that could be made to the masterplan, which could add value to the place, if balanced with the cost and programme. This includes enhancements such as:

- **Improved linkages** across the site, including additional pedestrian and cycle routes, improved approach to routes such as bridging over busy roads instead of crossing at grade and outlining alternative opportunities for the realisation of these links. Opportunity to create an underground concourse to the Conventional Station.
- **Increased opportunity for additional public open space** in a variety of locations across the site including accessible terraces above the station footprint.
- **Realigning the Civic Heart**, facing on to Euston Road, to be centred on the wider axis of the Bloomsbury Georgian squares to the south. This alignment will vastly improve the presence of the new Euston station and associated development and offer an opportunity to incorporate a new or re-interpretation of the Euston Arch. This amendment requires relocating the existing Euston Lodges as well as the street level access to Crossrail 2 and London Underground.

*Refer to Diagram 01*

### Additional Opportunities

This section describes significant opportunities which have larger impacts;

1. Development opportunities such as over station, NR sidings, Crossrail 2 worksite
2. Additional public realm and pedestrian linkages
3. Surface strategy opportunities

*Refer to Diagram 01*

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## 2 Masterplan Variants

### 2.1 Pedestrian and Cycle Linkages

There are a variety of opportunities to improve the linkages and public open space across the site. The following series of images captures some of the opportunities to add linkages across the site including connections across the station over multiple levels (including below ground and above ground) as well as outside of the station footprint, for example bridge links across Hampstead Road.

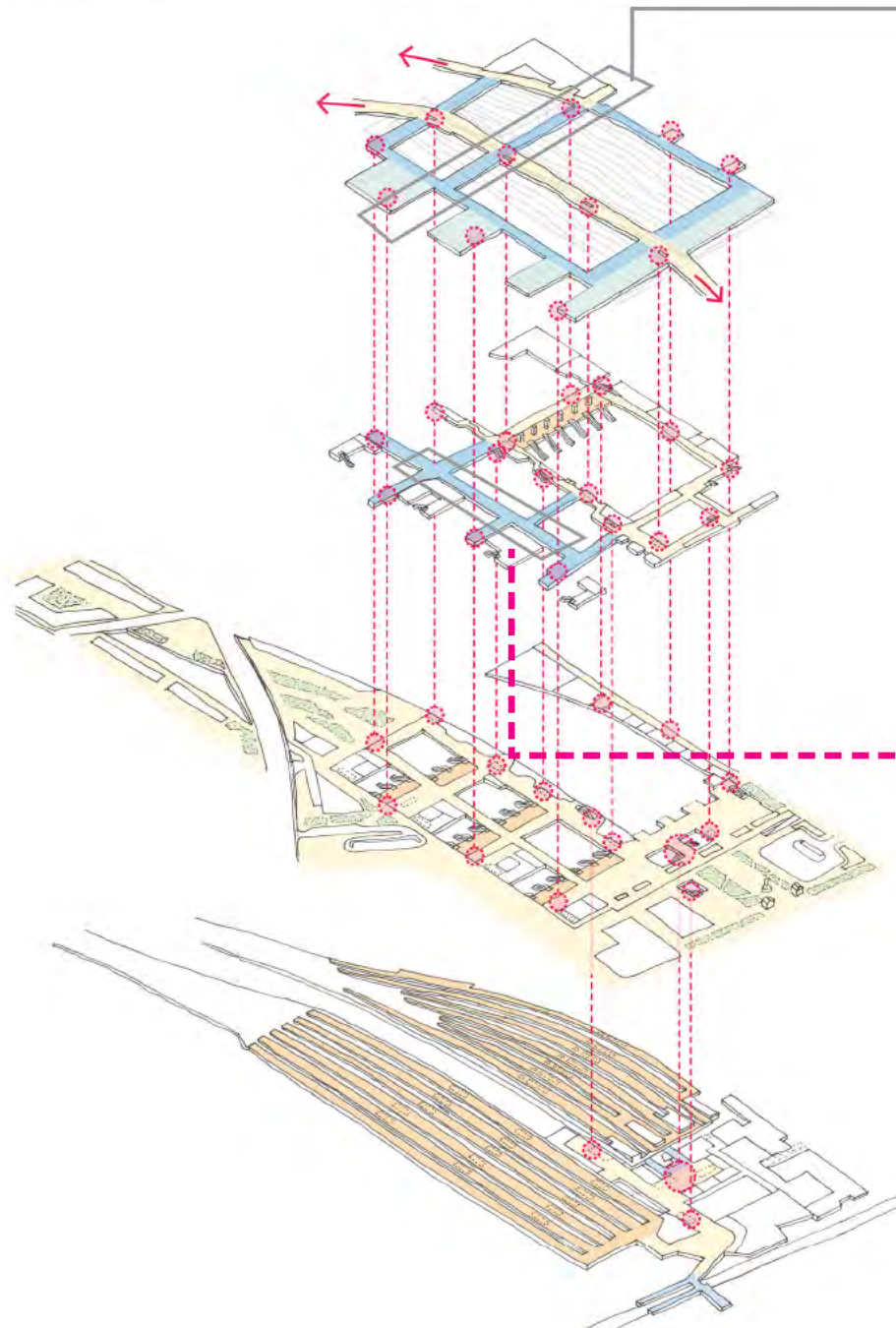
In addition, there are significant ways to improve pedestrian routes across the site including greening, activating the edges by introducing retail and comparing under-cover or open to the sky. These variants will help to create a varied experience across the site, simulating the extension of the surrounding street network and should be explored further.

Refer to the Pedestrian Permeability, Cycle Strategy and Public Realm Opportunity Reports for more detail.

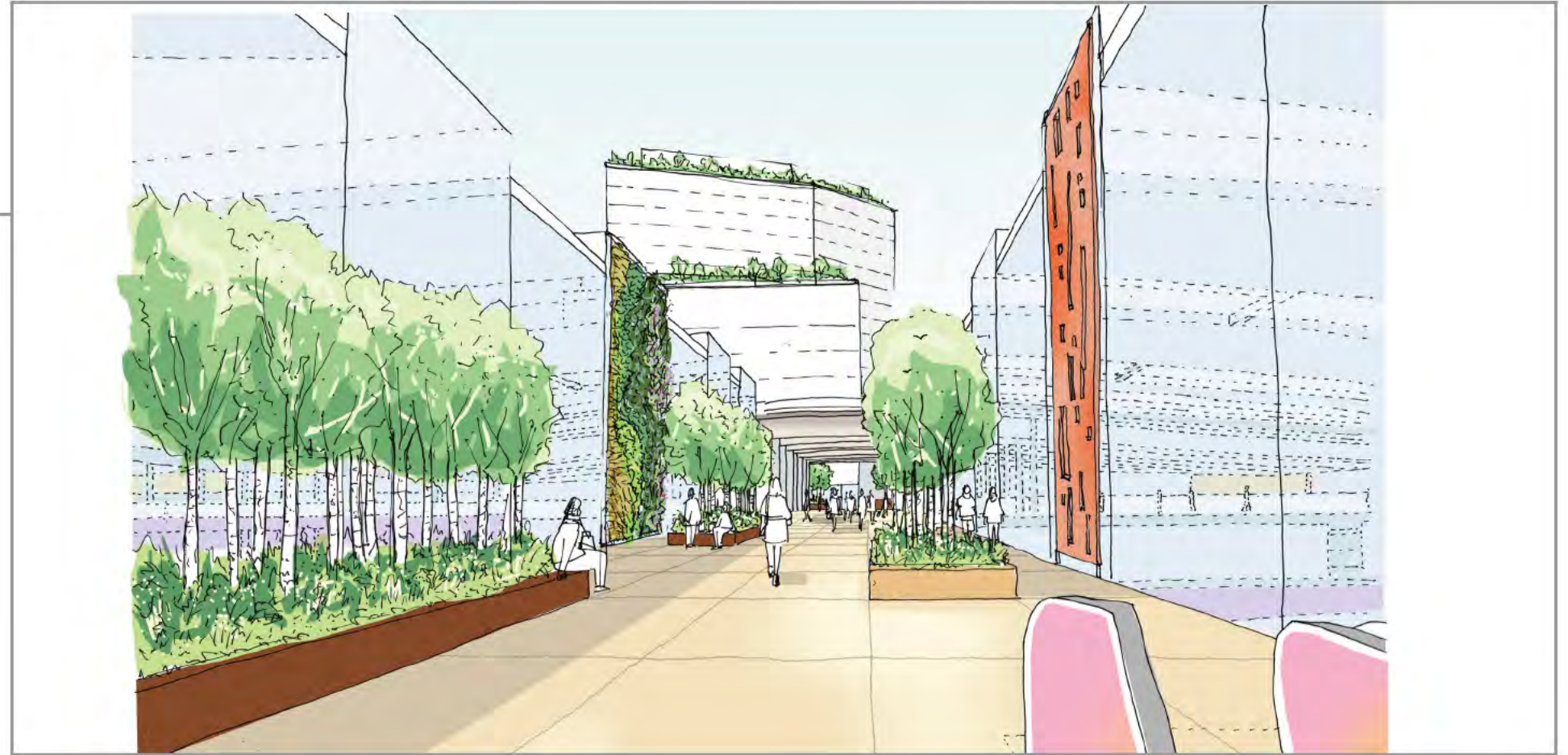


## 2.1.1 Additional linkages across the HS2 and NR stations

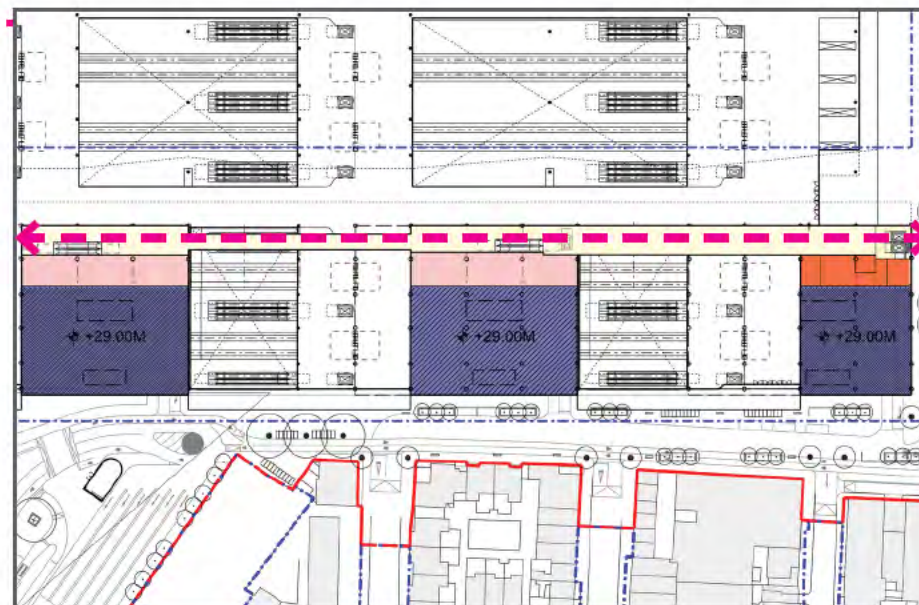
The below diagram illustrates where possible linkages could be added to the Euston Masterplan to form continuous connections across the station footprint, encouraging dispersal and offering a range of user experiences



Exploded axonometric diagram illustrating additional opportunities for public spaces and linkages across the masterplan site (in blue)



Continuous activated east-west pedestrian and retail link looking west, open to the sky, providing additional opportunities for station users and non-station users to traverse the site



Possible first floor retail sky bridge link (coloured in yellow) to be delivered in stage A. Refer to FSD Building Architecture Report for more information.

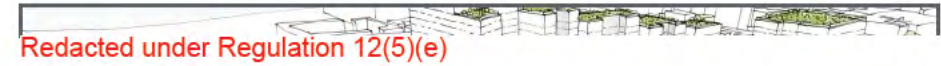


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2.1.2 Bridge over Hampstead Road or Euston Road

There is an opportunity to provide a bridge link over the busy Hampstead Road which could connect the North City Park to the Parkland Community in the North. By creating this bridge a continuous green link from Bloomsbury in the south the Camden in the North can be achieved at an elevated level.

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The Highline, New York | Successful elevated walkway that provides the additional public open space and an alternative route to the bustling streets below



Opportunity for pedestrian green link over the highly congested Euston Road



### 2.1.3 NR Underground Concourse

There are several variations regarding the NR Conventional Station configuration. A key opportunity identified includes dropping the auxiliary NR concourse below the platforms. This would greatly enhance pedestrian linkages towards the London Underground and Crossrail 2 ticket hall.



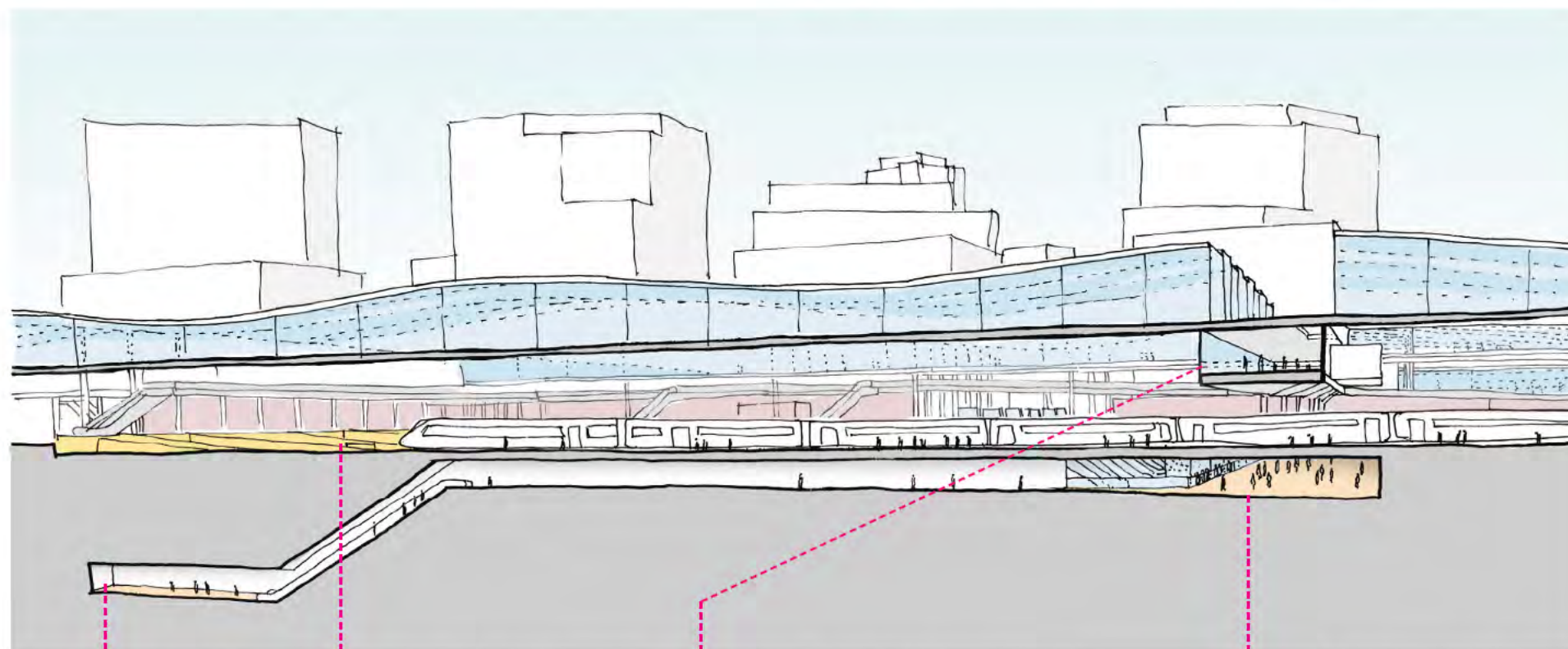
King's Cross pedestrian tunnel, London, Allies and Morrison | Illustrates a successful opportunity for an underground link under the busy roads and tracks.

## 2.2 Public Space Variants

### 2.2.1 Increased Provision of Public Space

There are significant opportunities to create additional public open space within the footprint of the station at the upper levels. The roofscape offers the potential to create a series of quieter terrace-style spaces for use by passengers, residents and OSD/station staff linked by a series of outdoor walkways. These spaces have the potential to create valuable spill out space for the OSD.

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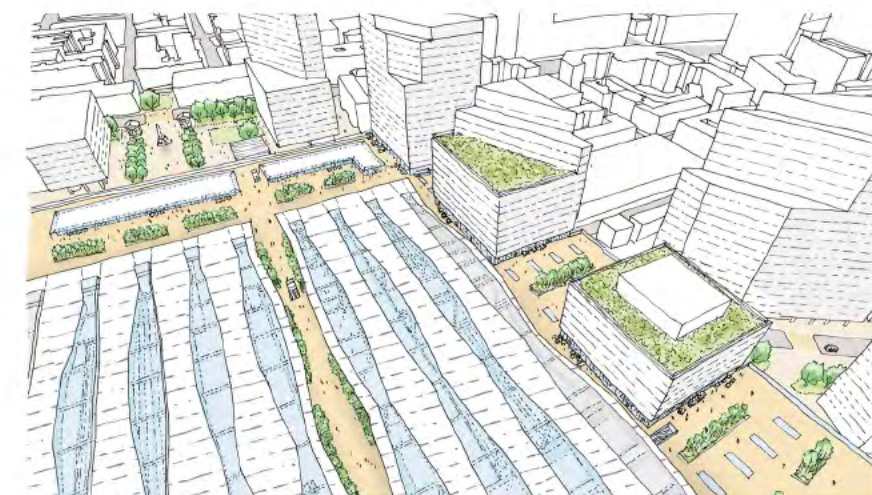
Potential direct future link to Crossrail 2 Ticket Hall

Platforms can still be accessed from a primary concourse to the south

Above the platforms, there is potential to implement an activated non-station route from east-west with retail offering, which would separate passengers and pedestrians

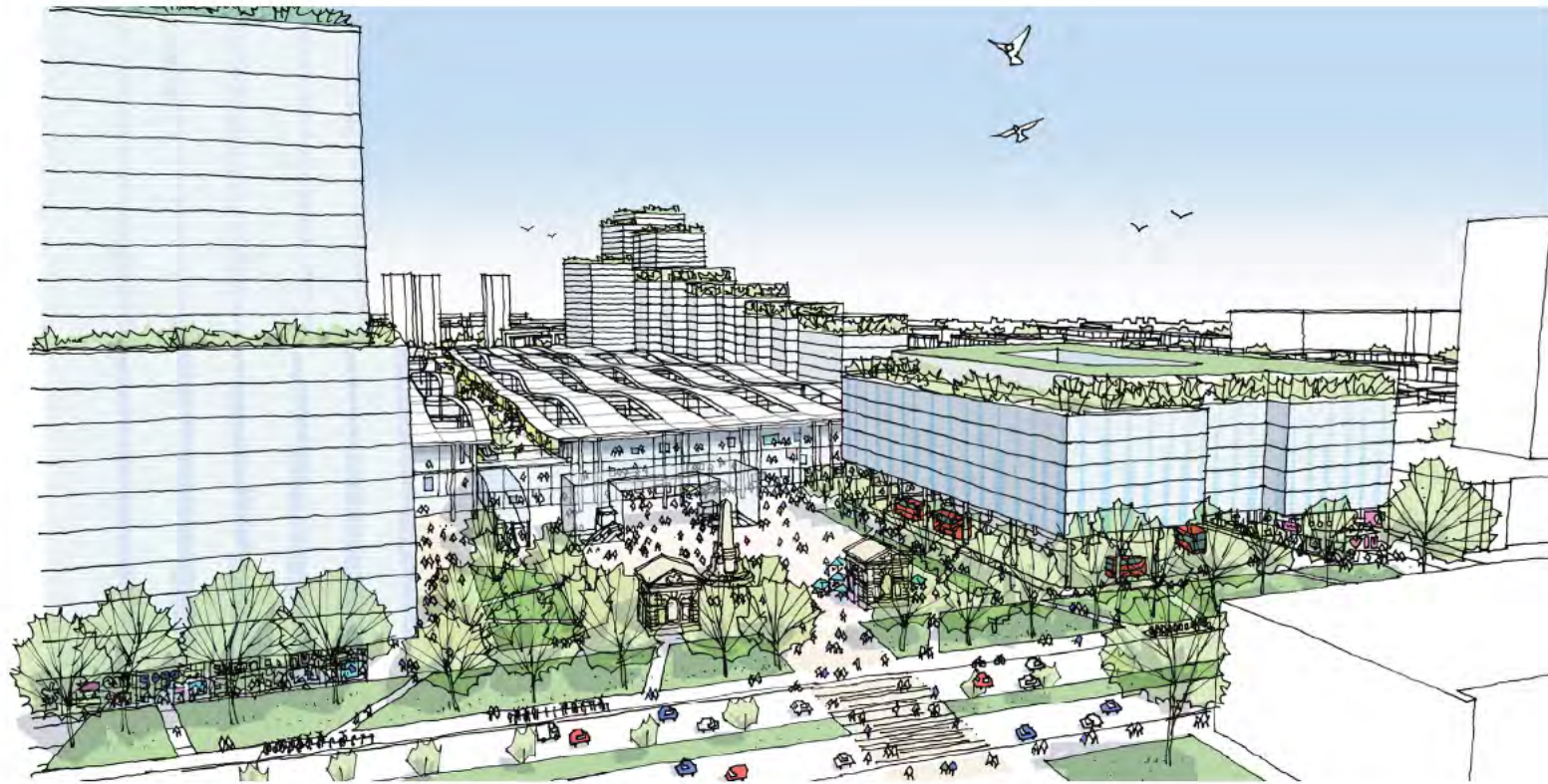
Underground NR auxiliary concourse feeding the platforms centrally via a series of escalators

Diagram illustrating an opportunity to drop the Conventional NR Station auxiliary concourse below track level and provide improved connections to Crossrail 2

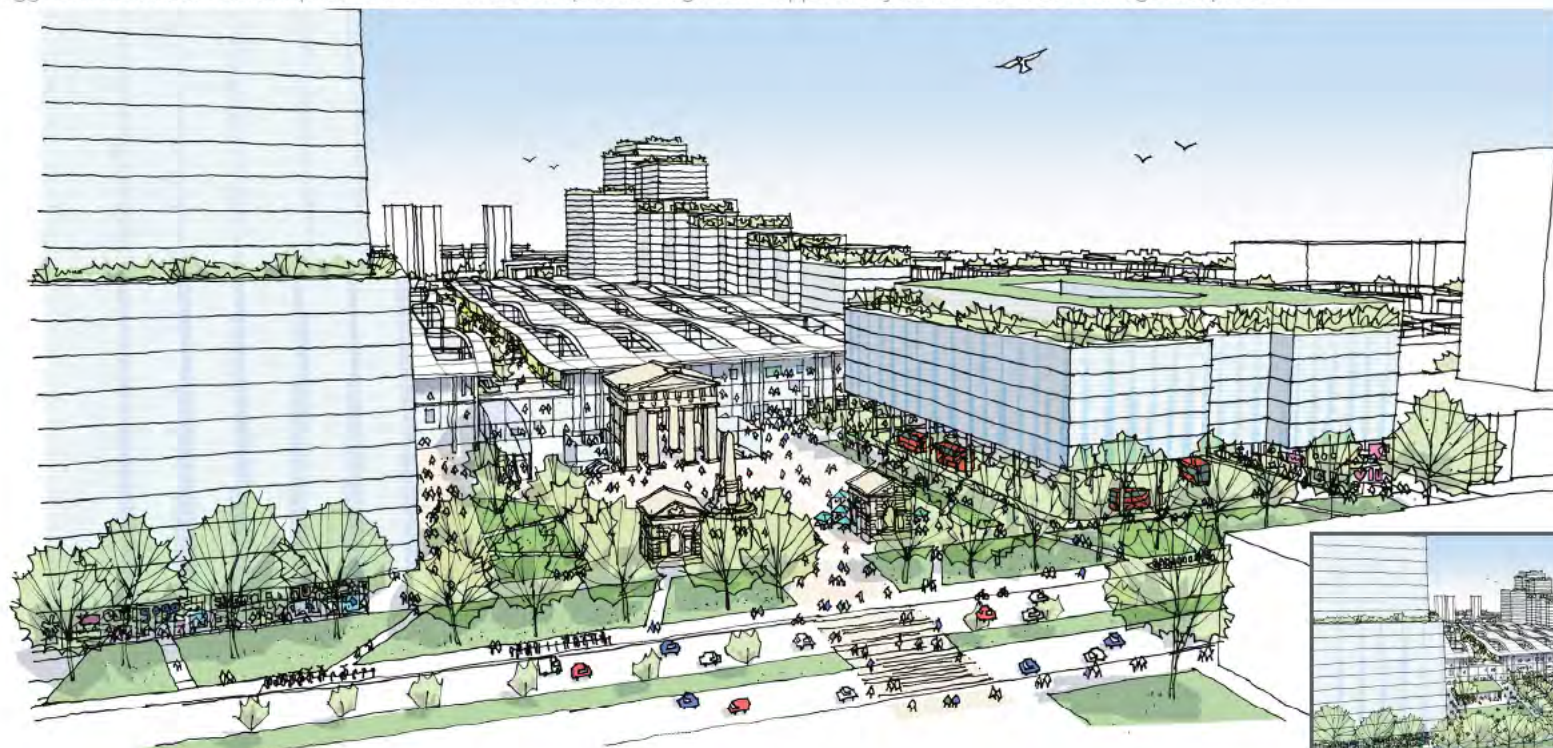


The roofscape offers the potential for additional terraces to create a more activated and accessible zone. These spaces would be create valuable spill out space for the OSD.





Euston Square Gardens alternative arrangement with lodges and cenotaph repositioned to align with central axis and frame the re-orientated gardens. Suggestion of a modern reinterpretation of the arch which provides significant opportunity for an international design competition



Sketch illustrating the possible arrangement to reinstate the Euston Arch, providing a gateway to the revitalised Euston Station  
Inset: Masterplan



## 2.2.2 Realignment of the Civic Heart

The masterplan affords the opportunity to realign with the original Bloomsbury Square axis. These alternatives considered within the gardens include the relocation of the listed lodges and war memorial to complement a new Euston Arch placed on the central axis of the landscaped space between the proposed buildings framing the square. The lost arch could be reprovided as an entrance to the station either in its original form or in a more contemporary architecture. There would be some public benefit in reproviding the arch in its original form, but it would be principally a populist benefit rather than a heritage benefit. It is doubtful whether the public benefit could balance the harm that would occur to the significance of the existing lodges, the underpass between them, the war memorial and the setting of Euston Gardens, as a result of their relocation. For more details refer to Place, Planning and Movement Report. For additional Euston Square Gardens arrangements, including the reinstatement option, see Part H for scenario testing.



Opportunity to celebrate the history of the Euston Arch by scattering pieces of the original arch throughout the site.



Cloud Gate, Chicago, Anish Kapoor | Successful example of a modern interpretation of an arch



## 3 Additional Opportunities

Redacted under Regulation 12(5)(e)

### 3.1 Overview

A number of opportunities have been explored throughout the masterplanning process. Some opportunities remain that aren't included within the Euston Stations Masterplan but could be explored further, including:

#### Development Opportunities

- Increasing over station development
- Extending northern development over NR Sidings

Redacted under Regulation 12(5)(e)

- Crossrail 2 worksite development
- Utilisation of existing NR parcel deck

#### Public Realm and Pedestrian Permeability

- Reduction in ranked taxi spaces to improve public open space and development feasibility / delivery
- Additional public realm within the Crossrail 2 site
- Public space located over the station footprint (as shown opposite)
- Granby Terrace realignment to allow for new deck to accommodate additional public realm

#### Interchange, surface strategies and LU/CR2

- NR platform configurations
- Relocating the buses from of station with the possibility to utilise the Crossrail 2 work site for bus interchange



3.2 Development Opportunities

3.2.1 Over station development

As part of the options study process, various options were explored with over station development, such as the illustrations on the adjacent page. This could be utilised as both OSD or additional public open space. Moreover, if the ambition for enabling budgets was amended the following plots could be added, such as; above the station concourse, adjacent to plot A above the station, over operational railway.

3.2.2 Utilisation of NR Parcel Deck

Redacted under Regulation 12(5)(a)

3.2.3 Northern Development NR Sidings

There is an opportunity to utilise the sidings above the existing NR tracks for additional residential development. By continuing this active edge the strong link from Euston Road towards Camden Town is emphasised. This could be further activated by creating a continuous deck that is utilised for public open space and mitigate some of the potential shortfall in public open space provision. This is illustrated in the Place, Planning and Movement Report.

Redacted under Regulation 12(5)(e)

3.2.4 Proposed Crossrail 2 Work Site

It would be recommended to consider the utilisation of the proposed Crossrail 2 work site for a number of activities including public open space, cycle storage, development or as a bus interchange. The relocation of the bus interchange on to the proposed Crossrail 2 worksite would allow for significant improvements to the civic heart, with increased activated edges and improved grounding for OSD plot C. The additional mileage and operational changes required to re-route these buses would require further study.

11 Stories max

Redacted under Regulation 12(5)(e)

ed



Redacted under Regulation 12(5)(e)

### 3.2.5 Cobourg Street Service Corridor

The opportunity to service the OSD plots along Cobourg Street from an underground service corridor would mean that OSD servicing does not need to be done from street level and offers enormous benefits. The corridor would be connected via the triangular basement and key items of note are:

- Ability to improve activation along Cobourg Street if service yards are relocated below ground
- Less interface between service vehicles and pedestrians along Cobourg Street
- Reduced number of loading bays due to consolidation of requirements. Similarly there would be one shared controlled facility underground
- Basement size would require an increase, to accommodate additional service access and storage. Resulting in additional costs associated with excavation and enabling works
- Management of interface between HS2 and MDP required
- Extension of HS2 boundary line below Cobourg Street

Refer diagram 01 and 02

Redacted under Regulation 12(5)(e)

### 3.3 Public Realm and Pedestrian Permeability

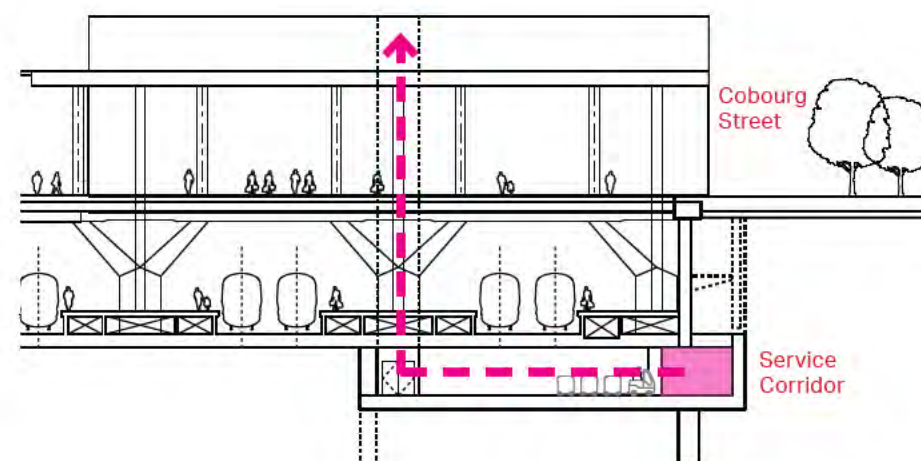
There are numerous significant opportunities for additional public open space if there was an appetite from the landowners to increase the enabling budget. The additional development opportunities diagram at the start of this section illustrates both public open space and massing opportunities if the budget was to be agreed.

The roovescape offers the potential for a highly active zone providing passive and programmed uses. A large public park with associated community facilities at roof level is an opportunity that should be explored further.

There is also an opportunity to realign the existing Granby Terrace bridge which would allow an improved arrangement for the 'green' link from the civic heart to the Northern City Park through to Camden Town. It would also offer an opportunity to prioritise this route predominantly for pedestrians and bicycles. Further sites which could be further explored are the Crossrail 2 site, the dispersal of taxi ranks to allow for greater public realm offering in the western gateway, and additional public realm on the roovescape of the station to supplement overstation development.



The roovescape offers the potential for a highly active zone providing passive and  
Redacted under Regulation 12(5)(e)



01. Plan illustrating opportunity for a service corridor along Cobourg Street

02. Section illustrating opportunity for a service corridor along Cobourg Street



3.4 Interchange, Surface Strategies and LU/CR2

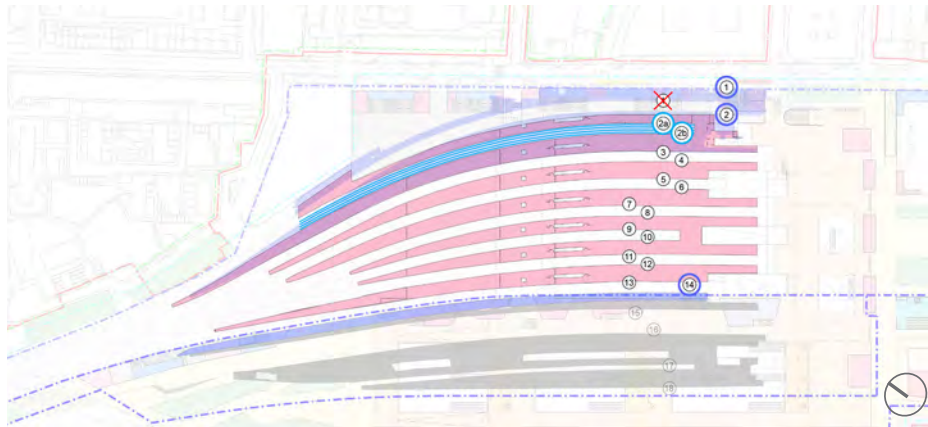
3.4.1 NR Platform Configurations

There are several options for the re-alignment of the NR Conventional Station tracks.

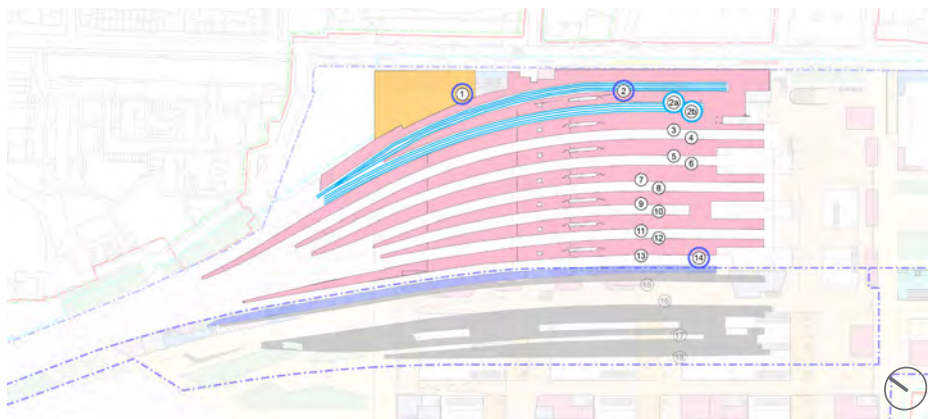
NR have set out an operational requirement for 15 platforms for the conventional station. As per the High Speed Rail Act, the current HS2 design returns 13 platforms to NR post-HS2 construction. NR have challenged this design, with a view to considering whether additional NR platforms could be provided. This is subject to ongoing discussion between NR, HS2 Ltd and DfT.

The masterplan sought to identify opportunities for additional operational platforms for a redeveloped Conventional Station. The removal of the spine building within the parallel high speed station was highlighted as a potential opportunity. The HS2 FSD design team undertook technical analysis in relation to the potential removal of the spine building to see if this would be possible for the HS2 Station. This analysis found that the removal of the spine building was possible, as the HS2 station accommodation could be located elsewhere in an alternative OSD plot, but is also found that the high speed station passenger circulation space at ground floor and concourse level, and space required for passageways and escalators to interchange into the existing London Underground network were unaffected by its removal. As these utilise the space that is currently used by Platform 14 in the Conventional Station, this meant that the masterplan was not able to realise the potential opportunity identified by the masterplan design team in the early stages to return an additional platform to NR post HS2 construction, and therefore this potential opportunity is not included in the base masterplan. NR have challenged the basis for the HS2 station design and technical analysis with a view to seeing whether if certain assumptions or parameters were changed, or if a different approach to design were undertaken, whether space could be freed up to accommodate returning additional platforms to NR post HS2 construction to meet their operational requirements. These discussions between NR and the HS2 Station Design team are ongoing.

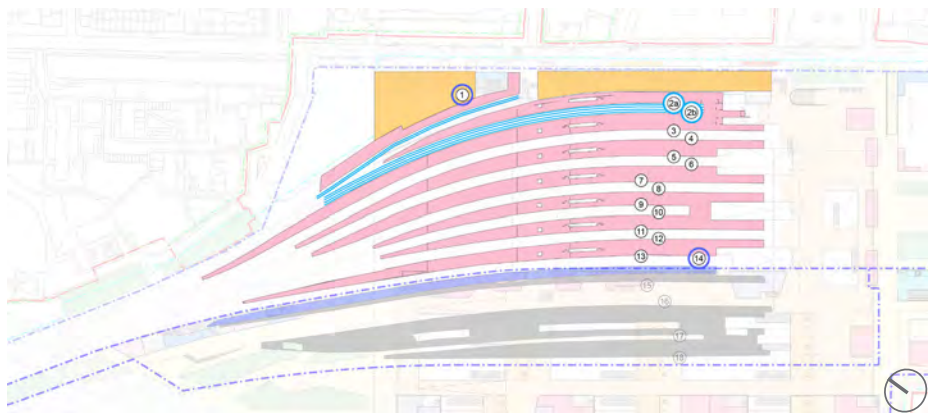
Other opportunities to increase platform provision were identified as shown to the right, these include the provision of shorter platforms within the conventional station and will be superseded by the feasibility work undertaken by Network Rail as requirements are refined and options considered.



Option 01 - The re-instatement of NR platform 14



Option 02 - Shortening of platform 1



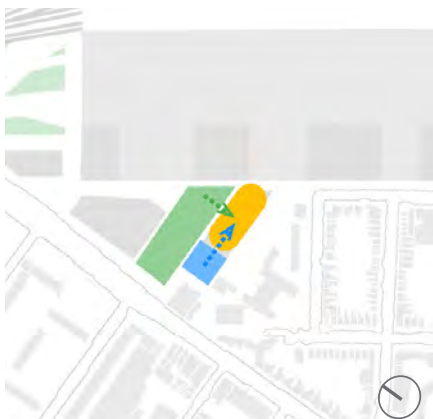
Option 03 - Re-instatement of NR platforms 1 and 2

3.4.2 Alternative Taxi Rank and Western Gateway Arrangements

The taxi rank layout and number of rank spaces in the Euston Stations Masterplan scheme compromises the amount of public open space at the western entrance to the station. The extent of the footprint significantly reduces opportunities to ground the building above, limiting lobby size and ability to active the edges. This could be significantly improved in future if taxi rank numbers were to decrease. Refer to surface strategy: Buses Opportunity study report for more information.



Plan diagram illustrating potential improvements to public open space if taxi rank was flipped to utilise the extension of Cobourg Street onto Hampstead Road.



Plan diagram illustrating potential improvements to public open space if taxi rank numbers were reduced from 45 ranked.



View of taxi facility from Robert Street | Potential to increase quantum of open space if taxi numbers are reduced



### 3.4.3 Utilisation of Proposed Crossrail 2 Worksite for Bus Interchange

There is an opportunity to utilise the proposed Crossrail 2 (CR2) work site for a number of activities including public open space, cycle storage, development or as a bus interchange. The relocation of the bus interchange on to the proposed CR2 work site would allow for significant improvements to the public realm to the southeast corner of the development, with increased activated edges and improved grounding for OSD plot C. The additional mileage and operational changes required to re-route these buses would require further study.

### 3.4.4 Bus interchange options

The opportunities studies identified a selection of bus interchange locations and numbers of stops and stands for consideration. These require further testing. See table below for the selected options that were agreed with TfL.



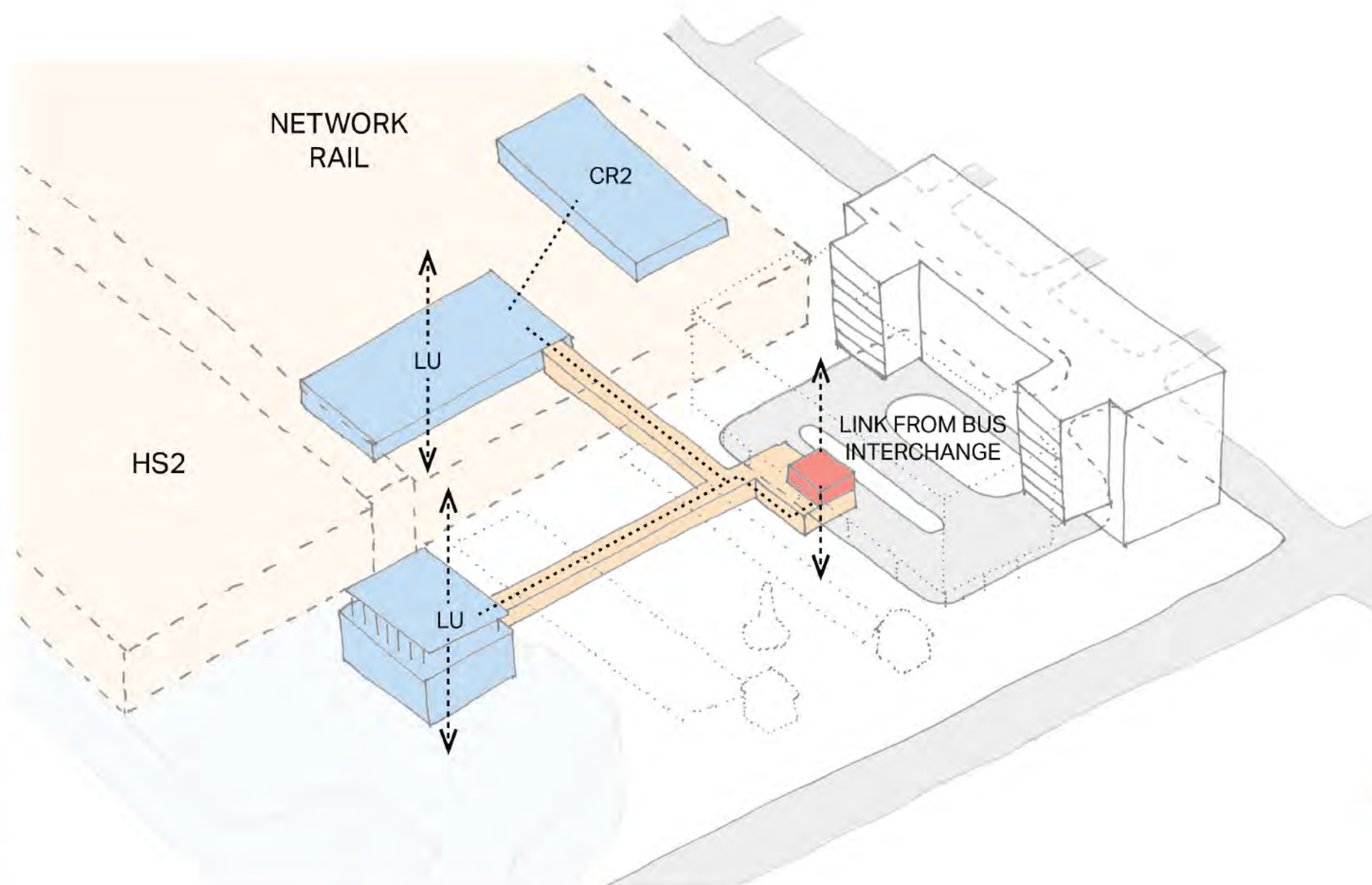
Plan diagram illustrating potential for a bus interchange in the Crossrail 2 worksite

Bus Interchange Options		
	Bus Stops	Bus Stands
<b>Option 01 Integrated interchange</b>	5 bus stops in south east interchange 3 stops Euston Road 2 stops Eversholt Street	10 bus stands in south east interchange
<b>Option 02 Split interchange</b>	5 bus stops in south east interchange 3 stops Euston Road 2 stops Eversholt Street	7 bus stands in south east interchange 3 bus stands in north west
<b>Option 03 Crossrail 2 interchange</b>	5 bus stops in Crossrail 2 site 3 stops Euston Road 2 stops Eversholt Street	10 bus stands in Crossrail 2 site
<b>Total provision</b>	<b>10 bus stops</b>	<b>10 bus stands</b>

Table of bus interchange options

### 3.4.5 Bus interchange link to London Underground

Opportunity to provide an underground pedestrian link from the bus interchange, direct to the London Underground/ Crossrail 2 tickethall. This link would optimise intermodal travel times and encourage dispersal around the site.



Potential direct link(s) from proposed bus interchange to London Underground / Crossrail 2



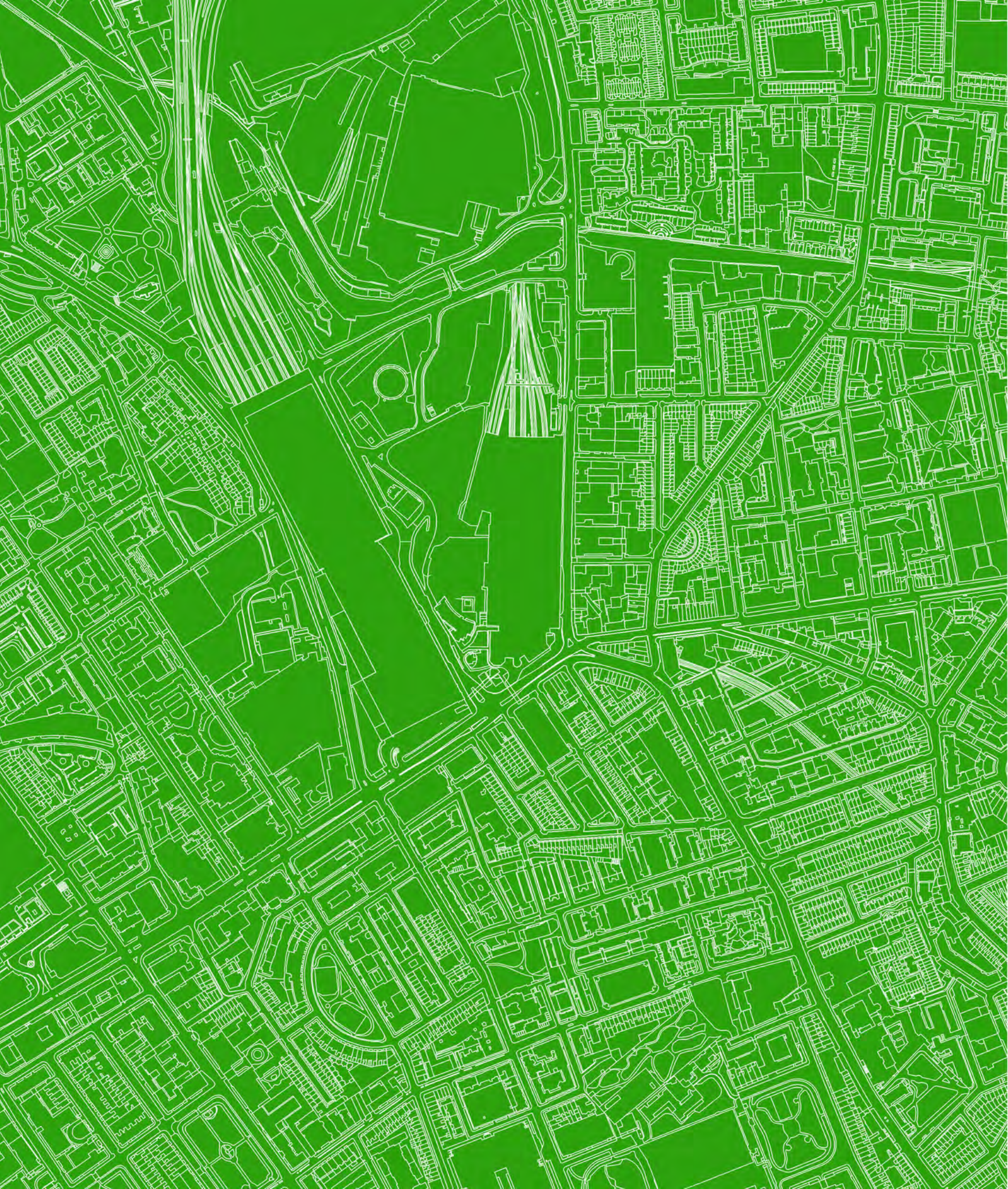
## 4 Acquisition Opportunities

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## Part J

# Conclusion and Recommendations



# 1 Conclusion and Recommendations

## 1.1 Overview

The Euston Stations Masterplan provides a baseline for landowners and stakeholders to develop their plans at Euston, whether as transport operators, property developers, or planning authorities.

In its ambition to align landowners and stakeholders on a common framework to inform the future development of Euston, the development and agreement to the Masterplan Framework has been critical, set out in Part E of this report. This framework creates a simple, legible diagram of key strategic moves and demonstrates the non-negotiable elements that must be adhered to moving forward in implementing the Euston Stations Masterplan. Key features of the framework include the creation of entrances and public space to the development on all four sides (east / west / north / south), the connection of spaces with key links across the entire site and the desire to activate street frontages. This Framework can now guide and inform all feasibility, planning, and design work at Euston moving forward, regardless of who the client body is for this work. This is an important step in delivery of the masterplan set out in this document.

The masterplan will be delivered by different clients, and their consultants, contractors, and delivery partners. A masterplan needs to be flexible to accommodate for changes, and no doubt changes will be proposed and take place over time. In addition to the Framework, this masterplan seeks to establish a clear set of principles as part of the vision set out in Part B of this document for all parties to work together to achieving, so whilst particular elements of the scheme may evolve, they should do so respecting these common principles and overall vision. Embracing this masterplan design vision by all stakeholders is essential for the success of the masterplan.

This masterplan has been produced at a point in time, and some elements are more developed than others. In order to ensure that the key aspirations within this document are delivered more work is needed in a number of areas. A series of recommendations are set out below for the next stages, whether by the Euston MDP or other parties.

## 1.2 Recommendations

### Stakeholder Engagement

- The role of the Euston Stations Strategic Redevelopment Board is critical in providing leadership and co-ordination of different stakeholder activity at Euston moving forward. ESSRB should play a key role as the ‘guardian’ of the masterplan Framework, so that as the masterplan evolves and new designs and plans come forward, the key agreed principles that have been established through this masterplanning process are retained.
- Clarity on the roles and responsibilities of different parties in relation to delivering the vision and the different elements of the masterplan is important. Ensuring that effective working and strategic relationships continue and are enhanced as the programme moves forward will be essential for effective coordination of activity to realise common aims between HS2 Ltd, NR, the MDP, Transport for London, and Crossrail Two in particular.
- The next iteration of the masterplan should involve local stakeholder and community engagement to inform the development of strategies, plans, and ultimately the development of an outline planning application. This should include further work to understand the characteristics of the local communities surrounding Euston and a clear planning strategy developed for engagement with people, businesses, stakeholders, and statutory authorities.
- Owing to the historic assets at Euston and the rich history surrounding the area, the interaction between old and new will be important to establish a clear identity for the area. Engagement with relevant bodies including the following will be important in developing the designs and plans at Euston:
  - Historic England
  - Bloomsbury Conservation Area Advisory Committee
  - Euston Arch Trust
  - Railway Heritage Trust
  - Regent’s Park Conservation Area Advisory Committee
  - Camden Town Conservation Area Advisory Committee

- In particular, a clear position on the approach to the Euston Arch will be important over the coming period to create certainty and allow for designs to develop accordingly.
- Proactive engagement and close working with the London Borough of Camden will be important in the development of the Planning Brief for Euston, to ensure that this Brief builds on the work undertaken in this masterplan but also so that the masterplan is developed in a manner which embraces local aspirations and is cognisant of planning policy. Such collaborative working will enable a more informed Brief to be developed, and should assist developing the plans to align with local policies and ambitions.

### Overall Opportunity

This masterplan report sets out the masterplan and a series of additional opportunities. It is recommended that these additional opportunities are considered by key delivery bodies at Euston to consider how they may enhance the plans for the site. This will need to consider the relative costs and benefits associated with different proposals which include;

- realignment of the Civic Heart on Euston Road;
- alternative strategies for the location and arrangement of the bus station;
- change in approach to taxi ranking;
- opportunities to increase the quantum and quality of public open space;
- alternative and additional OSD arrangements;
- interfaces between HS2, NR, TfL and CR2; and,
- various design improvements for the delivery of pedestrian and cycle linkages across the site including multi-layered opportunities and street activation.

These additional opportunities have the potential to enhance the impact of such significant development in a dense piece of the city.



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- [Redacted]
- [Redacted]

#### OSD

- The masterplan sets out a series of development plots and indicative phasing for these plots which is linked to the overall construction programme. It may be possible to release plots early for development.. This presents an opportunity to bring in tenants to the site earlier. Consideration should be given to meanwhile use of the site during construction. A clear strategy should be developed so as to reduce the impacts of construction and provide opportunities for new amenity during the construction period.
- The nature of the commercial buildings and their appropriateness for their future use and the modern workplace is an important consideration in the buildings being lettable and offering a variety of employment uses that also add to the existing knowledge quarter and medical corridor. A clear inward investment strategy will need to be developed to identify anchor tenants early.
- Further detailed analysis of the LVMF impacts on each plot across the site will be required as the masterplan in its current form is relatively ambitious and may give rise to harm to the settings and significance of heritage assets in a number of circumstances. In order to mitigate this harm and reduce planning risk the masterplan will require qualitative design of the highest quality in relation to individual heritage assets and views and may require modification to its volume and height during the planning process.
- The OSD plots over the HS2 station are aligned with the HS2 station design, and delivery contracts are in place over the HS2 approach tracks. The ability to make changes without programme and cost implications will be limited, there is far greater flexibility in the location and nature of the building plots over the Conventional Station and tracks. These plots should be reconsidered as to their appropriateness once the feasibility work that NR is undertaking is completed.



- The land use mix in this masterplan is indicative. It is anticipated that mix is reviewed as the masterplan develops with a view to determining the most appropriate land use for different plots and across the whole site, at the point in time that they are likely to be delivered to market, the economic climate at the time, demands for different types of use in London and locally at that time, and local planning policy.
- The current plan assumes no residential development over the stations due to potential freehold enfranchisement issues. It is recommended that further advice is sought on this issue, as well as different models of delivery of residential accommodation, in order to increase the potential flexibility of the scheme.
- Studies and strategy development are advised in relation to affordable housing provision, types and tenures on the Site.

**The Conventional Station**

- Continued coordination between the NR Conventional Station and the HS2 station designs is recommended in order to maximise efficient use of space between the two stations.
- Further study in to what and how a station and a concourse functions in 20-50-100 years’ time and how the station and surrounding area will be used. What impact will technology and the digital world have on stations in the future?

**London Underground and Proposed Crossrail 2**

- A review of the benefits of a combined ticket hall (and accommodation) potential for London Underground (LU) and Crossrail 2 (CR2).
- A review of the emerging CR2 designs to consider the integration of CR2 alongside HS2, LU and NR.
- Explore further options to improve the permeability across the site including how the routes are realised i.e.; are they landscaped (hard / soft), open to the air and activated.

**Surface Transport**

- A study into black cab, minicab and private car hire use in the future including how a taxi rank will operate in light of the reduction in taxi numbers proposed by the mayor. Reducing black cab numbers could provide a significant benefit back to the community and station users in the form of public open space.
- A detailed review of the future of bus routes and bus usage around the Euston Station area and beyond; consideration should be given to how buses are used and what the key requirements are for staff and passengers at Euston, including a review of the possibility of relocating bus stands off-site. The proposal to relocate the bus interchange on the CR2 worksite should be explored further as well as the possibility of alternative bus stand locations.
- Further detailed review of Euston Road traffic use and the changes expected up to 60 years in the future, for example, can the lane numbers be reduced? Can it be re-routed? Or can it be sunk underground into a tunnel to improve the surrounding public realm? What are the opportunities for planting and greening along Euston Road? Can pedestrian and cycle permeability across this north/ south barrier be improved?
- Impacts on surrounding areas and streets including review of all traffic use; Camden are reviewing areas such as Phoenix Street and Drummond Street and this should be addressed in the masterplan, including studies into the soft landscaping and improvements of Euston Road.

**Connectivity**

- Commission a people movement study to analyse how the Euston Area will be used around and across the site by members of the public to help inform the increase in numbers in the area.
- Commissioning of an Urban Realm study would be significantly beneficial for the Euston Area and the emerging planning brief which is being developed by LB Camden

**Social Infrastructure**

- Progression of social infrastructure requirements that are likely to arise as a result of the proposals and how these may best be accommodated. It is advised to commission a review of the social infrastructure requirements arising from the Masterplan proposals.

**1.3 Conclusion**

The Euston Stations Masterplan will only be realised if the key principles underpinning it are adopted by all key stakeholders and reflected in their relative emerging documentation, studies and designs. This includes;

- the incoming Master Development Partner (MDP) in their own masterplanning and the development of an outline planning application
- the London Borough of Camden in the development of their Planning Brief;
- various ongoing design developments for NR, HS2, Crossrail2 and TfL.

This masterplan seeks to create a flexible framework for future development as well as being aspirational and setting the parameters to guide further work. The key to success will be ongoing championing of a shared vision and coordination of activity across the various parties involved at Euston to ensure that the aims of the masterplan are achieved, including the delivery of one station comprised of four stations and a new piece of city which is coherent, legible, and a truly unique and inspirational place of interconnected quality spaces.







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ID	Agency	Document	Section/Element ref	Page	Theme / Models	Comment
MP-TFL-001	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	General comment regarding TfL's Masterplan Requirements	-	General	The Masterplan a strategic review of the Euston Masterplan area in 2017 to determine the high-level transport requirements needed at Euston in line with Mayoral priorities. These priorities, aligned to the Healthy Streets Approach, include: - A minimum of one N-S pedestrian link across the stations site, and two E-W links across the stations site. - Pedestrian links that provide excellent connectivity and are well integrated with the surrounding urban fabric. - Pedestrian links between modes should be high-quality, attractive, fast, convenient, legible, accessible and wherever possible unaided. - 7,500 cycle parking spaces for rail passengers provided through multiple hubs. - Excellent N-S and E-W cycling connectivity. - A world class bus interchange in the SE corner with 15 stands and 10 stops (of these 5 stops may be able to be placed on adjacent streets, off-highway - subject to design and modelling). Requirement is reduced by 5 stands when CR2 is operational. - High quality taxi and private hire facilities with the same overall capacity provision as provided in the High Speed Act. - Necessary provisions for the proposed CR2 station and do not preclude the future efficient construction and operation of CR2. - Respect CR2 station works and tunnel infrastructure safeguarding. - Operationally independent proposed CR2 entrance located to the south east on the NR existing mainline station and off Eversholt Street. - A LU station which meets the design principles agreed in the High Speed Act. - A LU station which meets the additional pedestrian demands of the CR2 within the station and the nearby transport network. As covered in further detail below, this current stage of the Masterplan does not meet all these requirements. TfL is very keen to work with HS2, NR and the MDP (when appointed) to deliver a more ambitious transport interchange (to deliver on Masterplan Report Key Principle 2).
MP-TFL-002	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	General comment regarding Governance	-	General	TfL recognises that the coming stages of the Masterplan development are critical to delivering an ambitious transport interchange and place. TfL must be engaged in the development and decision making process for any component of the Masterplan that impacts our operations, assets or customers.
MP-TFL-003	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	General comment regarding Governance	-	General	Clarity is required on roles, responsibilities, forums and requirements going forward as well as change control and how it will be coordinated.
MP-TFL-004	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	General comment regarding Contents	-	General	TfL note that comments have not been provided on formatting or grammar discrepancies. This was not considered the purpose of the review comments.
MP-TFL-005	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Executive Summary	p.7	General	The Euston Stations Masterplan Report should include reference to Appendix H - Eight Options Assessment Sheet (01296-WEA-MP-XX-RP-A-Masterplan options) in its contents page.
MP-TFL-006	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Executive Summary	p.10	General	TfL welcome and fully support the Masterplan Report Key Principle 2 for 'Efficient interchange between all modes of transport'. Not all options explored within the report appear to be aligned to this principle. Therefore TfL encourages HS2 to seek opportunities where reasonably possible to further increase efficient interchange between all modes of transport across the options considered.
MP-TFL-007	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Executive Summary	p.13	General	The Challenges should make reference to providing sufficient public transport capacity (and access to it) to cater for future demand forecast (both from rail passengers and development/destination).
MP-TFL-008	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Executive Summary	p.18	CR2	Plots C, E, F, G, H, L, M, N, O, R, S, T are located within CR2 Safeguarding Directions. Under the provisions of these Directions, Local Planning Authorities (LPAs) are required to consult TfL both before determining planning applications for development within the Safeguarding Limits and before resolving to authorise the carrying out of specific proposals for development within those Limits. Refer to CR2 information to Developers for further information and details on foundation design in the vicinity of CR2 tunnels.
MP-TFL-009	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Executive Summary	p.18	CR2	Plot A is located above the latest CR2 southbound tunnel. Foundation design will have to take into account requirements listed in the CR2 information for developers.
MP-TFL-010	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Executive Summary	p.19	Street network	More detail is required on where the new pedestrian and cycle routes link with the TfLRN. All links should be aligned to the Healthy Streets Approach.
MP-TFL-011	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Executive Summary	p.19	Pedestrians	The provision of an E-W route to the north of the site is vital to ensuring local segregation caused by the scale and potentially impermeable nature of a large station can be overcome. A link of the type shown on p.52 is highly desirable. As details of this and other routes are worked through, the Masterplan should ensure they will not be lost and that they will be attractive for users, regardless of abilities - direct, safe and legible - in line with the Healthy Streets Approach. The links must also have capacity for prospective use and be a pleasant and interesting place to be in. An approach to dealing with level changes along routes should be developed and presented.
MP-TFL-012	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Executive Summary	p.52	Street network	It is suggested in future stages of the Masterplan, to test the quality of routes that visual illustrations would be a benefit. The illustrations should show users' journeys along each route, indicating the type of elevations and facilities they will walk next to, the scale of space available to them, how they will change levels and where there may be 'junctions' (where busy routes cross) and how these will be dealt with.
MP-TFL-013	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Executive Summary	p.20	Street network	Future proofing of utility capacity should be considered within the phased delivery approach to minimise repeat utility connections.
MP-TFL-014	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Executive Summary	p.25	CR2	Please issue the '1DC03-WSP-AR-REP-SS06_SL09-000007' document referred to in this section.
MP-TFL-015	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part A - Brief and Context	p.30	General	This section should include TfL's Euston Masterplan requirements (MPD-TFL-001).
MP-TFL-016	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part A - Brief and Context	p.36	LU	LU roundel should be located also on the lift/staircase by the Sainsbury's to show the existing entrance here which is currently managed by Network Rail.
MP-TFL-017	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part A - Brief and Context	p.40	LU	The FSD design has not been sized to accommodate OSD demand. But only the HS2 2041+20% demand. How is the Masterplan going to address this gap?
MP-TFL-018	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part A - Brief and Context	p.41	LU	The Legion models with 2041+30% identified areas of not acceptable level of service. The upgrades HS2 is providing for the LU station are sized only for a 2041+20% demand level. CR2 is sizing their infrastructure and the LU additional parts with a 2041+35% demand level.
MP-TFL-019	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part A - Brief and Context	p.41	CR2	The enhancements made to the existing Underground station as part of the HS2 design will enable the forecast growth even if Crossrail 2 is not constructed'. This is incorrect. Based on rail modelling data, LU Lines (particularly the Victoria Line southbound) will not have the capacity to accommodate forecast growth associated with HS2 phase 2 without Crossrail 2.
MP-TFL-020	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part B - Masterplan Vision	p.49	Buses	Buses are not shown in visual or referred to.
MP-TFL-021	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part B - Masterplan Vision	p.52	Cycling	The SoS/TfL Protective Provisions Agreement (PPA) Schedule 3 requires clear cycling links from east, west, south and north both to and through the station (see PPA Schedule 3: EUS/1). This is supported further by Schedule 5 which envisages a new E-W cycle route along a new bridge link. With respect to E-W cycling connectivity, the current baseline Masterplan does not consider or meet this requirement. For example, there appears to be no E-W cycle route through the HS2 station illustrated on the diagram labelled 'Plan illustrating site wide cycle links' (p.108). That said, the pedestrian and cycle link proposal (p.52), subject to detailed information, may satisfy the existing assurance provided to TfL. The next stage of Masterplan development should incorporate E-W cycling connectivity into its key requirements and baseline design (not included in the spatial concept drawing on p.19, or site wide cycle links plan on p.108). Furthermore, connectivity with the wider cycle network needs to be considered and aligned to the Healthy Streets Approach.
MP-TFL-022	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part B - Masterplan Vision	p.108	LU	The addition of cycle route opportunities to existing and other proposed routes is welcome, but some further exploration is needed of the potential benefits and drawbacks of each proposal, and the barriers to delivery. The status of 'London-friendly cycle routes' also needs explaining - Euston Road and Eversholt Street would need significant change to be attractive parts of the cycle network.
MP-TFL-023	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part B - Masterplan Vision	p.119	LU	With respect to the bridge link over Hampstead Road or Euston Road (p.145), rebuilding Hampstead Road gives the opportunity to provide a much better environment for walking and cycling along the link. Therefore, arguably the focus should be on the quality of the street environment rather than on grade separation - clearly it also creates design challenges in the North City Park, which risks becoming severed by the bridge. Nevertheless, if a high-level walking and cycling connection of this type is an essential ingredient in enabling an east-to-west link across the mouth of the station, then it could potentially be justified.
MP-TFL-024	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part B - Masterplan Vision	p.145	LU	The experience of using the junction between Eversholt Street and Euston Road also needs further consideration as this is an important access route and at the moment is not a good pedestrian environment.
MP-TFL-025	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part B - Masterplan Vision	p.54	Public Realm	TfL have general concerns about the quality and practicality of the proposed Eversholt Street design. The Masterplan should look in detail at the feasibility of the space being able to in particular accommodate bus and cycle movements and provide a high quality pedestrian environment with the characteristics of a 'healthy street'. It appears from the current Masterplan drawings that this might be hard to achieve, and further work is needed to demonstrate how it will be achieved.
MP-TFL-026	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part B - Masterplan Vision	p.54	Street network	The experience of using the junction between Eversholt Street and Euston Road also needs further consideration as this is an important access route and at the moment is not a good pedestrian environment.
MP-TFL-027	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part B - Masterplan Vision	p.58	Public Realm	Permeability and legibility need to be considered together. Due to the positioning of proposed new buildings the station could be largely invisible from surrounding areas. The Masterplan should look at ways of ensuring its presence and the key function of the area as an important transport interchange is easily recognisable and understood. For example corner elevations of buildings fronting Euston Road that can be seen down longer views could be used to identify the station presence. Such legibility should be thought about in three dimensions, from all directions and for all users.
MP-TFL-028	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part B - Masterplan Vision	p.63	General	The station will have a number of entrances, which should be seen as a key benefit of the Masterplan. However it is important to ensure people know how these different entrances work and the station still retains a core, recognisable 'front' relating to its historic setting and gateway buildings.
MP-TFL-029	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part B - Masterplan Vision	p.63	General	To develop Masterplan requirements, further information is required in order to understand HS2 ticketing / passenger profiling.
MP-TFL-030	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part B - Masterplan Vision	p.66	General	Key consideration for the transport hub must also include capacity (in addition to efficiency and legibility).
MP-TFL-031	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part B - Masterplan Vision	p.56	LU	Operational independence, identification of demise and safe evacuation should be added to these parameters. LU requested operational independence (e.g. dedicated entrance). This is not shown in the high level figures in this page.
MP-TFL-032	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part B - Masterplan Vision	p.58	Pedestrians	As recognised in the report, 'it is essential that the permeability of the site is improved within the development of this new piece of city'. However, it is our view that the current Masterplan baseline is at risk of not delivering needed east-west permeability improvements. It is noted that the design is based on the assumption that the NR station design will include an auxiliary
MP-TFL-033	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part B - Masterplan Vision	p.62	Public Realm	The Masterplan should set out wind and temperature performance requirements for routes and public spaces (i.e. levels of wind, shade, wind created cooling and sun created heating) that should be met and test the proposals to ensure this can be achieved. TfL look forward to working with the MDP to develop details further in RIBA Stage 3.
MP-TFL-034	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part C - Constraints and Considerations	p.69	General	Further consideration is required on servicing of the station and OSDs.
MP-TFL-035	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part C - Constraints and Considerations	p.69	CR2	Below ground constraints: future Crossrail 2 infrastructure (station, shafts, interchange links), not just tunnels.
MP-TFL-036	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part C - Constraints and Considerations	p.69	CR2	The CR2 alignment is subject to changes as the scheme develops. Continuous engagement and effective change control with CR2 is required.
MP-TFL-037	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part C - Constraints and Considerations	p.71	General	Diagrams showing the pedestrian flows and origins are unclear. Volumes should be explained, not just proportions. Reference to model used, and specific run. Furthermore, buses must be included as an interchange mode.
MP-TFL-038	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part C - Constraints and Considerations	p.71	NR	Currently NR demand forecast is different from the one used. This may affect provision. What additional demand sensitivity is going to be applied to this? OSD is not included in these figures. Is background demand associated with commercial facilities included?
MP-TFL-039	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part C - Constraints and Considerations	p.72	Buses	TfL have identified the following paragraph as incorrect: 'The proposed bus stand provision requires an increase of 5 stands totalling 10 stops and 15 stands. This figure takes into account the inclusion of the proposed Crossrail 2 and the increased quantum of development. Should Crossrail 2 not be realised within the time frame set out within this document, additional stops and stands would be required within the interchange'. This should be replaced with: 'The current bus interchange allows for 10 stops and 10 stands. The 2033 requirement, based on detailed TfL analysis, is for 10 stops and 15 stands. Once CR2 is operational, 5 less stands required which could then be returned to other uses e.g. public realm'.
MP-TFL-040	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part C - Constraints and Considerations	p.73	Cycling	The report assumes 5,000 cycle parking places for rail passengers by the opening of Stage B2 (i.e. conventional station improvements). It is noted that this falls short of TfL's requirement of 7,500 cycle parking spaces for rail passengers provided through multiple hubs once Stages A, B1 and B2 are delivered. In the coming stages of Masterplan development, TfL would challenge HS2, NR and the MDP to be more ambitious in the provision of cycling parking to make active transport the most competitive modes wherever possible. The increased TfL requirement is largely due to the 26% increase in forecast rail AM Peak arrivals since the baseline 5,000 cycle parking provision was originally calculated.
MP-TFL-041	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part C - Constraints and Considerations	p.73	Cycling	TfL is encouraged to see the report provide multiple cycle hub locations across the Masterplan area. TfL supports the indicative cycle hub locations to the west of the station, subject to detailed information. The FSD Platform level with Cycle Parking Facility envisaged in the RIBA2 designs should also be included as a cycle hub location. In principle, TfL is very supportive of this option in particular, and our view is that it should be incorporated into the Masterplan and RIBA3 baseline designs.
MP-TFL-042	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part C - Constraints and Considerations	p.73	Cycling	Cycle hubs must be located at the most likely points of arrival/departure for people using cycles. There is inadequate provision of cycle routes and cycle hubs on the eastern side of the Masterplan area which needs to be addressed as a priority. Hubs should also be provided at the following locations: close to the Drummond Street / Cobourg Street junction and Gordon Street / Euston Road junction.
MP-TFL-043	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part D - Masterplan Process	p.77	Buses	Challenge whether completely moving the bus interchange out of the sightline is faithful to the Masterplan Key Principle 2 of providing for efficient transport interchange.
MP-TFL-044	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part D - Masterplan Process	p.78	Pedestrians	Overall, it would be useful for the Masterplan to consider, and show, where elevations will be active, or not and relate this to movement routes, ensuring that people will not be expected to walk along dead or intimidating areas.
MP-TFL-045	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part D - Masterplan Process	p.78	Pedestrians	The numbers of people who are likely to be using routes, and the space provided for them, should be considered. The amount of 'dwell space' needed for example around information boards or outside food and drink outlets should be taken into account when ensuring space capacity is adequate.
MP-TFL-046	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Part D - Masterplan Process	p.78	Pedestrians	The Masterplan could usefully provide specific information on level changes across the area and how different users will experience and traverse these. The designs should ensure these do not create barriers, dead spaces, dark places or inhibit legibility. Designs should work to minimise the need for pedestrians to change level wherever possible, particularly for through-movement.



MP-TFL-040	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part D - Masterplan Process</b> 5.3 Crossrail 2 / London Underground	p.87	CR2	Integrating CR2 and LU must ensure that sufficient capacity is provided to avoid congestion, and must ensure operational independence between LU and CR2.
MP-TFL-041	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part D - Masterplan Process</b> 5.3 Crossrail 2 / London Underground	p.87	CR2	TfL does not support a Masterplan option without CR2.
MP-TFL-042	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part D - Masterplan Process</b> 5.3 Crossrail 2 / London Underground	p.87	CR2	A CR2 (alternative) entrance location on the eastern side of Eversholt Street is not acceptable.
MP-TFL-043	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part D - Masterplan Process</b> 5.3 Crossrail 2 / London Underground	p.87	CR2	Lack of information regarding the HS2/CR2 interchange. These options focus mostly on entrance location.
MP-TFL-044	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part D - Masterplan Process</b> 5.7 Summary and Next Steps	p.89	CR2	Given this also relates to the interchange study, there should be reference to LU and CR2 under section 5.7 Summary and Next Steps.
MP-TFL-045	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part E - The Masterplan</b> 5.6 Cycle Strategy	p.89	Cycling	The report assumes that 2,000 cycle parking spaces are required as outlined in the HS2 Act, as well as the provision for an additional 500 spaces as stipulated by TfL. However, it should be stated clearly that – in accordance with the SoS/TfL Protective Provisions Agreement (PPA) Schedule 5 – 2,000 are required to be provided by the opening of HS2 Stage A (2026), with additional cycle spaces by Stage B1 (2033) and B2. This should be reflected in future reports.
MP-TFL-046	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part D - Masterplan Process</b> 5.6 Cycle Strategy	p.89	Cycling	A clearer breakdown of the type and quantity of cycling facilities would be useful in order to understand the impact on the public realm. As previously discussed, cycle hubs should be used for rail passengers (not on-street).
MP-TFL-047	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part D - Masterplan Process</b> 5.6 Cycle Strategy 5.7 Summary and Next Steps	p.89 p.89	Cycling	Understanding future cycling patterns linked to passenger profiling and cycle infrastructure to and from Euston is noted as an important next step. As previously noted by officers, TfL is open to further investigating our stated cycle parking requirements and cycling patterns more generally. However, this requires a clearer breakdown of passenger type – tourists, social trippers, business and commuters – which needs to be derived from HS2's ticketing strategy which has been requested but not yet received. TfL would appreciate if this could be sent as a matter of priority.
MP-TFL-048	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part D - Masterplan Process</b> 5.7 Summary and Next Steps	p.89	Taxis	Understanding future possible taxi scenarios and optimal mix between distributed and informal and centralised and formal ranking is noted as an important next step. TfL must be involved in all future discussions relating to this scenario work, particularly in the context of our current assurance as per the Functional Requirements.
MP-TFL-049	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part D - Masterplan Process</b> 5.7 Summary and Next Steps	p.89	Buses	The report notes that an important next step is to consider bus routing in the future and whether alternate routing or provision could help to reduce standing requirements in particular. As part of TfL/BC/GLA's developing bus station concepts, we are already considering bus routing to optimise the mix of services across Euston. It is important to note that re-routing is unlikely to provide a significant reduction in bus requirements in the south-east. Adequately sized bus facilities in the south-east will remain critical from a passenger and operational perspective.
MP-TFL-050	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part D - Masterplan Process</b> 5.7 Summary and Next Steps	p.89	Buses	Please note that TfL is developing more detailed bus station concepts with LB Camden and GLA. We will be in a position to discuss these concepts with HS2, NR and the MDP early in 2018.
MP-TFL-051	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part D - Masterplan Process</b> 6.3 East – West Walkthrough (diagram)	p.113	General	Have step free routes been considered? It is not clearly visible on these figures.
MP-TFL-052	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part D - Masterplan Process</b> 1.7 Intermodal Interchange and Surface Strategies <b>Part E - The Masterplan</b> 7.5 Surface Transport Strategy - Buses	p.79 p.119	Buses	Bus options that propose dispersing stops and stands across the Masterplanning area (or wider area) need to be discounted and should not be included within future reports. Bus services and facilities are an integral part of the world class transport interchange we are collectively trying to deliver. Requiring the 17,000 customers per day that currently use the bus station to walk an additional distance (and potentially cross a road) to access their bus stop, would carry a significant passenger journey time disbenefit of £1.3m to £1.8m per annum. Not included here is the potential additional dwell time at the rail station, while they work out where to go to catch their bus (NB: The 17,000 passenger figure does not include passengers that current board/alight on Euston Road adjacent to the main bus station). This is alongside the significant bus operational cost implications if the facility is dispersed, estimated at £4-8m per annum). Many of these customers will be carrying luggage – making their bus connection confusing and harder to access and may drive them to use private hire (the opposite modal shift we are trying to achieve through the Healthy Streets Approach). We know that low income Londoners are more likely to rely on buses (compared to 61% of all Londoners using the bus at least once a week, 69% of people with household incomes <£20,000 do so, this rises to 73% amongst the lowest household income bracket of <£5,000). Any proposal to disperse services could disproportionately affect this group, and the equality and inclusion considerations need to be highlighted. LB Camden resident groups have previously stated that they are supportive of an integrated bus station.
MP-TFL-053	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part D - Masterplan Process</b> 4.4 Technical Assessment <b>Part F - Feasibility</b> 1.3 Ventilation, MEPH & Utilities	p.85 p.123	Buses	Support comments and caution about ventilation and servicing (and overall passenger environment) of under OSD bus interchange. An under OSD bus interchange will require ventilation provision and some MEP and safety systems. The site owner should bear the additional costs of providing and maintaining these systems.
MP-TFL-054	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part D - Masterplan Process</b> 5.7 Summary and Next Steps; <b>Part E - Further Opportunities</b> 3.4.3 Utilisation of Proposed Crossrail 2 Worksite for Bus Interchange	p.89 p.154	Buses	The report notes that an important next step is to consider the possible opportunity presented by the Crossrail 2 worksite for a bus interchange location. It is very important to note the challenges with respect to this option. Please refer to TfL's feedback issued in October 2017 (Initial TfL views – Euston Masterplan transport options) for further details. However, it is worth noting that TfL is very keen to work with HS2, NR and the MDP to deliver exceptional bus facilities at Euston.
MP-TFL-055	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part D - Masterplan Process</b> 5.5 Taxi Strategy <b>Part E - The Masterplan</b> 7.5 Surface Transport Strategy - Taxis <b>Part 1 - Further Opportunities</b> 3.4.2 Alternative Taxi Rank and Western Gateway Arrangements	p.89 p.119 p.153	Taxis	The report considers varying rank provisions of 15, 30, 45 or 60 ranked spaces. It has been agreed between HS2 and TfL through the functional requirements that the size of the taxi facilities at Euston must be able to accommodate the forecast increase in taxi demand resulting from HS2. It is noted that based on HS2's own analysis (Euston Station RIBA 2 - FSD Taxi Rank Numbers Technical Note, 1DC03-WSP-TM-NOT-SS06_SL09-000001) that 60 ranking spaces are required at the end state design in order to maintain the existing reserve of taxis (a measure of capacity) and minimise negative impact to traffic.
MP-TFL-056	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part E - The Masterplan</b> 3.1.1 Civic Heart	p.100	Public Realm	Although Euston Square Gardens is not in particularly good condition, it still provides an element of tranquility and visual/noise relief in what is a very busy area with little such space and the loss of this cohesive open space and mature trees will have a significant impact on the area. If the Masterplan is to take forward the loss of public space, it should make it very clear what is being provided in return. This should relate to quality and usability of space not just area take. Re-provision by individual roof gardens will not provide the same value as a comprehensive single surface level open space linked by a number of public routes.
MP-TFL-057	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part E - The Masterplan</b> 4. Heritage and Culture	p.103	Public Realm	TfL welcome the opportunity to enhance the settings of the two listed Victorian lodges and the London and North Western Railway war memorial. The reconstruction of the Doric Arch has the potential to provide a highly distinctive landmark entrance portfolio to the new station. It would provide a fitting backdrop to the listed lodges and war memorial, and provide heritage and cultural benefit. The mid-Victorian railings that enclose Euston Square Gardens are also listed Grade II and should be restored and relocated in a suitable location within the vicinity of the redeveloped station. The same applies to the listed statue of Robert Stephenson.
MP-TFL-058	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part E - The Masterplan</b> 5.3 Station Forecourts 7.5 Surface Transport Strategy	p.104 p.118	Street network	Improvements to the street network should give priority consideration to the Healthy Streets Approach adopted in the new Mayor's Transport Strategy. This should be noted in future Masterplan work. This also relates to the ambitions underpinning the landscape and public realm proposals as well as the proposed new linear park.
MP-TFL-059	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part E - The Masterplan</b> 5.3 Station Forecourts 2.2.1. Increased Provision of Public Space	p.104 p.148	Public Realm	Following comments raised at the HS2 Euston Station Design Development Community Workshop (12 Sep 2017) regarding the function of the HS2 station roof as a potential communal space to enhance the 'greening' of the station and surrounding area and thus sense of place.
MP-TFL-060	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part E - The Masterplan</b> 5.3 Station Forecourts	p.104	Street network	As the design progresses through RIBA Stage 3, TfL require HS2 to clearly demonstrate how the new linear park will maintain required pedestrian comfort levels with the addition of new street trees.
MP-TFL-061	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part E - The Masterplan</b> 5.2 Public Open Space Provision	p.107	Public Realm	The RIBA 2 Euston Stations Masterplan report recognises the option considered presents a shortfall of Public Open Spaces (POS). Greater clarity is required over proposals explored by HS2 to meet the POS requirement as stipulated in the AP03 and to ensure alignment with the Healthy Streets agenda as per the Mayor of London's Transport Strategy.
MP-TFL-062	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part E - The Masterplan</b> 6.2 North-South Walkthrough 7.5 Surface Transport Strategy (Integrated south east bus interchange and taxi strategy diagram) <b>Part 1 - Further Opportunities</b> 3.2.5 Cobourg Street Service Corridor	p.110 p.111 p.118 p.119 p.152	Street network	This is a positive proposal, from a pedestrian and cycle access perspective – the more that vehicular movements (particularly by large vehicles) can be minimised, the better the prospects of Cobourg Street fulfilling its potential as a public space and exemplar for the Healthy Streets Approach. Noting that there is a potential issue over integration of a cycling route with pedestrian desire lines and building entrances around the southern end of new Cobourg Street. There is a risk of creating potential conflict between users and an awkward and poor quality public space. As advised in TfL feedback issued in October 2017 (Initial TfL views – Euston Masterplan transport options), TfL has concerns that the extension of Cobourg Street onto the Euston Road is likely to have significant network impacts due to the probable requirement for a new signalled entry/exit and its proximity to other junctions. This concept needs more consideration with traffic modelling and the benefits clearly explained and evidenced. The Masterplan does not clearly demonstrate how the extension of Cobourg Street onto the Euston Road would strengthen pedestrian and cycle connections to the south (particularly if it is shared with taxis, see p.119).  TfL is also concerned that this link may increase the conflict between general traffic and cyclists, as cyclists may need to use a section of Euston Road to access cycling facilities to the south. Furthermore, as indicated in the 'Integrated south east bus interchange and taxi strategy map' (p.119), HS2 may be proposing to use Cobourg Street for taxi movements. TfL has significant concerns about the negative impact that these movements (and the new junction providing for these movements) would have on the wider road network.
MP-TFL-063	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part E - The Masterplan</b>	p.115	CR2	Location of entrance and interchange. Interchange between CR2 and NR needs minimising to ensure passengers use CR2 rather than the Victoria Line.
MP-TFL-064	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part E - The Masterplan</b> 7.2.5 Station Interchange (LU/CR2 Connection)	p.115	CR2	No reference to LU and CR2 apart from 7.2 and the brief description of a triple height ticket hall.
MP-TFL-065	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part E - The Masterplan</b> 7.5 Surface Transport Strategy	p.118	Street network	Although the greening of Euston Road is a good aspiration the depth of services and LU assets underneath the road mean this may be challenging.
MP-TFL-066	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part E - The Masterplan</b> 7.5 Surface Transport Strategy - Taxis	p.119	Taxis	More detail is required over what the Masterplan Report is proposing in the 'additional set down facilities' along the southern area of Cobourg Street. As advised in TfL feedback issued in October 2017 (Initial TfL views – Euston Masterplan transport options), given the desire for Cobourg Street to be predominantly for walking and cycling, any taxi dropping off points should be for very specific, targeted purposes – i.e. mobility access only. The same applies to Eversholt Street. Consideration needs to be given to how the set downs are managed and signed. Clearer consideration also needs to be given and made explicit with regards to charging points at the main rank. Furthermore, impacts need to be considered with respect to potential improvements made as part of the Euston Healthy Streets initiative.
MP-TFL-067	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part E - The Masterplan</b> 7.5 Surface Transport Strategy - Buses	p.119	Buses	TfL is encouraged by the landowners' recognition that an integrated bus interchange in the SE is a critical component Euston functioning as a world class transport hub. An adequately sized bus facilities in the south-east will remain critical from a passenger and operational perspective.
MP-TFL-068	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part F - Feasibility</b> 1.1 Overview	p.122	LU	Please issue the 'Euston Stations Masterplan Feasibility Report' referred to in this section.
MP-TFL-069	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part F - Feasibility</b>	p.122	CR2	Incorrect CR2 alignment used in this figure.
MP-TFL-070	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part F - Feasibility</b> 1.3 Ventilation, MEPH and Utilities	p.123	CR2	Current CR2 plan has MEP (Mechanical, Electrical and Public Health) plant/vent and lifts in area shown in yellow (water tank).
MP-TFL-071	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part F - Feasibility</b> 1.3 Ventilation	p.123	LU	The existing LU ticket hall, including escalator machine chambers, plant areas and staff accommodation, is mechanically ventilated. Provision needs to be maintained throughout the construction period whilst the existing ticket hall remains in operation for this mechanical ventilation to remain in service.
MP-TFL-072	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part F - Feasibility</b>	p.125	Street network	TfL welcomes layout, design and operation of the servicing and waste proposals, however TfL would like to highlight that accesses to the highway network needs to be safe for vulnerable road users and minimise impact to traffic. Servicing and waste proposals should consider the Healthy Streets Approach.
MP-TFL-073	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part F - Feasibility</b> 1.7 Waste	p.125	LU	Information is required on how waste will be managed for the LU station during construction and in the final case. This is an important consideration for the future operation of the LU station.
MP-TFL-074	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part F - Feasibility</b> 1.5 Fire Engineering <b>Part E - The Masterplan</b> 7.2.5 Southern Interchange (LU/CR2 Connection)	p.124 p.115	LU	The key project requirement for each station to operate separately and have appropriate fire separation between them is correctly identified here.  However, it is not clear how the triple height atrium illustrated in Part E - Section 7.2 (p.115) will achieve either fire separation or independent operation in the event of an emergency. This needs to be considered in more detail.
MP-TFL-075	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P05	<b>Part G - Delivery</b>	p.129	General	TfL request HS2 to provide further details on delivery parties and how delivery can be phased inline with the delivery of other projects
MP-TFL-076	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P05	<b>Part G - Delivery</b>	p.129	LU	Construction phasing needs to ensure that LU operations are maintained. Furthermore, need to understand impact of NR proposals on LU infrastructure.
MP-TFL-077	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P05	<b>Part G - Delivery</b>	p.131	CR2	Indicative CR2 timeline should be added.
MP-TFL-078	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part G - Delivery</b> 1.2.1 Masterplan phasing	p.131	Buses	More discussion/visibility is required about interim provision for 04-06 Stages of B1 phase 2030-2035.
MP-TFL-079	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part G - Delivery</b>	p.131	CR2	Plot no.5 (CR2 worksite) will be used for the entirety of the CR2 construction period.
MP-TFL-080	TfL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part G - Delivery</b> 1.2 London Underground Connection	p.132	LU	The 3D diagram in this section is not particularly clear in demonstrating how the staged construction will facilitate the continued operation of Euston LU station throughout Stage A, B1 and B2. It is acknowledged that a key consideration is keeping LU operational at all times, however more evidence is required to demonstrate how this will be achieved in practice.



MP-TFL-081	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part G - Delivery</b> 1.2 London Underground Connection	p.132	LU	This diagram shows future connections to the LU Charing Cross Branch (in Red) constructed during Stage A. This is inconsistent with current HS2 proposals, and is unfeasible given that these tunnelled connections sit beneath the Stage B1 HS2 Platforms.
MP-TFL-082	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part G - Delivery</b> 1.2 London Underground Connection	p.132	LU	Diagram appears to show triple height void (Blue outline) being created during Stage B - intersecting Stage A passenger tunnels to Northern Bank Branch and Victoria Lines.  Current RIBA 2 Fire Strategy shows that these Stage A tunnel connections to the Bank/Victoria Lines provide the crucial additional capacity to maintain the safe operation of Euston station with Stage A and Stage B demand increase, and it's not clear how LU can continue to operate safely at Euston if these tunnels are subsequently taken out of service to create the triple height void.
MP-TFL-083	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part G - Delivery</b> 1.2 London Underground Connection	p.132	LU	Construction of the three storey void during Stage B is likely to be very technically challenging, particularly given the close proximity of existing LU infrastructure, notably the Victoria Line running tunnels, and the Northern Line Bank Branch.
MP-TFL-084	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part G - Delivery</b> 1.4 Risks	p.134	General	Phased delivery should make reference to maintaining the operation of LU, NR, CR2, HS2 and Surface Transport modes includes Buses and Taxis etc.
MP-TFL-085	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part G - Delivery</b> Plan illustrating key risks and considerations	p.135	CR2	Key: 'Crossrail 2 alignment/location' should be renamed Crossrail 2 workites
MP-TFL-086	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part H - Scheme Variables</b> 1.2 Reinstatement of Euston Square Gardens	p.139	Buses	Some of the assumptions and conclusions drawn in this section are misleading. As noted above, TIL/LBC/GLA are undertaking further detailed analysis of bus station concepts in the south-east. TIL is not of the view that all the bus station must be located entirely underneath the south-eastern plot, in fact at a minimum waiting facilities should not. Our emerging concepts indicate that, while subject to further development, re-instating the gardens and providing an improved linear bus station (with some bus standing under OSD) may be achievable without compromising the quality of public space. The emerging concepts also show that it is too early to conclude that under Landscape strategy 03, Bus Option 3 would need to be implemented. It is very likely that there are other alternatives that meet TIL's requirements for a south-east bus station. TIL design work and precedents elsewhere in London show that efficient bus interchange can be provided without causing severance or presenting a barrier to access adjacent transport modes or amenities.
MP-TFL-087	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part H - Scheme Variables</b> 1.4 Proposed Crossrail 2 Scheme	p.141	CR2	TIL's data indicates that LU Lines (particularly Victoria Line southbound) will not have the capacity to accommodate forecast growth associated with HS2 phase 2 without Crossrail 2.
MP-TFL-088	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part H - Scheme Variables</b> 1.4 Proposed Crossrail 2 Scheme	p.141	CR2	In an event of CR2 being delayed, the Safeguarding Directions would remain. Local Planning Authorities (LPAs) will continue to be required to consult TIL both before determining planning applications for development within the Safeguarding Limits.
MP-TFL-089	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part I - Further Opportunities</b> 2.1.2 Bridge over Hampstead Road or Euston Road	p.147	Pedestrians	The cream areas in the main diagram under section 2.1.2. are not clear and need further explanation. The bridge link over the Hampstead Road is clear however the wide cream areas across the carriageway do not illustrate what type of facility is being proposed (shared space?).
MP-TFL-090	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part I - Further Opportunities</b>	p.151	CR2	CR2 is currently assessing the possibility to include permanent CR2 infrastructure in the worksite on the east side of Eversholt Street. CR2 do not support progressing the opportunities listed in section 3.2.4.
MP-TFL-091	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part I - Further Opportunities</b> 3.4 Interchange, Surface Strategies and LUCR2	p.153	General	Section 3.4 is superseded by NR GRIP2 study.
MP-TFL-092	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part I - Further Opportunities</b> 3.4.5 Bus interchange link to London Underground	p.154	Buses	In principle, TIL is very supportive of the opportunity to provide a bus interchange link to London Underground. Optimised interchange should be a key priority for all stakeholders.
MP-TFL-093	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part J - Conclusion and Recommendations</b> 1.2 Recommendations - Surface Transport	p.160	Taxis	TIL requests clarity over the origins of the study into future black cab, minicab and private car hire usage as referenced in the first point under the Surface Transport heading on page 160 as well as the stated proposed reduction in taxi numbers by the Mayor. TIL is not aware of a mayoral commitment to reduce taxi rank numbers.
MP-TFL-094	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Part J - Conclusion and Recommendations</b> 1.3 Conclusion	p.160	General	Further consideration required on how Masterplan option impact on the interchange between modes (journey times, legibility, capacity).
MP-TFL-095	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix A - Architectural Drawings</b>	p.2	CR2	The plan does not show step free access to CR2 nor current CR2 ventilation.
MP-TFL-096	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix A - Architectural Drawings</b>	-	CR2	HS2/CR2 link not clear from this set of plans.
MP-TFL-097	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix A - Architectural Drawings</b>	-	Buses	A single entrance/exit point is shown for the design of the bus station. TIL has concerns over the lack of resilience this presents for example in the event of a breakdown or traffic collision occurring at the entrance or exit point.
MP-TFL-098	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix A - Architectural Drawings</b>	-	Buses	A shared surface is indicated in the bus station area, the concept indicates this continuing in and around bus stops where there are expected to be tight turning movements. TIL is concerned regarding safety and consider this design to be dangerous in addition to being difficult to maintain. TIL will need to review the detailed designs.
MP-TFL-099	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix A - Architectural Drawings</b>	-	Buses	Public waiting facilities are shown under a building and in a sunken area. Natural light on the station concourse is further reduced by a series of perimeter structures including a grey (presumably core) which is located on the principle desire line from the station entrance. This will need careful consideration around customer experience.
MP-TFL-100	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix A - Architectural Drawings</b>	-	Buses	Stops are shown in bays on Eversholt Street and on Euston Road which is contrary to TIL guidance: -The Eversholt Street stop has a narrow towlway and will require the removal of mature trees (counter to the objectives of the Masterplan) -The Euston Road stop is shown very close to the junction, the tapers in and out are insufficiently sized and it is unclear how buses will exit the bay given the current and projected traffic flows on the Euston Road
MP-TFL-101	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix A - Architectural Drawings</b>	-	Buses	Stops are moved on Euston Road closer to the junction with Upper Woburn place – whilst this helps with passenger interchange there is no longer capacity for stacking in the bus lane on approach should the stops be full – unless buses block the junction. This will need to be modelled.
MP-TFL-102	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix D - Option C1 Not Anal</b>	-	LU	Should development exceed that proposed in Option C1, the LU capacity may need to be upgraded beyond that being fulfilled by HS2.
MP-TFL-103	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix F - Requirements, Assumptions and Design Considerations Register</b>	-	CR2	Co-ordinating HS2, NR and CR2 construction programmes. The phasing of the delivery of the Masterplan needs to be aligned with CR2's construction programme.
MP-TFL-104	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix F - Requirements, Assumptions and Design Considerations Register</b>	p.7	CR2	Vibration isolation: MDP should design OSD in accordance to CR2's Information for Developers, where requirements on isolation (noise and vibration) and loading of the tunnels are detailed.
MP-TFL-105	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix F - Requirements, Assumptions and Design Considerations Register</b>	p.8	CR2	Please include under provisions for CR2: passive provisions in HS2 station design including safeguarded route for running tunnels
MP-TFL-106	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix F - Requirements, Assumptions and Design Considerations Register</b>	p.8	CR2	"Improving visibility/interchange distance between NR/ HS2 and the London Underground interchange could risk overcrowding and reduce numbers using CR2" should be rephrased and make reference to the consequences of worsening the interchange with CR2
MP-TFL-107	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix F - Requirements, Assumptions and Design Considerations Register</b>	p.8	CR2	Unclear what "The LU and Crossrail 2 link, would have been appropriately phased and carefully developed with due consideration to logistical and operational constraints" refers to.
MP-TFL-108	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix F - Requirements, Assumptions and Design Considerations Register</b>	p.8	CR2	Passive provisions provided by HS2 should take into account phasing and constructability of future CR2 links.
MP-TFL-109	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix F - Requirements, Assumptions and Design Considerations Register</b>	p.9	CR2	Please include that construction, maintenance, whole life costs shall be optimised.
MP-TFL-110	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix F - Requirements, Assumptions and Design Considerations Register</b>	p.9	CR2	CR2 escalators: CR2 is flexible into what direction the escalators are coming out of the shaft as long as a fast and direct interchange is provided, also ensuring that the new entrance location is suitably located.
MP-TFL-111	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix F - Requirements, Assumptions and Design Considerations Register</b>	p.9	CR2	Step free access is a requirement. (i.e. not only desirable)
MP-TFL-112	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix F - Requirements, Assumptions and Design Considerations Register</b>	p.9	CR2	Platform level: in the 2016 CR2 design, platform level are at +88.6m (set out according to Ordnance Datum Newlyn -100m). The CR2 alignment, and platform levels may be subject to changes. Greater clarity will need to be determined over the CR2 alignment to provide clarity on design development of other projects.
MP-TFL-113	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix F - Requirements, Assumptions and Design Considerations Register</b>	p.9	CR2	The link between CR2 and LU (Northern and Victoria Line) is at +97m (set out according to Ordnance Datum Newlyn -100m)
MP-TFL-114	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix F - Requirements, Assumptions and Design Considerations Register</b>	p.10	CR2	Development: OSD phasing should also suit CR2 and B2 programmes, not only FSD programme
MP-TFL-115	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix F - Requirements, Assumptions and Design Considerations Register</b>	p.13	CR2	Modelling: CR2 is using RailPlan forecast, 2041+35% for the design of the Euston St Pancras station
MP-TFL-116	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix F - Requirements, Assumptions and Design Considerations Register</b>	p.13	CR2	CR2 access shall be able to operate independently of NR station, not just desirable.
MP-TFL-117	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix G - Risk Register</b>	p.1	General	The risk register focuses mostly on the interfaces between the Masterplan and HS2 FSD. It should equally take into consideration Crossrail 2, NR B2 and Surface Transport, particularly in terms of construction phasing, passenger movement, passenger experience, integrations of designs, etc.
MP-TFL-118	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix G - Risk Register</b>	p.1	CR2	The risk register should make reference to the interface between OSD plots, CR2 and LU infrastructure (station and running tunnels).
MP-TFL-119	TIL	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	<b>Appendix G - Risk Register</b> MP003	p.1	CR2	FSD is currently based on an 2015 alignment, now out of date. Latest CR2 alignment has been issued to HS2 and Masterplan architects.
MP-TFL-120	TIL	not identified - general issues register	not identified - general issues register	n/a	Buses	RIBA 2 linear bus station - barrier created by 'wall of buses'
MP-TFL-121	TIL	not identified - general issues register	not identified - general issues register	n/a	Buses	Further modelling required to understand impact of eastbound Euston Road bus stops on road network
MP-TFL-122	TIL	not identified - general issues register	not identified - general issues register	n/a	Buses	Clarity on who would deliver new bus facilities, and how it can be phased inline with delivery of other projects
MP-TFL-123	TIL	not identified - general issues register	not identified - general issues register	n/a	Buses	What would be the nature of the bus facilities, taking account of interchange public realm, development plots, current/future bus routings/requirements?
MP-TFL-124	TIL	not identified - general issues register	not identified - general issues register	n/a	Cycling	Concern that HS2 cycle parking provision does not align with PPA in terms of timing, ie. 2,000 spaces provided by opening of Phase One of HS2
MP-TFL-125	TIL	not identified - general issues register	not identified - general issues register	n/a	Cycling	Impacts of cycle parking on public realm - cycle hubs preferred
MP-TFL-126	TIL	not identified - general issues register	not identified - general issues register	n/a	Cycling	To develop masterplan requirements, need to understand HS2 ticketing / passenger profiling
MP-TFL-127	TIL	not identified - general issues register	not identified - general issues register	n/a	Cycling	There is inadequate provision of cycle hubs to the east of the rail stations
MP-TFL-128	TIL	not identified - general issues register	not identified - general issues register	n/a	Cycling	There is no clear solution or proposal to improve E-W cycling connectivity
MP-TFL-129	TIL	not identified - general issues register	not identified - general issues register	n/a	Cycling	Infrastructure for arrival/onward movement of cyclists needs to more considered
MP-TFL-130	TIL	not identified - general issues register	not identified - general issues register	n/a	Taxis	Priority for TIL is to meet demand for rail users. Insufficient taxi rank capacity in masterplan, but will consider a reduction in capacity if other modes are made more attractive
MP-TFL-131	TIL	not identified - general issues register	not identified - general issues register	n/a	Taxis	Impact of taxi set-down on Eversholt Street need to be considered with respect to potential improvements made as part of the Euston Healthy Streets initiative
MP-TFL-132	TIL	not identified - general issues register	not identified - general issues register	n/a	Taxis	Requirement for n-s and e-w permeability
MP-TFL-133	TIL	not identified - general issues register	not identified - general issues register	n/a	Walking	Pedestrian modelling - Further work to be undertaken to demonstrate how the masterplan improves permeability across the area and how it distributes passengers in/out of the area. This should include the potential for Euston becoming a destination
MP-TFL-134	TIL	not identified - general issues register	not identified - general issues register	n/a	Highways	Euston Road - Study needs to take place as part of Euston Healthy Streets initiative
MP-TFL-135	TIL	not identified - general issues register	not identified - general issues register	n/a	Highways	Servicing - need consideration of station and OSD servicing
MP-TFL-136	TIL	not identified - general issues register	not identified - general issues register	n/a	CR2	Location of entrance and interchange. Interchange between CR2 and NR needs minimising to ensure passengers use CR2 rather than the Victoria line
MP-TFL-137	TIL	not identified - general issues register	not identified - general issues register	n/a	CR2	Co-ordinating HS2, NR and CR2 construction programmes. The phasing of the delivery of the masterplan needs to be aligned with CR2's construction programme
MP-TFL-138	TIL	not identified - general issues register	not identified - general issues register	n/a	CR2	Determining the CR2 alignment to provide clarity on design development of other projects
MP-TFL-139	TIL	not identified - general issues register	not identified - general issues register	n/a	LU	Should development exceed that proposed in Option C1, the LU capacity may need to be upgraded beyond that being fulfilled by HS2
MP-TFL-140	TIL	not identified - general issues register	not identified - general issues register	n/a	LU	Construction phasing needs to ensure that LU operations are maintained
MP-TFL-141	TIL	not identified - general issues register	not identified - general issues register	n/a	LU	Need to understand impact of NR proposals on LU infrastructure
MP-TFL-142	TIL	not identified - general issues register	not identified - general issues register	n/a	Ways of working	Clarity required on roles, responsibilities, forums and requirements going forward
MP-TFL-143	TIL	not identified - general issues register	not identified - general issues register	n/a	Ways of working	Change control - how will this be co-ordinated?
MP-GLA-001	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Transport	Servicing of OSD should be below ground
MP-GLA-002	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Transport	Clarity required on how consent is being gained for surface transport (eg. HS2 through Sch 17 or the MDP through planning permission)



MP-GLA-003	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Transport	Cycle parking (hubs) and routes (north-south & east-west) need further consideration
MP-GLA-004	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Transport	There is a need for TfL to have a project plan on surface transport
MP-GLA-005	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Transport	Political support is required to help deliver a cohesive surface transport solution (GLA to lead?)
MP-GLA-006	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Transport	The opportunities to the south of the station need fully exploring to consider the bus station provision, development and Euston Sq gardens
MP-GLA-007	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Permeability / links	Mis alignment of station entrance/east-west route with Drummond Street
MP-GLA-008	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Permeability / links	Routes should be more 'street' like eg. open to air and 'green' where possible within constraints
MP-GLA-009	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Permeability / links	Further detail needed on how level changes would be accommodated
MP-GLA-010	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Permeability / links	Clarity required on who would facilitate routes over the NR tracks - NR or the MDP?
MP-GLA-011	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Permeability / links	Aspiration for an east-west route that aligns with Phoenix Road
MP-GLA-012	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Open space & public realm	An open space/public realm strategy is required
MP-GLA-013	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Open space & public realm	Suitable provision of open space required to mitigate loss of St James's Gardens
MP-GLA-014	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Open space & public realm	Need to understand the nature, location and quantum of proposed open space/public realm, including the split between the HS2 station provision and that required for the development
MP-GLA-015	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Open space & public realm	The benefits of reorientating Euston Square gardens need fully exploring before progressing the proposal
MP-GLA-016	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Open space & public realm	Community should be involved in developing proposals considering green open space, trees and location near to the communities that will use the open space
MP-GLA-017	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Development	Quantum of development needs to be more aspirational
MP-GLA-018	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Development	Future discussion required at a strategic level on the sequence and relationship between town planning applications at Euston
MP-GLA-019	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Development	Concern about the quantum of retail use exceeding that stated in the EAP
MP-GLA-020	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	NR design interface	Query on the possibility of accelerating certain aspects of the NR B2 design
MP-GLA-021	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Community engagement	A single strategy is required for community engagement across the various Euston projects
MP-GLA-022	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Community engagement	Suggestion of a 'community charter'. For example, considering apprentices and betterment
MP-GLA-023	LBC & GLA	not identified - general issues register	not identified - general issues register	n/a	Mearnwhile uses	Opportunities should be explored, linking to the growth strategy
MP-EDP-001	Euston Design Panel (communicate d via LBC Notes)	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	overarching	n/a	Overall Vision	The scale of the opportunity at Euston Station is vast. The creation of a new piece of city could resolve existing issues such as: the quality and legibility of the existing station; difficulties in interchanging between different transport modes; the severance of communities either side of the tracks; as well contribute to the increasing demands for new homes and jobs.  The panel acknowledges a significant amount of work has been undertaken, however the panel feels this represents a business case option and not the masterplan required. It remains extremely concerned with the absence of a robust narrative and vision for the place to direct the station design team and MDP starting in 2018. Current proposals lack the clear vision needed to orchestrate what is a hugely complex and challenging development site, and to ensure it becomes an integrated, contextually responsive, and rich and vibrant part of the city. Report of Euston Station Design Panel meeting, 13 November 2017
MP-LBC-001	LBC	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	overarching	n/a	Process, comments and ownership of the masterplan.	While there are references to all stakeholders not agreeing all the time, the report is not explicit that this is the Landowners masterplan and as such, the option that was developed is the preferred option of the landowners rather than all the stakeholders (which the report suggests). The differing views of stakeholders on the various options and process are also not reported or highlighted, this is especially important given the risks associated with some elements of the masterplan. We have included suggestions for amended wording to reflect the Council's involvement in the process more accurately.
MP-LBC-002	LBC	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	overarching	n/a	The landowners masterplan should be viewed as a baseline for development.	Discussions at recent boards and in the later stages of the masterplan development clarified that decisions and assessments were to be completed by the landowners and as such, this has been described as the landowners' masterplan. Stakeholders including Camden Council and the GLA are in favour of a more ambitious scheme for the site and in particular have expressed a clear ambition to develop across the whole of the station, which the masterplan does not currently do. In response to these concerns, HS2 has repeatedly described the masterplan as a baseline to be developed, reading the masterplan report; this position is not expressed clearly. There are references to this being a masterplan that 'needs to be adopted by stakeholders'; whereas our understanding and ambition is that, the MDP will be asked to seek a more ambitious solution to create a successful place at Euston. We have suggested amendments throughout the report to clarify this position and to encourage the MDP to develop a more ambitious scheme, which seeks to achieve the ambitions of the EAP and guidance in the emerging planning brief.
MP-LBC-003	LBC	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	overarching	n/a	Euston Square Gardens	Reference to Euston Square Gardens should reflect the commitment for the masterplan to be able to accommodate either a reinstated or a re-orientated Euston Square Gardens. The landowners preferred masterplan option, with only periphery development, limited open space provision and an overall lack of emphasis on the place, does not demonstrate clear public benefits needed to justify the re-orientation of the gardens. The masterplan as drafted shows the gardens as re-orientated and the reinstated gardens as a 'scheme variable' only. Both options should be referred to throughout the report and all references to buildings on the Gardens should caveat this and show the alternative scheme with the gardens reinstated.
MP-LBC-004	LBC	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	overarching	n/a	Planning policy compliance	As the planning authority, Camden would like to see further information before we can comment fully on the planning policy compliance of the masterplan. In particular, it would be helpful to have more information about open space and affordable housing. From the information available to us, we have highlighted a number of areas where the masterplan does not comply with planning policy. We recommend further assessment of the scheme's planning policy compliance; with any future schemes seeking to address areas of concern and request amendments to the masterplan report to recognise fully the associated risks.  Of particular concern is the limited contextual analysis, which results in the masterplan report, failing to justify the townscape, height, massing and architectural principles to which it alludes. As a result, many of the precedent and illustrative images are inappropriate for this context.  The appropriate form of developments is likely to vary depending on how comprehensively the site is developed. The proposal to restrict development to the station perimeter means that there is less opportunity to create a new urban quarter and therefore a greater need to respond to the existing surrounding character. It also means that the east-west connections are unlikely to be the welcoming and attractive streets that the EAP demands.
MP-LBC-005	LBC	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	overarching	n/a	Document layout	The layout and lack of consistency in numbering of paragraphs makes the report difficult to follow and comment on. We have referred to page numbers and headings when providing detailed comments; it would be helpful to correct the numbering of paragraphs. We also highlight references throughout the document to connections to Camden and we assume this is Camden Town, these should be reworded to avoid confusion.
MP-LBC-006	LBC	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Main document	p. 16	Options identification	Please make the following amendment to reflect that these options were agreed as reasonable options (subject to further work on option G) to be assessed rather than acceptable options, this is an important distinction. "Seven options and one sub-option were agreed for <u>assessment</u> in July 2017 by the Euston Management Board, which ranged from 'minimal development' to 'maximum development.'"
MP-LBC-007	LBC	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Main document - The Masterplan	p. 18	Masterplan introduction	This section needs to be clearer about the context for the masterplan, especially with regard to which stakeholders have signed up to and agreed with which elements. It is especially important to be clear about how it relates to planning policy and other legislation and regulations. In particular, the masterplan report needs to be much clearer on the position with respect to Euston Square Gardens. HS2 Ltd have provided commitments at various boards that the masterplan would cover both options for reinstating and re-orientating the gardens. Similarly, it was agreed that wording could be included in the report to reflect the aspirations of the Council and the GLA for more comprehensive development across the whole site. The following amendments to reflect these points are suggested: "The Masterplan Following the option process and the agreed framework, a single masterplan arrangement was selected by <del>the landowners</del> to be developed and documented in more detail. The masterplan can be summarised by the following features: - Activated station edges with perimeter development - Improved network of streets throughout the new and existing surrounding neighbourhoods. - New east-west and north-south links connecting across the station improving site-wide permeability - <u>The possibility to reinstate Euston Square Gardens as a broad public realm configuration as existing and a proposal to re-orientated Euston Square Gardens creating legible links. If the latter is progressed Camden Council have expressed the need to show significant public benefit which we believe the preferred masterplan option as it starts with only secondary development, and a lack of emphasis on the place, does not deliver.</u> - Development and parkland bridging across the Camden Cutting - Restricted under 12.5m - Phased delivery over the next 15 years." Additional paragraph suggested as follows: <u>The GLA and Camden have expressed a clear ambition to develop across the whole of the station which the masterplan does not currently do. Additional opportunities to enhance the baseline masterplan have been identified which can be explored as the masterplan gets developed in future stages. Proposals should seek to achieve the ambitions of the EAP and guidance in the emerging planning brief.</u>
MP-LBC-008	LBC	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Main document - The Masterplan	p.18	Masterplan introduction	The diagram illustrating development land-use, areas and number of storeys does not refer to or appear to be in line with policy. We highlight particular concerns about heights in the cutting – please refer to heights in the EAP (fig 3.4) and include this reference and caveat in the masterplan.
MP-LBC-009	LBC	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Main document - Recommendations and Conclusions	p. 21	Recommendations	The points raised above should be included in the recommendations and conclusions and additional wording is proposed to better reflect the points raised above: "The Euston Stations Masterplan creates a flexible yet robust framework <del>to guide</del> to inform further work around the development at Euston into the future. <del>Where appropriate, To be delivered,</del> key elements <del>need to be</del> incorporated into the feasibility, design development, and planning work of HS2, NR, London Underground, Crossrail 2, the London Borough of Camden and the Master Development Partner.  Over the next year Camden and the GLA encourage further development of the landowner's baseline masterplan to better fit with the EAP and emerging planning brief aspirations, with a particular emphasis on place and utilising the opportunities that exist across the stations footprints. Any changes in Euston Square Gardens will need to demonstrate significant public benefit and meet the tests of the London Squares Act.  Alongside, the Euston Station Strategic Redevelopment Board and the Euston Strategic Board is anticipated to continue to consider the strategic vision for Euston stations and wider masterplanning. Strategic and working level coordination between stakeholders is going to be vital to achieving the aspiration of 'One Euston' rather than a series of disconnected places and stations."
MP-LBC-010	LBC	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Main document - 1.1 Masterplan Overview	p. 24	Baseline masterplan	Suggest additional paragraph to reflect that this is the landowner's baseline masterplan and to explain the ambitions of stakeholders as follows: <u>The Euston Stations Masterplan is based on the landowners preferred option and creates a flexible baseline to inform further work around the development at Euston into the future. Over the next year the MDP is encouraged to further develop the landowners baseline masterplan to better fit with the EAP and emerging planning brief aspirations, with a particular emphasis on place and utilising the opportunities that exist across the stations footprints. Any changes to Euston Square Gardens will need to demonstrate significant public benefit and meet the tests of the London Squares Act.</u>
MP-LBC-011	LBC	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Main document - 1.1 Masterplan Overview	p. 24	Stakeholder involvement	Reference is made to stakeholder's involvement in the process; however, there is no reference in the masterplan or appendices to specific comments and assessment of options by stakeholders. It would be helpful if the masterplan report could include reference to the process and how stakeholder comments have been dealt with throughout the process. An additional paragraph here could be appropriate.
MP-LBC-012	LBC	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Main document - 1.2 Purpose of the report	p. 25	Purpose of the report	This section needs to better reflect the process and highlight that the selected option is that of the landowners, not stakeholders: "This report has been developed during 2017 to create a shared understanding by landowners and stakeholders of the constraints and opportunities presented at Euston, to improve the collaboration between stakeholders at Euston on future development plans, and to identify shared principles underpinning the future vision for Euston. <u>The preferred option, which has been developed in the masterplan, was selected by the landowners.</u>  <u>The work has informed and will continue to influence the development of the HS2 station design at Euston and the approach to development over the HS2 tracks to the north of the station. It is informing the feasibility work being undertaken by NR in relation to the potential redevelopment of the Conventual Station. Where appropriate, it will inform the development of the Euston Planning Brief to be developed by the London Borough of Camden, recognising that the current masterplan is not complete in line with existing planning policy, certain elements will need to be tested and explored further. It will also help to inform plans for Crossrail 2.</u>  The Masterplan Process documents the identified opportunities for the site, the development of working assumptions into a framework principles agreed by all landowners and stakeholders, and the 8 options that were explored and tested against a set of criteria. <u>The final selection of the masterplan option and assessment of options was completed by the landowners.</u> "
MP-LBC-013	LBC	1DC03-WSP-AR-REP-SS06_SL09-000016 P04	Main document - 1.3.2 Euston Area Plan	p. 30	Euston Area Plan	No reference is made to HS2's involvement in the production of the EAP, suggested amends below:  <u>The Euston Area Plan, which was jointly produced by the London Borough of Camden, the GLA and Transport for London with support from HS2 and Network Rail and which represents a unified vision for Euston includes eleven objectives which are set out below. For details on the Planning aspirations and policy for Euston, including land-use strategies, spatial concepts and summary of the key issues, refer to the EAP.</u>







