Masterplan for Timperley Wedge Allocation

for Trafford Council

September 2020



Revisions

Revision Record

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1.0 Introduction

1.0 Introduction

Land at Timperley Wedge, Trafford has been identified • by Trafford Council and the Greater Manchester Spatial Framework (GMSF) for the provision of approximately 2,500 new homes and 60,000 square metres of commercial space. • Reflect NPPF, emerging thematic GMSF policies and other

This strategic masterplan has been prepared on behalf of Trafford Council and local landowners. Care has been taken to address comments on previous GMSF consultations, and other key stakeholders have been consulted during preparation of this document, including but not limited to:

Environment Agency United Utilities Manchester Airport Group Transport for Greater Manchester Highways England Manchester City Council HS2 Ltd GMAAS

To provide the necessary new homes for Trafford to meet the need identified in the GMSF, it has been necessary to propose areas of Green Belt release through strategic allocations in the GMSF. Two sites are therefore proposed in Trafford: New Carrington and Timperley Wedge.

Timperley Wedge has been selected for housing and employment allocation due to the opportunity for sustainable development on this site and its location adjacent to other areas of growth identified at Medi Park and Airport City. The allocation will be supported by new and enhanced infrastructure and the opportunity to benefit from the delivery of HS2. Timperley Wedge will deliver approximately 2,500 dwellings. Part of the land within the Timperley Wedge allocation at Davenport Green was previously allocated for high quality B1 office use within the Trafford Core Strategy adopted in January 2012. The GMSF replaces this allocation.

This document sets out a strategic masterplan for the proposed Timperley Wedge allocation in the Greater Manchester Spatial Framework.

Its key purpose is to:-

- Shape and phase development taking into account site constraints and the outcomes of a range of strategic evidence base documents which cover topics on transport, flooding, green infrastructure and heritage assets;
- Ensure that the development is integrated with existing growth proposals at Manchester Airport, HS2 and Medipark in Manchester;

- Inform the GMSF Allocation policy and boundary in the next version of the GMSF Plan:
- relevant local and national planning policy requirements, including the latest guidance that addresses climate change and low carbon initiatives.

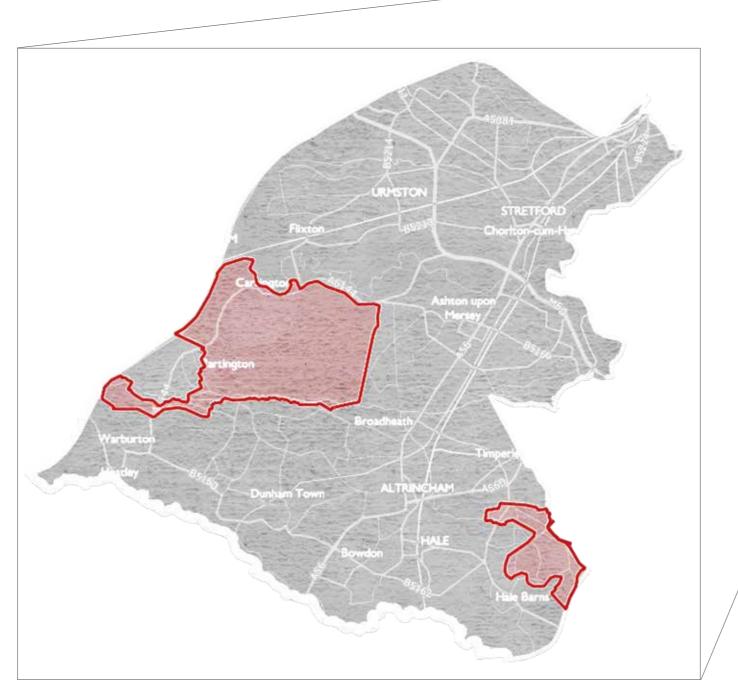


Figure 1 Top: Location of Trafford within Greater Manchester Figure 2 Below: Location of New Carrington and Timperley Wedge within Trafford



Timperley Wedge is located in the Manchester Airport area identified in the overarching GMSF strategy. The allocation is adjacent to the Roundthorn Medipark and the Airport City sites which have been identified as areas of future growth and are the subject of separate GMSF allocations. Together with Timperley Wedge this area of Greater Manchester will see significant growth and infrastructure to support development over the plan period.

Timperley Wedge and the surrounding GMSF allocations will support significant population growth, as this study demonstrates improvements in local and national infrastructure and the integration with local amenities and green spaces will provide a sustainable community over the plan period.

This Timperley Wedge masterplan defines the parameters for the delivery on site of:

- •2,500 residential dwellings;
- •60,000sq.m employment land;
- •A comprehensive public transport strategy including bus rapid transit, walking and cycling routes
- •Airport Metrolink Line, western leg extension;
- •Improvements to the local and strategic highway infrastructure;
- •A new local centre, providing community infrastructure;
- •Significant green infrastructure corridor and rural park;
- •Retain and enhance existing sports and recreation facilities;
- Protect and enhance the heritage assets and their settings;
- •Incorporate appropriate noise mitigation;
- •Sensitive integration of new development with the existing communities.

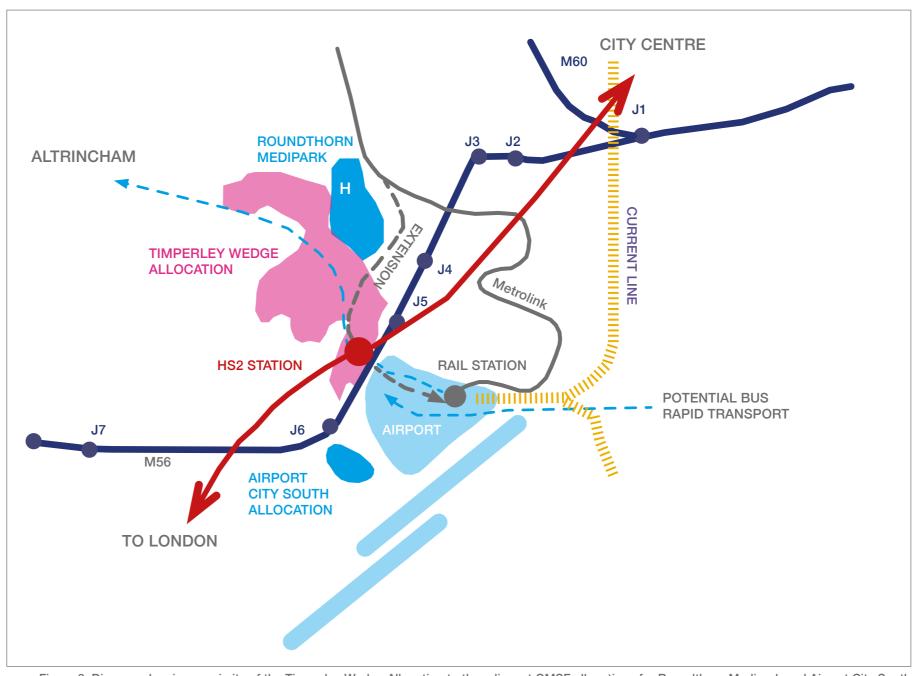


Figure 3. Diagram showing proximity of the Timperley Wedge Allocation to the adjacent GMSF allocations for Roundthorn Medipark and Airport City South
Diagram based on information from Fig 14 in GREATER MANCHESTER SPATIAL FRAMEWORK
REVISED DRAFT - JANUARY 2019



2.0 Key Priorities

2.1 Vision and Objectives

Strategic Objectives

Meet our housing need.

Timperley Wedge to provide approximately 2,500 dwellings including affordable housing throughout the site in accordance with the Trafford Council Housing Needs Assessment and the Trafford Local Plan. Housing will provide a mix of dwelling sizes in accordance with the Trafford Council Housing Needs Assessment and Trafford Core Strategy. The allocation will therefore make a significant contribution to addressing housing need within the local area.

Create neighbourhoods of choice

New dwellings at Timperley Wedge will be supported with good connections to public transport and social infrastructure to create a sustainable community.

Ensure a thriving and productive economy

The allocation of Timperley Wedge includes 60,000sq.m Development to provide a mixed use and sustainable of employment area which will support a local centre at Davenport Green and employment opportunities linked to HS2 and Manchester Airport.

Maximise the potential arising from our national and international assets.

Timperley Wedge will benefit from close proximity to Manchester Airport and a new HS2 station within the site. Development should improve access and facilities for both visitors and residents, and enhance employment opportunities.

Reduce inequalities and improve prosperity.

Timperley Wedge will deliver new and improved infrastructure to enhance transport connectivity both within the site and the surrounding communities, providing improved access for employment opportunities and economic growth. New dwellings will be supported by additional education, recreation and healthcare facilities.

Promote the sustainable movement of people, goods and information.

The appropriate development density will be determined by proximity to sustainable transport hubs, as set out in the GMSF, and designed to encourage and enable active and sustainable travel. The site is uniquely placed to capitalise on new national and regional investment in transport infrastructure including HS2, NPR and Metrolink services.

Ensure that Greater Manchester is a more resilient and carbon neutral city-region.

Development to be energy efficient and include on-site generation of appropriate renewable and low carbon energy. Neighbourhoods to establish sustainable patterns of development that reduce car dependency. Promote carbon neutrality of new development by 2028;

Improve the quality of our natural environment and access to green spaces.

Development at Timperley Wedge will enhance the special landscapes within the site including Sites of Biological Importance (SBI), the creation of green infrastructure and providing biodiversity net gain. Access to the natural environment to be enhanced with improvements to footpaths and cycling routes, creation of a new rural park, green corridors, other green spaces and play areas. Holistic strategies to be included in new developments to tackle surface water and flooding issues, particularly around Timperley and Fairywell Brooks to enhance existing blue infrastructure and prevent downstream flooding.

Ensure access to physical and social infrastructure.

community. New dwellings to be supported with new and enhanced physical infrastructure and local retail, employment, education, healthcare, play and sports facilities.



Figure 4. Indicative view

Timperley Wedge offers an opportunity to deliver sustainable and affordable housing on a greenfield site which will provide a significant contribution to addressing the acute affordable housing need in Trafford. The site is uniquely placed to benefit from new transport infrastructure and development at Manchester Airport and University Hospital South Manchester. Development of the site creates an opportunity to enhance biodiversity and improve access and recreation within existing and new green spaces.



3.0 Baseline Constraints and Opportunities

3.0 The Site

The following have been identified as the existing constraints and opportunities to be resolved as part of the development of the site. These are reviewed in greater detail in the following pages;

Location and Transport Connectivity

Adjacent areas of growth

Timperley Wedge is located adjacent to two other key areas identified for growth in the draft GMSF 2019 - these are GM Allocation 11 Roundthorn Medipark Extension and GM-Strategy 10 - Manchester Airport. Timperley Wedge should complement these allocations with connecting physical and green infrastructure and support economic opportunities within these growth areas.

HS2 station

Phase 2b of the national high speed rail project HS2 will link Manchester city centre and Manchester Airport to the national high speed rail network. The station for Manchester Airport will be located within the southern section of the site creating an opportunity for a step change in transport connectivity.

Northern Powerhouse Rail

The new HS2 station for Manchester Airport will also provide connections for Northern Powerhouse Rail (NPR) services with links to Liverpool and other northern towns and cities from the site.

Metrolink

Currently the nearest Metrolink stops are at Altrincham, Roundthorn and Manchester Airport. Transport for Greater Manchester are due to extend services as part of a 'western leg extension' to the Airport which will run through the site with new stops and interchange with HS2 and NPR.

Road connections

The road network currently consists of country lanes which are unable to support the proposed development; a new to the surrounding road network, improving connections between existing communities. This connection will also provide improved bus transit through priority public transport lanes to better connect to Manchester Airport.

Cycling and pedestrian routes

The site includes the traffic free pedestrian and cycle route along Brooks Drive and good links beyond the site to TfGM and the national cycle network. The network of existing lanes and footpaths through the site should be enhanced to provide high quality walking and cycling routes. These, together with new routes, will provide sustainable links through the site and connections to adjoining communities.

Environment and Social Context:

Heritage

Heritage assets, historic landscape, and archaeological sites within the allocation to be protected and their setting enhanced where appropriate.

Green spaces

The site is predominately pastoral with enclosed fields and gentle rolling topography. Settlement is dispersed with small centres of population around Davenport Green and towards Timperley. Public access to the site is restricted to a number of footpaths and lanes. Opportunities exist to enhance areas of SBIs, existing woodland and hedgerows, enhance existing infrastructure around Fairywell and Timperley Brooks, and provide a significant area of enhanced and accessible green infrastructure. Development should seek to retain historic landscape features, public footpaths, and existing routes and lanes through the site.

Flood risk

Address the existing flood risk issues and provide water management including SUDS within the design and layout of development and in accordance with a comprehensive drainage strategy. In addition, a holistic approach, working with the Environment Agency, to control surface water and flood risk and to protect communities downstream.

Social infrastructure

There is limited retail provision within a short walk of the site, development should provide a new local centre with convenience shopping facilities close to the Metrolink stop. spine road will therefore provide increased capacity and link New community infrastructure including education and health facilities will be required to support the new community.

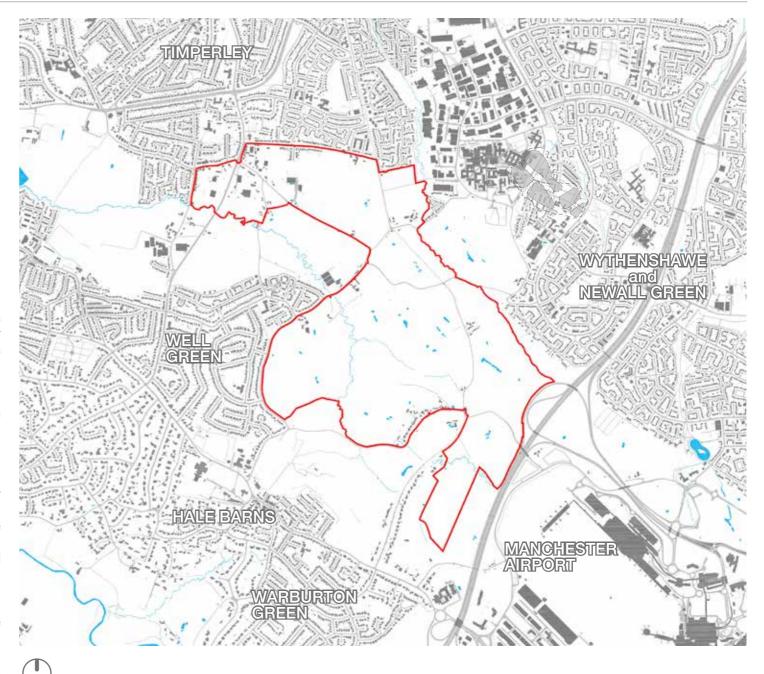


Figure 5. The Timperley Wedge Allocation Site outlined in red



3.1 Adjacent Areas of Growth

Timperley Wedge is located adjacent to two other key areas identified for growth in the GMSF 2019 - these are GM Allocation 11 Roundthorn Medipark Extension and GM Strategy 10 Manchester Airport. In addition, connections exist to wider growth locally, including the Wythenshawe Hospital SRF

Roundthorn Medipark Extension

The Medipark Extension will deliver approximately 86,000sqm B1-focused employment floorspace as a health and biotech cluster, taking advantage of the research strengths of the adjacent Wythenshawe Hospital and the wider Manchester University NHS Foundation Trust. Medipark Extension will improve highway, pedestrian and cyclist links both to existing networks and to new infrastructure at Timperley Wedge. Development at Medipark Extension is supported by new transport connectivity within the wider area with links to HS2 and NPR at Timperley Wedge and the Metrolink Airport Western Leg, access to this enhanced infrastructure will be supported by development at Timperley Wedge. The Roundthorn Medipark Extension is the subject of Wythenshawe Hospital Campus Strategic Regeneration Framework published as Draft for MCC Executive Committee March 2020.

Manchester Airport

Manchester Airport is the UK's third largest airport, with connections to almost 200 destinations worldwide. The airport is a key economic driver for Greater Manchester with circa 19,000 people directly employed on site. A £1 billion upgrade programme (MAN-TP) is currently underway to transform the existing facilities and in preparation for future growth. The adjacent Airport City masterplan area will deliver approximately 500,000 sq m of office, logistics, hotel and advanced manufacturing space. Core Strategy Policy MA1 Manchester Airport allocates this area as a strategic employment site. The airport is a key factor in realising the wider growth agenda for the North and unlocking the economic potential of cities and regions within its catchment area. More locally, the emerging Airport City development (part of the Greater Manchester Enterprise Zone) is creating a major new economic asset for Greater Manchester, attracting global occupiers and investment attracted by this location's unrivalled connectivity.

Opportunities for Timperley Wedge

Growth at Medipark, Airport City, and the wider Enterprise Zone area will provide a significant increase in employment floorspace within the local area, in combination with new housing at Timperley Wedge this creates an opportunity for a complementary and mixed use community with exceptional connectivity. Timperley Wedge is uniquely located to benefit from and support growth in these adjacent allocations. Development of Timperley Wedge will provide cohesive transport links and green infrastructure connections with Medipark and Airport City.

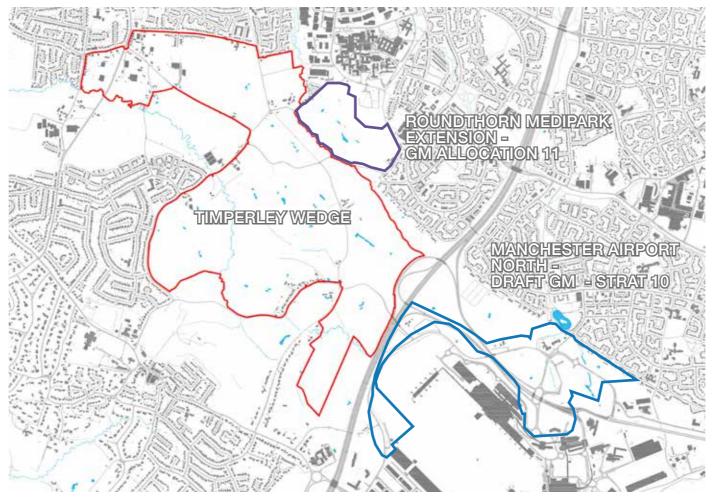


Figure 6 - Timperley Wedge Allocation.
Roundthorn Medipark and Airport City Allocations illustrated

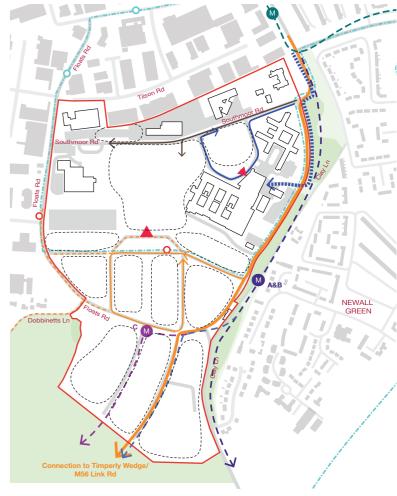


Figure 7 - Wythenshawe Hospital SRF - Future Vehicle and Public Transport Movements



Figure 8 - Wythenshawe Hospital SRF - indicative view



Figure 9 - Airport City North Masterplan Image from: https://www.airportcity.co.uk/property-options/

3.2 Transport Connectivity - 3.2.1 HS2

HS2 is a new high speed railway that will link London with other major cities in England. Phase 1, due in 2026, will bring high speed services from London to Birmingham with Phase 2 expanding the network to reach Manchester and Leeds completing a full Y-shaped network. New stations at Manchester Piccadilly and Manchester Airport are expected to be completed in 2033, although this is subject to the Phase 2b Hybrid Bill process and HS2 construction programme. HS2 will significantly increase the capacity and connectivity of Britain's rail network.

Phase 2b of HS2 will include a new station within the Timperley Wedge site to serve Manchester Airport, existing communities and the surrounding residential and employment development sites. This will create a step change in transport connectivity to the site with fast and frequent connections to Crewe, Birmingham and London.

In February 2020 the government announced that it would be drawing up an Integrated Rail Plan (IRP) for the Midlands and the North. The assessment will be informed by an assessment from the National Infrastructure Commission (NIC) looking at the rail needs of the Midlands and the North, and the available evidence on Northern Powerhouse Rail, Midlands Rail Hub, HS2 Phase 2b and other proposed Network Rail projects. The IRP is expected to be published at the end of 2020.

It was also announced that the government would proceed with the legislation to allow for the development of HS2 Phase 2b Western Leg.



Approximate location of a new HS2 station within the site

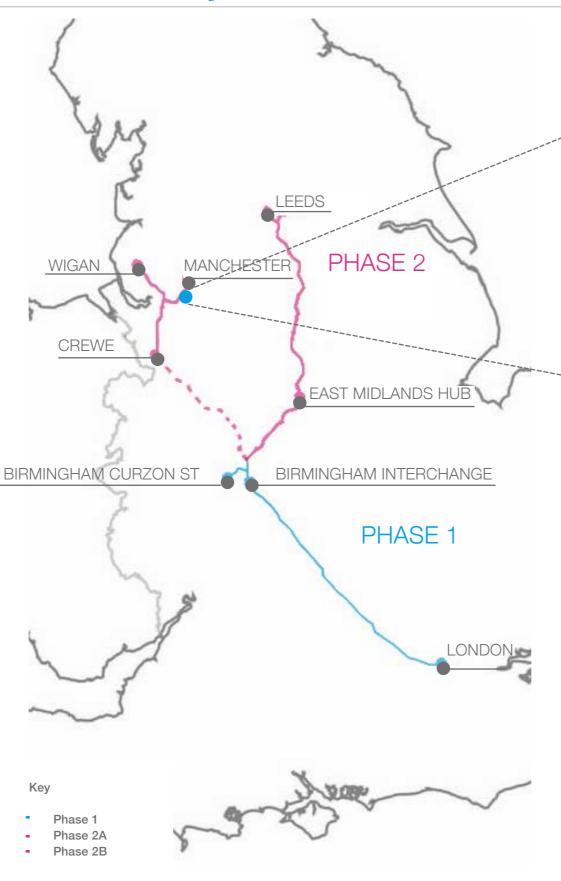


Figure 10. HS2 Network and Phases



HS2 Journey Times from Manchester Airport

London in 1hr3 minutes (currently 2hrs24 minutes)

Birmingham Curzon Street in 32mins (currently 1hr 17)

Source: https://www.hs2.org.uk/stations/manchester-airport/



3.2.2 Northern Powerhouse Rail

Northern Powerhouse Rail (also referred to as 'HS3' or 'Crossrail for the North') will deliver upgraded railway lines between Manchester and other major northern cities designed to radically improve capacity, journey times and service frequencies.

This investment will extend the connectivity and productivity benefits of HS2 with improved services to towns and cities across the North, enhancing business to business connectivity and significantly improving access to job opportunities.

NPR will connect with HS2 services at the integrated HS2 / NPR Airport Station within the site. This will provide faster and more frequent links between Liverpool and Manchester Piccadilly via Warrington and Manchester Airport. NPR will connect Manchester to Liverpool, Leeds and Sheffield in around 30 minutes, and to Newcastle and Hull in under 90 minutes.

NPR development and delivery is currently under consultation, with estimated completion by 2040.



Approximate location of a new HS2 /NPR station within the site

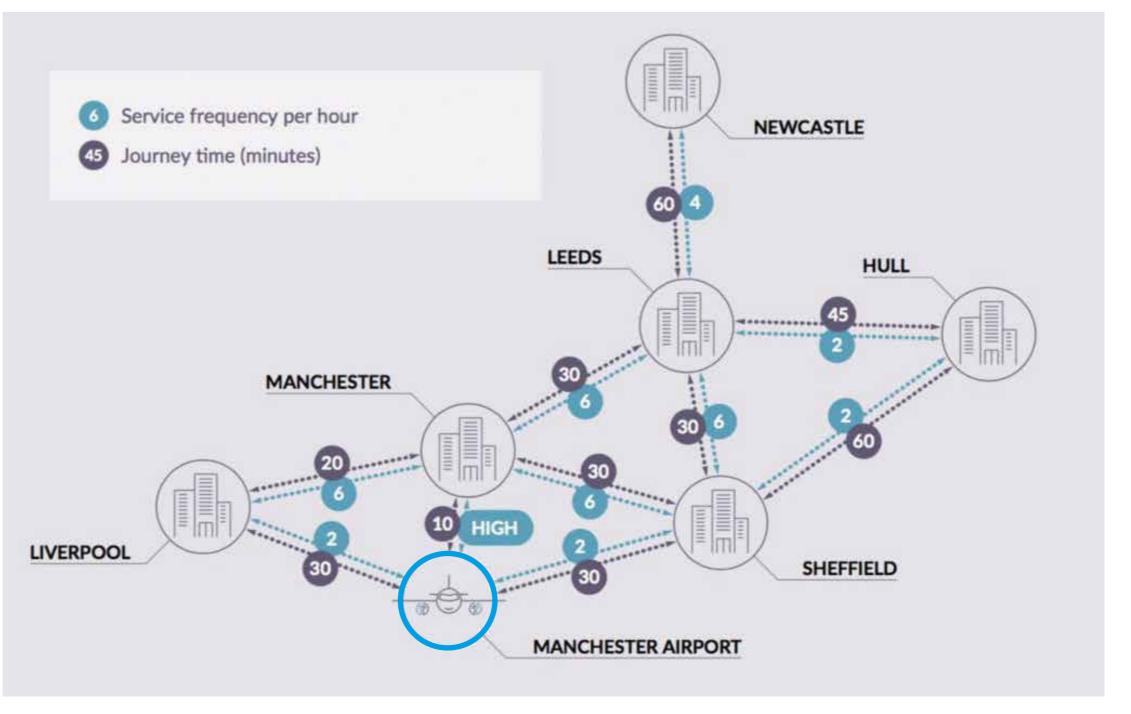


Figure 11. Northern Powerhouse Rail Source: Transport for the North



3.2.3 Metrolink

Currently the closest Metrolink stops to the site are located at Altrincham, Roundthorn and Manchester Airport. These are all in excess of 20 minutes walking travel time from the site.

TfGM are planning to extend the existing Metrolink network

Stretford Chorlton with three new stops as a new western leg route to Manchester Airport - this is illustrated as the dashed line on St Werburgh's Road Barlow the adjacent map. Two of these stations - Davenport Green Moor Road Withington and Manchester Interchange (HS2) will be located within the site and will be integrated into the development of Timperley **Burton Road** Dane Road Sale Sale West Didsbury Water Park Sale This will provide an interchange with NPR and HS2, improve connections to the airport and to the surrounding Brooklands Northern Didsbury Didsbury Village communities, as well as linking to Medipark and a new population at Timperley Wedge. Wythenshawe East Didsbury Timperley (Park Potential delivery of the Metrolink extension is Moor Road estimated for 2028-30. Baguley Martinscroft Navigation Road Roundthorn WYTHENSHAWE HOSPITAL Benchill Altrincham Victoria Manchester Salford Crossacres Altrincham Wythenshawe DAVENPORT GREEN Town Centre Robinswood Road Peel Hall Piccadilly MANCHESTER INTERCHANGE (HS2) Shadowmoss Manchester Airport Stockport Altrincham Key Existing Metrolink line Airport Proposed Metrolink Western Leg Estimated location of new Metrolink stops

Firswood

Old Trafford

Figure 12. Metrolink - Existing and Proposed Western Airport Extension Source: https://tfgm.com/public-transport/tram/geographical/network-map



Approximate locations of new Metrolink stops,

within and adjacent to the site

3.2.4 Bus and Road Transport Connections

The existing roads through the site are limited in capacity and do not provide a strategic link between Altrincham and Timperley to the north and the Airport and communities to the south.

A new spine road is required to link Timperley and the proposed interchange for HS2 and NPR at Manchester Airport Interchange. The spine road will be a combination of new and upgraded infrastructure and provide a link to the Medipark site to the east.

The spine road will deliver increased capacity and links to the surrounding road network. This will be a key route for bus services and with the potential for future rapid bus transit, forming a sustainable transport corridor through the site and contributing to improving east/west connectivity between Altrincham and the Airport, as well as the wider southern Greater Manchester area.

The spine road will be the predominate vehicle route through the site. Other routes will be enhanced to promote pedestrian and cycling connections. The adjacent plan shows these key routes. Details of a road connection to the Medipark development will be subject to the masterplan of that site.

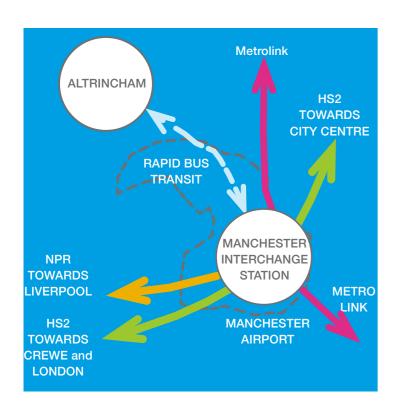


Figure 13. Opportunities for new transport connections through the site

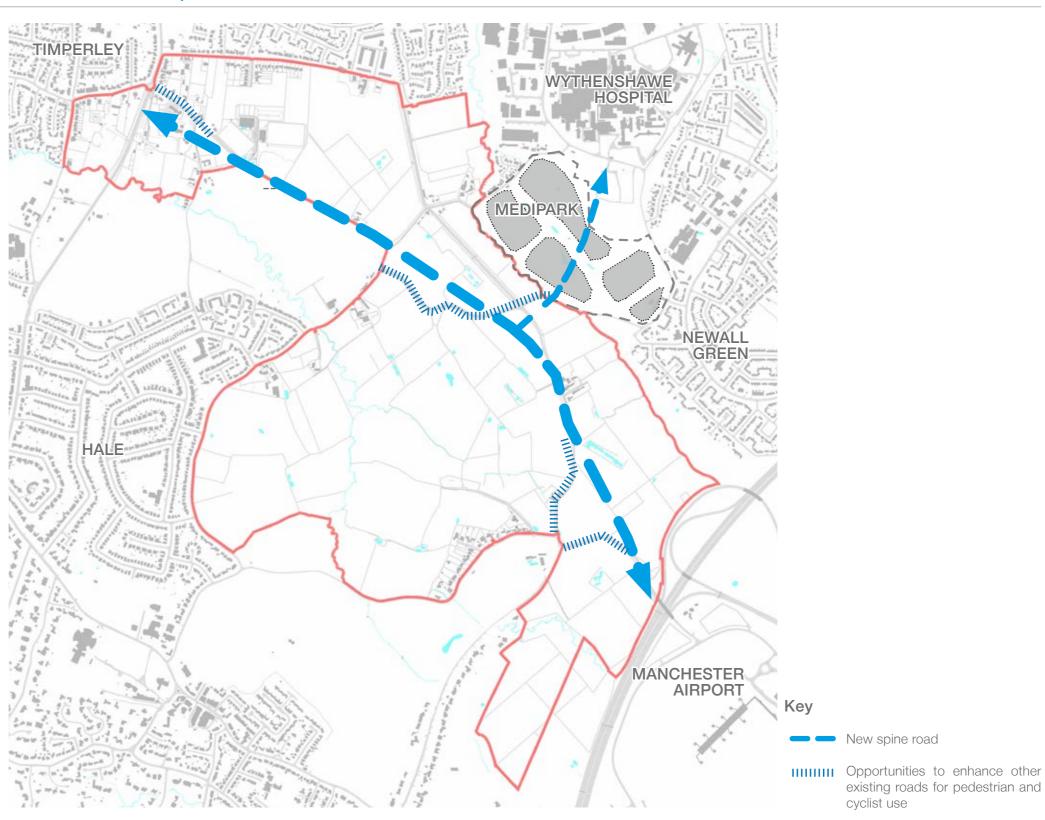


Figure 14. New strategic road connections and existing routes to be enhanced



3.2.5 Cycle Routes

The Bee Network Vision for Great Manchester was published in 2017. This provides a detailed proposal for a fully joined up cycling and walking network; the most comprehensive in Britain covering 1,000 miles. This will consist of segregated cycling and walking routes, plus 1,400 new crossings that will connect every community in Greater Manchester. This approach will open up communities and neighbourhoods, making them much more accessible and pleasant places to be. Future development at Timperley Wedge should be in accordance with these principles and link to the surrounding pedestrian and cycle network.

The site has good access to the existing TfGM and National Cycle Network routes. These are marked in dark blue on the adjacent map. Development of Timperley Wedge will connect to these existing networks and create opportunities for both commuting and recreational cycling.

The proposed new Metrolink stops will be commuter hubs and therefore new cycle routes should provide good access to these locations. This will significantly enhance transport access both for Timperley Wedge and for existing communities in Hale, Hale Barns, Wythenshawe and Newall Green.

The adjacent diagram show streets (coloured light blue) that would be within an average 15 minute cycle of the proposed location of Manchester Interchange Station and Davenport Green. This demonstrates that the proposed extension of the Metrolink and other enhancements to the transport network will greatly increase connectivity and access for the wider area.

Key



Existing cycle network routes - Sustrans / TfGM

 Potential cycle routes within the site to be created or enhanced

Existing Metrolink Stop /Train Station

Potential new Metrolink Stop

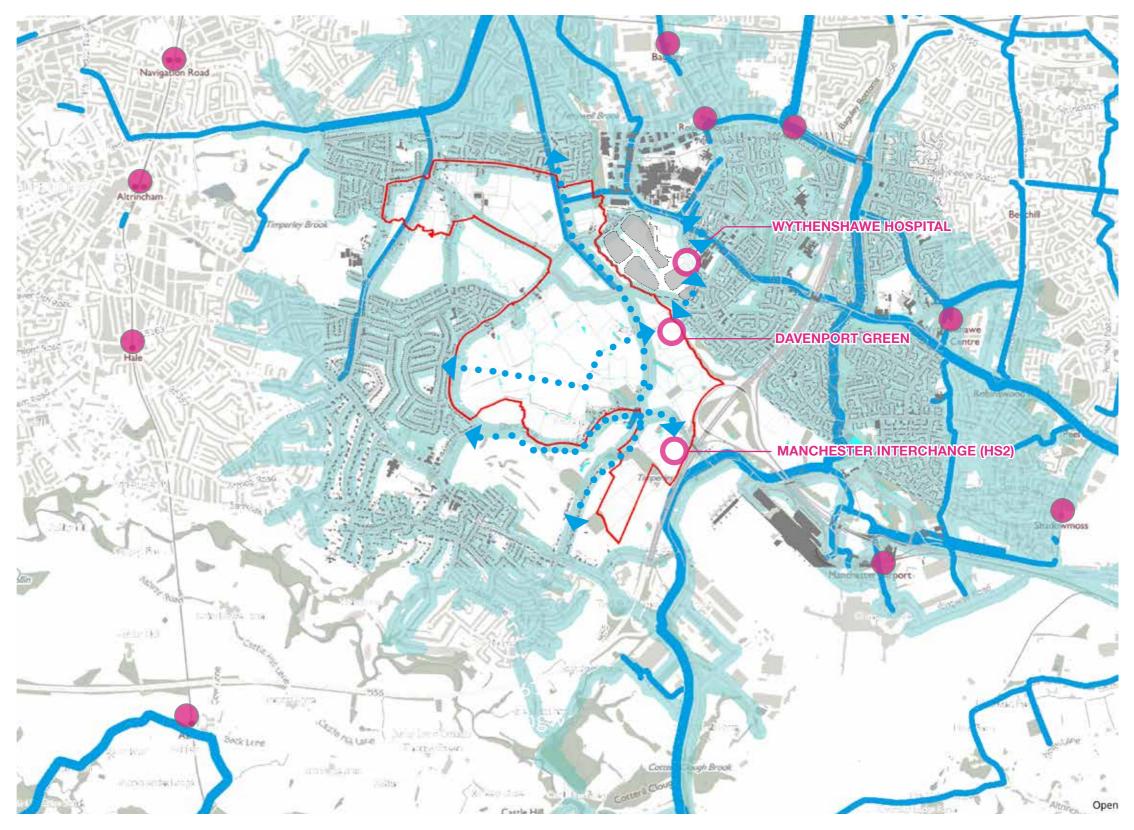


Figure 15. Cycling Accessibility Diagram Source information from Bike Citizens Mapping and mappinggm.org.uk



3.2.6 Pedestrian Connectivity

The site currently has a number of footpaths and rights of way and these are illustrated on the adjacent plan.

Although Brooks Drive is not a public right of way this is an important existing route for both pedestrians and cyclists.

The existing footpaths and rights of way should be conserved and enhanced by any development. Additional routes will provide opportunities for recreation and attractive links to the potential local hubs of the Metrolink stops. Walking and active travel should be prioritised in any new development in accordance with Trafford Council Design Guide and the TfGM design standards for cycling and walking routes.

Key

Existing right of way/footpath

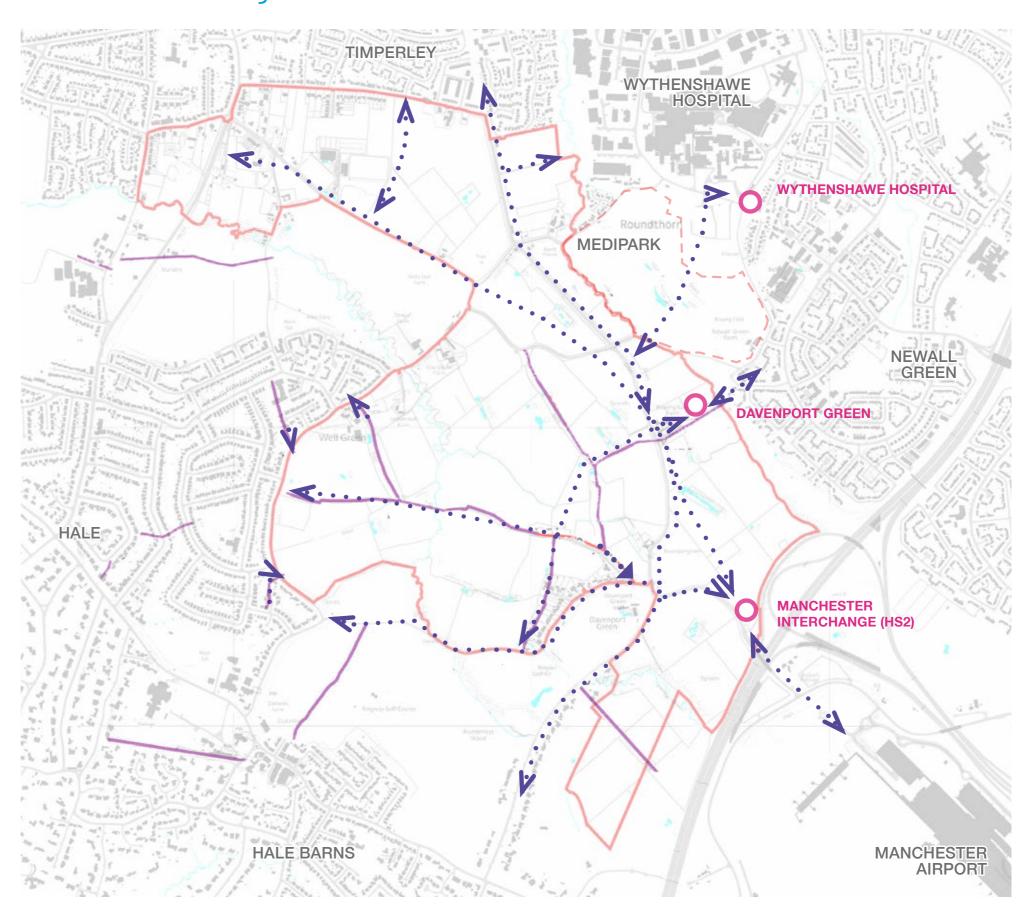
Opportunities to enhance existing routes or provide



Potential location of new Metrolink stop

Improved walking routes are required to make short journeys on foot a more attractive option and make connecting to public transport options easier and safer for all. In addition to this, safe and well-connected cycle routes make cycling an option for more people on short journeys and for commuting.

Trafford Council Design Guide 2020
Best Practice Principles



3.3 Environment and Social Context:3.3.1Heritage Assets

Within the site there are a number of heritage assets and historic features. A detailed report on these features, including recommendations for safeguarding and enhancement as appropriate, has been prepared by Centre for Applied Archaeology, University of Salford (also referred to as GMAAS) and forms part of the evidence base for this masterplan.

Designated Built Heritage Assets

The proposed allocation lies within the setting of a number of Designated Heritage Assets. The adjacent map (reproduced from the GMAAS report) identifies heritage assets that are either within or less than 250m of, the site.

Within the south of the site Davenport Green Farmhouse and the adjacent Barn and Paddy's Hut have Grade II listed status. These structures form an important group and, along with Davenport Green Hall, reflect the historic rural landscape of the southern half of the allocation. The GMAAS report describes the significance of these assets as follows:

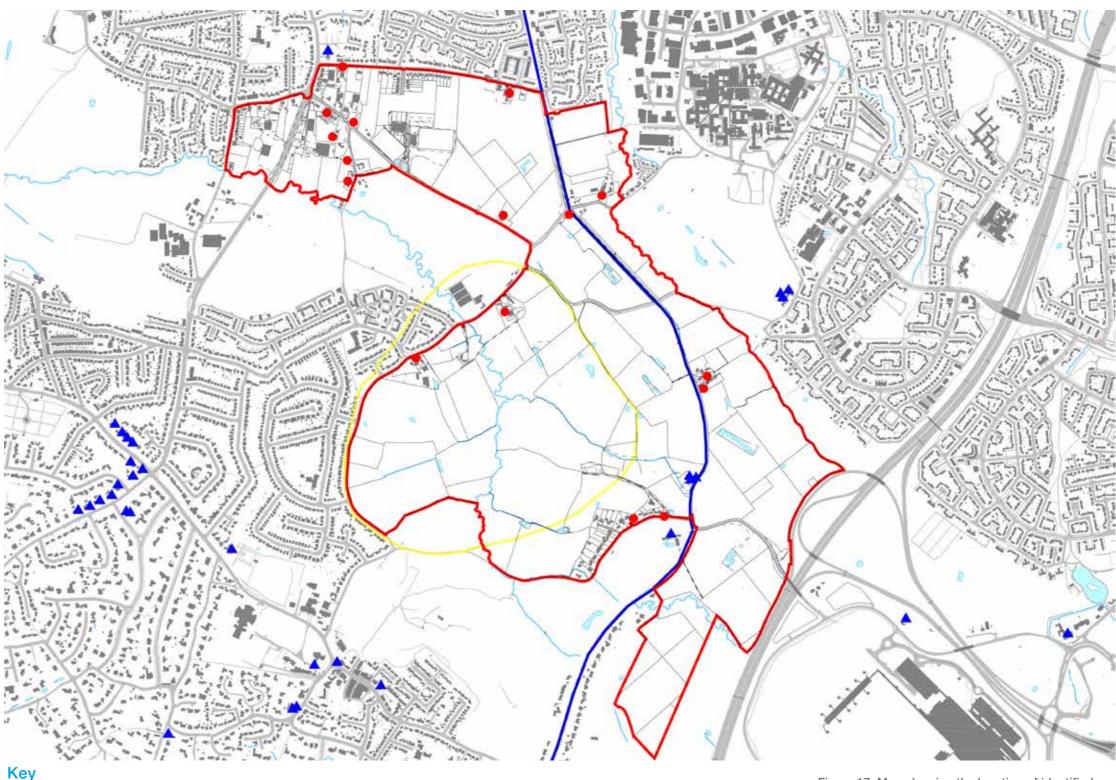
The buildings at Davenport Green Farm draw their significance from a number of values and represent a rare example of a group of agricultural buildings demonstrating different functions and possibly dating back to the 16th century. They sit within a relatively well-preserved rural landscape, however since its conversion to residential its immediate setting has altered from agricultural to private garden. A large number of trees now enclose this space but nevertheless this makes a positive contribution to their significance. In addition there are a number of key views to the east and careful consideration is needed of the overall design, layout and views to reduce harm to their significance.

Non-designated Built Heritage Assets

A number of non-designated buildings have also been identified within the GMAAS assessment, which, although not being listed, contribute to the architectural and historic character of the area. These heritage assets should, where possible, be retained and their settings protected. For those located within more built-up areas, it is suggested that development proposals should seek to respect the current grain and townscape. For those with rural settings making positive contributions to their significance, any proposed development should consider overall design layout, including softer edges to development and green buffer zones. It is also really important due to the flat topography of the Borough that long range views are considered to respect the rural setting and avoid being visually dominant.

Opportunities for Safeguarding and Enhancement of Heritage Assets

These opportunities are reviewed in detail within the GMAAS report and will need to be considered in any future development of Timperley Wedge.



Medieval Deer Park boundary

Brooks Drive

Figure 17. Map showing the location of identified

built heritage assets

Timperley Wedge – Masterplan for Trafford Wedge Allocation

Designated built heritage assets

Non-designated built heritage assets

3.3.2 Historic Landscape and Archaeology

report to provide a summary of these features.

The landscape across the Site is mostly rural, agricultural land, particularly to the south and west with some residential development to the north-west.

Medieval Deer Park

Research has shown that the manor of Sunderland lay within the Site and a charter from 1290 mentions the owner of the manor. Hamon de Mascy's intention to create a deer park. This is then mentioned in the Ministers Accounts of 1353 as
The existing hedgerows contribute to the historic and rural parcum de Sunderland. The Deer Park probably existed for around 200 years as Saxton's Map of 1577 does not depict it. After which it was then enclosed in a piecemeal fashion.

A number of features, including a Deer Park boundary, the moated site at Buttery House Farm and possible fish ponds survive relating to the former Medieval Sunderland Deer Park. These form a key part of the heritage of the site, and preservation and further investigation will be required.

Brooks Drive

Part of Brooks Drive runs across the Site and is named after a local landowner, Samuel Brooks, This was built as a private drive, running from Brooklands Station in the north, southwards to Hale Barns over a distance of around 6.5km.

Brooks Drive survives as a substantial feature within the landscape today. The purpose built parts were originally lines with 7m wide plantations, either side of two double lines of hawthorn hedges. The path would have been originally 2.5m wide, however only one line of hawthorn hedge survives today. The path has fallen into disrepair in places although part of it has been restored by volunteers to restore hedges and carry out additional planting.

Field Boundaries

A number of historic hedgerows and field boundaries that appear on 19th century Tithe Mapping and/or the first edition Ordnance Survey are still evident on the site and these are illustrated on the adjacent map.

The field system within the Deer Park and to the east, is a product of piecemeal enclosure and post-dates the park, which is known to have disappeared by the late 16th century. More fragmented elements of Post-Medieval enclosure also survive, particularly within the extreme north-west portion of the site.

Opportunities

The historic features that relate to the Medieval Deer Park, including the boundary, the moated site and possible fish ponds should be preserved and enhanced within new development. Opportunities for heritage trails and heritage

The following text is extracted from the GMAAS technical interpretation points relating to these sites should also be considered.

> Other elements which should be preserved include the Ancient/Semi-Natural woodland at Davenport Green Wood. There are also small areas of woodland which may have been covert which although not identified as ancient woodland, are shown on early 19th century mapping. These again form an important part of the rural character of the area and could be opened up for public access.

> character of the area and, where possible, they should be incorporated and retained within the landscape as they will help provide a unique sense of place, continuity, character, and historic interest to the new development.



Brooks Drive, between Whitecarr Lane and Dobbinetts Lane, looking north-west

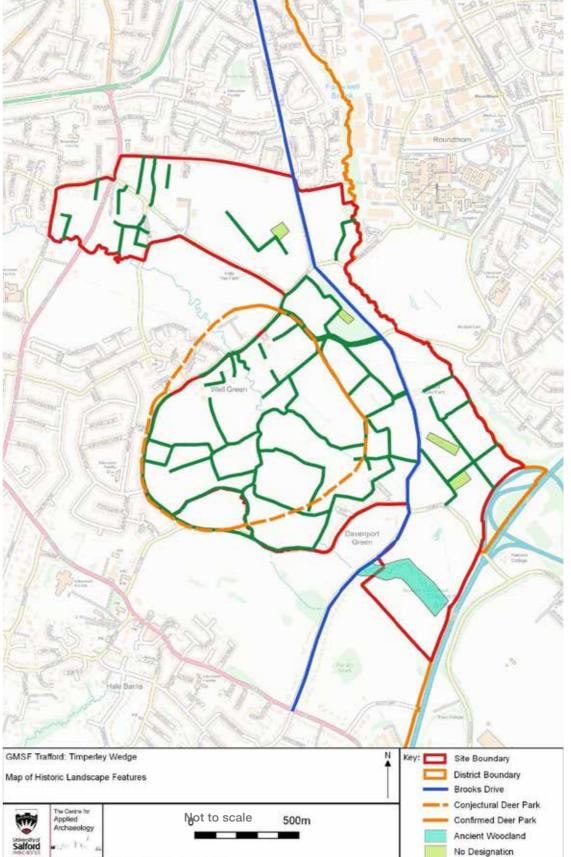


Figure 18. Map showing historic field boundaries, as well as other historic landscape features

All images from GMAAS report



Archaeology

A programme of geophysical surveys and archaeological evaluation is recommended for areas of medium and high archaeological sensitivity. This should be carried out in consultation with GMAAS to then determine what further steps need to be taken. It is envisioned that some archaeological work can be dealt with as part of a condition of planning permission, however for more significant remains, further pre-planning work may need to take place to determine their future treatment.



Part of the possible Deer Park pale with bank, ditch and mature trees still surviving

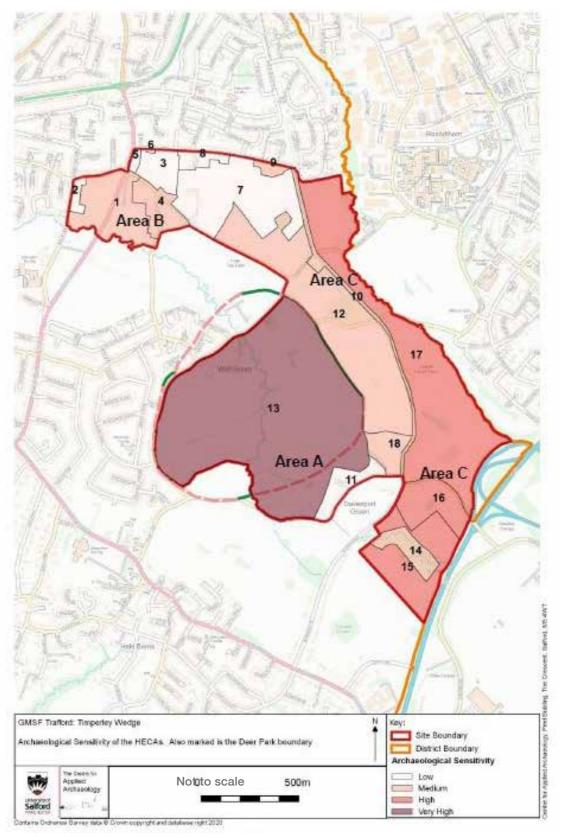


Figure 19. Map showing areas of archaeological sensitivity

All images from GMAAS report



3.3.3 Arboriculture and Ecology

The site contains a number of important ecological and arboriculture features.

Ecology

Two Sites of Biological Importance (SBI) have been identified within the site. This is a non statutory term for a locally valued site of biological diversity which are described generally as Local Wildlife Sites by the UK Government.

Ponds at Davenport Green - SBI.

'A cluster of ponds and associated terrestrial habitat including marsh, grassland, hedgerows and streams. The ponds support the largest known population of great crested newts in Trafford together with other amphibians, aquatic invertebrates and a range of plant species. The site supports a range of pond habitats. These vary from small shallow ponds, to large open ponds and ponds with deep water all at different successional stages. Many of the ponds are UK Biodiversity Priority Habitats and marsh is a Greater Manchester Biodiversity Habitat.'

Greater Manchester Ecology Unit - Site Description

Arboriculture

The trees lining Brooks Drive have Tree Protection Order (TPO) status. There is an area of ancient woodland in the south of the site - Davenport Green Woods. This area is also a Site of Biological Importance (SBI).

Opportunities

The existing ecology and arboriculture can be enhanced by replanting hedgerows and trees along Brooks Drive and within the historic hedgerows.

The zone identified as the Ponds at Davenport Green - SBI corresponds to a similar area as the Medieval Deer Park and these will become key features for biodiversity and green infrastructure proposals.

Development on the site must enhance ecology by delivering Biodiversity Net Gain. This is a national planning policy requirement for development to deliver a minimum 10% biodiversity improvement.

Development must also take care to enhance the existing water bodies (Fairywell and Timperley Brooks) that are monitored under the Water Framework Directive. These should be improved through renaturalisation, removal of barriers and tackling invasive species to create better connected ecological networks.

Tree Preservation Orders

Site of Biological Importance (SBI)



3.3.4 Green Belt

The National Planning Policy Framework (NPPF) defines the purpose of Green Belt land as the following:

- (a) to check the unrestricted sprawl of large built-up areas;
- (b) to prevent neighbouring towns merging into one another;
- (c) to assist in safeguarding the countryside from encroachment;
- (d) to preserve the setting and special character of historic towns; and
- (e) to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

The Greater Manchester Green Belt study has been prepared by LUC to assess the potential green belt harm for the GMSF allocation sites.

The majority of the site is currently identified as Green Belt land, and used for farming with public access via a number of footpaths and lanes.

The Greater Manchester Landscape Character and Sensitivity Assessment by LUC (2018) characterises the area as Urban Fridge Farmland - typically low grade pasture land and semi-improved grassland associated with stock rearing and rough grazing.

Within the north of the site formal recreational uses increase association with the adjacent urban area and limits the contribution to the Green Belt purposes.

Opportunities

The allocation of Timperley Wedge creates opportunities to improve access and recreation as well as to protect and enhance the existing heritage assets within the Green Belt.

Land at the southeast section of the site is not within the Green Belt and has been previously allocated for development. This area is a key opportunity for the delivery of new homes and employment floor space within Timperley Wedge.



Figure 21. Existing Green Belt Land



Existing Green Belt

3.3.5 Flood Risk

Timperley Brook and Fairywell Brook run through the site and there are localised areas of surface flood risk from these watercourses. For Timperley Brook, flooding occurs within an area that is undeveloped farmland. Fairywell Brook flooding impacts on existing roads at Whitecarr Lane and Dobbinetts Lane as well as the surrounding farmland.

Downstream of the site there are areas identified as Flood Risk Zones 2 and 3 in Timperley and Brooklands. This includes areas with existing dwellings. This is illustrated on the adjacent Environment Agency Flood Risk Map.

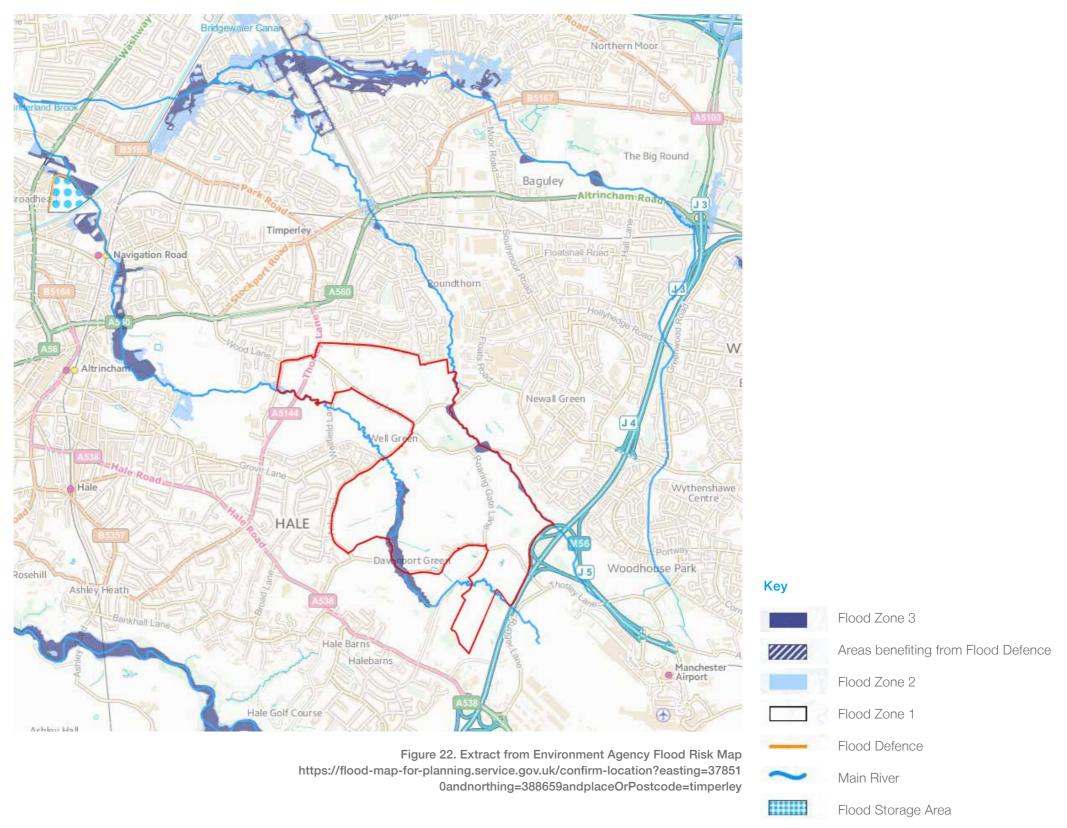
The Environment Agency definition of flood risk zones Flood Zones is are as follows:

- Flood Risk Zone 2 area has between a 1 in 100 and 1 in 1,000 annual probability of river flooding.
- Flood Risk Zone 3 area has a 1 in 100 or greater annual probability of river flooding.

Opportunities

Development of Timperley Wedge should include flood risk management measures such as allocating land for water storage within the landscape to assist in mitigating flood risk both within the site and downstream in Brooklands and Timperley. As the site is not directly adjacent to these areas downstream that are affected by flooding, landscaping to create more storage is likely to be more effective than walls or conveyance improvements. It would also be more cost effective and provide wider natural capital benefits. This must be carefully balanced with the requirements of Manchester Airport, and consultation must be taken to avoid increasing risk of bird strike.

New dwellings and infrastructure within the site should be designed with regard to flood risk and the specialist flood risk assessments would be required in accordance with national policy for development areas which contain areas identified as Flood Risk Zones 2 and 3. The Council and developer will need to work closely with the Environment Agency to identify potential solutions to managing flood risk for the wider catchment.





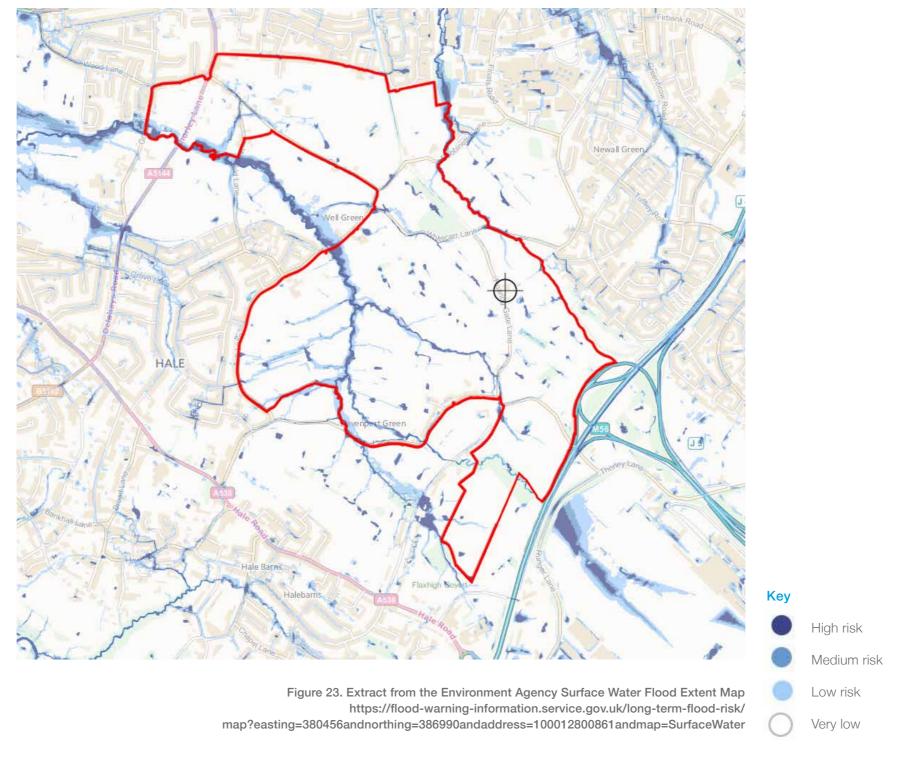
3.3.6 Surface Water and Drainage

The Environment Agency Surface Water Flood Risk map (adjacent) shows areas within and surrounding the site which currently have poor drainage and subsequent surface flooding issues. Evidence suggests that during periods of substantial rainfall, new surface water tributaries of Timperley Brook develop and these cause areas of localised flooding. This includes part of Clay Lane and areas of Whitecarr and Dobbinetts Lane.

Opportunities

Development at Timperley Wedge creates an opportunity to incorporate sustainable drainage systems (SUDS) and manage surface water across the site. SUDS are designed to both manage flood and pollution risks resulting from water run-off and can contribute to environmental enhancement and place making.

A site wide drainage strategy will be required so that the control of surface water and drainage is integrated across the site. Technical information on surface water management will be required to support planning applications.





3.3.7 Utilities and Easements

Utilities

The site currently has limited utilities infrastructure due to its primary use as arable farmland.

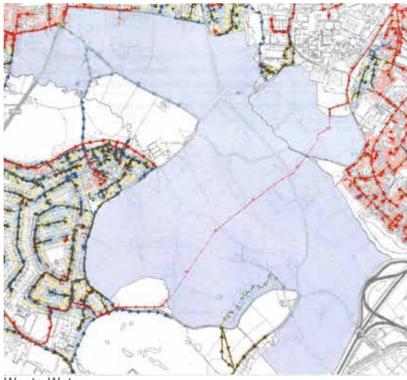
Improvement to the utilities provision will be required to support development on the site. Early infrastructure improvements should take into account later phase work to provide capacity for later developments to tie in to. Care will have to be given with how new developments tie into existing networks. Developments towards the south will require more infrastructure development than those further north.

Easements

There is an existing easement along Brooks Drive.

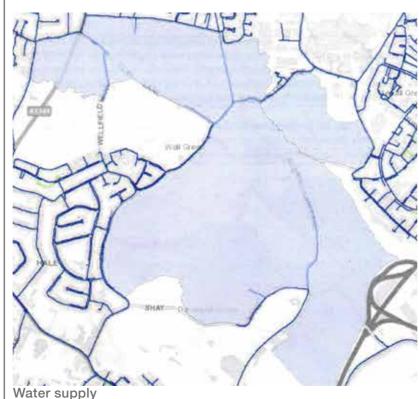
Infrastructure Delivery

A comprehensive, site wide Infrastructure Strategy shall be submitted as part of any planning application for any strategic allocation. The Strategy shall demonstrate communication with infrastructure providers and outline how each phase interacts with other phases. When necessary, the Strategy must be updated to reflect any changing circumstances between each phase(s). The entire allocation shall only be carried out in accordance with the most recent site wide Infrastructure Strategy. Any associated strategies, such as for foul and surface water drainage, must be consistent with the updated site wide Infrastructure Strategy.



Waste Water

The existing sewer crossing the site is pressurized, and should be avoided in any proposed layout.



Connection to clean water supply exists around Hale, Newall Green, and Timperlev.



The only easement passing through the site is located to the North passing along an existing footpath.





3.3.8 Surrounding Areas

Timperlev

The historic village centre of Timperley is to the north of the at some distance form Timperley Wedge. The airport and the site, with local retail based around the junction of Thorley Lane and Stockport Road. The area has a mixture of suburban and rural character, and is predominately residential. The existing area is a mixture of detached, semi-detached, and terraced houses, with occasional low rise apartment complexes.

South of the village centre Timperley becomes more rural in character with low density development. This area is included with the Timperley Wedge site. Existing uses in this area includes the Hale Country Club and Bowdon Rugby Club which provide urbanising features within the landscape. Altrincham Masonic Hall is located on Clay Lane and provides communities facilities.

Bus services run mainly along Thorley Lane and Stockport Road. Timperley Metrolink stop is on Park Road, approximately 3/4 mile north from Timperley village centre, and lies on the route between Manchester city centre and Altrincham. The closest rail connection is further to the west in Altrincham.

Thorley Lane is an important vehicle route between the centre of Timperley, the A560 and Hale Green to the south. Thornley Lane passes through the northern section of Timperley Wedge and provides an opportunity for future infrastructure Green. connections to the Timperley Wedge site.

Wythenshawe and Newall Green

Wythenshawe and Newell Green are located to the east of Timperley Wedge. Fairywell Brook, which is also the boundary of Trafford, separates Timperley Wedge from Wythenshawe and Newall Green. Wythenshawe Hospital and Roundthorn Medipark adjoin Timperley Wedge to the north east with residential neighbourhoods to the east. Wythenshawe hospital is a major healthcare centre. To the south west of Wythenshawe Hospital the Roundthorn Medipark Extension will deliver approximately 86,000 sqm B1-focused employment floorspace as a health and biotech cluster alongside clinical and some linked residential use. This site directly adjoins the Timperley Wedge and this creates the opportunity for new links and green infrastructure connections between the two sites.

Major retail facilities are located at Wythenshawe Civic Centre. There is an existing Metrolink stop at Roundthorn approximatively 800m from the north east of Timperley Wedge.

Manchester Airport

The airport is to the south of the site, located across the M56 from Timperley Wedge. The airport is a major employer and provides air links for business, leisure and freight use. There is bus and Metrolink access to the airport, connections to public transport are located to the south east of the airport

associated Airport City development is identified as a key site for growth and employment in the GMSF 2019.

Hale Barns and Warburton Green

Hale Barns and Warburton Green are residential neighbourhoods with local retail facilities grouped along Hale Road. Hale Barns Cricket Club and Ringway Golf club adjoin the Timperley Wedge site to the south west.

The historic Brooks Drive connects to the Hale Road and Thornley Lane and continues through the Timperley Wedge site to connect to Timperley in the north. This is a key cycling and pedestrian route. Public transport within Hale Barns and Warburton Green is limited to bus services with the nearest rail station located further west at Hale.

Well Green

Well Green is located directly west of Timperley Wedge. This is a residential neighbourhood with limited retail facilities at Grove Lane, and a primary school. The 258 bus route runs along Ash Road which is the eastern boundary of Timperley Wedge. The nearest rail station is at Hale. Metrolink services do not extend to Hale Barns. Warburton Green and Well

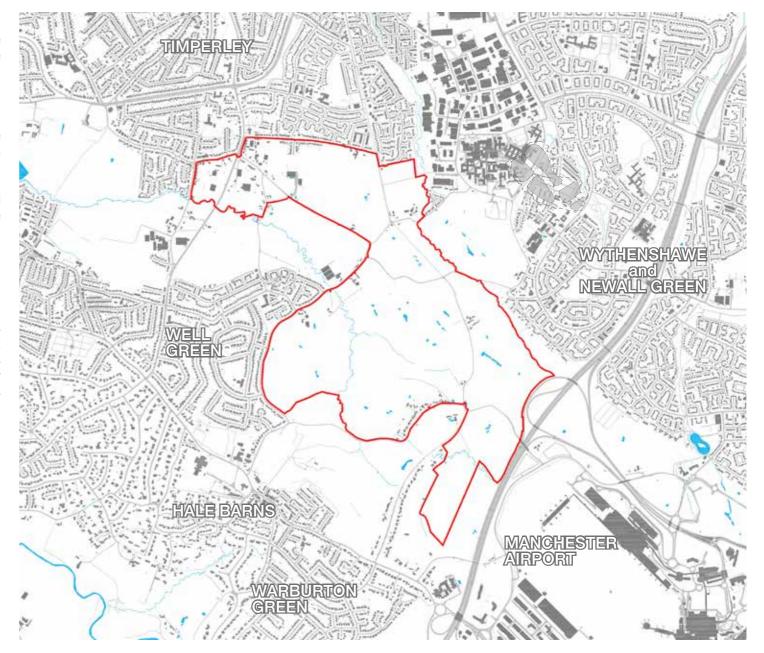


Figure 25. Surrounding areas



3.3.9 Social Infrastructure

As the site is predominately greenfield with a small and dispersed population, there is currently limited social infrastructure within the site. The adjacent plan shows the average walking distance from the proposed Metrolink stop at Davenport Green to the surrounding local retail centres (shown purple).

The location of existing education, healthcare and sports facilities within the wider site context are illustrated on the adjacent plan.

Opportunities

Development at Timperley Wedge will be supported by additional social infrastructure, including education, healthcare, sport and local retail facilities based on the need of a new population.

To create an integrated, sustainable development these services should be conveniently located within local hubs close to new transport links within the site.

Key

- Walking Route (average time)
- Metrolink Stop at Davenport Green Starting location for walking distances
- Existing Healthcare Facilities
- Existing Retail Facilities
- Existing Sports and Play Facilities
- Existing Recreational Water Areas
- **Nurser**
- Primary School
- Secondary School
- Other Education
- Existing Metrolink Stop

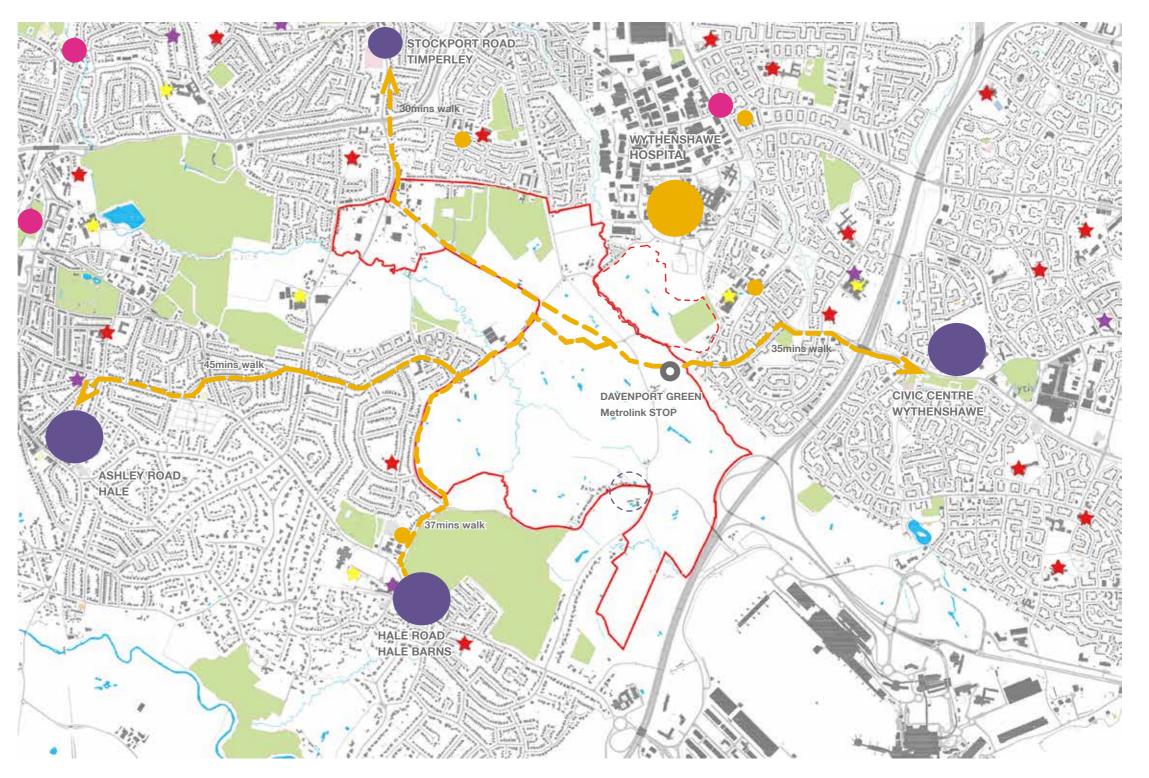


Figure 26. Existing retail, education, sports and healthcare facilities walking travel times calculated via Google Maps Information source: GM Mapping

4.0 Design Principles

4.1 Green Design Principles

4.1.1 Green Belt

The majority of the site is currently Green Belt land, used for farming with public access via a number of footpaths and lanes. To deliver the number of new homes planned on the site, a section of the greenbelt has been identified for release (shown dotted on the adjacent plan).

The Greater Manchester Landscape Character and Sensitivity Assessment by LUC (2018) characterises the area as Urban Fringe Farmland - typically low grade pasture land and semi-improved grassland associated with stock rearing and rough grazing.

Development will retain existing public rights of way and create opportunities for greater recreational access. In conjunction with biodiversity enhancement and green space requirements, development should preserve, restore, and enhance historical natural features within the site. In particular, existing field boundaries, trees, and hedgerows should be preserved.

The revised Green Belt boundary has been informed by detailed evaluation including the technical GMAAS reports and the Green Belt Harm Assessment that accompany this masterplan.

Safeguarded land

The land identified to the south of the HS2 station, although removed from the Green Belt, is protected from development unless it can be demonstrated that proposals for development on the land directly contribute to the Greater Manchester HS2 Growth Strategy. Prior to the delivery of HS2, Green Belt policies will continue to apply.

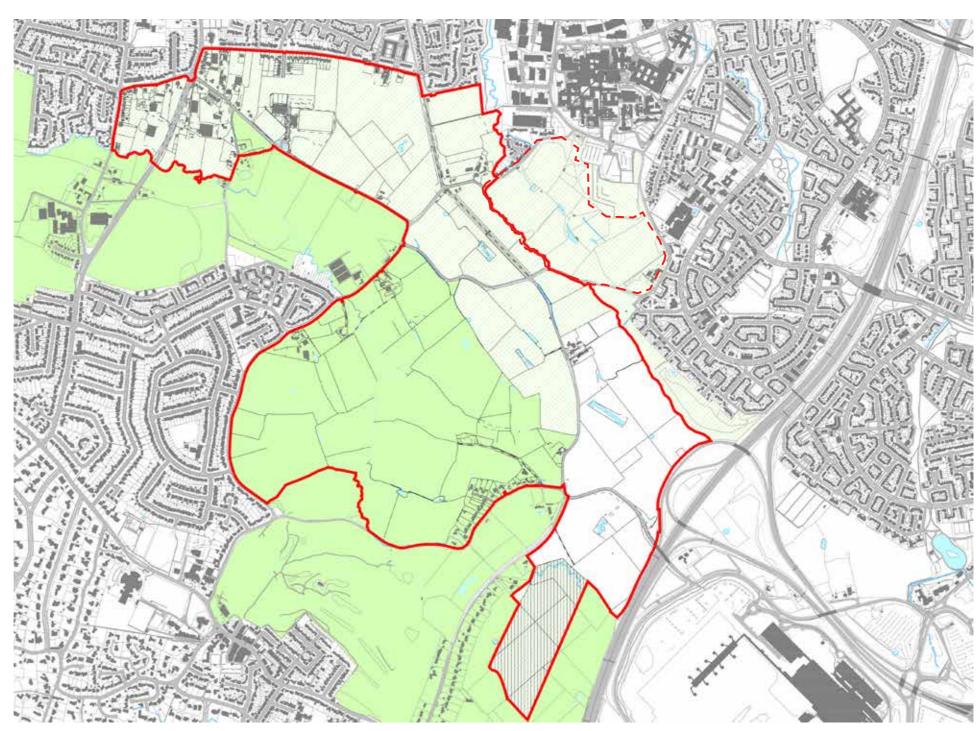


Figure 27. Plan showing Green Belt proposed for release and retention





Released Green Belt



Retained Green Belt



Proposed Safeguarded Land



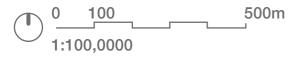
4.1.2 Green Corridors

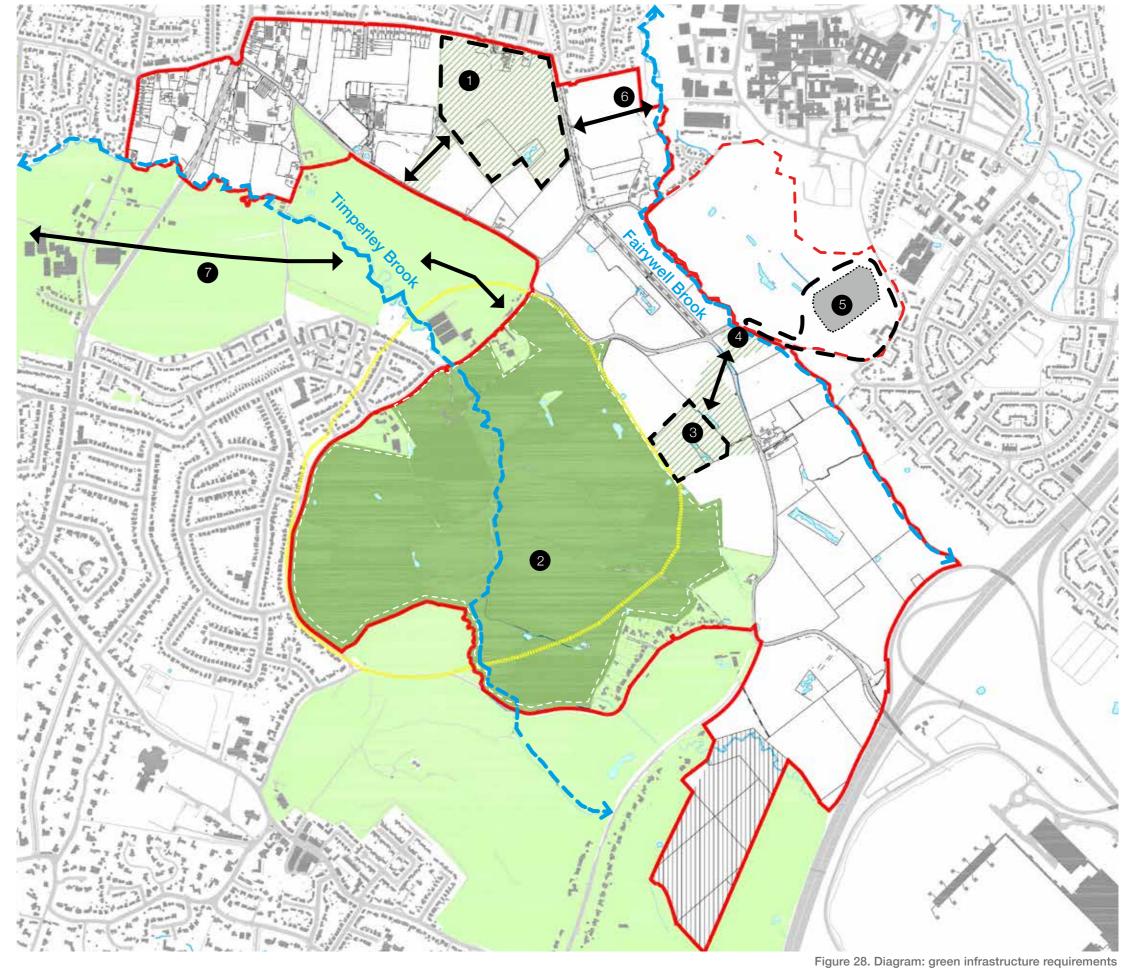
Green corridors are important to provide both habitat connections and recreational routes through the built environment and links between larger green spaces. Green corridors provide aesthetic benefits, encourage active lifestyles and link sites of biodiversity to form a green infrastructure network.

Within Timperley Wedge green corridors should be provided to serve both conservation and recreational functions, and preserve a green link between and along Timperley and Fairywell Brook. The adjacent plan shows the design principles for important green connections that should be incorporated into development at Timperley Wedge.

Key

- 1 Key green corridor to include Manor Farm Sports Fields
- New rural park as part of retained Green Belt land
- 3 Davenport Green Ponds SBI
- 4 Flood Risk zone
- 5 Indicative location of green space within Medipark development
- 6 Green link along this cycle route to Fairywell Brook
- 7 Green connection continues to Altrincham
- Retained Green Belt
- New Rural Park (within Green Belt)
- Green Corridor (Indicative)
- Key connections between corridors
- ← → Key Blue Routes to include Green buffers





Timperley Wedge - Masterplan for Trafford Wedge Allocation

4.1.3 New Rural Park

Development of Timperley Wedge creates an opportunity for a new rural park within the south-west of site, which is currently farmland. A new park would open up this green space for the surrounding communities and provide recreation opportunities and ecological benefits. This area is within the retained green belt and includes the features identified as the medieval deer park and the SBI at Davenport Green Ponds. These existing assets will be protected and enhanced within the setting of a rural park.

Activities

The park would accommodate a wider range of uses and enhanced accessibility. This would include upgrading and widening existing footpaths to accommodate a range of uses including facilitating wheelchair and buggy access, cycling and horse riding.

Other features could include dedicated bike trails, heritage routes with signage and information and play areas.

A variety of landscape character areas would enhance biodiversity and offer opportunities for community involvement. This could involve routes through farmland, wetlands and orchards will provide access to a wide range of landscape character areas. Establishment of orchards and allotments for the local community.

A new cafe and activity hub would create a focal point and support the recreational use of the park.

Water Management

Planting and landscape design to assist flood management. This could include fast-growing poplar or willow are planted adjacent to existing water bodies with the primary intent of regulating the movement of materials in surface runoff and groundwater.

Biodiversity

The existing site of biological importance at Davenport Green Ponds should to be protected and enhanced. Native plants reintroduced to support biodiversity. Park management to support biodiversity and ecology within the site.



















Figure 29. Images showing indicative proposals for land use and activities within the rural park



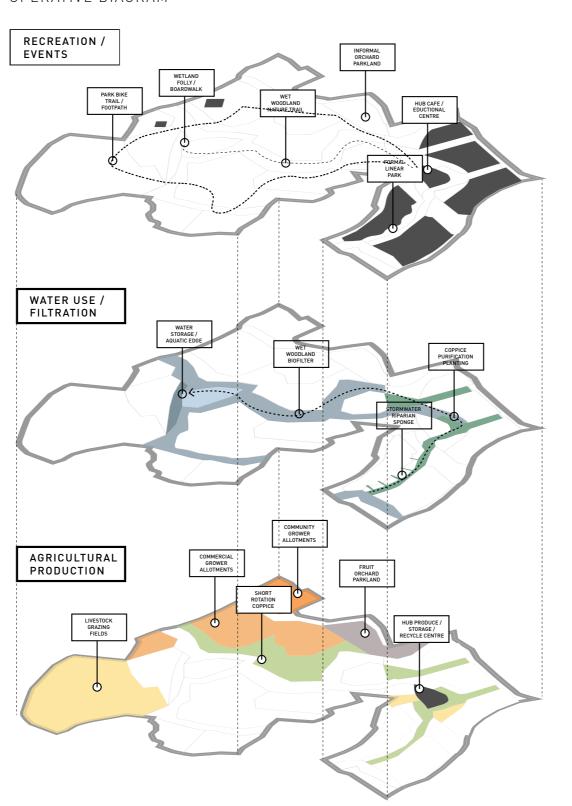
The adjacent diagram for potential land use within the new rural park was prepared by Planit-IE landscape architects for Royal London in 2014.

This demonstrates shows how a range of uses and character areas could be incorporated into the park. Note that large bodies of water are not suitable for the site to reduce the risk of bird strikes on aircraft using Manchester airport.

Please note this diagram is illustrative only and the park will be subject to future detailed design.

DAVENPORT GREEN DAVEPORT GREEN

OPERATIVE DIAGRAM



ACTIVITIES

Bike trails and boardwalks, routes through farmland, wetlands and orchards will provide access to a wide range of landscape character areas.

By utilising the sites clay geology, water will become a dominant feature of the park and human interaction with water via boardwalks, platforms and decks will give users a sense of exploration.

CLOSED LOOP PROCESS...

The Hub building will become the 'gateway' building to the park, a meeting destintation, transportation hub, cafe, recycling point and educational space. The hub will provide views across the park as well as giving visitors an understanding of how the key sustainable parkland processes work for the development.

WATER

Linear rows of fast-growing poplar or willow are planted adjacent to existing water bodies with the primary intent of regulating the movement of materials in surface runoff and groundwater. This purification process is linked to the establishment of wet woodland habitat along the riparian edge which ultimately ends at the proposed wetland lake.

CLOSED LOOP PROCESS...

Whilst providing biomass feedstock for bioenergy. The harvesting cycle of the coppice can be as short as 3–4 years. In this way, both stream bank protection, water quality improvements and biomass production can be achieved.

FOOD

Establishment of allotments and orchards will transform the northern area of the park into a landscape that serves the development and the wider communities of Hale and Wythenshawe.

These typologies aim to enhance the site ecologically as well as creating a layer of productivity that visitors and residents can benefit from.

CLOSED LOOP PROCESS...

Once the produce is grown and ready it is packaged in cardboard boxes, the cardboard boxes from the allotments can be recycled at the hub recycling point on the development, the cardboard will then be re-used as animal bedding for the grazing livestock which can then mixed with manure and composted. Then of course, the compost is spread back on the allotments to complete the cycle.

Figure 30. Potential land use within the rural park - subject to detailed design.



The adjacent plan shows the proposed location and extent of the rural park. Land use within the park is illustrative only and the park will be the subject of future detailed design.





Figure 31. Location of rural park within the site, land use within the rural park shown illustratively.

Diagram based on a scheme originally prepared by Planit-IE landscape architects for Royal London



4.1.4 Biodiversity Net Gain

Biodiversity net gain requires assessment of the existing ecology on site and implementation of improvements that enhance ecology by 10%. For Timperley Wedge these improvements should include the habitat that comprise the Sites of Biological Importance (SBI) within the site.

The Biodiversity Net Gain process starts by assessment of the biodiversity baseline; the habitats and species present before the development. This is followed by avoiding, mitigating and as a last resort compensating for any impacts on biodiversity.

Opportunities to restore, recreate and enhance biodiversity are designed into the development. The biodiversity that will be present after the development is then assessed. A metric is used to enable comparison of the biodiversity pre- and post-development.

The biodiversity assessment must be undertaken by the applicant/developer using a suitably qualified ecologist. Following the 10 principles:

- 1. Apply mitigation hierarchy. Do everything possible to first avoid and then minimise impacts on biodiversity
- 2. Avoid losing biodiversity that cannot be offset by gains elsewhere. Avoid impacts on irreplaceable biodiversity these impacts cannot be offset to achieve no net loss or net gain.
- 3. Be inclusive and equitable. Achieve net gain in partnership with stakeholders where possible, and share the benefits fairly among stakeholders
- 4. Address Risk
- 5. Make and Measure net gain contribution
- 6. Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge
- 7. Be additional. Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. doesn't deliver something that would occur anyway).
- 8. Create a net gain legacy. Ensure Biodiversity Net Gain generates long-term benefits
- 9. Optimise sustainability. Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy
- 10. Be transparent. Communicate all Biodiversity Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.

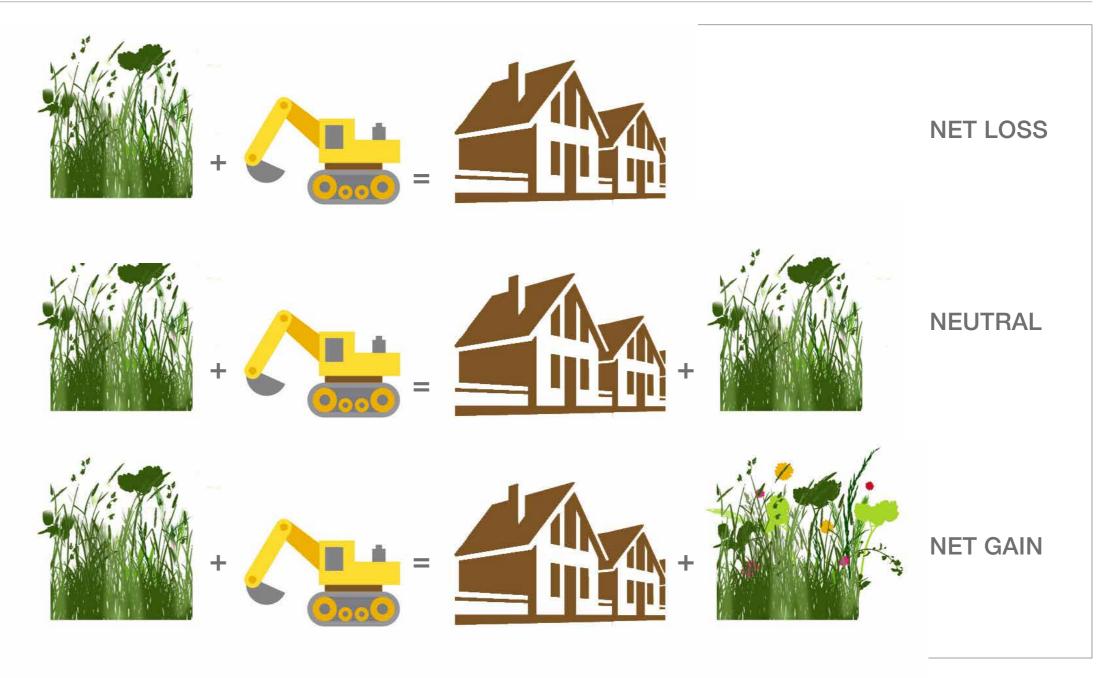


Figure 32. Principles of Biodiversity Net Gain Diagram based on principle as illustrated in Biodiversity Net Gain Proposed Guidance for Greater Manchester prepared by WSP 2019



4.1.5 Play and Sports Facilities

New play areas and sports facilities will be required to support the delivery of housing and the projected new population within Timperley Wedge.

The adjacent map shows indicative locations for play and recreation within Timperley Wedge. As development comes forward the requirement for new play, recreation and sports facilities will need to be assessed against Trafford Council Core Policy. Developers will be required to demonstrate how their development will protect, and encourage the use of Trafford's open space and sports/ recreation facilities. This will involve assessment of the capacity of existing sites/ facilities in the area and the provision of additional new facilities.

Play Space

For the GMSF allocation of 2,500 dwellings and the potential housing mix (based on Trafford housing needs assessment) this would equate to approximately 3 play areas for young people and 10 children's play areas, based on current policy. These facilities would include equipped play and teenage provision. These should be distributed across the site so that they are accessible to the community.

Sport and Recreation

Trafford Core Policy includes minimum requirements for seminatural space, local open space, outdoor and indoor sports facilities according to the size of the local population.

The new rural park will be a key space for the natural environment, biodiversity, and local open space.

Sports facilities will require assessment of the existing capacity and potential provision of additional facilities will be required in accordance with Trafford policy.

Key



Indicative location of new play area for young people



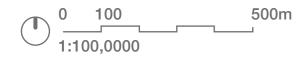
Indicative location of new play area for children



New open space/area for sport, recreation and play



Existing open space/area sport, recreation and play



Timperley Wedge – Masterplan for Trafford Wedge Allocation

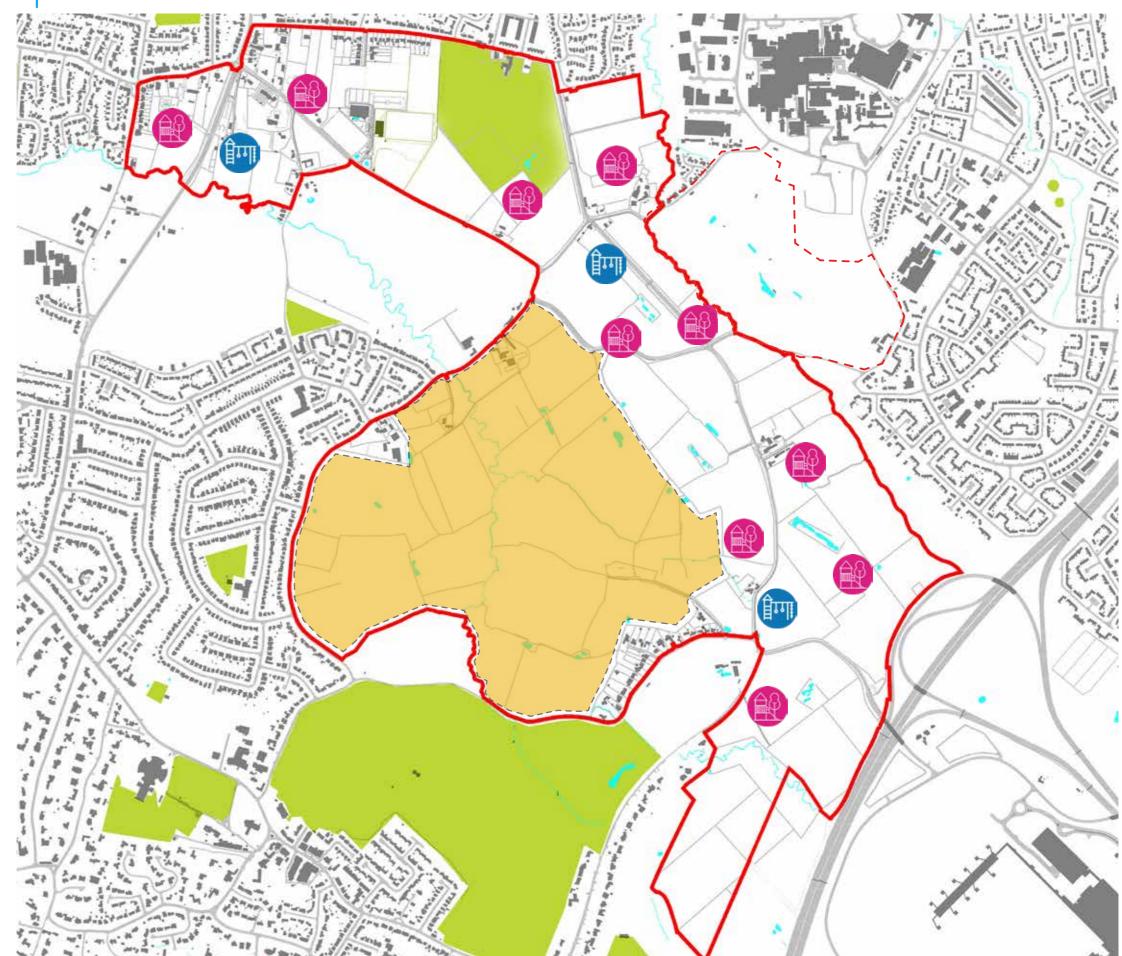


Figure 33. Indicative number and distribution of play spaces

4.2 Blue Infrastructure

The following principles should be incorporated into a site wide drainage strategy to effectively manage surface water within the site via blue infrastructure:

- maintain access to the existing watercourses as required by the Environment Agency;
- Incorporate landscape drainage to assist in flood management;
- Areas that are aversely affected by flooding to remain undeveloped.

Landscape drainage can be provided by incorporating swales and other SUDs (sustainable drainage systems) methods to form an effective network of blue infrastructure within the site. SUDs reduce the flow of surface water into a drainage system and divert water into soil infiltration. This is an important tool to reduce flooding

Site Appropriate SUDs

It is important that the blue infrastructure does not encourage large numbers of birds due to the proximity of Manchester Airport and the safety requirements to prevent future bird strikes to aircraft. Therefore large areas of surface water are not suitable for this site.

Appropriate SUDs for this location includes swales, soft landscaping - planted areas and the use of permeable paving. Impermeable surfaces such as roads should be designed with levels to shed water into areas of SUDs.

A swale is a shallow, linear depression within the landscape which allows surface water to be temporary stored and drained from the site assisting in flood management. These can be connected to form a linked network with storage ponds and wetlands. These are commonly incorporated adjacent to roads to mitigate water run off. This principle can be integrated into the construction of a new spine road through the site.

In other areas planting or soft landscaping can act as an infiltration bed with below ground attenuation chambers and permeable paving can be used to minimise surface water run off. These drainage interventions should be integrated into the landscape design and can provide ecological and aesthetic benefits.



Figure 34. Diagram showing a typical cross section through a swale



Figure 35. SUDs - Planting bed and drainage channels adjacent to a cycle lane in Salford



Figure 36. SUDs - Planting bed and permeable paving at Moorland Junior School, Sale Image from: https://www.susdrain.org/case-studies/pdfs/suds_awards/025_18_04_30_susdrain_suds_awards_moorlands_junior_school_suds_sale.pdf



4.4 Community Facilities

The site will benefit from exceptional transport accessibility that will support development and generate connectivity within the local and wider communities of Greater Manchester.

The new transport links will serve as gateways for both onwards connections and local activity. The new Metrolink stop at Davenport Green and the Metrolink interchange with HS2 and NPR at Manchester Interchange Station are in excess of 20mins walking travel time from existing urban centres at Timperley, Hale and Wythenshawe, therefore these locations are well suited as local hubs for retail and social infrastructure to support new and existing communities.

Social infrastructure including education, healthcare and local retail services will be required to support the delivery of new homes as per the GMSF allocation. To create an integrated, sustainable development these services should be located close to new transport links at Davenport Green and Manchester Interchange.

Manchester Interchange

This area includes the new HS2, NPR and Metrolink interchange station and is located in close proximity to Manchester Airport. These exceptional transport links create an ideal location for business and employment floor space. This use should be supported by some convenience retail for both local workers, passengers using Manchester Interchange Station and local residents.

Davenport Green Local Centre

Davenport Green is located in a central area of the site, within the released green belt land and benefits from a new Metrolink stop which will provide links to employment and leisure opportunities. Davenport Green will therefore be a key area to provide new homes. As this site is in excess of 20mins average walking time from existing local retail services this new community should include some local retail close to the Metrolink stop. This is also a location where education, healthcare and community services would support a new population within Timperley Wedge. Locating these services close to the Metrolink would increase accessibility and create a hub of local services in the area. These services would cater to the local population and be accessible via direct and attractive pedestrian and cycle routes as well as the Metrolink stop to promote active travel and reduce car dependency.

The requirement for new education and healthcare services will need to be based on an assessment of the existing local capacity and the projected new population within Timperley Wedge so that the provision of new social infrastructure will best serve the local area.

New Metrolink Stop New Centre HS2 and NPR Interchange Primary School Healthcare Facilities

Key Employment Area

Local Retail

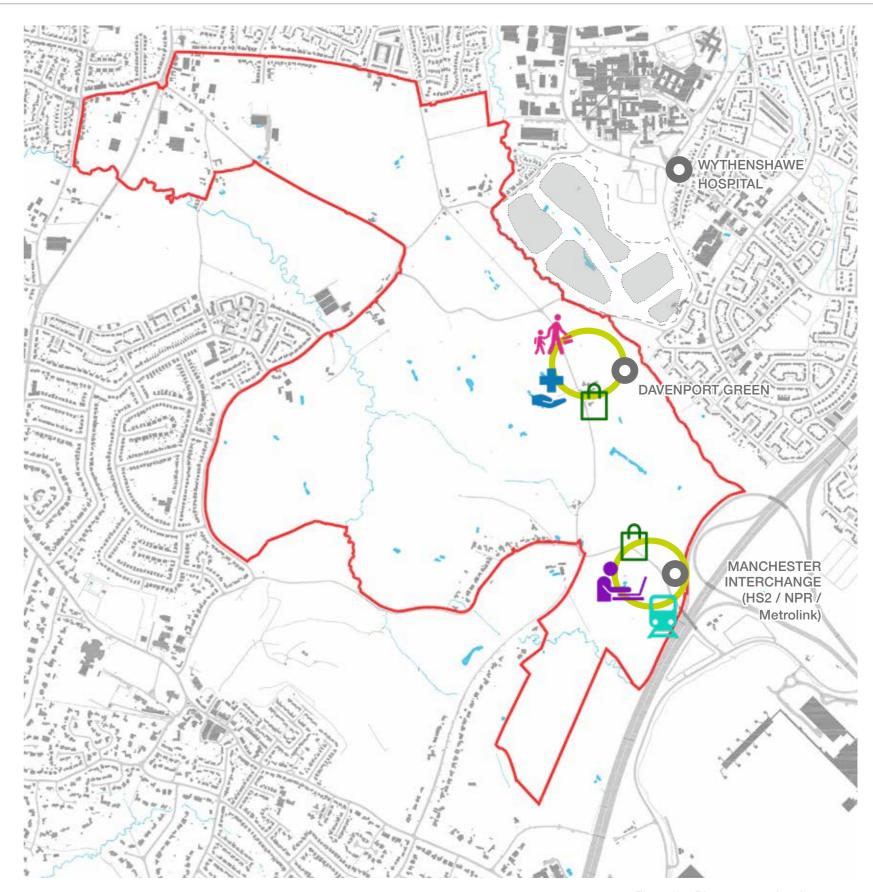


Figure 37. Diagram: new local centres



4.5 Appropriate Minimum Building Densities and Heights

Density

The appropriate minimum density of development will be determined by the distance from existing or planned urban centres and from public transport stations or stops. This is as defined within the Greater Manchester Spatial Framework 2019 - see table on the right.

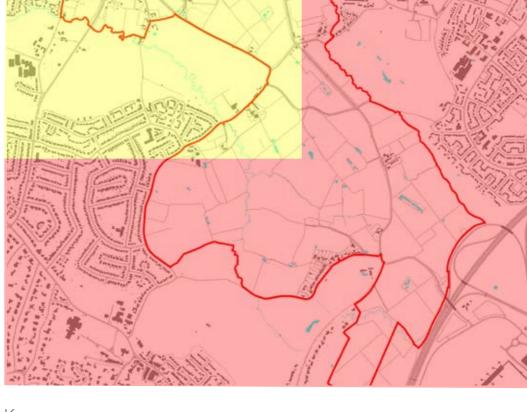
For Timperley Wedge the location of the new Metrolink stop at Davenport Green and the HS2 and NPR station/ Metrolink Stop at Manchester Interchange will determine the appropriate densities across the site. The existing centre at Timperley, to the north of the site is beyond 800m from the Timperley Wedge site.

Height

Maximum heights are to be within the parameters as defined by proximity to Manchester Airport to ensure flight safety. See the adjacent diagram which defines the limits which, if exceeded, will require consultation with Manchester Airport Group. The suitable heights for development will be determined via detailed design work and the planning process as development plots come forwards.

Location (use highest density that applies when a		num net residential de dwellings per hectare	
site falls within more than one location)	Within the location	Within 400 metres	Within 800 metres
Designated town centres	120	70	50
Other designated centres	70	50	35
Public transport stop	s:		
Main rail stations and Metrolink stops in the City Centre	N/A	200	120
Other rail stations and Metrolink stops in large designated centres	N/A	120	70
Other rail stations with a frequent service and all other Metrolink stops	N/A	70	50
Leigh Guided Busway stops	N/A	50	35
Areas within GMAL 6 and above	50	35	35

All other locations: minimum net residential density of 35 dwellings per hectare



Key

Building height limited to 15m (subject to consultation with the airport)

Building Height limited to 45m (subject to consultation with the airport)

Figure 38. Minimum density requirements. Greater Manchester Spacial Framework 2019

Figure 39. Maximum Development Heights before requiring consultation with Manchester Airport



4.6 Design Quality

The Draft Trafford Design Guide 2020 includes the following Design Objectives and these should be incorporated into development at Timperley Wedge:

Connected

- 1 Encourage Activity and Ease of Movement: places will be designed to make people want to move by providing safe, attractive, fun and well-proportioned streets, as well as delivering a sustainable mix of uses.
- 2 Promote Sustainable Movement: buildings and places will be designed in way that makes walking, cycling and public transport the most attractive option to make, whether it be a short trip to the shops or a commute into neighbouring centres.

Green

- 1 Lead with Landscape: public spaces and landscape design will be of paramount consideration for proposals in Trafford, and not be an afterthought, creating buildings that positively address streets and spaces that positively frame buildings.
- 2 Protect and Enhance the Environment: all designs will respond positively to their environmental context by enhancing opportunities for active use of the environment and ensuring environmentally sensitive areas are protected or enhanced where possible.

Characterful

- 1 Reflect a Distinctive Character: proposals will respond to the historic and contemporary character of its place, delivering designs that complement and enhance historic assets in a creative and innovative way.
- 2 Beautiful: the design of new buildings and spaces will contribute to the beauty of Trafford, delivering places and buildings that their community is proud of and people are impressed by.

Resilient

Adaptable and Resilient to Change: proposals will respond to the climate emergency, delivering designs that are adaptable in order to respond to changing socio-economic and environmental challenges, as well as contributing positively to Greater Manchester carbon-neutral and zero-carbon target.

Vibrant

- 1 Encourage a Mix: proposals will deliver a sustainable mix of land uses which will activate, enliven and enhance places, providing the community with accessible and convenient amenities which enhance their quality of life.
- 2 Have Some Fun: proposals will deliver unique and characterful designs that encourage activity and enjoyment of Trafford, the use of colour and landscape should increase engagement and pride in communities.

Innovative

1 Embrace New Ideas: designs in Trafford will embrace new ideas and approaches to design and development, delivering efficient, sustainable and useable buildings and spaces for all the community.

Engaged

- Design Collaboratively: design will in Trafford will be a collaborative endeavour, with the community engaged in developing design responses for emerging proposals.
- 2 Design Inclusively: proposals will create buildings, places and streets for everyone

Development must deliver high quality residential units incorporating a broad mix of housing types and tenures. Development should reinforce local distinctiveness, urban grain, architectural integrity and a good quality palette of materials. Spaciousness, landscaping and soft boundary treatments are important characteristics in the historic suburbs of South Trafford.

The following examples illustrate a range of new developments that have successfully provide high quality environments at similar residential densities to that proposed within Timperley Wedge, and illustrate some key design principles for high quality development.

Accordia, Cambridge -

This development comprised a mix of houses, apartments and duplexes, at approximately 47 homes per hectare,. within a site that included 700 existing trees. The existing mature landscape has been enhanced with new and diverse green spaces between the mews courts, greens and squares. Each space is linked to the next by a network of footpaths and cycleways. Quiet streets, homezones and subtle traffic calming measures reduced the prominence of the car and created a safe 20 mph zone. The scheme was awarded the Stirling prize in 2008.



Figure 40. Reflect a Distinctive Character: respond to the historic and contemporary character of its place. For example use of local and robust materials for external elevations.

Accordia, Cambridgeshire

All images of Accordia from: https://fcbstudios.com/work/view/accordia



Figure 41. Lead with Landscape: buildings that positively address streets and high quality external spaces

Accordia, Cambridgeshire

Beaulieu Park, Chelmsford

centres around new education provision while maintaining reinforced and neighbourhoods are joined by a series of green spaces with pedestrian connections.



Figure 42. Beaulieu Park, Chelmsford Source: https://www.beaulieu.uk.com/

New Lubbesthorpe, Leicestershire

This development of 3600 homes in Chelmsford, Essex A significant urban extension west of Leicester, within Blaby District, New Lubbesthorpe, once completed, will be a strong connection to local landscape. Local character is a community with 4,250 houses, including 873 affordable homes, three schools, a health centre, leisure centre and open space. A planned District Centre will include a supermarket, small shops, café and restaurants.

> Around half of the 400ha site is dedicated as green space taking the form of extensive new parklands, encompassing a Scheduled Monument and an existing watercourse, as well as new informal and formal public open space, and new sports fields. New road infrastructure provides connections to the key transport links and strategic employment sites.

> The landscaping has been designed to provide sustainable drainage to the site as well as an attractive green character to the development. New Lubbesthorpe was recognised nationally at the 2020 Royal Town Planning Institute Awards. The scheme was commended as 'excellent example of good planning practice', with New Lubbesthorpe demonstrating a 'commitment to diversity and sustainability.'



Figure 43. Encourage a Mix: integrating social infrastructure within a residential community **New Lubbesthorpe**



Figure 44. Protect and Enhance the Environment: increase biodiversity within the site with considered landscaping that enhances the existing ecology **New Lubbesthorpe**

All images of New Lubbesthorpe

from: https://www.fpcr.co.uk/new-lubbesthorpe-2019-updates/

4.7 New Internal Road Network and Hierarchy

Different Streets with Different Characters

Timperley Wedge should provide a variety of streets to suit local and planned context. The design of these key connections will assist in provide a distinct character to different areas and provide a legible network of connections for vehicle, cyclist and pedestrian journeys.

It is vital to provide a high quality public realm to support the promotion of walking and cycling as well as facilitate vehicle movements where required to ensure connectivity and permeability. within Timperley Wedge and the wider site context.

The character of these different streets will be expressed with various design characteristics including road and pavement width, boundary treatments, planting and landscape treatment, street furniture, lighting and parking arrangements. The comprehensive design of these spaces will be undertaken as part of detailed planning applications.



Figure 45. Altrincham Town Centre, Image from: https://www.planit-ie.com/portfolio_page/altrincham-town-centre/

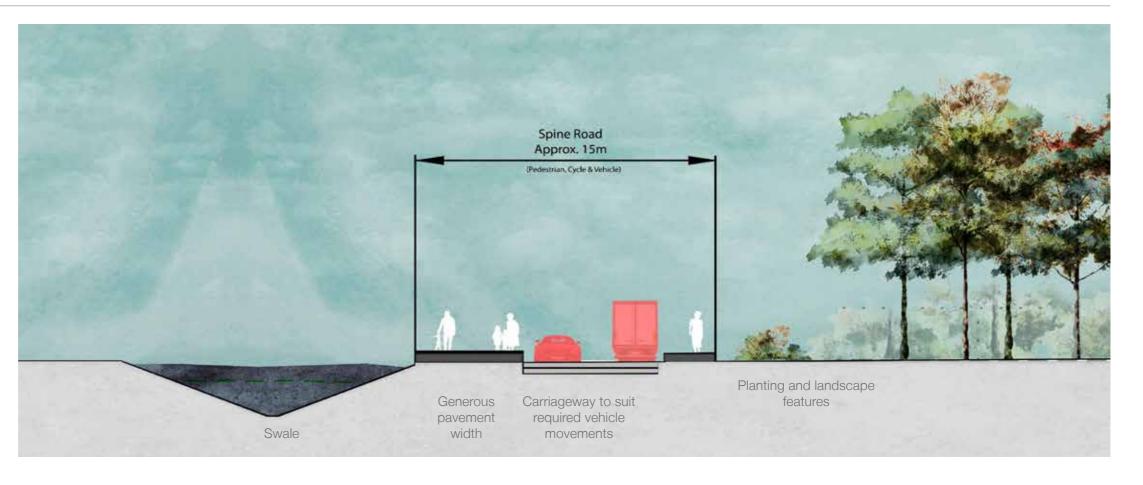


Figure 46 showing a indicative section through the spine road

Spine Road

The spine road will be the primary vehicle route through Timperley Wedge and the potential route of a future rapid bus link between Altrincham and Manchester Airport.

The indicative section through the spine road above demonstrates how this route could accommodate significant vehicle movements alongside space for pedestrians. The section demonstrates how landscape features can be incorporated into the design with a swale adjacent to the carriageway to capture surface water run off and reduce flooding issues through SUDs.

The spine road will also feature as a key element to cycle and pedestrian movement through the site. To accomplish this, generous cycle and pedestrian areas separate from the carriageway will be supplied.



Primary Roads

Primary roads on site will be key to connecting major community facilities including the Metrolink stop, local centre and employment zones. This route will have continuity of building frontage along the street edge. Private space on the front of the buildings will be limited with a well defined edge condition between private space, the pavement and cycle path.

The road will be formal in appearance and may feature on street parking on both sides; it will be tarmac with tree planting and lighting arrangements that will reinforce the formality of the route. Various traffic calming features should be adopted to help slow traffic to 20mph including frequent

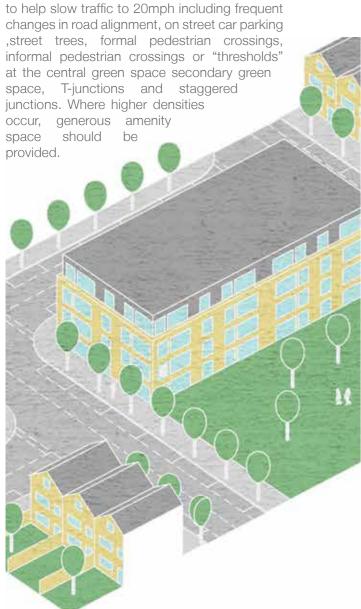


Figure 47. Primary Road

Secondary Roads

Secondary roads should be included within developments, particularly where residential development is densest. Elements of formality will be included to reinforce the character of these routes, and a well defined built edge should be included with private amenity space away from the road.

Residential areas will be characterised by a change in surface material. Motorists will be able to identify the area in which they are to drive slower and give informal priority to other road users. These areas will be further enhanced by benches, planting, lamp posts and trees. Parking will be located to the road edges which will help to control traffic seed and reinforce the informality of residential areas.

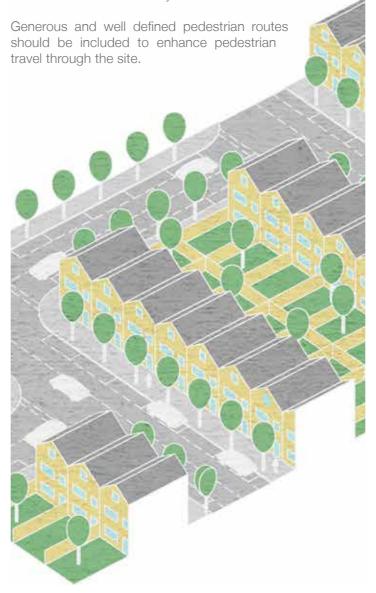


Figure 48. Secondary Road

Local Roads

Lower density areas should feature smaller roads with more permeable edges. Calmer spaces should be created with amenity spaces toward the front of residential properties providing a softer street edge. Traffic calming measures should be retained, but areas of hard landscaping reduced by moving parking off street and providing generous green spaces in conjunction with pedestrian paths.

The built edge should be informal, with mixes of terraced, semi-detached, and detached housing providing gaps in the built edge of streets.

Where feasible, pedestrian only routes should be considered with parking accessible from secondary routes at the rear of properties.



Figure 49. Local Roads



4.8 Sustainability

The following minimum requirements for sustainability are contained within the Greater Manchester Spacial Framework 2019 and the Trafford Design Objectives:

GMSF Objective 7:

- Promote carbon neutrality of new development by 2028;
- Promote sustainable patterns of development that minimise the need to travel and contribute to cleaner air;
- Locate and design development to reduce car dependency;
- Facilitate provision of infrastructure for cleaner vehicles;
- Improve energy efficiency and the generation of renewable and low carbon energy.

Policy GM-S 2 Carbon and Energy

- Taking a positive approach to renewable and low carbon energy schemes;
- Keeping fossil fuels in the ground;
- Planning for a balanced and smart electricity grid by identifying geographical locations which could support energy assets
- Increasing carbon sequestration through the restoration of peat-based habitats, woodland management and tree-planting;
- Development of Local Energy Area plans to develop cost effective pathways to achieve carbon targets; and
- An expectation that new development will: a. Be zero net carbon from 2028 by following the energy hierarchy (with any residual carbon emissions offset), which in order of importance seeks to:
 - i. Minimise energy demand;
 - ii. Maximise energy efficiency;
 - iii. Utilise renewable energy;
 - iv. Utilise low carbon energy; and
 - v. Utilise other energy sources.

With an interim requirement that all new dwellings should seek a 19% carbon reduction against Part L of the 2013 Building Regulations

b. Incorporate adequate electric vehicle charging points to meet likely long-term demand;

c. Where practicable, connect to a renewable/low carbon heat and energy network;

d. Achieve a minimum 20% reduction in carbon emissions (based on the dwelling emission or building emissions rates) through the use of on site or nearby renewable and / or low carbon technologies; and

e. Include a carbon assessment to demonstrate how the design and layout of the development sought to maximize reductions in whole life CO2 equivalent carbon emissions.

Trafford Design Principles

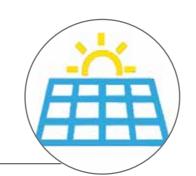
 Promote Sustainable Movement: buildings and places will be designed in way that makes walking, cycling and public transport the most attractive option to make, whether it be a short trip to the shops or a commute into

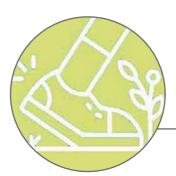
- neighbouring centres.
- Adaptable and Resilient to Change: proposals will respond to the climate emergency, delivering designs that are adaptable in order to respond to changing socio-economic and environmental challenges, as well as contributing positively to Greater Manchester carbonneutral and zero-carbon target.
- The design of new development should consider the inclusion of water efficiency measures in the development of new buildings. New development can become more resilient to climate change by encouraging water efficiency measures including water saving and recycling measures to minimise water usage. Such a proactive approach is designed to mitigate and adapt to climate change, taking into account the long-term implications for water supply in the area.

Sustainability within Timperley Wedge

- Promoting active travel with attractive and direct pedestrian and cyclist routes to key locations. Connections to public transport infrastructure to reduce car dependency.
- Low energy principles embedded within development - such as high levels of insulation and incorporation of solar design principles
- On site renewable energy generation

 this could include solar panels, geothermal energy and connections to a local heat networks. Wind turbines would not be appropriate for this site due to the proximity of Manchester Airport.
- Incorporating water management measures including SUDS across the site
- Improvements to biodiversity and ecology including tree planting and restoration of historic hedgerow and SBI
 Use of low carbon and recycled
- Use of low carbon and recycled materials in construction where possible. Specification of elements with a long lifespan to reduce maintenance and replacement
- Electric car charging points, secure bicycle storage, and well designed recycling provision.





Integrating active travel providing attractive, safe and convenient routes for pedestrians and cyclist

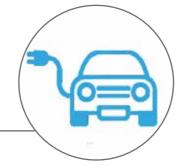
Renewable energy

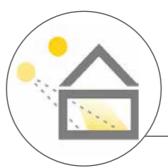
Heat and Energy Network
Opportunity Area



Incorporating sustainable drainage such as swales into the landscape

Provision of electric charging points





Low energy principles to minimise energy demand

Tree planting, ecology and biodiversity enhancements



Recycling and reuse Low carbon/recycled materials to be used where practical. Materials to have a long lifespan to reduce maintenance and replacement

Figure 50. Sustainability principles



5.0 Proposals

5.0 Proposals

The adjacent plan is a summary of the masterplan proposals, the following pages include a series of diagrams that examine the implications of these proposals.

The final masterplan is intended to demonstrate the feasibility and deliverability of development. Future proposals would be subject to the usual planning process.

Key

- - Proposed Road (indicative route)

Proposed Road

- - Proposed Road Improvements

Key green corridors

← - → Key blue corridors

← - - > Key locations for improvement of pedestrian and cycle infrastructure

Key areas for sport, recreation, and leisure

Indicative development areas

Indicative Metrolink route

Indicative Metrolink Stop

IIIIIIII Indicative HS2/NPR rail route

Indicative HS2/NPR Station

Safeguarded Land for growth following completion of HS2

Allocation Boundary

Adjacent Medipark allocation

Proposed Greenbelt Boundary

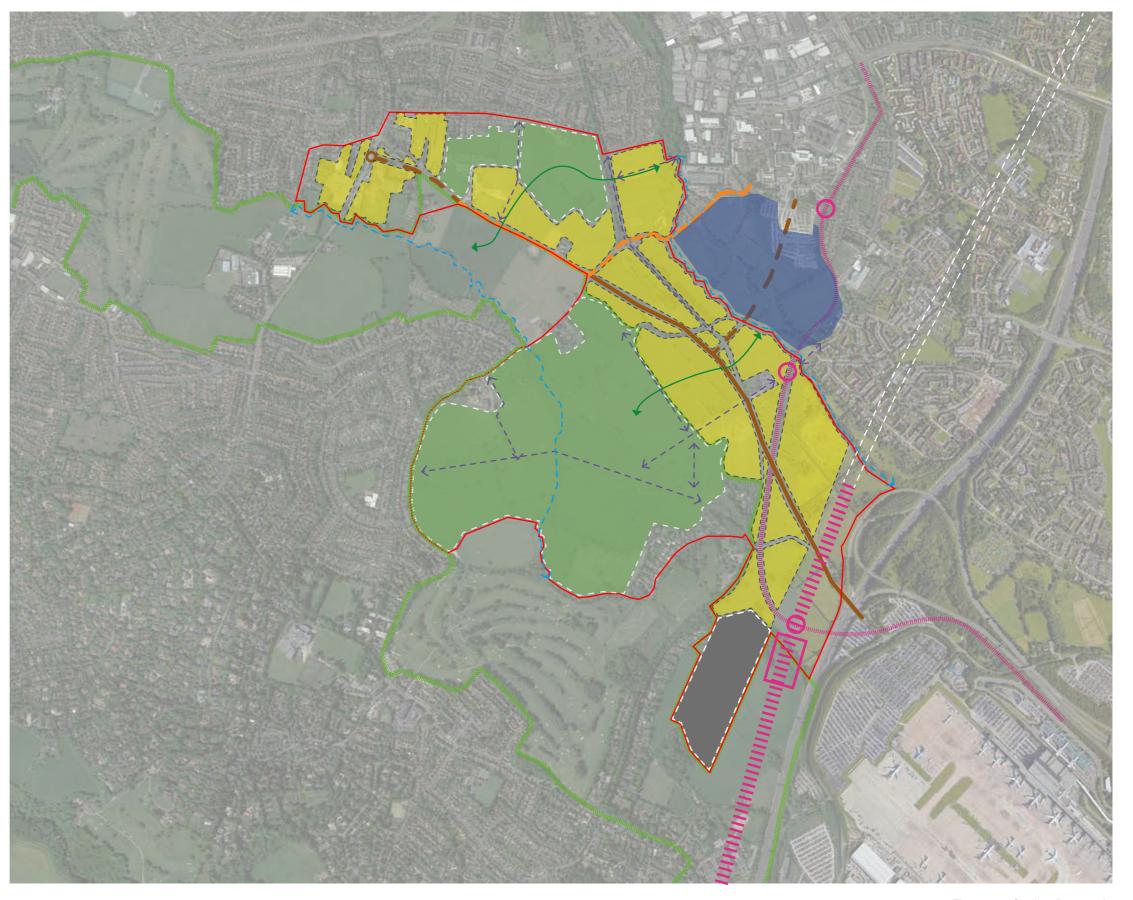


Figure 51. Outline Proposals

5.1 Spine Road

A new spine road through the site will link Timperley and the key transport interchange site for HS2 and NPR at Manchester Airport Interchange. The proposed route through the site is illustrated in the adjacent diagram. This will combine new and upgraded of infrastructure and provide a link to the Medipark site to the east.

The spine road will be the route of the new Rapid Bus Transit between Altrincham and Manchester Airport.

The final route of the link from F to H is to be determined as part of the Roundthorn Medipark Extension Masterplan.

Further junction improvements in the wider area will be necessary subject to detailed highways design.

A strategy to deliver the new spine road must demonstrate co-ordination with other associated infrastructure, including dialogue with other providers, to ensure there is available infrastructure for each phase of development. The strategy would outline what needs to be delivered and a timeframe for when this would be achieved.

NEW JUNCTION
WITH THORLEY LANE
(SOUTH OF CLAY
LANE / WOOD LANE)
ROUNDABOUT

NORTH SECTION OF CLAY LANE TO BE RESTRICTED TO BUS/ LOCAL ACCESS

C EXISTING SECTION OF CLAY LANE TO BE UPGRADED (500m)

DOBBINETTS ROAD WIDENED AND ACTIVE TRAVEL PROVISION ADDED

JUNCTION UPGRADE AT FOALS ROAD MEDIPARK EXTENSION SPINE ROAD

> BRIDGE OVER FAIRYWELL BROOK (ROAD ACCESS OVER WHITECARR LANE CLOSED

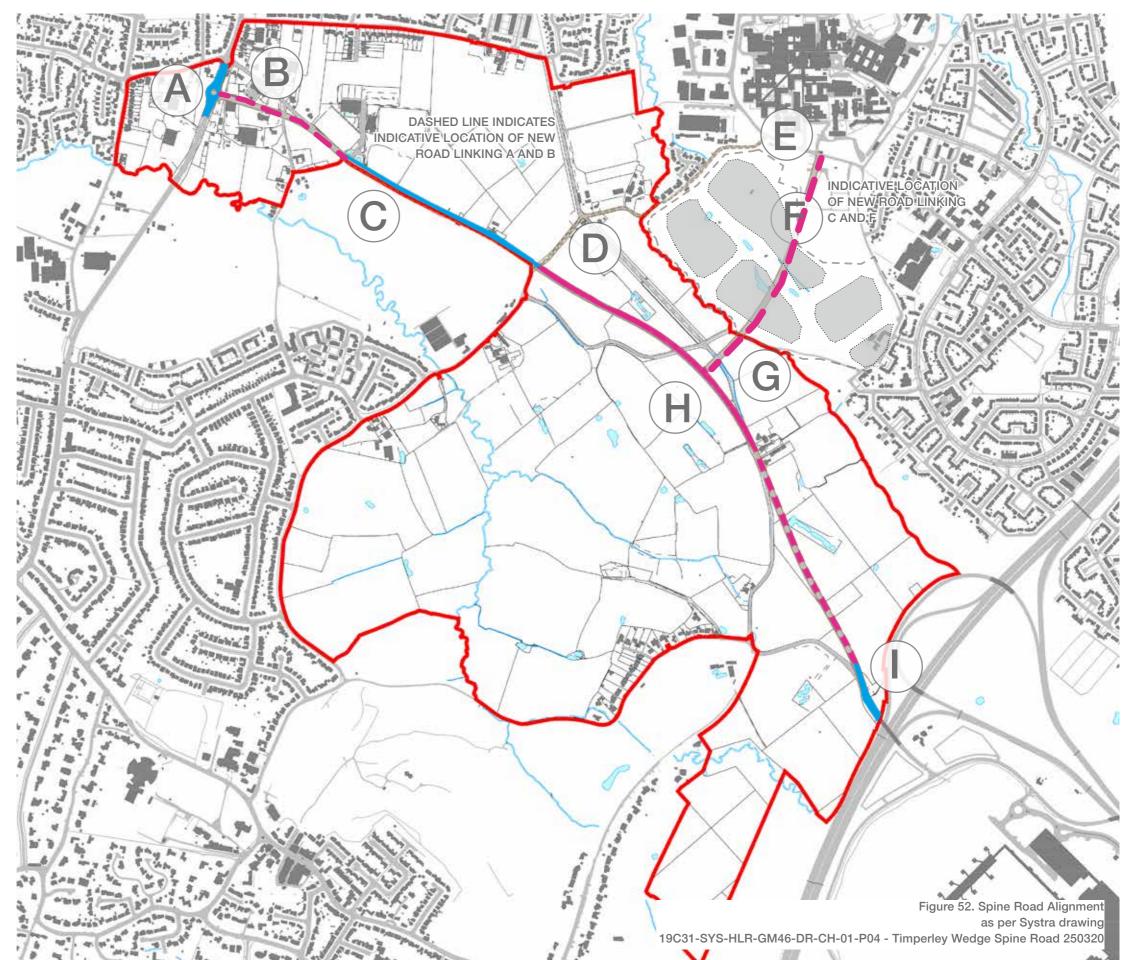
JUNCTION OF MEDIPARK EXTENSION AND SPINE ROAD

CONNECTION TO EXISTING RUNGER LANE BRIDGE

Upgrades to existing roads

New roads

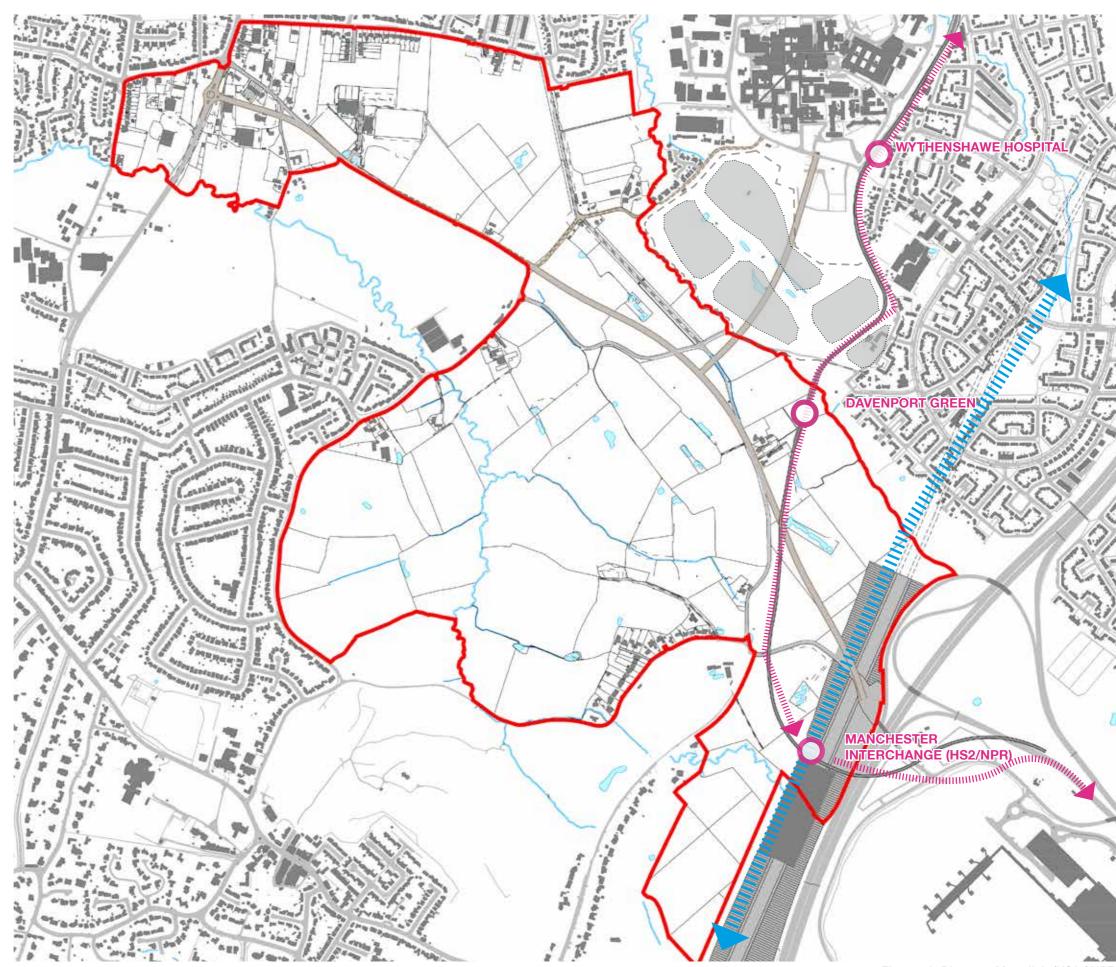
New road (indicative route)



5.2 New Rail and Metrolink Infrastructure

Development at Timperley Wedge will benefit from the provision of new rail infrastructure. This will serve both to connect Timperley Wedge to central Manchester and other regions through Metrolink, NPR, and HS2, and to improve the sustainability of proposed developments in the area.

The Metrolink route and stops are indicative and based on the latest advice. Routes and stops have not been finalised by TfGM and HS2 and are subject to change.



Key

IIIIII New Metrolink line

New HS2 and NPR Line

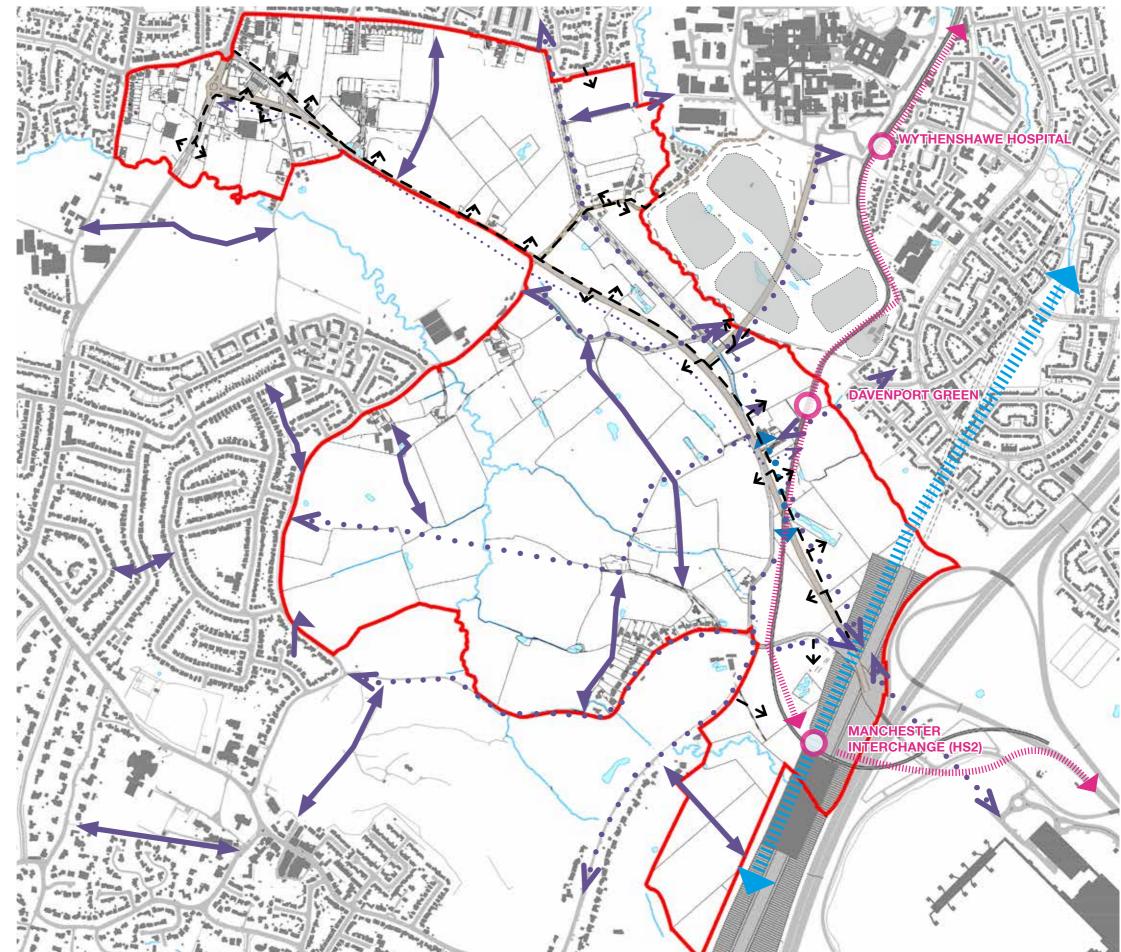
O Proposed Metrolink Stop

Proposed HS2/NPR Station

5.3 New Transport Nodes

Key to the success of Timperley Wedge will be the integration of new infrastructure that will support development and generate connectivity with both the local and wider communities of Greater Manchester.

Timperley Wedge will not only provide new places to live and work but will also significantly enhance accessibility for existing communities to the public transport network, recreation and employment opportunities.



Key

New road/improvements to existing roads - to form new Spine Road (Bus/car/cycle/pedestrian)

Existing cycle/pedestrian routes

• • • New or enhanced pedestrian or cycle routes

Proposed primary road access through site

New Metrolink line

New HS2 Line

New HS2 station / Metrolink stop

0 100 500m 1:100,0000

5.4 Blue Infrastructure

Requirements for watercourse access, flood management and surface water drainage have been identified in this document, including:

Access to Watercourses

Wide buffer strips should be provided along Fairywell and Timperley Brook and opportunities to address current failures under the Water Framework Directive should be considered. This includes removal of redundant structures and barriers, renaturalisation of the river corridor and provision of additional habitat. A minimum of 8 metres will need to be adopted and this area has been removed from the proposed developable land.

Site-wide Drainage Strategy

A site wide drainage strategy must also outline how future development will allocate provision for the management of surface water through the use of sustainable drainage systems with multi-functional across a high quality green and blue water environment. The strategy must outline how phases of such features interact and how the topography of the phases influence the site layouts by identifying naturally occurring flow paths and any low lying areas within the proposal where water will naturally accumulate.

New development will be expected to incorporate exemplary Sustainable Drainage methods and follow the surface water hierarchy. Applicants will have to submit clear evidence of why each option within the hierarchy has been discounted. The expectation will be for only foul flows to communicate with the public sewer.

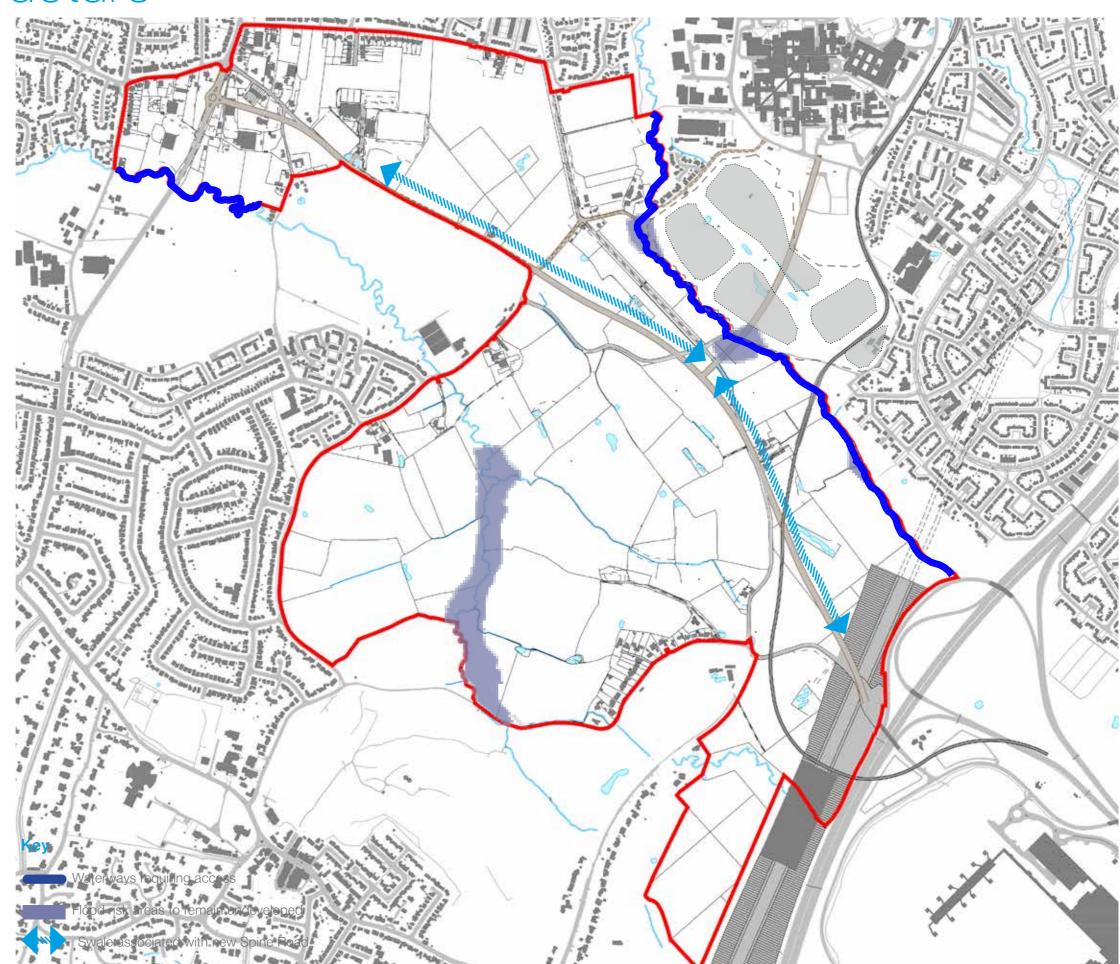
Approved drainage schemes will be expected to be supplemented by appropriate maintenance and management regimes for the lifetime of any surface water drainage schemes.

Flight Safety - Bird Strikes

Any additional areas of surface water and changes to existing bird habitats will require consultation with the Manchester Airport Group in case of any increased risk of bird strike.

Flooding

Areas of flood risk have been identified and are not considered suitable for development in this masterplan. The areas identified on the adjacent figure correspond with the Environment Agency information in section 3 of this document. Developers will need to work closely with the Council and Environment Agency to deliver a site wide flood risk strategy to maximise potential to reduce flood risk downstream.



5.5 Green Infrastructure

With the integration of well designed green infrastructure Timperley Wedge can deliver a valuable public resource with numerous benefits, including enhanced recreation and education opportunities, an increase in biodiversity and wildlife habitats and assist in the mitigation of climate change. It also provides other ecosystem services that can help to protect health and well-being through noise reduction, improvements to air and water quality, as well as reductions in flood risk, providing visual screening, an attractive appearance and urban cooling benefits.

Key considerations:

- protection of existing natural spaces
- new open spaces that enhance green infrastructure and unlocks underutilised areas
- connected spaces that create a network of green infrastructure within and beyond the site
- improve resilience through SUDs, air quality and noise pollution improvements
- planted green buffer zones along new green belt boundaries

Key

Existing Hedgerow/Trees to be retained as far as possible

Retained Greenbelt

Retained Green Belt - New Rural Park

Key Green Corridors (Indicative)

• • • • New Green Belt boundary

Key Green Infrastructure Connections

0 100 500m 1:100,0000



5.6 Development Sites

This site schedule reflects divisions by natural and manmade features, and not necessarily ownership structure. Developable land excludes land subject to an easement from the EA (i.e. access to a watercourse), as well as other previously identified constraints. For the purpose of area estimates, generous green corridors have been included and development plots are assumed to have an 80% yield. All final site areas and locations will be subject to future planning work.

Schedule of Developable Land within each Plot:

1. 3.2 ha

2. 3.4 ha

3. 0.3 ha

4. 3.2 ha 5. 2.9 ha

6. 2.3 ha

7. 5.4 ha

8. 6.1 ha 9. 3.0 ha

10. 4.5 ha

11. 2.9 ha

12. 4.5 ha 13. 0.3 ha

14. 4.2 ha

15. 4.4 ha

16. 0.4 ha

17. 4.8 ha 18. 5.2 ha

19. 3.6 ha

20. 6.3 ha

Total Developable Area: 70.9ha **Key**



Development Plot



Retained Greenbelt



Key Green Corridors (Indicative)



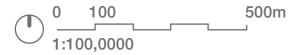
Existing Hedgerow/Trees to be retained as far as possible



Safeguarded Land for growth following completion of HS2



Indicative development plot in Manchester Medipark





5.7 Density

Timperley

Development to the north of the site relates to the existing town of Timperley. No development is within 800m of the existing town centre, as such all development is indicated as a minimum of 35 dwellings per hectare (dph) as per the GMSF.

Davenport Green Local Centre

New development around Davenport Green will include substantial new transport and social infrastructure, including a new Metrolink stop, heath and community facilities and a new primary school. This will create a new local centre with the following densities:

Centre (Within 100m of the Station):

Minimum 70 dwellings + 2800m2 commercial per hectare **Centre (Within 200m of the Station):**

Minimum 70 dwellings per hectare

Within 400m of the Station:

Minimum 50 dwellings per hectare

Within 800m of the site

Minimum 35 dwellings per hectare

Some areas of localized reduced densities have been shown due to constraints on individual sites. Final densities and housing numbers will be subject to planning approvals.

Manchester Interchange (HS2)

New development around Manchester Interchange will include both a new Metrolink stop, as well as a new direct HS2 and NPR services to the centre of Manchester and other major town and cities. As a result, the proposed densities for this area are closer to that of a town centre:

Centre (Within 200m of the Station):

Minimum 50 dwellings + 8000m2 commercial per hectare **Within 400m of the station:**

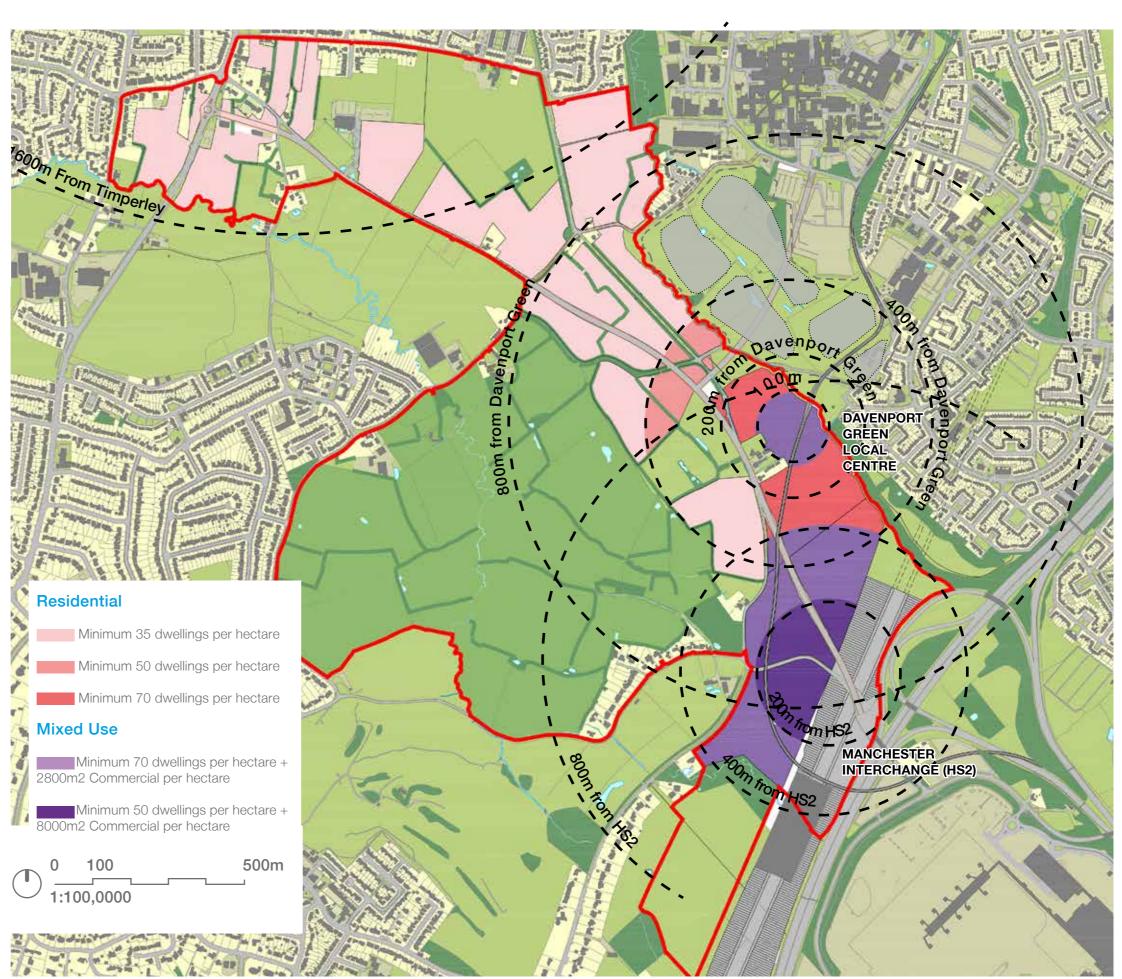
Minimum 70 dwellings + 2800m2 commercial per hectare **Within 800m of the site:**

Minimum 50 dph

All densities are an average and represent a minimum as per the GMSF. Densities will need to reflect local constraints such as rights of light, environmental factors and the local street network.

Building Heights

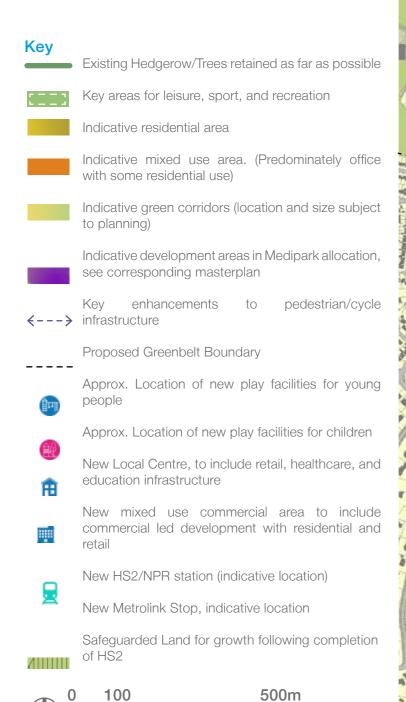
Heights to be in accordance with the maximum parameters to comply with flight safety requirements navigation and passenger safety due to the proximity of Manchester Airport.



Timperley Wedge - Masterplan for Trafford Wedge Allocation

5.8 Indicative Masterplan

This masterplan demonstrates a feasible scenario for how development may come forward at Timperley Wedge, subject to the adoption of the GMSF. Final developments will be subject to all necessary planning consents.





5.9 Indicative Regions

Region 1

Region 1 involves developments in the north of the site. These developments, closer to the existing urban areas have the potential to be developed more quickly. Access to these sites will be off of the existing road network, although upgrades to the existing road network will be required in some areas.

Approx. 608 dwellings

Region 2

Region 2 involves sites closer to the centre of the Timperley Wedge allocation. These sites will be accessible from the new spine road, as well as improved roads at Clay Lane and Dobbinetts Lane. As such, these plots will be served by road improvements as they are finalised.

Approx. 630 dwellings

Region 3

Region 3 focusses toward the south of the site. Development in this area will be accessible via the spine road, as well as a new Davenport Green Metrolink stop and local centre. Developments here will be served by creation of the spine road and the new Metrolink extension.

Approx. 458 dwellings

Approx. 3,136sqm of retail/commercial

1 school

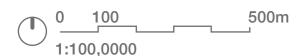
Region 4

Region 4 is centred around the new Manchester Airport HS2 station. The availability of these sites will be dependent on their release on completion of HS2, currently planned for 2033.

Approx. 851 dwellings

Approx. 60,928sqm of retail/commercial

This examines the appropriate density and phasing in the event that all proposed transport infrastructure developments (including HS2, Metrolink, and the Timperley Wedge Link Road) happen within the proposed plan period



REGION **REGION 3 REGION 4** ASYMPHICA ...

Figure 60. Development Regions

5.10 Indicative Site Capacity, Population, and Phasing

Indicative Site Capacity

Below is a schedule of indicative capacity based on the previous analysis. This area schedule applies the minimum densities and expected commercial yield to the plot areas as seen in sections 5.6 and 5.7.

Applied to the development areas is a net to gross factor of 80%. Previous estimates had included a 70% net to gross, but with the identification of many existing constraints, the total area of expected development has been refined to 71.8 hectares with a higher confidence of delivery.

The commercial provision is expected to be delivered as approximately 60,000 square metres of commercial space and 4,000 square metres of retail space.

Population Estimate

The table to the right takes the total residential development and estimates the mix of dwelling sizes based on the housing needs identified by Trafford Councils assessments.

Census data was used to ascertain an average population by housing type in order to estimate a total population for the proposed allocation at Timperley Wedge.

	Percent of Dwellings by Type	Total Number	Average Population	Population
1 Bed	0.21	535	1.3	695
2 Bed	0.3	764	1.8	1375
3 Bed	0.28	713	2.5	1782
4 Bed	0.21	535	3.1	1658
Total		2546		5510

Expected Phase	Plot Number	Developable Area	Residential Density	Residential Yield (100% Development)	Residential Yield (80% Development)	Commercial Density	Commercial Development (100% Yield)	Commercial Development (80% Yield)
	1	1	.2 35	112	90			
	1	2	.4 35	119	95			
	1	3	.3	11	8			
	1		.2 35					
	1	5	.9 35					
	1		.3					
	1		.4 35					
	2		.1 35					
	2		.4 35					
	2		.6 50					
	2 1		.3					
	2		.2 50					
			.9 35					
	2 1		.8 35					
	2		.7 50					
			.3 50					
	3 1		.1 50					
	3		.9 70					
	3		.4 70	98	78	2800	3920	3136
	3		.6 (Land Reserved for School)					
			.4 35					
			.4 70					
	3 1		.2 70					
	4		.6 70					
	4 1		.3 70					
	4		.9 50					
	4 1	.9	.8 70					
	4		2 50					
	4 2		.5 70					
	4		.7 50					
	Tot	al 71	.8	3183	2546		80080	64064



Indicative Phasing

Below is an indicative phasing schedule for the proposed sites at Timperley Wedge. Estimates are based on a series of assumptions based on Trafford Council's evidence base for residential developments:

- The expected average yield per year is around 160 homes.
- Sites in excess of 150 homes spend, on average, more than 2 years in planning
- Sites deliver 20% of their total capacity per year
- Sites enter the planning process in conjunction with key infrastructure developments

This phasing is intended to be indicative and to demonstrate the ability of the Timperley Wedge allocation to deliver the residential properties as indicated in this document.

ion	Expected Yield	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40	2040/41	2041/42	2042/43
1	608	In Planning			40	8	0 12	0 12	0 8	0 8	0	88											
2	630				In Planning			4	0 8	8	0	80 1	60 12	0	70								
3	458									In Planning			4	0	80 120	120	98	3					
	Employment																						
3	(sq.m)														5000	5000	5000						
4	850														In Planning			90	170	170	17	0 17	0
	Employment																						
4	(sq.m)																	15000	15000	15000)		
Expected \	ield By Year		0 () (0 40	8	0 12	0 16	0 16	0 16	0 1	68 1	60 16	0 1	50 120	120	98	90	170	170	17	0 17	0
Employr	nent sq.m		•	•	•	•	•	•	•	•		•	•	•	5000	5000	5000	15000	15000	15000)	•	

Road Improvements

Spine Road

Primary School

Metrolink Western Leg
New Bus Infrastructure

HS2



5.11.1 Key Concepts and Spaces

The following pages include a number of concept and precedent images to illustrate key characteristics of development at Timperley Wedge.



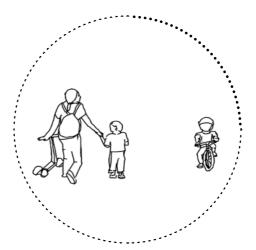
Exceptional public transport connectivity to provide the basis for development



Integrated green spaces and biodiversity, with areas for recreation and play



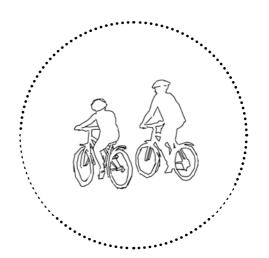
High quality public realm with integral green and blue infrastructure



Accessible for all



A street hierarchy that provides a variety of spaces including filtered neighbourhoods in accordance with Beeline principles



Safe and attractive routes for active travel

Figure 60. Key concepts



5.11.2 HS2 Station at Manchester Interchange

The adjacent images are conceptual CGIs produced by Bennetts Associates for the new rail hub station at Manchester Interchange which will connect HS2, Northern Powerhouse Rail and Metrolink services.

These proposals, contained in the "The Stop is Just the Start" strategy created for Greater Manchester Combined Authority, demonstrate a one-station solution created to encourage infrastructure stakeholders to cooperate on fully integrating national, regional and local transport modes in facilities to rival those of other global cities.

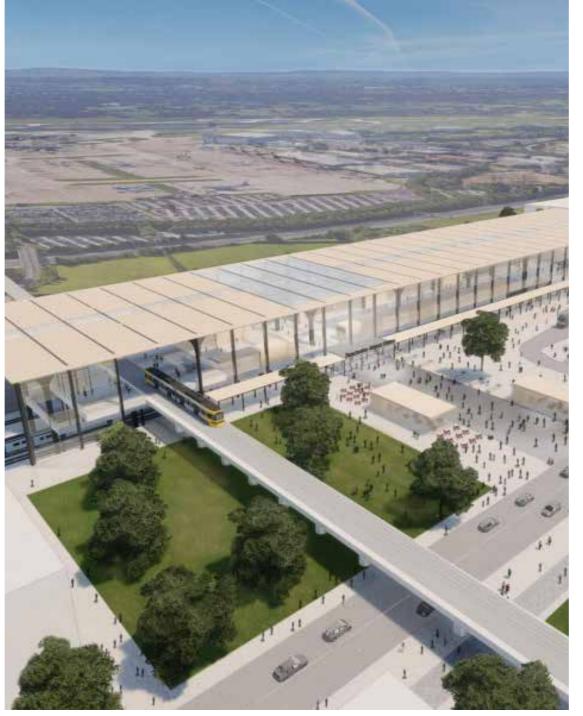


Figure 61. Manchester Interchange Station -Exterior View Concept CGI by Bennetts Associates

Image from: https://www.bennettsassociates.com/projects/hs2-npr-growth-strategies/



Figure 62. Image from: https://www.bennettsassociates.com/projects/hs2-npr-growth-strategies/



Figure 63. Image from: https://www.hs2.org.uk/stations/manchester-airport/



5.11.3 New Metrolink and Davenport Green Centre

Davenport Green centre will be a local hub for retail, social and community facilities and provide connection to Metrolink services. Good pedestrian and cycle routes should enable access to the Metrolink stop and local services.

Figure 65 is a concept sketch demonstrating high quality public realm, local retail and connections to public transport create a local centre for connections and services. Figure 64 and 66 provide precedent images for the integration of cycle routes and public transport and examples of local retail facilities.



Figure 64. Stevenson Square, Manchester (visualisation) image from Beelines Delivery Plan

https://assets.ctfassets.net/ nv7y93idf4jq/Xx5s7azQY1SYmdNKIAviX/ e4395ab029410907365cd0962d17bf81/19-1950_Bee_Network_ delivery_plan-style_-_website_version.pdf



Figure 65. Concept sketch showing public transport, pedestrian and cycle connections with local retail services

Figure 66. Examples of local retail facilities in Altrincham and Hale Barns

Images from: L -https://www.planit-ie.com/portfolio_page/altrincham-town-centre/

R - http://altrincham.today/2015/04/15/news/shopsand-markets/pictures-inside-the-new-hale-barnsbooths-after-103-year-old-lillians-grand-opening/







5.11.4 Davenport Green

Davenport Green North will be a key area for new homes. Figure 67 provides an example of a filtered neighbourhood from the Beelines Delivery Plan. Filtering reduces traffic within residential areas and provides safe and attractive routes for walking and cycling and as well as opportunities for play and ecology.

Figure 67 is a concept sketch showing road filtering to create a community green within a residential neighbourhood with the potential to integrate SUDs and ecology benefits.



Figure 67. Example of a Filtered Neighbourhood from the Beelines Delivery

Image from: https://assets.ctfassets.net/ nv7y93idf4jq/Xx5s7azQY1SYmdNKIAviX/ e4395ab029410907365cd0962d17bf81/19-1950_Bee_Network_ delivery_plan-style_-_website_version.pdf



Figure 68. Concept sketch showing public realm integrated into a residential neighbourhood with areas for play and encourage active travel



6.0 Alternative Scenario Without HS2

6.0 Proposals

The following pages examine the implications to the site in the event that HS2 is not brought forward. The adjacent plan is a summary of the masterplan proposals, the following pages include a series of diagrams that examine the implications of these proposals.

The final masterplan is intended to demonstrate the feasibility and deliverability of development. Future proposals would be subject to the usual planning process.

Key Proposed Road (indicative route) Proposed Road Proposed Road Improvements Key green corridors Key blue corridors Key blue corridors Key locations for improvement of pedestrian and cycle infrastructure Key areas for leisure, sport, and recreation Indicative development areas

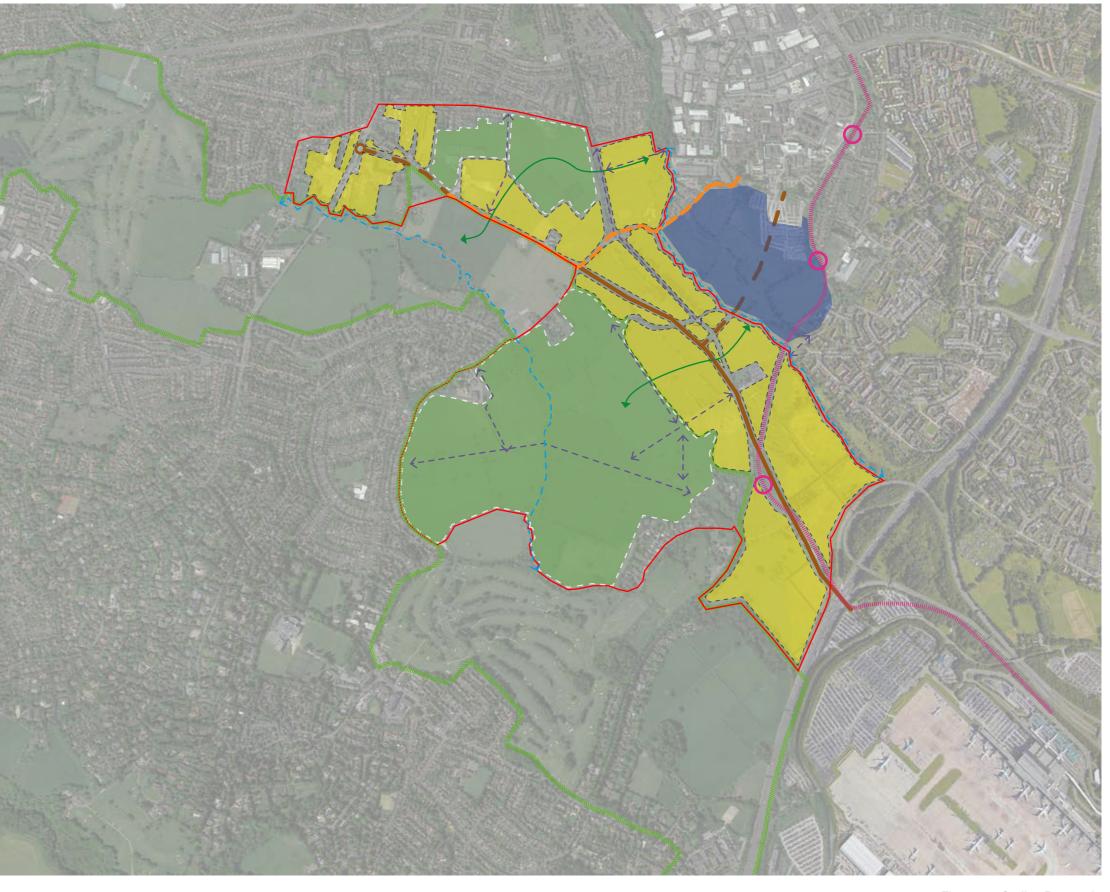


Figure 51. Outline Proposals

Adjacent Medipark allocation

Proposed Greenbelt Boundary

Indicative Metrolink Stop

Allocation Boundary

6.1 Spine Road

A new spine road through the site will link Timperley and Manchester Airport. The proposed route through the site is illustrated in the adjacent diagram. This will combine new and upgraded of infrastructure and provide a link to the Medipark site to the east.

The spine road will be the route of the new Rapid Bus Transit between Altrincham and Manchester Airport.

The final route of the link from F to H is to be determined as part of the Roundthorn Medipark Extension Masterplan.

Further junction improvements in the wider area will be necessary subject to detailed highways design.

A strategy to deliver the new spine road must demonstrate co-ordination with other associated infrastructure, including dialogue with other providers, to ensure there is available infrastructure for each phase of development. The strategy would outline what needs to be delivered and a timeframe for when this would be achieved.

A NEW JUNCTION
WITH THORLEY LANE
(SOUTH OF CLAY
LANE / WOOD LANE)
ROUNDABOUT

NORTH SECTION OF CLAY LANE TO BE RESTRICTED TO BUS/ LOCAL ACCESS

C EXISTING SECTION OF CLAY LANE TO BE UPGRADED (500m)

DOBBINETTS ROAD WIDENED AND ACTIVE TRAVEL PROVISION ADDED

E JUNCTION UPGRADE AT FOALS ROAD

MEDIPARK EXTENSION SPINE ROAD

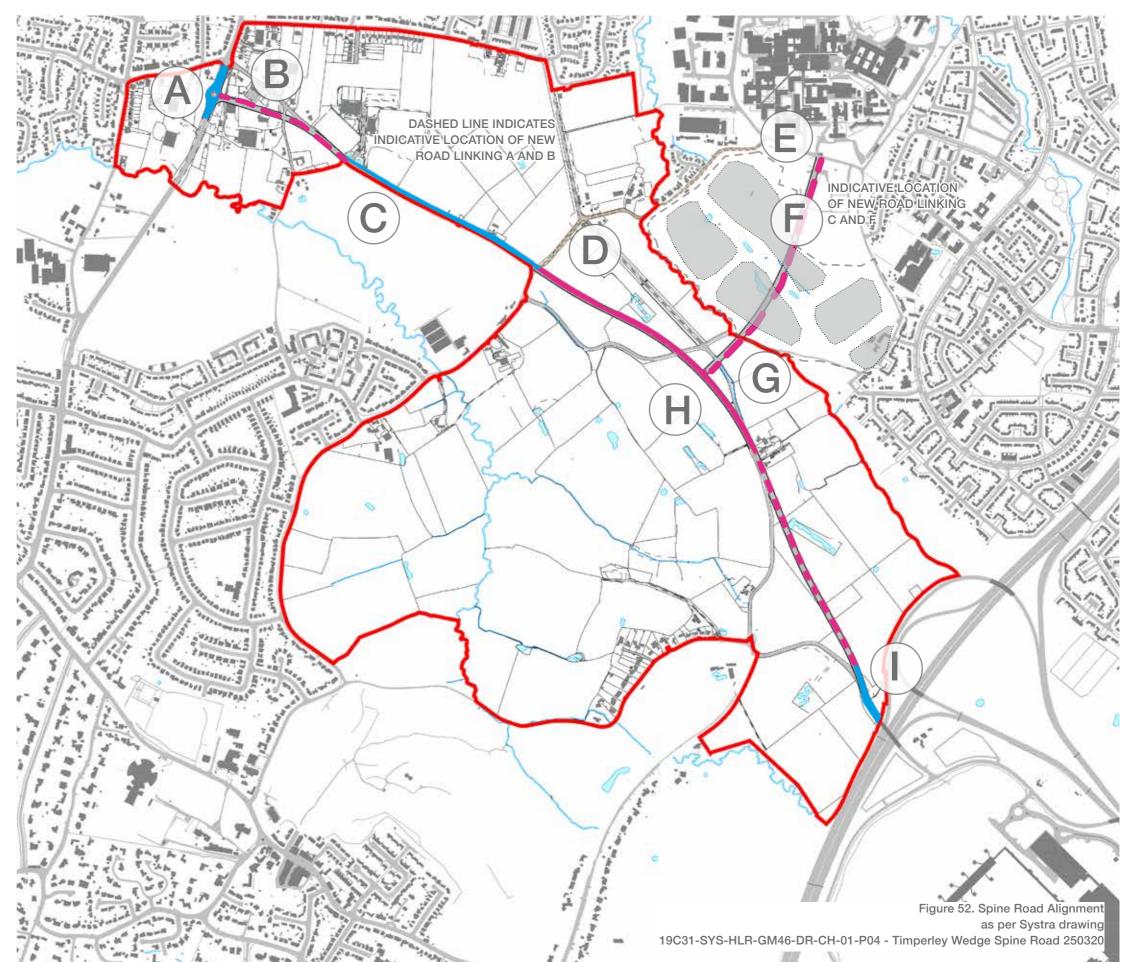
> BRIDGE OVER FAIRYWELL BROOK (ROAD ACCESS OVER WHITECARR LANE CLOSED

JUNCTION OF MEDIPARK EXTENSION AND SPINE ROAD

CONNECTION TO EXISTING RUNGER LANE BRIDGE

Vew roads

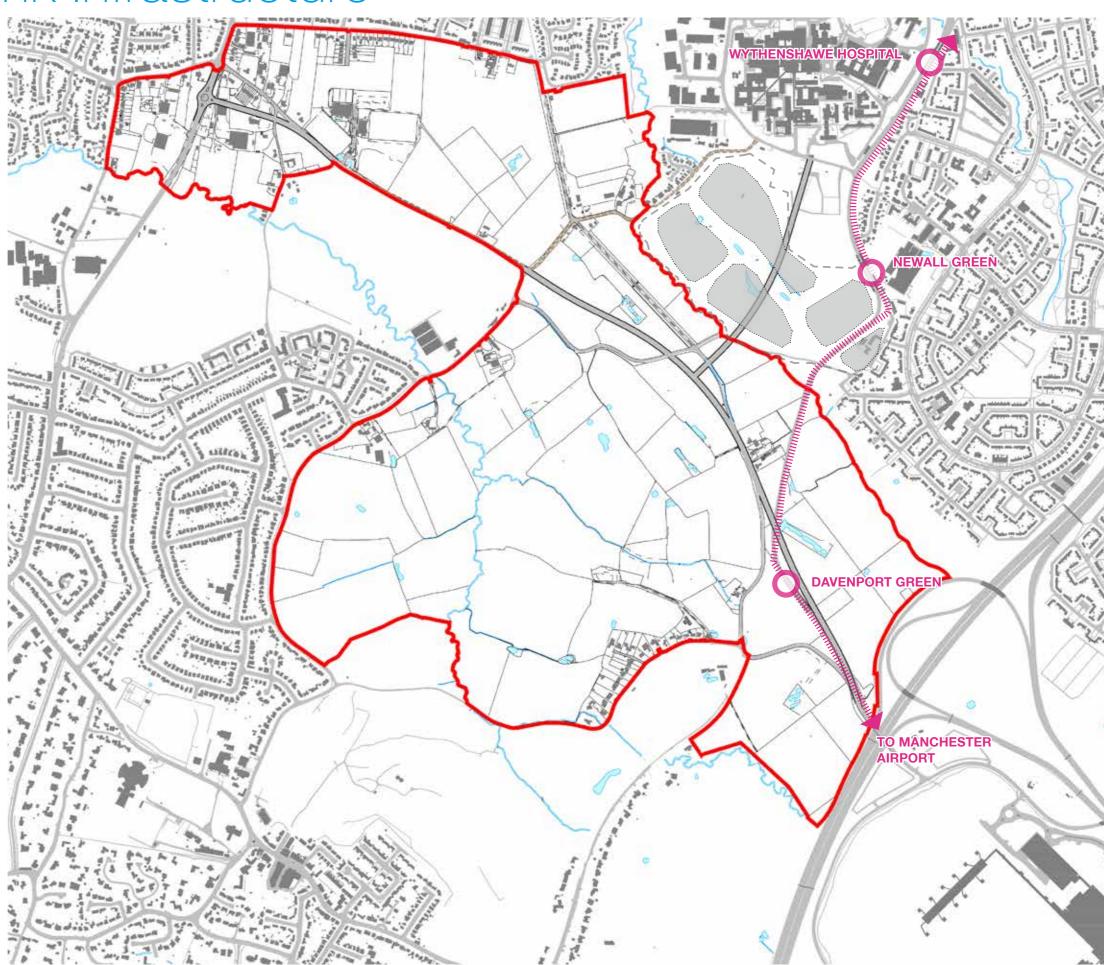
New road (indicative route)



6.2 New Metrolink Infrastructure

Development at Timperley Wedge will benefit from the provision of new rail infrastructure. This will serve to connect Timperley Wedge to central Manchester through Metrolink, and to improve the sustainability of proposed developments in the area.

The Metrolink route and stops are indicative and based on the latest advice. Routes and stops have not been finalised by TfGM and HS2 and are subject to change.



Key

IIIII New Metrolink line

IIIIII New HS2 and NPR Line

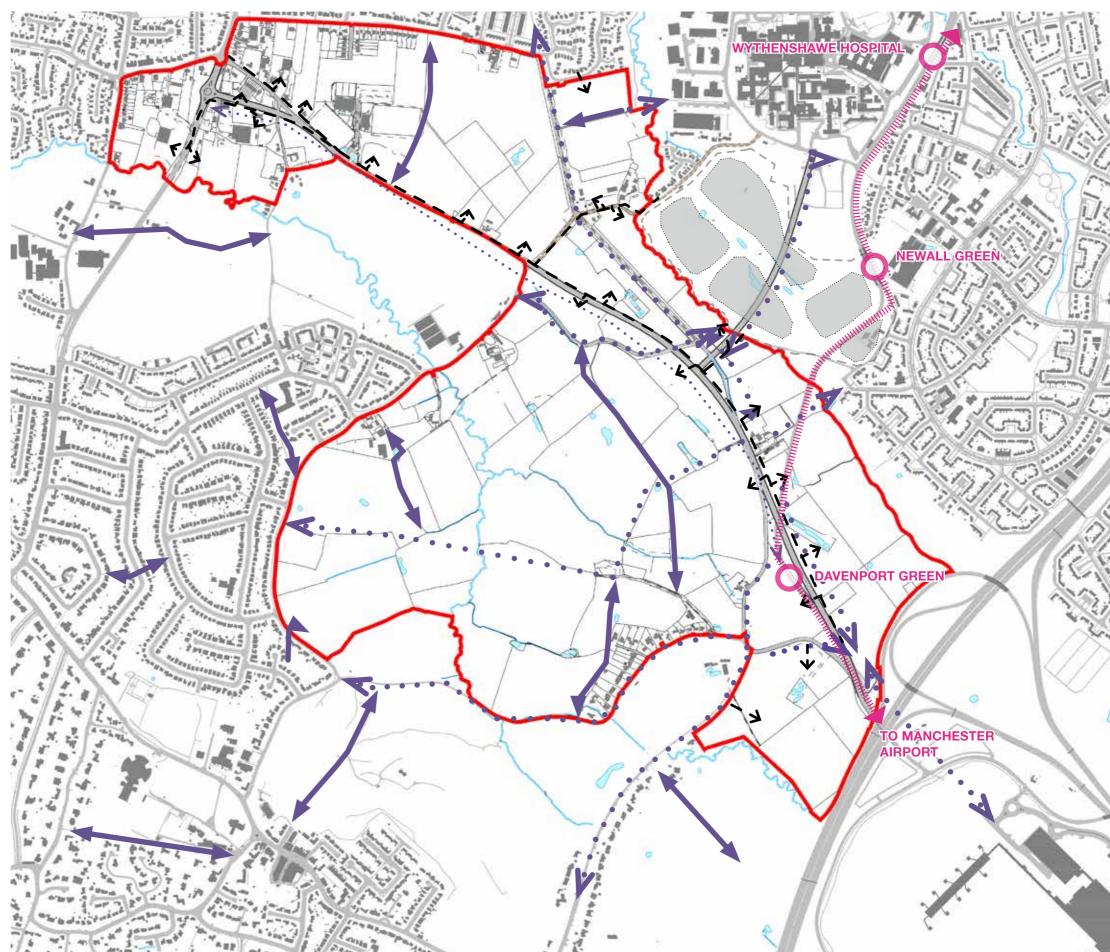
O Proposed Metrolink Stop

Proposed HS2/NPR Station

6.3 New Transport Nodes

Key to the success of Timperley Wedge will be the integration of new infrastructure that will support development and generate connectivity with both the local and wider communities of Greater Manchester.

Timperley Wedge will not only provide new places to live and work but will also significantly enhance accessibility for existing communities to the public transport network, recreation and employment opportunities.



Key

New road/improvements to existing roads - to form new Spine Road (Bus/car/cycle/pedestrian)

Existing cycle/pedestrian routes

New or enhanced pedestrian or cycle routes

Proposed primary road access through site

New Metrolink line

Proposed new Metrolink Stop

0 100 500m 1:100,0000

6.4 Blue Infrastructure

Requirements for watercourse access, flood management and surface water drainage have been identified in this document, including:

Access to Watercourses

Wide buffer strips should be provided along Fairywell and Timperley Brook and opportunities to address current failures under the Water Framework Directive should be considered. This includes removal of redundant structures and barriers, renaturalisation of the river corridor and provision of additional habitat. A minimum of 8 metres will need to be adopted and this area has been removed from the proposed developable land.

Site-wide Drainage Strategy

A site wide drainage strategy must also outline how future development will allocate provision for the management of surface water through the use of sustainable drainage systems with multi-functional across a high quality green and blue water environment. The strategy must outline how phases of such features interact and how the topography of the phases influence the site layouts by identifying naturally occurring flow paths and any low lying areas within the proposal where water will naturally accumulate.

New development will be expected to incorporate exemplary Sustainable Drainage methods and follow the surface water hierarchy. Applicants will have to submit clear evidence of why each option within the hierarchy has been discounted. The expectation will be for only foul flows to communicate with the public sewer.

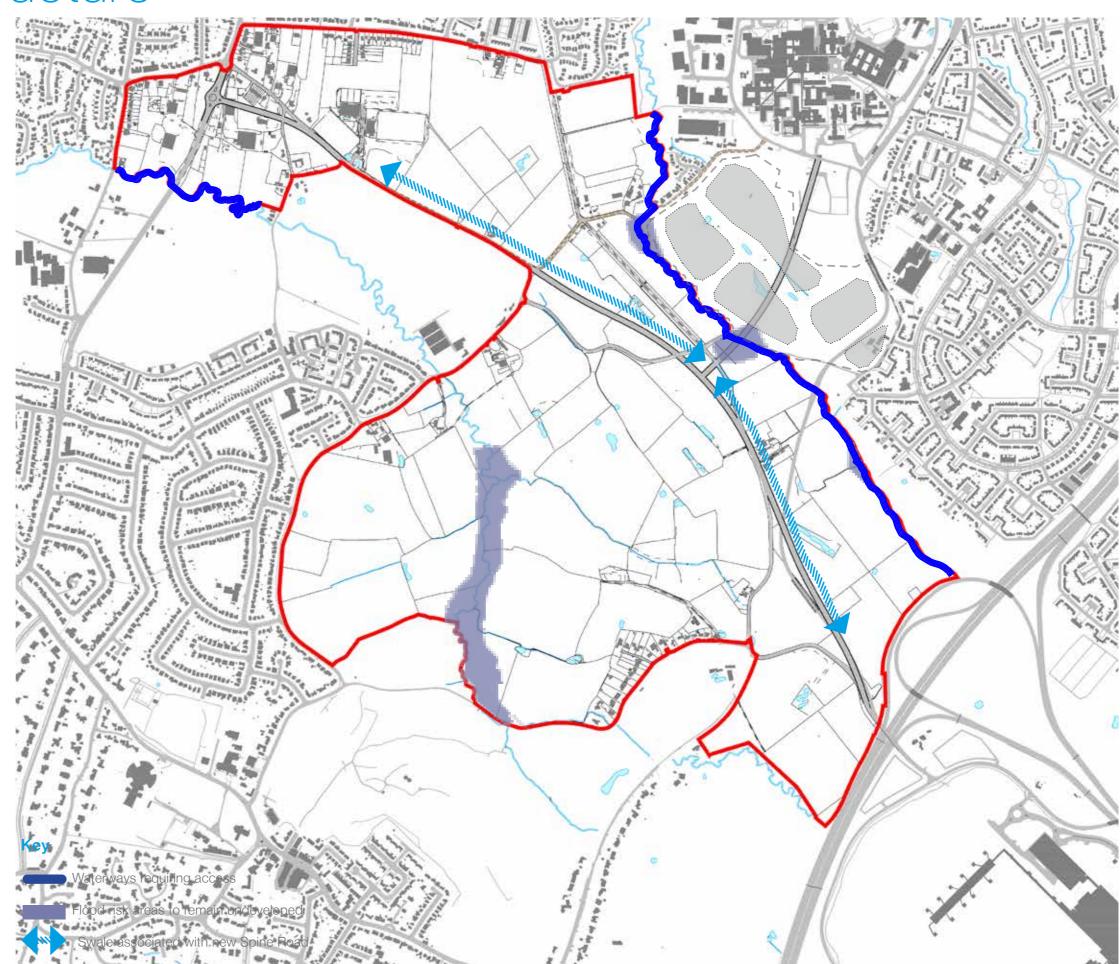
Approved drainage schemes will be expected to be supplemented by appropriate maintenance and management regimes for the lifetime of any surface water drainage schemes.

Flight Safety - Bird Strikes

Any additional areas of surface water and changes to existing bird habitats will require consultation with the Manchester Airport Group in case of any increased risk of bird strike.

Flooding

Areas of flood risk have been identified and are not considered suitable for development in this masterplan. The areas identified on the adjacent figure correspond with the Environment Agency information in section 3 of this document. Developers will need to work closely with the Council and Environment Agency to deliver a site wide flood risk strategy to maximise potential to reduce flood risk downstream.



6.5 Green Infrastructure

With the integration of well designed green infrastructure Timperley Wedge can deliver a valuable public resource with numerous benefits, including enhanced recreation and education opportunities, an increase in biodiversity and wildlife habitats and assist in the mitigation of climate change. It also provides other ecosystem services that can help to protect health and well-being through noise reduction, improvements to air and water quality, as well as reductions in flood risk, providing visual screening, an attractive appearance and urban cooling benefits.

Key considerations:

- protection of existing natural spaces
- new open spaces that enhance green infrastructure and unlocks underutilised areas
- connected spaces that create a network of green infrastructure within and beyond the site
- improve resilience through SUDs, air quality and noise pollution improvements
- planted green buffer zones along new green belt boundaries

Key

Existing Hedgerow/Trees to be retained as far as possible

Retained Greenbelt

Retained Green Belt - New Rural Park

Key Green Corridors (Indicative)

• • • • New Green Belt boundary

Key Green Infrastructure Connections

0 100 500m 1:100,0000



6.6 Development Sites

This site schedule reflects divisions by natural and manmade features, and not necessarily ownership structure. Developable land excludes land subject to an easement from the EA (i.e. access to a watercourse), as well as other previously identified constraints. For the purpose of area estimates, generous green corridors have been included and development plots are assumed to have an 80% yield. All final site areas and locations will be subject to future planning

Schedule of Developable Land within each Plot:

1. 3.2 ha

2. 3.4 ha

3. 0.3 ha

4. 3.2 ha 5. 2.9 ha

6. 2.3 ha

7. 5.4 ha

8. 6.1 ha 9. 3.0 ha

10. 4.5 ha

11. 2.9 ha

12. 4.5 ha 13. 0.3 ha

14. 4.2 ha

15. 4.4 ha

16. 15.4 ha

17. 4.1 ha

18. 11.9 ha

Total Developable Area: 83.5ha

Key



Development Plot





Key Green Corridors (Indicative)

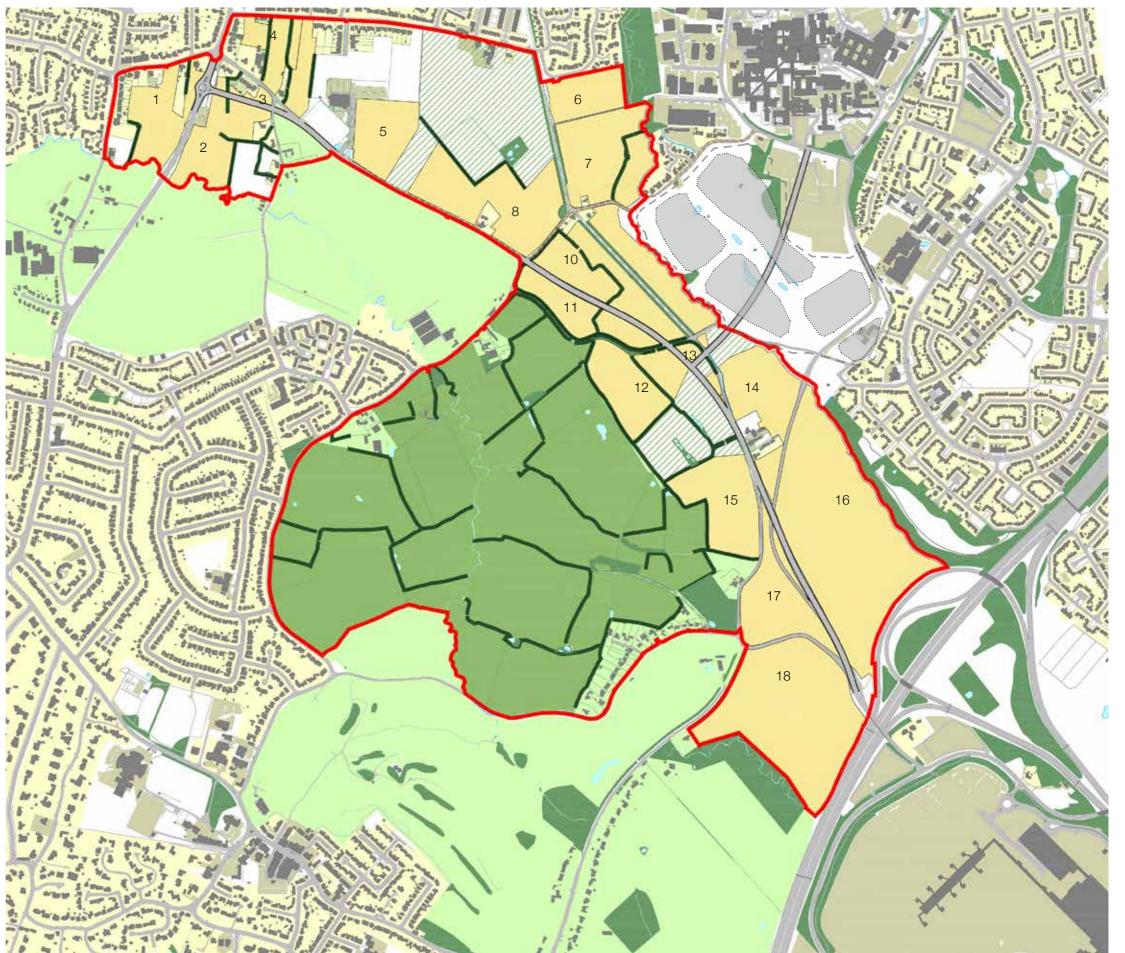


Existing Hedgerow/Trees to be retained as far as



Indicative development plot in Manchester Medipark





6.7 Density

Timperley

Development to the north of the site relates to the existing town of Timperley. No development is within 800m of the existing town centre, as such all development is indicated as a minimum of 35 dwellings per hectare (dph) as per the GMSF.

Davenport Green Local Centre

New development around Davenport Green will include substantial new transport and social infrastructure, including a new Metrolink stop, heath and community facilities and a new primary school. This will create a new local centre with the following densities:

Centre (Within 100m of the Station):

Minimum 70 dwellings + 2800m2 commercial per hectare **Centre (Within 200m of the Station):**

Minimum 70 dwellings per hectare

Within 400m of the Station:

Minimum 50 dwellings per hectare

Within 800m of the site

Minimum 35 dwellings per hectare

Some areas of localized reduced densities have been shown due to constraints on individual sites. Final densities and housing numbers will be subject to planning approvals.

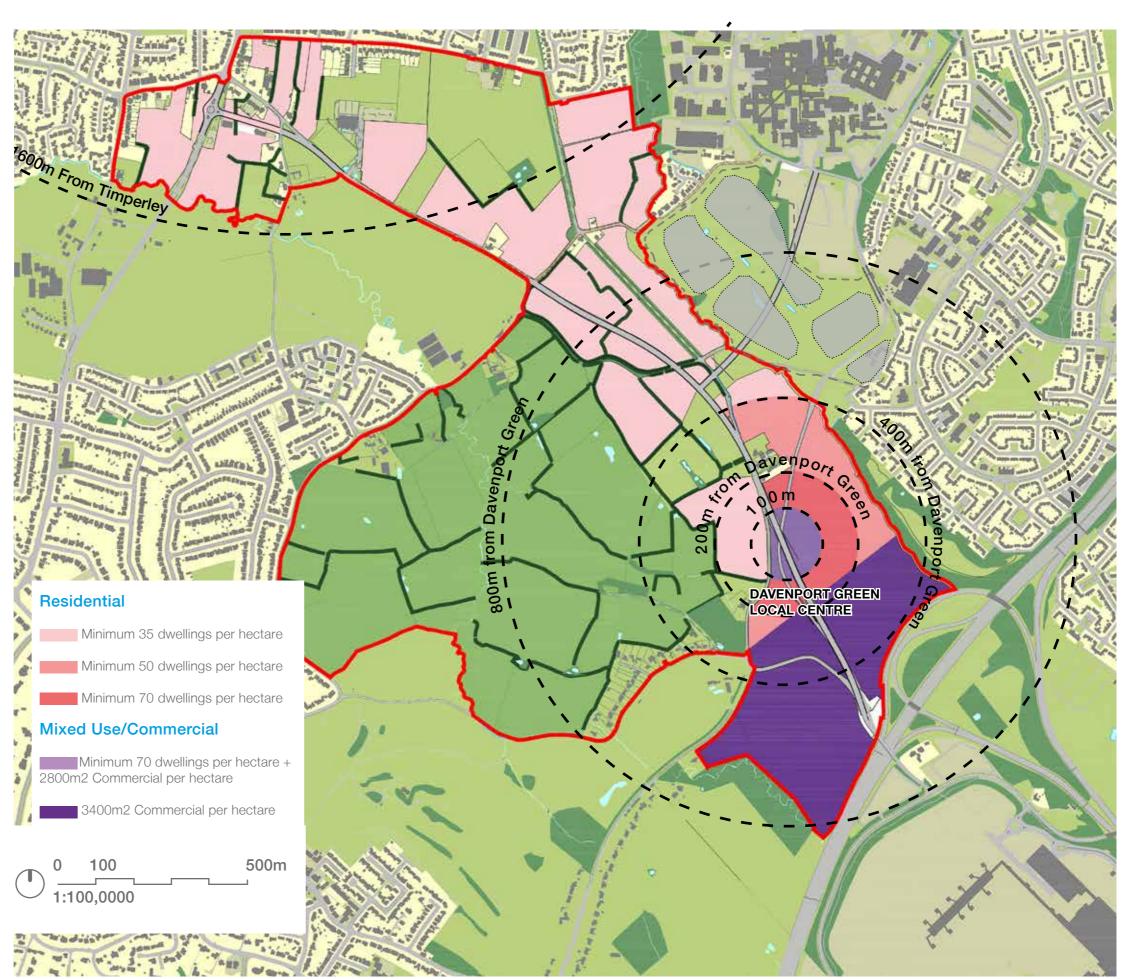
Commercial Development

Toward the south of the site, along the M56, a new commercial development will provide substantial commercial floor space as one of a series of key enterprise areas that includes Medipark to the North and Airport City to the South.

All densities are an average and represent a minimum as per the GMSF. Densities will need to reflect local constraints such as rights of light, environmental factors and the local street network.

Building Heights

Heights to be in accordance with the maximum parameters to comply with flight safety requirements navigation and passenger safety due to the proximity of Manchester Airport.



Timperley Wedge – Masterplan for Trafford Wedge Allocation

6.8 Indicative Masterplan

This masterplan demonstrates a feasible scenario for how development may come forward at Timperley Wedge, subject to the adoption of the GMSF. Final developments will be subject to all necessary planning consents.

Key Existing Hedgerow/Trees retained as far as possible Key areas for leisure, sport, and recreation Indicative residential area Indicative mixed use area. (Predominately local centre with some residential use) Indicative green corridors (location and size subject to planning) Indicative commercial development areas including Medipark allocation, see corresponding masterplan Key enhancements to pedestrian/cycle infrastructure Proposed Greenbelt Boundary Approx. Location of new play facilities for young people

New Metrolink Stop indicative location 500m Timperley Wedge – Masterplan for Trafford Wedge Allocation

education infrastructure

commercial led development



Approx. Location of new play facilities for children

New Local Centre, to include retail, healthcare, and

New commercial area to include predominantly

6.9 Indicative Regions

Region 1

Region 1 involves developments in the north of the site. These developments, closer to the existing urban areas have the potential to be developed more quickly. Access to these sites will be off of the existing road network, although upgrades to the existing road network will be required in some areas.

Approx. 608 dwellings

Region 2

Region 2 involves sites closer to the centre of the Timperley. Wedge allocation. These sites will be accessible from the new spine road, as well as improved roads at Clay Lane and Dobbinetts Lane. As such, these plots will be served by road improvements as they are finalised.

Approx. 596 dwellings

Region 3

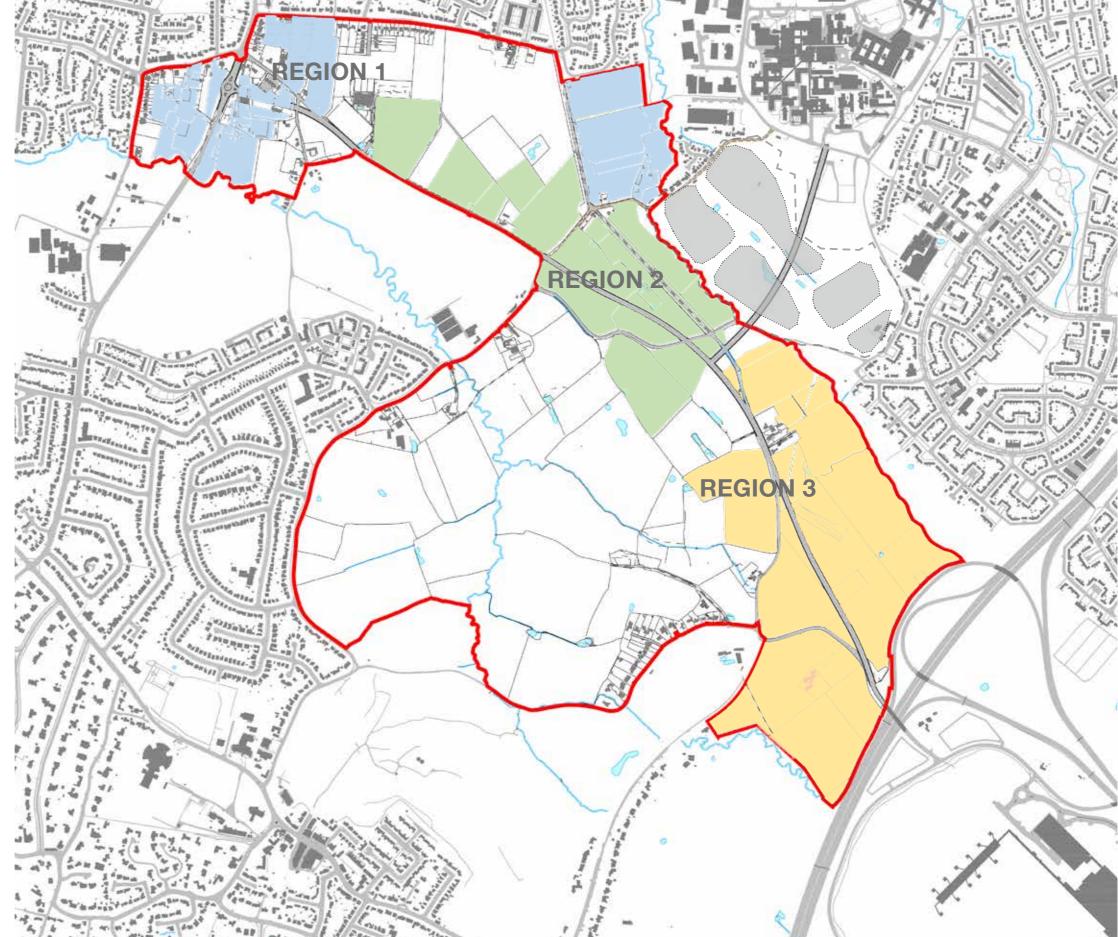
Region 3 focusses toward the south of the site. Development in this area will be accessible via the spine road, as well as a new Davenport Green Metrolink stop and local centre. Developments here will be served by creation of the spine road and the new Metrolink extension.

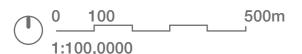
Approx. 754 dwellings

Approx. 62,784sqm of retail/commercial

1 school

This examines the appropriate density and phasing in the event that all proposed transport infrastructure developments (including Metrolink, and the Timperley Wedge Link Road) happen within the proposed plan period





6.10 Indicative Site Capacity, Population, and Phasing

Indicative Site Capacity

Below is a schedule of indicative capacity based on the previous analysis.. This area schedule applies the minimum The table to the right takes the total residential development densities and expected commercial yield to the plot areas as and estimates the mix of dwelling sizes based on the housing seen in sections 6.6 and 6.7.

Applied to the development areas is a net to gross factor of Census data was used to ascertain an average population 80%. Previous estimates had included a 70% net to gross, by housing type in order to estimate a total population for the but with the identification of many existing constraints, the proposed allocation at Timperley Wedge. total area of expected development has been refined to 83.5 hectares with a higher confidence of delivery.

The commercial provision is expected to be delivered as approximately 60,000 square metres of commercial space and 3,000 square metres of retail space.

Population Estimate

needs identified by Trafford Council's assessments.

	Percent of Dwellings by Type	Total Number	Average Population	Population
1 Bed	0.21	411	1.3	534
2 Bed	0.3	587	1.8	1057
3 Bed	0.28	548	2.5	1370
4 Bed	0.21	411	3.1	1274
Total		1957		4235

Expected Phase	Plot Number	-	Residential Development (100% Yield)	Residential Development (80% Yield) Commercial Density	Commercial Development (100% Yield)	Commercial Development (80% Yield)
	1 1	3.2		.2 90		
	1 2	3.4		9 95		
	1 3	0.3		.1 8		
	1 4	3.2		.2 90		
	1 5	2.9		81		
	1 6	3.3		.6 92		
	1 7	5.4		151		
	2 8	6.1				
	2 9	3		84		
	2 10	4.5		126		
	2 11	2.9		81		
	2 12	4.5		126		
	2 13			.1 8		
	3 14			34		
	3	2.5				
	3	0.5		28		
	3	0.1		7 6 28	00 280	224
	3 15			78		
	3		(Land reserved for school)			
	3 16			140		
	3	3.5		196		
	3	1.3		73 28		
	3	7.1		34	24140	19312
	3 17	0.5		20		
	3	1		56		
	3	0.4		22 28		
	3	2.6		34		
	3 18			34		
	Total	83.5	24	1957	78480	62784



Indicative Phasing

Below is an indicative phasing schedule for the proposed sites at Timperley Wedge. Estimates are based on a series of assumptions based on Trafford Council's evidence base for residential developments:

- The expected average yield per year is around 160 homes.
- Sites in excess of 150 homes spend, on average, more than 2 years in planning
- Sites deliver 20% of their total capacity per year
- Sites enter the planning process in conjunction with key infrastructure developments

This phasing is intended to be indicative and to demonstrate the ability of the Timperley Wedge allocation to deliver the residential properties as indicated in this document.

Region	Expected Yield	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40	2040/41	2041/42
	1 60	8 In Planning			40	3 0	30 12	0 120	3	80 8	0 8	8										
	2 63	0			In Planning			41	3 (80 8	0 8	0 160	120	0 70)							
	3 75	4								In Planning			15:	1 151	1 151	. 151	150	0				
	Employment																					
	3 (sq.m)													15000	15000	15000	17784	4				
	Expected Yield By Yea	ar	0	0	0 40	3 0	30 12	0 160	16	50 16	0 16	8 160	27:	1 221	1 151	. 151	150	0	0	0	0	0
Empl	oyment (sq.m)													15000	15000	15000	17784	4				
		CRACE	'	2000					-								•				<u> </u>	<u>'</u>

Road Improvements

Spine Road

Primary School

Metrolink Western Leg New Bus Infrastructure





References and Supporting Documents

This document should be read in conjunction with the following evidence based documents and planning policy requirements.

Greater Manchester Spatial Framework 2019

Trafford Core Strategy

Trafford Landscape Strategy

GM Landscape Character and Sensitivity Report

GMCA Biodiversity Net Gain Guidance

GMSF Trafford Historic Environment Assessment

GMAAS Historic Environment Assessment, GMA46 Timperley Wedge

Stage 2 Greater Manchester Green Belt Study Harm Assessment of Proposed GMSF Allocations

Draft Trafford Retail Study

Trafford Playing Pitch Strategy

Trafford Design Guide

Draft Wythenshawe Hospital Campus SRF

Manchester Medipark Masterplan

GMSF Locality Assessment: Roundthorn Medipark Extension (GMA11) and Timperley Wedge (GMA46)

Strategic Flood Risk Assessment

GMCA Landscape Character Assessment

GMCA Green Belt Assessment 2016

Trafford Council SPD1 2014 Planning Obligations





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