



Executive Summary

This document presents AECOM's analysis and concept masterplanning approach to the development of the Warrington South West Urban Extension Area (WSWUE). The analysis has helped the Council to confirm the WSWUE area as part of its Preferred Development Option. It has provided additional detail to understand the sustainable development capacity of the area and the infrastructure required to support new development.

The framework plan within this documents is underpinned by AECOM and initial analysis of landscape, historic assets, transport considerations, utilities, and the enviromental context. The subsequent framework plan process explores the extent of the development area, and establishes development parcels, green space areas and required infrastructure. The WSWUE is looking for a long term large scale sustainable mixed-use development, to provide around 1,800 new homes, 2 ha Local Centre for community facilities, a new 2 ha primary school, a new 20 ha local park and around 31 ha of associated Open Spaces.

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INTRODUCTION



1.1 About the Document

Warrington South West Urban Extension area (WSWUE), forming part of the wider south Warrington area, is defined by its surrounding large scale transport infrastructure (i.e. West Coast Railway Line, Manchester Ship Canal, and Bridgewater Canal, etc.) and hosts a number of scattered residential properties. This expanse of land provides an opportunity for a natural urban extension to south-west Warrington, which can accommodate sustainable residential growth, promote economic activity, and recreational spaces within this part of the borough.

The framework plan presented in this document builds upon AECOM's experience in the Warrington area, where they have been involved in masterplanning schemes across the town centre, Warrington Waterfront Development Area, and throughout wider Warrington.

1.2 Site Location

The WSWUE area comprises 129 hectares of land, and is situated immediately to the south-west of the main built-up area of Warrington. To the west of the site are raised railway lines (West coast line and Chester-Manchester line) which form physical and visual boundaries to the land further to the west. To the south is Bridgewater Canal, which provides high quality amenity and recreation spaces to local communities. Chester Road (A56) defines the eastern boundary of the site, connecting it to Warrington and the south via M56. The Manchester Ship Canal lies to the north of the site, and it defines the northern boundary of the site.



Figure 1.1: WSWUE Study Area

1.3 Planning Background

This section provides a summary of key national, regional, and local policy relevant to the WSWUE. It demonstrates how the framework aligns with overall national, regional and local planning objectives. At a national level, The National Planning Policy Framework (NPPF, 2012) sets out the Government's planning policies for achieving sustainable development in England. It performs an economic, social and environmental role, and provides the foundation for which local and neighbourhood plans can develop.

At a local level, the Warrington Local Plan Core Strategy, adopted in 2014, sets out set the framework to guide decisions in the borough over the next 15 years, including a wide range of activities that shape areas, from the role of the town in the economy, the health of the Town Centre, and how future housing needs can be accommodated, to the location of new schools and opportunities for outdoor play for children. The Warrington Core Strategy is the central policy document in Warrington's Local Planning Framework.

In October 2016, the council launched its Local Plan Review to drive forward the growth and development of the borough over the next 20 years. There was a 'Call for Sites' exercise being undertaken to support the borough's development needs. The responses of this consultation have been incorporated within this framework process.

1.4 Call for Site and Land Promotions

Warrington Council has received 2 'Call for Sites' submissions in the WSWUE area from private sector land owners/ developers. AECOM has taken on board of developers' proposals and their development capacity work, and this has formed part of the key considerations for the framework developing process, including defining the boundary of the area.

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BASE LINE STUDY



2.1 Landscape Character and Site Photograph

Landscape and Visual Impact

This study comprises a desk-top review of the landscape character and site survey; consequently the potential landscape impact of development and its mitigation principles will be cooperated into the masterplanning process. The appraisal is based upon principles set out within 'Guidelines for Landscape and Visual Impact Assessment' GLVIA (Landscape Institute and Institute of Environmental Management and Assessment, 3rd Edition, 2013).

National Landscape Character Context:

The broad study area is identified by Natural England and falling within National Landscape Character Area NCA 60, Mersey valley. Its pertinent key characteristics are identified as comprising:

- The field pattern is regular and large scale, often defined by hedgerows with isolated hedgerow trees, many hedgerows are intermittent and have been replaced by post-and-wire fencing, while field boundaries on the moorlands are marked by ditches.
- There are densely populated urban and suburban areas, with major towns particularly at the river crossings, including Runcorn, Widnes and Warrington

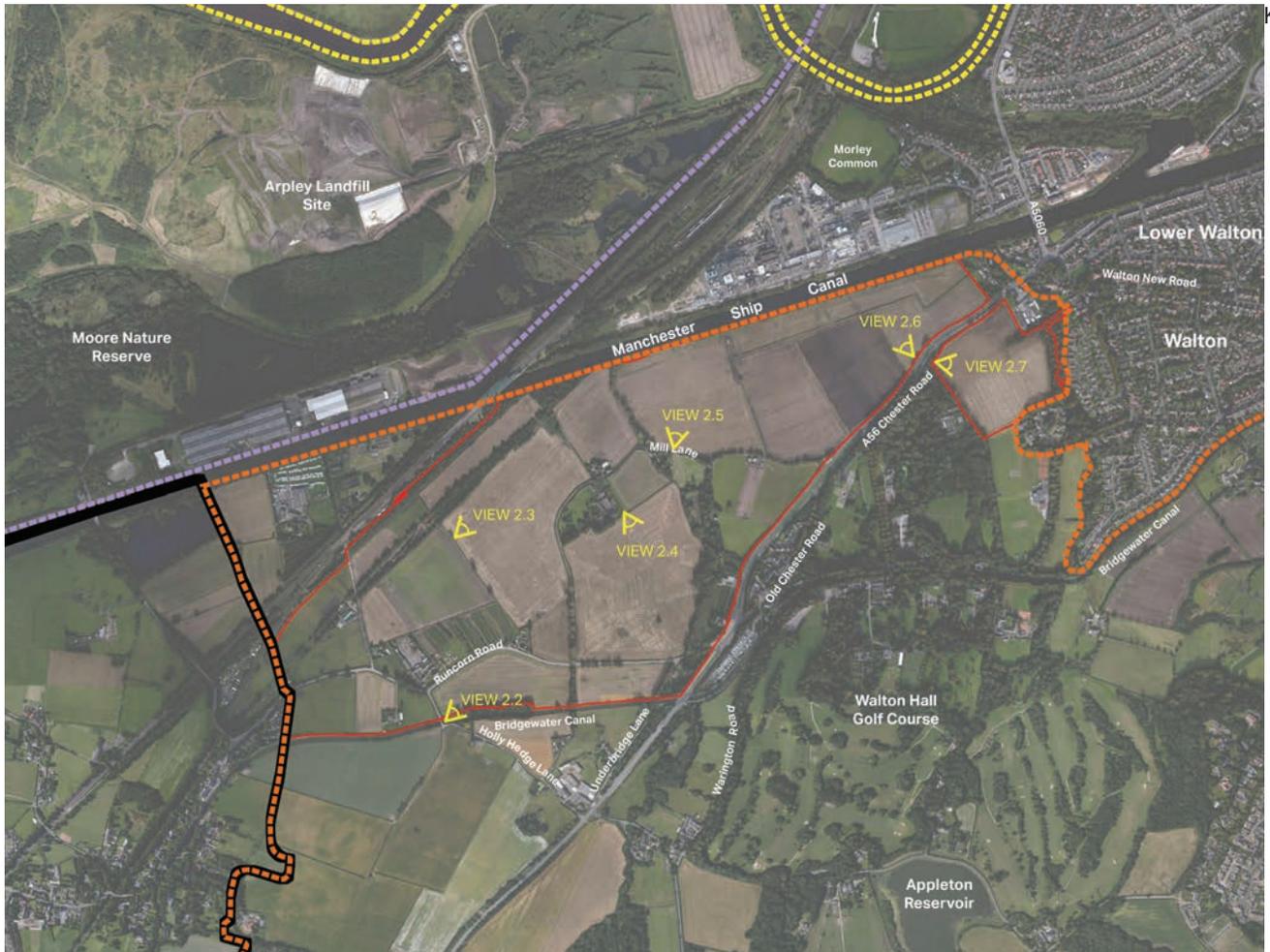
- There is large-scale, highly visible industrial development, with docks, chemical works and oil refineries; and
- The river valley has a dense communication network with motorways, roads, railways and canals running east-west, and power lines are also prominent.

Local Landscape Character Context:

At local level, the 'Warrington: A Landscape Character Assessment' report, prepared by Agatcholis Beckmann Landscape Architects for Warrington council in 2007 identifies 6 types of Landscape Types. Each landscape type area is divided into further sub-divisions of Landscape Areas. The site falls within LCA Area 3A: Appleton Park and Grappenhall. This character area consists of two parcels of land of similar character split by housing development associated with the A49 London Road. The site falls within the western parcel, to the west of Walton. The landscape character of these areas comprises of strongly sloping land to the north, towards the Manchester Ship Canal, occasionally restricted by the presence of linear deciduous woodlands, coverts and tree groups. All the streams flow almost due north with minor tributary streams fed from spring lines. Key Characteristics include:

- Sweeping northerly views
- Strongly sloping land to the north
- Incised stream valleys running in a northerly direction
- Linear woodlands, coverts and tree clumps;

To the north of the Manchester Ship Canal, the Landscape Area LCA 5A River Mersey/ Bollin 9West) can be seen immediately outside of the study area. It covers large areas of woodland and water bodies, alongside the edges of large scale warehouses and chemical plants (Baronet works). The structures of these plants are visible from the northern part of the site.



- KEY**
-  Warrington Borough Boundary
 -  Landscape Character Area 3A-
Appleton Park to Grappenhall
 -  Landscape Character Area 5A-
River Mersey/ Bollin East
 -  Landscape Character Area 6A-
Victoria Park to Fiddlers Ferry

Figure 2.1: Landscape Character Area



Figure/ View 2.2



Figure/ View 2.3



Figure/ View 2.4



Figure/ View 2.5



Figure/ View 2.6



Figure/ View 2.7

2.2 Topography and Water Courses

The WSWUE boundaries are marked by Bridgewater Canal to the south, Chester Road (A56) to the east, West Coast railway line to the west, and Manchester Ship Canal to the north. The study area has subtly north-facing slopes which are dropping from Bridgewater Canal and Runcorn Road, towards Manchester Ship Canal. The highest area is around Bridgewater Canal, about 30m AOD, and the site starts fall down toward north to reach about 10m AOD at the Manchester Ship Canal.

There are two long distance un-named water courses running through the site. The more significant one starts from Bridgewater Canal, and passes Mill Lane before it joins the Manchester Ship Canal. EA flood Zones 3 areas have been identified along this water course, which requires some stand-off areas for development. Another water course starts from Appleton Reservoir, running along the western edge of Walton village and cutting through the north corner of the site, and then joins the Manchester Ship Canal. This water course has little impact on potential development capacity.



Figure 2.8: Topography and Water Courses Map

2.3 Vegetation and Environmental Designations

As Figure 2.9 shows, a large number of mature woodland areas can be found to the north of Manchester Ship Canal, which are identified as Local Wildlife Sites. Within the site, mature tree belts can be found along water courses and railway embankments. Higher quality trees, qualified as TPO trees, can be found along Runcorn Road and the Bridgewater Canal, within the southern part of the site. The eastern boundary of the site overlaps with a large area of protected TPO tree group, which covers a valley area of an existing water course. To the south of Chester Road, mature woodland and trees dominate Higher Walton and Walton Hall areas. The proposed framework plan will look for retain and enhance existing good quality vegetation and environmental features.



Figure 2.9: Vegetation and Environmental Map

2.4 Movement Network

As Figure 2.10 indicates, the site is well connected. Chester Road (A56) provides a north-south connection to Warrington Town centre and the M56 (Junction 11). Runcorn Road, runs west-east, connecting Chester Road and Moore village. Mill Lane runs through the centre of the site, to provide access to existing properties. However, this road is a narrow one-lane track, which is framed by well managed hawthorn hedgerows on both sides. It can be seen as one of the most significant landscape features of the site, therefore the framework plan will look for retain this and integrate it into a network of green corridors.

The Manchester Ship Canal, runs alongside the northern boundary, forming a physical barrier for the development. A potential strategic road and bridge may be needed to provide stronger connection between both sides of the canal. A Public Right of Way connects Runcorn Road and Mill Lane, crossing through the fields to the south of the Grange Green Manor. A long distance amenity trail, Cheshire Ring Canal Walk, runs along the southern boundary, alongside the Bridgewater Canal.

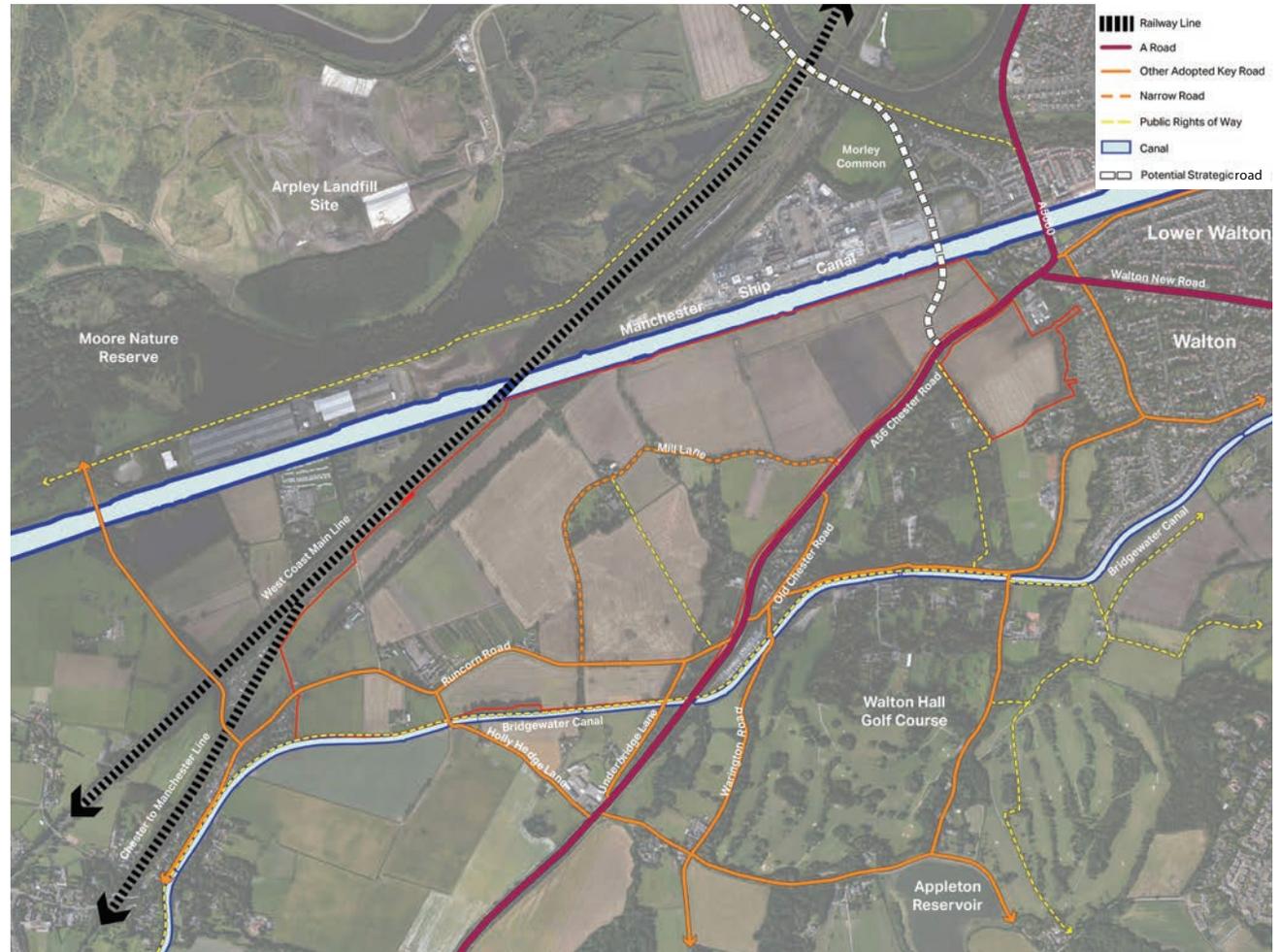


Figure 2.10: Movement Network

2.5 Historic Assets

The WSWUE area contains several historic assets, including six locally Listed Buildings. As Figure 2.11 shows, two locally listed residential properties are located at the centre of the site, to the south of Mill Lane, and the other 4 locally listed buildings can be found around Runcorn Road. The Walton Village Conservation Area (1977) lies east of Chester Road, immediately next to the site and requires consideration of buffers. The present Walton Hall and its parkland dominates the area of escarpment to the south of Chester Road. The Bridgewater Canal was constructed through the area in the 1770s, originally to transport coal from Worsley to Liverpool for transshipment elsewhere. Along the canal are a number of listed buildings and structures. There are three Grade II Listed Buildings along the southern site boundary, i.e. Acton Grange Bridge, Thomason's Bridge and the Aqueduct carrying the Bridgewater Canal, which connect the site to further south areas over the Bridgewater Canal. These designations enhance the historic value of the WSWUE, and help to define the local characters of the study area.

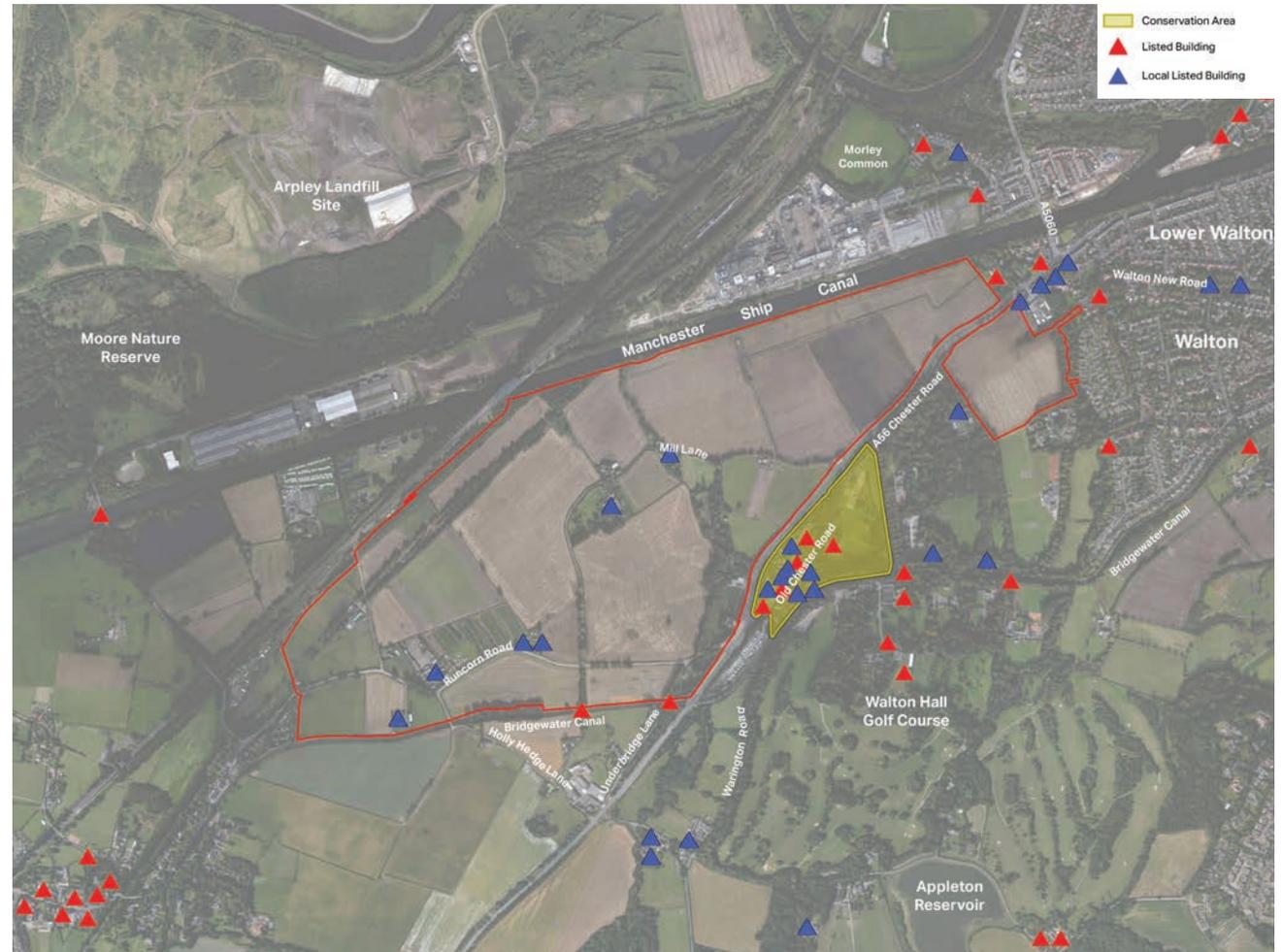


Figure 2.11: Historic Assets Map

2.6 Utilities and Site Constraints

There are several major industrial structures on the northern bank of Manchester Ship Canal, which require hazardous substances consideration. The COMAH zones of the Baronet Road Works cover almost half of the northern part of the site, whilst a small part of the western half of the site is covered by the COMAH Outer Zone of Acton Grange Distribution Centre. A significant underground pipeline (Transpennine ethylene pipeline Wilton/Runcorn) runs alongside and underneath the railways lines immediately outside of the western boundary, which requires consultation and buffer zones. A National Grid Gas pipeline enters the site from the south, around the Holly Hedge Lane, crossing Runcorn Road running northwards, and leaves the site at Acton Grange Bridge (Figure 2.12).

The proposed framework of the development will consider the existing constraints, including landscape characters/features, land form, water bodies, existing movement network, historic designations, etc. The key constraints are shown in the Figure 2.13.

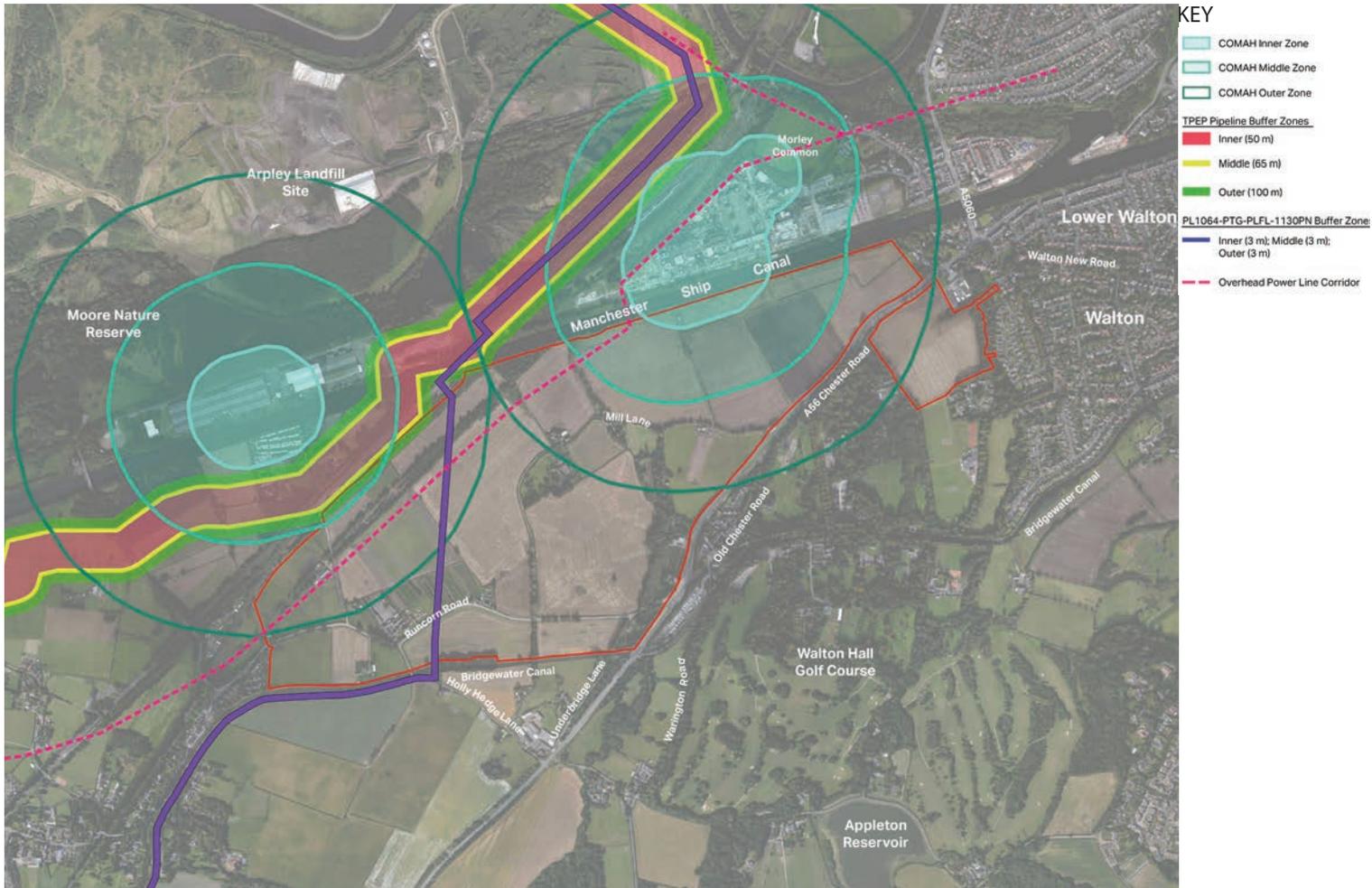


Figure 2.12: Utilities Constraints Map

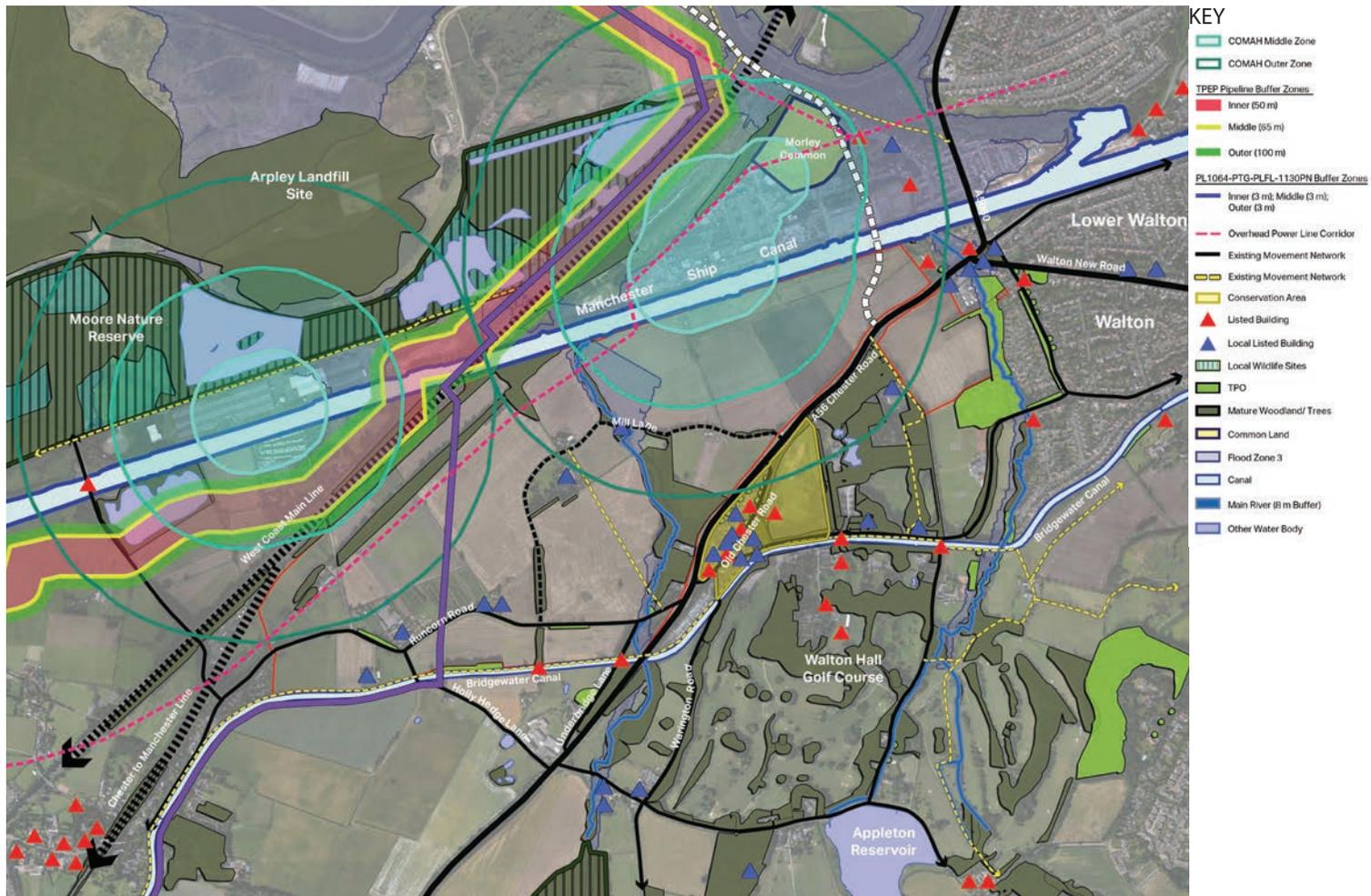


Figure 2.13: Site Constraints Map

3

DEVELOPMENT FRAMEWORK



3.1 Key Urban Design Concepts

Concept 1:

Integrate COMAH zones into a potential local park, to improve land use efficiency and provide convenient access corridors to this key recreational destination.



Figure 3.1: Urban Design Concept 1

Concept 2:

Protect and enhance existing landscape features, such as the Bridgewater Canal frontage and woodland along water courses and incorporate these into strategic amenity green corridors.

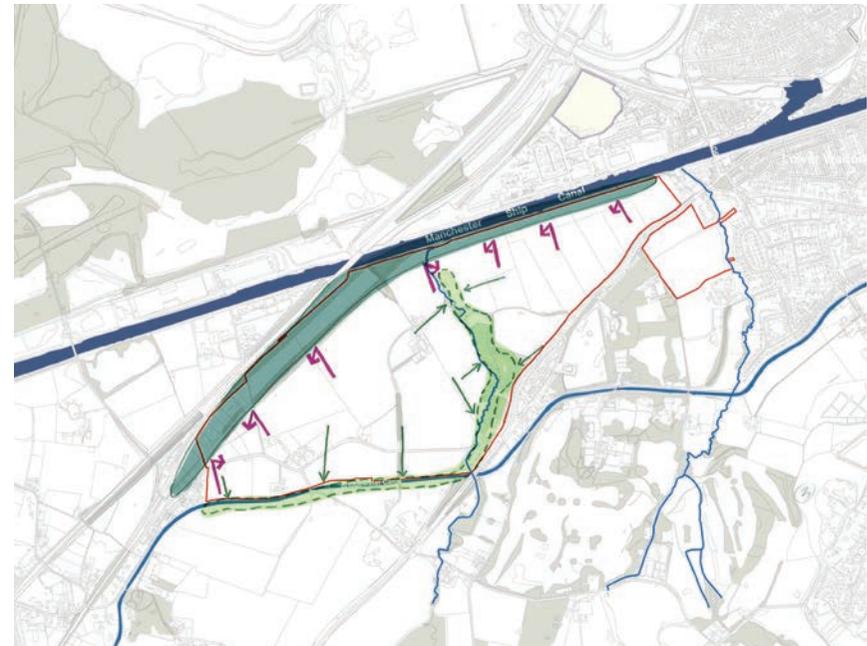


Figure 3.2: Urban Design Concept 2

Concept 3:

Carefully arrange a series of open spaces along Chester Road, to build up an 'approaching' experience and create an attractive 'Gateway' to Warrington from the south.



Figure 3.3: Urban Design Concept 3

Concept 4:

Create a permeable movement network throughout the site; provide a safe and convenient pedestrian/ cycle route links to the proposed local centre.

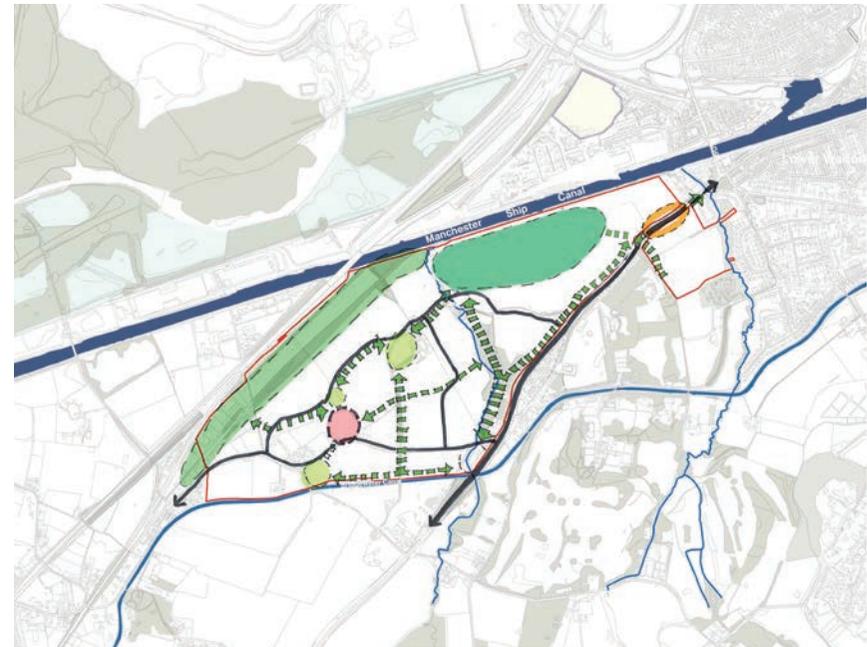


Figure 3.4: Urban Design Concept 4

3.2 Conceptual Approaches

Based on the urban design concepts suggested in section 3.1, the approach to the WSWUE development is underpinned by the following considerations:

1. Delivering quality new homes which make the best use of the WSWUE land and meet the housing needs of Warrington;
2. To create a safe and desirable place to live to the south west of Warrington;
3. Creating a new local park, next to the Manchester Ship Canal, within the COMAH Inner and Middle Zones, to improve land use efficiency;
4. Providing a multi-functional Local Centre centrally within the site, that includes a convenience store, several small scale retail units and a small health facility;
5. Providing high quality, accessible, green corridors and recreation spaces to link the Village Core to the wider WSWUE areas.

Based on the above proposals, AECOM considered two further potential options: i.e. with/ without the potential strategic road/ bridge over the Manchester Ship Canal. Both options share similar urban design principles, with minor differences listed below:

Conceptual Approach Option 1- with the strategic road:

- A small piece of green space is proposed to the east of the strategic road;
- A proposed primary school to be located next to the Local Centre.

Conceptual Approach Option 2- without the strategic road:

- A larger residential development area to the east corner of the site;
- Locate the outdoor play area of the proposed primary school within COMAH Middle Zone, School buildings kept in Outer Zone.

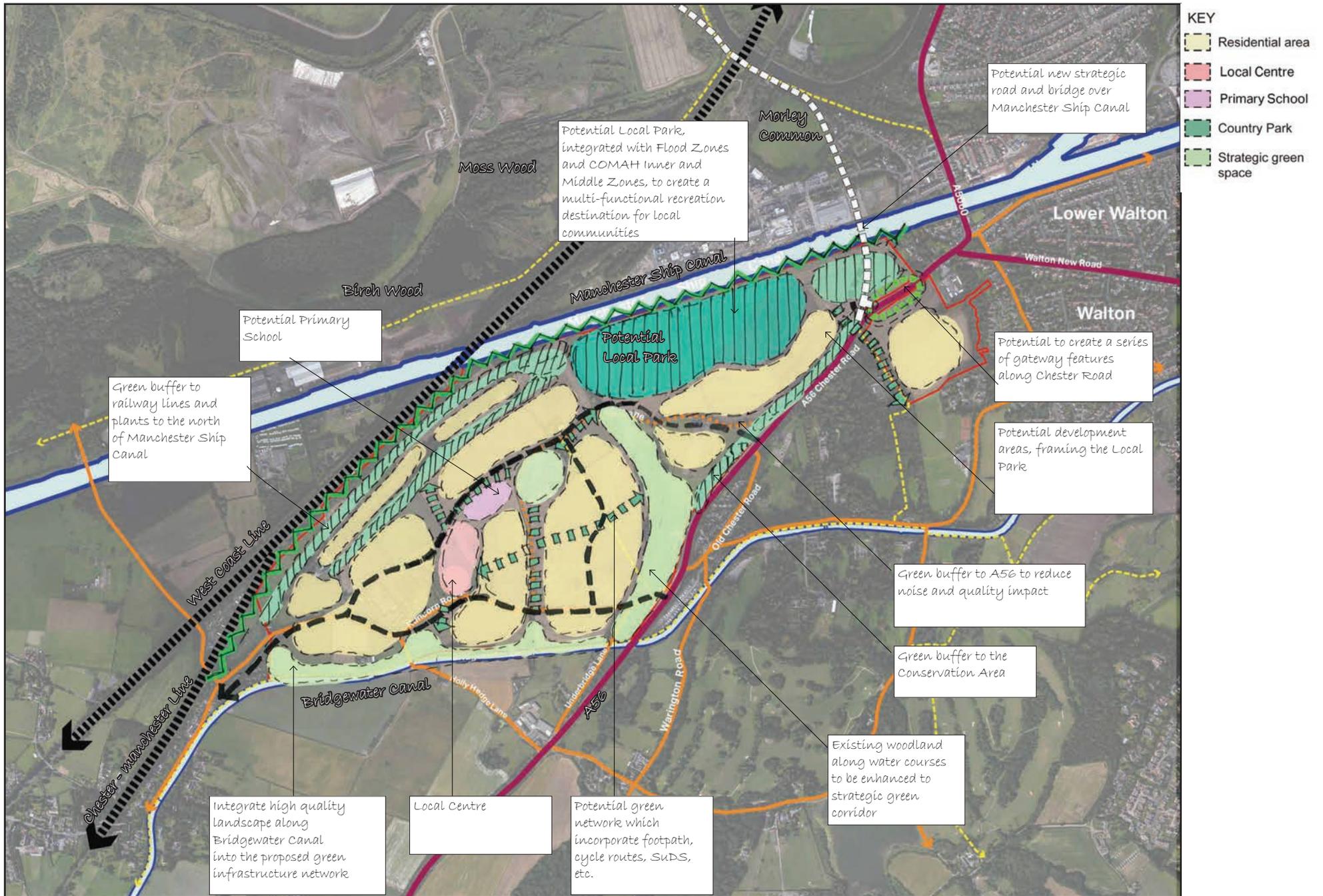


Figure 3.5 Conceptual Approaches Option 1

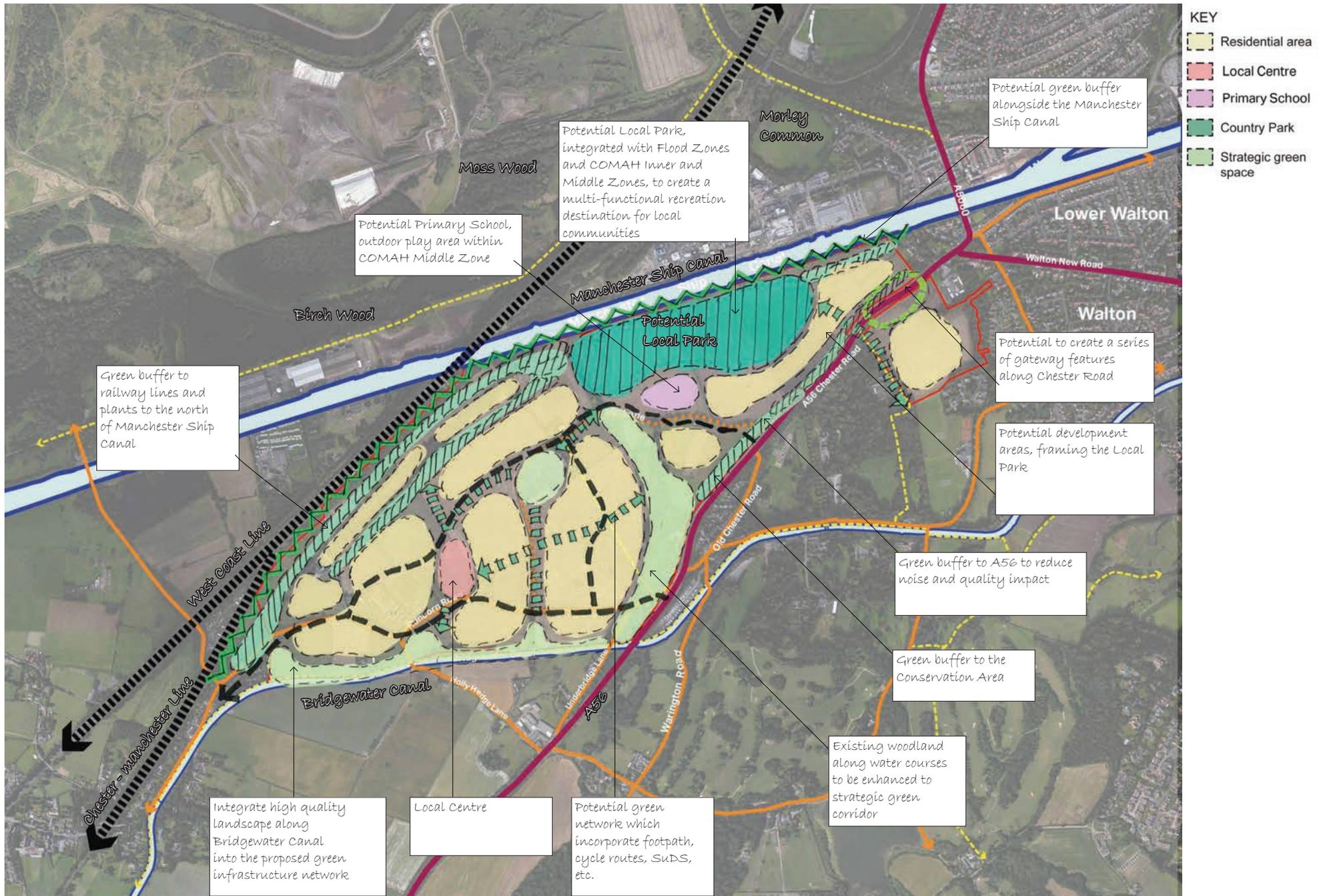


Figure 3.5 Conceptual Approaches Option 2

3.3 Framework Plan and Land Uses

The framework plan for the WSWUE area demonstrates how a responsive development and associated landscape structure can respect the local context of the site and deliver a new sustainable community.

The Urban Design Compendiums (1&2), produced by English Partnerships, summarise the best practice principles in urban design, that suggest potential housing densities for various locations from city centres to remote suburban areas. For the study area, 30 dph is considered as an ideal density (page 48), as the site lies in a typical suburban location along transport corridors. However, considering the site consists of several COMAH constraints, the actual average housing density might be lower than 30 dph. For instance, one of AECOM's recent works, Carrington Village in Trafford, could only deliver a density at 26.5 dph (gross) because the site overlaps with a COMAH. Based on the nature of the site and AECOM's previous project experiences in the North West, a gross density of 28 dph is considered to be appropriate for the site, subject to future detail design.

The framework plan Option 1 presented in the document demonstrates how approximately 1831 new homes could be accommodated on the site, together with a 2 ha primary school, a 2 ha Local Centre, and a 20.8 ha Local Park, etc. The framework plan Option 2 demonstrates how approximately 1892 new homes could be accommodated on the site, together with a 1.3 ha primary school, a 2 ha Local Centre, and a 21 ha Local Park, etc. The key elements of two vision/ options are listed in the table 3.1 and table 3.2.

Table 3.1: WSWUE Land Use Schedule Option 1

| Land Use | ha | acre |
|------------------|--------------|--------------|
| Local Centre | 2 | 4.9 |
| Primary School | 2 | 4.9 |
| Residential Area | 65.4 | 161.6 |
| Strategic road | 5.5 | 13.6 |
| Area to be kept | 2.2 | 5.4 |
| Local Park | 20.8 | 51.4 |
| Open Space | 31.1 | 76.8 |
| Total | 129.0 | 318.8 |

Table 3.3: Potential Housing Units- Option 1

| Residential Area | Parcel | Parcel Area (ha) | Parcel Area (acre) | Potential Gross Density (28 dph) |
|------------------|----------------------------|------------------|--------------------|----------------------------------|
| A | A1 | 1.7 | 4.2 | 48 |
| | A2 | 3.3 | 8.2 | 92 |
| | A3 | 4.7 | 11.6 | 132 |
| | A4 | 3.0 | 7.4 | 84 |
| | A5 | 0.7 | 1.7 | 20 |
| | A6 | 1.7 | 4.2 | 48 |
| | A7 | 2.6 | 6.4 | 73 |
| B | B1 | 3.4 | 8.4 | 95 |
| | B2 | 2.0 | 4.9 | 56 |
| | B3 | 3.6 | 8.9 | 101 |
| | B4 | 6.2 | 15.3 | 174 |
| | B5 | 7.5 | 18.5 | 210 |
| | B6 | 6.4 | 15.8 | 179 |
| | B7 | 1.2 | 3.0 | 34 |
| C | C1 | 3.1 | 7.7 | 87 |
| | C2 | 5.0 | 12.4 | 140 |
| | C3 | 1.0 | 2.5 | 28 |
| D | D1 | 6.3 | 15.6 | 176 |
| | Local Centre + Residential | 2.0 | 4.9 | 56 |
| TOTAL | | 65.4 | 161.6 | 1831 |

Table 3.2: WSWUE Land Use Schedule Option 2

| Land Use | ha | acre |
|------------------|--------------|--------------|
| Local Centre | 2 | 4.9 |
| Primary School | 1.3 | 3.2 |
| Residential Area | 67.6 | 167.0 |
| Strategic road | 6.2 | 15.3 |
| Area to be kept | 2.2 | 5.4 |
| Local Park | 21 | 51.9 |
| Open Space | 28.7 | 70.9 |
| Total | 129.0 | 318.8 |

Table 3.4: Potential Housing Units- Option 2

| Residential Area | Parcel | Parcel Area (ha) | Parcel Area (acre) | Potential Gross Density (28 dph) |
|------------------|----------------------------|------------------|--------------------|----------------------------------|
| A | A1 | 1.7 | 4.2 | 48 |
| | A2 | 3.3 | 8.2 | 92 |
| | A3 | 4.7 | 11.6 | 132 |
| | A4 | 3.0 | 7.4 | 84 |
| | A5 | 0.7 | 1.7 | 20 |
| | A6 | 1.7 | 4.2 | 48 |
| | A7 | 2.6 | 6.4 | 73 |
| B | B1 | 3.4 | 8.4 | 95 |
| | B2 | 2.0 | 4.9 | 56 |
| | B3 | 3.6 | 8.9 | 101 |
| | B4 | 6.2 | 15.3 | 174 |
| | B5 | 7.5 | 18.5 | 210 |
| | B6 | 6.4 | 15.8 | 179 |
| | B7 | 1.2 | 3.0 | 34 |
| C | C1 | 3.1 | 7.7 | 87 |
| | C2 | 4.5 | 11.1 | 126 |
| | C3 | 1.0 | 2.5 | 28 |
| | C4 | 2.7 | 6.6 | 74 |
| D | D1 | 6.3 | 15.6 | 176 |
| | Local Centre + Residential | 2.0 | 4.9 | 56 |
| TOTAL | | 67.6 | 166.9 | 1892 |



Figure 3.6: Framework Plan Option 1



Figure 3.6: Framework Plan Option 2

4

CONCLUSION



Conclusion

Development of the WSWUE site presents a significant positive opportunity for Warrington, which will help to meet housing land supply requirements in the following years. The framework plans provided in this document, demonstrate potential solutions to achieving this ambition and vision, which will include approximately 1,800 homes, a new 20 ha Local Park, a 2 ha Local Centre, a 2 ha Primary School, and an associated 31 ha of Open Space. This will be a significant opportunity for Warrington to create a new sustainable urban extension to the south west of Warrington.

AECOM