



**Sandwell Council**

**Friar Park Road, Sandwell**

**Baseline Report**

June 2022

Project Code: 05086



## Version Control and Approval

Version	Date	Main Contributor	Issued by	Approved by
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# I Introduction

## I.1 Overview

- 1.1.1 This Baseline Transport Report has been prepared on behalf of Sandwell Metropolitan Borough Council to set out the existing situation and identify opportunities or constraints associated with the potential development of land to the north of Friar Park Road, Sandwell for residential use.
- 1.1.2 The opportunities and constraints outlined within this report are intended to inform the development of a masterplan for the site.
- 1.1.3 Consideration has also been given to any potential offsite mitigation that may need to be included as part of the development proposals.

## I.2 Planning Context

- 1.2.1 The site is allocated for residential, mixed use and community development under policy HOC 8 of the Sandwell Site Allocations and Delivery Development Plan Document (December 2012). The land currently comprises open field and a former industrial area which has been demolished.

## I.3 Report Structure

- 1.3.1 The remainder of the report is structured as follows:
- Section 2: Scoping;
  - Section 3: Policy Guidance;
  - Section 4: Baseline Conditions;
  - Section 5: Opportunities and Constraints;
  - Section 6: Travel Demand;
  - Section 7: Off Site Highways Assessments;



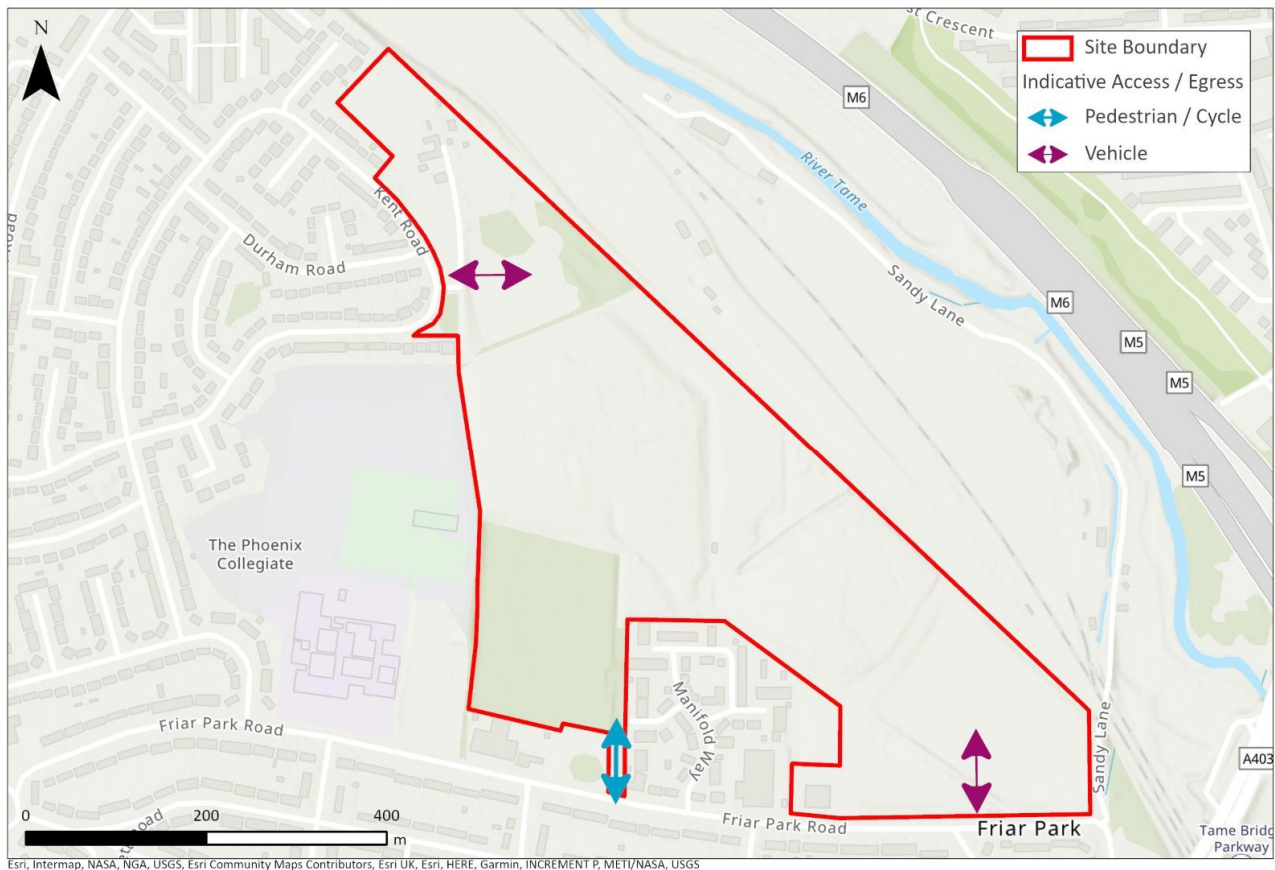
## 2 Scoping

### 2.1 Sandwell Metropolitan Borough Council (SMBC)

2.1.1 In March 2021, PJA prepared a Transport Assessment Scoping Report which set out the proposed scope of a Transport Assessment to be prepared for submission of a Planning Application. This Scoping Report, along with a slideshow presentation, was used to inform a meeting which was undertaken online and held on 15<sup>th</sup> April 2021. With consideration of the masterplan, key outcomes of this discussion are discussed below.

2.1.2 The principles of access for vehicles from Friar Park Road and Kent Road was discussed, with an additional access for pedestrians and cyclists to be provided onto Friar Park Road, as indicated in Figure 2-1.

Figure 2-1: Principles of Access



2.1.3 Preliminary general arrangement drawings were presented at scoping discussions and the principles of design were accepted. It is pertinent to note that these will need updating to incorporate cycle facilities once the internal layout has been developed. A copy of these drawings are provided in **Appendix A** whilst an extract is shown below.



Figure 2-2: Friar Park Road Access – Option 1

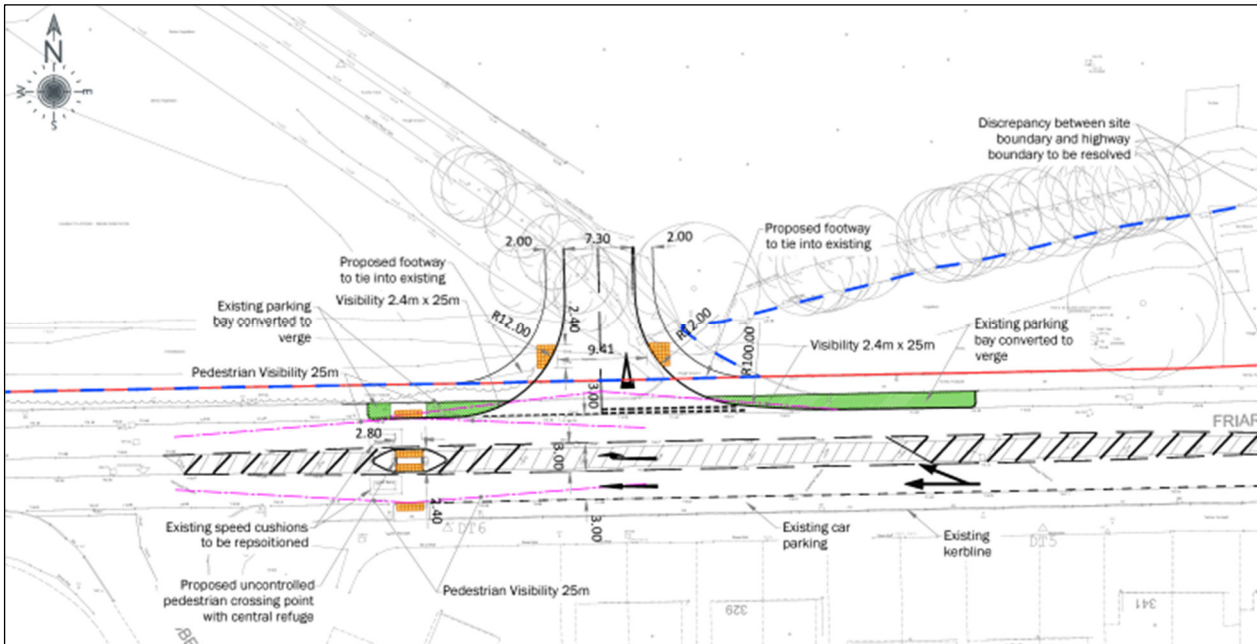


Figure 2-3: Friar Park Road Access – Option 2

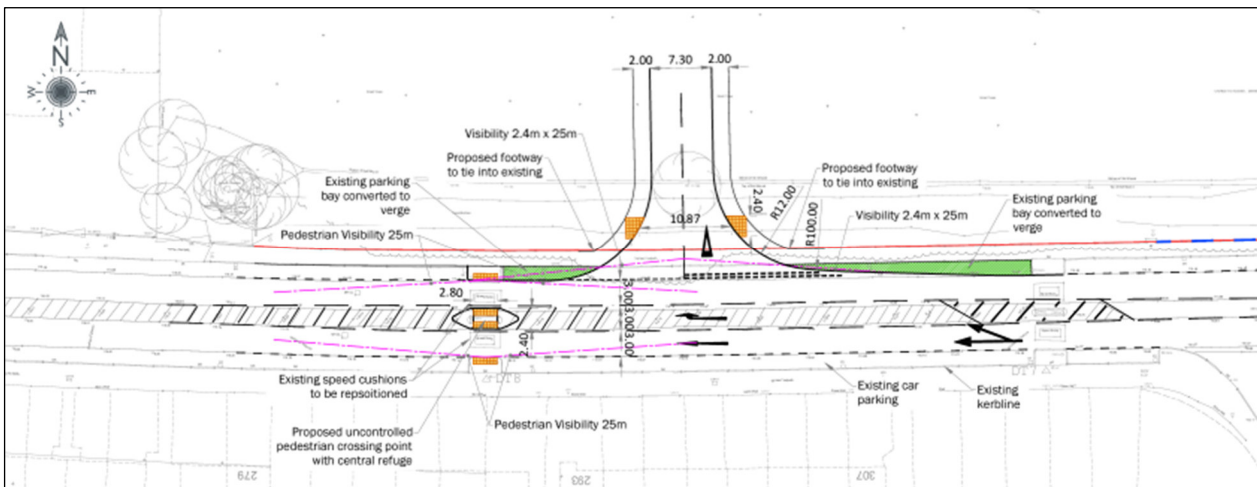




Figure 2-4: Kent Road Access – Option 1

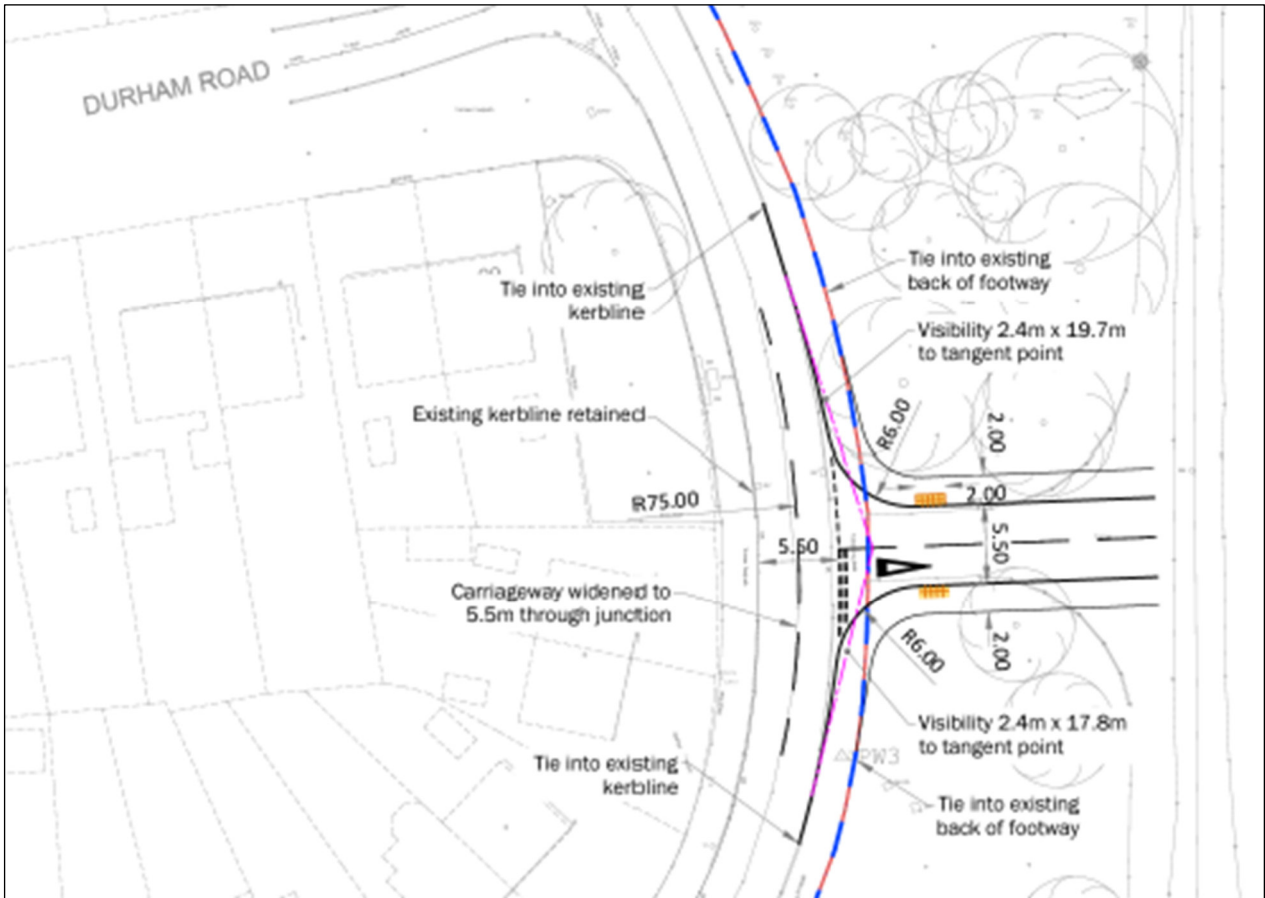
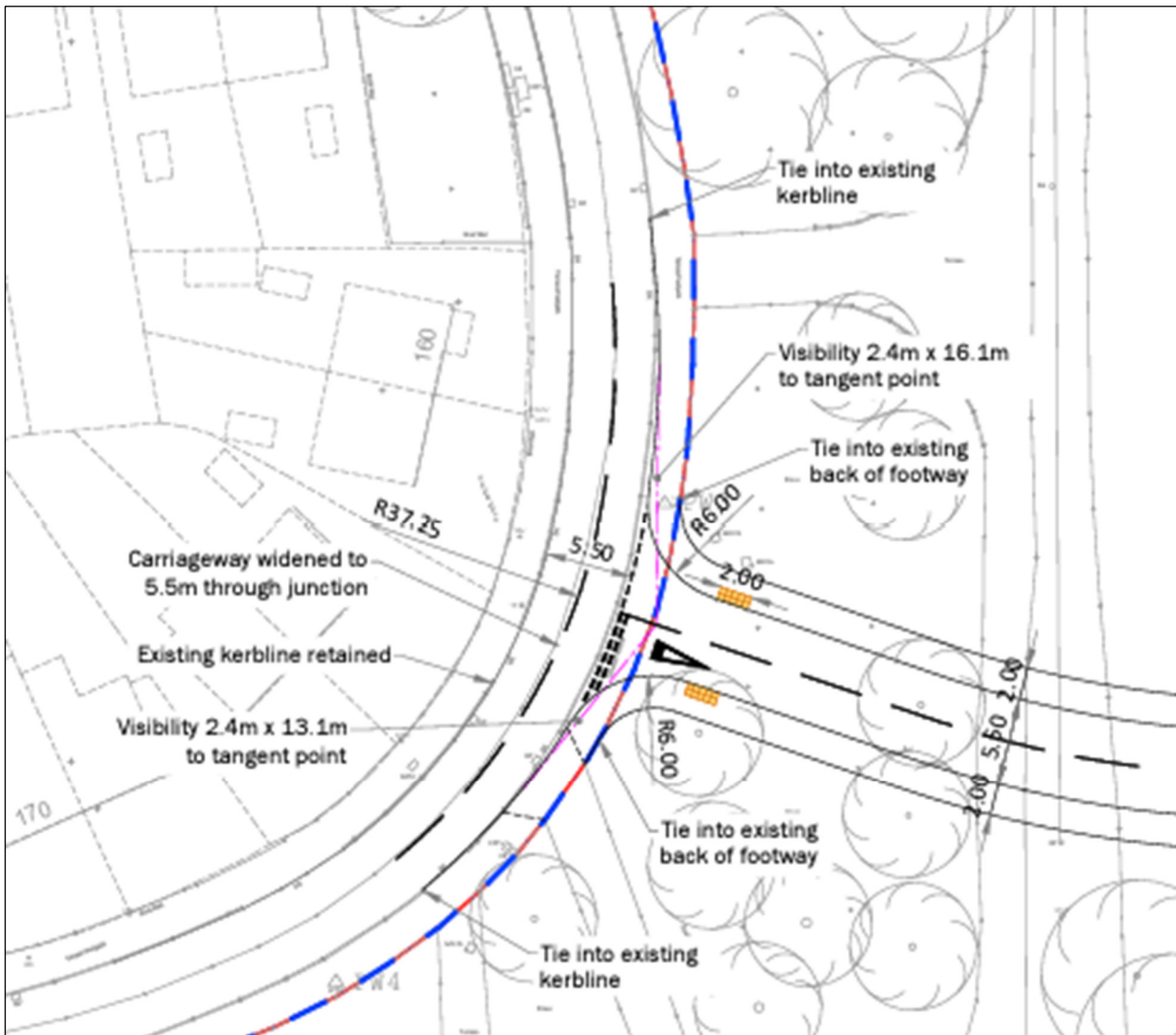


Figure 2-5: Kent Road Access – Option 2

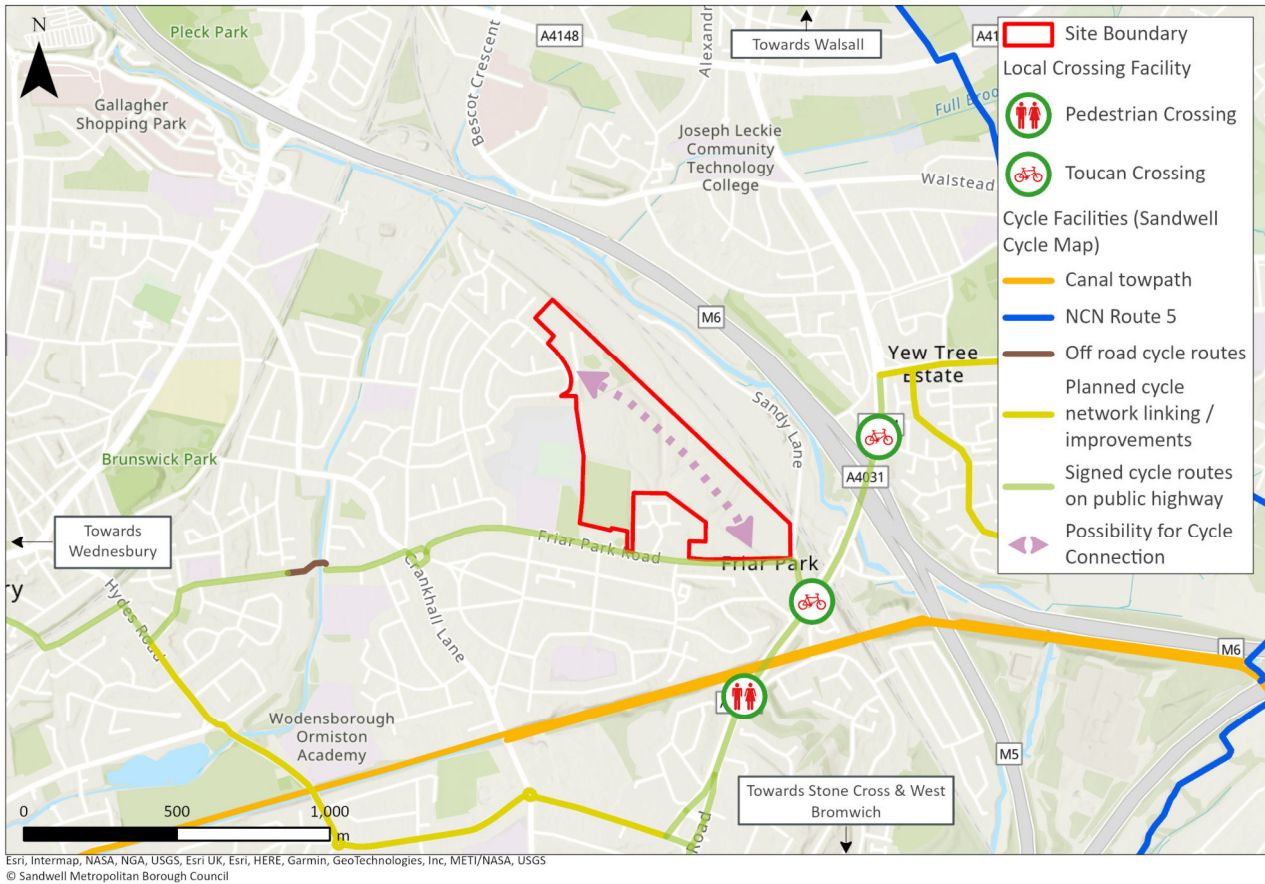


2.1.4 Principles of movement strategy were also discussed. The masterplan would need to look to deliver a strong connection through the development site for walking and cycling. This would need to provide a direct and convenient connection between Kent Road and the Friar Park Road to the south east of the development.





**Figure 2-6: Pedestrian and Cyclist Connectivity**



2.1.5 Agreement was also made on details relating to trip generation, distribution and assignment, and scope of highway assessment including highway safety.

## 2.2 National Highways (NH)

2.2.1 A copy of the Transport Assessment Scoping Report was also sent to National Highways in March 2021. Key outcome of National Highways' formal response can be summarised as follows:

- NH provided commentary on the TRICS assessment and an updated review was undertaken.
- NH requested that the trip assignment and distribution exercise included and presented data for the following junctions: M5 J1, M6 J7 and M6 J9; and,
- Requested a Travel Plan.

## 2.3 Walsall Council

2.3.1 As the neighbouring authority, Walsall Council were also consulted and provided with the same Transport Assessment Scoping Report. As a result of this consultation process, a number of additional junctions (within Walsall) were included in the capacity assessment scope.



## 3 Policy Guidance

### 3.1 Introduction

3.1.1 This section sets out relevant National, Regional and Local Policy Guidance that would need to be considered as the residential masterplan develops.

### 3.2 National Policy

#### National Planning Policy Framework (July 2021)

3.2.1 The National Planning Policy Framework was updated in July 2021 and sets out the government's planning policies for England and how these are expected to be applied to achieve sustainable development.

3.2.2 Policies aimed at promoting sustainable development are covered by Paragraphs 104 to 113 of the NPPF with Paragraph 104 stating that:-

*“Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:*

- a) the potential impacts of development on transport networks can be addressed;*
- b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;*
- c) opportunities to promote walking, cycling and public transport use are identified and pursued;*
- d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and*
- e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places.”*

3.2.3 Paragraph 110 states-

*“In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*

- a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
- b) safe and suitable access to the site can be achieved for all users;*
- c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and*



*d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.”*

3.2.4 Paragraph 111 states-

*“Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.”*

3.2.5 Paragraph 112 states-

*“Within this context, applications for development should:*

*a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*

*b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*

*c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*

*d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and*

*e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.”*

### **Local Transport Note 1/20 Cycle Infrastructure Design**

3.2.6 LTN 1/20 provides guidance and good practice for the design of cycle infrastructure, in support of the Cycling and Walking Investment Strategy. The scope of the document is limited to design matters. It follows core design principles to ensure walking and cycling networks and routes are coherent, direct, safe, comfortable and attractive.

## **3.3 Regional Policy**

### **The Black Country Core Strategy (February 2011)**

3.3.1 The Core Strategy sets out how the Black Country should look in 2026 and establishes clear directions for change. It establishes a partnership between Black Country local authorities and looks to address its economic, transportation, social infrastructure and environmental needs while reducing its carbon footprint and helping to tackle climate change.





3.3.2 Policy CSP5 Transport Strategy outlines several strategic outcomes in order to establish an integrated transport network which will serve existing and new developments and promote greater use of sustainable transport modes. These outcomes include:

- *Providing communities with improved access to employment, residential services and other facilities and amenities, with travel choices that are attractive, viable and sustainable;*
- *Containing congestion by developing and managing transport networks to operate more efficiently;*
- *Improve road safety; and*
- *Supporting the strategy through demand management and the promotion of sustainable transport.*

3.3.3 Policy TRAN1 Priorities of the Development of the Transport Network looks to deliver an improved and integrated transport network both within the Black Country and in links with regional and national networks. Notable improvements include improving Junction 9 of the M6 (Wednesbury); delivering a quality bus network across the Black Country; and improved rail passenger services (as identified in the West Midlands Local Transport Plan).

3.3.4 Policy TRAN2 Managing Transport Impacts of New Developments states that:

*“Planning permission will not be granted for development proposals that are likely to have significant transport implications unless applications are accompanied by proposals to provide an acceptable level of accessibility and safety by all modes of transport to and from all parts of a development including, in particular, access by walking, cycling, public transport and car sharing. These proposals should be in accordance with an agreed Transport Assessment, where required, and include implementation of measures to promote and improve such sustainable transport facilities through agreed Travel Plans and similar measures.”*

3.3.5 Policy TRAN4 Creating Coherent Networks for Cycling and for Walking looks to create:

*“An environment that encourages sustainable travel requires new developments to link to existing walking and cycling networks. The links should be safe, direct and not impeded by infrastructure provided for other forms of transport. Where possible, existing links including the canal network should be enhanced and the networks extended to serve new developments. New developments should have good walking and cycling links to public transport nodes and interchanges.*

*Cycle parking facilities should be provided at all new developments and should be located in a convenient location with good natural surveillance, e.g. in close proximity of main front entrances for short stay visitors or under shelter for long stay visitors. The number of cycle parking spaces required will be determined by local standards in supplementary planning documents.”*



### 3.4 Local Policy

#### **Sandwell Site Allocations and Delivery Development Plan Document (December 2012)**

3.4.1 The Sandwell Site Allocations and Delivery Development Plan Document (SADDPD) will form part of the Borough’s Local Development Framework (LDF) which will guide future planning decisions, and builds on the Black Country Core Strategy with a focus on Sandwell.

3.4.2 The site, known as ‘Land at Friar Park Road, Wednesbury’ (ref no: 16) is allocated for residential, mixed use and community development under policy HOC 8. Key details relating to transport are described as follows:

- *“Master planning of the site will be needed to ensure a holistic approach to development.*
- *Site has good access to the 404 Smart Route and Tame Bridge Railway Station.*
- *Issues around road access will have to be resolved before development progresses and substantial land remediation will be necessary to facilitate development.*
- *Redevelopment of Manor Secondary School will also be needed as part of the sites development along with addressing nature conservation issues regarding the SLINC.”*

3.4.3 In relation to transport, the SADDPD highlights the policies outlined in the Black Country Core Strategy.

#### **Sandwell Metropolitan Borough Council Revised Residential Design Guide Supplementary Planning Document (SPD) (January 2014)**

3.4.4 The SPD ensures that housing and residential environments in Sandwell are designed to:

*“meet the needs and aspirations of the local community and provide clear guidance to the development industry when designing and delivering new housing sites in the borough.”*

3.4.5 Appendix 3: Guide to the Design of New Streets provides a range of geometric parameters and legal requirements as strongly recommended guidance to be used when designing developments. As part of Appendix E, the car parking requirements for residential developments are provided. The off street car parking requirements are outlined as follows:

**Table 3-1: SMBC Residential Design Guide SPD - Car Parking Requirements**

Total Bedrooms	Total Spaces
1 to 2 bedrooms	1 dedicated parking space
3 to 4 bedrooms	2 dedicated parking spaces
5 to 6 bedrooms	3 dedicated parking spaces
7 to 8 bedrooms	4 dedicated parking spaces
Visitor Parking	
Development of 10 or more properties	1 space per 4 properties



3.4.6 Guidance also notes:

*“At the discretion of the Highway Authority, consideration may be given to reducing off-street visitor parking provision if spaces can be safely accommodated on street without unduly affecting the amenity of residents, the movement of pedestrians and the free passage of vehicles.”*

3.4.7 Cycle parking is also outlined within Appendix 3, summarised as follows:

**Table 3-2: SMBC Residential Design Guide SPD - Cycle Parking Requirements**

Total Bedrooms	Total Spaces
1 bedroom	1 cycle space
2 to 3 bedrooms	2 cycle spaces
4 to 5 bedrooms	3 cycle spaces

3.4.8 The location required for cycle storage is outlined below:

*“Homes with garages will be deemed to have adequate secure storage facilities within the garage, as long as Sandwell’s recommended garage dimensions are provided. In homes without garages, consideration should be given to providing secure under cover storage within the property’s own amenity space.”*

### **3.5 Implications for Design**

3.5.1 The design of the masterplan must take into account key matters outlined by each policy document above.

3.5.2 A masterplan that complies with the NPPF would ensure that the impact on the environment and wider transport networks can be addressed, while providing opportunities to promote walking, cycling and public transport use. The internal design and access into the site would have to be appropriately safe and suitable, reflecting current National Guidance, such as the National Design Guide, the National Model Design Code and Local Transport Note 1/20.

3.5.3 A masterplan that complies with regional policy would reflect the sustainable values held within Policy CSP5 and Policy TRAN4 of the Black Country Core Strategy. This would include promoting and providing an accessible level of accessibility for sustainable modes of travel such as walking and cycling, for example by linking to existing facilities.

3.5.4 The masterplan should adhere to the design standards relating to car and cycle parking outlined within the SMBC Residential Design Guide SPD, and should look to deliver strong connections to Tame Bridge Parkway in accordance with the key details of HOC8 within the Sandwell Site Allocations and Delivery Development Plan Document.



## 4 Baseline Conditions

### 4.1 Site Location

4.1.1 The site is located to the east of Wednesbury, to the north of Friar Park Road. The site is bounded by residential development to the south and west, and the railway line to the northeast.

Figure 4-1: Site Location



### 4.2 Local Highway Network

#### Friar Park Road

4.2.1 Friar Park Road runs in a west-east alignment to the south of the site between Crankhall Lane and Sandy Lane. In the vicinity of the site, the road measures approximately 8.5m in width with approximate 2m wide central hatchings, and parking bays generally on each edge of the carriageway – both approximately 2m in width.



- 4.2.2 The road is subject to a 20mph speed limit and traffic calming measures are provided in the form of speed cushions, generally located adjacent to a central refuge and with build outs on both sides of the carriageway.
- 4.2.3 Friar Park Road provides frontage to residential properties on the southern edge of the carriageway with lit footways measuring approximately 2.5m in width. The surrounding residential areas predominantly take access from Friar Park Road via ghost right turn priority junctions.
- 4.2.4 Lit footways measuring approximately 3m on the northern edge of the carriageway provide access to local amenities and other residential roads.

### **Sandy Lane**

- 4.2.5 Sandy Lane runs in a north-south alignment to the southeast of the site. The northern extent of Sandy Lane is a no through road which serves the Bescot Rail Depot. The southern end of Sandy Lane forms a continuation of Friar Park Road, which curves southbound to the south of the site to join A4031 Walsall Road via a signalled junction.
- 4.2.6 Sandy Lane is subject to a 30mph speed limit and measures approximately 11m in width with a footway on the western extent of the road measuring approximately 2.5m in width. Traffic calming is provided in the form of speed humps approximately 20m and 75m to the north of the junction with A4031 Walsall Road.
- 4.2.7 It is acknowledged that adjacent to the junction with A4031 Walsall Road, a grass verge measuring up to 70m in width is provided on the eastern edge of Sandy Lane, which presents opportunities for enhanced pedestrian and cycle connections towards Tame Bridge Parkway.

### **A4031 Walsall Road**

- 4.2.8 A4031 Walsall Road is a dual carriageway which runs in a southwest to northeast direction to the south of the site, and is subject to a 40mph speed limit. The road measures approximately 7m in each direction, and footways measuring approximately 2.7m in width are provided on both sides of the carriageway.
- 4.2.9 A4031 Walsall Road provides a route towards West Bromwich in the south, and Walsall in the north. M6 Junction 9 is accessible by following A4031 Walsall Road, Broadway West and Bescot Road.

### **Kent Road**

- 4.2.10 Kent road is a single carriageway which runs in a loop to the north-west of the site, providing access to residential properties. The road measures approximately 5m in width with lit footways on both sides of the carriageway measuring approximately 2.5m in width.



## **Wood Green Road**

- 4.2.11 Wood Green Road runs in a north-south alignment to the west of the site, and connects directly to M6 Junction 9 to the northwest of the site.
- 4.2.12 Wood Green Road is accessible from the site via single carriageway streets. From Kent Road, the route follows Suffolk Road, Coronation Road, Park Hill and Woden Road East. From Friar Park Road, the route follows Crankhall Lane and Woden Road East.
- 4.2.13 In the vicinity of the signalised junctions between Woden Road East and the M6, Wood Green Road comprises a dual carriageway, subject to a 30mph speed limit, measuring approximately 20m in width with a kerbed and fenced central reservation of approximately 2m in width. Lit footways measuring approximately 2.7m are provided on both sides of the carriageway.

## **4.3 Sustainable Travel**

### **Pedestrian and Cycle**

- 4.3.1 Footways are located on all roads surrounding the site, which are generally lit and on both sides of the carriageway.
- 4.3.2 Friar Park Road is part of a signed cycle route, which continues along the A4301 Walsall Road in the east, connecting to various facilities in the north and south. In the west, the signed cycle route continues towards the centre of Wednesbury, which is accessible in less than 10 minutes on a bike.
- 4.3.3 The Sandwell Metropolitan Borough Council Cycle Map<sup>1</sup> describes various routes surrounding the site as 'planned cycle network linking centres, improvements and signing in progress'. Most notably, a route along Greenside way to the east of the site connects the A4301 signed cycle route to the National Cycle Network Route 5. The NCN Route 5 links to Walsall in the north, and West Bromwich / Sandwell in the south.
- 4.3.4 Toucan crossings are provided on all arms of the A4031 Walsall Road / Sandy Lane junction and take the form of a staggered arrangement. These crossings enhance a key walking route towards Tame Bridge Railway Station, in addition to local bus stops with shelters and seating, served by various routes.

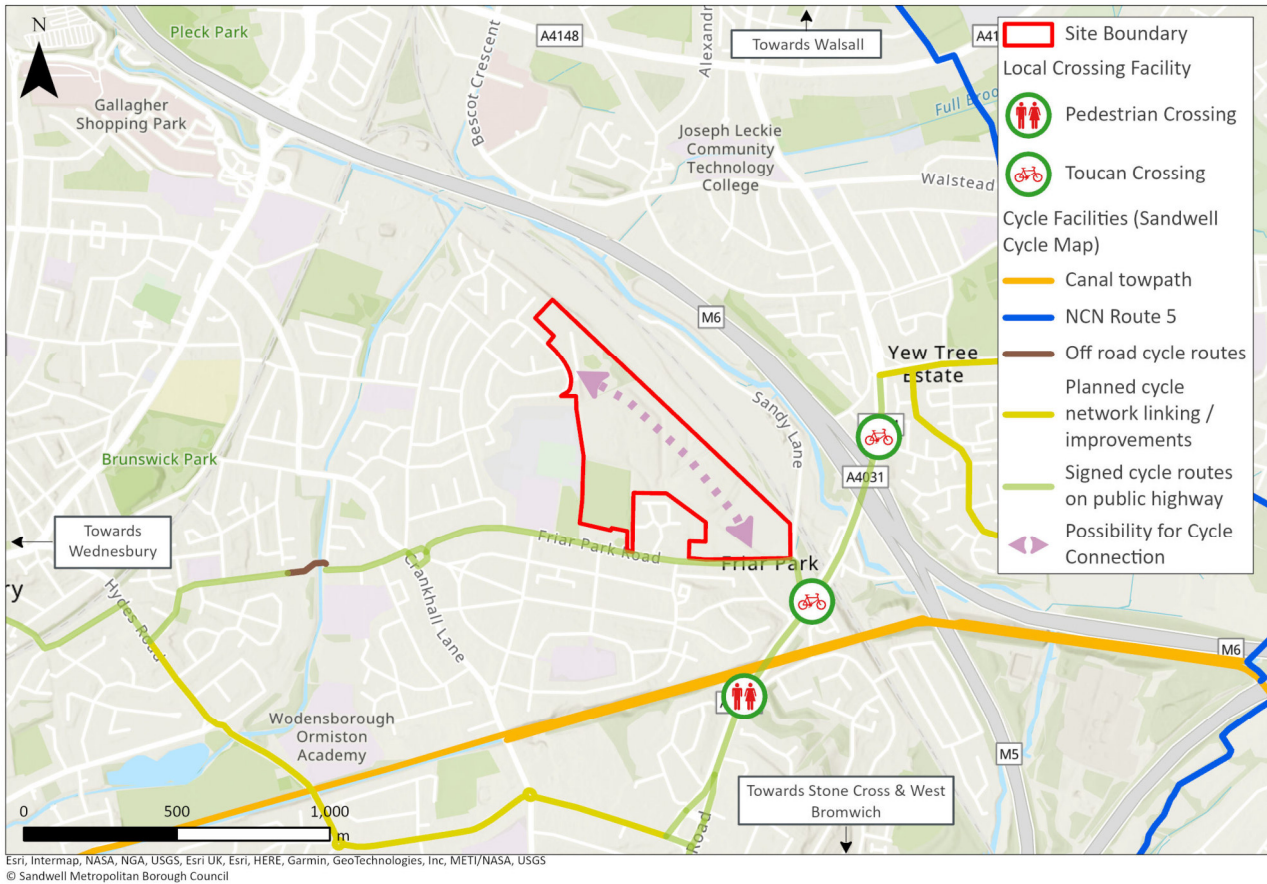
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<sup>1</sup> [SMBC Cycle Map](#)





**Figure 4-2: Pedestrian and Cycle Facilities**



**Bus**

4.3.5 There are various bus stops located within 650m from site access points, with the closest bus stops located less than a 300m walk from a site access. These include sheltered stops with seating on A4031 Walsall Road, with additional services available on within the vicinity of site accesses. The services available from local stops are outlined in Table 4-1.

**Table 4-1: Bus Services**

No.	Bus Stop	Service Operator	Route	Peak Frequency	Days of Operation
45	Tame Bridge Station / A4031 Walsall Road	National Express	West Bromwich – Walsall	Three Per Hour	Mon-Sun (reduced weekend services)
4	Tame Bridge Station / A4031 Walsall Road	National Express	Blackheath – Walsall	Four Per Hour	Mon-Sun (reduced weekend services)
4H	Tame Bridge Station / A4031 Walsall Road	National Express	Hayley Green to Walsall	Three Per Hour	Mon-Sun (reduced weekend services)



No.	Bus Stop	Service Operator	Route	Peak Frequency	Days of Operation
4M	Tame Bridge Station / A4031 Walsall Road	National Express	Merry Hill to Walsall	Two per hour	Mon-Sun (reduced weekend services)
41	Tame Bridge Station / A4031 Walsall Road	Diamond Buses	West Bromwich – Friar Park	Hourly	Mon - Sat
65	Kent Road	Diamond Buses	Woods Estate – Darlaston	Hourly	Mon - Sat
40	Coronation Road	National Express West Midlands	West Bromwich - Wednesbury	Three Per Hour	Mon - Sat
67	School Road / Carrington Road	Walsall Community Transport	Wednesbury – Yew Tree via Friar Park	Hourly	Mon – Sat

## Rail

4.3.6 Tame Bridge Railway Station is located an approximate 170m (280m walk) from the south-eastern corner of the site. The station provides regular West Midlands Railway Services to the following locations:

- Birmingham New Street (three per hour);
- Birmingham International (two per hour);
- Walsall (three per hour); and
- Rugeley Trent Valley (two per hour).

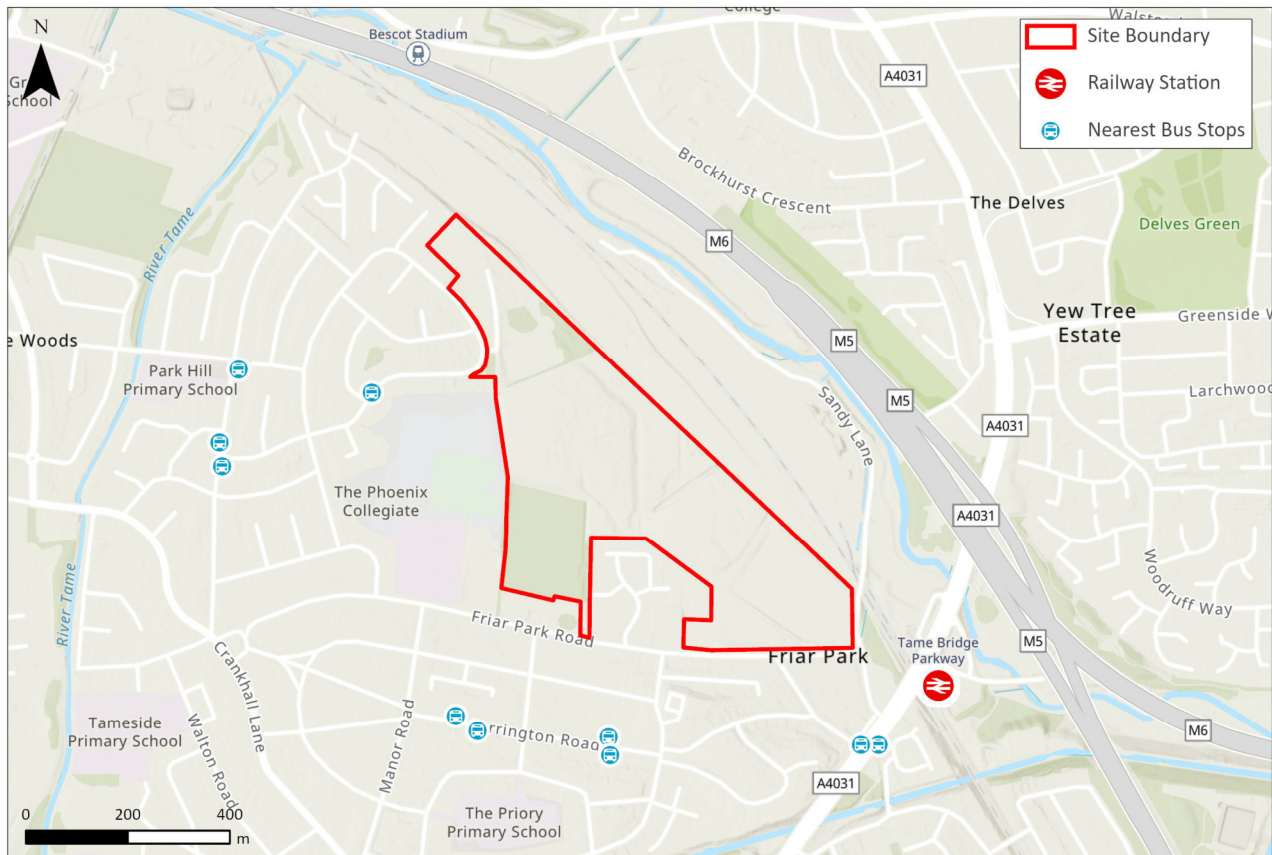
4.3.7 The station benefits from 27 cycle parking spaces and is located along local cycle routes. The station can be accessed from the development via the following facilities:

- A footway is provided along Friar Park Road, Sandy Lane and A4031 Walsall Road, with a toucan crossing providing access the footway on the southern edge of Walsall Road, which connects to ramp and stair access to the station.
- Cyclists can access the station via signed cycle routes along Friar Park Road, Sandy Lane and A4031 Walsall Road, and can cross using toucan crossings which connect to ramp and stair access to the station.





**Figure 4-3: Public Transport**



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### **Consideration for Masterplan Design**

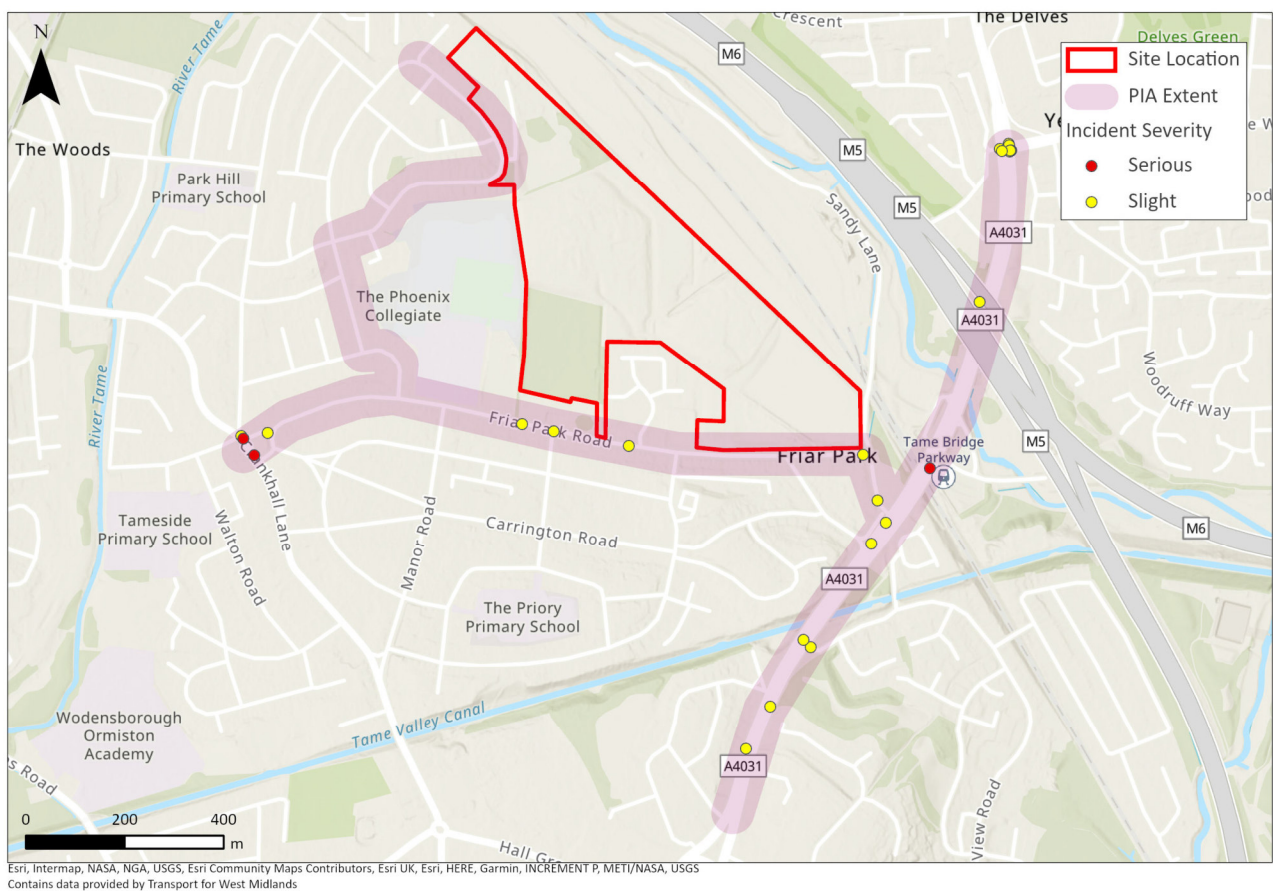
- 4.3.8 This section has identified that the site is located in an accessible area via various modes of transport. The development would benefit from a masterplan that is designed to accommodate movement in accordance with the modes outlined above.
- 4.3.9 The masterplan should be designed to enable permeability through the residential parcels for walking and cycling, and to provide connections south towards bus stops on Carrington Road. In addition to this, it is pertinent that the development is designed with a strong cycle connection connecting Kent Road to Friar Park road to the south-eastern extent of the development, providing a connection to the station for both residents of the development and existing residents to the west of the red line boundary.
- 4.3.10 Cycle facilities have been identified on the southern boundary, and as such any cycle provision through the site should connect to this route creating a more cohesive cycle network. Potential improvements should be considered for this route where necessary.



## 4.4 Highway Safety

- 4.4.1 In order to establish whether there are any existing highway safety concerns on the local highway network which may be exacerbated by the proposed development, Personal Injury Collision (PIC) data has been obtained from Transport for West Midlands (TfWM) for the most recent 5-year period available (1<sup>st</sup> January 2016 to 1<sup>st</sup> January 2021).
- 4.4.2 Of a total of 24 collisions, no fatal collisions have been recorded in the study area within the most recent 5-year period available. One slight collision captured within the study area occurred on the M6 and has been excluded from the analysis.

**Figure 4-4: Collision Locations**



- 4.4.3 Over the five year period there is an average of less than five collisions per year across the whole study area. Given the low frequency of collisions, the lack of spatial clustering and lack of common causation factors, it is considered that there are no existing highway safety issues on the local highway network which would need to be considered as part of the development.



## 4.5 Access to Local Amenities

4.5.1 There is a wide range of amenities within 2km of the site from both main access points and therefore considered in an appropriate walking distance. A summary of approximate journey times to local amenities from the centre of the site are outlined in Table 4-2.

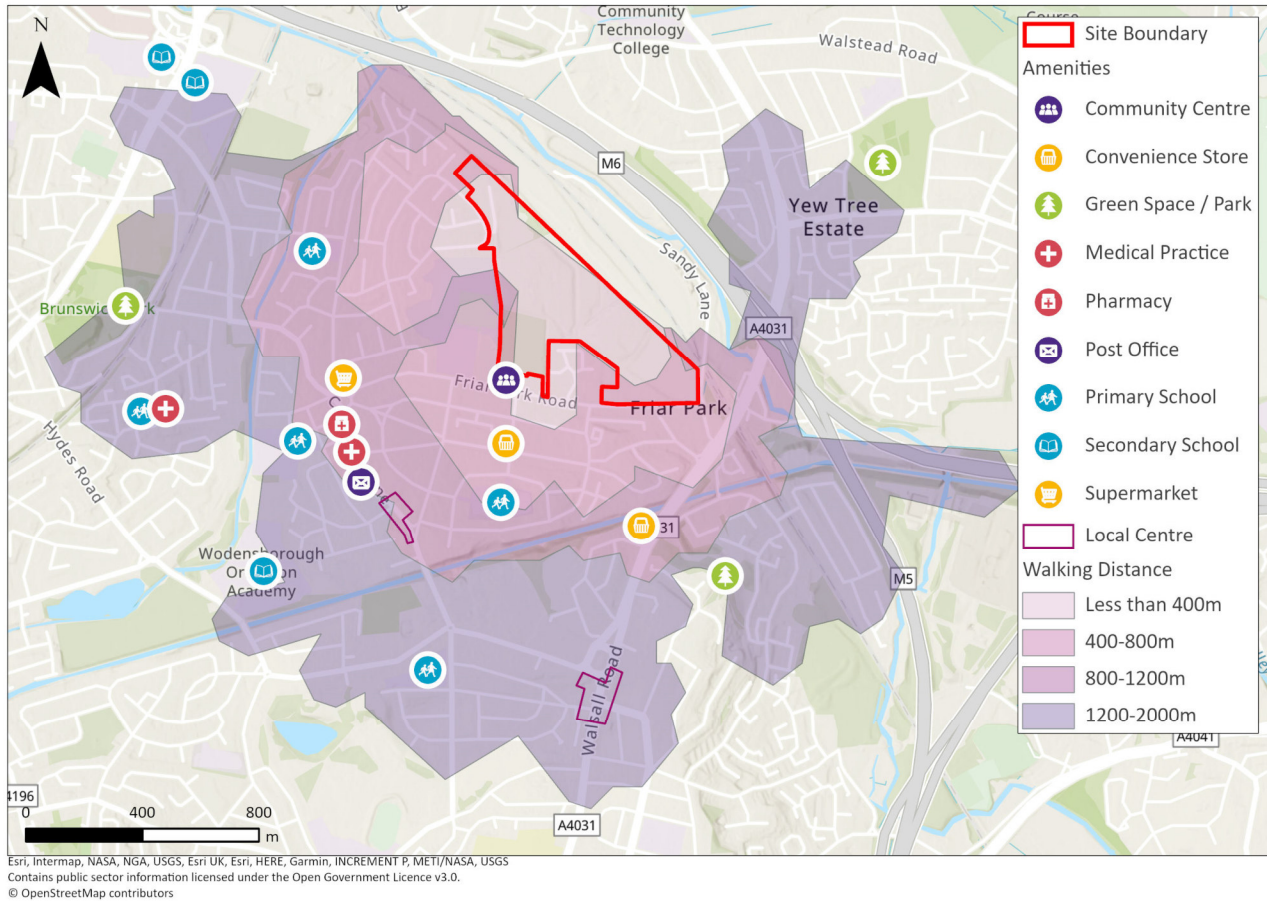
**Table 4-2: Local Amenities**

Amenity	Location	Approx. Walking Distance From Site Centre	Walking Time (minutes) <sup>2</sup>
Community Centre	Friar Park Road	500m	6
Convenience Store (incl. cash machine)	Carrington Road	700m	8
Primary School	School Road	800m	10
Supermarket	Friar Park Road	1.1km	13
Primary School	Park Hill	1.1km	13
Medical Practice / Pharmacy	Crankhall Road	1.2km	14
Convenience Store	Walsall Road	1.2km	14
Post Office	Crankhall Lane	1.3km	11
Primary School	Price Road	1.3km	11
Crankhall Lane Local Centre (incl. eateries, convenience store, florist)	Crankhall Lane	1.4km	12
Stone Cross Local Centre (incl. convenience store, post office, eateries, medical centre)	Walsall Road	1.8km	21
Medical Practice	Alma St	1.8km	21
Primary School	St Luke's Road	1.9km	23
Secondary School	Wood Green Rd / St Paul's Road	1.9km	23
Open Space	Brunswick Park	1.9km	23

<sup>2</sup> Assuming a 1.4m/s walking speed as suggested within 'Guidelines for Journeys on Foot' 2000.



Figure 4-5: Amenities



### Consideration for Masterplan Design

- 4.5.2 The masterplan should be designed so that accessibility from the site towards these amenities for pedestrians and cyclists is maximised. This would involve providing suitable footway connections onto existing surrounding facilities towards the amenities identified above. An additional traffic free connection onto Friar Park Road would provide a more direct link south for those residents in the middle of the development.
- 4.5.3 The internal residential parcels should be designed to allow filtered permeability, so that walking and cycling connections can be made where vehicle connections are not maintained.





## 5 Opportunities and Constraints

### 5.1 Overview

5.1.1 It is considered that a development of this size could accommodate residential development of circa 830 dwellings. This chapter provides a set of design principles with consideration to the baseline conditions set out in chapter 4 of this report.

### 5.2 Friar Park Road – Access Opportunities

#### Vehicle Access

5.2.1 There is opportunity to provide a primary access in the south-east of the site. Two possible options have been identified which take the form of a priority junction with ghost island right turn. The first option was developed using the former industrial access, whilst a second option was considered opposite properties 301/303 Friar Park Road.

5.2.2 General Arrangement Drawings indicate that visibility splays of 2.4m x 25m (suitable for a 20mph road) are achievable from these suggested access locations, and also demonstrate the tracking of a large refuge vehicle into and out of the site. These drawings are provided in **Appendix A**. The principle of this access was agreed with SMBC in the scoping meeting as outlined in Section 2.

#### Active Travel Access

5.2.3 The preliminary access arrangements will need to be updated to incorporate cycle facilities once the internal layout has progressed.

5.2.4 There are a number of cycle routes located in the vicinity of the development site. It is suggested that the development proposals consider interventions and improvements to the cycle route along Friar Park Road, between the development access points and the train station.

5.2.5 As identified in the baseline section, there are a number of parallel parking bays on Friar Park Road in the vicinity of the proposed site access that are substandard in width. It is considered that there are opportunities to rationalise these parking bays, to allow for road space reallocation and to provide enhanced protected cycle facilities. Sandy Lane measures 11m in width and it is recommended that protected cycle facilities are investigated in this location to provide a Connection to the rail station.

### 5.3 Kent Road – Access Opportunities

5.3.1 A secondary access point can be provided to the north-west of the site via a simple priority junction on Kent Road. Two possible options have also been identified.



- 5.3.2 General Arrangement Drawings indicate that visibility splays of 2.4m x 25m (suitable for a 20mph road) are achievable from these suggested accesses, and also demonstrate the tracking of a large refuge vehicle into and out of the site. These drawings are provided in **Appendix A**. The principle of this access was agreed with SMBC in the scoping meeting as outlined in Section 2.
- 5.3.3 Kent Road is a smaller road and experiences on-street car parking. As such, it would be beneficial for the internal site layout to be designed in such a way to deter vehicles from using this access and rat running through the site.
- 5.3.4 This can be achieved via a set of internal priority junctions, making the route to the north west more convoluted. This can also be enforced through modal filters which enable pedestrian and cycle permeability.

## **5.4 Internal Design Considerations**

- 5.4.1 Preliminary access design onto Friar Park Road and Kent Road include footways measuring 2m in width which tie into the existing footway network.
- 5.4.2 The development proposals should be designed so that routes through the site for pedestrians and cycles are more direct and attractive than using a car. The provision of cycle facilities within the site should be provided in accordance with national guidance such as LTN 1/20, which sets out the vehicle speed and volume thresholds for when protected facilities should be considered.
- 5.4.3 The primary vehicular route throughout the site may have the potential to generate up to approximately 3569 vehicle trips per day. Using Figure 4.1 from LTN/1/20 as a guide, this primary route would need to provide a protected space for cyclists, such as a fully kerbed track, a stepped track or light segregation.
- 5.4.4 A protective space for cycling should comprise a one way cycle track measuring 2m in width, or a two way cycle track measuring 3m in width, depending on total peak hour cycle flow and in line with Table 5-2 of LTN 1/20. In areas where vehicle volumes are below 2,000 vehicles per day, and speeds are below 20mph, it is appropriate to accommodate cyclists within the carriageway. This should be supported through other forms of traffic calming and design to encourage low vehicle speeds across the site. Such design features could include continuous footways at side roads, which provides priority to pedestrians at side roads whilst also slowing vehicles turning in and out of the junction. Priority features with cycle bypasses also work to reduce the vehicle speeds whilst allowing cyclists to continue through the feature without delay.
- 5.4.5 Some examples of these design features are provided below.

**Figure 5-1: Continuous Footway**



**Figure 5-2: One Way Cycle Track**





Figure 5-3: Two Way Cycle Track



Figure 5-4: Priority Feature with Cycle Bypass







## 5.5 Parking

5.5.1 The car parking requirements for residential developments in Sandwell are outlined within the SMBC Residential Design Guide SPD in the Guide to the Design of New Streets (Appendix 3). The total parking required is summarised in Table 5-1 below.

**Table 5-1: SMBC Residential Design Guide SPD - Car Parking Requirements**

Total Bedrooms	Total Spaces
1 to 2 bedrooms	1 dedicated parking space
3 to 4 bedrooms	2 dedicated parking spaces
5 to 6 bedrooms	3 dedicated parking spaces
7 to 8 bedrooms	4 dedicated parking spaces
Visitor Parking	
Development of 10 or more properties	1 space per 4 properties

5.5.2 The cycle parking requirements included within the SPD are outlined in Table 5-2.

**Table 5-2: SMBC Residential Design Guide SPD - Cycle Parking Requirements**

Total Bedrooms	Total Spaces
1 bedroom	1 cycle space
2 to 3 bedrooms	2 cycle spaces
4 to 5 bedrooms	3 cycle spaces

5.5.3 The masterplan design should consider the car and cycle parking requirements outlined above.



## 6 Offsite Highway Improvements

### 6.1 Introduction

6.1.1 This section sets out the anticipated demand of the development, and provides an assessment of offsite highway improvements with regards to capacity issues.

### 6.2 Trip Generation

6.2.1 The vehicular trip generation for the a development of 830 residential dwellings has been derived by interrogating TRICS v7.8.2 to obtain trip rates using the following criteria:

- Land use 03/A - Residential / Houses Privately Owned;
- Sites with 200-4334 dwellings; and
- Sites in a Suburban or Edge of Town location.

6.2.2 During the Transport Assessment scoping process, concerns were raised by National Highways (NH) that trip rates were not representative using the above criteria alone. Therefore, a thorough sifting exercise was undertaken in order to generate trip rates as comparable to the proposed development as possible. A Trip Generation Technical Note was produced to summarise this process, which is provided in **Appendix B**.

6.2.3 The trip rates and resulting trip generation for 830 dwellings during the AM (08:00-09:00) and PM (17:00-18:00) peak periods is shown in Table 6-1.

**Table 6-1: Trip Generation – 830 Dwellings**

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Trip Rate (per dwelling)	0.121	0.356	0.477	0.348	0.183	0.531
Trip Generation (830 dwellings)	100	295	396	289	152	441

### 6.3 Trip Distribution and Assignment

6.3.1 The distribution of trips is based on Journey to Work data from the 2011 Census. The data reports the place of work of respondents who live within the 'Sandwell 003' Middle Layer Super Output Area (MSOA) in which the site is located. A copy of the data is provided within **Appendix C**.

6.3.2 This methodology assumes that all trips to the site are 'commuting' trips, and during the network peak hours, it is considered that commuting trips would form the bulk of trips from the site. Therefore, this is a reasonable assumption for the purposes of this assessment.



6.3.3 Trips have been assigned to the network using ArcGIS route mapping software, which assigns trips between the site access points at Kent Road / Friar Park Lane, and the Census output areas. The split of development traffic from each access has been calculated as follows:

- Kent Road Access – a third (33%) of traffic; and
- Friar Park Road Access – two thirds (66%) of traffic.

## 6.4 Traffic Growth

6.4.1 The traffic growth rates used as part of the junction modelling assessments have been derived using TEMPro V7.2c, and are outlined in Table 6-2.

**Table 6-2: Traffic Growth Rates**

	AM	PM
2017-2021	1.0614	1.0627
2018-2021	1.0445	1.0454
2021-2022	1.0118	1.0126
2021-2027	1.0688	1.0733

## 6.5 Scope of Assessment

6.5.1 As agreed with Sandwell Metropolitan Borough Council and Walsall Council, junction capacity assessments have been carried out at the following junctions:

### **Sandwell:**

- A461 Wood Green Road / Woden Road East / Myvod Road Signals;
- Woden Road East / Park Hill Priority Junction;
- Coronation Road / Park Hill Priority Junction;
- Crankhall Lane / Woden Road East Priority Junction;
- Crankhall Lane / Freeman Road Priority Junction;
- Freeman Road Mini Roundabout;
- A4031 Walsall Road / Sandy Lane Signals; and
- A4031 Walsall Road / Hall Green Road Signals.

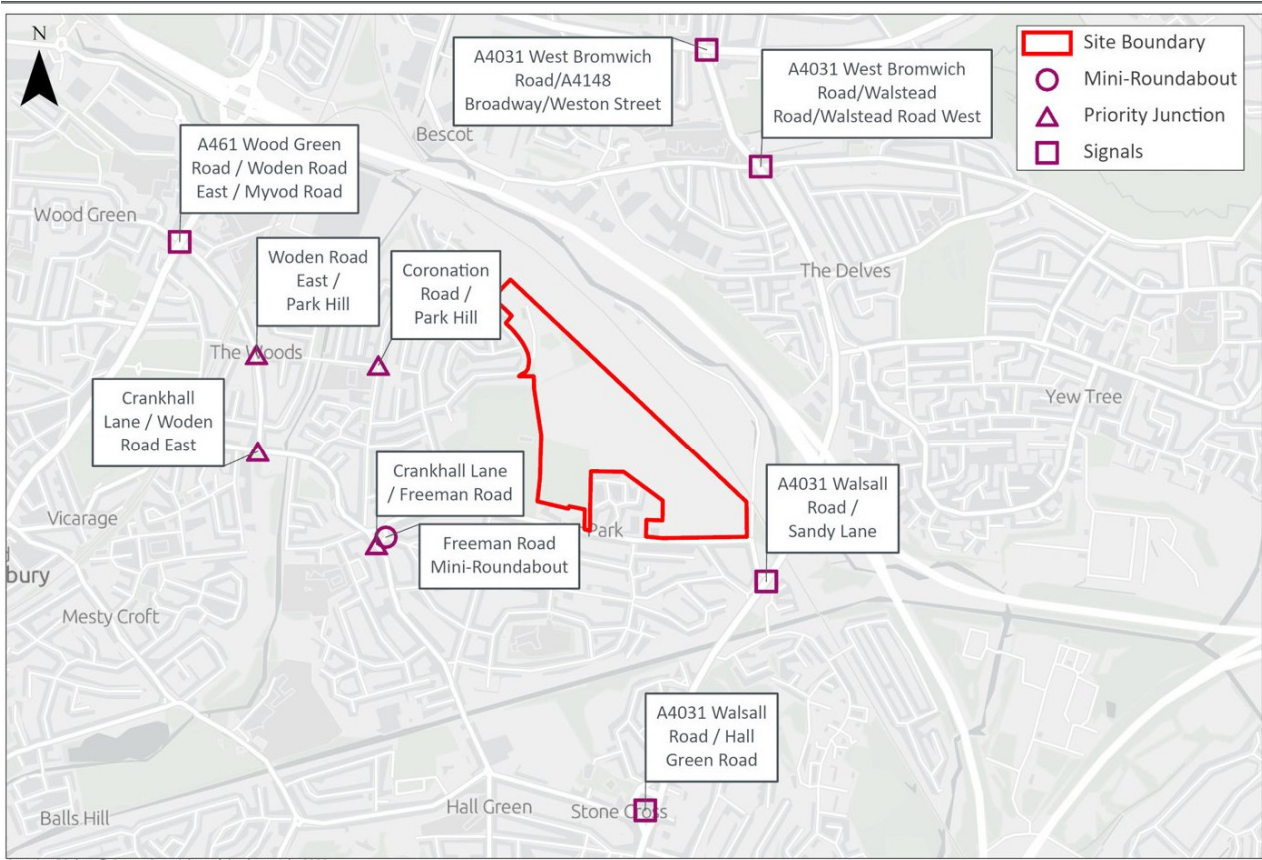
### **Walsall:**

- A4031 West Bromwich Road / A4148 Broadway / Weston Street Signals; and
- A4031 West Bromwich Road / Walstead Road / Walstead Road West Signals.

6.5.2 The location of these junctions can be seen at Figure 7.1.



**Figure 6-1: Scope of Assessment**



Contains OS data © Crown Copyright and database right 2020  
Contains data from OS Zoomstack

## 6.6 Assessment Scenarios

6.6.1 The following assessment scenarios have been considered within this TA:

- 2022 Base;
- 2027 Base (Opening Year);
- 2027 Base + Development;

## 6.7 Modelling Results

6.7.1 A summary of the modelling results for each junction are provided below with consideration to possible offsite mitigation strategies.

**Table 6-3: Summary of Capacity Assessments**

Junction	2021	2027	2027 + Development	Mitigation?
Coronation Road/Park Hill				n/a
Crackhall Lane/Freeman Road		0.67	0.79	n/a
Crackhall Lane/Woden Road	0.85	0.97	1.10	Mitigation strategy may include option to signalise junction to assist movements from minor arm



Woden Road/East Park Hill				n/a
West Bromwich Road/Walstead Road	-3.9%PRC	-11.4% PRC	-11.4% PRC	The junction is shown to be failing in base. The development will generate and additional trips c.23 two way in the PM peak hour and a small increase in delay. <b>No mitigation considered necessary</b>
Sandy Lane/Walsall Road				n/a
Stone Cross Island	2.3%PRC	-4.9%PRC	-12.6%PRC	Further understanding can be obtained by learning frequency of pedestrian crossings from operational timings.  It is considered that changes to the signal timings at the junction will likely improve the capacity of the junction.  Mitigation may include optimisation of signal timings
Wood Green Road/Wyvod Road/Woden Road	8.2%PRC	1.2%PRC	-2.3%PRC	Mitigation may include optimisation of signal timings
Broadway/West Bromwich Road				n/a

6.7.2 As summarised in Table 6-3 above, there are three junctions which have been flagged as requiring offsite mitigation. It is anticipated that this may include the signalisation of a junction, and the optimisation of the other two existing signalised junctions.

6.7.3 Furthermore, it is recommended that the focus of any mitigation strategy would be in the form of active travel improvements. The site is located in a very sustainable location, and it is considered that through improved infrastructure, a large proportion of development trips could be undertaken by sustainable modes.



## 7 Mitigation Strategy

7.1.1 This section provides an overview of the likely mitigation strategy which would need to be secured as part of an eventual planning application.

### 7.2 Public Transport Strategy

7.2.1 The development is located in close proximity to a range of public transport services. The proposals therefore revolve around providing better access to these existing facilities by foot and by bike.

### 7.3 Travel Plan

7.3.1 A Travel Plan has been prepared in conjunction with the Transport Assessment report which aims to encourage sustainable transport at the proposed development. The Travel Plan will be submitted as part of an application.

7.3.2 The Travel Plan sets out the various travel-related measures and strategies that will be implemented to encourage residents of the site to consider the use of a range of travel modes. The key objectives of the Travel Plan are to:

- Deliver a long-term and sustained commitment to changing and widening travel choice;
- Address the access needs of residents by enabling walking, cycling, public transport and car sharing;
- Promote healthy lifestyles and raise awareness about the benefits of utilising sustainable travel opportunities; and
- Build upon good urban design principles that promote the permeability of development, encouraging walking and cycling as the first choice for local trips.

7.3.3 The masterplan will need to ensure that measures outlined within the Travel Plan can be fully implemented, this would include the provision of infrastructure to encourage sustainable modes such as the walking and cycling facilities and cycle parking outlined in Section 6.

### 7.4 Active Travel

7.4.1 In responding to the current climate emergency, it is necessary for there to be a step change in how developments are planned from a transport perspective. For a development of this scale, it must be acknowledged that the site will be built out well into the 2030s and it is essential that the transport vision for the site reflects this. Our transport vision for the site is centred around three key strands:

- Use of Mobility as a Service (MaaS); and,
- The implementation of a central mobility hub;



## Mobility as a Service



7.4.2 Mobility as a Service (MaaS) is a term used to describe digital transport service platforms that enable users to access, pay for, and get real-time information on, a range of public and private transport options. These platforms may also be linked to the provision of new transport services (UK Parliament, 2017).

7.4.3 MaaS does not yet have a major presence in society more generally, although this is likely to change very quickly with significant investment in research in these areas. This is because MaaS potentially offers a paradigm shift from transport being fundamentally provider-led (i.e. where fixed capacity is provided to serve a predictable demand), to being a fully user-led system whereby the level and type of transport supply continually adjust in response to the specific desires of individual travellers<sup>3</sup>.

### *Connected Transport*

7.4.4 From a transport perspective, it is envisaged that the development will become a recognisable place with an offer of different and connected transport modes, supplemented with enhanced facilities and information features to both attract, and benefit the traveller. The site will be designed such that the focus is not placed on the private car, rather on providing public realm spaces that optimise access to and between sustainable transport modes. This will ensure that there is a reduced need to travel for all users of the site.

7.4.5 Not only will the development provide access to traditional forms of transport i.e. bus and cycle, but also shared modes of mobility including electric/bikes and scooters, car club provision, e-cargo bikes etc.



7.4.6 In addition, information will be provided to those using the development, signposting mobility options, preferably in a digital format.

An example of appropriate mobility provision on site could be as follows:

Mobility component: public transport	Mobility components: non-public transport	Mobility related components	Non mobility & urban realm
<ul style="list-style-type: none"><li>Local bus</li><li>Taxi</li></ul>	<ul style="list-style-type: none"><li>Car Club bay with a choice of van/estate car</li><li>Bike/scooter share</li><li>E-cargo bike share/trailers</li></ul>	<ul style="list-style-type: none"><li>Bike repair stand</li><li>Electric vehicle charging bays</li><li>Secure cycle parking</li><li>Digital pillar (transport info, ticketing, way finding, walk distances, local services)</li></ul>	<ul style="list-style-type: none"><li>Covered waiting area</li><li>Package delivery lockers</li><li>Traffic calming</li><li>Community exercise equipment</li></ul>

It is considered that should the development come forward in this manner, it will offer the following benefits:

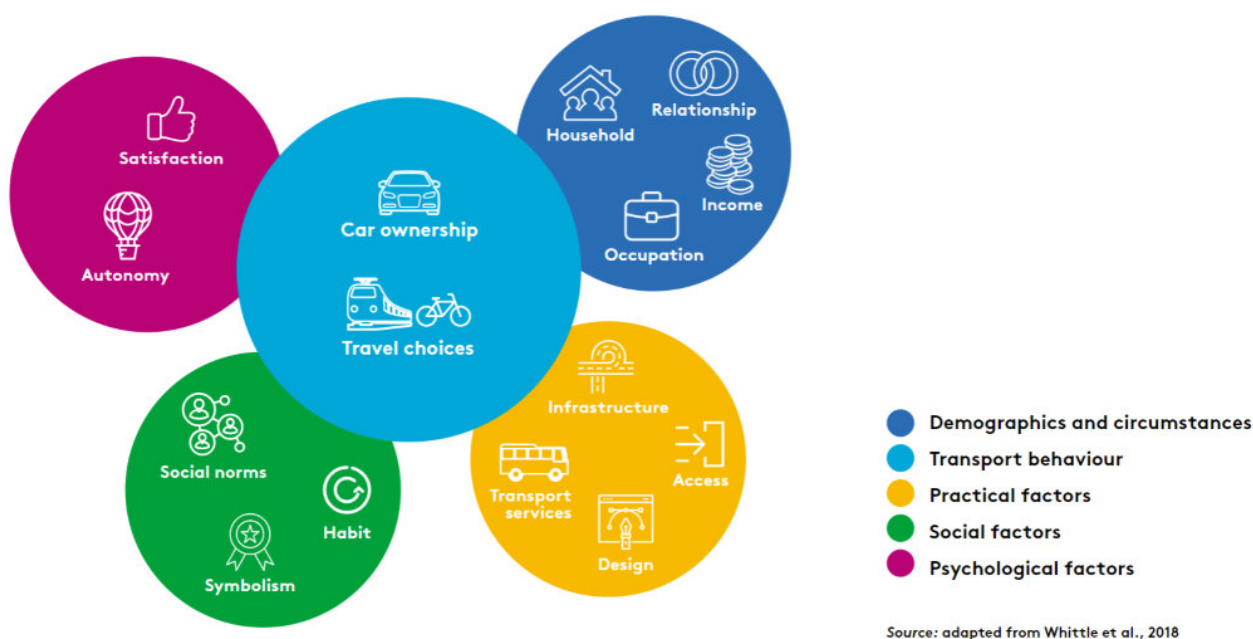
- **Mode choice** – travellers to, and from the development will have a real mode choice for different journeys and needs. It encourages people to think multi-modally, and therefore reduce reliance on car use and associated impacts;
- **Convenience** – travellers to, and from the development will provide convenience for multi-modal trips allowing for seamless transitions between modes;
- **Focus on public realm** – development will be organised such that space is organised for the benefit of pedestrians and cyclists, creating a pleasant urban realm; and
- **Density** – providing a real mode choice for travellers to, and from the development means that less car parking will be required on-site, allowing a higher density to be accommodated on site.

7.4.7 There are of course a number of factors that influence mode choice and mobility decisions are influenced by practical, psychological and social factors as well as by demographics and circumstances. Practical factors relate to how well a form of transport can meet people’s practical needs, for example whether the transport infrastructure is conducive to travelling by car or public transport. Figure 14-1 illustrates how these factors influence our transport behaviour.

7.4.8 As a development there is an opportunity to positively influence transport behaviour through improved transport choices and encouragement of lower car ownership through limited on plot parking. There is also an opportunity to positively influence practical factors through improved infrastructure, good design and improved transport services. Softer measures through a residential travel plan delivered at the outset of the development can result in a change of travel habit on occupancy of the development.



**Figure 14-1: Factors that Influence Mobility Decisions**



## Mobility Hubs

- 7.4.9 Mobility hubs are parking areas or structures which provide a number of parking spaces equivalent to the difference between the ‘normal standard’ and the number of spaces provided on or adjacent to plots within a parcel.
- 7.4.10 Mobility hubs can be located so as to minimise the distance that a vehicle has to drive into the site before being able to park. Access to Mobility Hubs should generally be taken from the primary road network.
- 7.4.11 Mobility hubs are likely to be multi-storey structures, with active frontages provided at ground floor level. These buildings shall be more than just a neighbourhood car park, and they will act as a focal point for the community offering a one stop location for transport and other related services, potentially including:
- Car parking (residential and visitors)
  - Bike Share location
  - Car share/hire location
  - Electric car charging facility
  - Bus/Taxi interchange
  - Delivery collection point (for residents’ parcels etc.)



- Concierge/reception/development gateway
- Self-Storage units for residents
- Service providers (cleaners/gardeners)
- Estate management office
- CAV Pod location (future)

7.4.12 Because of the potential importance of mobility hub buildings, in both their location and its ability to set new 'standards' in the way we live, means they need to be architecturally significant and functionally robust, combining a set of uses that are unique and at the same time future proofed to meet the accelerated changes in transportation that are on the horizon. The structure(s) itself can also be constructed so that it can be adapted to alternative uses in the future in response to predicted changes in car ownership levels.

7.4.13 In order to be most effective, mobility hubs need to be located within easy walking distance of the dwellings they serve. A typical walking distance should be around 200m, but residents should not be expected to walk more than 400m to their mobility hub. Residents wishing to park one or more vehicles within a mobility hub will be required to pay for an annual parking permit.

7.4.14 The control of the permit pricing strategy is typically developed as part of the sustainable travel plan for the development and will vary over time. The cost of a permit is likely to escalate with every subsequent permit purchased, and a cap on the number of permits may be introduced in line with parking standards.

7.4.15 The network of Mobility Hubs across the site should incorporate smart city thinking, allowing information on availability of spaces and pricing strategies to be shared with real-time information displays across the site and potentially with users smart phones via an app. Pedestrian and cyclist access routes to the hubs need to be carefully considered to ensure that they accord with the key principles of coherence, directness, comfort, attractiveness and personal safety.

### **Enhanced Wayfinding**

7.4.16 Wayfinding signs can provide a better journey experience to cyclists, by directing users to different destinations along the most convenient and bicycle friendly routes. Signage should be placed in advance of all turns and decision points, containing the distance and journey time to key local destinations.

7.4.17 Effective wayfinding gives cyclists the confidence and incentivises them to return to the destination whilst signalling to drivers that they are on a cycle route and should exercise caution. The wayfinding can be branded specifically to The Hub to create identity and a feeling of cohesion.



## 8 Summary

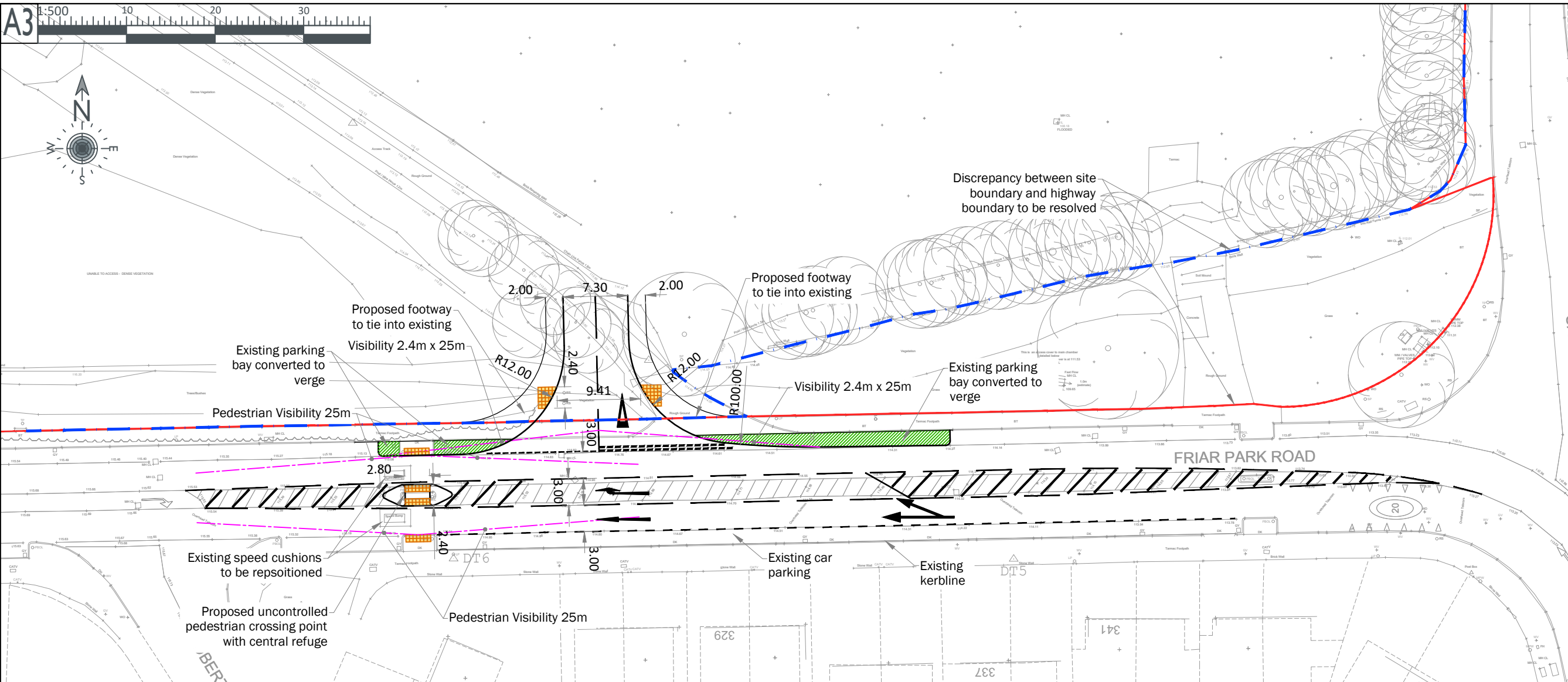
8.1.1 PJA has prepared a Baseline Report for the benefit of Campbell Reith with the intention to assist in shaping the masterplan for the residential development to the north of Friar Park Road, Sandwell.

8.1.2 This report has demonstrated the following key considerations for the masterplan:

- The principles of access for all modes, and design of vehicular access has been agreed with the Local Highway Authority. The general arrangement drafts would need to be developed as the masterplan evolves, particularly to accommodate cycle facilities.
- The site is surrounded by a range of sustainable transport opportunities, which the masterplan facilitates access to;
- There are no existing highway safety concerns on the local highway network that the masterplan would need to consider;
- The site is located within close proximity to a range of local amenities, the masterplan would benefit from ensuring direct and attractive connections towards these amenities;
- Internal connectivity throughout the site should be considered with close consideration of LTN 1/20 cycle guidance;
- Parking provision on site should be provided in line with local guidance; and
- Mitigation proposals should have a strong focus on active travel infrastructure. By enabling walking and cycling trips, the masterplan would be able to influence the mode shift of residents, and generate less vehicle movements.



## Appendix A    Vehicular Access Drawings

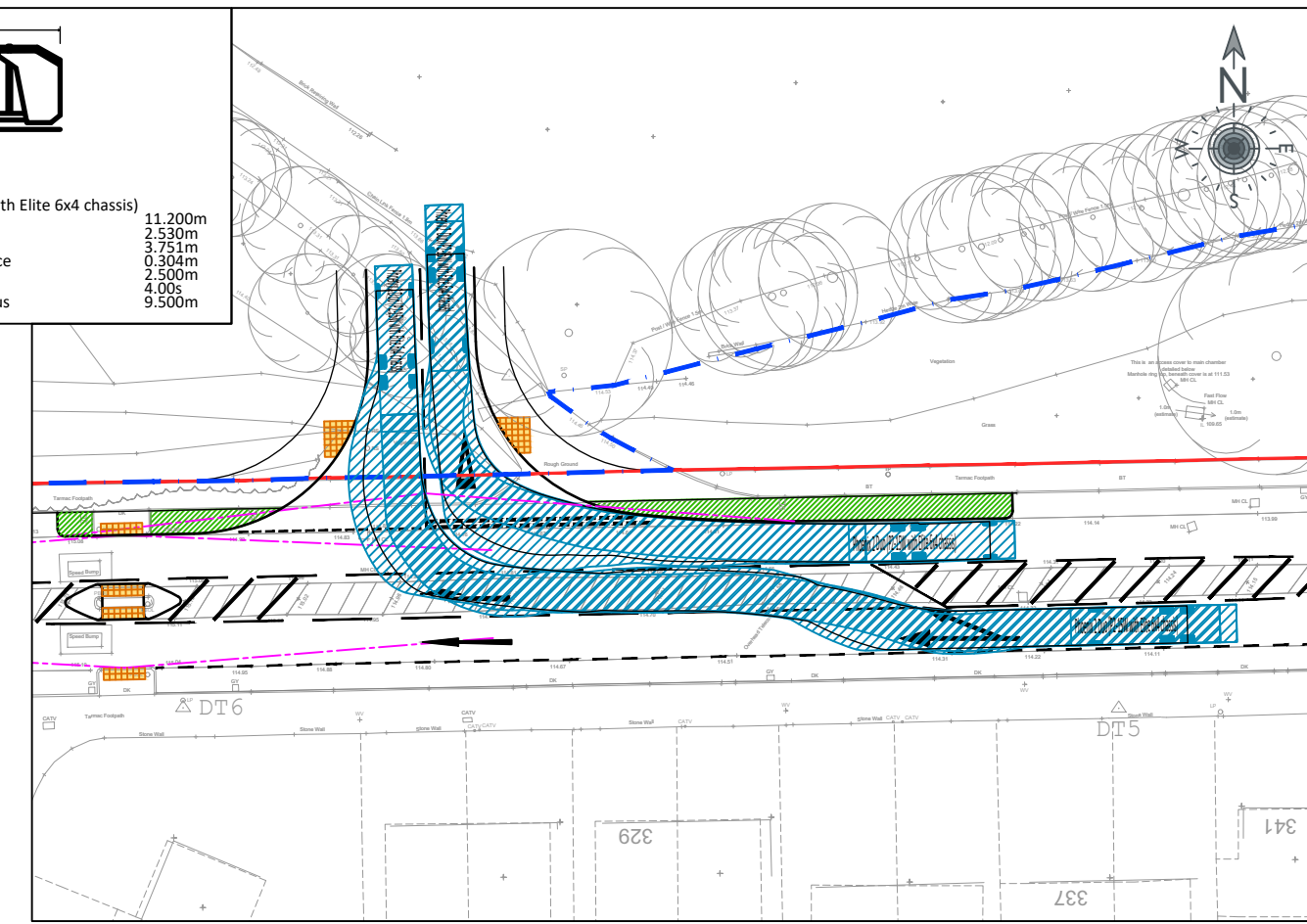
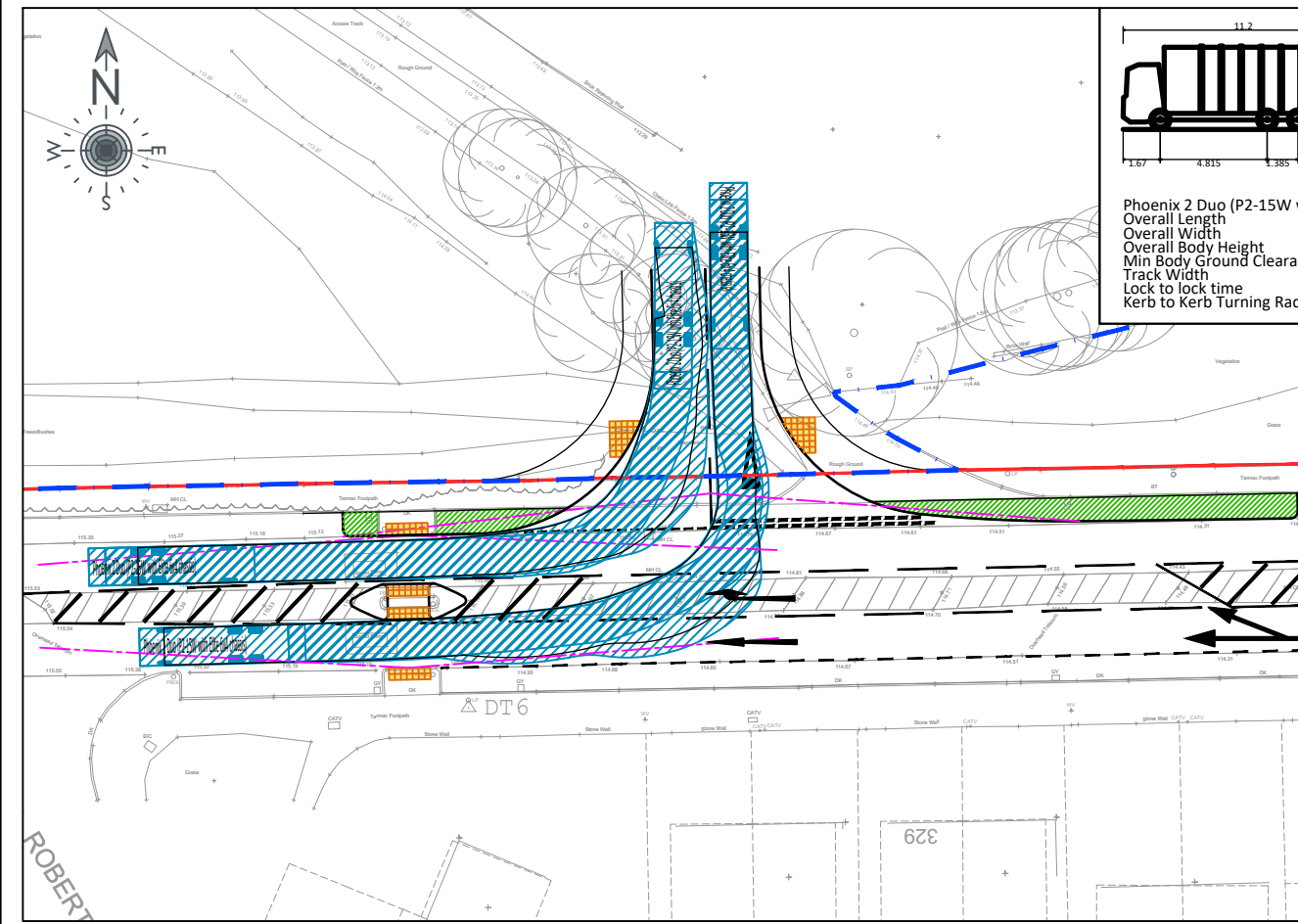


**NOTES**  
**CDM NOTE**  
 These drawings have been produced with reference to the CDM Regulations 2015. Please note that these are pre-construction phase drawings and should be subject to further design risk management as required in accordance with Regulation 9

- Notes**
1. Do not scale from this drawing.
  2. All dimensions in metres unless stated otherwise.
  3. The purpose of this drawing is to demonstrate the ability to deliver a ghost island right turn junction from Friar Park Road into the proposed development at Friar Park.
  4. This drawing should be read in conjunction with all other project related drawings.
  5. Drawing is based on Topographical survey supplied by DYWIDAG Project No 2560T and is limited to a 2D design at this stage.
  6. OS Mapping is included for context.
  7. All boundaries have been reproduced from source data, however there is a discrepancy between the site boundary and highway boundary in the south-east corner which needs to be reviewed.
  8. Design has been based on the principles of DMRB CD123. Junction radii have been increased to accommodate refuse vehicle tracking.
  9. Pedestrian and cyclist facilities to be reviewed and developed as design progresses.
  10. Visibility is based on Manual for Streets 20mph Design Speed.

**KEY**

	Highway Boundary
	Site Boundary
	Proposed Kerbline
	Proposed Footway
	Proposed Visibility



**Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)**

Overall Length	11.200m
Overall Width	2.530m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.500m

REV	DATE	REVISION NOTE	BY

**PJA**  
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 Birmingham · Bristol  
 Exeter · London · Reading  
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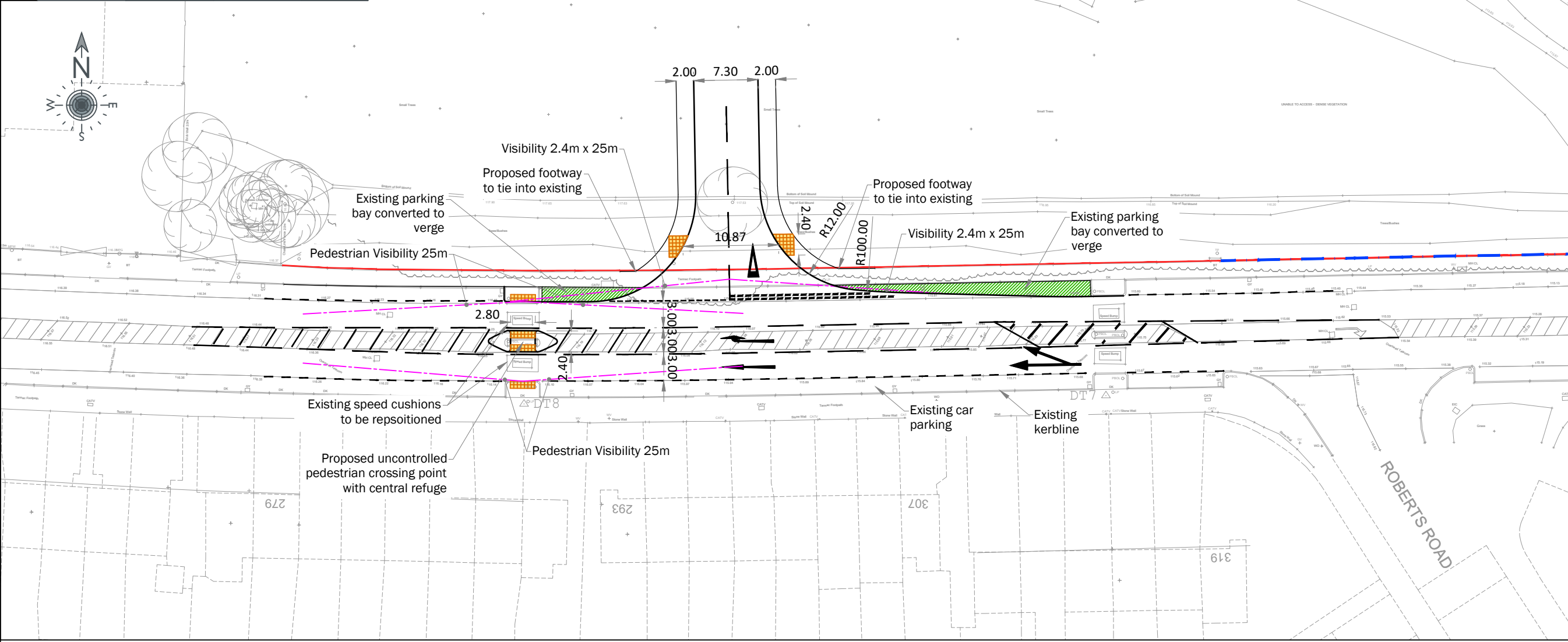
**Campbell Reith**

**PROJECT**  
 Friar Park Road  
**DRAWING TITLE**  
 Friar Park Road  
 Ghost Island Right Turn  
 General Arrangement

**DRAWING ISSUE STATUS**  
**INFORMATION**  
 PJA JOB No. SUB-CODE DRAWING NO. REVISION  
 05086 - Ci - SK002 - PO  
 Revision Letter : P - Prelim / A - Approval / T - Tender / C - Construction  
 BIM/DRAWING REFERENCE

SCALE	DRAWN	REVIEWED	DATE
A3 @ 1:500	NS	RMB	12.03.21





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**KEY**

	Highway Boundary
	Site Boundary
	Proposed Kerblines
	Proposed Footway
	Proposed Visibility

REV	DATE	REVISION NOTE	BY
P0	29/03/21	First issue	JG

**PJA**  
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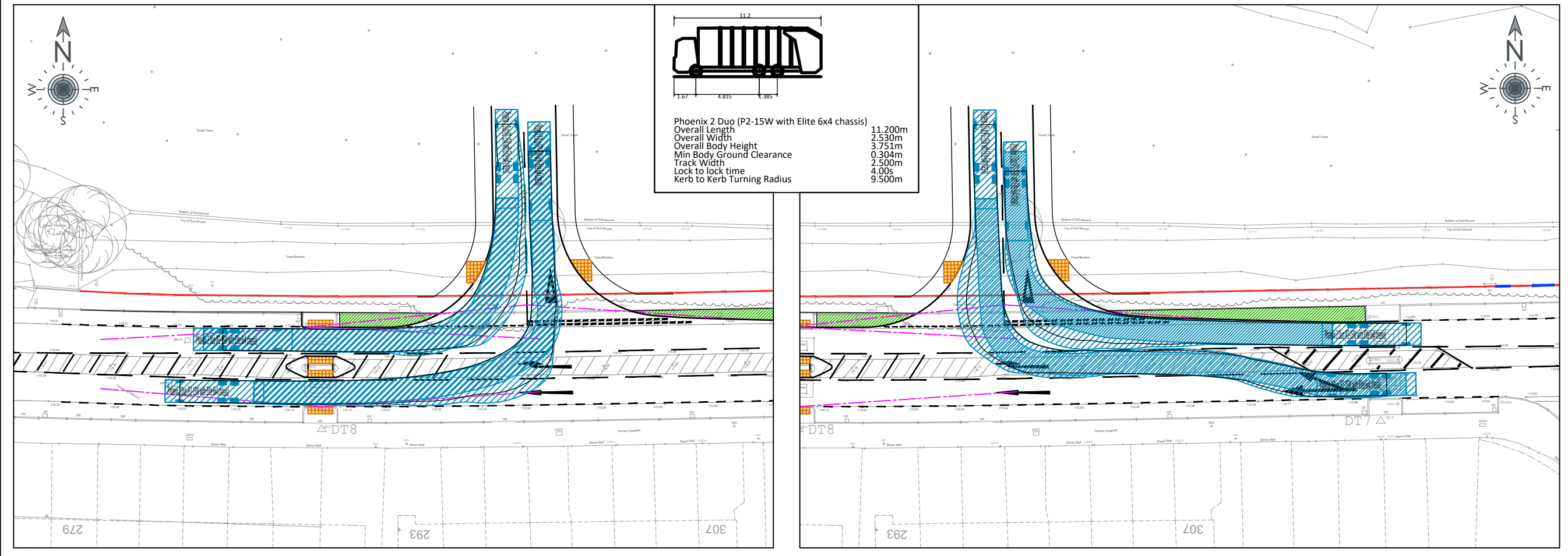
**Campbell Reith**

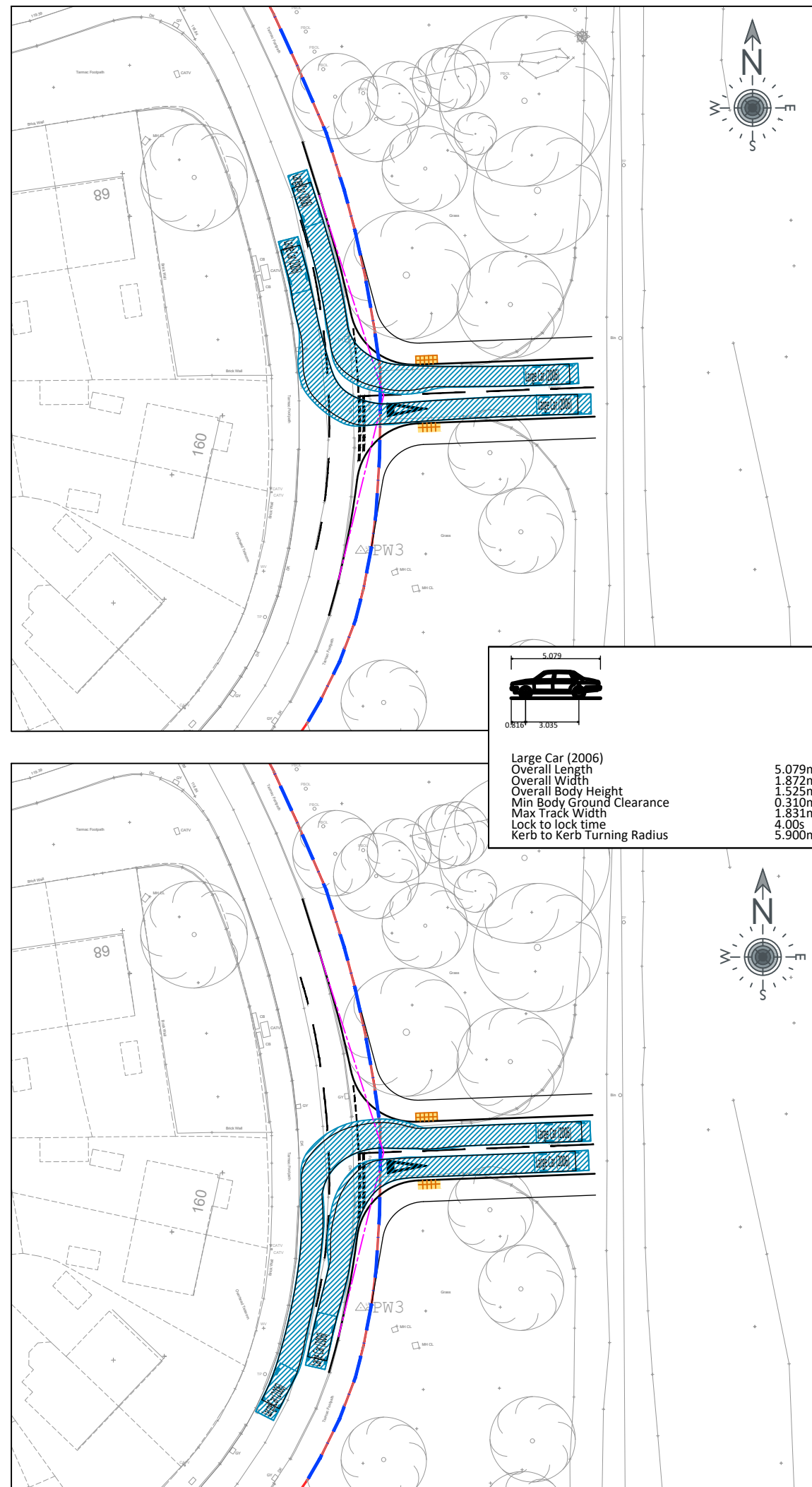
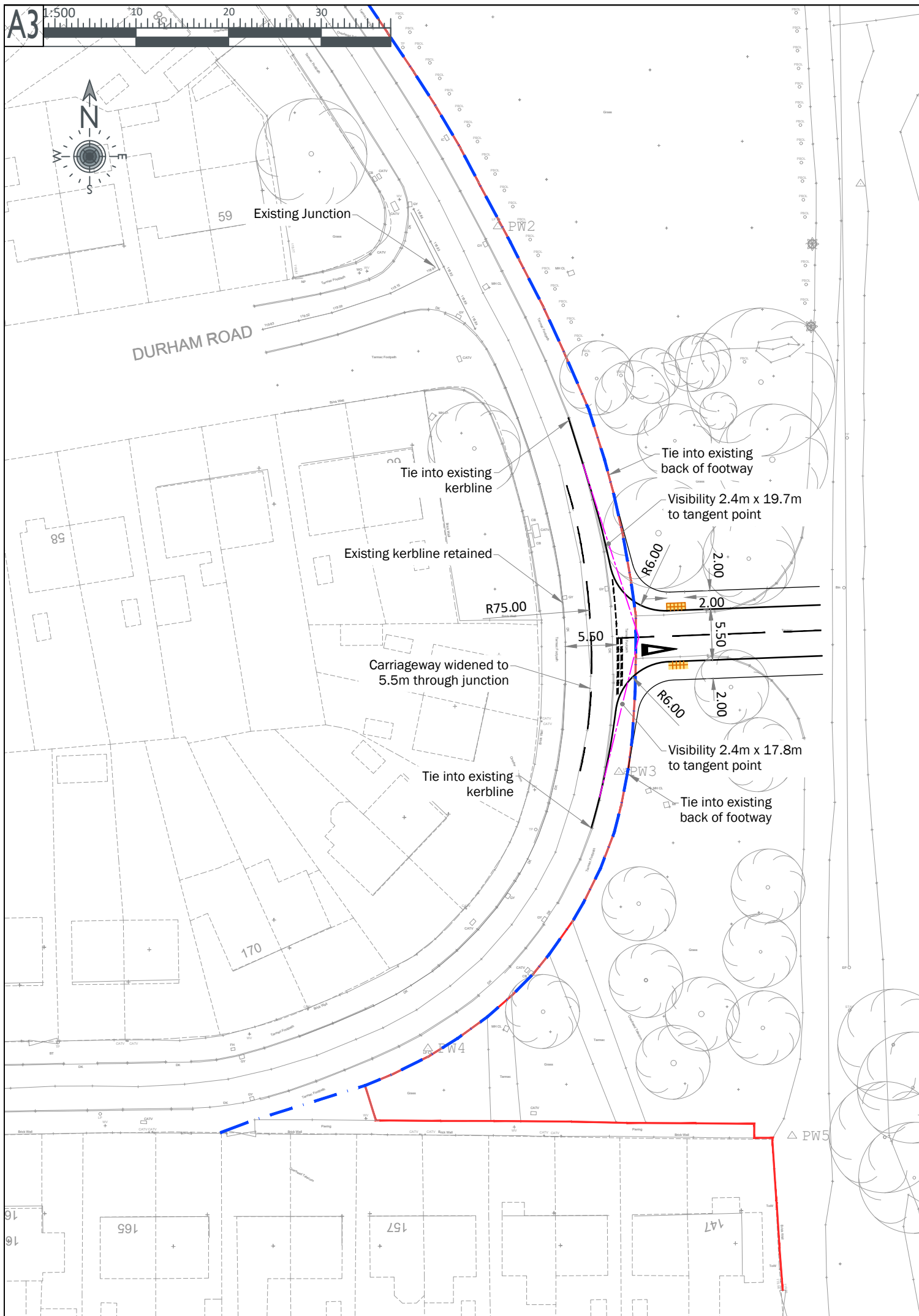
**PROJECT**  
Friar Park Road

**DRAWING TITLE**  
Friar Park Road  
Ghost Island Right Turn  
General Arrangement Option 2

**INFORMATION**  
PJA JOB No. SUB-CODE DRAWING NO. REVISION  
05086 - Ci - SK004 - P0  
Revision Letter: P - Prelim / A - Approval / T - Tender / C - Construction  
BIM/DRAWING REFERENCE

SCALE	DRAWN	REVIEWED	DATE
A3@1:500	JG	NS	29/03/21





	5.079
Large Car (2006)	5.079m
Overall Length	1.872m
Overall Width	1.525m
Overall Body Height	0.310m
Min Body Ground Clearance	1.831m
Max Track Width	4.00s
Lock to lock time	5.900m
Kerb to Kerb Turning Radius	

**NOTES**  
**CDM NOTE**  
 These drawings have been produced with reference to the CDM Regulations 2015. Please note that these are pre-construction phase drawings and should be subject to further design risk management as required in accordance with Regulation 9

- Notes**
1. Do not scale from this drawing.
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  3. The purpose of this drawing is to demonstrate the ability to deliver a priority access junction from Kent Road into the proposed development at Friar Park.
  4. This drawing should be read in conjunction with all other project related drawings.
  5. Drawing is based on Topographical survey supplied by DYWIDAG Project No 2560T and is limited to a 2D design at this stage.
  6. OS Mapping is included for context.
  7. All boundaries have been reproduced from source data, however all boundaries should be verified on site.
  8. Design has been based on the principles of DMRB CD123.
  9. Pedestrian and cyclist facilities to be reviewed and developed as design progresses.
  10. Visibility is based on Manual for Streets Design Speed of 30mph.

KEY	
	Highway Boundary
	Site Boundary
	Proposed Kerblines
	Proposed Footway
	Proposed Visibility

REV	DATE	REVISION NOTE	BY

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CLIENT  
**Campbell Reith**

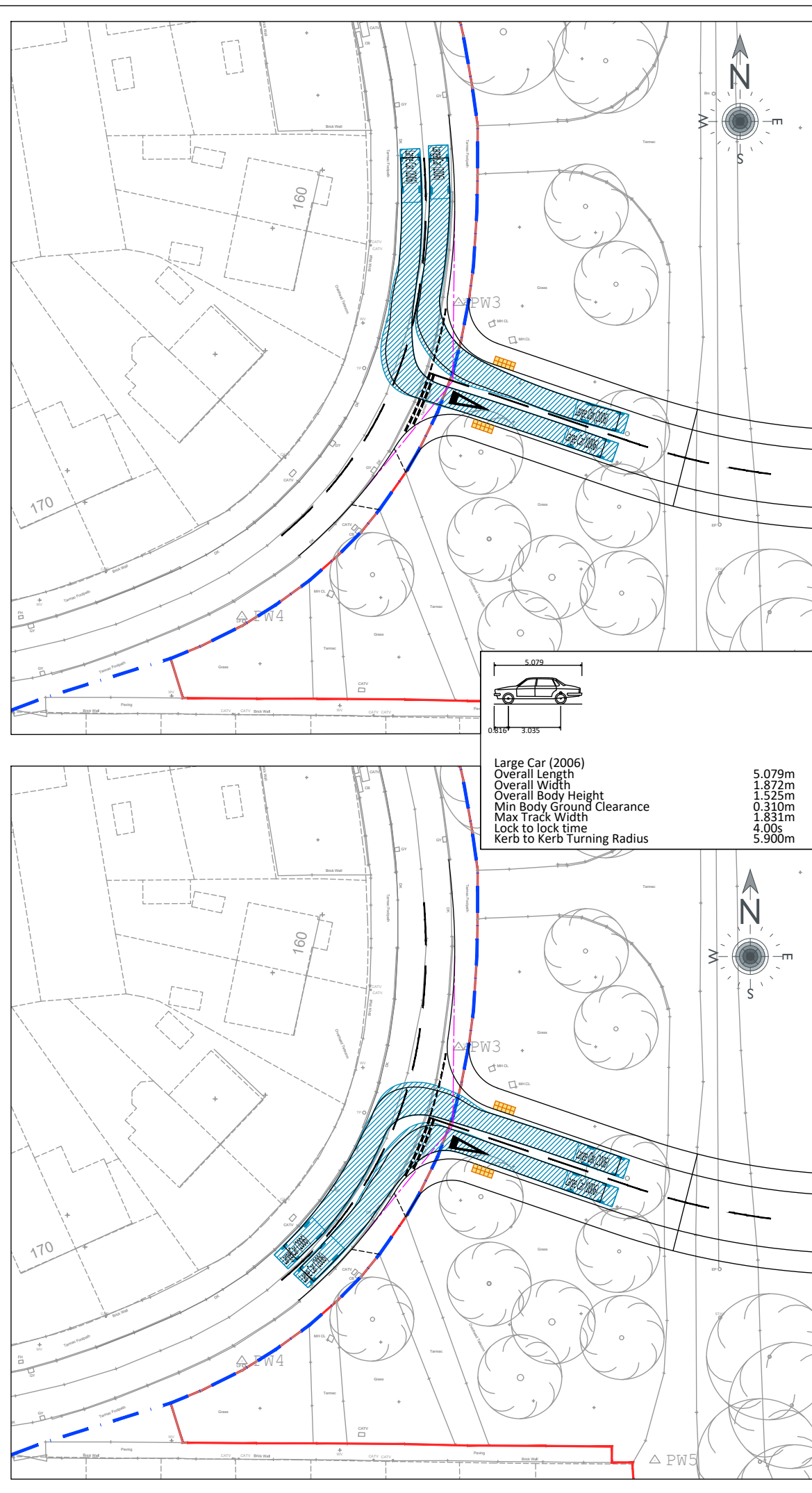
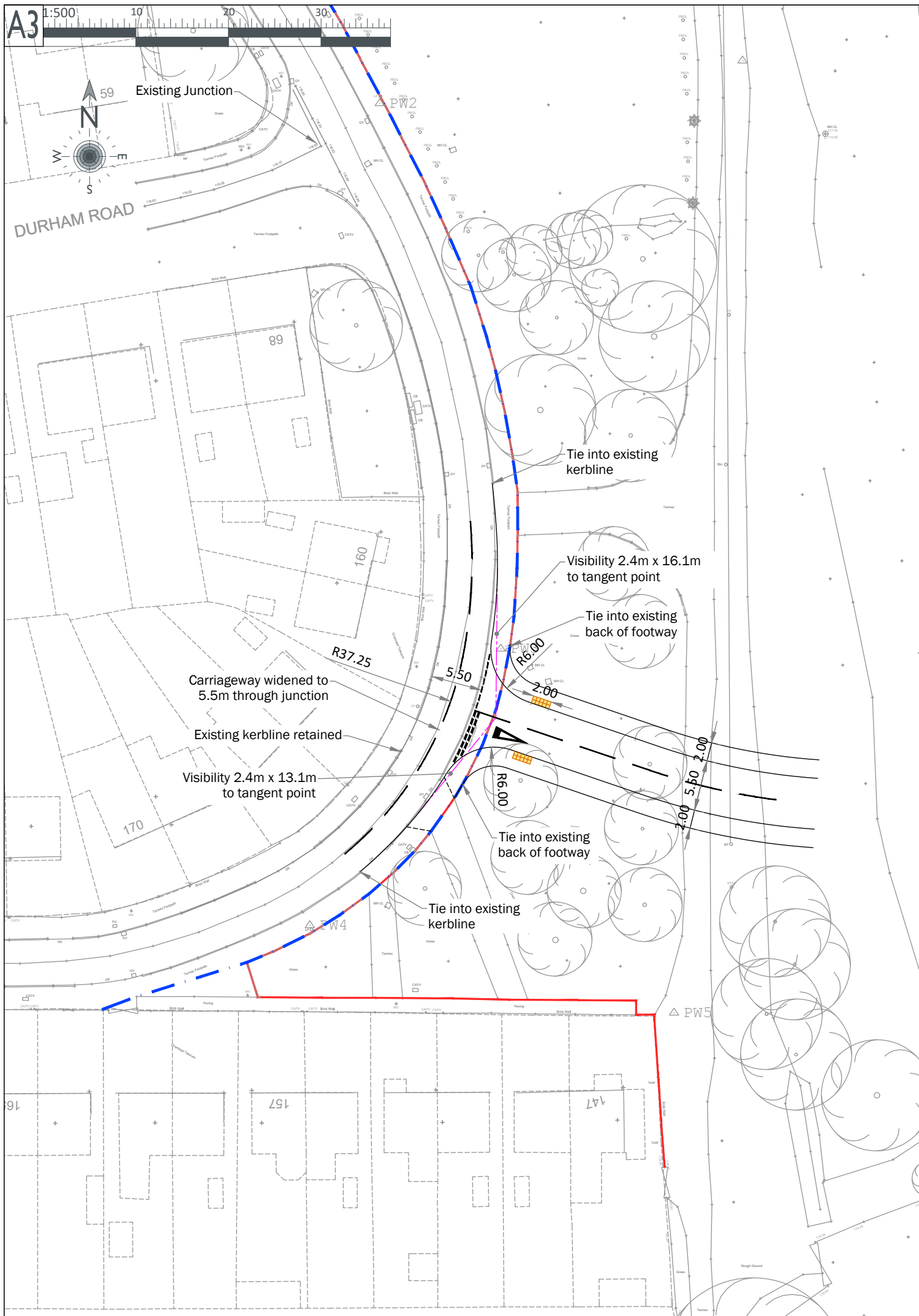
PROJECT  
 Friar Park Road

DRAWING TITLE  
 Kent Road  
 Proposed Priority Junction  
 General Arrangement

DRAWING ISSUE STATUS  
**INFORMATION**  
 PJA JOB No. SUB-CODE DRAWING NO. REVISION  
**05086 - Ci - SK001 - PO**  
 Revision Letter: P - Prelim / A - Approval / T - Tender / C - Construction  
 BIM DRAWING REFERENCE

SCALE	DRAWN	REVIEWED	DATE
A3 @ 1:500	NS	RMB	12.03.21





**NOTES**  
**CDM NOTE**  
 These drawings have been produced with reference to the CDM Regulations 2015. Please note that these are pre-construction phase drawings and should be subject to further design risk management as required in accordance with Regulation 9

- Notes**
1. Do not scale from this drawing.
  2. All dimensions in metres unless stated otherwise.
  3. The purpose of this drawing is to demonstrate the ability to deliver a priority access junction from Kent Road into the proposed development at Friar Park.
  4. This drawing should be read in conjunction with all other project related drawings.
  5. Drawing is based on Topographical survey supplied by DYWIDAG Project No 2560T and is limited to a 2D design at this stage.
  6. OS Mapping is included for context.
  7. All boundaries have been reproduced from source data, however all boundaries should be verified on site.
  8. Design has been based on the principles of DMRB CD123.
  9. Pedestrian and cyclist facilities to be reviewed and developed as design progresses.
  10. Visibility is based on Manual for Streets Design Speed of 30mph.

KEY	
	Highway Boundary
	Site Boundary
	Proposed Kerblines
	Proposed Footway
	Proposed Visibility
	Proposed Vehicle Crossing

PO	REV	DATE	REVISION NOTE	BY

**PJA**  
 CLIENT  
 Campbell Reith

PROJECT  
 Friar Park Road

DRAWING TITLE  
 Kent Road  
 Proposed Priority Junction  
 General Arrangement Option 2

DRAWING ISSUE STATUS  
**INFORMATION**  
 PJA JOB No. SUB-CODE DRAWING NO. REVISION  
**05086 - Ci - SK003 - PO**

SCALE	DRAWN	REVIEWED	DATE
A3@1:500	JG	NS	29/03/21





## Appendix B Trip Rate Report

# Technical Note

**Project:** Friar Park Road, Sandwell

**Subject:** Trip Generation - Response to Highways England

<b>Client:</b>	Campbell Reith	<b>Version:</b>	A
<b>Project No:</b>	05086	<b>Author:</b>	MW/SC
<b>Date:</b>	26/08/2021	<b>Approved:</b>	LB

## I Introduction

- 1.1.1 PJA has been commissioned as part of the Homes England framework to prepare transport input for the development of circa 830 dwellings on land to the north of Friar Park Road, Sandwell.
- 1.1.2 In March 2021, PJA prepared a scoping note to determine the content of the Transport Assessment which will accompany the planning application. This informed a scoping meeting between PJA and Sandwell Metropolitan Borough Council (SMBC) on 15<sup>th</sup> April 2021. In this meeting, principles regarding access, trip generation, junction modelling, highway safety and sustainable transport were agreed. The meeting minutes associated with this meeting are included in **Appendix A**.
- 1.1.3 Following this meeting, the Scoping Note was updated to reflect the scope agreed with SMBC, and sent to Highways England (HE) on 28<sup>th</sup> April 2021. The response received from Highways England is available in **Appendix B**.
- 1.1.4 The purpose of this note is to provide a response to HE comments and to summarise the adjusted trip generation to be used as part of PJA’s transport input following consultation with SMBC and HE. The adjusted trip generation outlined in this note shall be used in the subsequent Transport Assessment carried out to support the application.
- 1.1.5 Additional scoping was undertaken with Walsall Council, where no comments regarding trip generation were raised.

## I.2 Highways England Response

- 1.2.1 As part of Highways England’s response received on 26<sup>th</sup> May 2021, it was suggested that further consideration should be given to the TRICS analysis used to derive the trip rates for the site.
- 1.2.2 The following concerns were raised as part of the response:

- Sample sites had low total dwelling numbers compared to the proposed development;
- Sites in an 'Edge of Town' or 'Suburban Area' do not align with the urbanisation of the proposed development location; and,
- Consideration should also be given to whether the peak hours from the TRICS outputs are representative of the peak hours of travel in proximity to this development.

## 2 Peak Hour on Local Highway Network

2.1.1 Between Tuesday 6<sup>th</sup> July 2021 and Monday 12<sup>th</sup> July 2021 ATC surveys were carried out by PCC Traffic Information Consultancy Ltd. at the following locations:

- Kent Road;
- Friar Park Road; and
- Walsall Road.

2.1.2 An analysis of the average weekday flows for all three junctions indicated that the AM peak hour on the local highway network was between 08:00 and 09:00. The PM peak hour was calculated to be between 16:00 and 17:00. However, the total average flow for this hour was calculated to be only approximately 0.1% (two vehicles) higher than that between 17:00 and 18:00. This slight difference is likely due to the location of schools nearby, aligning with pick up times. A copy of the traffic survey data is provided in **Appendix C**.

2.1.3 Given that the peak period for residential sites is 17:00-18:00, as can be seen in the TRICS output reports provided at **Appendix D** and **Appendix E**, it is considered robust to use the likely trip generation of the proposed land use (residential) as opposed to the local highway network peak.

2.1.4 Therefore, for the purposes of this assessment, a peak hour of 17:00-18:00 has been used in line with the standard network PM peak. The Transport Assessment will assess the impact of the proposed development on the local highway network during these peak periods.

## 3 Trip Generation

### 3.1 Original Trip Generation

3.1.1 The trip generation agreed with SMBC is outlined in Table 1 below, the full TRICS output reports are available in **Appendix D**. These trip rates were generated using the following TRICS parameters:

- Land Use: 03 – Residential / A- Houses Privately Owned;

- Units: 200-1200 dwellings;
- Location: Suburban Area or Edge of Town location; and
- Date: 01/01/12 to 24/09/19

**Table 1: Original Trip Generation**

	08:00-09:00			17:00-18:00		
	Arrivals	Departures	Totals	Arrivals	Departures	Totals
Trip Rate	0.137	0.386	0.523	0.359	0.164	0.523
Trip Generation (830 dwellings)	114	320	434	298	136	434

## 3.2 Revised Trip Generation

### TRICS Analysis

- 3.2.1 Following HE's response, a comprehensive analysis of the TRICS v7.8.2 database has been undertaken to address the concerns raised by HE. This process involved finding suitable comparable sites in order to generate the most realistic trip rate possible.
- 3.2.2 While TRICS v7.8.2 provides a comprehensive list of residential sites in urbanised locations, there are a lack of available surveys for residential developments over 200 dwellings in Edge of Town Centre and Town Centre locations. This is largely due to the lack of available land for residential development in built up, urbanised locations. It is therefore considered that new residential developments, of a similar size to the proposed c.830 dwellings, are most likely to be located at 'Edge of Town' locations. Furthermore, sites in more comparable urbanised locations are more likely to have fewer dwellings due to space constraints in urbanised locations. 'Edge of Town', 'Edge of Town Centre' and 'Suburban Area' sites above 200 dwellings have therefore been included in the trip rate search.
- 3.2.3 Table 2 outlines the selected sites and their comparability. The following parameters were used in order to generate the list of potential sites:
- Land Use: 03 – Residential / A- Houses Privately Owned;
  - Excluding sites in Ireland, Northern Ireland and Greater London;
  - 200-4334 dwellings (max parameter);
  - Surveys in an Edge of Town Centre, Suburban Area or Edge of Town location; and
  - Surveys from 01/01/00 to 29/02/20.

3.2.4 In order to ensure the sites used to derive the trip rates were representative of a similar location to the proposed development, the remaining sites were individually selected on the basis that they matched the following criteria:

- Located in close proximity to the strategic highway network;
- Located in close proximity to a Rail Station with a similar level of service to Tame Bridge Parkway;
- Located within a built up residential area.

3.2.5 This resulted in a total of five comparable sites, which due to their location and proximity to the strategic highway network, public transport facilities and existing residential areas, are likely to generate similar trip rates to the proposed development.

**Table 2: Comparable Sites**

TRICS Site Reference	Location	TRICS Location Type	Total Dwellings	Reasons for Selection
CF-03-A-01	Cardiff	Suburban Area	222	Comparable urbanised location with similar number of local facilities and local railway station with similar level of service to Tame Bridge Parkway in Sandwell
GM-03-A-08	Stockport	Edge of Town	247	Site within short distance to strategic road network (M60) and within 2km of railway station with similar level of service to Tame Bridge Parkway.
HC-03-A-16	Winchester	Edge of Town	1040	Comparable number of dwellings, with a range of local amenities (schools, supermarket, community and medical centres) and within 2km of strategic road network (M3)
NF-03-A-09	Norwich	Edge of Town	984	Comparable number of dwellings, with a range of local amenities (schools, convenience store and medical centre) and within 2km of strategic road network (A11/A47)
WO-03-A-04	Worcester	Edge of Town	792	Comparable number of dwellings with local amenities (schools, convenience stores) and similar level of bus services available from local stops

### TRICS Output

3.2.6 The resultant trip generation from the TRICS analysis outlined above is provided in **Table 3**. Full TRICS outputs are provided in **Appendix E**.

**Table 3: Revised Trip Generation**

	08:00-09:00			17:00-18:00		
	Arrivals	Departures	Totals	Arrivals	Departures	Totals
Trip Rate	0.121	0.356	0.477	0.348	0.183	0.531
Revised Trip Generation (830 dwellings)	100	295	396	289	152	441
Previous Trip Generation (830 dwellings)	114	320	434	298	136	434
Net difference when compared to previous trip generation	-14	-25	-38	-9	16	7

3.2.7 The revised trip rate generates 38 fewer trips in the AM peak, and seven more trips in the PM peak. A finding of lower trip rates in the AM peak is considered to be representative of the location of the sites chosen within TRICS, being located in existing residential areas that have good public transport connections available in the vicinity of the site.

3.2.8 It is considered that the greater level of service available within the vicinity of the site, the less likely residents are to travel by car, particularly during peak hours on the network where their journey times may be reduced by travelling to inter city areas by rail.

3.2.9 The site AM peak hour (08:00-09:00) and PM peak hour (17:00-18:00) align with the peak hours of the local highway network identified in Section 2, which also align with standard network peak hours. Therefore, assessments to examine the impact of the proposed development on the local highway network using these peak periods are considered to be robust.

## 4 Summary and Conclusion

### 4.1 Summary

4.1.1 The purpose of this note has been to summarise the planned trip generation to be used as part of PJA's transport input for the application for c.830 dwellings on land north of Friar Park Road, Sandwell, following consultation with Sandwell Metropolitan Borough Council (SMBC) and Highways England (HE).

4.1.2 This note has acknowledged comments from HE, and following a comprehensive TRICS analysis, a selection of comparable sites have been used to generate revised trip rates.

4.1.3 Following an analysis of recent ATC traffic count data on the local highway network, the Transport Assessment will consider the impact of the development in the following peak periods:

- AM Peak: 08:00-09:00
- PM Peak: 17:00-18:00

4.1.4 Whilst there is a lack of suitable sites available on the TRICS database that align with the criteria requested by HE (similar number of units to the proposed (830 dwellings) and within a more urbanised location, it is considered that the sites selected on an individual basis are representative of the likely trip generation of the proposed development. This is largely based on the assumption that should a residential site be located in close proximity to built up areas and good rail connections, it is likely that a significant proportion of residents will carry out journeys (to work in particular) by rail. This will therefore reduce the number of trips generated by the development.

## **4.2 Conclusion**

4.2.1 The response to Highways England outlined in this note has demonstrated a comparable trip rate to be considered as part of the Transport Assessment, in terms of size, location and proximity to existing sustainable transport infrastructure and the strategic highway network, for the proposed residential development.

4.2.2 This report has also established suitable AM and PM peak periods to be considered as part of the assessment.



## Appendix C Journey to Work Data



WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)

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Population : All usual residents aged 16 and over in employment the week before the census

Units : Persons

Date : 2011

Method of travel to work: Driving a car or van

place of work : 2011 super output area - middle layer	mnemonic	usual residence
		Sandwell 003
		E02002045
Sandwell 005	E02002047	102
Sandwell 019	E02002061	73
Sandwell 017	E02002059	72
Sandwell 013	E02002055	71
Sandwell 001	E02002043	68
Sandwell 020	E02002062	68
Sandwell 021	E02002063	60
Sandwell 003	E02002045	53
Sandwell 018	E02002060	53
Walsall 033	E02002142	53
Walsall 030	E02002139	50
Sandwell 024	E02002066	35
Sandwell 010	E02002052	33
Sandwell 023	E02002065	32
Birmingham 050	E02001876	28
Sandwell 016	E02002058	27
Walsall 026	E02002135	26
Sandwell 004	E02002046	20
Birmingham 047	E02001873	19
Walsall 038	E02002147	19
Wolverhampton 012	E02002160	19
Sandwell 039	E02006810	18
Walsall 018	E02002127	18
Walsall 017	E02002126	17
Walsall 031	E02002140	16
Sandwell 026	E02002068	15
Birmingham 138	E02006899	14
Sandwell 007	E02002049	14
Sandwell 035	E02002077	14
Walsall 015	E02002124	14
Walsall 027	E02002136	14
Dudley 006	E02002005	13
Walsall 025	E02002134	13
Wolverhampton 020	E02002168	13
Dudley 011	E02002010	12
Sandwell 014	E02002056	12
Sandwell 015	E02002057	12
Walsall 024	E02002133	11
Walsall 037	E02002146	11
Wolverhampton 018	E02002166	11
Birmingham 029	E02001855	10
Birmingham 033	E02001859	10
Birmingham 136	E02006897	10
Dudley 015	E02002014	10
Dudley 022	E02002021	9
Dudley 034	E02002033	9
Sandwell 033	E02002075	9
Walsall 034	E02002143	9
Wolverhampton 029	E02002177	9
Birmingham 031	E02001857	8
Birmingham 049	E02001875	8
Dudley 017	E02002016	8
Sandwell 037	E02002079	8
Walsall 036	E02002145	8
Cannock Chase 012	E02006129	7
Birmingham 043	E02001869	7

Birmingham 079	E02001905	7
Birmingham 137	E02006898	7
Dudley 001	E02002000	7
Walsall 016	E02002125	7
Wolverhampton 035	E02006894	7
Birmingham 087	E02001913	6
Dudley 018	E02002017	6
Dudley 020	E02002019	6
Sandwell 038	E02002080	6
Walsall 002	E02002111	6
South Staffordshire 008	E02006181	5
Birmingham 028	E02001854	5
Birmingham 053	E02001879	5
Birmingham 139	E02006900	5
Walsall 008	E02002117	5
Walsall 012	E02002121	5
Walsall 020	E02002129	5
Walsall 022	E02002131	5
Wolverhampton 023	E02002171	5
Wolverhampton 033	E02002181	5
Telford and Wrekin 016	E02002943	4
Birmingham 010	E02001836	4
Birmingham 025	E02001851	4
Birmingham 026	E02001852	4
Birmingham 037	E02001863	4
Birmingham 041	E02001867	4
Birmingham 058	E02001884	4
Birmingham 064	E02001890	4
Birmingham 135	E02006896	4
Dudley 013	E02002012	4
Dudley 026	E02002025	4
Dudley 032	E02002031	4
Sandwell 009	E02002051	4
Sandwell 027	E02002069	4
Sandwell 030	E02002072	4
Solihull 011	E02002091	4
Walsall 004	E02002113	4
Walsall 013	E02002122	4
Wolverhampton 027	E02002175	4
Telford and Wrekin 018	E02002945	3
Telford and Wrekin 023	E02002950	3
Lichfield 005	E02006150	3
South Staffordshire 006	E02006179	3
South Staffordshire 012	E02006185	3
Birmingham 004	E02001830	3
Birmingham 006	E02001832	3
Birmingham 008	E02001834	3
Birmingham 009	E02001835	3
Birmingham 013	E02001839	3
Birmingham 039	E02001865	3
Birmingham 048	E02001874	3
Birmingham 052	E02001878	3
Birmingham 069	E02001895	3
Birmingham 071	E02001897	3
Birmingham 075	E02001901	3
Birmingham 089	E02001915	3
Birmingham 124	E02001950	3
Dudley 012	E02002011	3
Dudley 016	E02002015	3
Dudley 021	E02002020	3
Dudley 039	E02002038	3
Sandwell 002	E02002044	3
Sandwell 006	E02002048	3
Sandwell 034	E02002076	3
Solihull 009	E02002089	3
Solihull 019	E02002099	3
Walsall 001	E02002110	3

Walsall 035	E02002144	3
Walsall 039	E02002148	3
Wolverhampton 006	E02002154	3
Wolverhampton 013	E02002161	3
Wolverhampton 015	E02002163	3
Worcester 003	E02006736	3
Cheshire East 038	E02003829	2
Calderdale 008	E02002251	2
Shropshire 027	E02006009	2
Shropshire 034	E02006013	2
Lichfield 006	E02006151	2
South Staffordshire 005	E02006178	2
South Staffordshire 013	E02006186	2
Tamworth 003	E02006219	2
Warwick 012	E02006530	2
Birmingham 002	E02001828	2
Birmingham 017	E02001843	2
Birmingham 019	E02001845	2
Birmingham 036	E02001862	2
Birmingham 051	E02001877	2
Birmingham 094	E02001920	2
Birmingham 096	E02001922	2
Birmingham 134	E02006895	2
Birmingham 140	E02006901	2
Coventry 019	E02001976	2
Dudley 002	E02002001	2
Dudley 004	E02002003	2
Dudley 009	E02002008	2
Dudley 024	E02002023	2
Dudley 030	E02002029	2
Dudley 037	E02002036	2
Dudley 043	E02002042	2
Sandwell 025	E02002067	2
Solihull 006	E02002086	2
Walsall 006	E02002115	2
Walsall 023	E02002132	2
Walsall 029	E02002138	2
Wolverhampton 002	E02002150	2
Wolverhampton 009	E02002157	2
Wolverhampton 011	E02002159	2
Wolverhampton 017	E02002165	2
Redditch 001	E02006721	2
Redditch 004	E02006724	2
Worcester 011	E02006744	2
Wyre Forest 004	E02006770	2
Wyre Forest 010	E02006776	2
Tewkesbury 009	E02004674	2
Caerphilly 016	W02000305	2