

A stylized, light gray map of the North West Cambridge area is positioned on the left side of the page, partially overlapping a dark blue background. The map shows the irregular shape of the region with some internal details.

NORTH WEST **cambridge**

Bus Stop Strategy

Condition 38

September 2013

North West Cambridge

**Discharge of Condition 38 of the
outline planning permissions**

11/1114/OUT and S/1886/11

- Bus Stop Strategy

On behalf of **University of Cambridge**



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1 Introduction

1.1 Overview

1.1.1 Peter Brett Associates LLP (referenced from here as Peter Brett Associates, or PBA) has been commissioned by The University of Cambridge to provide technical information to support the discharge of transport-related conditions associated with the North West Cambridge (NWC) Development outline planning permission granted on 22nd February 2013 - planning application references 11/1114/OUT (Cambridge City Council) and S/1886/11 (South Cambridgeshire District Council).

1.1.2 North West Cambridge comprises a Sustainable Urban Extension consisting of:

Market Housing	Up to 1,500 units	
Key Worker Housing	Up to 1,500 units	
Academic Research	At least 60,000m ²	Total - Up to 100,000m ²
Commercial Research	Up to 40,000m ²	
Collegiate	Up to 2,000 bed spaces	
Local Centre / Community	Up to 5,300m ² gross retail floorspace (the Food Store is not more than 2,000 m ² net floorspace Further Local Centre / Community facilities includes: Up to 500m ² community centre, Up to 450 m ² indoor sports provision Up to 200m ² Police office, Up to 700m ² Primary Health Care	
Hotel	Hotel – Up to 7,000 m ² (130 bed spaces)	
Nurseries	Up to 2,000m ²	
Senior Living	Up to 6,500 m ² (75 units of Sheltered Accommodation have been assumed in the Assessment)	
School	3,750 m ²	
Energy Centre		

1.2 Background Planning and Transport Context

1.2.1 Technical assessment work was undertaken and submitted in September 2011 by Peter Brett Associates LLP to support the outline planning application including a Transport Assessment, a Travel Plan Statement and contribute the transport chapter of the Environmental Statement.

1.2.2 North West Cambridge received a planning permission on 22 February 2013, subject to a number of conditions. The outline planning consent includes 13 planning conditions relating to access and movement, numbered 36 to 48. This report sets out the methodology and results of the assessment to allow the discharge of Condition 38. In summary, this consists of providing further details on the location, design, specification, management, maintenance and phasing of bus stops within North West Cambridge.

2 Background – Planning and Transport Assessment Context

2.1 Introduction

- 2.1.1 This section reviews the planning condition, and comments within the agreed Transport Assessment which supported the outline planning application.

2.2 Planning Condition and Supporting text

- 2.2.1 Planning Condition 38 was drafted to ensure that details of proposed bus stops within North West Cambridge are reviewed following the grant of outline planning permission.

- 2.2.2 Condition 38 states that:

No development, apart from enabling works agreed in writing by the local planning authority, shall commence until such a time as details relating to the location, design, specification, management and maintenance and phasing of bus stops within the development have been submitted to and approved by the local planning authority. Development shall then be carried out in accordance with the approved details.

- 2.2.3 The reason provided for this planning condition is the need to ensure that adequate public transport facilities are provided for future residents of the site in accordance with the North West Cambridge Area Action Plan policy NW16.

2.3 Review of work in the previous Transport Assessment

- 2.3.1 Chapter 8 of the Transport Assessment prepared by Peter Brett Associates submitted in September 2011 in support of the outline planning application considered the public transport strategy for North West Cambridge. Section 8.6 considered on site bus infrastructure including “high quality bus stops”.

- 2.3.2 Paragraph 8.6.2 makes reference to bus stops:

High quality bus stops act as the gateway to the network....It is considered that six pairs of bus stops would be required on the development site. The provision of these would be phase to reflect the progress of the emerging development.

- 2.3.3 The precise locations of the bus stop pairs within North West Cambridge would need still to be agreed, but would be carefully located to reflect the best location in terms of the road alignment, and delivering accessibility to the bus users within the Development.

3 Information to respond to the Condition

3.1 Overview

3.1.1 This section summarises details of the proposed Bus Stops within North West Cambridge to respond to the following aspects of the Condition:

- i) Location of the Bus Stops;
- ii) Design and Specification;
- iii) Management and Maintenance; and
- iv) Phasing of delivery.

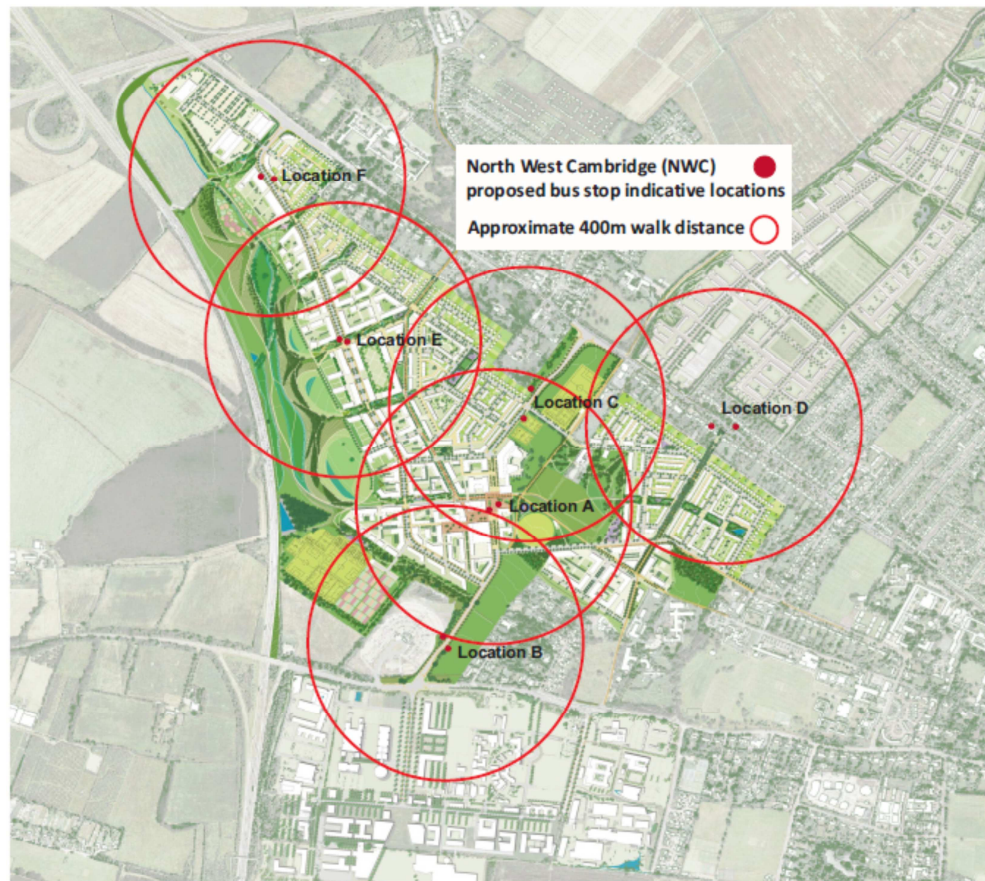
3.2 Location

3.2.1 The following criteria have been applied to determine the location of the bus stops within the Development:

- bus stops would be located away from accesses, junctions and crossings to minimise obstructions to visibility splays;
- bus stops would ideally be located on straight sections of road with good forward visibility;
- the boarding / alighting area should not block vehicle access routes (such as footway crossovers for residential properties);
- the footway widths would be adequate for both bus stop users and other pedestrian traffic;
- the position of the bus shelter and flag should not conflict with existing or proposed street furniture such as bins and trees;
- where practical and feasible, bus stops should be located close to pedestrian crossings;
- the pairs of bus stops should be ideally 'tail-to-tail' on opposite sides of the road to avoid pairs of buses blocking the access road; and
- bus stop clearways and cages should be located to avoid conflict with traffic calming features such as raised tables.

3.2.2 The proposed locations of the six bus stop pairs to serve North West Cambridge are shown on the following Figure 3.1, these reflect the Public Transport strategy set out in Chapter 8 of the Transport Assessment. The bus stop location has been chosen to maximise the bus accessibility to the Development, these stops would be delivered to reflect the progress of the emerging development.

Figure 3.1 - Bus Stop locations



3.2.3 In greater detail:

- **Location A** – two stops would be provided within the bus-only section to the east of the Market Square pedestrianised zone (to be maintained by Cambridge City Council);
- **Location B** – two stops would be provided on the Development access road to the north of the Madingley Road junction, to the east of the Madingley Road Park and Ride site. This would enable Uni4 users not going from North West Cambridge to park their cars within the Park and Ride site still and use the Uni4 service (to be maintained by Cambridge City Council);
- **Location C** - two stops would be provided on the Development access road to the south of the Huntingdon Road East junction (the southern stop is to be maintained by Cambridge City Council, the northern stop by South Cambridgeshire District Council);
- **Location D** – to enable the eastern areas of the Development to access the existing services routing along Huntingdon Road, two stops would be provided on Huntingdon Road, near the current private road access to Cambridge Research Laboratories. With this improved provision, an adjacent pair of existing bus stops (formed by signs) could be reallocated due to the improved offer (to be maintained by Cambridge City Council);
- **Location E** - two stops would be provided on the Development access road, to the north-west of the Market Square pedestrianised zone (to be maintained by South Cambridgeshire District Council); and

- **Location F** - two further stops would be provided on the Development access road to the south of the Huntingdon Road West junction, north of the Location E stops (to be maintained by South Cambridgeshire District Council).

3.3 Design and Specification

- 3.3.1 **Bus shelters** – the County Council requirement is for high-quality three sided shelters.
- 3.3.2 The guiding principles for all bus stop design were set out in Section 8.6 of the Transport Assessment – this identified high quality bus stops to provide a positive image for the North West Cambridge bus services. A common design specification will be applied to the five pairs of stops within North West Cambridge (at Locations A, B, C, E and F). The University is considering a bespoke design, and this will be progressed with the local authorities.
- 3.3.3 The sixth pair of stops on Huntingdon Road (Location D) will be in accordance with Cambridgeshire County Council's standard specification for bus stops along this corridor.
- 3.3.4 The Transport Assessment cited the following design considerations, which form the basis of the sub-headings below.
- 3.3.5 **Seating and lighting** – the provision of bench-type seating and lighting within the bus shelter are a requirement of the County Council's specification. Supplementary lighting would be provided from the street lighting of carriageway and footways areas. The type and length of seats within shelters will reflect the County Council's specification for existing Landmark shelters on the Cambridgeshire Guided Busway.
- 3.3.6 **Comprehensive timetable information** – display panels would be provided within the bus shelter to accommodate current timetables, network maps and fare details.
- 3.3.7 **Bus stop flag** – each stop would be provided with a bus stop flag mounted on the roof of the bus shelter, reflecting current practice for on-street stops in Cambridge on the Cambridgeshire Guided busway. The flag would as a minimum provide information on services calling at the stop.
- 3.3.8 **Real Time Passenger Information (RTPI)** – communication connections for RPTI would be provided at every stop. Information such as next bus departure times would then be relayed to bus users through display screens mounted within the bus shelters.
- 3.3.9 **Raised kerbs** – reflecting the County Council's standard, the kerb would be raised at all stops to a minimum upstand of 125mm to assist less mobile bus users and those with pushchairs and heavy luggage.
- 3.3.10 **Litter bins** – bins would be provided in close proximity to the stops, located such that they do not impede bus access. Litter bin locations will reflect best practice shown in the construction drawings for on-street stops on the Cambridgeshire Guided Busway.
- 3.3.11 **"BUS STOP" cage and clearway markings** – markings in accordance with the 2002 Traffic Signs Regulations and General Directions (TSRGD) will be provided to prevent obstructive parking / loading impeding kerbside bus access.

3.4 Management and Maintenance

3.4.1 Management and maintenance of bus stops within North West Cambridge will be governed by the agreed strategy for adoption of highways within the development site:

- i) on the Site Access roads to be adopted – Locations B, C, E, and F - the local highway and planning authorities would become responsible for management of the bus stop infrastructure;
- ii) on the sections of the Site Access roads that are to remain as privately owned – Location A on the bus-only section to the east of the Local Centre - the Estate Management Company will assume responsibility for the highway and bus stop infrastructure;
- iii) for the proposed pair of stops at Location D located off-site on Huntingdon Road, the local highway and planning authorities would be responsible for the construction, management and maintenance of these stops.

3.4.2 Further details are provided in this section.

Maintenance of road markings

3.4.3 Future maintenance of the bus stop carriageway markings on adopted roads will be the responsibility of the highway authority.

3.4.4 On sections of Site Access roads to remain privately owned, the future maintenance of the carriageway markings would be undertaken by the Estate Management Company.

Bus shelter maintenance

3.4.5 The maintenance of the bus shelters at Location A will be the responsibility of the Estate Management Company.

3.4.6 The maintenance of the bus shelters at Locations B, C, D, E and F will be the responsibility of the local planning authorities (Cambridge City Council or South Cambridgeshire District Council, depending upon location).

3.4.7 The Section 106 contributions for the bus shelter maintenance have not been agreed yet, but would be established following agreement to the shelter design.

Maintenance of RTPI and public transport information

3.4.8 Some specific components of the bus stop infrastructure will require a common management and maintenance approach.

3.4.9 Cambridgeshire County Council will be responsible for management and maintenance of the Real Time Passenger Information at all the bus stops at North West Cambridge. Technology installed within the bus shelter such as RTPI displays would be maintained on a city-wide basis by a council appointed contractor. The University will be providing commuted sums to provide for RTPI to the County Council consistent with the obligations set out in the S106 legal agreement.

3.4.10 Maintenance of transport information such as maps and bus timetables would be the responsibility of the bus operator, voluntarily supported by the North West Cambridge Framework Travel Plan Coordinator.

3.5 Phasing

- 3.5.1 Bus stop infrastructure will be phased to support the introduction of bus routes within the North West Cambridge site as the Development emerges. The proposed Development Bus Services are shown on Section 106 Figure 10 included in Appendix A. Table 3.1 summarises the expected bus service provision and bus stop delivery phases.

Table 3.1 – Phased introduction of bus stops

Services within NWC	Bus Stops required (see Figure 3.1)
Uni4	A and B
Uni4 Citi8 Science Park	A, B, C, D and E
Uni4 Citi5 Science Park	A, B, C, D, E and F

- 3.5.2 Initial phase – the Uni4 service would be extended to the developed area of North West Cambridge via Madingley Road. The bus stop pairs at Location A (to the east of the Local Centre) and Location B (to the east of Madingley Road Park and Ride site) would be required to support this route extension.
- 3.5.3 Second phase – as the development continues, the Citi8 service would be introduced as an interim service via the Huntingdon Road West Junction, and a new service would be introduced linking West Cambridge via North West Cambridge to the Cambridge Science Park. This would require the bus stop pairs at Location C on the Site Access to the south of Huntingdon Road East junction, the additional bus stop pair on Huntingdon Road at Location D, and potentially the bus stop pair at Location E to the north-west of the Local Centre.
- 3.5.4 Final phase – towards the completion of the Development, Citi8 would be replaced by the diverted Citi5 service, triggering the activation of the remaining bus stop pairs - at Location F.

4 Conclusions

- 4.1 This report has been produced by Peter Brett Associates to respond specifically to Condition 38 of the outline planning permissions 111/1114 and S/1886/11 for the development relating to land between Huntingdon Road, Maddingley Road and M11 North West Cambridge, Cambridgeshire.
- 4.2 This report contains the details relating to the location, design, specification, management maintenance and phasing of bus stops within the North West Cambridge development in accordance with the requirements of Condition 38.
- 4.3 To deliver quality coverage across the Development, six pairs of bus stops would be provided. A minimum of two bus stop pairs would be implemented during the initial development phase.
- 4.4 The specification for the bus stops within North West Cambridge will conform to design criteria set out in the Transport Assessment.
- 4.5 This report therefore provides all necessary details to allow Condition 38 of the outline planning permissions to be discharged.

Appendix A Development bus services

