



LAND AT STUBCROFT FARM,  
EAST WITTERING

LOCAL PLAN PROMOTION REPORT




February 2019

Barratt Homes

**MIXED USE STRATEGIC DEVELOPMENT  
LAND AT STUBCROFT FARM  
EAST WITTERING**

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**CONTROLLED DOCUMENT**

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## 1. INTRODUCTION

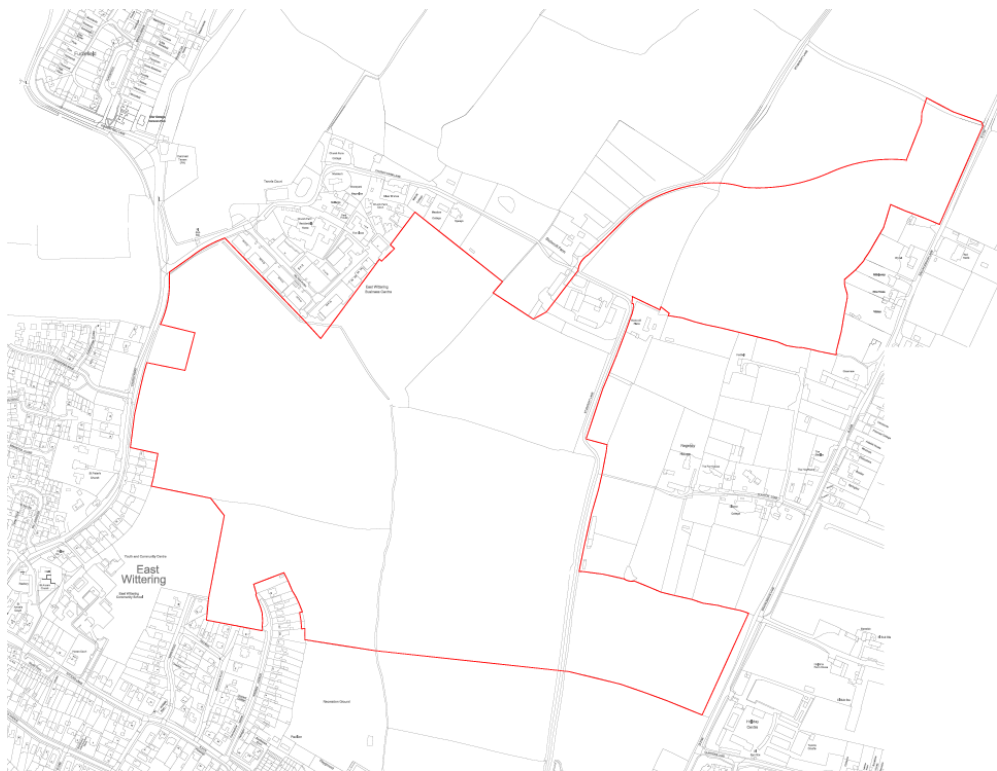
1.1 This Local Plan Promotion Report (LPPR) has been prepared by Paul Basham Associates on behalf of Barratt Homes to support a development site at Stubcroft Farm, East Wittering.

1.2 Chichester District Council (CDC) are currently consulting on the Chichester Local Plan Review Preferred Approach 2016-2035 (from December 13<sup>th</sup> to 7<sup>th</sup> February). Within the preferred approach a total of 350 residential dwellings have been allocated within East Wittering. Whilst no specific sites have been allocated in East Wittering under the Local Plan Review it is understood that East Wittering and Bracklesham Parish would allocate the 350 units within their upcoming neighbourhood plan, if this figure is adopted.

1.3 As part of the Local Plan consultation a 'Sustainability Appraisal for the Chichester Local Plan Review – Preferred Approach' (October 2018) has been prepared. This document seeks to assess the social, environmental and economic effects of the emerging Local Plan to ensure that decisions will be made with the objective of creating sustainable developments. The relevant transport criteria and score for East Wittering Parish are identified below and will be discussed in the subsequent chapters of this LPPR:

- 3A: Does the option reduce air pollution from industrial processes and transport? = single negative quoting 'without major improvements on the A27 large scale development here will exacerbate existing problems at the Stockbridge roundabout where the A286 links in'.
- 4B: Does the option reduce the need to travel? = double negative quoting 'strategic development would be on a scale to meet the needs across the district and beyond. Inevitably development on the south of the Manhood would add to travel for the facilities of Chichester City Centre that are not available elsewhere'.
- 6A: Does the option achieve modal shift to more sustainable forms of transport, integrating bus and train networks? = Single negative quoting 'there is a good bus service, but this is restricted by the access across the A27. No train service. Car travel more likely'.
- 6B: Does the option improve networks for cyclists and pedestrians? = Neutral quoting that 'potential to improve local links to East Head and Medmerry, but longer distance links would require an off-road route to be identified'.
- 6C: Does the option reduce congestion? = single negative quoting 'will add congestion the A27 and potentially City Centre via Stockbridge roundabout'.
- 9: Does the option provide access to services and facilities? = negative quoting 'some local shops but access to secondary school, hospital and further education worse than some other options and settlement would be greater distance away from these amenities'.

- 1.4 A review has also been undertaken of the revised A12 Infrastructure Delivery Plan. This identifies a number of infrastructure improvements for the East Wittering Parish to be delivered over the plan period. The measures identified for transport relate to the creation of bridleway links and funding improvements to the A27 corridor. This report will identify how and if any of these measures could be provided/funded as part of this site.
- 1.5 In addition, Peter Brett Associates were commissioned by CDC to assess and review the Chichester Transport Model for the adopted Chichester Local Plan (2014-2029) whilst also seeking to confirm the mitigation works required to support the housing proposed as part of the Local Plan 2016-2035 review. As such the subsequent 'Transport Study of Strategic Development' report has been reviewed.
- 1.6 This LPPR seeks to support this site for a residential development for which there are three options for consideration: Option 1 - 298 units and employment, Option 2 - 602 units, employment, commercial space, a secondary school, local centre and care home and Option 3 – 875 units, employment, commercial space, a secondary school, local centre and care home. The site's location is shown in **Figure 1**.



**Figure 1:** Site Location

- 1.7 This LPTR will consider the proposed development's suitability and impact in terms of connectivity to existing infrastructure and amenities, the design and operational capacity of the access arrangements, and the impact of the development on the local road network and the A27, before drawing conclusions.

## 2. EXISTING SITE AND SURROUNDINGS

- 2.1 The site is currently made up of several agricultural fields to the north of East Wittering. To the north of the site lies further agricultural land, as well as the existing Hilton Park industrial estate to the northwest. The site fronts onto Bracklesham Lane to the east, whilst further agricultural fields lie to the south (which were subject to a withdrawn planning application for the erection of 50 dwellings). To the west, the site fronts onto Church Road. The proposed development would form a natural extension to East Wittering, with easy and convenient permeability through to the Town Centre.

### Public Rights of Way

- 2.2 Public Right of Way 3696 “Stubcroft Lane” is a footpath that intersects the site on a north-south orientation providing access to Stubcroft Farm. Similarly, an unnamed stream intersects the site on a north-south orientation. Public Right of Way 3695 is a bridleway providing access from Stubcroft Lane onto Bracklesham Lane through Middleton Close. The Public Rights of Way surrounding the site are shown in **Figure 2**, with PROW 3696 shown in pink and 3695 shown in green.



Figure 2: Public Rights of Way within the site



- 2.3 CDC's Infrastructure Delivery Plan identifies the need for the creation of a new bridleway connection between Church Road and the Caravan Park on Bracklesham Lane, which has recently been consented for the development of 85 dwellings (planning application reference: 18/00753/OUT). The site is well located to provide this connection with Barratt Homes owning the land in between Church Road and Bracklesham Lane. A site in this location could therefore provide this link as a Section 106 contribution or through the provision of a formalised route.

### **Bracklesham Lane**

- 2.4 Bracklesham Lane (B2196), located to the east of the site, provides an arterial route between East Wittering and the A27 at Chichester. In the vicinity of the site, Bracklesham Lane features a 30mph (southbound) / 40mph (northbound) posted speed limit boundary. The conditions of Bracklesham Lane are shown in **Photograph 1**.



**Photograph 1:** Conditions on Bracklesham Lane (looking south)

- 2.5 Bracklesham Lane is approximately 6m in width, with a footway provided on the eastern side of the carriageway adjacent to the site frontage. A large hedgerow separates Bracklesham Lane from the site. Four bus stops are located within the vicinity of the site on Bracklesham Lane; a pair of bus stops are located adjacent to Clappers Lane to the south and a pair of bus stops located adjacent to the entrance to the South Downs Holiday Village.
- 2.6 The traffic conditions on Bracklesham Lane were investigated through two ATC surveys undertaken in October 2016; one in the vicinity of the access to the south and another in the vicinity of the Island Meadow caravan park to the north. The results of these surveys are shown in **Table 1**, with the full traffic survey results shown in **Appendix B**.

Bracklesham Lane	Direction	0800-0900 Traffic Volume	1700-1800 Traffic Volume	24H Traffic Volume	85% Vehicle Speeds
Northern Survey	Northbound	294	192	3493	45.9
	Southbound	176	327	3475	45
Southern Survey	Northbound	292	181	3324	40.9
	Southbound	178	337	3498	43.9

**Table 1:** Traffic Surveys on Bracklesham Lane

2.7 **Table 1** indicates that Bracklesham Lane is moderately trafficked, albeit with vehicles travelling in excess of the 30mph speed restriction, which comes into force (when heading southbound) approximately 20m to the north of the northern survey. The northern survey has been used to confirm southbound speeds/volume along the site frontage whilst northbound speeds/volume have been confirmed using the results of the southern survey. This indicates 85<sup>th</sup> percentile speeds of 40.9mph northbound and 45mph southbound and 24 hour traffic flows of 3,324 and 3,475 northbound and southbound respectively .

### Church Road

2.8 Church Road is located to the west of the site and also acts as a north/south route to and from East Wittering and the A27. Church Road is subject to a 30mph speed limit across the site frontage. At Church Road’s most northern point (Piggery Hall Lane) it forms a crossroads with Rockwood Road (B2179) and Itchenor Road. In the vicinity of the site Church Road is approximately 6m in width, with frequent bends along its length. As such, Church Road is a less attractive route into and out of East Wittering, and this is reflected in the recorded traffic flows.

2.9 Church Road has a footway along the eastern side of the carriageway, which is segregated from the carriageway by a hedgerow. This footway is approximately 1.5m wide and runs c.270m north of the site boundary to Church Farm Lane. Access to East Wittering Community Primary School can be achieved from the footway on Church Road. The characteristics of Church Road are shown in **Photograph 2**.



**Photograph 2:** Conditions on Church Road (looking south)

- 2.10 Opposite the site frontage onto Church Road is the Barratt Homes “Sandpiper Walk” development of 50 homes (planning permission reference 13/03286/FUL). This development has been fully constructed and is shown in **Photograph 3**.



**Photograph 3:** Sandpiper Walk development (looking west)

- 2.11 Traffic surveys were undertaken to investigate traffic conditions on Church Road. In October 2016, two ATC’s were installed in the vicinity of the Sandpiper Walk development access, and a summary of the survey results are shown in **Table 2**, with the full traffic survey results shown in **Appendix B**.

Church Lane	Direction	0800-0900 Traffic Volume	1700-1800 Traffic Volume	24H Traffic Volume	85% Vehicle Speeds
Northern Survey	Northbound	150	76	1441	36.8
	Southbound	123	135	1556	35.5
Southern Survey	Northbound	144	96	1510	38.3
	Southbound	119	147	1617	35.1

**Table 2:** Traffic Surveys on Church Road

- 2.12 To provide a more accurate representation of traffic flows and speeds at the site frontage, southbound traffic speeds and volumes have been derived from the northern survey and northbound traffic speeds and volumes have been derived from the southern survey. The results identify 85<sup>th</sup> percentile speeds of 35.5mph southbound and 38.3mph northbound. The result indicate that Church Road is relatively lightly trafficked with 24 hour flows of 1,510 northbound and 1,556 southbound.

### **Stocks Lane and East Wittering Local Centre**

- 2.13 To the south west of the site on Stocks Lane / Cakeham Road lies East Wittering Local Centre. This is approximately 850m (an 11-minute walk) south of the site via Church Road. Stocks Lane features footways of approximately 2m in width on both sides of the carriageway which are facilitated by dropped kerbs, informal and controlled crossing points.

- 2.14 There are also two bus stops on Stocks Lane that cater for the number 52/53 bus services to Chichester (as a loop). This bus service operates alongside a number of school services on Monday to Friday in the AM and PM peak periods during the school term.
- 2.15 East Wittering Local Centre offers numerous local facilities including a doctor’s surgery, pharmacies, shops, pubs and restaurants. Convenient pedestrian and cycle permeability between the site and East Wittering allows for residents to enjoy travelling to local facilities by sustainable modes. The characteristics of East Wittering local centre are shown in **Photograph 4**.



**Photograph 4:** East Wittering Local Centre (looking west)

2.16 The CDC Local Plan Review Background paper ‘Settlement Hierarchy’ (December 2018) classifies East Wittering/Bracklesham as a ‘Settlement Hub’ alongside Selsey, Southbourne and Tangmere. This document identifies that whilst a number of local services are available, unlike other settlement types there is a possibility to enhance the provision in town/village centres. There could therefore be opportunity as part of this development to provide a number of local services which would further encourage the uptake of sustainable modes.

2.17 The sites proximity to existing local amenities is summarised in **Table 3**.

Amenity	Distance	Walking time
East Wittering Primary School	500m	5 minutes
Food convenience	750m	10 minutes
Witterings Library	750m	10 minutes
Pharmacy	850m	10 minutes
Doctor’s Surgery	850m	10 minutes
Primary School	850m	10 minutes
Bank	850m	10 minutes

**Table 3:** Local Amenities

- 2.18 The site is well located to amenities with East Wittering Local Centre, which is accessible via a 10 minute walk from the site. It would therefore be convenient and feasible for residents of the development to walk or cycle when accessing local amenities within East Wittering. For destinations within the City Centre or outside East Wittering there is the opportunity for residents to travel via local bus services (see **Table 4**).
- 2.19 East Wittering has received a double negative under criteria 4B in CDC's Sustainability Appraisal, on the basis that large scale development would be needed to accommodate the needs of the district and beyond. However, this statement is true of the majority if not all of the settlements located outside the City Centre and particularly those located south of the A27. This statement does not take into consideration that there is the opportunity to provide additional services and amenities to further meet the needs of development south of the A27 and reduce the opportunity to travel via private car. Such services could be provided or improved as part of this development which would encourage the uptake of sustainable travel modes. This would help to alleviate the concerns raised for development in East Wittering, unless a large scale development could be facilitated.
- 2.20 Under criteria 9 the Accessibility Appraisal states that East Wittering has received a negative on the basis that access to secondary schools, hospitals and further education is worse than some other options. Again, this statement is true of numerous locations outside the City Centre, with it likely that hospitals, further education and secondary schools are not provided within village/town centres. As a result, this statement was used in several instances in the Accessibility Appraisal however each location was given a different rating despite the constraint remaining. The only way that this concern could be overcome is if these services could be provided within East Wittering or if access to these services could be improved through mitigation.
- 2.21 A development site in this location would provide close connection to existing local services and would not require residents to travel 'further' to amenities as suggested in the Accessibility Appraisal. The site is located in a 10 minute walking distance of a primary school, doctors surgery and numerous retail stores which gives opportunity for residents of the development to travel via sustainable travel modes. It should also be noted that there is opportunity for existing pedestrian infrastructure to be improved as part of the development, which would further enhance the development's connection to local services and facilities.

### **Pedestrian Accessibility**

- 2.22 The proposed development benefits from a range of facilities within comfortable walking distance. A continuous pedestrian connection is available between the site and the local centre, with a footway of 1.5m, set back from the carriageway, provided on the eastern (development) side of the Church Road carriageway, heading south into East Wittering.
- 2.23 At the junction of Church Road and Stocks Lane, dropped kerbs and pedestrian refuge islands assist pedestrian access over Stocks Lane. Within East Wittering, footways of 1.5m to 2m are provided on both sides of the carriageway at Stocks Lane and Cakeham Road.
- 2.24 This direct pedestrian connection ensures that walking into East Wittering is a convenient and attractive mode of travel of residents of the proposed development. However, there is an opportunity to improve pedestrian connectivity at the junction of Church Road and Stocks Lane.
- 2.25 The proposed development would seek to maximise opportunities to encourage sustainable travel and make use of the facilities available within East Wittering by connecting into and contributing towards the range of sustainable travel options and infrastructure in the vicinity of the site.

### **Cycle Accessibility**

- 2.26 Whilst there are no formalised cycle facilities in the vicinity of the site, the local highway network is attractive for cycling due to the wide roads, parking restrictions and low vehicle speeds. Cycle parking is provided within the local centre.
- 2.27 Within the development, cycling would be encouraged through the application of Manual for Streets principles, ensuring the local streets are not car dominated and pedestrians and cyclists are given greater priority in street design.
- 2.28 A local cycle route, "Salterns Way", is located 4km to the north of the site, accessible via both Church Road and Bracklesham Way. Salterns Way local cycle route provides a low-traffic route access to West Wittering, Itchenor and Chichester, where it connects to National Cycle Network Route 2.
- 2.29 When reviewed in the Sustainability Appraisal criteria 6B, was given a neutral rating given that there is opportunity to improve local connections. As part of the development a contribution could be secured to support the delivery and improvement of routes towards the East Head and Medmerry.

## Bus Accessibility

2.30 The site benefits from bus stops located on Bracklesham Lane and Stocks Lane at East Wittering local centre. These bus stops comprise a pole only, with some of the bus stops incorporating a layby whilst others feature a yellow bus cage on the carriageway. Bus services available from these bus stops are shown in **Table 4**.

Bus Service	Route	Provider	Weekday Service	Saturday Service	Sunday Service
52	Chichester - Witterings	Stagecoach	30 minutes	30 minutes	Hourly
53	Witterings – Chichester	Stagecoach	30 minutes	30 minutes	Hourly
150	Itchenor - Selsey	Compass Travel	3 times a day	N/A	N/A
614	Witterings – Selsey Academy	Stagecoach	Twice a day	N/A	N/A
652/3	Birdham – Bishop Luffa School	Stagecoach	Twice a day	N/A	N/A

**Table 4:** Accessible bus services

2.31 **Table 4** sets out that the development benefits from a regular bus service to and from Chichester, 7 days a week. With services starting at 7.54am and arriving in Chichester at 8.20am, the 52/53 bus service presents an attractive alternative to the private car for commuters. Chichester Bus Station is located adjacent to Chichester Railway Station and as such allows for linked bus and rail trips.

2.32 Early engagement with Stagecoach has been undertaken to identify opportunities and constraints to the available bus services and how to maximise bus travel.

2.33 Stagecoach identified that the 52/53 bus services are nearing capacity during peak hours, and that the capacity of this bus service is affected by existing congestion on the local road network. However, the bus company acknowledged that there were opportunities to maximise bus usage and minimise any negative impact caused by the development:

- Internal streets should be designed to accommodate buses
- A link between Bracklesham Lane and Church Road should be allowed for
- Connectivity to existing bus stops, creating interchanges for pedestrians, cyclists and bus users (especially in the development's initial phases)
- Consideration to be given (by Stagecoach) to the opportunities and constraints presented by routing a bus through the site
- Review bus frequency and capacity including contributing towards improvements if necessary
- Provide a financial contribution towards bus improvements

2.34 These options (and others) will be explored through any subsequent planning application to ensure that bus uptake is maximised and the impact on the bus services available is minimised. In addition, CDC are reviewing potential for providing bus priority lanes which would improve conditions for buses when accessing the City Centre and make local services more attractive for commuters. The implementation of such routes would address the concerns raised under criteria 6A of the Accessibility Appraisal.

#### **Rail Accessibility**

2.35 The development site is located 12km from Chichester Railway Station. Chichester Railway Station provides access to a range of services with destinations including Brighton, Southampton, Littlehampton, Portsmouth Harbour and London Victoria, with a train calling at the station every 10 minutes.

2.36 With the railway station accessible by bus (with a reasonable journey time and the bus station located next to the train station), longer distance commuting by rail (linked to the development site by bus) is an attractive alternative to the private car.



### 3. PROPOSED DEVELOPMENT

- 3.1 The site proposes the development of 298 residential units and employment space with access onto Church Road and Bracklesham Lane. An indicative masterplan demonstrating the proposal is attached as **Appendix A**. The residential development of the site creates the opportunity for other community land-orientated uses to be provided on the site to support both the development and the existing residents of East Wittering.
- 3.2 CDC's Infrastructure Delivery Plan identifies the need for a number of green infrastructure amenities that could be secured through this development. These include allotments, amenity space, recreation ground and play space for children.
- 3.3 If upon review of the CDC Local Plan Review, a larger quantum of development was to be secured within East Wittering there is opportunity for the site to provide two further development scenarios of 602 units and 875 units for which there would be opportunity for supporting infrastructure to be provided such as commercial uses, a local centre, a care home, recreational space, leisure facilities and a secondary school. Both of these scenarios would also be accessed from Church Road and Bracklesham Lane.
- 3.4 For the purposes of this report the site has been assessed for the following development options. These are summarised in **Table 5**, with indicative masterplans attached in **Appendix A**.

Development Option	Proposals
1	298 Dwellings + Employment
2	602 Dwellings + Local Centre + 5FE Secondary School + Employment + Care Home
3	875 Dwellings + Local Centre + 5FE Secondary School + Employment/Commercial + Care Home

**Table 5:** Development Options

#### Access – Church Road

- 3.5 This access in to the site would take the form of a priority bellmouth junction from Church Road. The access would be 7.5m in width with radii of 10m. Footways would be provided on both the northern and southern side of the site spine road, and tie into the existing footways on Church Road. Visibility splays of 96.4m can be achieved, in accordance with DMRB standards for the recorded vehicle speeds. An indicative layout design is included in **Appendix C**.

## Access Modelling

- 3.6 A junction capacity assessment has been undertaken to demonstrate that a priority bellmouth junction configuration would operate with sufficient capacity. The junction capacity assessment was undertaken in Junctions 9, with the RFC (ratio of flow to capacity) value of a junction's arm indicating how much of the arm's capacity is in use. An RFC of 0.85 is used as a threshold for when alternative designs should be considered, whilst an RFC of 1.00 indicates the junction is operating at maximum capacity.
- 3.7 In order to provide a robust assessment, a 10-year future year assessment has been undertaken, with traffic flows recorded on Church Road in 2016 factored up to 2029 values. The results of this modelling exercise are demonstrated in **Table 6** to **8** with the full modelling outputs contained in **Appendix D**.

Church Road Access – Development Option 1	AM		PM	
	RFC	Queue	RFC	Queue
Church Road Northbound	0.02	0.0	0.04	0.01
Site Access (Right Turn)	0.04	0.0	0.02	0.0
Site Access (Left Turn)	0.06	0.1	0.03	0.0

**Table 6:** Summary of junction capacity for Church Road Access – Development Option 1

Church Road Access – Development Option 2	AM		PM	
	RFC	Queue	RFC	Queue
Church Road Northbound	0.11	0.2	0.09	0.1
Site Access (Right Turn)	0.13	0.2	0.06	0.1
Site Access (Left Turn)	0.12	0.1	0.04	0.0

**Table 7:** Summary of junction capacity for Church Road Access – Development Option 2

Church Road Access – Development Option 3	AM		PM	
	RFC	Queue	RFC	Queue
Church Road Northbound	0.13	0.2	0.12	0.2
Site Access (Right Turn)	0.21	0.3	0.08	0.1
Site Access (Left Turn)	0.15	0.2	0.05	0.1

**Table 8:** Summary of junction capacity for Church Road Access – Development Option 3

- 3.8 **Tables 6** to **8** demonstrate that the proposed junction would operate well within capacity for all development options. The results indicate a maximum RFC of 0.21 in the AM peak for option 3, with no vehicles anticipated to be queued on the site access waiting to turn right.

3.9 The safe operation of the junction would be ensured through the provision of pedestrian crossings in the form of dropped kerbs and tactile paving over the site access road, with pedestrians not required to cross Church Road to reach amenities in East Wittering. Similarly, the large geometries of the junction enable a large vehicle to safely enter and exit the site in forward gear. A Road Safety Audit would be prepared to support any future planning application to confirm the safe operation of the junction.

### Bracklesham Lane – Site Access

3.10 The access onto Bracklesham Lane would come forward as a three-arm roundabout, with an Inscribed Circular Diameter of 28m and two-lane approaches for both Bracklesham Lane northbound and southbound. An overrun area in the centre of the roundabout allows for large vehicles to complete all turning manoeuvres whilst creating deflection for cars to reduce north and southbound vehicle speeds. The proposed roundabout is included in **Appendix C**.

3.11 Providing a large roundabout on the approach to East Wittering will create a gateway feature on approach for traffic arriving into the more urban East Wittering area. As such, vehicle speeds are likely to be slightly reduced, and with the potential for the development to provide an ‘active frontage’ onto Bracklesham Lane, a 30mph speed restriction could be supported. Forward visibility splays (125.1m southbound and 97.6m northbound) on approach to the roundabout have been provided in accordance with DMRB standards for the recorded vehicle speeds.

### Access Modelling

3.12 A junction capacity assessment has been undertaken to demonstrate that the proposed roundabout access would operate with sufficient capacity. In order to provide a robust assessment, a 10-year future year assessment has been undertaken, with traffic flows recorded on Bracklesham Lane factored up to 2029 values. The results of this modelling exercise are demonstrated in **Table 9 to 11**, with the full modelling outputs contained in **Appendix D**.

Bracklesham Lane Access – Development Option 1	AM		PM	
	RFC	Queue	RFC	Queue
Bracklesham Lane Southbound	0.18	0.3	0.35	0.6
Bracklesham Lane Northbound	0.26	0.4	0.17	0.2
Site Access	0.14	0.2	0.06	0.1

**Table 9:** Summary of junction capacity for Bracklesham Lane Access - Development Option 1

Bracklesham Lane Access – Development Option 2	AM		PM	
	RFC	Queue	RFC	Queue
Bracklesham Lane Southbound	0.24	0.3	0.40	0.7
Bracklesham Lane Northbound	0.28	0.4	0.19	0.3
Site Access	0.29	0.4	0.11	0.1

**Table 10:** Summary of junction capacity for Bracklesham Lane Access - Development Option 2

Bracklesham Lane Access – Development Option 3	AM		PM	
	RFC	Queue	RFC	Queue
Bracklesham Lane Southbound	0.26	0.4	0.44	0.9
Bracklesham Lane Northbound	0.29	0.4	0.21	0.3
Site Access	0.41	0.7	0.15	0.2

**Table 11:** Summary of junction capacity for Bracklesham Lane Access - Development Option 3

3.13 **Tables 9 to 11** identify that the proposed roundabout onto Bracklesham Lane would operate well within capacity in all three development options, demonstrating that the site can be suitably accessed from Bracklesham Lane.

## 4. TRIP GENERATION

4.1 The site currently comprises a mix of agricultural land and fallow green fields. However, to ensure a robust trip generation assessment, it has been assumed that the existing site is not generating any trips onto the local highway network.

4.2 To determine the likely trip generation for the three development options, a TRICS investigation has been undertaken.

### Residential Trip Generation

4.3 To inform the trips generated by the proposed residential dwellings TRICS has been consulted using the following criteria:

- Private Residential land uses;
- Sites within England and Wales (Excluding Greater London);
- Sites in 'edge of town' locations and 'Residential' Zones;
- Sites of between 200 and 900 dwellings; and
- Surveys between 2015 and 2017, weekday surveys only.

4.4 Whilst the site is on the northern edge of East Wittering, due to the configuration of East Wittering the site is adjacent to and within walking distance of the local centre and primary school, suggesting that an "edge of town centre" trip rate could also be appropriate. However, the "edge of town" rate has been applied to ensure a robust trip generation assessment. The trip rates and trip generation values are summarised in **Table 12**, with the full TRICS outputs contained in **Appendix E**.

Residential Land Use	AM Peak Period (0800 - 0900)		PM Peak Period (1700 - 1800)		12 Hour (0700 - 1900)
	Arrivals	Departures	Arrivals	Departures	
Trip Rate /Dwelling	0.180	0.444	0.393	0.171	5.122
Trip Generation /298 Dwellings	54	132	117	51	1,526
Trip Generation /602 Dwellings	108	267	237	103	3,083
Trip Generation /875 Dwellings	158	389	344	150	4,482

**Table 12:** Trip rates and generation - residential land use

4.5 **Table 12** sets out the trip generation of the residential aspect of the three options. It should be noted that all development options would provide mixed use developments and as such it is likely that a proportion of these trips would not utilise the highway network outside of the development site. However, in the interests of providing a robust assessment, all residential vehicle trips are assumed to be external to the development.

## Commercial

- 4.6 All three development options include an element of commercial/employment land. Given the development's early stage the uses on-site are not fixed; however, it is anticipated to be B1a/b/c uses.
- 4.7 Whilst Option 2 and 3 includes either a secondary school or further commercial/ leisure land located to the north east of the site, for the purposes of this highway assessment, it has been assumed that this land will come forward as a 4-form entry secondary school and is not considered to generate any "commercial" trips at this stage.
- 4.8 To determine the trip generation of the commercial uses on site, a TRICS trip investigation has been undertaken for "Industrial Estate" land uses, to ensure the variety of possible commercial land uses are taken into account. Similarly, the location and size of the commercial land is flexible and as such, an indicative site area of 8,500m<sup>2</sup> has been applied to all scenarios to provide a robust assessment.
- 4.9 The full TRICS criteria used to determine the trip generation is shown below, with the full TRICS outputs summarised in **Table 13** and shown in full in **Appendix E**.
- "Industrial Estate" Land Use
  - Sites within England and Wales (Excluding Greater London);
  - Sites in 'edge of town' locations and 'Residential' and 'Development' Zones;
  - Sites of between 0.5Ha and 3Ha; and
  - Surveys between 2010 and 2017, weekday surveys only.

Commercial TRICS	AM Peak (0800-0900)		PM Peak (1700 – 1800)		12 Hour
	Arrivals	Departures	Arrivals	Departures	
Trip Rate / Ha	16.947	8	5.053	18.842	282.632
Trip Generation /0.85Ha	14	7	4	16	240

**Table 13:** Trip rates and generation – commercial land uses

- 4.10 **Table 13** demonstrates that the indicative 0.85Ha commercial area would generate 240 trips per day, with 21 in the AM peak period and 20 in the PM peak period.
- 4.11 It is anticipated that an element of internalisation will occur for the commercial land use, with residents of the development commuting to the commercial land use, without using the wider highway network. However, in order to present a robust assessment, no trip generation deductions from the commercial land use are proposed.

## Secondary School

4.12 The site proposes to include a secondary school in Options 2 and 3, with this anticipated to be a 4 form entry. To determine the trip generation of the school, a TRICS investigation has been undertaken. The Criteria used are summarised below.

- “Secondary School” land use;
- Sites within England and Wales, excluding Greater London;
- Sites in “Edge of Town” locations, “Residential” zones;
- Schools of between 300 to 1,200 Secondary School pupils; and
- Surveys undertaken on weekdays only, between 2010 and 2017.

4.13 The trip rates resulting from the above criteria are summarised in **Table 14** with full TRICS outputs shown in **Appendix E**:

Secondary School TRICS	AM Peak (0800-0900)		PM Peak (1700 – 1800)		12 Hour
	Arrivals	Departures	Arrivals	Departures	
Trip Rate / Pupil	0.211	0.158	0.021	0.025	1.127
Trip Generation /600 (4FE)	127	95	13	15	676

**Table 14:** Trip rates and generation – secondary school

4.14 Consideration has been given to the potential for much of the school’s trip generation originating from the site itself. Office for National Statistics (ONS) population data “Families and Households: 2017” Figure 2 (included in **Appendix F**) indicates that 67% of households have dependent children. As such, it is anticipated that 586 dependent children will live in the development (for Development Option 3), and as such, these pupils (and their associated trips) will not have an impact on the local highway network as they will remain within the development.

4.15 It is anticipated that there would be a 50/50 split between primary and secondary school attendance, and it has therefore been assumed 293 pupils would attend the secondary school from the proposed development. The trip generation values have therefore been revised to reflect only the external trips, that is the trips which have an impact on the local highway network, and this is shown in **Tables 15**.

Secondary School TRICS	AM Peak (0800-0900)		PM Peak (1700 – 1800)		12 Hour
	Arrivals	Departures	Arrivals	Departures	
Trip Rate / Pupil	0.211	0.158	0.021	0.025	1.127
Trip Generation /307 Pupils	65	49	6	8	346

**Table 15:** Secondary school external trips

4.16 **Table 15** sets out that the secondary school could generate 346 external vehicle trips per day.

- 4.17 It is worth noting that the provision of a secondary school on site would provide a more local school for existing pupils in The Witterings, and as such would remove trips from Bracklesham Lane and the A286 that originated from The Witterings that were originally destined for schools nearer Chichester.
- 4.18 As such, consideration has been given to the proportion of trips that are associated with education trips per day. The DfT's National Travel Survey indicates in table NTS0409 that 6% of vehicle trips are associated with an educational use. As a result, of the 6,799 vehicles per day using Bracklesham Lane (as identified in the traffic survey), 408 of these are associated with educational trips.
- 4.19 A proportion of these 408 trips are anticipated to be diverted into the site to travel to the secondary school, and as such, the schools present a wider traffic benefit for Bracklesham Lane and the A286 by removing existing trips from these roads.

#### **Care Home**

- 4.20 Development Options 2 and 3 also propose a care home. As the site is in the early stage it is unknown at this stage how many bedrooms are proposed. Given the nature of the care home it is likely that a minor number of trips would be generated by the care home across the AM and PM peak hours. It is not considered that the trips generated by this use would have a significant impact on the operation of the site accesses or the surrounding highway network and therefore these trips have not been assessed as part of this LPPR.

#### **Local Centre**

- 4.21 Options 2 and 3 for the development of Stubcroft Farm include a local centre. This is anticipated to include local shops such as convenience stores, pharmacists, coffee shops and a post office.
- 4.22 The local centre is anticipated to only serve the development, as East Wittering local centre, located 850m to the south, provides access to a greater range of services for existing residents of East Wittering. As such, it is not anticipated that existing residents of East Wittering would travel an increased distance to access to the development's local centre. As a result, the local centre is not anticipated to generate any new trips onto the wider highway network.
- 4.23 It is acknowledged that there is the potential for residents of East Wittering to use the local centre on the way to or from another destination (e.g. on the way home from work). However, these trips are existing trips on the highway network, and not new trips generated by the local centre, and as such are already included in the traffic surveys of Bracklesham Lane and Church Road.



## 5. TRAFFIC DISTRIBUTION

5.1 To determine the likely distribution of traffic to and from the development site, 2011 Census data has been used. Dataset “WR01BEW- Location of usual residence and place of work” has been consulted for residents living in local output area “Chichester 13C”. **Table 16** details the destination boroughs (and specific areas within Chichester District itself) that residents of the proposed development would travel to, as well as the proportion of residents undertaking this journey, and the full Census Data is contained in **Appendix G**.

Destination	Percentage of Residents	Route from Site
Chichester Road – Terminus Road	13%	Northbound to A286; Northbound at Stockbridge Roundabout
East Wittering Town Centre	11%	Southbound to Stocks Lane
Almodington	7%	Site Area
Arun	7%	Northbound to A286; Eastbound at Stockbridge Roundabout
Birdham	5%	Northbound to A286
West Wittering	4%	Southbound to Stocks Lane; Westbound to West Wittering
Bracklesham	3%	Southbound to Stocks Lane and Eastbound at Bracklesham Drive
Northgate	3%	Northbound to A286; Eastbound at Stockbridge Roundabout
Oaklands Park	2%	Northbound to A286; Eastbound at Stockbridge Roundabout
Lavant and Goodwood	2%	Northbound to A286; Northbound at Stockbridge Roundabout
Apuldram and Donnington	2%	Northbound to A286
Selsey (North)	2%	Southbound to Stocks Lane; Eastbound on Clappers Lane
Quarry Lane Industrial Area	2%	Northbound to A286; Eastbound at Stockbridge Roundabout
East Broyle	2%	Northbound to A286; Eastbound at Stockbridge Roundabout
East Hampshire	2%	Northbound to A286; Westbound at Stockbridge Roundabout
Selsey (South West)	2%	Southbound to Stocks Lane; Eastbound on Clappers Lane
Horsham	1%	Northbound to A286; Eastbound at Stockbridge Roundabout
Mundham and Oving	1%	Northbound to A286
Bosham Area	1%	Northbound to A286; Westbound at Stockbridge Roundabout
South Harting	1%	Northbound to A286; Westbound at Stockbridge Roundabout
Hillingdon	1%	Northbound to A286; Eastbound at Stockbridge Roundabout
Wyke	1%	Northbound to A286; Eastbound at Stockbridge Roundabout
Worthing	1%	Northbound to A286; Eastbound at Stockbridge Roundabout
Havant	1%	Northbound to A286; Westbound at Stockbridge Roundabout
Sidlesham	1%	Southbound to Stocks Lane; Eastbound at Clappers lane
Bradshaw Road, Chichester Area	1%	Northbound to A286; Eastbound at Stockbridge Roundabout
Guildford	1%	Northbound to A286; Eastbound at Stockbridge Roundabout
Waverly	1%	Northbound to A286; Eastbound at Stockbridge Roundabout
Westminster	1%	Northbound to A286; Eastbound at Stockbridge Roundabout
Midhurst	1%	Northbound to A286; Northbound at Stockbridge Roundabout
Selsey	1%	Southbound to Stocks Lane; Eastbound at Clappers Lane
Selsey (South East)	1%	Southbound to Stocks Lane; Eastbound at Clappers lane
St. James', Chichester	0.5%	Northbound to A286; Eastbound at Stockbridge Roundabout
Ealing	0.5%	Northbound to A286; Eastbound at Stockbridge Roundabout
Merton	0.5%	Northbound to A286; Eastbound at Stockbridge Roundabout
Southwark	0.5%	Northbound to A286; Eastbound at Stockbridge Roundabout
Melbourne Road, Chichester	0.5%	Northbound to A286; Northbound at Stockbridge Roundabout
Basingstoke	0.5%	Northbound to A286; Westbound at Stockbridge Roundabout
Bosham	0.5%	Northbound to A286; Westbound at Stockbridge Roundabout
Selsey (East)	0.5%	Southbound to Stocks Lane; Eastbound at Clappers Lane
West East Wittering	0.5%	Southbound to Stocks Lane; Westbound at Northern Crescent

Graffham and Ducton	0.2%	Northbound to A286; Eastbound at Stockbridge Roundabout
Oving Crossroads Area	0.2%	Northbound to A286; Eastbound at Stockbridge Roundabout
Portfield Cemetery	0.2%	Northbound to A286; Eastbound at Stockbridge Roundabout
Lodsworth	0.2%	Northbound to A286; Eastbound at Stockbridge Roundabout
Fernhurst Area	0.2%	Northbound to A286; Eastbound at Stockbridge Roundabout
Green Hill, Liphook	0.2%	Northbound to A286; Eastbound at Stockbridge Roundabout
Petworth	0.2%	Northbound to A286; Eastbound at Stockbridge Roundabout
Milland	0.2%	Northbound to A286; Eastbound at Stockbridge Roundabout
Harrow	0.2%	Northbound to A286; Eastbound at Stockbridge Roundabout
Kensington and Chelsea	0.2%	Northbound to A286; Eastbound at Stockbridge Roundabout
Kingston Upon Thames	0.2%	Northbound to A286; Eastbound at Stockbridge Roundabout
Lewes	0.2%	Northbound to A286; Eastbound at Stockbridge Roundabout
Maidstone	0.2%	Northbound to A286; Eastbound at Stockbridge Roundabout
Norwich	0.2%	Northbound to A286; Eastbound at Stockbridge Roundabout
Reigate and Banstead	0.2%	Northbound to A286; Eastbound at Stockbridge Roundabout
Rushmoor	0.2%	Northbound to A286; Eastbound at Stockbridge Roundabout
Surrey Heath	0.2%	Northbound to A286; Eastbound at Stockbridge Roundabout
North Chichester	0.2%	Northbound to A286; Northbound at Stockbridge Roundabout
Parklands	0.2%	Northbound to A286; Northbound at Stockbridge Roundabout
Huntson	0.2%	Northbound to A286
Camden	0.2%	Northbound to A286; Westbound at Stockbridge Roundabout
Cheshire	0.2%	Northbound to A286; Westbound at Stockbridge Roundabout
Chiltern	0.2%	Northbound to A286; Westbound at Stockbridge Roundabout
Colchester	0.2%	Northbound to A286; Westbound at Stockbridge Roundabout
Chidham	0.2%	Northbound to A286; Westbound at Stockbridge Roundabout
East Broyle (north)	0.2%	Northbound to A286; Westbound at Stockbridge Roundabout
Southbourne	0.2%	Northbound to A286; Westbound at Stockbridge Roundabout
Westbourne	0.2%	Northbound to A286; Westbound at Stockbridge Roundabout
East Riding of Yorkshire	0.2%	Northbound to A286; Westbound at Stockbridge Roundabout
Fareham	0.2%	Northbound to A286; Westbound at Stockbridge Roundabout
New Forest	0.2%	Northbound to A286; Westbound at Stockbridge Roundabout
Southampton	0.2%	Northbound to A286; Westbound at Stockbridge Roundabout
Test Valley	0.2%	Northbound to A286; Westbound at Stockbridge Roundabout
Winchester	0.2%	Northbound to A286; Westbound at Stockbridge Roundabout
Selsey (East)	0.2%	Southbound to Stocks Lane; Eastbound on Clappers lane

**Table 16:** Development trip distribution

5.2 **Table 17** sets out the resulting assignment of trips onto the local road network.

Direction	Assignment	Proportion
Northbound from site	N/A	68%
Southbound from site	N/A	32%
Northbound	Local Northbound (Destinations South of A27)	8%
Northbound	Northbound at Stockbridge Roundabout	15%
Northbound	Westbound at Stockbridge Roundabout	18%
Northbound	Eastbound at Stockbridge Roundabout	26%
<b>Northbound</b>	<b>TOTAL</b>	<b>68%</b>
Southbound	Westbound at Stocks Lane	5%
Southbound	Eastbound at Socks Lane (Town Centre)	11%
Southbound	Eastbound at Stocks Lane (Bracklesham)	3%
Southbound	Eastbound at Stocks Lane (Selsey Via Clappers Lane)	14%
<b>Southbound</b>	<b>TOTAL</b>	<b>33%</b>

**Table 17:** Development Trip Assignment on the local road network

- 5.3 **Table 17** sets out the assignment of trips on the local road network, with 68% of trips heading north and 32% heading south. It is acknowledged that there is a +/- 1% margin for error, which is caused by the rounding of distributions and is not anticipated to have a material impact on the volumes of vehicles assigned to the network. This is demonstrated in the flow diagram included in **Appendix H**.
- 5.4 The proposed distribution and assignment of development trips compares favourably with approved distributions associated with recently approved developments at 'Clapper's Lane' (planning reference 14/01806/OUT) and the South Downs Holiday Village (planning application reference: 18/00753/OUT), with both applications identifying 58% of trips would head north towards the A27. The trip distribution and assignment set out above is considered to be robust, given that a greater proportion of trips are distributed towards the more congested part of the network.
- 5.5 This LPPR considers three development options, two of which include two accesses. The distribution between the two accesses have been retained, although the specific assignment of trips may differ depending on what accesses are used.
- 5.6 The development proposes for the eastern access to connect to the western access via the spine road, and as such, it is possible for residents of the eastern side of the site to use the west access, and vice versa. Given the larger junction, wider road and more direct route presented by the Bracklesham Lane junction, it is anticipated that 70% of trips (whether north or southbound) will use the eastern access onto Bracklesham Lane.

## 6. HIGHWAY IMPACT

6.1 Given the scale of the proposed development, consideration has been given to the development's impact on the local highway network.

### Church Road

6.2 **Table 2** sets out the volumes of traffic currently using Church Road (as per 2016). To better reflect traffic conditions today, the TEMPro database has been used to factor up the traffic conditions to a 2029 "Future Year" assessment. The following TEMPro criteria were used and TEMPro factors were identified:

- NTM AF15 Dataset
- Data for Chichester District
- Car Driver trips only, for all trip purposes
- AM and PM Peak Periods
- All area and road types

6.3 The above criteria results in a TEMPro factor of 1.1773 in the AM peak period, 1.1775 in the PM peak period and 1.1861 over a 24-hour day.

6.4 **Table 18** sets out the factored-up traffic volumes on Church Road, as well as the development's additional traffic. This is also shown on the distribution diagrams included in **Appendix H**.

2029 Traffic Flows	AM Traffic Volume	PM Traffic Volume	Option 1 AM (% Change)	Option 1 PM (% Change)	Option 2 AM (% Change)	Option 2 PM (% Change)	Option 3 AM (% Change)	Option 3 PM (% Change)
Church Road (south)	314	272	389 (+24%)	340 (+25%)	547 (+74%)	413 (+52%)	609 (+94%)	361 (+72%)

**Table 18:** Development traffic impact on Church Road (south)

6.5 **Table 18** sets out that the development would result in a noticeable increase of traffic on Church Road. However, whilst this proportional increase is high, the overall traffic volumes on Church Road remain relatively low for a road of this nature. Highway link capacity guidance is relatively sparse, however, guidance for new rural roads (DMRB TA 46/97, Table 2) indicates that a standard "single carriageway, dual lane (S2)" road such as Church Road are designed to accommodate up to 13,000 vehicles per day.

6.6 However, it is appreciated that the effective width of the road narrows slightly to the north of the site. As a result, Church Road is considered to offer less capacity than the 13,000 vehicles per day.

6.7 In the absence of design and capacity guidance, it has been assumed that this section of Church Lane could offer 50% (6,500 vehicles per day) of the theoretical capacity of an S2 road, given its moderate widths and curvature.

6.8 A capacity assessment has been undertaken on this basis to anticipate the impact of the proposed development trips on Church Road travelling south. The results of this assessment are based on distributions, the 2029 baseline and the anticipated trip generation for each development scenario. This assessment is shown in **Table 19** for each development option.

Options	Base flows (24H)	Development Trips (24H)	Combined Traffic	Percentage of capacity
Option 1	3,637	282	3,919	60%
Option 2	3,637	704	4,341	67%
Option 3	3,637	928	4,565	70%

**Table 19:** Church Road Capacity Assessment

6.9 **Table 19** sets out that Church Road would be operating significantly under its assumed capacity and as such, the operation and safety of Church Road would not be significantly impacted by any of the development proposals.

### Bracklesham Lane

6.10 Similarly, to Church Road, the surveyed traffic flows shown in **Table 1** have been factored up to take into account background traffic growth to 2029. The same TEMPro criteria that was applied to Church Road has been applied to Bracklesham Lane.

6.11 **Table 20** sets out the factored-up traffic volumes on Bracklesham Lane, as well as the traffic flows associated with the development across the AM and PM peak periods for the three development options.

2028 Traffic Flows	0800 -0900 Traffic Volume	1700 -1800 Traffic Volume	Option 1 AM (% Change)	Option 1 PM (% Change)	Option 2 AM (% Change)	Option 2 PM (% Change)	Option 3 AM (% Change)	Option 3 PM (% Change)
Bracklesham Lane (south)	551	596	595 (8%)	674 (13%)	674 (22%)	755 (26%)	705 (28%)	823 (38%)

**Table 20:** Development traffic impact on Bracklesham Lane (south)

6.12 **Table 20** sets out that the development would have a minor increase on trips on Bracklesham Lane for development Option 1. Option 2 would result in a 22% and 26% increase in vehicles on Bracklesham Lane in the AM and PM peak periods respectively, whilst Option 3 would result in a 28% and 38% increase in vehicles in the AM and PM peak periods respectively.

- 6.13 The proportional increase in traffic on Bracklesham Lane is more modest than that on Church Road, given that Bracklesham Lane is an arterial route into East Wittering, with an increased level of existing traffic using this route in comparison to Church Road. Consideration has therefore been given to the overall capacity of Bracklesham Lane.
- 6.14 In the vicinity of the site, Bracklesham Lane is relatively wide and straight. As such, it is considered reasonable that Bracklesham Lane can accommodate 13,000 vehicles per day.
- 6.15 An assessment of capacity on Bracklesham Lane for trips travelling south into East Wittering has been undertaken on this basis. The results for each development option are shown in **Table 21** for each development option.

Options	Base flows (24H)	Development Trips (24H)	Combined Traffic	Percentage of capacity
Option 1	8,064	282	8,346	64%
Option 2	8,064	600	8,664	67%
Option 3	8,064	824	8,874	68%

**Table 21:** Bracklesham Lane Capacity Assessment

- 6.16 **Table 21** indicates that Bracklesham Lane would be operating at up to 68% of its capacity, with the development traffic added to the network.

#### **A286 / B2179 / B2198 Roundabout**

- 6.17 This roundabout was assessed through South Downs Holiday Village application (planning application reference: 18/00753/OUT) using junction modelling software. This junction assessment identified that ,in 2022 as a worst case, this junction would operate under capacity with an RFC of 0.64.
- 6.18 Based on this assessment it is anticipated that the junction would be approaching capacity in 2028 should the development go ahead. As such, the capacity and operation of this junction would be fully assessed to support any subsequent planning application, with improvements to the roundabout secured through the development, if necessary.

#### **Piggery Hall Lane / B2179 / Itchenor Road**

- 6.19 This junction forms a crossroads, with the B2179 forming the main road (providing access to West Wittering from the A286). This junction would be fully assessed in any supporting Transport Assessment, and whilst an initial accident investigation at this junction identifies only two accidents have occurred over a five year period, suggesting the junction configuration does not present an existing safety concern, improvements to capacity and safety would be considered to mitigate the development's impact and provide a wider highway benefit at this junction.

### **Stocks Lane / Bracklesham Lane / Beech Avenue**

- 6.20 This junction forms a crossroads within East Wittering. Whilst the development is close to this junction, only a small minority of development trips would go through this junction (16% of residential trips). However, consideration has been given to previous assessments undertaken at this junction.
- 6.21 Land East of Beech Avenue, Bracklesham (planning reference 12/02461/FUL) assessed this junction with 2017 traffic flows. This assessment identified that this junction was operating at 40% capacity.
- 6.22 Whilst it is anticipated that the junction would remain within capacity in 2028 with development traffic, this junction will be fully assessed ahead of any subsequent planning application, with the developer providing a proportionate contribution towards improvements to the junction if necessary.

### **A27 Stockbridge Roundabout**

- 6.23 Consideration has been given to assessing the likely traffic impact on the A27 and Stockbridge Roundabout. Whilst the funding received from central government for improvements to the A27 Chichester Bypass have been removed, several mitigation measures have been proposed as part of Peter Brett Associates' review of the Chichester Area Transport Model. The document prepared to support the Local Plan Review 'Transport Study of Strategic Development' states that three levels of strategic development were modelled. The scenarios modelled for East Wittering were: 350 units, 736 units and 1,250 units.
- 6.24 Following review of these models only option 1 was brought forward by CDC for 350 units (as referenced in the Local Plan consultation). A mitigation scheme has then been developed, which ensures that the level of development across the adopted CDC Local Plan, neighbouring local plans and CDC Local Plan review can be accommodated. This model would, however, need to be reviewed following the adoption of the new the Havant Borough Local Plan
- 6.25 The mitigation scheme to support 350 units in East Wittering proposes the transformation of the Stockbridge Roundabout to provide a signalised crossroads with a dual carriageway for the A27. The junction would ban right turn movements from the A27 Stockbridge Road. The mitigation scheme also includes the development of the Stockbridge Link Road. The link road would provide a direct link from Birdham Road, through the creation of a new roundabout, to the Fishbourne Roundabout. This would allow trips travelling west to bypass the Stockbridge Roundabout. The Fishbourne Roundabout in turn would be transformed to provide a 'hamburger' style arrangement including the removal of the existing Terminus Road arm which would be replaced by a new arm for the Stockbridge Link Road. The proposed improvement schemes for these junctions are attached as **Appendix I** for reference.

- 6.26 The mitigation proposed within the Transport Study confirms that sufficient measures would be implemented to support 350 units in East Wittering. Whilst Option 1 comprises of 298 units and employment space it is considered that this would generate a similar number of trips to that of the 350 units identified in the Local Plan Review. It is therefore considered that development Option 1 could be accommodate on the network through the implementation of the proposed mitigation scheme. As part of the development a contribution towards these works is proposed. To support a planning application for Option 1 a modelling assessment would be undertaken which would take into consideration the proposed mitigation scheme.
- 6.27 The Transport Study does, however, state that the proposed mitigation scheme does not provide any additional capacity to support growth outside that allocated within the Local Plan and therefore the impact of development Options 2 and 3 would need to be assessed in further detail. It should, however, be noted that when the results for 2035 mitigated scenario 1 (350 units) are compared with that of 2035 mitigated scenarios 2 (736 units) there is a minor increase in the maximum Volume to Capacity ratios across both the AM and PM peaks. Further works may therefore be possible to facilitate a larger quantum of development in The Witterings. A modelling exercise to support these options would be undertaken to support any planning application and would be informed by discussions with Highways England and West Sussex County Council.

#### **A286 / B2201 Mini-roundabout junction**

- 6.28 The A286/B2201 mini-roundabout has been previously assessed as part of the Clappers Lane development and most recently to support the application at South Downs Holiday Village. In the Transport Assessment prepared by Icenii to support the application at South Downs Holiday Village, modelling indicates that this roundabout currently operates above desirable capacity with an RFC of 0.95 in the PM peak (2017), with this increasing to 1.07 in the 2022 PM peak. This application did not propose any improvements to this junction given that the development was anticipated to increase RFC by 0.01 across the AM and PM peaks.
- 6.29 This modelling does however not include the works undertaken as part of the mitigation scheme identified in the Peter Brett Associates' Transport Study. This mitigation scheme proposes the creation of an additional roundabout on Birdham Road (A286) to facilitate access onto the Stockbridge Link Road and in turn the A27. The creation of this route would reduce traffic at the A286/B2201 mini roundabout, with no improvements identified at this junction as part of the mitigation scheme. A modelling assessment would be undertaken of this roundabout, taking into consideration the effects of the proposed mitigation scheme.



### **Seasonality**

- 6.30 The road network within The Wittering's is subject to seasonal fluctuations and whilst this has been noted within the Peter Brett Associates' report separate analysis has not been undertaken of the proposed mitigation scheme. The Transport Study states that 'modelling of the Local Plan is not required to assess weekends, bank holidays or seasonal changes' and suggest that localised assessments would need to be undertaken by the Council to assess the impact of seasonal changes.
- 6.31 Seasonal variation in East Wittering is likely to be reflected in an increase in southbound trips arriving into East Wittering during the morning and northbound trips departing from East Wittering in the afternoon. It should be noted that the development's trip generation is the opposite of this with the peak in departure trips occurring in the morning and the arrival trips occurring in the afternoon. As such, the development is not anticipated to have a significant impact on seasonal traffic conditions, and vice versa. Never the less, a sensitivity test would be undertaken to support any future planning application.

### **CDC Sustainability Appraisal**

- 6.32 Criteria 3A and 6C of CDC's Sustainability Appraisal questions whether development in East Wittering will reduce air pollution from industrial processes and transport (3A) and whether it will reduce congestion (6C). Whilst East Wittering received a single negative rating against both 3A and 6C due to its impact on the A27, a mitigation scheme has been identified by Peter Brett Associates as part of their Transport Study for Strategic Development document. This scheme can accommodate the 'allocated' 350 units in East Wittering. It is therefore not considered that a single negative rating under 3A and 6C would not be appropriate given that measures have already been proposed by CDC to reduce the impact of development in East Wittering and that further measures could be provided as part of Options 2 and 3.

## 7. CONCLUSION

- 7.1 This LPPR has been prepared by Paul Basham Associates on behalf of Barratt Homes to support the site at Stubcroft Farm, East Wittering.
- 7.2 The site's proximity to existing local amenities and pedestrian and cycle networks presents a good opportunity to encourage the use of sustainable transport and create a sustainable development. A high-quality bus service is available to Chichester and its railway station, offering an attractive alternative to the private car for commuting trips into Chichester and beyond. There is opportunity for local bus services and pedestrian and cycle infrastructure to be improved as part of the proposed development. This would help to address the concerns raised in CDC's Sustainability Appraisal and help meet the needs identified within the Infrastructure Delivery Plan.
- 7.3 The development comprises three development options; Option 1 - 298 units and employment, Option 2 - 602 units, employment, commercial space, a secondary school, local centre and care home and Option 3 – 875 units, employment, commercial space, a secondary school, local centre and care home. Each option has been assessed in this Local Plan Promotion Report and would be accessed onto Church Road and Bracklesham Lane.
- 7.4 The site would be accessed via a priority bellmouth access onto Church Road for all three development options. This access would feature radii of 10m and a width of 7.5m to ensure large vehicles (such as buses) can access the site safely. The second access is a roundabout onto Bracklesham Lane, which would be provided for all three development options. Junction capacity analysis has been undertaken which identifies that both accesses would operate well within capacity in all development scenarios.
- 7.5 A trip generation assessment has been undertaken for the three development options on the site, with Option 1 likely to generate 1,526 trips per day, whilst Option 3 is likely to generate 4,482 trips per day. These trips would be distributed across the highway network, with 68% of trips heading north and 32% of trips heading south (with 11% remaining within East Wittering), based on census travel to work data.
- 7.6 Consideration has been given to the development's impact on the local road network. Based on daily traffic flows, Church Road would be operating at up to 70% of capacity, whilst Bracklesham Lane would be operating at 68% of capacity.

- 7.7 For local junctions, a comparison to previously undertaken assessment work has been provided, which identifies that the A286 / B2198 / B2179 junction is likely to operating at or close to capacity in 2028 with the development (Option 3). As such, this junction would be fully assessed in any subsequent transport assessment, including identifying highway improvements where necessary.
- 7.8 The A286 / B2201 junction has been previously assessed, which identified that this junction is operating over capacity currently, due to traffic queueing for the A27, which may be exacerbated by development traffic. Modelling of this junction would therefore be undertaken to support a planning application, with this taking into consideration the mitigation scheme proposed by CDC.
- 7.9 Peter Brett Associates' Chichester District Council – Local Plan Transport Study of Strategic Development (December 2018) identifies a mitigation scheme for the A27 Chichester Bypass. This scheme includes changes at both Stockbridge and Fishbourne Roundabouts and the development of a new link road onto the A27. This scheme has been developed to support the 350 allocated units in East Wittering. The modelling results of scenarios 1 (350 units) and scenarios 2 (736 units) indicate that there is a minor increase in the maximum Volume to Capacity ratios for the 2035 mitigated scenario and therefore further works may be possible to support a larger quantum of development within The Witterings. A modelling exercise to support any future planning application would be undertaken with the improvements identified in the A27 mitigation scheme. A contribution could also be made by development to help fund the proposed mitigation scheme.
- 7.10 CDC's Sustainability Appraisal highlights a number of negative ratings for development in East Wittering given the potential impact on the A27. However, the impact of a 350 unit development (the current figures identified in the Local Plan review) have already been assessed through the preparation of the Transport Study. This identifies a mitigation scheme which accounts for the trips generated by development identified within the Local Plan. It is therefore considered that the Option 1 this scheme alleviates the concerns raised in the CDC Sustainability Appraisal and Options 2 and 3 would explore additional mitigation to addresses these further if required.
- 7.11 This LPPR Report has identified that development could be provided in this location without having a significant impact on the operation or safety of the local road network, including the potential to provide community infrastructure with the potential to reduce vehicle trips such as a local centre and a school.