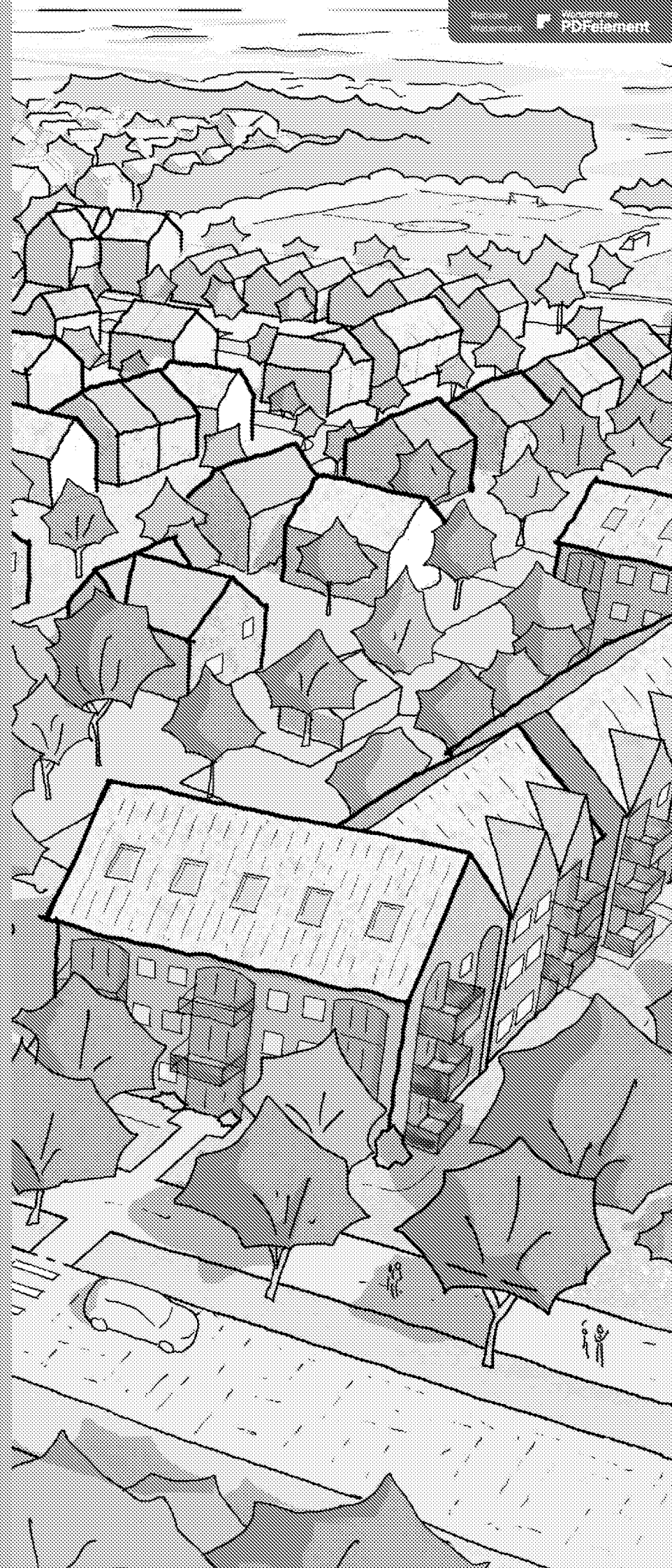


The Landings, Ford Airfield

Infrastructure RM (IRM)

Transport Technical Note
IRM_03.B
December 2024



Vistry Group

VISTRY HOMES LIMITED

THE LANDINGS, LAND AT FORD AIRFIELD, FORD

**Infrastructure Reserved Matters Transport Technical
Note**

**REPORT REF.
2205771-R11C**

December 2024

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Appendices

Appendix A Stage 1 Road Safety Audit

Document Control Sheet

REV	ISSUE PURPOSE	AUTHOR	CHECKED	APPROVED	DATE
-	Final	SG	JS	DH	09/08/2024
A	Final	SG	JS	KM	16/08/2024
B	Final	SG	BS	SAF	30/08/2024
C	Final	SG		DH	17/12/2024

Distribution

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1. Introduction

1.1. Ardent Consulting Engineers (ACE) has been appointed by Vistry Homes Limited to advise on the Highways & Transportation aspects of the proposals for a residential-led mixed-use development on Land at Ford Airfield, Ford.

1.2. Outline (all matters reserved except access) permission (ref F/4/20/OUT) was granted in July 2023 for:

"...the development of up to 1,500 dwellings (Use Class C3), 60-bed care home (Use Class C2), up to 9,000 sqm of employment floorspace (Use Classes B1), local centre of up to 2,350 sqm including up to 900 sqm retail / commercial (Use Classes A1-A5) and 1,450 sqm community / leisure floorspace (Use Classes D1-D2), land for a two-form entry primary school (Use Class D1), public open space, allotments, new sports pitches and associated facilities, drainage, parking and associated access, infrastructure, landscape, ancillary and site preparation works, including demolition of existing buildings and part removal of existing runway hardstanding..."

1.3. The development will be brought forward via a number of reserved matters applications. This Transport Technical Note (TTN) covers the Infrastructure Reserved Matters (IRM) application, which consists of:

Approval of Reserved Matters pursuant to condition 1 (Reserved Matters Details) following outline consent F/4/20/OUT for Infrastructure RM, for the provision of a primary spine road and associated secondary road junctions, pavement, footpaths, cycle infrastructure and bus stops; site wide drainage infrastructure, including foul pumping stations, foul sewer infrastructure, SUDS basins, SUDS swales, surface water infrastructure; public open space, including landscape details, play areas, footpaths & associated works.

1.4. This TTN outlines the proposed highways plans, including tracking and visibility splays, the bus routing and the Highway design hierarchy.

1.5. The site location is shown in **Ardent Drawing 2205771-D060**.

1.6. The Local Planning Authority (LPA) is Arun District Council (ADC) and the Local Highways Authority is West Sussex County Council (WSCC).

Report Revision Updates

1.7. The report updates undertaken as part of this revision as part of the following consultation responses:

- WSCC Highways;
- Sussex Police;
- Ford Parish Council;
- Active Travel England;
- Ford Community Land Trust;
- WSCC Highways PRowS.

1.8. Of note, the updates provided within this TTN and incorporated into the proposed layouts are:

- The design of the spine road, including the crossings, speed calming and alignment have been subject to a Stage 1 Road Safety Audit. The reports are shown in **Appendix A**.
- Vehicle tracking has been provided in colour, including that for HGVs and busses along the spine road.
- Visibility splays are provided on the attached drawing.
- Cycle link as identified by WSCC (highlighted purple within response) provided
- Where FP363 and FP366 will be widened to 3m and upgraded to a bridleway, the bridleway will be constructed to the WSCC standard Bridleway Specification, with a sealed surface material.
- Any diversion of a public footway will be applied for by means of a Public Path Order through Arun District Council.
- Bus stops have been designed with shelter, seating, raised kerbs and real time passenger information.

- 1.9. Any and all off site improvement works will be designed at the appropriate stage, and subject to the Road Safety Audit process to ensure the form and design is appropriate for the environment.

2. Access and Movement Strategy

2.1. This section of the note provides a brief outline of the access and movement strategy for the site as set out in Transport Assessment submitted with the approved outline application. The approved strategy as set out below has been retained in developing the proposals subject to this RM application, incorporating the consultation feedback from ADC/WSCC that has taken place to date.

2.2. The design of the site is in accordance with the consented Access and Movement Parameter Plan – RG-M-122 Rev. M, with designs of the spine road, footpaths and access points defined within this report.

2.3. The wider site connectivity is shown in **Plate 2.1**.

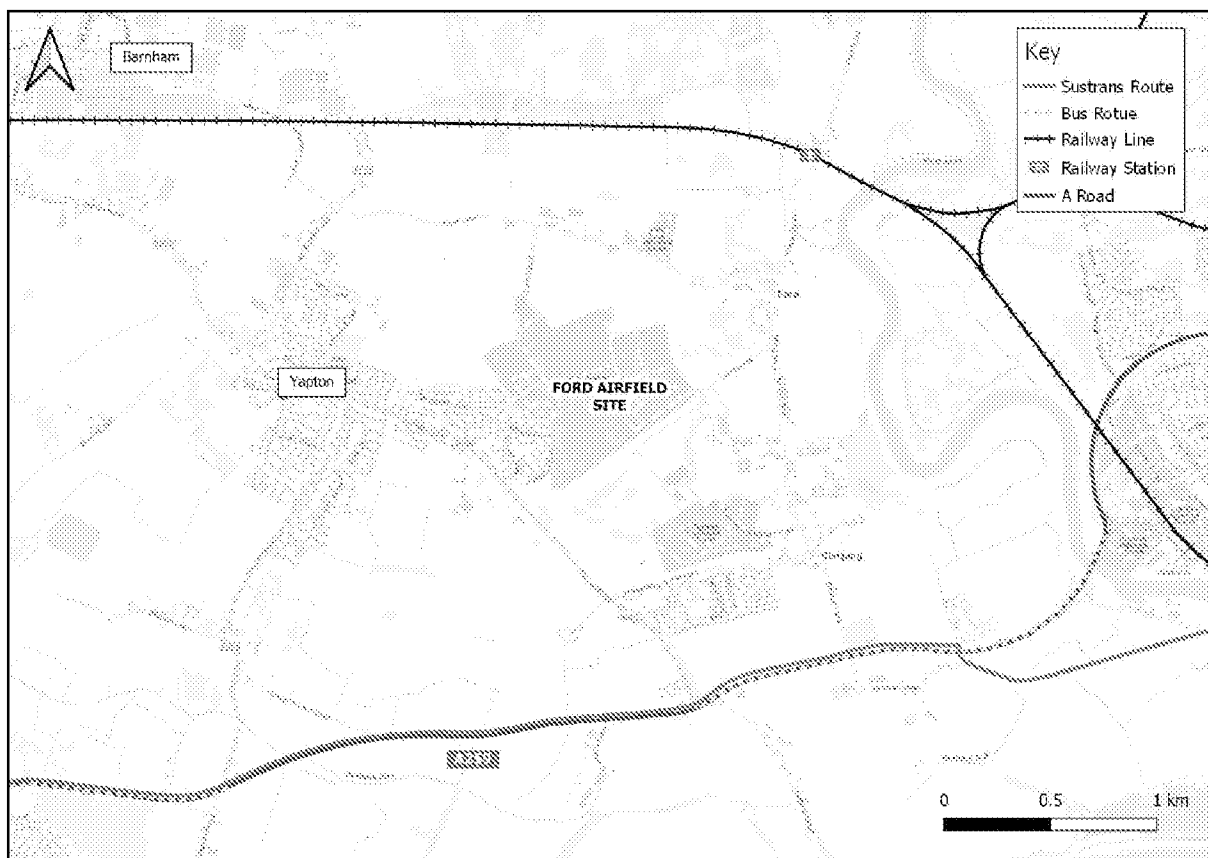


Plate 2.1 – Wider Site Connectivity

Private Vehicle Access and Movement Strategy

- 2.4. Vehicular access to the site is provided at three points: a new southern access from Yapton Road; a new northern access from Ford Lane; and an existing eastern access on to Ford Road to serve the employment zone.
- 2.5. The IRM focuses upon the enabling infrastructure that will be required to support the build out of the wider site and which includes the primary spine road that will connect from Ford Lane in the North to Yapton Road in the south. The spine road will serve to provide access to the remaining areas within the site which will come forward under further RM applications in due course

Public Transport Access and Movement Strategy

- 2.6. Buses are able to access the site via the northern and southern accesses and suitable design proposed so that a service could operate along the primary spine road in both directions, serving the local centre as well as residential parcels.
- 2.7. Bus stops are to be designed Manual for Streets and CIHT / Stagecoach advice note 2018 in accordance with WSCC Highways feedback. The Design and Access Statement from the outline permission requires a minimum of three bus stops, one covering the northern, one central and one southern bus stops. However, to provide an increased permeability and connectivity to public transport offering associated with the scheme, the proposals are for four bus stops in each direction along the spine road.
- 2.8. The scheme will provide a service connecting Littlehampton Town Centre and Barnham Railway Station. There will be the possibility of routing the Stagecoach Coastliner 700 service through the site, dependent on discussions with Stagecoach. Off-site improvements will be made to Ford Road to provide pedestrian / cycle connections to Ford Station.
- 2.9. The passenger waiting area around bus stops is separate to the pedestrian and cycle routes, ensuring minimal conflict between waiting passengers and active travel users. **Plate 2.2** shows an example design of a bus stop along the spine road.

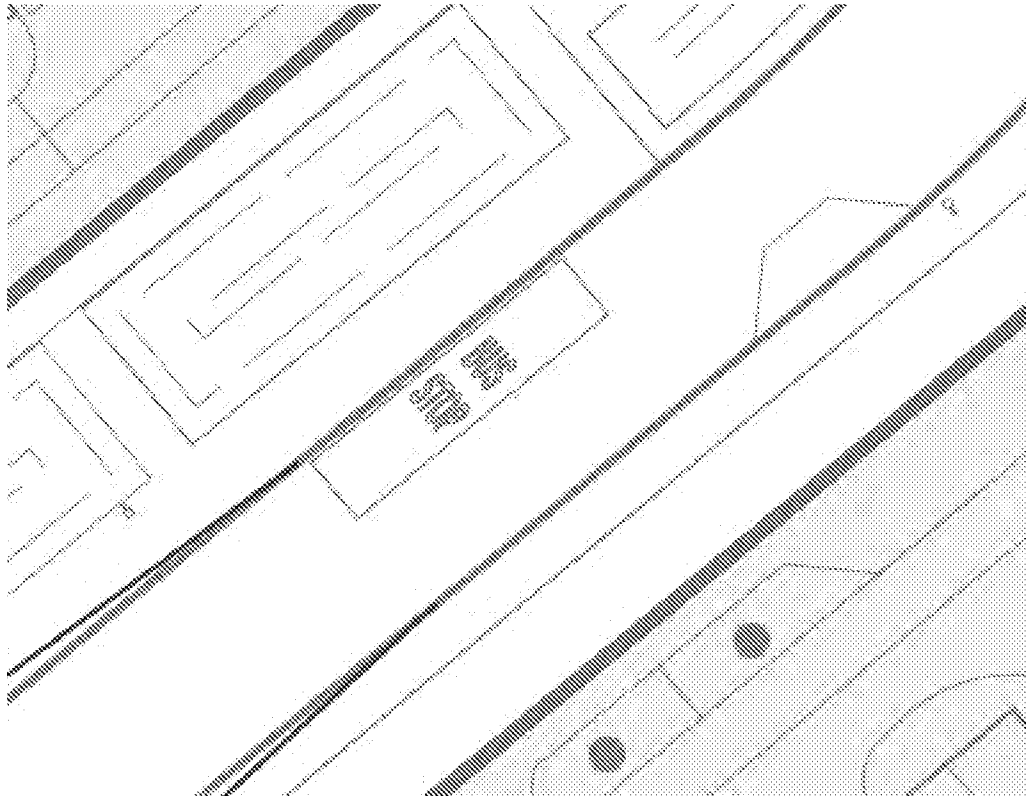


Plate 2.2 - Example Bus Stop Design

Pedestrian and Cyclist Movement Strategy

2.10. There are a number of inbuilt onsite infrastructure measures which will encourage and promote active travel within the site, including:

- a permeable site layout which provides multiple and convenient opportunities from the site to link into local facilities, particularly the foot and cycleway network surrounding the site;
- Services and facilities such as education, retail, leisure and community are provided on site, minimising journey distances and promoting sustainable travel;
- The layout of the site will emphasise sustainable access to the local centre. The central location of facilities will minimise journey distances for all residents, and the parking strategy for these buildings will discourage the use of cars for short journeys;
- The highway network within the site will encourage low speed streets, suitable for movement by all modes of travel, particularly walking and cycling; and
- Good quality cycle parking will be provided for each residence, in accordance with standards.

2.11. Access to the overall masterplan site by active travel modes (including walking and cycling) will be provided at:

- The provision of an uncontrolled pedestrian crossing with tactile paving and dropped kerbs on the Johnson Way / Rollaston Park junction;
- The provision of an uncontrolled pedestrian crossing with tactile paving and dropped kerbs on Rollaston Park;
- The provision of an uncontrolled pedestrian crossing with tactile paving on existing dropped kerbs on Yapton Road next to the bus shelter;
- A proposed new footway extension immediately north of the bus shelter on Yapton Road, to tie into the proposed uncontrolled pedestrian crossing;
- Provision of vehicle crossovers and narrowing of pedestrian crossing distance at both junctions leading into Drave Grove from the 2233 / Burndell Road;
- The provision of tactile paving at the existing dropped kerb on the Fordwater Gardens and Burndell Road Junctions;
- The provision of tactile paving at the existing dropped kerb on the Goodhew close and Burndell road junction;
- Provision of on-carriageway cycle lane demarcation extending from Rollaston Park (and forming an onward connection to cycle/pedestrian facilities routing through the development site from Rollaston Park through to Horsemere Green Lane and to the A259 in the south) through to Burndell Road / Bilsham Road Junction;
- Hatched green markings across junctions along the length of the route to denote the presence of cyclists and cyclist priority;
- Connection to Yapton Village Hall, to the east of Bilsham Road / Burndell Road junction;
- Onward connection, shown indicatively, to the potential Yapton-Barnham cycle route associated with planning consent Y/91/17 and Y/92/17;
- Widening of the existing footway to provide a 2.5m – 3.0m wide pedestrian/cycleway on the eastern side of Church Lane, to connect with Horsemere Green Lane;
- Widening of the carriageway at Church Lane / Horsemere Green Lane junction to accommodate a 3.0m wide path on the approach to a dropped kerb and tactile paving crossing;
- A tie in to the existing/diverted NCN Route 2 pedestrian /cycleway to the north of the A259 carriageway;

- Provision of an uncontrolled crossing, formed of dropped kerbs and tactile paving at the Ford Lane / Ford Road junction;
- The realignment of Station Road to enable a shared pedestrian / cycleway to be provided between the junction of Ford Lane and Ford Railway Station on the western side of the Station Road carriageway; and
- To the east of the site, a new 3m wide connection to Footpath 206 is to be provided, along with minor widening on Ford Road, to provide a refuge island.

2.12. The above will help integrate the site with the surrounding area and promote connectivity to Ford Station, which also includes provision of an enhanced pedestrian/cycleway along Ford Road that will provide a high-quality connection to Ford Station.

2.13. In addition, the outline consent secured a comprehensive package of Section 106 Agreement contributions to further enhance the local area to the benefit of existing residents in the area but also for prospective residents of the scheme, which included:

- Strategic Highways contribution of £1.227 million;
- Cycle Parking (at Ford Station) contribution of £37,500;
- Bus service improvements contribution of £15,000; and
- A27 roundabout enhancements contribution of £301,000.

2.14. The spine road through the site will incorporate pedestrian and cyclist facilities through the site, providing an 'active travel' super highway through the site. This will promote non-car travel through the site, connecting the individual parcels. Details of the pedestrian and cycle widths and locations are provided in **Section 3**.

2.15. Public Right of Way (PRoW) 363 and 175 cross the site, in an east – west orientation. These provide continuous pedestrian movements across the site. The crossings of these PRoW across the Spine Road will provide a safe and convenient means for pedestrian movement. Any diversions of these PRoW will be secured Post-Planning.

2.16. PRoW 363 will be upgraded to a bridleway as part of the application, further providing greater connectivity for cyclists across the site and in the area.

2.17. The cycle paths within the site will connect through to the wider cycle network in the surrounding area, in particular, NCN Route 2, to the south of the site.

Surrounding Mode Share and Travel Plan Target

2.18. The Nomis 2021 Travel to Work data has been extrapolated for Output Area Arun 006, which covers the site area, Yapton and Ford. The output area is shown below in **Plate 2.3**.

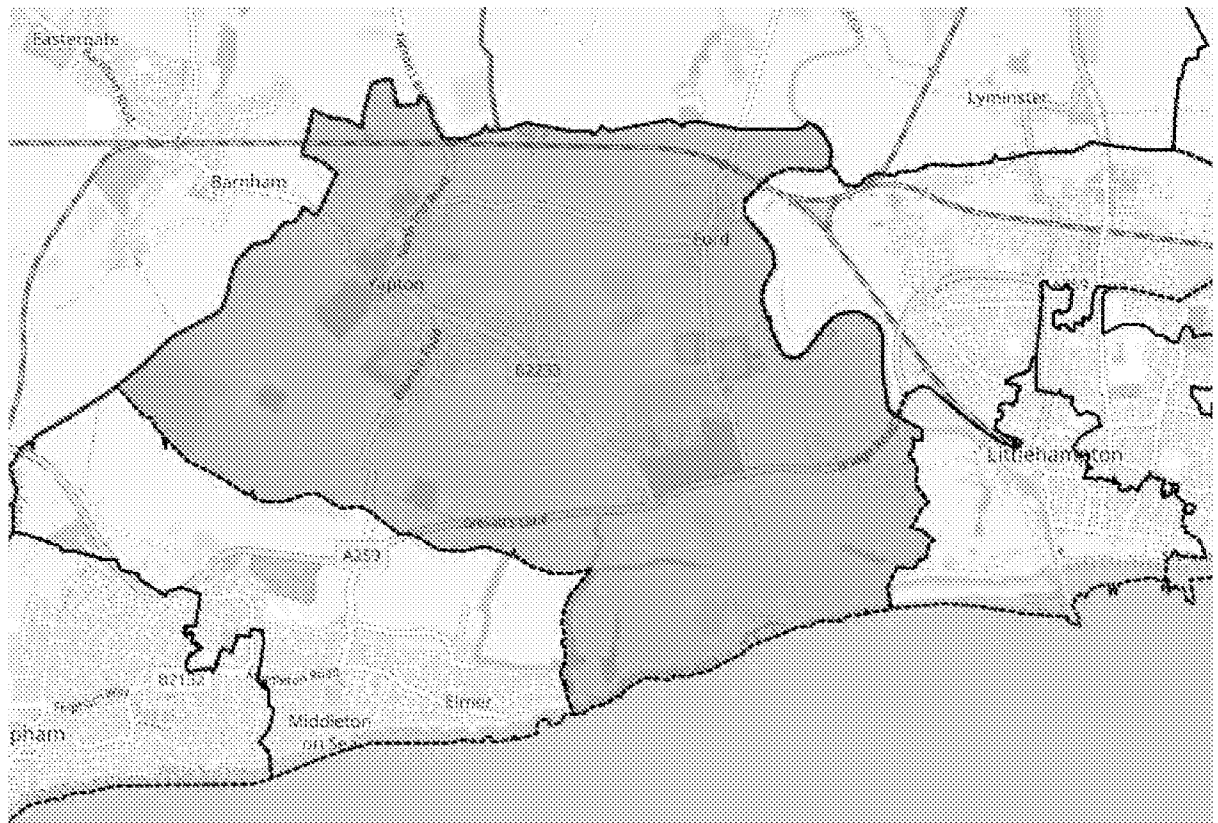


Plate 2.3 – Output Area Arun 006

2.19. **Table 2.1** shows the extrapolated Travel to Work data for Output Area Arun 006. Working from home has been discounted.

Mode	Mode Share
Train	2%
Bus, minibus or coach	2%
Taxi	0%
Motorcycle, scooter or moped	1%
Driving a car or van	78%
Passenger in a car or van	5%
Bicycle	4%
On foot	6%
Other method of travel to work	2%

Table 2.1: Arun 006 Mode Share

2.20. With an assumed passenger rate of one passenger per vehicle, this gives a Single Occupancy Vehicle mode share of 73% (78% - 5%).

2.21. The surrounding parcels will be subject to individual Travel Plans, which outlines a series of aims and objectives, all promoting sustainable travel, and minimising the reliance of future residents on the private car.

2.22. As such, over a five year period, a 10% reduction in the peak hour single occupancy vehicle mode share is proposed, from 73% to 66%. It is anticipated that the decrease in single occupancy vehicle mode share will result in a corresponding increase in sustainable travel means.

3. Street Geometries

Street Makeup

- 3.1. This TTN covers the enabling infrastructure which focusses upon the spine road through the site, which has been designed as a 'Primary Street'. Further street type hierarchies will be utilised throughout the site with details provided within subsequent separate RM applications.
- 3.2. Local Transport Note (LTN) 1/20 – Cycle Infrastructure Design places the emphasis on the consistency of routes, as well as on the level of infrastructure within new strategic development. The guidance sets out the principle that the standard of provision should reflect the expected number of users.
- 3.3. As such, carriageway widths, verges and segregated foot/cycleways are based on Arun District Design Guide SPD (February 2024) which has been updated to take into account LTN 1/20 and WSCC guidance, as well as Manual for Streets / Manual for Streets 2.
- 3.4. The shared footway / cycleway widths are based on the guidance contained in LTN 1/20 and Arun Design Guide (2024) (extract below) and tie in with the consented off-site shared routes. This promotes the consistency and coherence emphasised by LTN 1/20 guidance.

Primary Streets (spine road)

- 3.5. The configuration of the central route within the site will allow for a continuous two-way bus route to be delivered, connecting the two residential vehicular site accesses, and providing wider permeability/connectivity beyond the site.
- 3.6. Two primary street types are set out within the Ford Design Code, dated July 2024, which have been developed to respond to the character of the areas as well as topography of the site and reflect consultation/engagement undertaken between the applicant and ADC/WSCC to date.
- 3.7. The design of the spine road is such that kerbside parking is not attractive, ensuring a safe and convenient route is provided. In addition, sufficient formal resident and visitor parking and parking at non-residential destinations within the site is provided such that parking on the spine road would be significantly less convenient than parking within formal visitor bays or at destinations (residential or non-residential).

Primary Street (north)

3.8. The parameters for primary street North type are proposed as follows:

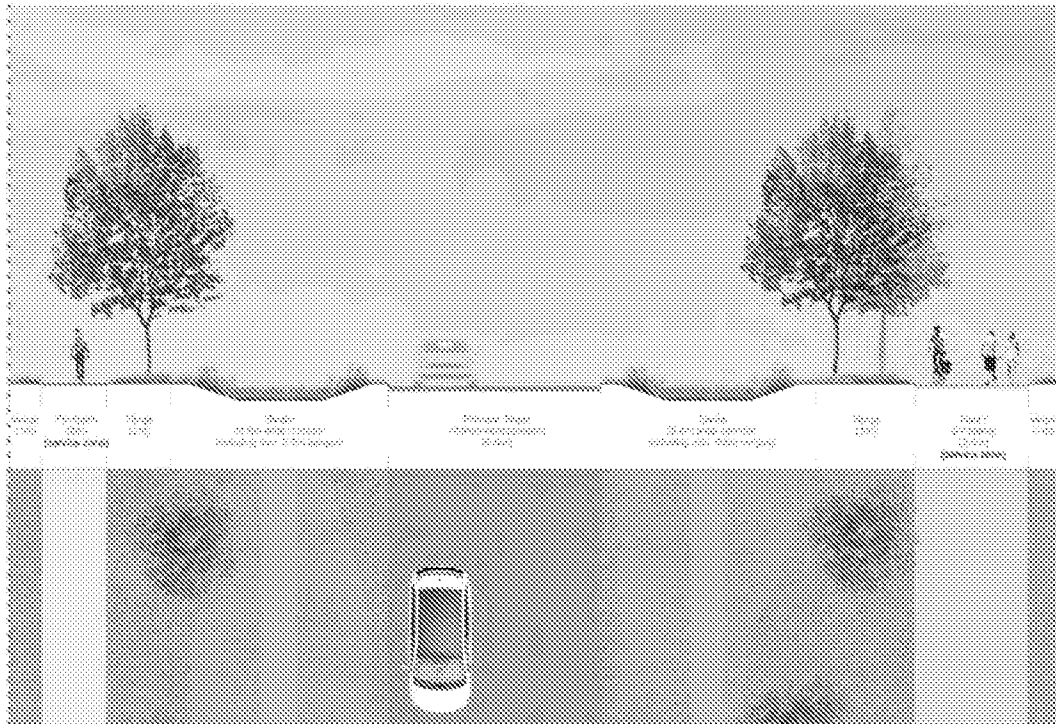
- Carriageway Width = 6.5m;
- Verge Width = 2m/3m (both sides of the carriageway);
- Shared Footway / Cycleway = 3.5m (One side of the carriageway);
- Footway = 2m (One side of the carriageway);
- Additional verge 1m to adjacent tertiary/mews street.



Primary Street type (south)

3.9. The parameters for primary street South are proposed as follows:

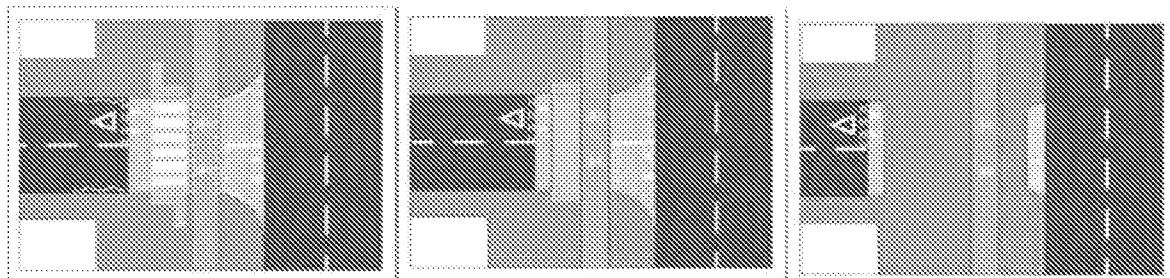
- Carriageway Width = 6.5m;
- Verge Width = 2m/3m (both sides of the carriageway);
- Swale = 6.6m (inc. min 0.5m verges)(both sides)
- Shared Footway / Cycleway = 3.5m (One side of the carriageway);
- Footway = 2m (One side of the carriageway);
- Additional verge 1m to adjacent tertiary/mews street (both sides).



Design Principles

Cycle Crossings

3.10. In accordance with LTN 1/20, partial setbacks as shown below are proposed due to expected low speeds and low flows on the minor arm. LTN 1/20 specifies that partial setbacks are appropriate for side roads with a flow less than 2,000 PCU's per day on side roads with a speed of less than 30mph.



3.11. The anticipated number of vehicular movements on the spine road of the site is less than 4,000 PCU's per day. In accordance with Table 10-2 of LTN 1/20, cycle- priority and parallel cycle crossings across the spine road are appropriate. As such, where appropriate, cycle crossings such as those shown in Figure 10.6 and Figure 10.7 of LTN 1/20 are incorporated on the spine road, particularly where PRow 363 and 175 cross the spine road.

Junction Stagger and deviation

3.12. Following initial discussions with WSCC, occasional crossroads are proposed however generally junction stagger of 2 x Stopping Sight Distance (SSD) for side roads on the same side of the road and 1 x SSD for side roads on opposite sides are provided throughout. A maximum deviation of 20 degrees from an ideal 90-degree approach angle will be provided for minor arms off the primary spine street.

Highway Safety and Traffic Calming

3.13. The design of the spine road will be in accordance with the results of various Road Safety Audits at appropriate times through the development of the design of the road.

3.14. The design of the spine road incorporates numerous horizontal and vertical deflections in accordance with Manual for Streets, which will passively encourage reduced vehicle speeds, which results in a safer design.

Highways Plans

3.15. This section outlines the proposed highways plans, including access, parking, tracking and visibility splays.

3.16. The following drawings show the proposed highways plans, including access, parking, tracking and visibility splays:

- Ardent Drawing 2205771 - D010D Tracking and Visibility (Sheet 1 of 7)
- Ardent Drawing 2205771 - D011D Tracking and Visibility (Sheet 2 of 7)
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- Ardent Drawing 2205771 - D016E Tracking and Visibility (Sheet 7 of 7)

4. Summary and Conclusion

- 4.1. Ardent Consulting Engineers (ACE) has been appointed by Vistry Homes Limited to advise on the Highways & Transportation aspects of a residential-led mixed-use development on Land at Ford Airfield, Ford that benefits from outline consent.
- 4.2. The development will be brought forward via a number of reserved matters applications. This Transport Technical Note (TTN) covers the Infrastructure Reserved Matters (IRM) application.
- 4.3. The Local Planning Authority (LPA) is Arun District Council (ADC) and the Local Highways Authority is West Sussex County Council (WSCC).
- 4.4. This note provides a brief outline of the access and movement strategy for the site as set out in Transport Assessment submitted with the approved outline application. The approved strategy as set out below has been retained in developing the proposals subject to this RM application, incorporating the consultation feedback from ADC/WSCC that has taken place to date.
- 4.5. This TTN covers the enabling infrastructure which focusses upon the spine road through the site, which has been designed as a 'Primary Street'. Two versions of the primary street are shown, one covering the northern parcel, and one the southern parcel, given different terrain and land use.
- 4.6. This TTN shows the Infrastructure Reserved Matters application has been designed in accordance with the Design Code, dated July 2024, which was developed in liaison with WSCC and ADC. Thereby, this TTN enables the discharge of the Infrastructure Reserved Matters Application.

Drawing