

# 5 TRANSPORT ANALYSIS

## 5.1 INTRODUCTION

This section sets out a transport and movement analysis of the Preston area, which has been undertaken by Faber Maunsell.

### SCOPE OF WORK

From a transportation perspective the key tasks undertaken to inform the emerging masterplan process included the following:

- (1) An assessment of baseline conditions including:
  - A visit to each site to review existing conditions;
  - A desk study assessment of the existing conditions and the general accessibility of the area by different modes of travel.
- (2) Strategic review and policy context of masterplan proposals including:
  - A review of National, Regional and Local Policies, particularly with regard to the site location, accessibility to non car modes and car parking;
  - Collation of information on existing public transport services and on current policies and initiatives with regard to public transport, car

parking and non car modes.

- (3) Inputs to Masterplan options:
  - The identification of key opportunities and constraints in the context of the emerging masterplan proposals;
  - The scope to improve access and movement by non car modes;
  - The access requirements and the estimated likely trip of key potential developments;
  - Initial identification of potential transport improvements and mitigation measures that may be required to improve access by non-car modes and overcome safety, capacity and operational concerns.
- (4) Attendance at meetings and liaison with the Project Team.

Following this introduction, section 5.2 provides the policy context and section 5.3 reviews accessibility and existing conditions. The key issues, opportunities and constraints are considered in section 5.4 with the summary and conclusions and way forward presented in section 5.5.

# 5 TRANSPORT ANALYSIS

## 5.2 POLICY CONTEXT

### NATIONAL POLICY ISSUES

The Government's White Paper "A New Deal for Transport: Better for Everyone" was published in 1998. The main focus of the White Paper was the development of a transport strategy integrated with land use planning, "which makes it practical to live in a more environmentally sustainable way, with less noise, pollution and traffic congestion". This was followed by the Transport Act 2000 which maintains the same aims and incorporates many of the key suggested policies of the White Paper.

National transport policies are detailed in Planning Policy Guidance (PPG) Note 13, first published in 1994. The main objectives cited within this document are the reduction of the need to travel and the length of journeys, especially by the use of the private car and hence the promotion of more sustainable transport options. The first revision to PPG13 was published in March 2001 and builds upon the previous version, promoting better integration between planning and transport and achieving a more consistent implementation of the existing policy approach.

PPG13 specifically states that "A key planning objective is to ensure that jobs, shopping, leisure facilities and services [including education provision] are accessible by public transport, walking and cycling." It also encourages local authorities

to make maximum use of the most accessible sites which are close to transport interchanges for travel intensive uses and promote a mix of land uses, including residential, on these sites. Proposals to develop, expand or redevelop existing education sites should improve access by public transport, walking and cycling.

In order to assist in promoting the use of more sustainable modes of travel, PPG13 also suggests significantly reducing the amount of parking in new developments, and particularly that local authorities "should not require developers to provide more (parking) spaces than they themselves wish".

PPG13 requires all major development applications to be supported by a Transport Assessment and a Travel Plan, which demonstrate that the proposed development is sustainable in transport terms. A sustainable development is one, which reduces the need to travel by virtue of the development's location, minimises reliance on the private motor car, and can be adequately accessed by non car modes and public transport in particular.

PPG3 details planning policy for housing and sets out the criteria by which local planning authorities should assess proposed housing developments. The guidance encourages the redevelopment of previously developed sites and empty or under-used buildings particularly where there is good accessibility to non-car

modes of transport and where there is sufficient existing or potential infrastructure to cope with the development. Controlling parking standards for residential development is a key part of this strategy, offering a very direct constraint on the levels of car use with PPG3 stating that a parking standard of greater than 1.5 off-street car parking spaces per dwelling is not consistent with an aim to reduce car traffic and create a sustainable residential development but could conflict with existing residents in the area.

### REGIONAL AND LOCAL POLICY ISSUES

Existing regional planning guidance for the South East is contained in Regional Planning Guidance (RPG9) and covers the period to 2016. Once the Planning and Compulsory Purchase Bill became law, RPG 9 became the spatial strategy for the region and forms part of the statutory development plan. Local development documents will need to be in general conformity with RPG9 and planning applications will need to accord with its provisions. The Regional Assembly is undertaking a comprehensive review of RPG9 in as far as it applies to the South East. This will extend the time period covered to 2026. The resulting new South East Plan will not only be restricted to matters that can be implemented through the planning system or local transport plan process. It will also take account of a wide range of activities and

# 5 TRANSPORT ANALYSIS

programmes which have a bearing on land use including health, education, culture, economic development, skills and training, social inclusion, crime reduction and the impact of climate change.

This Regional Planning Guidance for the South East (RPG9) covers the period up to 2016 setting the framework for the longer term future. This guidance supersedes the Regional Planning Guidance for the South East issued in March 1994, which covered the period up to 2011. The primary purpose of this guidance is to provide a regional framework for the preparation of local authority development plans. The other purpose of this guidance is to provide the spatial framework for other strategies and programmes. These include the preparation of local transport plans by local authorities and the regional strategies of the South East of England Development Agency (SEEDA).

The Regional Transport Strategy is the regional framework that will ensure that the investment programmes of local authorities, transport providers and other key stakeholders in the transport sector complement and support the wider regional objective of delivering a more sustainable pattern of development. The Regional Transport Strategy represents a replacement of the transport chapter of Regional Planning Guidance for the South East (RPG9), published in March 2001

The Surrey Structure Plan provides a

planning framework for the county. Together with local plans prepared by district and borough councils and a countywide minerals and waste plan, it forms the overall Development Plan for Surrey. The existing Structure Plan, approved in 1994, guides the amount and general location of development until 2006. It includes a wide range of policies covering issues such as the environment, transport and housing. The Plan is currently being reviewed to reflect changing lifestyles and new government guidance. See below for the Proposed Modifications.

The Surrey Structure Plan is closely linked to the Local Transport Plan which seeks to deliver the Structure plan policies. Key to the Structure Plan objectives are to ensure that major generators of traffic are located in areas which are accessible by a range of transport modes. The Local Transport Plan for Surrey provides a 5 year plan setting out how Surrey CC intend to tackle transport issues. A key objective of the Local Transport Plan is to increase the sustainability of travel.

The Structure Plan policies will assist in delivering the strategy of the Local Transport Plan which aims to:

- Widen travel choice (Policies DN4 and DN5);
- Manage traffic and restrain the demand for travel (Policies LO2, DN2 and DN3);
- Produce a more integrated transport

- system (Policies DN1 and DN2);
- Plan and manage the highway network (Policy DN6);
- Address the transport needs of rural areas (Policies LO4 and DN17);
- Help to make freight transport more sustainable (Policy DN7);
- Integrate transport with other policies (All Structure Plan policies).

## DESIGN GUIDANCE FOR NEW DEVELOPMENTS

In order to promote good design in Surrey, the Surrey Design Document has been produced to complement national policy guidance and provide good practice advice and advocate a new approach to design which consider highways as only one element in the design process.

Surrey Design is underpinned by five key access and movement principles:

1. The emphasis on design will be on pedestrians, people with mobility impairments, cyclists and public transport;
2. The layout of the highway is only one of the elements to be considered in the design of the built environment;
3. New developments should, wherever possible, enhance movement choice;
4. Speed restraint for vehicles should be incorporated as part of an overall

# 5 TRANSPORT ANALYSIS

5. Car parking should not dominate or overly influence urban form and should be designed for efficient and flexible use.

## 5.3 ACCESSIBILITY REVIEW AND EXISTING CONDITIONS

### STUDY AREA

The Preston Ward is located in the north west of the Borough of Reigate and Banstead between Tadworth and Tattenham Corner. The study area encompasses the Preston Ward together with the additional areas bounded to the north by Chapel Way, to the west by the railway, to the south by Shelveys Way and to the east by Burgh Heath.

### PEDESTRIANS AND CYCLISTS

There is a good level of provision for pedestrians in the area with regard to the existing footways and open spaces with designated paths across the Recreation Ground and Burgh Heath.

Within the study area, the cycle network largely comprises on-road routes although there is shared cycle / pedestrian route running east to west across the Recreation Ground. Significant barriers to movement in the study area and beyond include the A240 Reigate Road, the A217 Brighton Road and the Wealden Railway Line.

### PUBLIC TRANSPORT

#### Rail services

The area is served by two railway stations, Tattenham Corner and Tadworth, both of which are located approximately a mile or so from the centre of the study area. Both stations can be reached within a 15 to 20 minute walk from most of the study area but are not an easy walking distance for a significant number in the area.

The stations are served by the Wealden Line operated by Southern Railways which provides a service of up to 2 trains per hour to Central London (Monday to Saturday) and 1 train per hour on Sundays. Additional services are provided in the weekday AM and PM peak into and out of London respectively providing connections to London Bridge, Clapham Junction and London Victoria, via Purely and East Croydon. Access to the London underground and mainline network is possible from the key mainlines stations. A summary of the current service provision is provided in Table 5.1. The journey time from Tattenham Corner to London Bridge is approximately 45 to 60 minutes.

#### Bus services

Details of the bus routes serving the study area are provided in Figure 5.1 with frequencies summarised in Table 5.2. The study area is served by two regular bus routes, the 420 and 460, operated by

Metrobus and a Sunday service, the 318, operated by Sunray. These routes provide direct connections to Sutton, Banstead, Reigate, Redhill and Epsom and provide interchange with the rail services at Tattenham Corner, Tadworth and Sutton stations. Typical journey times are as follows:

- Route 460 runs 2 services per hour (Monday to Saturday) with services to Epsom (journey time approximately 12 minutes), Redhill (36-46 minutes) and Reigate (25-35 minutes);
- Route 420 provides a less frequent hourly service direct to Sutton (journey time approximately 7 minutes) and Banstead (22 minutes), Monday to Saturday.
- The 318 provides an hourly Sunday service with journey times of 14 minutes to Banstead and 12 mins to Epsom.



Tattenham Corner Station, Preston's nearest railway station

# 5 TRANSPORT ANALYSIS

- The last bus to and from Epsom departs / arrives in the early evening at 2000 hours or earlier on week days and 1730 hours on sundays

The key bus routes through the study area include Preston Lane, Merland Rise, Marbles Way and Chetwode Road. The local bus routings and bus stops served are illustrated in Figure 5.2 on page 28. The Department of Transport, Local Government and the Regions (DTLR) suggests that no property should be more than 400 metres walking distance from the nearest bus stop, although clearly a careful balance needs to be struck between penetration of public transport services into residential developments and the need to minimise bus and passenger journey times. Figure 5.2 plots the approximate 400 metre catchment areas around each bus stop in order to identify where there are existing gaps in terms of access to the nearest bus stop.

## HIGHWAY NETWORK

The Borough of Reigate and Banstead is crossed by a number of major transportation routes including the M25 which runs east to west through the middle of the Borough. Other key routes through the Borough include the M23, the A25, the A217 and the A23. The study area is located to the west of the A240, which connects to Epsom in the north, and the A217, which connects to the M25 Junction 8 in the south and to Sutton to the north.

Both the A217 and the A240 to the east of the study area form part of the primary road network. To the north, west and south the study area is surrounded by a number of distributor roads including the following:

- B2227 Great Tattenhams/Tattenham way;
- B290 Epsom Lane / Oashurst Road; and
- B220 Tadworth Street.

Route and Key Destinations	Trains per Hour			First Train Weekday	Last Train Weekday
	Weekday Peak	Mon-Sat	Sun		
Central London to Tattenham Corner (via East Croydon and Purley)	3-4	2	1	0615	2304
Tattenham Corner to Central London (via Purley and East Croydon)	4-8	2	1	0554	2245

Table 5.1 Trains Service Frequencies (Summer Timetable)

Route no.	Route and key destinations	Number of buses per hour					
		Mon-Fri peak	Mon-Fri off peak	Sat	Sun	First bus	Last bus
<b>Key routes</b>							
420	Sutton-Banstead-Tattenham Way-Tadworth Station-Reigate-Redhill	1	1	1	0	0620	2305
460	Epsom-Tattenham Corner Station-Marbles Way-Tadworth Station-Walton-on-the-Hill-Reigate-Redhill	2	2	2	0	0600	1737
<b>Other services</b>							
318 <sup>(1)</sup>	Epsom-Tattenham Corner Station-Burgh Heath-Banstead-Tattenham Corner Station-Epsom	0	0 (3/day)	0	1	0916	1346
516 <sup>(2)</sup>	Dorking-Betchworth Station-Box Hill-Leatherhead Station-Woodbridge-Leatherhead-Epsom	0	0	0 (1/day)	0	1245	1630
621 <sup>(3)</sup>	Lower Kingswood-Walton-on-the-Hill-Tadworth-Banstead-Epsom	0	0 (1/day)	0	0	0915	1245
623	Tadworth-Burgh Heath-Banstead-Woodmansterne-Banstead	0	0 (1/day)	0	0	1010	1240

Table 5.2 Selected Bus Routes and Frequencies

- (1) 318 service operates Monday, Wednesday, Friday and Sunday only
- (2) 516 service mostly operates as above, but 3 per day operate between Boxhill and Woodbridge only. One service on Saturday operates from Sutton-Banstead-Tadworth-Box Hill-Leatherhead-Epsom
- (3) 621 service operates on Friday only

# 5 TRANSPORT ANALYSIS

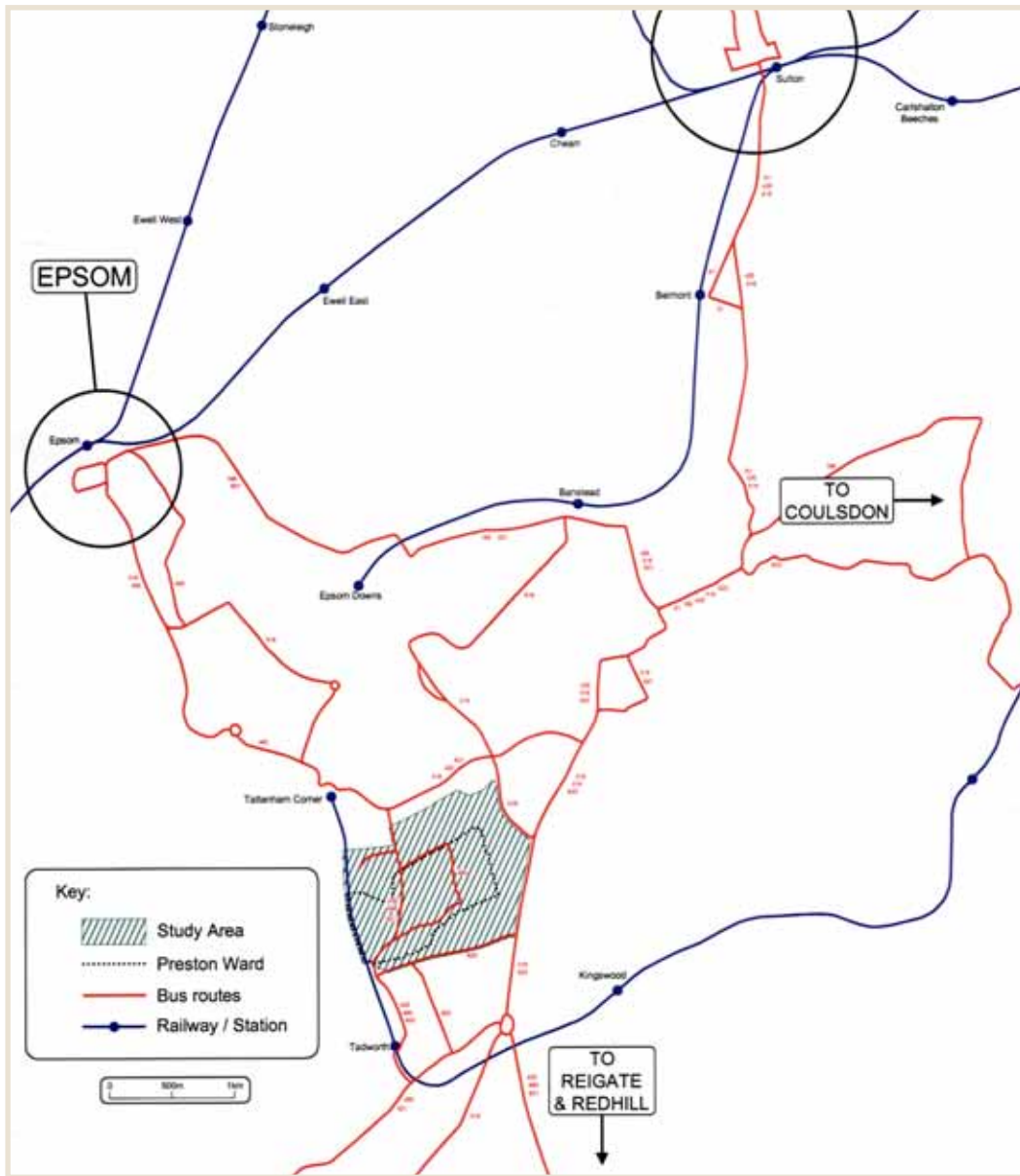


Figure 5.1 Bus routes serving the study area

Access onto the primary road network is possible from Great Tattenhams / Tattenham Way, Shelveys Way and Tadworth Street. Within the study area, the key local distributor roads are Merland Rise, Preston Lane, Chetwode Road, Marbles Way and Shelveys Way which serve the majority of residential access roads in the area.

## 5.4 KEY ISSUES, OPPORTUNITIES AND CONSTRAINTS

### KEY ISSUES AND ASPIRATIONS

The Preston Members' Forum and the public consultation process for the masterplan have identified the following issues and aspirations with regard to transportation in the study area:

- All members are keen for new and improved pedestrian routes through the study area;
- There is agreement that residents would want to guard against transport rat runs through the study area;
- Improved access and linkages to Asda via Burgh Heath and the A240 is considered desirable although any development proposals on or involving common land may provoke some opposition;
- Most people in the area (the Preston ward and neighbouring areas) travel north to Epsom, and sometimes Sutton

# 5 TRANSPORT ANALYSIS

for shopping, socialising, work etc - people rarely travel south. Consequently, wider transport connections to the north are a priority;

- Bus routes to Epsom have recently been cut and this has hit local residents, particularly those without cars. There are few bus services in the evening and, until recently, no Sunday service. People would like to see public transport services that attract those with cars as well as those without - so it is a viable option rather than a last resort.: A public transport link from Epsom, via Preston to Banstead would be very useful;
- Trains in the area are infrequent, there is only one line and it is considered unsafe by some to use in the evenings;
- Traffic impacts of new potential development and appropriate access to De Burgh site would need to be addressed;
- Improve linkages between Recreation ground facilities;
- On-street / verge / pavement parking perceived as an existing problem. Road widths at certain locations cause access difficulties for delivery / service vehicles and buses.

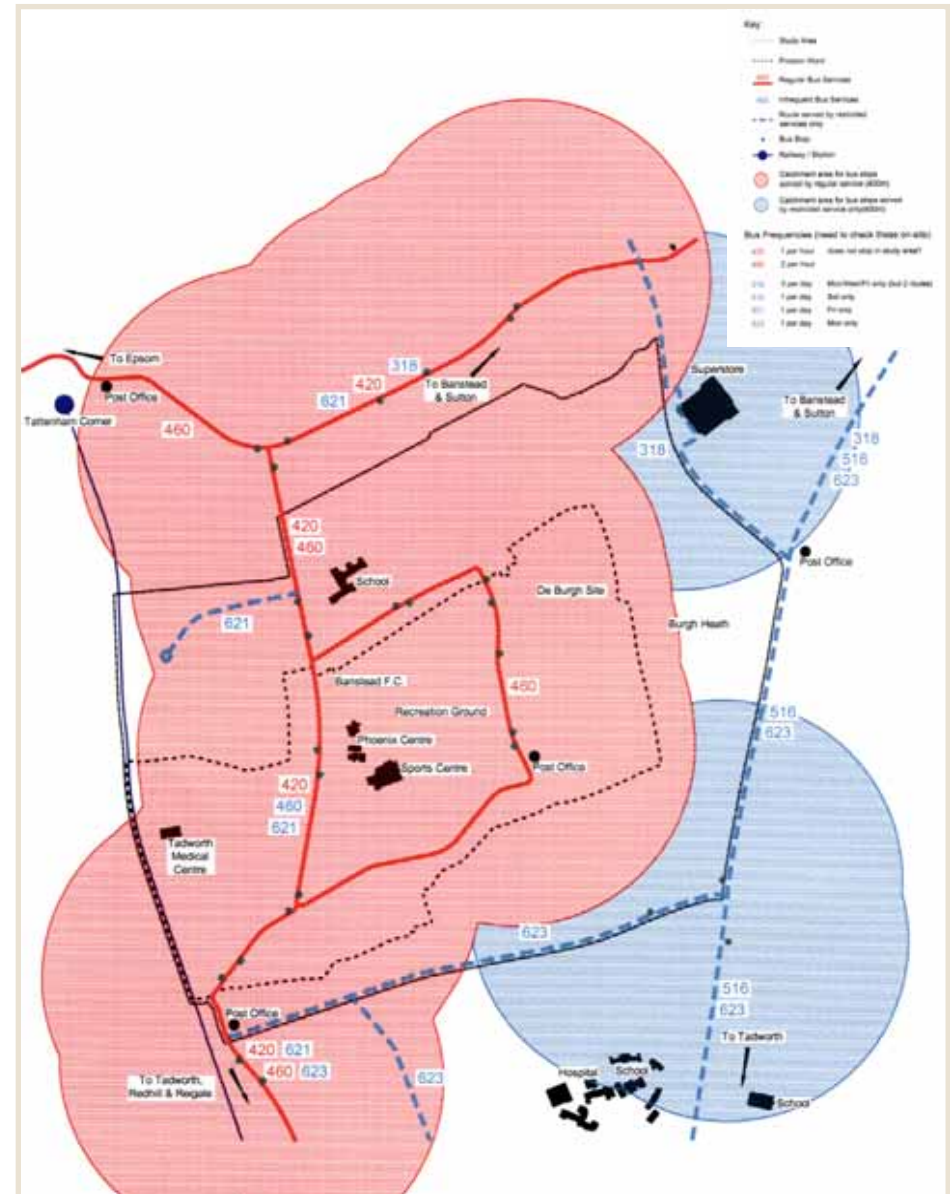


Figure 5.2 Local bus routes and bus stop locations in the the study area

# 5 TRANSPORT ANALYSIS

## KEY OPPORTUNITIES AND CONSTRAINTS

In order to investigate the key opportunities and constraints relating to transportation, a SWOT analysis was undertaken for the study area. The initial SWOT assessment is summarised in Table 5.3, with a more detailed consideration of the key opportunities and constraints provided in the following sections.

## ACCESS AND MOVEMENT

In accordance with the National Policy Guidance and the Surrey County Council Design Guide, the emphasis in design should be considered in the order of the following User Access Hierarchy in order to ensure that priority is no longer given to the car:

1. Pedestrians and the mobility impaired;
2. Cyclists;
3. Public Transport;
4. Service and delivery vehicles; and
5. Private cars.

## IMPROVED PEDESTRIAN LINKAGES AND CROSSINGS

The dispersed pattern of existing facilities / amenities and the lack of a centre makes it difficult to achieve wholesale

improvements in the pedestrian and cycle network. Generally there is a good level of provision for pedestrians in the area with regard to the existing footways and open spaces. Accordingly we strongly support the proposed strengthening of the east-west route linking key amenities and development sites. This should be supported by the provision of informal crossing facilities (zebras / pedestrian refuges) across the key vehicular routes at key locations to assist pedestrians. Potential locations for improved crossing facilities within the study area include;

- Merland Rise opposite the proposed community hub and the primary school;
- Chetwode Road between the primary

school and the recreation ground;

- Preston Lane / Marbles Way in the vicinity of the proposed retail and residential developments; and
- Marbles Way in the vicinity of Marbles Pond.

In principle there is no problem with a proposed new pedestrian route through Pit Wood. However where separate routes are proposed, these should ideally be overlooked with active frontages and be well lit.

With regard to the proposed link to ASDA a pedestrian crossing facility across the A240 has been previously investigated by

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>- Relatively low vehicle flows within the study area</li> <li>- Good network of existing footpaths</li> <li>- Bus connections to Epsom and Sutton provided by routes 460 and 420 (Monday to Saturday)</li> <li>- Two stations on the Wealden Line within walking distance</li> </ul>	<ul style="list-style-type: none"> <li>- Poor access to Asda superstore for non car modes</li> <li>- Dispersed nature of existing facilities and amenities with no central area</li> <li>- Poor late night and Sunday bus and rail services</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>- Speed reduction measures to improve safety for cyclists and pedestrians</li> <li>- Demand Responsive Transport</li> <li>- New access onto A240 Reigate Road to serve Burgh Heath development</li> <li>- Green Corridor</li> <li>- Bus link</li> <li>- Gateway measures to give identity to area</li> </ul>	<ul style="list-style-type: none"> <li>- Potential vehicle speeds and lack of pedestrian / cycle crossing facilities</li> <li>- Severance effects of A240 Reigate Road and A217 Brighton Road and Private facilities (eg Banstead Football Club and Sports Centre)</li> <li>- Traffic impact of new developments</li> </ul>

Table 5.3 Transport SWOT analysis

# 5 TRANSPORT ANALYSIS

Surrey County Council (SCC) but was not pursued due to safety concerns with regard to the siting of the pedestrian facility. SCC originally opposed the ASDA application on highways safety grounds but it was granted on appeal. There is an accident problem on the A240. SCC has entered into negotiations in the past with ASDA to improve access and safety to the store. Proposals for traffic signals were discounted by SCC. There is no objection in principle to a roundabout access to replace the existing priority junction and SCC believes ASDA's highway consultants have prepared some preliminary designs. Proposals were not progressed due to funding requirements and impact on common land. A roundabout would reduce vehicle speeds on the A240 which would allow pedestrian refuges to be provided on the key approaches. It may be possible to approach ASDA to revisit this issue although funding / common land / environmental issues would need to be overcome. Without the roundabout, it is unlikely that an isolated pedestrian crossing facility on the A240 would be acceptable to the Highway Authority, on safety grounds. Accordingly there is considered to be little point in upgrading the Burgh Heath pedestrian / cycle link until an improved pedestrian crossing across the A240 is deliverable.

## PUBLIC TRANSPORT

The 420 and 460 bus routes provide a decent regular bus service to the key town centres of Sutton, Epsom and Reigate and Redhill. However bus routes to Epsom have recently been cut and there are few bus services in the evening and on Sundays. The consultation exercise has indicated that improved public transport routes and frequencies is high on the local agenda.

Current and future proposals to improve bus-based public transport include the following;

- Routes 420 and 460 are part of a Quality Bus Partnership between Metrobus and Surrey CC. As part of a service improvement budget for Redhill and Reigate these services will benefit from a £0.5m budget for improving service infrastructure and a £1.2 to 1.4m budget for introducing ITS schemes (most notably real time service information) over the next two years. This could benefit the study area with improvements throughout the services' routes;
- New N400 Friday and Saturday evening service was introduced on 16 July 2004 and is operated by Central on behalf of Epsom and Ewell Crime and Disorder Unit. Bus links provided between Tadworth (Merland Rise / Preston Lane) and Epsom (out: 1900,

2030, 2200, 2330, 0100 / in: 2015, 2145, 2315, 0045, 0215). Fare £3 return, £2 single;

- Evening Demand Responsive Transport (DRT) services may be operational by the end of the year dependent on the interest for operators. When up and running it will offer travel opportunities to Epsom, Sutton and Redhill from 1830 to 2300.

There is a general perception that travel by public transport in the area is infrequent and is considered by some to be unsafe to use in the evenings. This perception is exacerbated by stations being left un-staffed at certain times of day, by the isolated nature of many interchanges and by low patronage levels of some services, particularly late evening trains. Other public transport issues include the inaccessibility of the train stations to



On street parking often conflicts with local bus service provision

# 5 TRANSPORT ANALYSIS

some residents and the cost of public transport for people in relation to local incomes.

The Council(s) should continue to seek partnerships with the rail industry to improve passenger information, the waiting environment, safety, security and access for disabled people at stations.

## DE BURGH SITE AND POTENTIAL FUTURE DEVELOPMENTS

The current indicative layouts for the De Burgh site propose two vehicular access points from Chetwode Road for the northern development site with access to the southern site via new links between Marbles Pond and De Burgh Gardens. These are acceptable in principle although for both sites the impacts on safety and existing residential amenity would need to be considered. Generally sites serving in excess of 100 dwellings should have more



The recent De Burgh Gardens development on the site of the old secondary school

than one point of access to the existing highway network, although this is also desirable for all sites in excess of 50 dwellings to allow emergency access if one access route becomes blocked.

The Surrey Design Guide makes the following recommendations with regard to minimum road widths for different types of road serving residential developments. However these represent minimum recommended road widths and greater widths may be required to accommodate on-street parking, buses and traffic flows. Shared surfaces may be appropriate for roads serving up to 50 dwellings. The Guidance also states that residential roads can be narrowed to 3.0 metres at certain locations in order to provide speed control. In addition passing places are recommended for road widths of less than 5.5 metres to allow to heavy vehicles to pass each other.

a. Within residential developments;

- 0-25 dwellings      4.1 metres
- 26-50 dwellings    4.8 metres
- 51-300 dwellings    5.5 metres

b. Roads serving residential areas:

- With o/s parking    5.5 metres
- Parking both sides 7.0 metres
- Roads with buses    6.75 metres
- Roads with Schools 5.5 metres

An alternative access option would be to provide a new vehicular access onto the A240 Reigate Road which could provide access to any new development at the De Burgh site. Clearly a vehicular link through Burgh Heath would have significant environmental impacts and could provoke local opposition. However, it may be possible to sell the concept of a green spine route through the area that links key facilities, reduces the severance effects of the A240, improves facilities for pedestrians and cyclists and introduces the possibility of a bus only link connecting the A240 and Chetwode Road - possibly reducing bus journey times. A vehicular access to the potential new development at Burgh Heath via the A240 would, in theory, minimise vehicular impacts on the main residential area in comparison to access from Chetwode Road and could reduce potential trip lengths.

The indicative plans indicate the development of some 170 to 200 dwellings on the DeBurgh site. In order to provide an initial assessment of the potential traffic impact the TRICS database has been used to determine potential trip rates for the proposed residential development. At this stage the likely scale of development and housing mix is still not clear. Accordingly, possible trip rates have been derived for privately owned housing and flats. The table below shows the estimated trip rates per dwelling for the AM Peak, PM Peak and Daily (24 hour)

# 5 TRANSPORT ANALYSIS

scenarios for residential development for both flats and houses (privately owned). Assuming 170 private houses are developed, this would result in the following potential vehicular traffic generation:

- AM Peak: 22 arrivals, 78 departures, 100 two way total;
- PM Peak: 87 arrivals, 49 departures, 136 two way total;
- Daily (24 hour total): 665 arrivals, 621 departures, 1285 two way total.

If access to the proposed DeBurgh developments is to be via the existing road network, then clearly there will be some traffic impacts on the adjacent residential roads and Chetwode Road, Merland Rise and Marbles Way in particular. We would recommend that the option of a vehicular access to serve the development onto the A240 via a new ASDA site access roundabout is not discounted at this stage. For either access option, a detailed Transport Impact Assessment would be required in support of any proposed development application and would be required to identify appropriate mitigation measures and to demonstrate that

additional traffic could be accommodated on the surrounding road network in safety, operational and capacity terms.

## SPEED RESTRAINT

Speed restraint is best achieved through a combination of buildings, landscape and junction design with the emphasis being as much on urban design as car use. Key methods that can be used to reduce vehicle speed include the following;

- More frequent junctions;
- Reducing straight lengths of road where vehicle speed can be built up;
- Tighter bends and radii rather than sweeping curves;
- Permitted on-street car parking;
- Changing the alignment of the carriageway to alter the drivers perception of the street. Localised narrowing and footway build-outs can be used in combination with landscape treatments;
- Vertical features such as raised tables should ideally only be used to calm existing streets or to solve existing problems that cannot be dealt with in other ways, for example, to provide

pedestrian priority at junctions and key crossing points.

There are long-term local transport schemes proposed at the Great Tattenhams / Merland Rise junction (new mini-roundabout and pedestrian crossing facility) and on Merland Rise opposite the primary school access (new pedestrian crossing). Further progression of these is subject to future resources and priority considerations.

The implementation of the above measures together with a potential Gateway improvement scheme at Preston Lane / Merland Rise would contribute to improved pedestrian facilities and would help to reduce vehicle speeds on Merland Rise.

Time period	Houses			Flats		
	Arrival	Departure	2-way	Arrival	Departure	2-way
AM Peak	0.13	0.46	0.59	0.01	0.30	0.31
PM Peak	0.51	0.29	0.80	0.26	0.06	0.32
24 Hour	3.91	3.65	7.56	_*	_*	_*

Table 5.4 Estimated Residential Trip Rates  
\* 7am to 7pm surveys only, Source TRICS 5.1



Junction between Preston Lane and Merland Rise

# 5 TRANSPORT ANALYSIS

With the implementation of these schemes, it is considered that, subject to available funding, traffic calming measures could be considered on the Preston Lane, Marbles Way and Chetwode Road loop along with general carriageway resurfacing and improvements. Preston Lane, in particular, currently experiences relatively high vehicles speeds, which along with on-street parking could reduce pedestrian safety. Consideration of appropriate traffic calming measures would need to take account of existing and forecast vehicle flows, historical accident records, parking demand and requirements and existing road widths.

Little information is currently available with regard to existing vehicle flows, travel patterns and parking supply and demand.

## PARKING

Surrey County Council has published supplementary planning guidance entitled "A Parking Strategy for Surrey" (March 2003):

- This guidance brings Surrey County Council's Residential parking standard in line with PPG3 by applying maximum parking standards to all locations for residential development. The Surrey CC parking guidance aims to achieve an average of 1.5 spaces per dwelling for all developments of around 20 dwellings and above. A

more flexible approach is suggested for smaller developments with dwellings of 3 bedrooms or more with a guideline of up to 2.0 spaces per 3 bedroom dwelling;

- For small parades of shops (upto 500 sqm) serving the community, the maximum standard is 1 car parking space per 30m. Cycle parking requirements would be dependent on the uses proposed but a minimum of 2 cycle spaces is suggested.

The Surrey CC parking guidance aims to achieve an average of 1.5 spaces per dwelling for all developments of around 20 dwellings and above. Accordingly a mixture of assigned and unassigned spaces is likely to be required for new residential developments.

With regard to existing parking issues, it is difficult to comment in detail given the lack of available information with regard to existing parking supply and demand. Daytime site observations have indicated that there is not a specific parking problem in the study area, although it is known that on-street / verge / pavement parking is considered an existing problem in certain locations, particularly where narrow road widths cause access difficulties for delivery / service vehicles and buses.

Furthermore the original design of some of

the residential developments within the study area include off-street parking areas that are currently poorly utilised due to a variety of reasons which may include perceived lack of security, poor location relative to their property and because use is subject to a charge despite there being free on-street spaces available nearby. It is recommended that a thorough survey is undertaken of existing parking supply and demand at different times of the day and overnight in order to identify the extent of any parking problems in the study area.



Marbles Way on-street parking

# 5 TRANSPORT ANALYSIS

In advance of detailed parking survey information being available, an initial review was undertaken of existing parking issues within the study area. Key routes were assessed with regard to the existing parking restrictions, general levels of daytime on-street parking, whether they served a bus route and any relevant traffic management arrangements such as one-way working. Levels of on-street parking varied considerably within the study area but was evident on the following routes used by local bus services, and exacerbated by poor occupancy of off-street parking and garage areas;

- Preston Lane;
- Merland Rise;
- Marbles Way; and
- Chetwode Road.

On-street parking is not in itself undesirable and it can act as a speed constraint to drivers on residential roads with parked vehicle effectively narrowing the road, thereby encouraging drivers to approach at a lower speed than might otherwise be the case. However it can also create traffic flow problems by reducing the effective width of the road to a point where two vehicles are unable to pass each other, particularly if one is a bus or heavy goods vehicle.

Figure 5.3 provides a summary of the initial parking review and highlights the following areas where specific parking problems were identified;

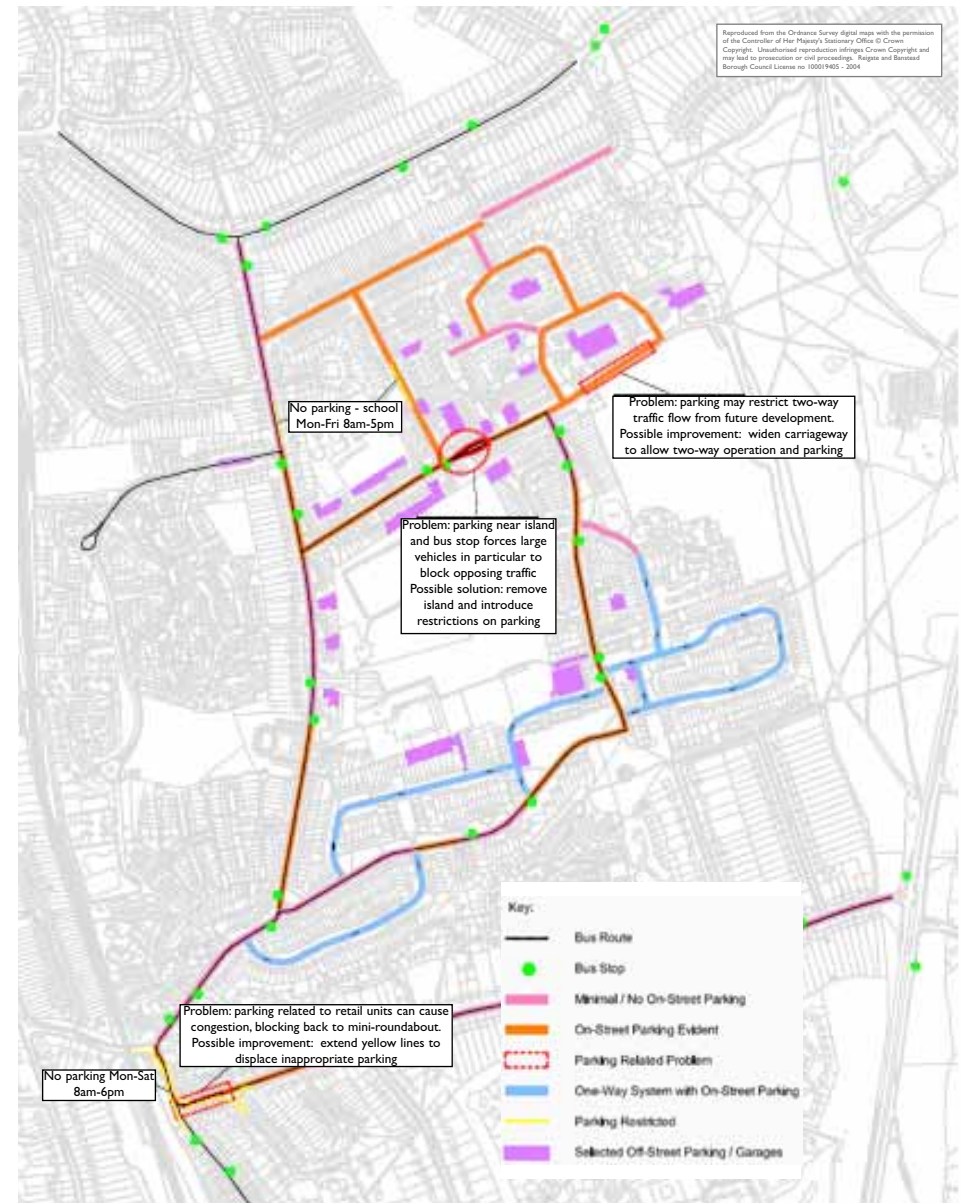


Fig. 5.3: Initial parking review of Preston

# 5 TRANSPORT ANALYSIS

- Chetwode Road to the north of the De Burgh site - Currently experiences on-street parking which may restrict two-way flow of traffic. This situation could be exacerbated by potential increased traffic levels associated with the possible future development of the De Burgh site. A potential solution would be to widening the Chetwode Road along the northern boundary of the site to allow continued parking use for local residents while facilitating two way traffic flow;
- Chetwode Road on approach to the St Leonard's Road junction - This is a significant "pinch-point" on the local bus network. The lack of parking restrictions in the vicinity of the existing bus stops together with the central traffic island forces large vehicles, and buses in particular, travelling westbound to manoeuvre around parked vehicles too close to the island and thereby oppose vehicles travelling eastbound. This problem is further exacerbated if a bus is at the bus stop but is unable to pull close to the kerb due to adjacent parked vehicles. Removing the central island would increase the width of the road, allowing vehicles to pass more easily. Further measures could include the introduction of parking restrictions, or the relocation of the bus stops to the wider part of the road.
- Merland Rise / Shelveys Way -

Parking associated with local retail units restricts the operation of the junction of Ashurst Road and Shelveys Lane to the south of the Regeneration Area. While parking is restricted between 8am and 6pm (Monday to Saturday) along Ashurst Road, it is permitted along Shelveys Way, preventing two-way traffic flow. During peak hours where the traffic flow is greatest, this can result in localised congestion with the potential to block back to the mini-roundabout junction. By extending the yellow line restrictions on both sides of Shelveys Way to its junction with Hill View Close and displacing the parking to further along Shelveys Lane, the existing problems may be eased.

## 5.5 SUMMARY, CONCLUSIONS AND WAY FORWARD

### SUMMARY AND CONCLUSIONS

The key findings of the initial Transport Appraisal can be summarised as follows:

- **Policy Context** - National, regional and local policy guidance requires all new developments to be sustainable and reduce the need to travel by inappropriate modes by virtue of the developments location and accessibility to non car modes. All major developments are required to be supported by detailed Transport

Impact Assessments. In order to promote good design in Surrey, the Surrey Design Document has been produced to complement national policy guidance and provide good practice advice and advocate a new approach to design which consider highways as only one element in the design process;

- **Pedestrian Movement and Linkages** - The dispersed pattern of existing facilities / amenities and the lack of a centre makes it difficult to achieve wholesale improvements in the pedestrian and cycle network. Generally there is a good level of provision for pedestrians in the area with regard to the existing footways and open spaces. Accordingly we strongly support the proposed strengthening of the east-west route linking key amenities and development sites. This should be supported by the provision of informal crossing facilities across the key vehicular routes at key locations to assist pedestrians;
- **Severance Effects of the A240** - A new ASDA access roundabout on the A240 would help reduce vehicle speeds and could allow pedestrian refuges to be provided on the key approaches.

# 5 TRANSPORT ANALYSIS

Without the roundabout, it is unlikely that an isolated pedestrian crossing facility on the A240 would be acceptable to the Highway Authority on safety grounds. Accordingly there is considered to be little point in upgrading the Burgh Heath pedestrian / cycle link until an improved pedestrian crossing across the A240 is deliverable;

- **Public Transport** - Both stations can be reached within a 15 to 20 minute walk from the majority of the study area. The 420 and 460 bus routes provide a decent regular bus service to the key town centres of Sutton, Epsom and Reigate and Redhill. However bus routes to Epsom have recently been cut and there are few bus services in the evening and on Sundays. The consultation exercise has indicated that improved public transport routes and frequencies is high on the local agenda. There are current and future proposals to improve bus-based public transport. The study area is served by two railway stations, Tattenham Corner and Tadworth, both of which are located approximately a mile or so from the centre of the study area. The Council(s) should continue to seek partnerships with the rail industry to improve passenger information, the waiting environment, safety, security and access for disabled people at stations;

- **De Burgh Site** - If access to the proposed DeBurgh developments is to be via the existing road network, then clearly there will be some traffic impacts on the adjacent residential roads and Chetwode Road, Merland Rise and Marbles Way in particular. We would recommend that the option of a vehicular access to serve the development onto the A240 via a new ASDA site access roundabout is not discounted at this stage. For either access option, a detailed Transport Impact Assessment would be required in support of any proposed development application and would be required to identify appropriate mitigation measures and to demonstrate that additional traffic could be accommodated on the surrounding road network in safety, operational and capacity terms;

- **Speed Restraint** - There are long-term local transport schemes proposed at the Great Tattenhams / Merland Rise junction (new mini-roundabout and pedestrian crossing facility) and on Merland Rise opposite the primary school access (new pedestrian crossing). Further progression of these is subject to future resources and priority considerations. The implementation of these measures together with a potential Gateway improvement scheme at Preston Lane / Merland Rise would contribute to improved pedestrian facilities and

would help to reduce vehicle speeds on Merland Rise. With the implementation of these schemes It is considered that, subject to available funding, traffic calming measures could be considered on the Preston Lane, Marbles Way and Chetwode Road loop along with general carriageway resurfacing and improvements;

- **Parking** - The Surrey CC parking guidance aims to achieve an average of 1.5 spaces per dwelling for all developments of around 20 dwellings and above. Accordingly a mixture of assigned and unassigned spaces is likely to be required for new residential developments. It is recommended that a thorough survey is undertaken of existing parking supply and demand at different time of the day and overnight in order to identify the extent of any parking problems in the study area.



Waterfield roundabout

# 5 TRANSPORT ANALYSIS

## WAY FORWARD

From a transportation perspective the key future tasks envisaged to progress the masterplan proposals include the following:

- Data Collection and Collation - Collection of peak hour traffic flows at key junctions and on key links within the study area;
- Access Options - Investigate the feasibility of a new A240 / ASDA access roundabout to help reduce vehicle speeds, improve access to ASDA and reduce the severance effects of the A240;
- Parking Surveys - A thorough survey of existing parking supply and demand at different time of the day and overnight in order to identify the extent of any parking problems in the study;
- Identification of Schemes - Subject to funding availability, the feasibility assessments, preliminary designs and costs of schemes to reduce vehicle speeds and improve access for non car modes on Merland Rise, Preston Lane, Marbles Way and Chetwode Road;
- Impact Assessment - A detailed Transport Impact Assessment and Travel Plans, where appropriate,

would be required in support of any major developments in order to identify appropriate mitigation measures and to demonstrate that additional traffic could be accommodated on the surrounding road network in safety, operational and capacity terms.