

ENVIRONMENTAL EFFECTS

A380 Kingskerswell Bypass

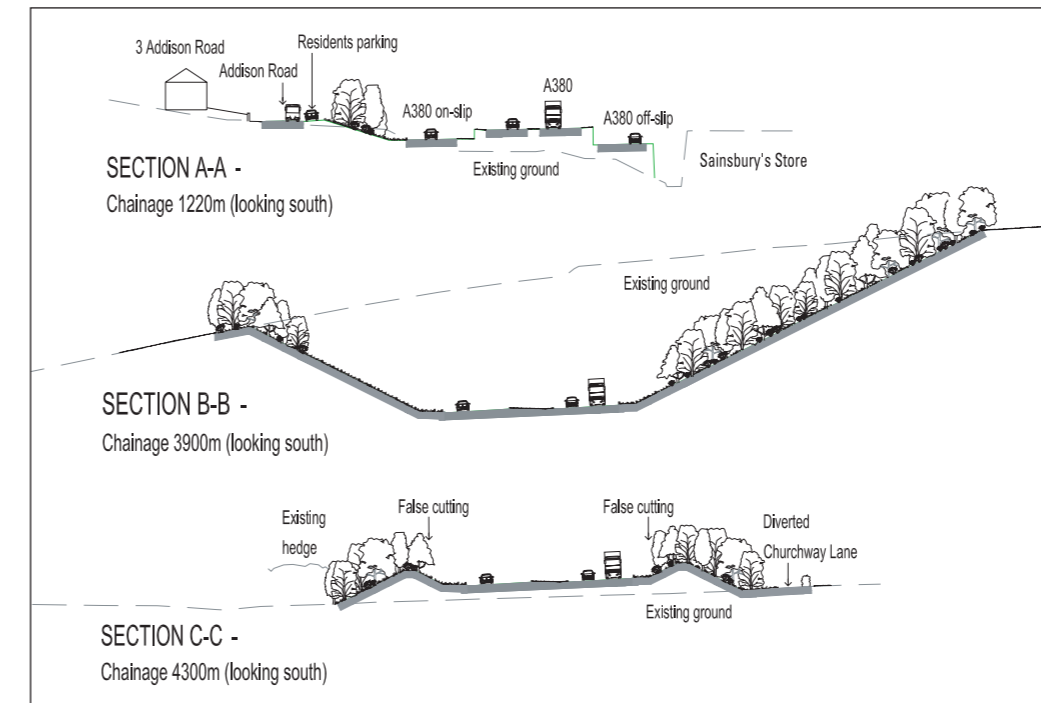


Non-technical
Summary of the
Environmental
Statement

November 2004



DEVON COUNTY COUNCIL



WHAT HAPPENS NEXT

The formal scheme Draft Orders are due to be published in Spring 2005. Depending on the nature and number of objections received to the Planning Application, a Public Inquiry may be held before an independent Inspector appointed by the Secretary of State. If a Public Inquiry is to be held, all those who have objected will be notified individually beforehand and notices will appear in the local press. All comments received will be made available to the Inspector who may decide to make them public. Publicity will be given to any alternative proposals received.

YOUR VIEWS

If you wish to support, comment on, or object to the Planning Application for this scheme, or if you wish to put forward alternative proposals or comment on the Environmental Statement, you should write before the latest date for objections given in the Public Notice to:

- Devon County Council**
Environment Directorate, Lucombe House,
County Hall, Topsham Road,
Exeter EX2 4QW
- Torbay Council**
Environment Services, Roebuck House,
Abbey Road, Torquay TQ2 5EJ

DETAILED INFORMATION

Copies of the Environmental Statement and the Planning Application documents for the proposals will be available for inspection for 21 days from the date the Planning Application is advertised. They will be on deposit at the following locations:

Devon County Council Environment Directorate Lucombe House County Hall Topsham Road Exeter EX2 4QW	Torbay District Council Environment Services Roebuck House Abbey Road Torquay TQ2 5DP	Teignbridge District Planning and Environment Forde House Brunel Road Newton Abbot TQ12 4XX
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Copies of the following may be obtained from Devon County Council or Torbay Council at the above addresses and for the prices shown:

- Non-technical Summary of Environmental Statement **FREE OF CHARGE**
- Environmental Statement **£140.00**
- Compact Disc **£15.00**

Additionally, online versions of the above can be viewed at: www.devon.gov.uk or www.torbay.gov.uk

Environmental Issues	Effects of the Scheme	Comments
Landscape Effects	<p>The design of the Scheme aims to integrate the new bypass into the local landscape as far as possible. However, the Scheme would involve the removal of approximately 5.5 km of field hedges, 0.44 km of garden hedges, 70 mature individual trees and 1 hectare (ha) of woodland.</p> <p>The construction and operation of the Scheme would generate a combination of adverse landscape, townscape and visual impacts. The visual envelope of the Scheme, however, is largely restricted to the densely-developed Aller, Kerswell and Edginswell Valleys, with few longer distance views from the surrounding countryside. The adjoining Coffinswell valley would be largely unaffected by the Scheme.</p> <p>There would be substantial adverse landscape and visual impacts (particularly on views from residential properties in Newton Abbot and Kingskerswell) during the construction phase along the whole length of the Scheme. After completion, traffic would be more prominent in views from the southern edges of Newton Abbot than it is on the existing A380 and embankments and traffic would intrude into the Aller valley. In views from much of lower Kingskerswell, when the earthworks have been finished and grassed, only the top of lorries would be visible, but the rock cutting at Kerswell Down would appear stark. These adverse impacts would be considerably reduced when the mitigation planting becomes established, because it would screen traffic in most views and create an extension to the existing wooded hillside to the west of Kingskerswell.</p> <p>Visual effects on existing residential properties are assessed, at 15 years after construction, to be substantial adverse: 43 properties, moderate adverse: 47 properties, slight adverse: 265 properties, no change: 575 properties and beneficial: 70 properties. In addition, the visual effects on Scheduled Monuments, Listed Buildings and Structures are assessed, at 15 years after construction, to be moderate adverse: 1 Scheduled Monument and 1 Listed Building, slight adverse: 1 Scheduled Monument and 4 Listed Buildings, no change: 6 Listed Buildings.</p>	<p>The adverse landscape and visual impacts would be mitigated by measures which include extensive 'false cuttings' to minimise the visual intrusion of traffic along part of the south-eastern side of the main Aller junction embankment and where the road would traverse the valley sides to the west of Kingskerswell. 'False cuttings' are screen mounds alongside the road that would be shaped to blend in with the natural landform.</p> <p>There would also be extensive areas of new woodland planting (15.43 ha), visually linking with existing woods in keeping with local landscape patterns. The pattern of hedges, disrupted at the construction phase, would be reconnected with new highway boundary hedges. In total, 3.5 km of hedges and over 100 new specimen trees would be planted.</p>
Ecology and Nature Conservation	<p>A total of seven locally designated County Wildlife Sites - CWS, or 'potential' County Wildlife Sites - pCWS are directly affected by the Scheme. Land take would result in habitat loss from approximately one half of the wetland at Edginswell Farm CWS and most of Aller Bridge pCWS. At the Kerswell Down and Whilborough Common CWS, 0.93 ha of woodland and scrub would be lost. In addition, 1.75 ha of grassland from Manor House Fields pCWS, 0.53 ha of grassland from Kerswell Down Hill Fields pCWS, 2.63 ha of arable fields from Yannon Lane Fields CWS and 0.87 ha of wetlands from the Ford Fields CWS would be lost. At the Ford Fields CWS a further 1.21 ha would be temporarily lost to a site compound and temporary access track required for the construction of a culvert under the mainline railway.</p> <p>The loss of habitat from three of these designated sites, Edginswell Farm CWS, Aller Bridge pCWS and Kerswell Down and Whilborough Common CWS are assessed as moderate adverse. The loss of the habitat from the Manor House Fields pCWS, Kerswell Down Hill Fields pCWS and Ford Fields CWS are assessed as slight adverse. The loss of the habitat at the Yannon Lane Fields CWS is assessed as slight beneficial due to the commitment to implement land management agreements with local landowners, prior to Scheme construction, in order to improve Cirl bunting habitat.</p> <p>In addition to the loss of habitats in the designated sites, approximately 5.5 km of hedgerow would be lost as a result of permanent land take for the Scheme and a 300m length of the Aller Brook would be diverted. The Aller Brook diversion would include a 140m long culvert to pipe the brook under the road junction at Aller. The loss of the hedgerows is assessed as moderate adverse and the brook habitat as slight adverse.</p> <p>These habitats support a number of fauna, such as Lesser horseshoe bat, Cirl bunting, Badger, Otter as well as Atlantic salmon. The effects are assessed as large adverse on Lesser horseshoe bat, slight adverse for Cirl bunting and Atlantic salmon and neutral for Badger and Otter. The effects on Lesser horseshoe bats are assessed as large adverse due to the severance of bat flight routes at the southern end of the Scheme, disruption to bat commuting patterns and loss of feeding habitat, in particular in the wetland at Edginswell CWS.</p>	<p>There are no Sites of International Wildlife Importance or Sites of Specific Scientific Interest within the Scheme corridor. As there is no deliverable alternative route at the Edginswell Farm County Wildlife Site, the Scheme includes creation of a new wetland habitat to compensate in part for that lost, as well as scrub and woodland planting in close proximity. The new wetland, as well as other grassland habitat within the Scheme corridor would continue to be grazed. Other measures include grassland establishment to compensate for loss of elements of some County Wildlife Sites, and hedgerow and woodland planting to compensate for loss of a part of Kerswell Down and Whilborough Common CWS.</p> <p>Where hedgerows are to be lost, new hedgerows would be planted with a mix of native, locally occurring species. Existing heavily managed hedgerows would be allowed to grow taller and wider. Grassland establishment would help compensate for loss of grassland along the Scheme corridor.</p> <p>Badger tunnels and fencing are proposed at two points along the Scheme, to enable Badgers to continue to access existing foraging habitat on the eastern side of the Scheme, whilst reducing the risk of road kills. Badger proof fencing would be installed to guide animals towards tunnel entrances.</p> <p>In order to ensure that Otters are able to continue to move freely along watercourses at periods of peak flow, a tunnel has been incorporated into the Scheme at Aller. The section of watercourse to be lost at Aller Junction would be replaced and works on the watercourses would be undertaken so as to ensure the integrity of water quality and maintain access for migratory fish by the inclusion of a fish traverse and pool in the culvert at Aller.</p> <p>Use of culverts and temporary low-level lighting would divert Lesser horseshoe bats under the Scheme at Edginswell. Purpose-built roosts would be constructed in appropriate locations to replace those roosts lost to the Scheme. A bat box scheme would be implemented to compensate for the tree roosts that would be lost.</p> <p>Management agreements in advance of construction would focus on arable land adjacent to the Scheme, to enhance hedges and their structural diversity and to manage field edges to increase Cirl bunting foraging extent and quality. Some work has commenced in this regard, on land at Manor Farm, north of Aller Cross. The work at Manor Farm involves ploughing and cultivating with a specific seed mix to benefit Cirl bunting and other insectivorous birds.</p>
Cultural Heritage	<p>No nationally important archaeological remains have been identified within the Scheme corridor. Two known archaeological sites would be directly affected: the Iron Age/Romano-British site at Aller Cross is considered to be of regional importance, whilst the medieval building off Edginswell Lane south of Kingskerswell is of local importance. Other known features that would be directly affected by the Scheme include buried remains of the prehistoric and post-medieval periods, parish boundaries and sunken lanes; these are considered to be of minor local importance.</p> <p>The main effect on the archaeological sites and features identified would be caused by physical damage to sites or severance of features during construction. No Scheduled Monuments or Listed buildings would be directly affected by the Scheme. However, the construction of the Scheme west of Kingskerswell would have residual adverse effects on the settings of the Scheduled Monuments of Kingskerswell Manor ruins and Kerswell Down, the Kingskerswell Conservation Area as a whole and on individual buildings within it.</p>	<p>The loss of these sites would be mitigated through archaeological recording prior to construction by means of detailed excavation or Strip, Map and Sample. Earthwork features such as parish boundaries and sunken lanes would be surveyed prior to site clearance. The loss of remains of minor importance, whether known or discovered, would be mitigated by archaeological recording by means of a watching brief during construction.</p> <p>False cuttings and landscape planting would be used to screen the sight and sound of the road past the old Kingskerswell village.</p>
Property Demolition	<p>Eleven properties would be demolished during the construction of the Scheme, none of which are of historical value.</p>	<p>Nine of the eleven properties are owned by Devon County Council, of which seven are unoccupied and boarded up. The owners of the two properties not owned by the authority would be compensated.</p>
Traffic Noise and Vibration	<p>Without the Scheme road traffic noise levels are predicted to increase, typically, by 0.5 dB(A) due to forecast traffic growth. With the Scheme road traffic noise levels are predicted to decrease along the existing A380 corridor by nearly 3 dB(A).</p> <p>Along the Scheme away from the existing A380 corridor road traffic noise levels are predicted to increase by at least 2 dB(A) up to a maximum of about 27 dB(A). It should be noted that these increases are from a low ambient noise level of typically about 42 dB(A).</p> <p>Opening of the Scheme would result in a net decrease of 481 properties subject to noise nuisance, in comparison to a net increase of 558 properties affected by noise nuisance if the Scheme were not built.</p>	<p>Landscape mitigation measures such as false cuttings and a 'low noise' road surface are included in the Scheme to help minimise the effects of road traffic noise.</p>
Air Quality	<p>The Scheme would not have a significant impact on air quality in the area. It is assessed that the Scheme would have beneficial effect on local air quality at properties in Kingskerswell, including potentially sensitive receptors and a neutral effect on regional air quality. The effect of the Scheme on greenhouse gas emissions is assessed to be neutral. It is anticipated that the Scheme would have a small beneficial air quality effect to the majority of residential properties in the study area.</p> <p>Through Kingskerswell there would be a significant improvement in the air quality arising from the large reduction in traffic using the existing A380.</p>	<p>It is not anticipated that any mitigation measures would be required.</p>
Water Quality and Drainage	<p>It is not envisaged that the construction works of the Scheme once opened would have any significant effect upon local groundwater regimes nor would they affect licensed abstraction sites. The magnitude of the impact on groundwater would be minor adverse.</p> <p>Construction work would occur immediately adjacent to or within watercourses at 15 sites. This work would include the provision of new culverts and two lengths of new channel. The Scheme would reduce the risk of both pollution and flooding of the existing watercourses Aller Brook and Edginswell Stream and would have a moderate positive impact on the frequency and amount of flooding associated with the Aller Brook and Edginswell Stream. The new channel west of Kingskerswell would allow the possibility of fish migration to the Edginswell County Wildlife Site, about 1 km further upstream than is possible at present.</p>	<p>In order to minimise the potential highway drainage effects of the Scheme, flows from the carriageways would be concentrated at six outfalls. At either end of the Scheme, where the new construction abuts existing highway, use would be made of existing outfalls and drainage infrastructure. Elsewhere, outfall positions take into account the need to avoid increasing flood risk and the ability to contain potential pollution risks by the use of attenuation ponds.</p> <p>The risk of a serious spillage along the route is low. Despite the low accidental spillage return periods (1 in 400 years along the Scheme with 1 in 247 years at Aller junction) the Scheme would incorporate either full bypass interceptors or pollution traps in the form of attenuation ponds.</p>
Earthworks	<p>Approximately 785,000 cubic metres of material, comprising topsoil, subsoil and rock, would be excavated from the cuttings in the Scheme. Of this quantity approximately 767,000 cubic metres would be required for engineering fill, landscaping fill, rock fill, capping or fill to reinforced earth structures. There is expected to be a surplus of excavated material of 18,000 cubic metres.</p>	<p>Some quarried materials would have to be imported for use in the construction of the Scheme, for example, for drainage layers or special filling associated with structures. It is anticipated that these and most of the quarry products for the construction of the road could come from local quarries.</p>
Land Use and Agriculture	<p>The Scheme would result in the permanent loss of approximately 41 ha of agricultural land, of which 16.05 ha is classified as the best and most versatile land in Grades 2 (2.17 ha) and subgrade 3a (13.88 ha). Some twenty one holdings comprising agricultural land would also be affected though only six are assessed as full time agricultural holdings; many of the other holdings are used as paddocks for grazing horses. None of the holdings described as full-time, viable holdings would be rendered non-viable by the construction of the Scheme.</p>	<p>The permanent effect of construction on the agricultural land resource is difficult to mitigate, but it is intended that no subsoil or topsoil would be removed from the Scheme corridor. Further, it is intended that where land is required for temporary works this would, where appropriate, be restored back to at least its former Agricultural Land Classification grade.</p> <p>New access tracks and field entrances would be provided in order to minimise long-term disruption to agriculture.</p>
Pedestrians, Cyclists, Equestrians and Community Effects	<p>Footpath Nos 45 and 36 /262 would be severed by the Scheme and a section of Churchway Lane would be closed. The car park on Kerswell Downs would be closed. A bus route/access link road would be provided between Penn Inn and Aller that would also provide a link, segregated from the bypass, for cyclists and pedestrians. The bus route would provide the opportunity for more convenient, safer, efficient and reliable bus services, which is assessed as minor positive.</p> <p>The scheme would secure substantial benefits by relieving community severance.</p>	<p>Suitable footpath diversions would be provided with new hedges and tree planting to make the diversions as attractive as possible. A new agricultural access/bridleway between Yan Street and the remaining section of Churchway Lane would be provided. A replacement car park would be provided on Kerswell Downs with an entrance off Maddacombe Road.</p> <p>Addison Road would be widened to 6m to enable it to be used as part of the bus route between Penn Inn and Aller.</p>

ENVIRONMENTAL EFFECTS

INTRODUCTION

Devon County Council and Torbay Council are promoting an improvement of the A380 between Penn Inn, Newton Abbot and Kerswell Gardens, Torquay by construction of the A380 Kingskerswell Bypass.

The Scheme was the subject of a Public Consultation Exhibition to explain the proposals, held in the Kingskerswell Village Hall on 28th February, 1st and 2nd of March 2002; the Central Church, Torquay on the 8th and 9th March 2002; and Forde House, Newton Abbot on the 27th March 2002. The Environmental Statement relates to the proposals as they have developed in response to the comments received following the consultation.

This leaflet describes the Scheme and summarises the Environmental Statement in non-technical language.

THE ENVIRONMENTAL STATEMENT

The Environmental Statement consists of two parts:

Main Volumes - Three comprehensive documents: Volume 1, Volume 2 and Volume 3, drawing together engineering and environmental information, along with proposed mitigation measures.

This **Non-technical Summary** is the second part.

The Environmental Statement is issued in accordance with the Town and Country Planning Regulations 1999 and EC Directive 85/337 as amended by Council Directive 97/11 and applied by Section 105(A) of the Highways Act 1980. The Environmental Statement has been prepared in accordance with the Design Manual for Roads and Bridges (DMRB) Volume 11, (Department of Transport, August 1994).

The Environmental Statement contains the findings of detailed studies of all environmental aspects of the Scheme. Its purpose is to ensure that the public and statutory environmental bodies are made aware of the environmental effects of the Scheme and are given an opportunity to express an opinion before the Scheme proceeds.

The full Environmental Statement will be sent to local councils in the area affected by the Scheme and may be inspected by members of the public at the locations shown at the end of this leaflet.

WHY THE SCHEME IS NEEDED

The Scheme forms part of Devon County Council's and Torbay Council's strategy for improvement of inter urban routes within Devon. The A380 between Newton Abbot and Torquay has experienced high traffic volumes for many years. Increased congestion and the resulting slow moving traffic would lead to a further deterioration in the living conditions experienced by the residents of Kingskerswell and its surroundings.

The high traffic volumes result in congestion and delay for road users and associated environmental problems for people in Kingskerswell, including safety, severance, noise and air quality.

Commercial and tourist traffic travelling between Newton Abbot and Torquay have had to contend with steadily increasing congestion and journey times, resulting in long delays and increased transportation costs. Penn Inn to Kerswell Gardens is the most heavily trafficked section of the A380 with an annual average daily traffic (AADT) flow in year 2000 of 32,000 vehicles.

The Devon and Torbay Local Transport Plans include development work on the A380 Kingskerswell Bypass and identify the A380 as a strategic road of regional importance.

ENVIRONMENTAL CONTEXT

The Scheme is located to the west of Kingskerswell between Newton Abbot and Torquay.

The characteristic landscape features of the route corridor are the hills enclosing Kingskerswell; Kerswell Down to the west, and Kerswell Hill to the east. These substantial rounded landforms are distinctive local landmarks; such features are, however, common in the Devon landscape. The landscape is a patchwork with larger fields on high, flatter land and a more intact, smaller field pattern on the valley sides. This complexity is emphasised by the network of Devon banks, which separate fields of irregular shape in mixed cultivation.

The hills to the east of Kingskerswell and the section of the Edginswell Valley between Kingskerswell and Torquay lie within an Area of Great Landscape Value.

Part of Kingskerswell has been designated a Conservation Area because the buildings and structures are listed in their own right as being of special architectural and historic interest. There are nineteen listed buildings in and around Kingskerswell.

There are seven sites of Local Nature Conservation Importance. These are designated as County Wildlife Sites (CWS) or potential County Wildlife Sites (pCWS) primarily because they are of significant conservation value. There are no Sites of Special Scientific Interest or Sites of International Wildlife Importance within the route corridor.

ALTERNATIVES CONSIDERED

Before carrying out the full environmental assessment on the Scheme, Devon County Council and Torbay Council commissioned the

A380 Newton Abbot to Torquay Corridor Study. It examined the transport problems between Newton Abbot and Torquay and proposed possible solutions. The results were published in June 2000 and the study concluded that the problems could not be materially improved other than by building a western bypass.

A route to the east of the A380 was considered during the initial stages of route identification. However, this option was dismissed due to the topography of the land. Constructing a road across this area would have required complex engineering, including a viaduct to span a valley to the east of Kingskerswell. This route was also considered too damaging in landscape terms as it affected an Area of Great Landscape Value. The route would have also affected an area zoned for employment in Torbay near Kerswell Gardens.

THE PROPOSED SCHEME

The Scheme comprises a 5km dual carriageway road between Penn Inn and the Torbay Ring Road at Kerswell Gardens. The Scheme would comprise two 7.3m wide carriageways, with a central reserve and verges. A two level junction would be provided at Penn Inn to carry the new carriageway over the Penn Inn roundabout to the improved dual carriageway section of the A380 lying between Addison Road and the Sainsbury's superstore.

A second two level junction would be provided at Aller and a traffic signal junction provided at the Torbay Ring Road. An 800m length of the Torbay Ring Road would be upgraded to a dual carriageway to Kerswell Gardens.

Between the southern end of Addison Road and Aller Brake Road a segregated cycle/pedestrian/bus route would be provided along the eastern side of the Scheme, separated from the main carriageway. This, together with Addison Road, would provide a continuous link for cyclists,

pedestrians and buses from the existing subways and carriageway at Penn Inn roundabout to the old A380 running through Kingskerswell via the bus route/access road.

Although the junction at the western end of Aller Brake Road with the existing A380 would be closed, a junction would be created with the bus route/access road. At this junction a left turn would be permitted for vehicles wanting access to Kingskerswell. Opening the eastern end of Aller Brake Road and creating a new junction with St Marychurch Road would provide an additional access into Aller Park Estate. This junction would exclude right turns from Aller Park Estate and left turns from St Marychurch Road.

Eight major bridge structures are proposed along the Scheme together with extensive use of retaining walls to both sides of the carriageway to limit land acquisition close to property and adjacent to the railway.

Penn Inn roundabout would continue to be lit. No lighting on the dual carriageway is proposed

except in the vicinity of junctions and between Penn Inn and Aller.

Signs on the approaches to junctions would be lit where appropriate. Two footpaths would be severed by the Scheme, Footpath 45 at Penn Inn through Sainsbury's and Footpath 36/262, 200m north of Kerswell Gardens. Diversions would be provided to ensure continuity of these Public Rights of Way. Typical cross sections through the new road at locations A-A, B-B and C-C are shown overleaf.

The current estimated cost of the Scheme (construction works plus land acquisition) is approximately £78 million (excluding VAT) at 2004 prices.

REDUCING THE EFFECTS

The results of investigations into the effects of the Scheme on the environment have been published in the Environmental Statement. The design of the Scheme includes measures to

reduce these effects. The main issues are summarised in the table overleaf.

CONSTRUCTION OF THE BYPASS

Construction is expected to take approximately two years, with a pre-construction site clearance to be carried out under the supervision of ecologists.

Restrictions would be placed on the contractor to minimise disturbance during the construction period, such as the specification of permitted noise levels, and measures would be taken to keep dust, dirt and potential pollution to a minimum.

Access would be maintained on all roads during this period.

The contractor's main compound would be located at Aller, bounded by the mainline railway to Plymouth and Kingskerswell Road.

