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**ENVIRONMENT & LANDSCAPE**  
Environmental Statement

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# **A27 PATCHING JUNCTION IMPROVEMENT – ENVIRONMENTAL STATEMENT 06/91**



HA 44/27/266# 1#



THE DEPARTMENT  
OF TRANSPORT

# A27 PATCHING JUNCTION IMPROVEMENT

## ENVIRONMENTAL STATEMENT

Department of Transport  
South East Construction Programme Division  
Federated House  
London Road  
Corking  
Surrey  
RH4 1SZ

Peter Ffrench & Partners  
Consulting Engineers  
Telling House  
27-27 St. George's Road  
Wimbledon  
London SW19 3GU

In association with

Chris Blanford Associates  
Landscape Architects  
Landscape Planning  
Rushworth Craft Workshops  
Blackheath  
Uckfield  
East Sussex TN22 5PL

JUNE 1991



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1. **INTRODUCTION**

- 1.1 This document summarises an assessment of the environmental effects of the proposed improvement to the A27 at Patching Junction and has been prepared in accordance with sub-section 105A(2) of the Highways Act 1980.
- 1.2 The document also includes, as an Appendix, a Non-Technical Summary. Copies of this summary are available, free of charge, from the Department of Transport, South East Construction Programme Division, Federated House, London Road, Dorking.

## **2. THE EXISTING A27 AND ITS SURROUNDING AREA**

### **2.1 Area of Study**

2.1.1 The study area comprises the corridor through which the A27 Trunk Road runs from Hammerpot to Clapham Common. The A280 running from Angmering to Findon intersects the A27 just to the south of Patching, this junction is staggered with the two arms of the A280 some 400m apart (see Figure 1). The villages of Clapham and Patching lie to the north of the A27, within the study area. There are several settlements along this section of the A27, the principal one being Selden and several outlying farms. The section under consideration is approximately 3.0 km long and wide enough to include off-line alternative routes.

### **2.2 The Existing Roads**

2.2.1 The existing A27 is predominantly rural in character and forms the main east-west route along the south coast. It has been upgraded to dual carriageway standard in several locations between Portsmouth and Brighton. This scheme is one of several along this length to complete the upgrading. Figure 1 shows the A27 in its regional context.

2.2.2 The section of the A27 under consideration lies between its junctions with Dappers Lane and Titnore Lane, consists of a single carriageway of nominal width 7.3m linking two sections of dual two lane carriageway at Hammerpot and Titnore Lane. There are a number of properties which have access directly onto the A27, and a series of side roads, including the two staggered arms of the A280, join it at priority junctions. The section has a continuous 1-2m wide footpath running on the south side between Dappers Lane and Arundel Lodge, 240m east of Titnore Lane. Both the horizontal and vertical alignments are sub-standard and this factor, combined with the junctions and narrow verges in places, precludes safe overtaking.

2.2.3 The A280 is a single carriageway, which runs north east to south west, from the A24 near Findon, across the A27 via a staggered junction, and through Angmering to connect to the A259. Longfurlong is the section of the A280 between Findon and the A27, generally 7.3m nominal width, with a 1.5m wide footpath running along the west side. Water Lane is the section of the A280 which runs from the junction with the A27 in a south westerly direction to Angmering, generally 6.0m nominal width.

## 2.3 Geology, Topography and Drainage

- 2.3.1 The main strata present within the area are Eocene deposits, consisting of Reading Beds and London Clay. These strata rest unconformably on Upper Chalk within a narrow synclinal fold, this forming an outlier which runs roughly parallel to the line of the A27.
- 2.3.2 The only significant drift deposit present within the area of interest is Alluvium, which lies in a narrow band along the stream flowing south-west out of Patching Pond.
- 2.3.3 The topography of the area is dominated by a broad shallow valley, refer to Figure 2, which is aligned north-south and forms a break in the line of the Sussex Downs. To the north of Selden the land falls gently into the valley and rises into a predominant ridge which extends between Jewshead Wood and Poling Furze fields (Figure 3). To the south of Selden the land slopes gradually down towards Water Lane. The study area is on gently undulating ground, which forms a transition between the Downs to the north and the flat coastal plain to the south. Generally the slopes are shallow, except where the land falls away steeply in the fields just north of 'The Fox' public house.
- 2.3.4 The most predominant high ground is the ridge line running between Jewshead Wood and Poling Furze fields at some 50m AOD between Jewshead Wood and 'The Fox' public house, and some distance to the south the chalk outlier of Highdown Hill rises to some 75 m AOD. The South Downs rise gradually to the north and north-east to 170m AOD.
- 2.3.5 The existing A27 road is situated virtually at grade throughout the study area, falling from a height of 50m AOD at the ridge of high ground near 'The Fox' public house, towards Patching Pond at 20m AOD and then rising again to reach Clapham Common, at about 40m AOD.
- 2.3.6 The main drainage feature in the study area is Patching Pond and an associated stream. The amenity and landscape value of the pond is high. The valley until this point is dry, from Patching Pond southwards there is a minor watercourse. Surface drainage runs from adjacent fields into this system via a series of ditches.



## 2.4 Settlements

2.4.1 See Figure 2, Land Utilisation.

2.4.2 The villages of Patching and Clapham lie on the southern edge of the Sussex Downs approximately 2km west of the edge of Worthing, and 4km north of the South Coast. The villages lie either side of a north-south valley containing Patching Pond, with Clapham on the east side, close to the A280 Longfurlong.

2.4.3 The village of Patching contains approximately 40 residential properties, a farm and a church. Clapham is slightly larger, with approximately 80 residential properties, a small shop, village hall, a church and farm buildings. To the south of Clapham the former Brick and Tile Works is now used as a Builders Yard and a Council Depot, and there is a group of 30 residential properties nearby.

2.4.4 The settlement at Selden has about a dozen residential properties along the north side of the A27 between 'Merrivale Farm' and 'The Horse and Groom' public house.

2.4.5 To the east of Selden adjoining the south side of the A27 close to the junction with A280 Longfurlong is a filling station and a residential property 'Wishmead', formerly known as 'The Police House'. 'The Cottage', another residential property, lies opposite 'Wishmead' on the north of the A27. To the south of the A27 in this area there are 3 farms, Potlands Farm, Northdown Farm and Ecclesden Farm and Woodlands riding stables.

2.4.6 The village of Angmering is 2km to the south west of the study area with a population of over 5,000. The centre of the village has been designated as a conservation area and contains a number of shops, public houses and a restaurant.

2.4.7 To the east of the study area is West Durrington on the fringe of the Borough of Worthing. West Durrington has been designated as a development area and houses and light industrial buildings are under construction. Development is currently confined to land close to the existing built-up area but may in future years extend westwards to Titnore Lane.

## 2.5 Land Use and Vegetation

- 2.5.1 Apart from the developments at Clapham, Patching and Angmering the predominant land use within the study area is agricultural. The majority of the land is Grade 3 and is generally used as pasture. The better quality farmland, Grade 2, is found in the base of the valley north of Patching Pond. It offers opportunity for some arable farming and market gardening. Figure 2 shows the land utilisation within the study area.
- 2.5.2 Foxwood Nursery was, until recently, used as a nursery and depot by a firm of landscape contractors, it is at present disused.
- 2.5.3 There are a number of large areas of woodland, some of these are important on landscape grounds. Some of these are remnants of the forest that once covered the lower slopes of the Downs. The most substantial of these are Titnore Wood, Clapham Wood, Jewshead Wood and Poling Furzefields.
- 2.5.4 Clapham Common, although privately owned, is crossed by several footpaths which are intensively used by local people.
- 2.5.5 There are equestrian centres at Woodlands Stables, to the east of Northdown Farm and at Potlands Farm.
- 2.5.6 There is an area used as a motor-racing track to the south of Ecclesden Common.
- 2.5.7 The field boundaries are generally formed by well clipped hedges. Hedgerow trees are common on the higher ground, especially in the north west of the study area, but rarer in the valley and the land to the south.
- 2.5.8 Patching Pond is an important amenity in the area for passive and active recreation and private fishing.

## 2.6 Planning Designations

### 2.6.1 Planning Policies

- 2.6.1.1 The northern part of the study area is within the Sussex Downs Area of Outstanding Natural Beauty (AONB), designated in 1966 by the Countryside Commission. The A27 forms the southern boundary to the AONB.

- 2.6.1.2 The study area is within the County of West Sussex and is covered by the West Sussex Structure Plan (1988). The West Sussex Structure Plan Second Review, Replacement Plan Submission Draft (1990) has been approved at County level and is used for development control purposes, for detailed policies see appendix A.
- 2.6.1.3 The general policies provide an overall framework for more specific policies. The overall commitment is to restrict development within the County to within the built up areas and protect the natural resources of the countryside. This is reflected in policy G1, the Replacement Plan expands this policy to a wider 'Green Statement' and includes a specific intention to protect landscape, wildlife and farmland.
- 2.6.1.4 The County has a commitment to providing safe and efficient opportunities for people's travel needs and the movement of freight, policy G5. In the Replacement Plan policy G8 maintains this commitment, but also emphasises a need to promote alternative forms of transport and avoid unacceptable effects on the environment.
- 2.6.1.5 There is a strong presumption against harmful development within the AONB in policies ENV.3 and 4. This is expanded in the Replacement Plan to a recognition of the need for essential development, such as roads, but major development plans will be considered only in compelling circumstances and will need to be accompanied by an environmental statement.
- 2.6.1.6 The need to protect areas of nature conservation interest is emphasised in policies ENV.5 and 16 and in policy C3 of the Replacement Plan, where it is expanded to include a statement that applications for roads will be subject to rigorous examination because of a possible impact on sites of nature conservation value.
- 2.6.1.7 A separate policy, C4, has been included in the Replacement Plan, derived from policy ENV.3 in the Structure Plan to protect high grade agricultural land (Grade 1, 2 or 3a of MAFF's Agricultural Land Classification) from development or disturbance.
- 2.6.1.8 The conservation of historic features and buildings, archaeological sites and conservation areas, is covered by policies ENV.18 and 19 in the Structure Plan. These are in the Replacement Plan under policies B3 and B5. These policies are expanded and strengthened, notably B3 which is expanded to cover not only listed buildings but all buildings which may be of local historic interest.

- 2.6.1.9 The natural resources and character of the countryside are protected under policies ENV.13, 14 and 16 of the Structure Plan. These are summarised in policy C14 of the Replacement Plan and expanded to include significant wildlife corridors, local nature reserves and Sites of Archaeological Interest.
- 2.6.1.10 The A27 Patching Junction Improvement is identified in policy M11 as an important trunk road improvement, this is covered by policy T2 in the Replacement Plan, with the addition of the A27 Crossbush Bypass.
- 2.6.1.11 The study area is within Arun District Council and is covered by the Arun District Council Local Plan (1989): Draft. Policy EVT3 states a commitment to the prevention of unsympathetic development within the AONB. Policy EVT6 restricts development outside the built up areas unless it can be justified in providing essential economic or social benefits. Any proposals will be judged according to their effects on high grade agricultural land, landscape features or nature conservation.
- 2.6.2 Tree Preservation Orders
  - 2.6.2.1 There are a number of woodlands and scattered trees within the area which are covered by Tree Preservation Orders (TPO's), see Appendix B and Figure 3. Poling Furze fields is to the west of the study area, adjacent to the A27. Other trees on Dappers Lane are subject to TPO's.
  - 2.6.2.2 Wyatts Copse lies to the south of Clapham Village and to the north of the A27.
- 2.6.3 Listed Buildings
  - 2.6.3.1 There are twenty listed buildings within the study area, see Appendix C and Figure 3, most of these are within the villages of Patching and Clapham.
  - 2.6.3.2 There are some Grade II listed buildings close to the A27, these are: The Horse and Groom Inn on the A27 Arundel Road, Meadow Cottage and France Cottage on the east side of France Lane and Plantation Cottage on the A280 Longfurlong.

## 2.7 **Public Rights of Way**

- 2.7.1 There are eight Public Rights of Way (PROW's) which connect with the present A27 within the area of study. One of these is a bridleway and the remainder are footpaths. Most of the paths run north-south, several crossing the A27 and giving access to the Downs (refer to Figure 3).

## 2.8 **Wildlife and Conservation**

- 2.8.1 The study area does not contain any designated nationally important ecological sites, ie Sites of Special Scientific Interest, but there are a number of sites important to the local area.
- 2.8.2 The study area is mainly agricultural land, either arable or improved grassland. The ecological/nature conservation value of this land is limited. The areas which have some ecological value are the woodlands, hedgerows, Patching Pond and an associated wetland area.
- 2.8.3 Potlands Copse, Titnore Wood and Goring Wood appear to form an area of much disturbed ancient woodland, which seems to have been originally mainly hazel coppice with oak standards, these are designated as Areas of Ecological Importance (AEI's) by West Sussex County Council. The County Council is at present re-surveying the County and by 1992 new designations will be applied and AEI's will become obsolete. They will be replaced by Sites of Nature Conservation Importance (SNCI).
- 2.8.4 The following areas are of ecological value:
- i) Potlands Copse will be affected by the scheme. Despite some indicator species being present it is not a registered Ancient Woodland and therefore its conservation value may be lower than some of the adjacent woodland, for example Titnore Wood and Goring Wood. Due to poor management it is not rich in wildlife. However, its importance lies in that it is part of a larger woodland system.
  - ii) Jewshead Wood: Although not Ancient Woodland, this wood has suffered very little disturbance since its planting in the mid 1800's. It is a good mixture of ash, sweet chestnut and hazel coppice with ash and oak standards. It is also of considerable wildlife value; there is evidence of roe deer being present.



- iii) Clapham Common: As the name suggests, the area was once managed by grazing. It is now predominantly wooded especially in the north. The south is more varied due to an abundance of clearings. It is of considerable wildlife value.
- iv) Poling Furze-fields: This site was a former common or wood pasture until comparatively recently. The major interest lies in the mature oaks throughout the wood. Secondary woodland is growing up amongst the oaks, characterised by the invasion of sycamore. Nevertheless, the site retains a high level of wildlife interest.
- v) Patching Pond: The pond is extensively fished and heavily managed for this purpose. Despite this management the ecological value is quite high. As there do not appear to be many areas of open water locally, its importance is therefore probably increased.
- vi) Wetland south of the A27 from Patching Pond: This area has a water table a few cm above the soil surface, the water is gently moving and therefore not stagnant. The area is fairly uniform with a limited range of major plant species, however the area is of local interest and probably has high value to aquatic invertebrates.

## 2.9 Archaeological Interest

2.9.1 Refer to Appendix D and Figure 3 for further details.

2.9.2 Although the South Downs are rich in archaeological history, the study area does not include any Scheduled Ancient Monuments, although it does contain sites of county interest listed on the Sites and Monuments Record (SMR), a list of historic buildings and archaeological sites held by West Sussex County Council.

2.9.3 Seven sites are listed by West Sussex County Council within the study area. These are as follows:

- i) A site between Northdown Farm and the watercourse where pre-Roman and Roman pottery finds suggest a farmstead site (site 78).

- ii) An area immediately west of Patching Pond where the remains of a Roman farmstead have been discovered (site 71).
- iii) A site south of Patching village where an Iron Age pottery find may indicate the site of a pre-historic farmstead (site 72).
- iv) A site to the north-east of Selden Farm where Roman coins have been found (site 19).
- v) Evidence of a limekiln has been found to the edge of Church Copse (site 64).
- vi) There are earthworks in Patching Copse (site 67).
- vii) Pre-Roman Iron Age pottery has been found to the east of France Lane (site 33).

### 3. THE PUBLISHED SCHEME

#### 3.1 General

- 3.1.1 The Published Scheme would provide a new section of dual carriageway road slightly to the south of the existing A27 which ties in to the existing A27 at Dappers Lane on the west and at Clapham Common on the east. The improvement also includes the provision of a grade separated junction at the A280 Junction. Figure 5 shows the Published Scheme in detail.

#### 3.2 Description of the Scheme

- 3.2.1 The proposed 2.5km length of new dual two-lane road swings to the south in a gradual curve away from the line of the existing A27 200m to the east of the junction with Dappers Lane. The route is in cut across the field known as Ecclesden Common and crosses A280 Water Lane some 150 metres from its present junction with the A27. The stream to the south of Patching Pond is crossed on an embankment up to 5 metres high before the route turns northwards and runs in cutting up to 4.5 metres deep over a length of some 650 metres. The route ties into the existing section of dual carriageway at the eastern end of the scheme approximately 200 metres east of Titnore Lane.
- 3.2.2 Water Lane would be realigned eastwards across the valley on a low embankment to the south of the new A27. Titnore Lane would be realigned to the west and would cut through the northern end of Potlands Copse to join Water Lane and the two westbound slip roads from the A27 at a roundabout junction south of the new A27, opposite A280 Longfurlong.
- 3.2.3 The existing A27 would be used as a two way service road connected to the new dual carriageway by a left-off junction near 'The Fox' public house, and a connecting link at the other end to the proposed northern roundabout on A280 Longfurlong.

- 3.2.4 The new northern roundabout would be constructed close to the existing A280 Longfurlong/A27 junction and linked over the dual carriageway to the southern roundabout to form a 'dumb-bell' type junction, with the east bound slip roads connected to the northern roundabout.
- 3.2.5 The proposed dual carriageway would be in a cutting approximately 4.5 metres deep at the dumb-bell junction. This cutting would have side slopes of 1 in 5.
- 3.2.6 The embankment for the realigned A27 at the valley would have side slopes of 1 in 3. Where the road would cross agricultural areas, and where otherwise possible, cuttings and embankments would be graded out to 1 in 10 to allow the land to be returned to agricultural use.
- 3.2.7 Two underpasses would be provided; one at Dappers Lane/Swillage Lane and one in the valley near Water Lane. The former would connect Dappers Lane on the south of the A27 to Swillage Lane on the north of A27 for vehicles, pedestrians and equestrians crossing the new dualled section of A27. No connections would be made with the A27 at this location. The Water Lane Underpass has been designed for use by pedestrians and equestrians to provide a link between the Pot Lane bridleway and the footpaths south of the existing A27 and the lanes and villages to the north of the A27 and to the Downs.
- 3.3 **Main Road Standards**
- 3.3.1 It is proposed that this section of the A27 should be an all purpose road having dual 7.3m, two lane, carriageways. The central reserve would be 4.5 to 5.0m wide with continuous safety fencing throughout. Right turns would be catered for at the dumb-bell type junction. The verges in general would be 3.5m wide including 1m hardstrips. Along the east-bound carriageway at the proposed A280 Bridge abutment, the verge would be widened so that the desirable stopping sight distance could be achieved. On the west-bound carriageway in the section between the on-slip and a point approximately 1035m west, an additional 3.65m wide climbing lane would be provided.
- 3.3.2 Slip roads would be 5m wide one lane carriageways with 3m side verges, including 1m hardstrips.
- 3.3.3 New lighting would be provided only at the two roundabouts and on the connecting link road that bridges over the proposed A27.

### 3.4 Side Roads Standards

- 3.4.1 Access to the existing A27 would be maintained to the west of 'The Fox' public house by means of a left off eastbound only connection. From Selden Lane to its connection into the northern roundabout the existing A27 would be a two way road.
- 3.4.2 A280 Water Lane and Titnore Lane realignments are described in paragraph 3.2 above. They would be 7.3m wide single carriageway with 3.5m verges, including 1m hardstrips.
- 3.4.3 Both the realigned sections of Dappers Lane and Swillage Lane would be 3.6m wide single carriageways.

### 3.5 Footpaths and Bridleways

- 3.5.1 The line of the proposed scheme crosses three public footpaths and one bridleway, see Figure 3.
- 3.5.2 Footpath FP2149 (Angmering CP) would be diverted westward along the southern boundary of Ecclesden Common to join Dappers Lane on the east side. Access to the existing A27 would be obtained by using the Dappers Lane Underpass to cross under the dual carriageway to reach the footway on the north side of the new section of the A27, which connects with the footway on the southern side of the existing A27.
- 3.5.3 Footpath FP2136 (Patching CP) would be diverted eastward at the north-east corner of Northdown Farm Buildings to the new bridleway, where access to the north of the A27 would be maintained either via the Water Lane Underpass or over the A280 bridge.
- 3.5.4 Footpath FP 2137 (Patching CP) would be connected to a section of new footpath along the south side of the realigned A280 Water Lane, and access to the north of the A27 would be provided across the realigned A280 Water Lane to the new bridleway and to the Water Lane Underpass.
- 3.5.5 Footpaths FP2171 and 3087 (Clapham CP) would be directed along a section of new footpath to the proposed northern roundabout.
- 3.5.6 Footpath FP 2180 (Patching CP) would be maintained for access to the south of the A27 either via the Water Lane Underpass, or via Dappers Lane underpass to the diverted Footpath FP 2149.



### 3.6 Equestrians

- 3.6.1 The underpasses at Water Lane and Dappers Lane would provide safe and easy access for equestrians from a number of riding stables in Angmering and Ferring across the A27 dual carriageway to the lanes and bridleways to the north and to the rides on the Sussex Downs, such as those in Angmering Park and the Patching Woods.

### 3.7 Traffic

- 3.7.1 The scheme would provide significant benefits for both local communities and long distance travellers by improving the capacity of this section of the A27 on which traffic flows frequently exceed current capacity. Traffic flows are shown on Figure 6.
- 3.7.2 The provision of dualling on the A27 with limited access would provide sufficient traffic capacity throughout the design period and would improve safety for all travellers.
- 3.7.3 The grade-separated dumb-bell type junction for A280/A27 should reduce delays and accidents and provide a considerably improved service when compared with the existing at-grade junctions.
- 3.7.4 Local traffic currently using the Hammerpot Junction to gain access onto A27 would use the new grade-separated junction via the realigned A280 Water Lane to the southern roundabout. The right turning movement at Hammerpot Junction on to A27 eastbound would be reduced and this should be reflected in reduced delays and accidents at this junction.
- 3.7.5 The scheme would convert the present A27 to a minor road serving the A280 junctions, thus relieving Selden considerably.
- 3.7.6 The scheme would also improve access to Titnore Lane from the A27 in terms of delay and accident rate over the existing junction, particularly during periods of peak traffic flows on the A27.

## 4. ENVIRONMENTAL EFFECT AND MITIGATION MEASURES

### 4.1 Appraisal Framework

4.1.1 The effects of the Published Scheme on the environment are shown in the Appraisal Framework (Appendix E). This has been prepared in accordance with the guidelines given in the Department of Transport's 'Manual of Environmental Appraisal' (MEA). The two options compared in the framework are:

- a) The Published Scheme as described in this report.
- b) The 'Do Minimum' scheme.  
The 'Do Minimum' Scheme has been adopted due to the detection of over capacity on links and junctions when the 'Do Nothing' scheme was modelled. This scheme would provide roundabouts at the A27/A280 Longfurlong junctions.

### 4.2 Summary of Major Environmental Effects

#### 4.2.1 Landscape Character

4.2.1.1 The published route would alter the landscape in some areas. There would be a deep cutting on either side of the A27 at the Dappers Lane to Swillage Lane underpass. The road swings south in a shallow cutting from the existing A27 across Ecclesden Common. At this point it would fit existing landscape well and be concealed from the land to the north. It is at grade from Foxwood Nursery to Water Lane, here it would fit into the existing topography. Where the road crosses the valley on a 5m high embankment it would curtail this valley and be an obtrusive feature in the landscape.

4.2.1.2 The 4.5m deep cutting beneath the dumbell junction would be an unnatural feature in this part of the landscape, the impact of this would be reduced by careful grading of the cutting and bridge embankments. The road would come out of this valley and rejoin the existing A27 at grade. The slip roads are generally at grade and would not disrupt the existing topography. The re-aligned Water Lane and Titnore Lane extensions would be on slight embankments or cuts which would be graded out where possible to gentler slopes to fit the undulating topography.

#### 4.2.2 Existing Vegetation

4.2.2.1 Some hedgerows and woodland would be affected by the scheme. Some mature oak trees would be lost on both sides of the A27 at the Dappers Lane to Swillage Lane underpass, including a large oak on the corner of Dappers Lane, where it meets the A27. Trees in Poling Furzefields, which is covered by a TPO, would be unaffected. Some trees would be lost in Cottage Rough by the realignment of Swillage Lane, but the major mature trees would be avoided.

4.2.2.2 Where the road swings south across Ecclesden Common several mature trees and a hedgerow would be lost on the south side of the A27, including approximately twelve mature oak trees and 30 metres of hedgerow.

4.2.2.3 The dual carriageway would clip the corner of Potlands Copse and the Titnore Lane extension would cut through the northern part of the copse, leaving a narrow strip of woodland between the two. The realignment of Titnore Lane would require the removal of some mature oak trees.

4.2.2.4 Some trees and hedgerow would be lost at the junction between the A280 Longfurlong and the existing A27. Several of these trees have suffered recent storm damage and are not particularly good specimens. Some trees and tall hedgerow would be lost along Water Lane and the field boundaries in this vicinity. The road clips the corner of woodland at Foxwood Nursery and cuts through hedgerow trees at Ecclesden Common. Neither of these are of great value in the local landscape.

#### 4.2.3 Effects on property and views

4.2.3.1 Views of the dual carriageway from Selden, Patching and Clapham and this part of the AONB would be limited as most of the road is in cutting or at grade. The cutting at Ecclesden Common would be 2.5m deep and the road would be particularly intrusive when viewed from Northdown Farm as well as nearby footpaths.

4.2.3.2 The embankment across the valley at Water Lane would be up to 5m high and again would have greatest impact from the south. When viewed from the north it would be partially screened by existing vegetation.

- 4.2.3.3 The greatest visual impact would be caused by the junction and slip roads. The northern roundabout and slip roads are just within the AONB. However, this is not a particularly attractive part of the AONB. The junction would be visible from Patching Pond and Clapham Common, but greatest visual impact would be of the junction when viewed from Northdown Farm and nearby footpaths.
- 4.2.3.4 The scheme would require the demolition of four properties, 'Wishmead', 'The Cottage', the Texaco filling station and Potlands Farm. Northdown Farm would suffer the greatest visual intrusion, although the farm house is set back behind the other non-residential farm buildings. Houses at Clapham Common would suffer moderate visual intrusion from the new junction and slip roads. There will also be some night time intrusion caused by the lighting of this junction. Properties to the north of the existing A27 would benefit from the scheme, as the main road would be further from them and the existing road would serve local traffic only.
- 4.2.3.5 The road would be visible from Merrivale Farm as it swings southwards across Ecclesden Common.
- 4.2.3.6 Properties between Merrivale Farm and Orchard House Farm would be screened from the road by existing vegetation and the change in level across the fields southwards. Selden Manor would suffer slight visual intrusion and 'The Horse and Groom' public house, a Grade II listed building, would suffer moderate visual intrusion from the partially screened view of the 5m high embankment crossing the valley.
- 4.2.3.7 Due to the re-routing of the A27 most properties along the route of existing A27 would experience a reduction in noise level, except for the Northdown Farm Buildings, which would experience a slight increase in noise due to the closeness of the realigned A280 Water Lane. Some properties at Clapham Common would also expect a marginal increase in noise.
- 4.2.3.8 'The Fox' and 'Horse and Groom' public houses may suffer from a loss of passing trade.
- 4.2.4 Agriculture
- 4.2.4.1 The proposed scheme would affect three farms and involve considerable land take, refer to Figure 2. In total 0.6 ha of Grade 2 agricultural land would be taken in a small area to the south of Patching Pond. The rest of the agricultural land take is of Grade 3 land, 19.2 ha. The grading is based on Ministry of Agriculture Fisheries and Food (MAFF) land classification.
- 4.2.4.2 Where the route crosses Ecclesden Common the cuttings would be graded out to 1 in 10 to maximise the amount of land which can be returned to agriculture and ensure that this land is retained as a viable field. The fields between Northdown Farm and the new route would be reduced in size and would probably only be viable for grazing purposes. Some small pockets

of land would be severed and no longer viable as agricultural units, notably a sunken wet area to the east of Water Lane and a small triangle of land between the existing A27 and the proposed road.

- 4.2.4.3 The field to the south of Clapham Common would be increased in size when the existing A27 is broken out. A small area of grazing land would be severed to the west of Titnore Lane. This would be made into a viable unit by incorporation into the adjacent field when the northern part of Titnore Lane is broken out.
- 4.2.4.4 Foxwood Nursery is no longer in use commercially. This area would be severed by the road and 0.6 ha taken. This would no longer be viable as a commercial nursery unit and would remain as two redundant areas of land.
- 4.2.5 Nature Conservation
  - 4.2.5.1 The impact on the nature conservation interest of the area would not affect any statutorily protected sites. The principal impacts would be the loss of hedgerows, trees, areas of woodland, notably Potlands Copse and part of a small wetland area.
  - 4.2.5.2 The realigned slip road which runs into Titnore Lane would require the loss of 1.3 ha of Potlands Copse. Potlands Copse is designated as an Area of Ecological Importance (AEI) by West Sussex County Council, as described earlier, however the loss of vegetation here is not considered to be highly significant within a wider context.
  - 4.2.5.3 The road passes through an area of wetland to the south of Patching Pond. This area would have high value to aquatic invertebrates. It is considered that the impact at this section would be of some significance locally.
  - 4.2.5.4 The creation of a road through an area causes a restriction of free movement of plants and animals, highly mobile animals with large territories would cross the road, for example deer and foxes.
  - 4.2.5.5 With increasing traffic volumes pollution levels would probably increase. This would be by exhaust emissions and run-off carrying road salt and petrol deposits. The increased surface area of the new road would produce more run-off into the stream than the existing road.



- 4.2.5.6 In summary, the scheme has limited impact on nature conservation in the area, the most significant being the loss of the small wetland area.
- 4.2.6 Archaeology
  - 4.2.6.1 The proposed realignment of Water Lane would have a slight impact on the northern tip of archaeological site No. 78 (see Appendix D, plan 3). The embankment and stream diversion here would affect approximately 5% of the total area.
- 4.2.7 Public Rights of Way Severance
  - 4.2.7.1 Several footpaths would be severed by the proposed scheme and diverted. Bridleway No. 2135, Pot Lane and footpath No. 2136 would be severed from the A27. These are to be redirected via an underpass just to the east of Water Lane. This would mean a slightly longer journey for both walkers and riders, but would give them a safer crossing of the A27. Footpath No. 2137 would also be redirected under the underpass. This is a slight detour from the existing route.
  - 4.2.7.2 Footpath No. 2149 would be stopped up and diverted west onto the existing track and along Dappers Lane so that the Dappers Lane underpass could be used to cross the A27 dual carriageway.
- 4.2.8 Construction
  - 4.2.8.1 Construction of the new road is likely to take up to two years. During construction of the new road some excavated material would be moved off-site to a licensed controlled tip. These off-site movements would be carried out using road-going trucks which would be restricted to an approved route from the site to the tip. In addition earth would be moved around the site to construct the embankment across the valley and some earth bunds for landscaping. These activities and other aspects of the site works may generate noise, air and water pollution and cause some nuisance to nearby residents.

### 4.3 Mitigation Measures

#### 4.3.1 General

4.3.1.1 See Figure 4, landscape proposals

4.3.1.2 The proposed scheme would have a high visual and physical effect on an area of intensively farmed countryside. These impacts would be mitigated by the use of earth shaping and grading and tree and shrub planting. Some settlements and houses would benefit from the new road as it would take traffic away from the existing A27.

4.3.1.3 Some trees, hedgerows and woodland would be lost, woodland management would be carried out through agreement with landowners by licence and new hedgerows planted where appropriate.

4.3.1.4 The severance of footpaths and north/south movement created by the road would not be substantially more than that created by the existing road and crossing would be made safer.

4.3.1.5 The cut slopes and embankments would be screened with dense native tree and shrub planting. The species used would reflect local conditions and character. Extensive planting would screen the junction. Where possible, existing trees and hedgerows would be retained, especially where they screen the road.

4.3.1.6 Additional land would be purchased for planting as necessary.

#### 4.3.2 Earthshaping

4.3.2.1 Where the road is in cutting adjacent to agricultural areas the cutting would be graded back to 1 in 10 to allow the land to be returned to agricultural use. Examples of this are, where the road crosses Ecclesden Common, and to the south of the Water Lane realignment. Areas to be graded out would be non-productive during construction.

4.3.2.2 Where possible, embankments would be graded out to 1 in 5 to reduce their visual impact, the steepest and most intrusive embankment being that which would cross the valley at 1 in 3.

- 4.3.2.3 The proposed road would be in cutting with 1 in 5 slopes under the junction. This would reduce the visual and noise impacts on Northdown Farm and Clapham Common. The embankments supporting the bridge and roundabouts would be graded into the cutting to create a natural landform and avoid a terraced effect.
- 4.3.2.4 It is proposed to construct a bund between the Water Lane realignment and the new road, to the north of Northdown Farm. Bunding would also be carried out between the slip road and the connecting link to the existing A27 to the west of the northern roundabout. This bunding would reduce the visual and noise impacts of the road on surrounding properties.
- 4.3.3 Dense and Intermittent Planting
- 4.3.3.1 Dense planting would be carried out on all cut slopes and embankments, unless they have been graded out for agriculture.
- 4.3.3.2 Additional land would be purchased for planting. This would be for additional screening or to utilise redundant areas of land which have been severed by the new road and junction.
- 4.3.3.3 A triangular area to the south of Merrivale Farm between the new road and the old A27 would be planted to serve both of the above purposes.
- 4.3.3.4 Where the new road is at grade to the west of Water Lane, a 20 metre wide strip would be planted to screen Selden from the new road. A small area of land between the realigned Water Lane, the south-west slip road, the new A27 and redirected bridlepath would become isolated and be purchased for inclusion in the scheme.
- 4.3.3.5 To the north of the north-east slip road there would be a 20 metre strip of dense planting to screen houses at Clapham Common from the new junction.
- 4.3.3.6 From Titnore Lane westwards along the new south-east slip road a strip of land which would be isolated from surrounding fields would be planted.
- 4.3.3.7 Dense planting would also be carried out around the junction on embankments, bunds and between slip roads.

- 4.3.3.8 Intermittent planting would be put on the lower slopes of the junction, adjacent to the new dual carriageway. This would help to blend the slopes into the surrounding countryside.
- 4.3.4 Hedge Planting
  - 4.3.4.1 Where the road is at grade or the slopes are graded back for return to agriculture hedge planting would be carried out along the fence lines in keeping with the local character and existing field pattern. This would help to replace lost hedgerows and integrate the road into the landscape.
  - 4.3.4.2 This would be done across Ecclesden Common, north and south of the new road, on both sides of the realigned section of Water Lane, at the junction of Titnore Lane and the new slip road and to the north of the old A27 where it joins the junction with Longfurlong.
- 4.3.5 Offsite Planting
  - 4.3.5.1 Offsite planting would be carried out by agreement with landowners to screen settlements and farms. The proposed areas for off-site planting are Northdown Farm, Clapham Common, along the existing A27 to the south of Selden, and along the western side of Swillage Lane, where the lane is to be broken out.
- 4.3.6 Disused Roads
  - 4.3.6.1 Disused sections of road would be broken out and returned to agriculture or planted as appropriate. These roads are part of Swillage Lane, Water Lane, Pot Lane and Titnore Lane. The northern part of Dappers Lane will be closed off and used as private access to Poling Furzefields.
- 4.3.7 Woodland Management
  - 4.3.7.1 By agreement with landowners, affected woodlands would be obtained by licence and managed. These would be returned to the landowner once construction is completed.
  - 4.3.7.2 These include the part of Cottage Rough to the east of Swillage Lane, woodland in the south of Foxwood Nursery, which would be severed, and a 30 metre wide strip of Potlands Copse to the south of the realigned Titnore Lane.

#### 4.3.8 Public Rights of Way

- 4.3.8.1 The realignment of routes and provision of underpasses would provide safer and easier access across the A27 than is experienced at present. The underpass at Swillage Lane to Dappers Lane would provide safer access for horses, pedestrians and local traffic. At present it is necessary to cross a busy dual carriageway.
- 4.3.8.2 The underpass serving the Pot Lane bridleway and local footpaths would improve access across the road. Some footpath diversions would increase journey time, depending on the walker's direction, but overall the situation would be improved.

#### 4.3.9 Surface Water Drainage

- 4.3.9.1 A comprehensive system of road and sub-soil drains would be installed to control run-off from all hard surfaces, side slopes and verges. Existing land drainage intercepted by the works would be incorporated in the project's surface water drainage system. Discharge from the system would conform with National Rivers Authority requirements.

#### 4.3.10 Construction

- 4.3.10.1 Construction of the new road would be carried out under strictly controlled conditions. Hours of working, routes of heavy vehicles, noise levels and emissions of pollutants would be controlled. The location of the works, away from existing properties, would assist in reducing the environmental effect of the works on the surrounding area. Accesses to the works areas would be located so that they caused the least disruption to existing traffic. The contract for the works would restrict and limit the activities of the contractor to those essential for the efficient construction of the new road and ensure that the environmental impact of the construction activities was minimised.

#### 4.3.11 Other Mitigation

- 4.3.11.1 Access to Patching Pond for fishermen and walkers would be improved as the existing A27 would become an access road.
- 4.3.11.2 The 'Horse and Groom' and 'The Fox' public houses may suffer from loss of passing trade, but would benefit from a quieter environment and safer access.

## **5. ALTERNATIVE SCHEMES CONSIDERED**

### **5.1 General**

5.1.1 A public consultation exercise was undertaken in 1988 for the Patching Junction Improvement. During the consultation three alternative scheme options were presented to the public at exhibitions held during July. The red, blue and orange routes were all off-line improvements which commenced at Dappers Lane and terminated east of Titnore Lane on the dual carriageway section of existing A27.

5.1.2 Prior to Public Consultation, an off-line route to the north of the existing A27 was examined. From the western end of the scheme the route left the existing A27 to the east of 'The Fox' and swung northwards, into a deep cutting before emerging onto an embankment to cross France Lane about 60 metres south of France Cottages. The route then curved south passing through the northern end of Patching Pond on embankment before continuing into cut under a grade separated junction at Longfurlong and rejoining the existing A27 near Titnore Lane. The route was considered unacceptable as it was entirely within the South Downs AONB, its embankment across the valley and Patching Pond had considerable adverse visual impact and it affected large areas of Grade II agricultural land.

5.1.3 Consideration was also given to the possibility of 'on-line' dualling of the existing A27. This option was not investigated further as the horizontal and vertical alignments of the existing A27 are sub-standard for the required 120 kph design speed. Access problems would also have been created for the fronting properties and the provision of a satisfactory grade separated junction would be difficult.

5.1.4 Following consideration of the responses from the public consultation exercise the Orange Route was announced as the Preferred Route in October 1989. The schemes presented at the public consultation exercise and subsequently developed for the A27 Patching Junction Improvement are described in more detail below.

### **5.2 The Red Route**

5.2.1 This route takes the closest practical line to the south of the existing road so that it avoids Selden and remains outside the AONB. The route swings to the south from Dappers Lane with a very gradual curve in cut across the field known as Ecclesden Common. The stream to the south of Patching Pond is crossed on an embankment before the route turns northwards to meet the existing A27 near Titnore Lane (Figure 7).

5.2.2 With the western grade-separated junction arrangement Titnore Lane would be taken under the A27 in cutting and connect to A280 Longfurlong at a roundabout. A280 Longfurlong and A280 Water Lane would be connected by a link under the A27, and there would be a second roundabout on the south side of the A27 connecting to the westbound slip roads.

5.2.3 The east bound 'off' slip road would connect to the existing A27 at its junction with Selden Lane, and the eastbound 'on' slip road could connect to the roundabout at Longfurlong or directly to Titnore Lane.

### 5.3 The Blue Route

5.3.1 This route was described as the Southern Route with a Western Grade-separated Junction and swings further south than the previous two Options. This enables the line to avoid the properties close to the existing A27 and to pass between Northdown Farm and Potlands Farm (Figure 8).

5.3.2 The vertical alignment for this option is rather similar to the Red Option.

5.3.3 The junction layouts would be similar to the Red Option.

### 5.4 The Orange Route

5.4.1 This route was described as the Central Route with an Eastern Junction has a similar horizontal alignment to that of the Red Route. The route would run into a deeper and longer section of cutting after crossing the valley on an embankment to provide sufficient headroom for the crossing under the dumb-bell type junction (Figure 9).

5.4.2 A280 Water Lane and Titnore Lane would be joined at a roundabout on the south side of the A27, and this roundabout, would connect to one on the north side of the A27 at A280 Longfurlong. The slip roads of the grade-separated junction would tie into these two roundabouts.

5.4.3 This option was announced as the Preferred Route in October 1989. Since then further development and refinement have been carried out before forming the 'Published Scheme'.

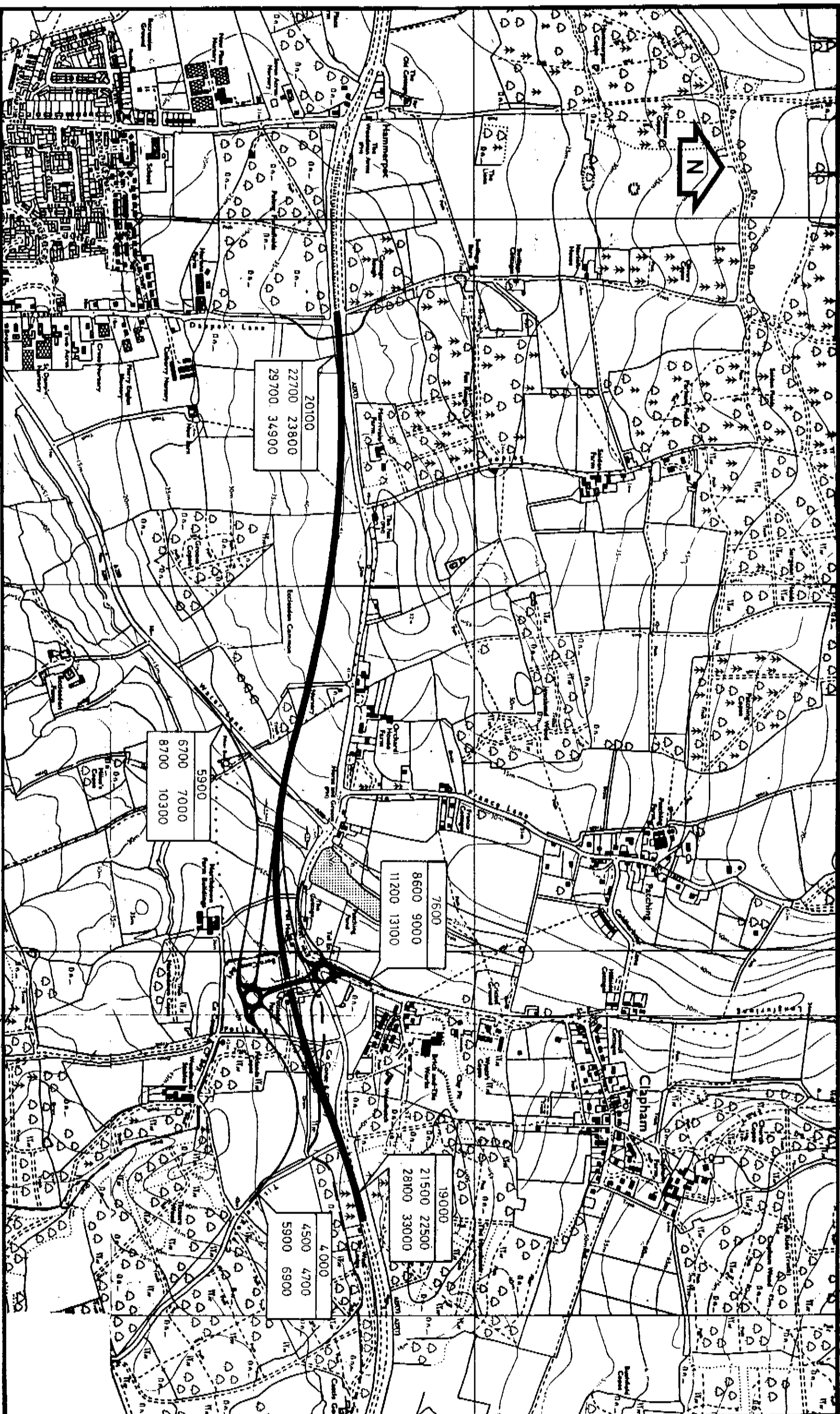
5.4.4 A more detailed description of the 'Published Scheme' appears under Heading 3.

## 5.5 Choice of Published Scheme

### 5.5.1 The published scheme was chosen because :-

1. It was most favoured by the local authorities and majority of those whose property would be affected by the scheme, and by those living closest to the scheme in Selden.
2. It would have a less severe visual impact on settlements at Selden, Patching and Clapham.
3. It would have the greatest reduction in noise on properties fronting the existing A27 at Selden.
4. It would have the least effect on archaeological sites.
5. It would be least intrusive on the landscape.
6. It considerably relieved community severance at Selden.
7. It would be favoured in terms of driver comprehension.
8. It would reduce the amount of lighting required.
9. It was best in terms of higher benefits and lower construction costs.





**KEY:**

A	1990, 12 Hour Existing Traffic Flow.
B	1995, 12 Hour, low growth.
C	1995, 12 Hour, high growth.
D	2010, 12 Hour, low growth.
E	2010, 12 Hour, high growth.

**NOTE:**  
Flows shown to the nearest 100 vehicles.

Peter Fraenkel & Partners  
Consulting Engineers

in association with  
Chris Blandford Associates  
Landscape Architecture Landscape Planning

**A27 Patching Junction Improvement**

Scale	metres	Date
0	100 200 300 400 500	April '91

**FIGURE No. 6** Traffic Flows for the Published Scheme

## APPENDIX A

The following policies are from the West Sussex County Council Structure Plan (1988). Approved plan and explanatory memorandum.

GEN 1 In all their decisions affecting the development and other use of land the Planning Authorities will seek to protect and improve the appearance and conserve the resources of the county, and in particular, not normally permit development which would

- (1) be outside the built up area, except where a countryside location can be justified;
- (2) be visually damaging to its environment;
- (3) destroy, sterilise or prejudice the enjoyment of an important resource;
- (4) cause unacceptable nuisance by way of traffic, noise, smell, pollution or other annoyance; or
- (5) be on land liable to flood or increase the risk of flooding on other land.

GEN5 In all their decisions affecting the development and other use of land the Local Planning Authorities and the Highway Authority will seek to provide adequate means and opportunities for people's travel needs and for the efficient movement of freight.

ENV3 Only in compelling circumstances will development be permitted where it would

- (1) be on land of grades 1, 2 or 3a of the Ministry of Agriculture, Fisheries and Food's Agricultural Land Classification;
- (2) be obtrusive in or damaging to the landscape, particularly in Areas of Outstanding Natural Beauty;
- (3) be harmful to nature conservation;
- (4) be harmful to the fabric or setting of archaeological sites or historic features in the countryside;
- (5) threaten the availability or purity of water supplies;
- (6) sterilise important mineral resources;
- (7) reduce the scope for public enjoyment of countryside important for recreation, or potentially so; or
- (8) be within a strategic gap between built up areas.

Exceptions to the above may be justified to allow for the development of important mineral reserves, recreational development and essential community facilities for local communities in the countryside.

ENV4 There will be a strong presumption against development and changes of use or management which would be harmful to the visual quality and essential characteristics of Areas of Outstanding Natural Beauty. Although the exceptions referred to in policy ENV3 may be justified, nevertheless in applying this policy applications for substantial mineral workings (including extensions of existing workings and the exploration for and appraisal and production of hydrocarbons) will be subject to the most rigorous examination because of their possible impact on the natural beauty of these areas.

ENV5 There will be a strong presumption against development and changes of use or management which would be harmful to officially notified sites of scientific importance. Although the exceptions referred to in policy ENV3 may be justified, nevertheless in applying this policy applications for substantial mineral workings (including extensions of existing workings and the exploration for and appraisal and production of hydrocarbons) will be subject to the most rigorous examination because of their possible impact on the importance of these sites.

ENV9 The Planning Authorities will attach major importance to the need to safeguard agricultural and horticultural production and forestry in all their decisions concerned with development in the countryside. They will

- (1) take account of practical farming needs when determining the location and design of development of all kinds; and
- (2) refuse planning permission for or otherwise oppose changes of use or development involving the subdivision of good agricultural land into unproductive units.

ENV13 When making decisions affecting land use the Planning Authorities will seek the retention and conservation of woodlands and hedgerows which are important in the landscape or as natural habitats or historically. Programmes for felling and replanting commercial woodlands will be supported provided that the programmes do not harm these other resources of the countryside. The Planning Authorities will take account of the need to promote the planting of indigenous (preferably broad-leaved) trees.

ENV14 The Planning Authorities will seek to protect and enhance the quality and distinctive character of the landscape in different parts of the county in all their decisions concerned with development in the countryside. Particular attention will be paid to Areas of Outstanding Natural Beauty.

ENV15 The County Council will itself promote improvements to the landscape by measures which will include where appropriate

- (1) tree planting (especially on the coastal plain and in other areas where significant loss of trees has occurred);
- (2) the removal or screening of eyesores;
- (3) the restoration of waste land to an appropriate after-use; and
- (4) the landscaping of new roads and planting on existing highway land.

ENV16 The Planning Authorities will seek to conserve the natural resources of the county in all their decisions concerned with development in the countryside and normally oppose land use changes which will be ecologically harmful. The County Council will itself carry out measures to protect important wildlife habitats and species on sites in which it has a special interest.

ENV18 The Local Planning Authorities will ensure where ever possible the conservation of the best buildings and archaeological and historic features in town, village and countryside. In particular they will

- (1) designate conservation areas in places where there are groups of buildings of special architectural or historic or unique interest, and within them require the highest standards of design, materials and construction;
- (2) safeguard the fabric and the setting of buildings of merit or archaeological or historic features against damage or discordant development, and agree to the demolition of such buildings or the removal of such features only where there is no practical alternative;
- (3) under some circumstances permit, in the best old buildings, uses which in other circumstances might be resisted, where this is the only means of retaining the character of the building. Permission will not normally be granted for the extension of such buildings or the expansion of the uses beyond their capacity.

ENV19 Planning permission involving the loss of a building or feature of archaeological or historic interest will not be granted unless reasonable opportunities for recording its characteristics are provided before demolition begins.

#### **Policies for Mobility**

M6 The County Council will provide the maximum practicable scope for the use of road transport by means of road improvements and other measures, consistent with the need for the environment to be protected and, where possible, improved.

M7 The main traffic flows should, as far as possible, be channelled into those routes most able to cope with them, thus reducing the environmental problems in the most sensitive areas.

M11 The Department of Transport has the following programme of trunk road improvement schemes within the county:

- A3 Liphook and Petersfield bypass
- A23 Handcross - Pease Pottage improvement
- A23 Handcross - Warminglid improvement
- A23 Warminglid - Brighton
- A27 Havant bypass - Chichester bypass
- A27 Westhampnett bypass
- A27 Fontwell bypass
- A27 Arundel bypass

- A27 Patching junction improvement
- A27 Brighton bypass

The following policies are from the West Sussex County Council Structure Plan Second Review Replacement Plan Submission Draft (1990)

## GENERAL POLICIES

### Primary Importance of Protecting and Improving the Environment

G1 The Planning Authorities will normally attach the greatest weight to the need to protect and improve the environment of West Sussex and the quality of life within it, and to conserve the county's resources. They will seek to ensure the highest standards of air and water quality, pollution control and waste treatment. They will not normally permit development which will

- (1) be visually damaging;
- (2) cause unacceptable nuisance or danger by way of noise, smell or other pollution, erosion, flooding or traffic; or
- (3) destroy, sterilise or prejudice the use or enjoyment of important landscape, wildlife, farmland, minerals, recreational potential or other resources.

They will carry out measures to enhance the urban and rural environment, and will encourage others to do likewise, including as part of development.

*Revised version of GEN1 which includes a wider "green" statement, expands on "improve" in first sentence and also emphasises primacy of environmental objective.*

### Transport

G8 The Planning Authorities and the Highway Authority will seek to provide safe and adequate means and opportunities for people's travel needs and for the efficient movement of freight, taking full account of the needs of pedestrians, cyclists and the disabled and the importance of protecting the environment. A particular objective will be to improve accessibility between the Coastal Districts and Central Sussex and to the towns within Arun district.

With the object of creating a road hierarchy which meets specified standard of reasonable service, selected main roads between and within urban areas will be improved, as permitted by the finance available and the need to avoid unacceptable effects on the environment. Because it will not always be practicable to cater for every demand on the road network, measures complementary to road construction and improvement will be pursued, including promoting greater use of public transport, cycling and walking, encouraging the timing of journeys outside peak periods, and constraints on the use of the private car through parking provision and charges and other measures. Such an approach will be followed particularly in urban

areas, where the emphasis will be on demand management rather than on providing further capacity for use by private cars.

The safe, efficient and commercial operation of Gatwick, Shoreham and Goodwood airports with broadly their present facilities, and of Shoreham and Littlehampton ports, will be supported, and efforts will be continued to minimise the environmental impact of their traffic.

*Expansion of GEN5.*

**Development in particularly sensitive areas of countryside**

**(1) Areas of Outstanding Natural Beauty**

C2 Only in compelling circumstances will development (or changes of use or management) be permitted where it would be harmful to the nationally important visual quality and distinctive characteristics of Areas of Outstanding Natural Beauty, particularly the opportunity they offer for quiet outdoor enjoyment.

Need for development essential for agriculture or forestry, for roads, or to take advantage of a valuable opportunity to meet demand for quiet informal recreation, the extraction of minerals or the deposit of waste may exceptionally be regarded as compelling, but applications for roads, mineral working or waste disposal will be subject to the most rigorous examination because of the possible impact of such development on natural beauty. Major developments for any purpose are likely to be inconsistent with the national designation of AONBs, and any applications will need to be accompanied by environmental assessments: they will be permitted only if there is an overriding interest and if no acceptable alternative is available.

Opportunities will be sought to maintain or reinstate the natural beauty and distinctive character of each AONB. Any development permitted will be required to be in sympathy with the landscape and designed and sited so as to enhance visual quality.

Development outside but near to a designated AONB will not normally be permitted if it would be unduly prominent in or detract from views into or out of the Area (particularly from roads, rights of way or other public places), or would otherwise threaten public enjoyment of it.

*ENV3 and ENV4, rephrased*

**(2) Areas of importance for nature conservation**

C3 Only in compelling circumstances will development (or changes of use or management) be permitted where it would be harmful to Sites of Special Scientific Interest or to other sites and areas identified as being of nature conservation or geological importance, including significant wildlife corridors.

Need for development essential for agriculture or forestry or to take advantage of a valuable opportunity to meet demand for quiet informal recreation, the extraction of minerals or the deposit of waste may exceptionally be regarded as compelling but applications for roads, mineral working or waste disposal will be subject to the most rigorous examination because of the possible impact of such development on sites of nature conservation or geological importance, including significant wildlife corridors.

*ENV5 and part ENV16*

**(3) High grade agricultural land**

C4 Only in compelling circumstances will development be permitted on the best and most versatile agricultural land (defined as land of grades 1, 2 or 3a of MAFF's Agricultural Land Classification).

Essential development related to the needs of agricultural or horticultural activities relying on the intrinsic quality of the soil or needed for forestry will normally be permitted, subject to policy C12. Extensive development for recreational purposes (such as golf courses) may be permitted providing the creation of substantial buildings or areas of hardstanding is avoided and there is no adverse effect on the landscape or nature conservation. Development for mineral extraction or waste disposal may be permitted in exceptional circumstances, but applications will be subject to the most rigorous examination because of the possible impact of such development on the existing or potential use of the land for agriculture, and restoration to that use will be required.

### Conservation of landscape and wildlife habitats

C14. The Planning Authorities will seek to protect, conserve and enhance the quality and distinctive character of the landscape in different parts of the county and to protect wildlife habitats and species. Particular attention will be paid to AONBs and their settings, SSSIs and other sites of nature conservation and geological importance, and sites in which the Planning Authorities themselves have an interest.

Practical measures to be taken will include

- (1) seeking, through tree preservation orders and other means, the retention, management and conservation of trees, woodlands and hedgerows which are important in the landscape and to wildlife conservation;
- (2) seeking the retention, management and conservation of wetlands and other habitat types rare in the county and of significant wildlife corridors;
- (3) supporting programmes of felling and replanting commercial woodlands where these do not harm the countryside;
- (4) creating, conserving, managing and improving wildlife habitats, including local nature reserves;
- (5) promoting landscape improvements and tree planting, preferably of broad-leaved native species, concentrating on areas where trees are relatively scarce, especially on the coastal plain and where significant tree loss has occurred or is expected;
- (6) securing the removal or screening of eyesores;
- (7) requiring the restoration of vacant or waste land to an appropriate after-use;
- (8) landscaping new roads appropriately and managing existing highway land for amenity and nature conservation purposes;
- (9) further developing countryside management services and encouraging the preparation and implementation of management and improvement schemes by landowners, voluntary bodies and other agencies, co-ordinated where appropriate by management plans and agreements;
- (10) ensuring that any necessary development meets high standards, as required by policy G5; and
- (11) conserving and interpreting historic buildings and features in the landscape, including sites of archaeological interest.

*Existing ENV13, 14 and part 16 combined.*

## TRANSPORT POLICIES

### Highways schemes

T2. The Department of Transport has the following programme of improvement schemes to relieve trunk roads within the county:

- A3 Liphook and Petersfield bypass
- A23 Handcross - Pease Pottage improvement
- A23 Handcross - Warninglid improvement
- A23 Warninglid - Brighton
- A27 Westhampnett bypass
- A27 Arundel bypass
- A27 Crossbush bypass
- A27 Patching junction improvement
- A27 Worthing improvement and Lancing bypass
- A27 Brighton bypass

The County Council will encourage the early completion of the road improvements in this list, subject to their effects on the environment being acceptable, and will press for additional schemes where a need is identified.

The County Council will seek involvement in the study by the Department of Transport of the need for and possible route of a new national road between Hampshire and Kent, which may affect West Sussex, and will respond to any consultations which may arise from it.

*Revised M11, placed above T4 and mentioning Kent - Hampshire route.*

### The best buildings

B3. The Planning Authorities will ensure wherever possible the conservation of the best buildings in town, village and countryside. In particular they will

- (1) designate conservation areas in places where there are groups of such buildings and within them require the highest standards of design, materials and construction;
- (2) safeguard the fabric and setting of such buildings against damage or discordant development;
- (3) protect important views of them from public places;
- (4) agree to their removal or alteration only when there is no practicable alternative and after adequate opportunity has been provided for their recording; and
- (5) in appropriate cases permit uses which in other circumstances might be resisted, where this is the only means of retaining the character of the building. Permission will not normally be granted for the extension of such buildings or the expansion of new uses within them beyond their capacity.

For the purposes of this policy the best buildings are those statutorily listed as being of architectural or historic interest, or those which are attractive or interesting features in the street scene, landscape or local history.

*ENV.18 adapted.*

### Archaeology

B5. Only in compelling circumstances will development (or changes of use or management) be permitted where it would be harmful to sites identified as being of

known or potential archaeological importance. The Planning Authorities will ensure that

- (1) where necessary, appropriate and satisfactory provision is made by the developer for a site evaluation to define the character and significance of the archaeological or historic interest of a site before any planning application is determined;
- (2) the fabric and setting of Scheduled Ancient Monuments and important non-scheduled monuments are preserved intact; and
- (3) where it is acknowledged, if necessary after evaluation, that a site is not of such importance that it merits complete or partial preservation, appropriate and satisfactory provision is made by the developer, prior to destruction or damage, for the excavation and recording of the remains and subsequent publication of the results.

Where possible, conflicts between the preservation of known archaeological sites and land uses will be resolved by management agreements.

*ENV.19 strengthened.*

The following policies from Arun District Council Local Plan (1989) are relevant to the study area.

*Policy EVT3.*

Within the Sussex Downs Area of Outstanding Natural Beauty shown on the proposals map planning permission will not be granted for development unless it is for essential agricultural or forestry purposes, for appropriate needs of recreation or for the essential needs of the local community.

*Policy EVT6*

Planning permission will not be granted for new development on sites lying wholly or partially outside the built-up areas unless the proposals can be justified as either:

- (a) essential to the needs of agriculture, forestry and in appropriate cases recreation, the extraction of minerals or hydrocarbons and the disposal of waste; or
- (b) in exceptional circumstances where they provide substantial economic or social benefits to the district, by providing jobs, low cost homes, or improvements to local infrastructure such as roads or drainage.

All such proposals will in addition be judged against the following criteria:

- (i) The use of agricultural land of grades 1, 2 or 3A will not normally be permitted.
- (ii) The proposals will not be visually damaging or obtrusive within the landscape and will not adversely affect the public's enjoyment of the landscape or its features.
- (iii) The proposals will not be harmful to nature conservation or established ecological interests and will not adversely affect the public's enjoyment of such features.
- (iv) The proposals will be subject to the policies that relate to specific development types as stated elsewhere in the plan.



## APPENDIX B

### Tree Preservation Orders

Refer to figure 3

1. Trees on Dapper's Lane, scheduled June 1975.
2. "Poling Furzefields", scheduled April 1975.
3. 2 trees at entrance to Dulaney Cottage, scheduled January 1984.
4. Trees within garden at Dulaney Cottage, scheduled January 1974.
5. "Wyatt's Copse", scheduled January 1980.
6. A number of trees within gardens at properties in Clapham, scheduled April 1963.
7. Trees and hedgerow adjacent to Church Close, Clapham, scheduled February 1971.
8. Trees within gardens of new properties on Woodland Close, scheduled January 1975.

**Listed Buildings**

Refer to figure 3

**1.0 Listed Buildings**

- A. **Parish Church of St John The Divine, The Street (West Side)**  
Grade I. C13. Good small medieval flint church, rather much restored.
- B. **The Forge, No. 137, The Street (East Side)**  
Grade II. Early C19. 2 storey. (Actual forge building adjoins cottage on NE, but is largely derelict.)
- C. **No. 134, The Street (East Side)**  
Grade II. C17 or earlier. 2 storey timber framed.
- D. **Morella Cottage, The Street (East Side)**  
Grade II. C17 or earlier. Timber framed. 2 storey.
- E. **Dukes Cottage, The Street (West Side)**  
Early C19. 2 storey.
- F. **Dulaney Garage, The Street (East Side)**  
Grade II. Originally the stables of Dulaney Cottage. Now converted to an office. Mid C19. 2 storey.
- G. **Dulaney Lodge, The Street (East Side)**  
Grade II. Originally the lodge of a large house named Dulaney Cottage, which has now been demolished. Mid C19. One storey.
- H. **Meadow Cottage & France Cottage, France Lane (East Side)**  
Grade II. One building. C16. Timber framed and flint.
- J. **The Horse & Groom Inn, Arundel Road.**  
Grade II. C18. 2 storey.
- K. **Plantation Cottage, Clapham Common, Clapham**  
Grade II. Early C19. 2 storey.
- L. **Clapham School & School Masters House, The Street**  
Grade II. Mid C19. 2 storey.
- M. **The Lodge, Coldharbour Lane**  
Grade II. Early C19. 2 storey.
- N. **Walnut Tree Cottage, No 176, The Street (South Side)**  
Grade II. C17 or earlier. Timber framed. 2 storey.
- O. **Nos 155 & 156, The Street (North Side)**

Grade II. One building. C17 or earlier. 2 storey. Timber framed.

**P. The Old Cottage, No 157 The Street (North Side)**

Grade II. Probably C17. 2 storey. Flints and red brick.

**Q. Nos 172 & 173, The Street (South Side)**

Grade II estate cottages built by Duke of Norfolk in 1847, 2 storeys.

**R. Little Thatch, No 160, The Street (North Side)**

Grade II. Timber framed. One storey with attic.

**S. The Old Farmhouse, No 163 & 164, The Street (North Side)**

Grade II. Originally a large farmhouse. Converted to two cottages. Now being renovated.

**T. Dovecote of The Old Farmhouse**

Grade II. Square. C17 or earlier. Four feet thick stone/flint chalk block walls.

**U. Parish Church of St Mary, The Street**

Grade I. Part Norman, otherwise C13. Simple Medieval church, rather restored.

**Heritage and Archaeological Sites**

Refer to figure 3

- Site 19 Roman coins found in this area could indicate a villa to the north-east of Seldon Farm.
- Site 33 Pre-Roman Iron Age pottery found to the east of Lane could indicate the site of a pre-historic farmstead.
- Site 64 A limekiln is shown on the edge of Church Copse on the OS Map of 1876.
- Site 67 Earthworks in Patching Copse are the remains of pre-historic field systems and possibly also a farmstead site.
- Site 71 The remains of part of a Roman farmstead were found to the west of Patching Pond in 1974.
- Site 72 Remains of Medieval occupation were found in the extensive gardens of Ladywell Cottage in 1974.
- Site 78 Pre-Roman and Roman pottery found west of Northdown Farm buildings may indicate a farmstead site.

## ASSESSMENT FRAMEWORK

## A27 PATCHING JUNCTION IMPROVEMENT

PREPARED APRIL 1991

## GROUP 1: TRAVELLERS

Sub-Group	Effect	Units	Proposed Scheme		Do Minimum	Comments
			High	Low		
Car Users	Time Savings	EM(PVB)	25.912	13.189	0	Notes A, B and C apply to first nine lines only
	Vehicle Operating Cost Savings	EM(PVB)	-0.670	-0.838	0	
Users of Light Goods Vehicles	Time Savings	EM(PVB)	5.510	2.479	0	A. Each column shows the improvements over the 'Do-Minimum' option. Hence, the 'Do-Minimum' entries are zero.
	Vehicle Operating Cost Savings	EM(PVB)	-0.128	-0.142	0	
Users of Other Goods Vehicles	Time Savings	EM(PVB)	2.445	1.109	0	B. Present value of benefits (PVB) are for 30 year periods from the expected date of opening and are discounted to 1988 prices at 8% per annum.
	Vehicle Operating Cost Savings	EM(PVB)	-0.161	-0.194	0	
Bus Operators & Passengers	Time Savings	EM(PVB)	0.634	0.362	0	C. It is assumed that national average figures for vehicle occupancy and for accident rates will apply.
	Vehicle Operating Cost Savings	EM(PVB)	-0.004	-0.007	0	
All Vehicle Travellers	Value of Accident Savings	EM(PVB)	5.407	3.723	0	

# ASSESSMENT FRAMEWORK

## GROUP 1: TRAVELLERS (continued)

Sub-Group	Effect	Units	Proposed Scheme		Do Minimum	Comments
			High	Low		
All Vehicle Travellers (continued)	Reduction in Casualties:					The figures indicate probable total reductions in casualties over the whole 30 year assessment period. They take no account of the safety implications of the detailed design of the proposed scheme.
	Fatal	number	16	14	0	
	Serious	number	181	154	0	
	Slight	number	517	439	0	
	Driver Stress		Low		High	Driver stress likely to increase on do minimum route as two way traffic flows increase.
View from Road			Agricultural		Agricultural	
Traffic Delays During Construction			Slight Mostly limited to periods when the road layout is being connected to the existing network.		Moderate Requires the construction of roundabouts at the existing A27/A280 junctions	

# ASSESSMENT FRAMEWORK

## GROUP 1: TRAVELLERS (continued)

Sub-Group	Effect	Units	Proposed Scheme	Do Minimum	Comments
<hr/>					
Cyclists	Change in Amenity		Separation of A27 through traffic and A280 turning traffic will improve the overall amenity for cyclists.	Increasing 2-way traffic will reduce the quality of the existing amenity.	
<hr/>					
	Safety		Provision of through dual carriageway will improve safety at junction.	Increasing 2-way flows will increase cyclist/traffic conflicts.	
	Severance		Reduced by provision of grade-separated junction.	None	

# ASSESSMENT FRAMEWORK

## GROUP 1: TRAVELLERS (continued)

Sub-Group	Effect	Units	Proposed Scheme	Do Minimum	Comments
Pedestrians (Total pedestrian movements per day less than 100.)	Change in Amenity		Through traffic on A27 will be separated from A280 turning traffic and provision of pedestrian/equestrian underpasses at Water Lane and Dappers Lane will improve pedestrian amenity.	Crossing of A27 more difficult as traffic volumes increase.	
	Safety		Separation of flows and provision of pedestrian facilities will improve safety.	Increasing 2-way traffic flows will increase pedestrian/traffic conflicts	
	Severance		Slight	Slight	A number of footpaths and bridleways would be affected. Diversions are proposed where appropriate.



ASSESSMENT FRAMEWORK

A27 PATCHING JUNCTION IMPROVEMENT

GROUP 1: TRAVELLERS (Continued)

Sub-Group	Effect	Proposed Scheme	Do-Minimum	Comments
Equestrians	Change in Amenity	Provision of underpass at Water Lane and Dappers Lane will improve amenity for equestrian enabling safe and easy access to the rides on the Downs	Increasing 2-way through traffic on A27 will increase the difficulties encountered by equestrians in crossing the A27	
Safety		Separation of flows from the A27 through traffic will enable equestrians to cross the A27 in safety.	Increasing 2-way through traffic on A27 will increase equestrian/vehicle conflicts	
Severance		Slight		Moderate to severe because of increasing reluctance of equestrians to cross the A27.

# ASSESSMENT FRAMEWORK

## A27 PATCHING JUNCTION IMPROVEMENT

### GROUP 2: OCCUPIERS

Sub-Group	Effect	Units	Proposed Scheme	Do Minimum	Comments
Residential	Properties Demolished	Number	3	0	The cost of property acquisition and demolition is included in Group 6.
	Noise*	Houses experiencing increases of:			Due to higher speeds on dual carriageway noise levels at properties adjacent to A27 would be marginally increased. Properties may be entitled to noise insulation treatment.
		More than 15 dB(A)L10	0	0	
		10 - 15 dB(A)L10	0	0	
		5 - 10 dB(A)L10	0	0	
		3 - 5 dB(A)L10	0	0	
		Number of houses experiencing decreases of:			Houses on the existing A27 at Selden will experience a reduction in noise levels due to diversion of A27 away from present route and rerouting of through traffic.
		More than 15 dB(A)L10	0	0	
		10 - 15 dB(A)L10	4	0	
		5 - 10 dB(A)L10	5	0	
		3 - 5 dB(A)L10	0	0	
	Visual Obstruction	Severe	0	No Change	No appreciable visual obstruction
		Significant	0		
		Slight	0		

\* The noise predictions have been calculated in accordance with 'Calculation of Road Traffic Noise' 1988 and compare the predicted noise level 15 years after opening (2010) with noise level predicted for the period immediately prior to construction (1994).

GROUP 2: OCCUPIERS (continued)

Sub-Group	Effect	Units	Proposed Scheme	Do Minimum	Comments
Residential (continued)	Visual Intrusion	No. of Properties	High Medium Low 0 1 6	No change	Properties along the route suffer various levels of intrusion. Greatest impact will be on Northdown Farm where the 2.5m deep cutting at Ecclesden Common would be particularly intrusive. 6 properties at Selden will experience slight visual intrusion on the partially screened view of the 5.0m high embankment crossing the valley
-----					
	Severance				
	a) Relief to existing severance		Substantial reduction in severance for properties on the existing A27 at Selden	None	
	b) Imposition of new severance		Slight		Increasing two way traffic flows will increase the difficulty of access.

# ASSESSMENT FRAMEWORK

## GROUP 2: OCCUPIERS (continued)

Sub-Group	Effect	Proposed Scheme	Do Minimum	Comments
Residential (continued)	Disruption during construction	Slight disruption to 6 properties within 100 metres of the site.	Slight disruption to properties close to the existing junctions of the A27/A280 during roundabout construction.	
Commercial Premises:				
a) Garage Services	Properties demolished	One Petrol Filling Station	No change	
b) Public Houses	Noise	Two premises will benefit from a reduction in noise.	Increase in noise levels with increase in traffic flows.	
	Visual Obstruction	No appreciable visual obstruction.	No change	
	Severance	Significant reduction of passing trade at 2 premises.	No change	
	Disruption during Construction	Slight	Moderate	

# ASSESSMENT FRAMEWORK

## GROUP 2: OCCUPIERS (continued)

Sub-Group	Effect	Units	Proposed Scheme	Do Minimum	Comments
Schools and Hospitals					No schools or Hospitals directly affected
Farming		Numbers of Farms affected by land take	3	0	
	Land take	Hectares of Land: Grade 2 Grade 3 Grade 4	0.6 19.2 0	0 0 0	Based on MAFF land classification. Compensation included in Group 6.
	Severance		Slight	None	
Foxwood Nursery	Land take	Hectares of Land	0.6	None	Nursery abandoned during 1989 following death of operator.
Woodland	Land take	Hectares of Land	1.4	None	Acquisition of woodlands on the northern part of Potlands Copse (1.3 Ha) and part of Cottage Rough (0.1Ha) on the east of Swillage Lane.
Open Space					No open space directly affected.

ASSESSMENT FRAMEWORK

A27 PATCHING JUNCTION IMPROVEMENT

GROUP 3: USERS OF FACILITIES

Sub-Group	Effect	Proposed Scheme	Do-Minimum
Users of The Fox Public House	Severance	Slight - Access for westbound A27 traffic via Grade separated junction. Access for local traffic eased.	Severance increases as traffic flows increase.
	Noise	Moderate reduction in noise between 5-10 dB(A)	Approximately 2.0dB(A) noise increment as traffic flows increase.
	Severance	Slight - Access for westbound A27 traffic via Grade Separated Junction. Access for local traffic eased.	Severance increases as traffic flows increase.
Users of The Horse and Groom Public House	Noise	High reduction in noise between 10-15 dB(A)	Approximately 2.0 dB(A) noise increment as traffic flows increase
	Visual obstruction	Slight	No change
	Severance	Filling Station demolished	Access eased by 'U' turn facility at roundabouts despite increases in traffic flows.
Users of Filling Station	Severance	Access to and from A27 improved by Grade Separated Junction.	Severance increases as traffic flows increase.

# ASSESSMENT FRAMEWORK

## GROUP 4: POLICIES FOR CONSERVING AND ENHANCING THE AREA

### A27 PATCHING JUNCTION IMPROVEMENT

Policies	Authority	Interest	Proposed Scheme	Do-Minimum	Comments
To protect Area of Outstanding Natural Beauty	DOE WSCC	To protect and improve landscape within AONB	Intrusion into agricultural land on southern edge of AONB (0.9Ha)	No effect	
To protect and improve the environment	WSCC	To protect and improve the appearance of the county	Proposed scheme has a slight effect on views along valley south of Patching pond, and would intrude into woodlands at Potlands Copse.	No effect	West Sussex structure plan. WSCC.
To protect listed buildings	DOE WSCC ADC	Effect on Horse and Groom Public House	New dual carriageway is 140m from public house	New roundabout is 25m from public house	Horse and Groom Public House is Listed Grade II
To protect archaeological sites	WSCC	Effect on Heritage site west of North-down Farm	Possible slight effect on northern boundary of site by realigned Water Lane	No effect	Pre-Roman and Roman pottery found may indicate a farmstead site

# ASSESSMENT FRAMEWORK A27 PATCHING JUNCTION IMPROVEMENT

## GROUP 5: TRANSPORT, DEVELOPMENT AND ECONOMIC STUDIES

Policy	Authority	Interest	Proposed Scheme	Do-Minimum	Comments
<b>Transport</b>					
a) To improve the safety and free flow of Trunk Road traffic	DTP	To improve the A27	Substantial improvement	Increasing delays expected	
b) To improve County Highway Network	WSCC	To improve the A27 and A280 junction	Substantial improvement to A27 and A280 junction	Increasing delays expected	West Sussex Structure Plan WSCC
c) To relieve local traffic problems in sensitive areas	WSCC		Reduction of traffic through Patching village avoiding queues at A280 junction	Through traffic expected to increase	West Sussex Structure Plan WSCC
<b>Development and Economic</b>					
a) To encourage development at West Dorrington	WSCC WBC	Effect on access	Access from A27 via Titmore Lane improved	Increasing delays expected at junction of Titmore Lane with A27	West Dorrington Informal Plan WBC



# ASSESSMENT FRAMEWORK

## GROUP 6: FINANCIAL EFFECT

A27 PATCHING JUNCTION IMPROVEMENT			
Sub-Group	Interest	Proposed Scheme	Do-Minimum
Department of Transport	Construction Costs	£m(PVC)	0.362
	Land Costs	£m(PVC)	0.003
	Compensation Costs	£m(PVC)	Included in Land Costs
	Maintenance Costs	£m(PVC)	0.113
	Total Cost	£m(PVC)	0.478
Total quantified monetary benefits		High	Low
		£m(PVB)	£m(PVB)
		38.944	19.679
			0
Net present value compared to do-minimum		£m(NPV)	13.040
			0

Costs are discounted from years of expected expenditure to 1988 at 1988 prices (PVC = Present value of costs, PVB = Present value of benefits, NPV = net present value)

Includes savings in time, vehicle operating costs and accidents taken from Group 1.



THE DEPARTMENT  
OF TRANSPORT

# **A27 PATCHING JUNCTION IMPROVEMENT**

## **ENVIRONMENTAL STATEMENT NON TECHNICAL SUMMARY**

Department of Transport  
South East Construction Programme Division  
Federated House  
London Road  
Dorking  
Surrey  
RH4 1SZ

Peter Fraenkel & Partners  
Consulting Engineers  
Tuition House  
27-37 St George's Road  
Wimbledon  
London SW19 3EU

in association with

Chris Blandford Associates  
Landscape Architecture  
Landscape Planning  
Possingworth Craft Workshops  
Blackboys  
Uckfield  
East Sussex TN22 5HE

JUNE 1991

## A27 PATCHING JUNCTION IMPROVEMENT

### NON-TECHNICAL SUMMARY

#### The Existing Situation

The A27 forms part of the main east-west trunk road route along the south coast.

The section of the A27 under consideration lies between its junctions with Dappers Lane and Titnore Lane. It is approximately 3km long and consists of a single carriageway connecting to dual carriageway sections at either end.

The existing road closely follows the gently undulating ground, falling from the ridge between Jewshead Wood and Poling Furze fields into the broad shallow valley containing Patching Pond before rising again onto Clapham Common.

The predominant land use is agricultural. The better quality farmland being in the base of the valley north of Patching Pond and between the villages of Patching and Clapham. There are several areas of woodland, some of which are remnants of the forest that once covered the lower slopes of the Downs.

The A280 crosses the A27 via a staggered junction at the southern end of Patching Pond. There are a number settlements alongside the A27, the principal one being Selden, and several outlying farms. The villages of Patching and Clapham lie to the north of the A27.

#### The Scheme

The published scheme would provide a new section of dual carriageway road slightly to the south of the existing A27, refer to Figure A. This section would tie in to the existing A27 at Dappers Lane to the west and at Clapham Common to the east. The improvement also includes the provision of a grade separated junction at the A280 junction. The proposed route would swing south eastwards in a gradual curve away from the existing A27. It is in cut across Ecclesden Common, and crosses the A280 Water Lane some 150 metres from its present junction with the A27. The stream to the south of Patching Pond would be crossed on a embankment up to 5 metres high before the route turns northwards and runs in cutting up to 4.5 metres deep over a length of some 650 metres at the junction with the A280. The route ties into the existing section of dual carriageway approximately 200 metres east of Titnore Lane.

The existing A27 would be used as a two-way service road connected to the new dual carriageway by a left-off junction near 'The Fox' public house, and a connecting link to the proposed northern roundabout on A280 Longfurlong.

Two underpasses would be provided, one at Dappers Lane/Swillage Lane and one in the valley near Water Lane. The former would connect Dappers Lane to Swillage Lane for pedestrians, equestrians and vehicles. The Water Lane underpass would be used by pedestrians and equestrians crossing the new dualled section of the A27.

### **The Side Roads**

Access onto the existing A27 would be maintained to the west of 'The Fox' public house by means of a left off eastbound only connection. From Selden Lane to its connection into the northern roundabout the existing A27 would be a two-way road.

Water Lane would be realigned eastwards across the valley to the south of the new A27. Titnore Lane would be realigned to the west to join Water Lane and the two westbound slip roads from the A27 at a roundabout junction south of the new A27, opposite A280 Longfurlong.

The new section of dual carriageway would not have any central reserve crossings and right turns would be catered for at the dumb-bell type junction.

### **Benefits of the Scheme**

The A27 would become dual carriageway from west of Worthing to Poling, removing the problems of congestion and reduced road safety caused by the single carriageway section at Patching.

The removal of the A280 staggered junction at Water Lane and Longfurlong would reduce congestion and delay at the junction and improve safety.

The removal of the existing Titnore Lane access onto the A27 would improve safety at this junction.

There would be considerably relieved community severance at Selden.

Noise to properties along the existing A27 would be significantly reduced.

### **Impact of the Scheme**

Four properties would be demolished at the eastern end of the scheme.

The new road and structures would be visible from several properties, the most intrusive features being the dumb-bell junction and the 5 metre high embankment across the valley.

There would be a slight increase in noise to properties at Clapham Common and Northdown Farm.

The northern roundabout and slip roads would be within the Sussex Downs Area of Outstanding Natural Beauty.

Some mature trees and hedgerows would be taken by the proposed scheme.

Two footpaths and a bridleway would be severed by the proposed scheme, these would be re-directed through underpasses providing safe crossing points.

Three farms would be affected, Potlands Farm house and buildings would be demolished.

### **Mitigation Measures**

Earthshaping would be used to reduce the effect of the scheme on the landscape. Slopes would be graded out for return to agricultural use. Cuttings and embankments would be graded out to minimise their impact on the local topography.

Earth mounding would be used to reduce the impact of noise on the most affected properties. Extensive planting would be carried out to integrate the road into the surrounding countryside, this would include dense tree and shrub planting on cuttings and embankments, hedge planting and off-site planting by agreement with landowners.

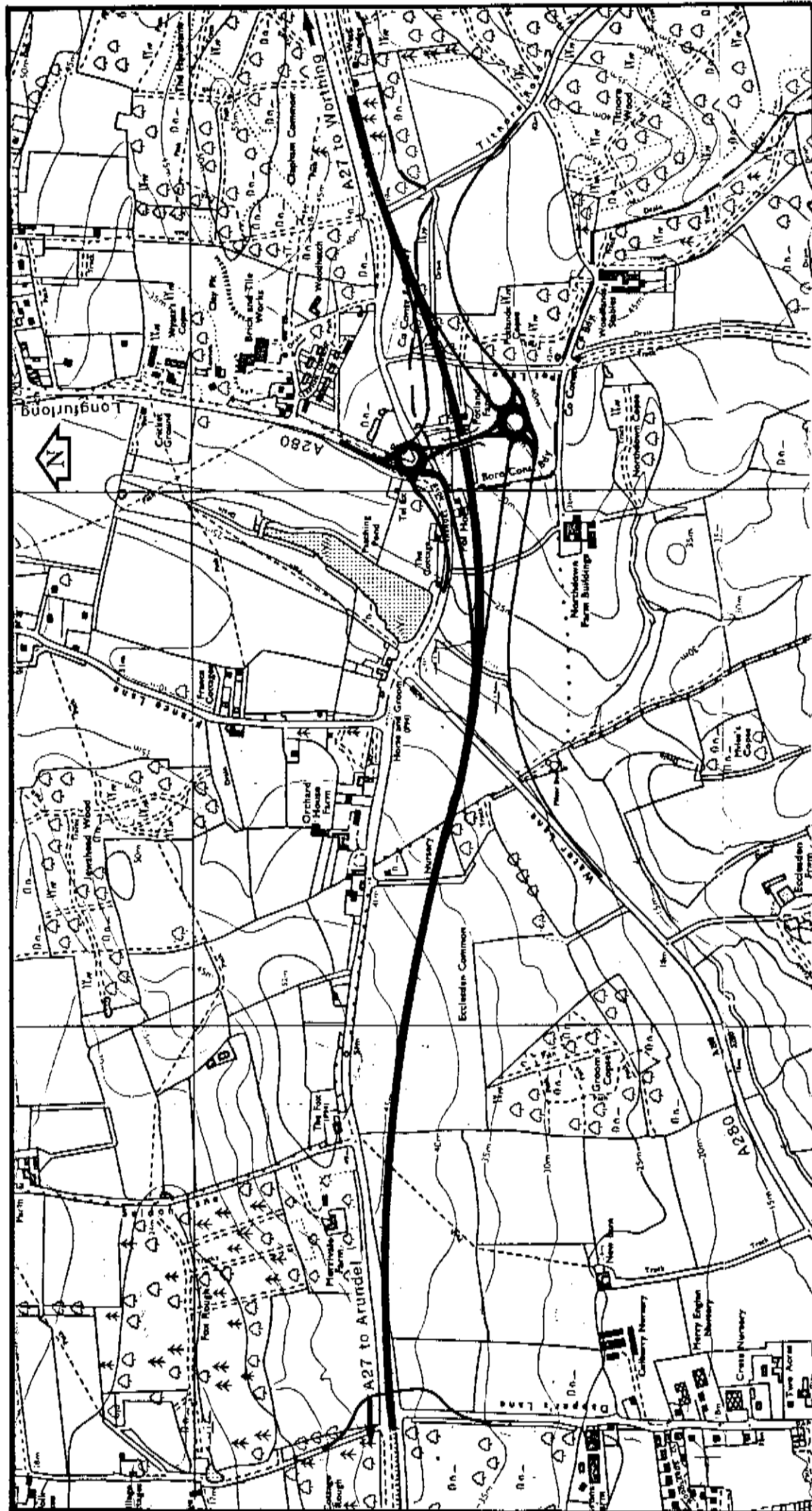
### **Alternatives Considered**

At the Public Consultation held on July 1988 for the patching Junction Improvment, three alternative scheme options were considered, refer to Figure B. The red, blue and orange routes were off-line improvments which commenced at Dappers Lane and terminated east of Titnore Lane on the dual carriageway section of the existing A27.

Prior to Public Consultation, an off-line route to the north of the existing A27 was examined. This was considered unacceptable as it was entirely within the Sussex Downs Area of Outstanding Natural Beauty.

The scheme based on the Orange Route was preferred because:

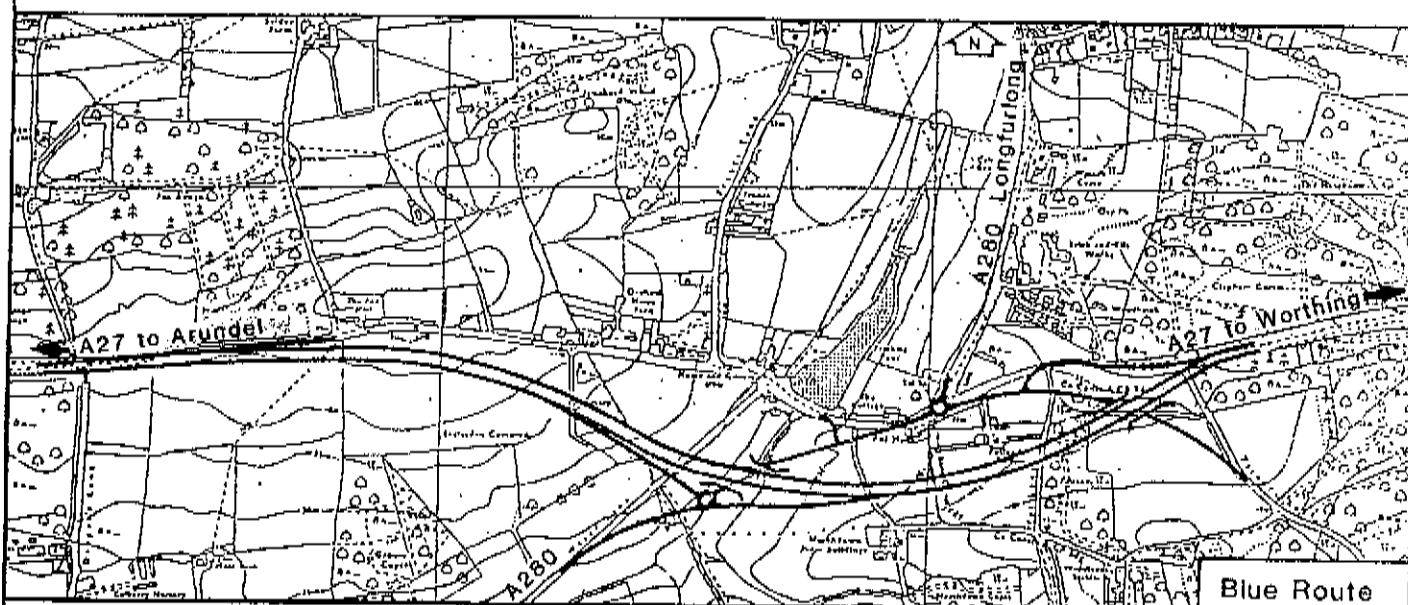
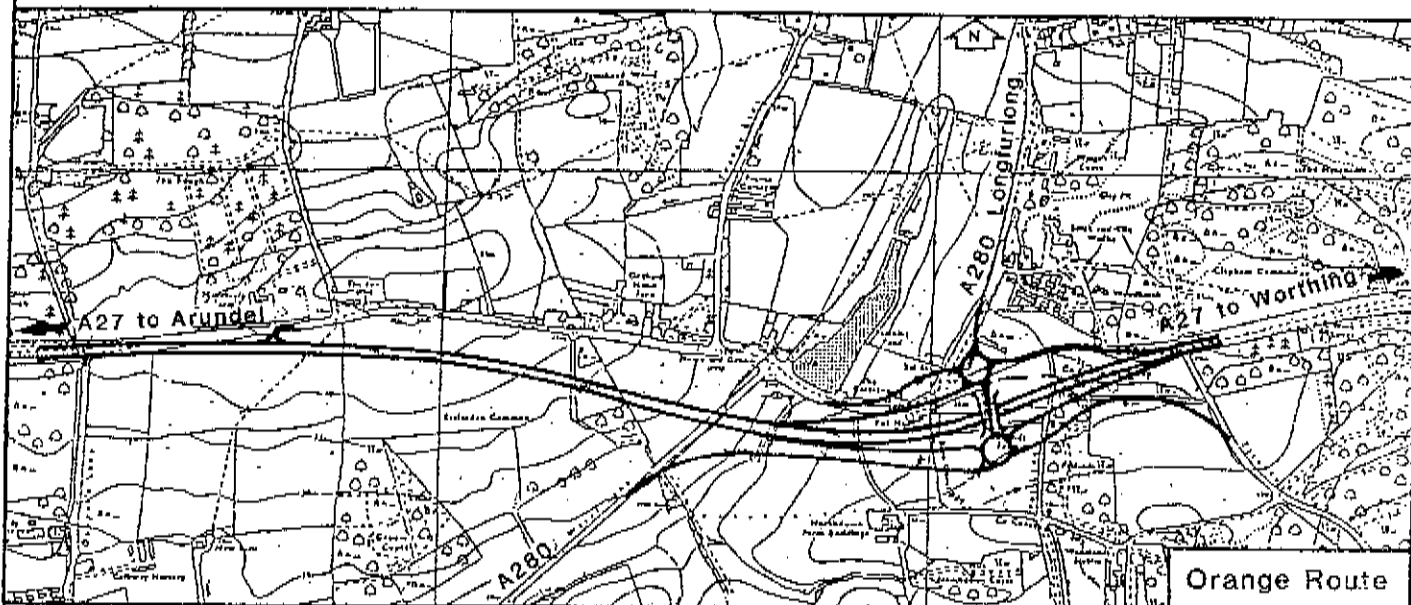
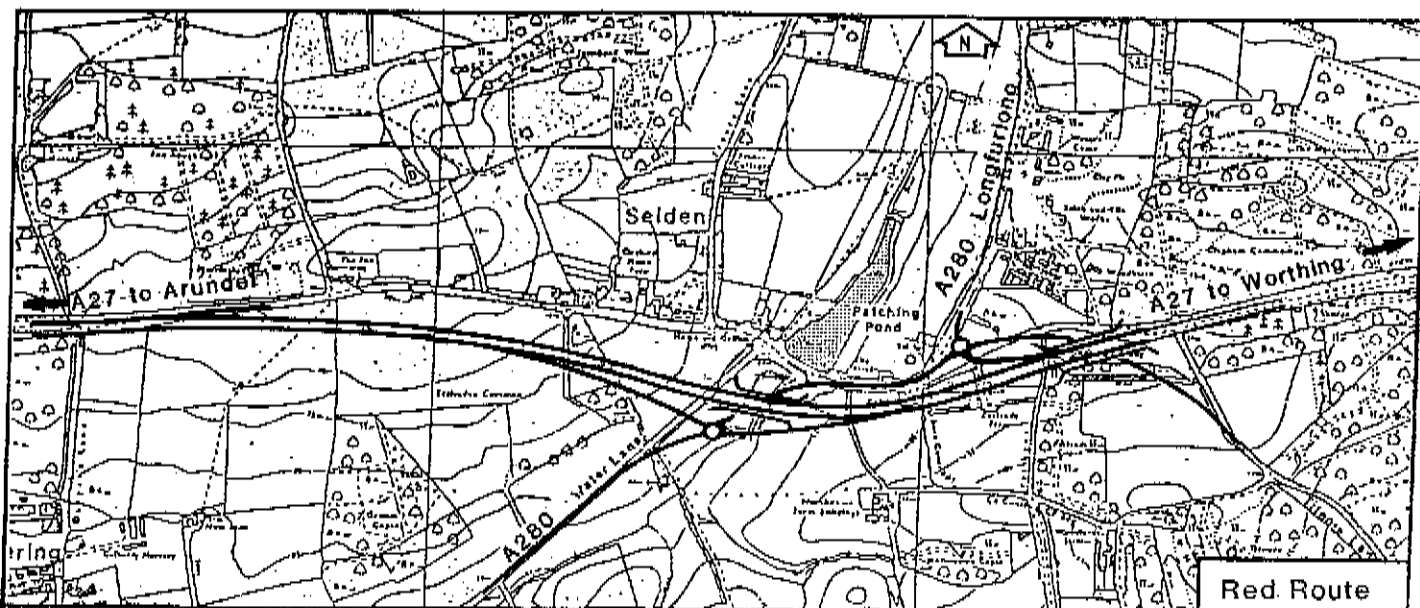
1. It was most favoured by the local authorities and majority of those whose property would be affected by the scheme, and by those living closest to the scheme in Selden.
2. It would have a less severe visual impact on settlements at Selden, Patching and Clapham.
3. It would have the greatest reduction in noise on properties fronting the existing A27 at Selden.
4. It would have the least effect on archaeological sites.
5. It would be least intrusive on the landscape.
6. It considerably relieved community severance at Selden.
7. It would be favoured in terms of driver comprehension.
8. It would reduce the amount of lighting required.
9. It was best in terms of higher benefits and lower construction costs.



## A27 Patching Junction Improvement

Scale	metres	Date
0 100 200 300 400		April '91

FIGURE No. A



Peter Fraenkel & Partners  
Consulting Engineers

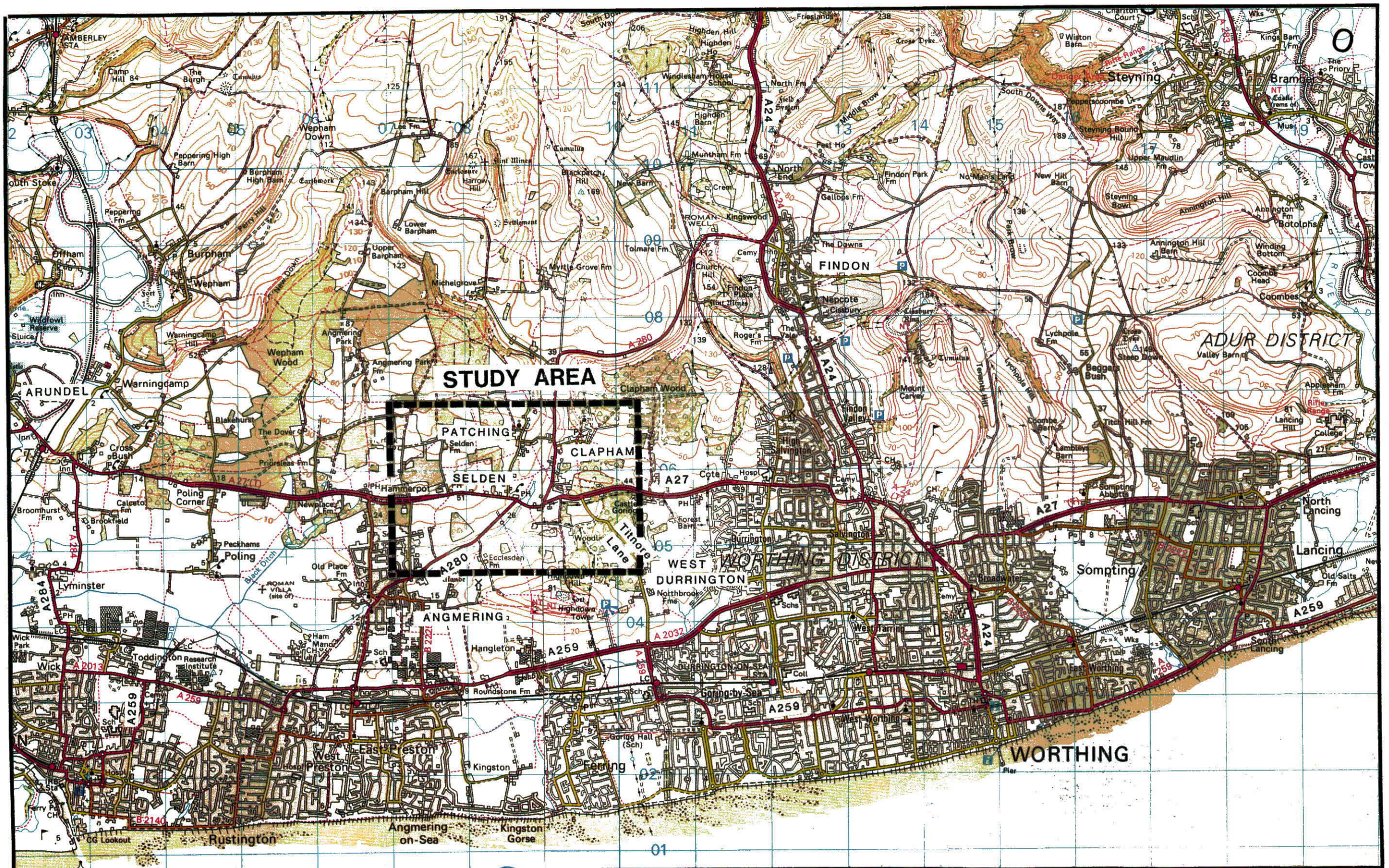
Chris Blandford Associates  
Landscape Architecture Landscape Planning

A27 Patching Junction Improvement

0 200 400 M Scale April '91

FIGURE No. B Alternative Schemes.





Peter Fraenkel & Partners  
Consulting Engineers

in association with

Chris Blandford Associates  
Landscape Architecture Landscape Planning

A27 Patching Junction Improvement

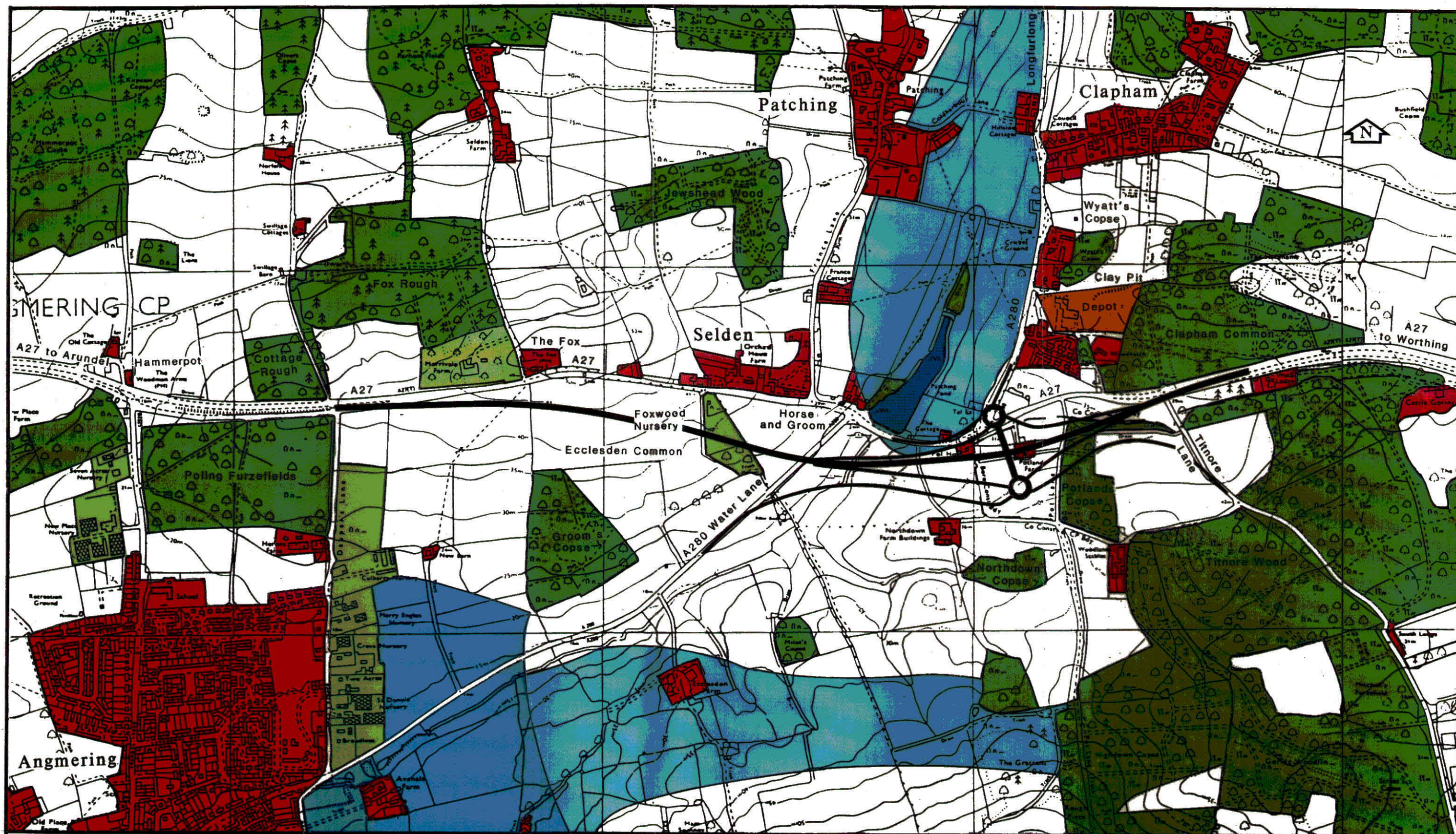
Scale 1: 50,000

Date  
April 1991





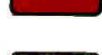



FIGURE No. 1 Location Plan

Based upon the Ordnance Survey map with the  
sanction of the Controller of H.M. Stationery  
Office Crown Copyright reserved.





# KEY

	Woodland		Agricultural Land - MAFF Grade 1
	Buildings - Principally Residential		Agricultural Land - MAFF Grade 2
	Industrial or Commercial		Agricultural Land - MAFF Grade 3
	Nursery or Orchard		Patching Pond

Peter Fraenkel & Partners  
Consulting Engineers

in association with

Chris Blandford Associates

Landscape Architecture Landscape Planning

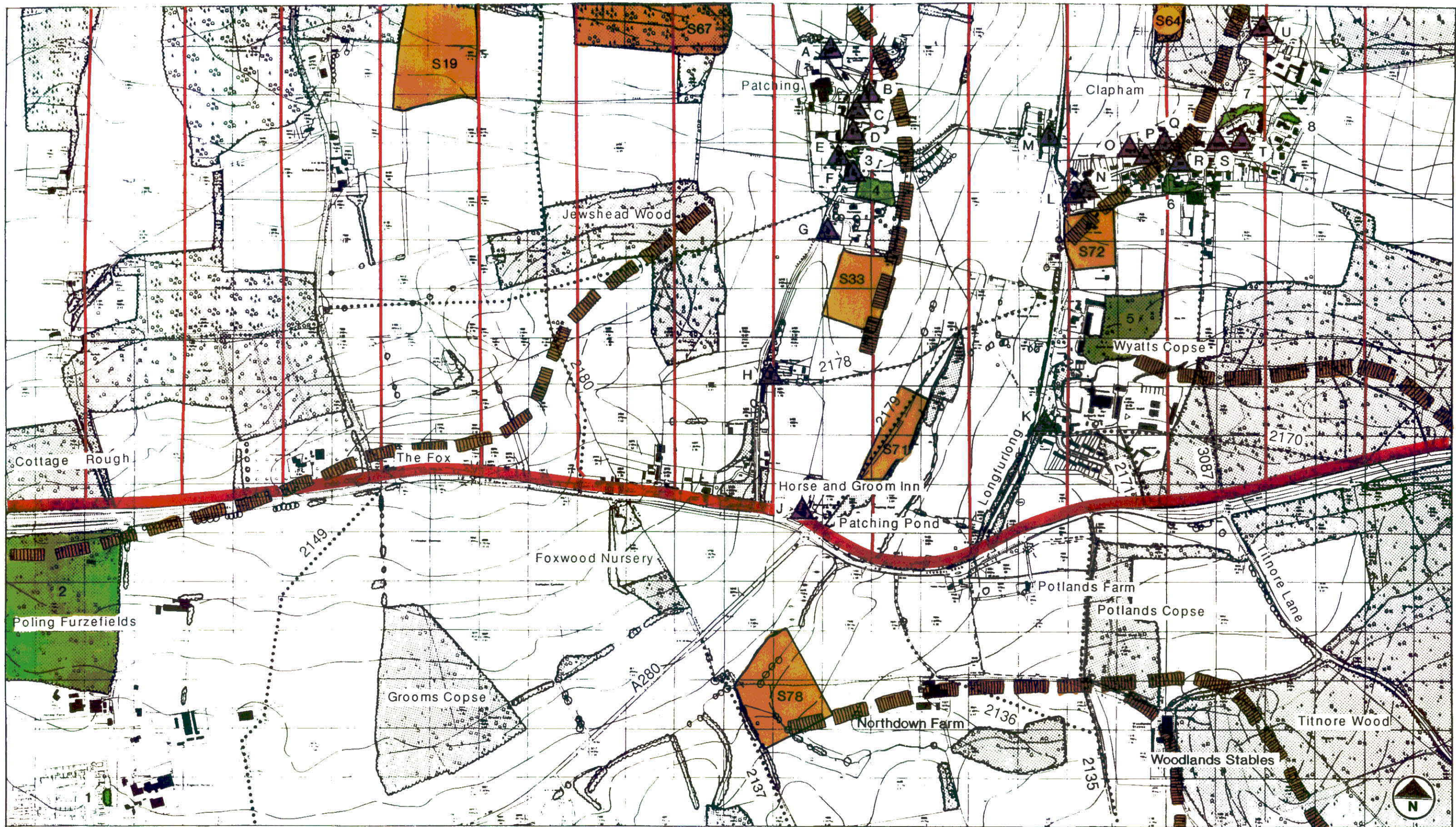
## A27 Patching Junction Improvement

SCALE  
0 100 200 300 400 500 metres




Date  
April 1991




Figure No. 2 Land Utilisation





# Key

-  Southern limit of the AONB
-  Listed building
-  Public Right of Way

-  Area of archaeological interest, listed on West Sussex County Council Sites and Monuments Record
-  Tree Preservation Order
-  Major ridgelines

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Scale  metres

Date  
May 1991

FIGURE No. 3 Planning Designations





# KEY

- Existing trees and woodland
- Existing hedgerow (to be retained)
- Dense planting
- Intermittent planting
- Areas of woodland to be managed
- Proposed offsite planting

- Slopes graded to continuous slope
- Slopes re-graded and returned to agriculture
- Land to be acquired for landscape purposes
- Proposed hedge planting
- Roads to be broken out and removed
- Proposed bridleway
- Footpaths

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## A27 Patching Junction Improvement

Scale

1:2500

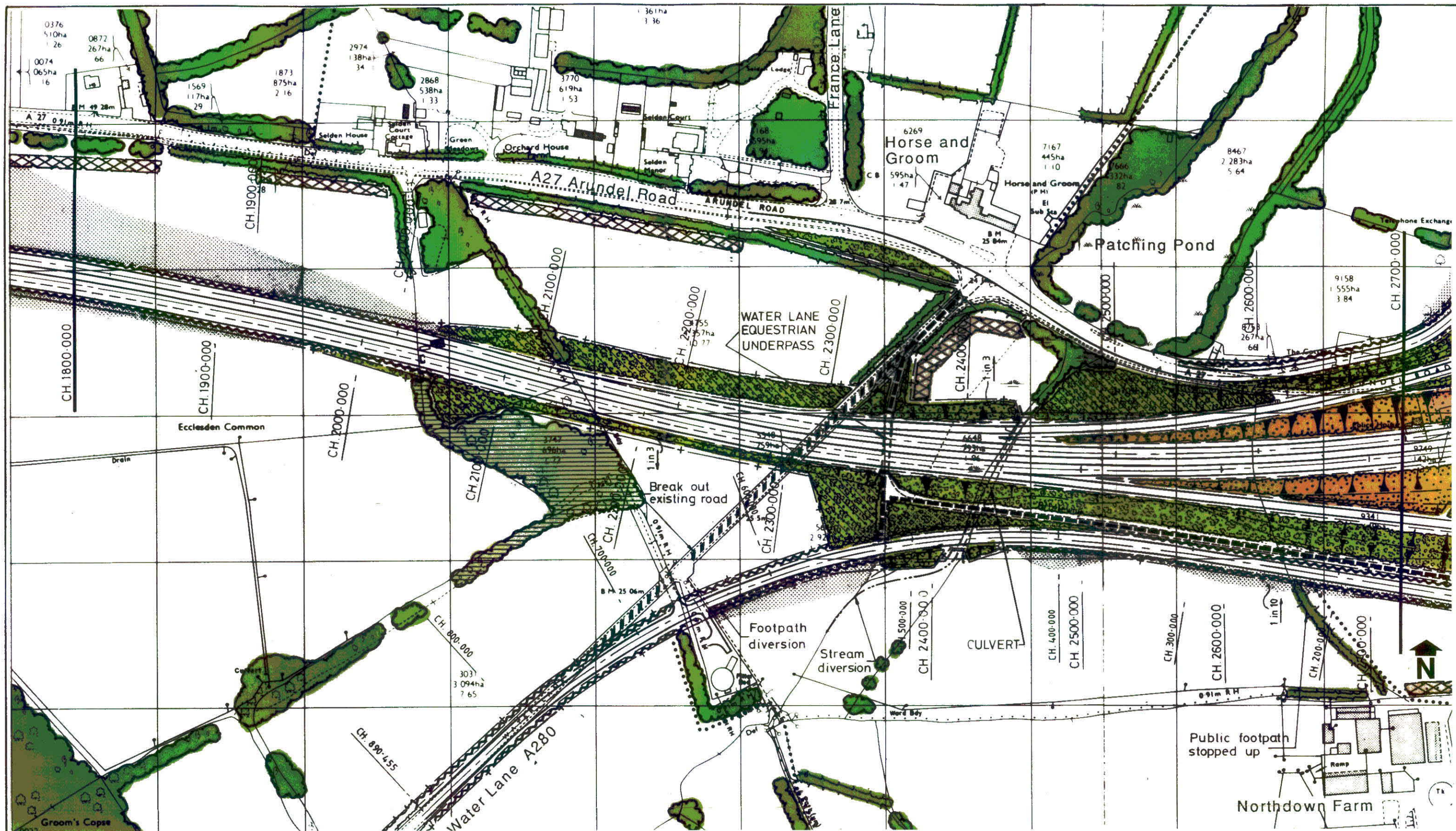
Date

May 1991

FIGURE No. 4A

Landscape Proposals  
Chainage 1000 - 1800





# KEY

- Existing trees and woodland
- Existing hedgerow (to be retained)
- Dense planting
- Intermittent planting
- Areas of woodland to be managed
- Proposed offsite planting

- Slopes graded to continuous slope
- Slopes re-graded and returned to agriculture
- Land to be acquired for landscape purposes
- Proposed hedge planting
- Roads to be broken out and removed
- Proposed bridleway
- Footpaths

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## A27 Patching Junction Improvement

Scale

1:2500

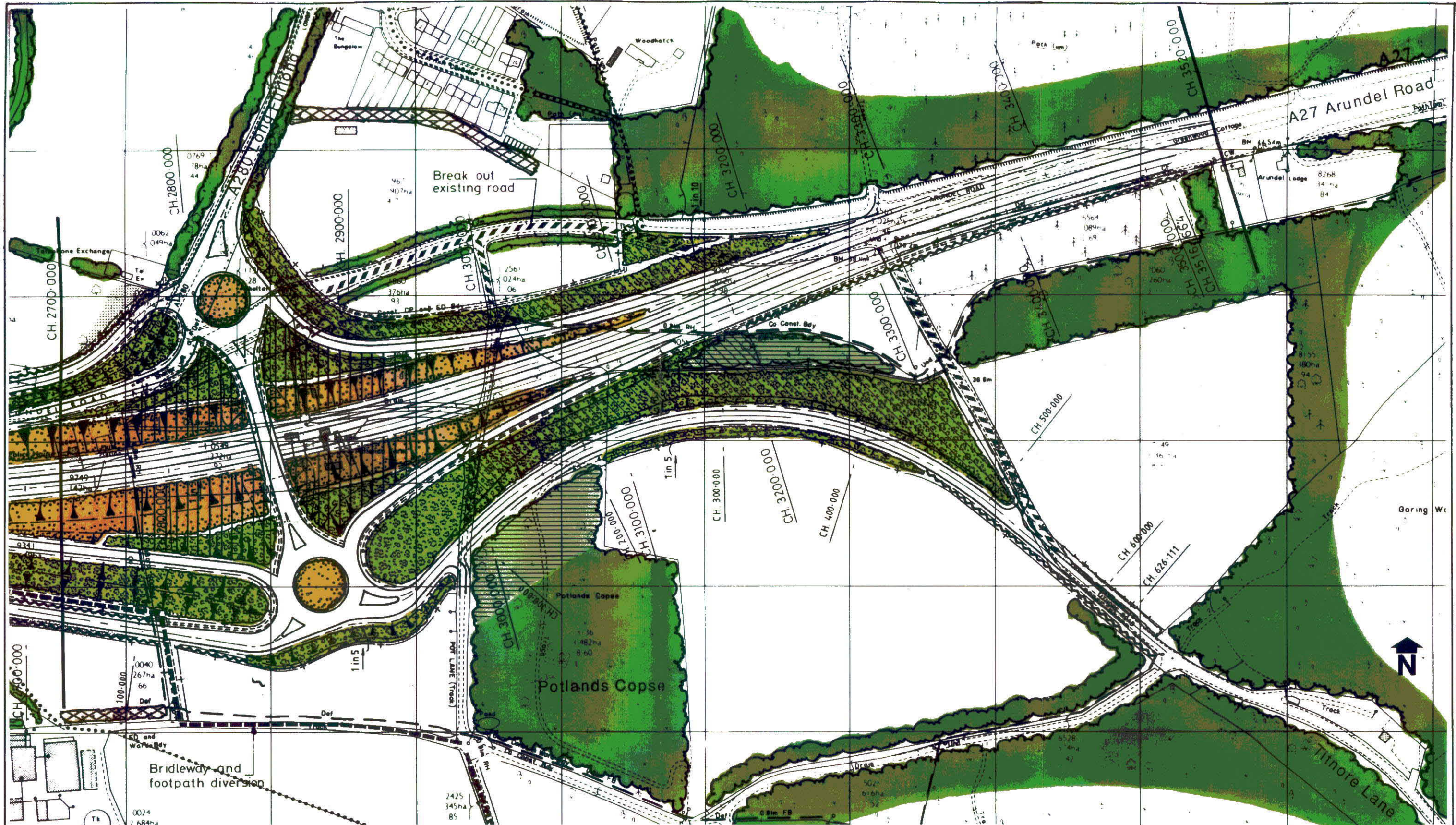
Date

May 1991





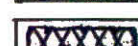
FIGURE No.4B





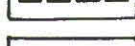
Landscape Proposals  
Chainage 1800 - 2700





KEY

-  Existing trees and woodland
-  Existing hedgerow (to be retained)
-  Dense planting
-  Intermittent planting
-  Areas of woodland to be managed
-  Proposed offsite planting

-  Slopes graded to continuous slope
-  Slopes re-graded and returned to agriculture
-  Land to be acquired for landscape purposes
-  Proposed hedge planting
-  Roads to be broken out and removed
-  Proposed bridleway
-  Footpaths

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A27 Patching Junction Improvement

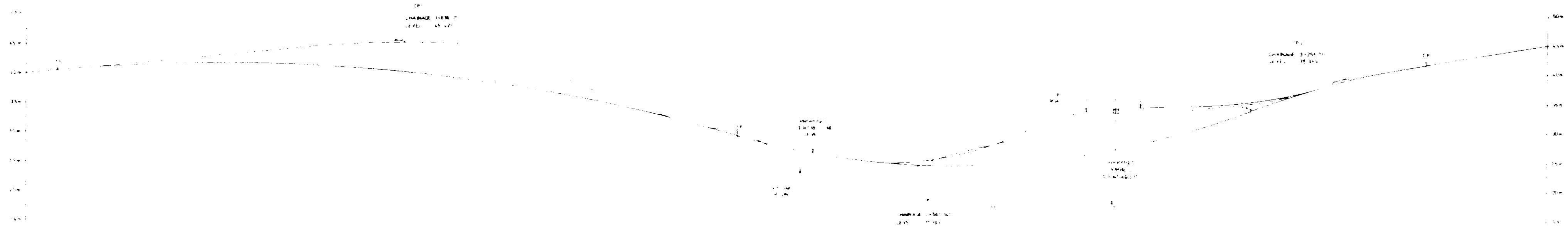
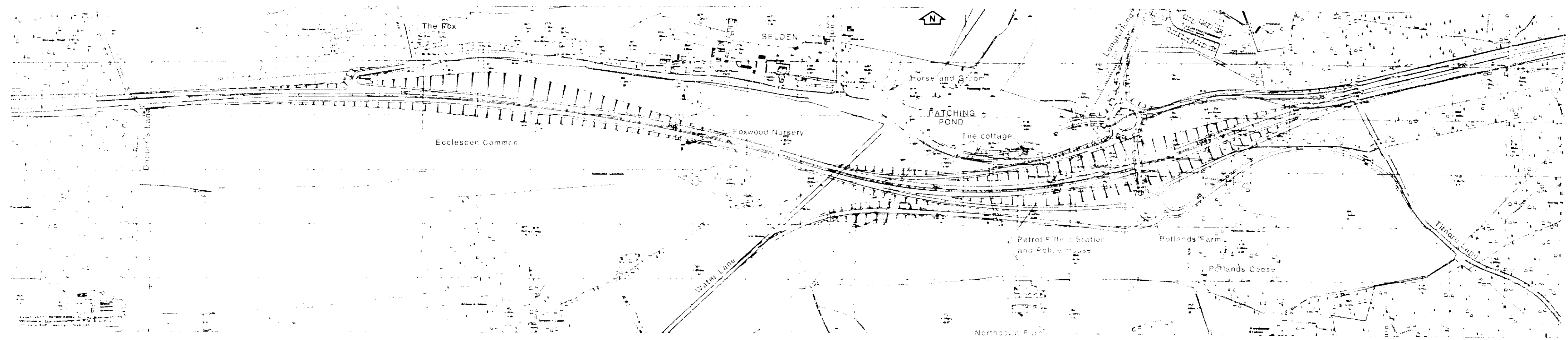
Scale  
1:2500

Date  
May 1991

FIGURE No. 4C

Landscape Proposals  
Chainage 2700 - 3520





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ALTERNATIVE SCHEMES - THE ORANGE ROUTE

Proposed Scheme Length 1.5 km Area 1.5 ha Cost £100,000	Scale 1:500 1:1000 1:2000
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