THE DEPARTMENT OF TRANSPORT

THE A406 TRUNK ROAD (GUNNERSBURY AVENUE IMPROVEMENT)

ENVIRONMENTAL STATEMENT

(VOLUME I)

Department of Transport
London Regional Office
2 Marsham Street
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A406 TRUNK ROAD

GUNNERSBURY AVENUE IMPROVEMENT

ENVIRONMENTAL STATEMENT

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VOLUME II

1. INTRODUCTION

1.1 The A406 North Circular Road (NCR) is the main orbital route around North and Central London from Chiswick in the west to the A13 in the east, a distance of 43 km. This route is the major link between trunk road routes radiating from London and also between more local routes. The proposed scheme forms part of a comprehensive programme of improvements to upgrade those sections of the NCR which at present are inadequate for the high volume of traffic carried.

1.2 This Environmental Statement is issued in accordance with E.C. Directive 85/337 as applied by Section 105A of the Highways Act 1980. It provides an environmental assessment of the proposed improvement of a 1.8 kilometre section of the NCR from the British Rail Western Region lines at Hanger Lane to the Popes Lane junction.

1.3 Orders under the Highways Act for the Northern Section from Western Avenue to just south of the British Rail Western Region Line, including modifications through Hanger Hill Wood, were made by the Secretary of State for Transport in September 1988. The Northern Section is not covered by this statement.

2. DESCRIPTION OF AREA

2.1 Introduction

2.1.1 The Department's original proposals for improving the 3.6 km section of NCR between Popes Lane and Western Avenue were the subject of a public inquiry held between December 1983 and June 1984. The Inspector who presided over the public inquiry recommended that the proposals contained within the draft Orders should be implemented subject to certain alterations. These included a changed alignment through Hanger Hill Wood and that the new road be taken in tunnel under Ealing Common.

2.2 Existing Conditions

2.2.1 Along the length of the scheme, the NCR is known as Hanger Lane north of Uxbridge Road junction while to the south it is known as Gunnersbury Avenue. Within the limits of the scheme, the existing road is a single two lane carriageway except for the approaches to Uxbridge Road and Popes Lane junctions. The width of the road varies from 7.7 metres to 20 metres. Starting from a level of approximately 33 metres above Ordnance Datum (A.O.D.) at the Western Region Railway bridge the road falls gently southwards to a level just under 17 metres (A.O.D.), an overall gradient of 0.9% (1 in 110) over the 1.8 km length.

2.2.2 The area surrounding Hanger Lane and Gunnersbury Avenue is suburban in character, the adjacent land being predominantly residential with areas of open space, in particular Ealing Common, and a number of non-industrial commercial premises. The London Borough of Ealing has designated the corridor containing the existing road and the proposed off-line improvement as an Environmental Corridor linking major open areas.

2.2.3 Severe congestion, long and variable journey times, unpleasant and potentially hazardous conditions typify the present situation on this section of road. The NCR suffers from a consistently high daily traffic flow on an unsatisfactory layout, with congestion leading to frustration and risk taking which results

in 1982.

2.2.8 To the south of the Common, between Elm Avenue and Baronsmede, the NCR crosses over London Underground Limited's (LUL's) Piccadilly Line which is in a deep cutting. Large houses of the late Victorian and Edwardian era line the east and west sides of Gunnersbury Avenue with the houses and footways separated from the trunk road by a narrow tree lined verge. Behind houses on the western side is a 30 metre wide corridor of open ground used by the Ealing Common Riding School. This area of land, which is owned by the Department of Transport, has been set aside for some years for road building purposes. Immediately to the west of this area is St. Paul's Close, a recent housing development, the design and layout of which took into account the likelihood of the Department's road proposals.

2.2.9 South of the Piccadilly Line bridge and west of the trunk road are the London Borough of Ealing's Popefield playing fields which are used by local schools. On the eastern side of the trunk road behind residential properties are allotment gardens and St. Columba's Tennis Club.

2.2.10 South of Gunnersbury Drive the road widens as it approaches the Popes Lane junction. The grass verges, no longer tree lined, widen and change position with the footways such that the footways now lie immediately adjacent to the carriageway. On the west side, where the grass verges are particularly wide, a number of areas have been cultivated under licence by the adjoining property occupiers.

2.2.11 The southern limit for the scheme occurs just south of the Popes Lane junction, a major signal controlled intersection. To the north east of this junction is Park Parade which comprises a row of small shops and businesses. South of the Popes Lane junction the trunk road consists of dual two lane carriageways with a wide grassed central reserve.

2.3 Published Scheme

2.3.1 The proposed improvement is designed to bring this section of the NCR up to established safer standards of highway provision more appropriate to its function as a main orbital route. Improvements in traffic flow would relieve congestion and along with other associated traffic management measures, would considerably reduce the volume of rat-running vehicles. The present problems of community severance created by the trunk road would be reduced, in particular by the tunnel under Ealing Common, and the section of off-line new road.

2.3.2 It is proposed to improve this section of the NCR by widening along its existing alignment from just south of the British Rail Western Region Railway line. A 520 metre tunnel with approach ramps 260 metre long on each wide would be constructed to divert the NCR under the eastern edge of Ealing Common. The proposed route would then emerge at the surface in a reserved corridor of land to the rear of St. Paul's Close. Continuing southwards, after cutting along the eastern margin of Popefield Playing Field, the road would rejoin the existing alignment at the junction of Gunnersbury Drive with Gunnersbury Avenue. The widened road would then tie-in to the existing dual carriageway just south of Popes Lane.

2.3.3 Throughout the length of the improvement, the scheme would be constructed to provide a 40mph dual carriageway standard all purpose road. For most of the scheme, the carriageways would consist of two lanes resulting in an overall running width, including the central reserve, of 16.5m. Though the tunnel hard strips adjacent to the hear side lanes would increase the overall width to 19.1 metres. North of Uxbridge Road, the carriageways would vary in width due to the presence of the slip road tapers. These eventually form additional lanes so that north of the tunnel approach ramp the North Circular Road would consist of 3 lanes in each direction. The central reserve separating the carriageways would contain a vertical concrete safety barrier reducing the risk of collision and eliminating indiscriminate crossing. Within the tunnel the barrier is formed by the

FOREWORD

1. An Environmental Statement was published in February 1990 in conjunction with the publication of draft Orders for the A406 North Circular Road, Gunnersbury Avenue Improvement.

2. The Department is now publishing draft Supplementary Orders which introduce a number of changes to the scheme. Principal amongst these is a modification to the alignment of the North Circular Road at the northern end of the scheme. The Inspector in his report following the Public Inquiry held in June and July 1990, commended for further consideration an eastwards realignment north of Uxbridge Road which would have the effect of reducing the number of trees which would otherwise have to be felled. This change and other more minor amendments are described in Annex 1 to this statement. A summary of the environmental effects specifically related to these changes is contained in Annex 2.

3. This Environmental Statement is based upon that which accompanied the main draft Orders published in February 1990 but modified where appropriate to reflect the changes brought about by the Supplementary Orders. This Environmental Statement draws together evidence presented at the 1990 Public Inquiry and where appropriate, the relevant inquiry document is cross referenced and is contained in Annex 3. Any changes, deletions or additions to the original Environmental Statement are highlighted by sidelining of the text.

4. Copies of the Environmental Statement can be obtained by writing to:

The Department of Transport, London Regional Office, Room C8/04, 2 Marsham Street, London SW1P 3EB at a cost of £12 and £86 including postage, for volumes I and II respectively.

5. Anyone wishing to comment on, or object to , any aspect of this statement or the proposals should write to the Secretary of State for Transport at the above address, not later than 9 April 1992. Existing objections to the Orders published in 1990 remain in force. It is not necessary to confirm existing objections to, or representations about the published proposals.

tunnel's central support. The whole length of the improvement would be lit by centrally placed lighting columns except through the tunnel where the lighting units would be suspended from the tunnel roof.

2.3.4 At its northern limit, the road would be on embankment approximately two metres above existing carriageway level supported by retaining walls. The widening of the road would involve the demolition of ten properties on the east side of the existing highway. Included in this number are the Dairy Crest depot at No. 12 Hanger Lane and the residential property at No. 11 Hanger Lane which is also owned by Dairy Crest. It is anticipated that these properties would be only partly demolished.

2.3.5 The new road would descend into a tunnel in retained cutting. The tunnel entrance (portal) being sited immediately to the north of Uxbridge Road. Construction of the retaining walls would be of contiguous bored piles tied back by inclined ground anchors. Whilst the piles would be hidden by a facing wall constructed of brick chosen to be sympathetic to the surroundings, the wall would be interrupted at regular intervals by exposed stainless steel anchor heads, permitting easy access for maintenance. Slip roads to Uxbridge Road would run along the outside of the walls at existing street level. A single storey building containing electrical equipment associated with the tunnel would be located over the portal.

2.3.6 Local traffic wishing to use the Uxbridge Road would be separated from the main trunk road traffic which would be taken in tunnel underneath. Both the main junctions at Uxbridge Road and Popes Lane would be improved and would continue to be controlled by signals. Vehicular movements at the east end of North Common Road would be restricted to left turns onto the North Circular via the slip road. Hamilton Road, Inglis Road, Tudor Way and Baronsmede would be stopped up at their junctions with the trunk road and would become cul-de-sacs as would the bypassed section of Gunnersbury Avenue between Kingsbridge Avenue and the realigned NCR. The stopped up sections of Gunnersbury Avenue and

Tudor Way would be linked by a one-way service road. This road, which would be shared by vehicles and pedestrians, would provide access to properties fronting Gunnersbury Avenue. Vehicular speed would be constrained by speed humps.

2.3.7 The tunnel would be constructed using "cut and cover" techniques due to the close proximity of the tunnel roof to existing ground level (0m to 2.5m). The tunnel alignment is predominantly across open land but would result in the loss of trees at Uxbridge Road, Warwick Road and Elm Avenue.

2.3.8 Beyond the southern portal, the trunk road would climb to existing ground level with its retaining walls reducing in height correspondingly. Red brick faced contiguous bored piles with exposed anchor heads capped in stainless steel would be used as at the northern approach retaining walls. The construction of the tunnel and its south facing slip roads would require the demolition of two houses in Elm Avenue. Between the two slip roads and over the southern portal a single storey service building would house a transformer and other electrical equipment for the tunnel's lighting, ventilation and communication systems.

2.3.9 Along Gunnersbury Avenue from Elm Avenue to Baronsmede, the existing road would become a residential cul-de-sac with significantly reduced noise levels on the front facades of properties facing the existing trunk road. Side roads along this section of the road would also benefit from similar environmental improvements.

2.3.10 The road would continue to rise, reaching one metre above existing ground level so as to cross the Piccadilly railway line over a new single span reinforced concrete bridge, before descending immediately afterwards to the corner of Popefield Playing Field. The new road would be separated from the playing field by a two metre high planted earth mound.

2.3.11 At Baronsmede the proposed trunk road would then rejoin Gunnersbury Avenue resulting in the demolition of several properties on the west side. Now on its existing alignment, the

road would widen from 16.4 metres to 31.0 metres as the Popes Lane junction is approached. This width includes service laybys for the adjacent properties. The improvement would then tie into the existing dual carriageway immediately south of this junction.

2.3.12 A wide subway, 33.0 metres long, designed to provide a safe and attractive crossing point for pedestrians and cyclists would be provided beneath the improved trunk road linking Hamilton and Inglis Roads. At Baronsmede a wide subway, 20.0m long, would be constructed similar to that between Hamilton and Inglis Road. All existing paths across the Common would be reinstated. Surface crossings for pedestrians under the protection of a "green man" phase within the traffic signals would be provided at both the Uxbridge Road and Popes Lane junctions.

2.3.13 The new scheme would make additional provision for cyclists. The pedestrian subways previously described for Hamilton Road - Inglis Road and at Baronsmede would be constructed with extra width to also provide for cyclists. Tracks on both sides of the NCR would connect Queens Drive to Inglis Road and Madeley Road to Hamilton Road. A cycle track on the north side of Uxbridge Road would cross the junction protected by cycle activated signals. Existing cyclist facilities across the Common at Warwick Road would remain.

2.3.14 Gaps for cyclists would be provided through the stopped up areas of Elm Avenue, Baronsmede and Tudor Way. Cyclists would have the option of avoiding travelling through the tunnel either by using the slip roads or making use of the stopped up section of Gunnersbury Avenue.

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3. ENVIRONMENTAL EFFECTS

3.1 Impacts of the Scheme

3.1.1 The construction of any improvement in a suburban area will inevitably have some effect upon the existing environmental fabric. Considerable benefits will be achieved by the reduction in congestion and in the resultant deleterious effects presently suffered. There will however be some adverse impacts. The Department of Transport is committed to taking all practical measures to minimise, mitigate or avoid these effects.

3.1.2 In recognition of the critical and sensitive nature of the Ealing Common Conservation Area, highlighted at the 1983/84 Public Inquiry, the Secretaries of State for the Environment and Transport have decided to adopt a tunnel scheme beneath this area. The environment and the present uses of the Common thereby being preserved upon restoration.

3.1.3 The construction of a dual carriageway in place of an existing single carriageway road requires additional land which would result in the demolition of twenty-two properties. Of these, thirteen are owned by the Department of Transport. Amongst those affected by demolition would be No 11 Hanger Lane, once known as Hanger Lane Farm, which has recently been classified by the London Borough of Ealing as a building of local "Architectural or Historical Interest". It is expected that the effects of demolition on this property would be confined to the north west wing of the building which is distinguishable from the main portion by its flat roof.

There would also be the loss of part of the front or back gardens to some thirty six properties, mainly between Tudor Way and Popes Lane junction and along Gunnersbury Lane. The removal of some 123 trees, many of which are mature and prominently sited, would compound this loss of fabric in the short term until new planting becomes established. In places a new, previously protected boundary to the highway, would be exposed with new views to and from the highway. A more detailed description of the effects of

the proposals on the landscape of the surroundings of the scheme was presented in evidence during the 1990 Public Inquiry (reference Inquiry Document 2/7 and 2/7A).

3.1.4 The visual and physical amenity of the Common would however be greatly improved with the tunnel due to a reduction in the substantial volume of traffic passing over the Common each day. The visual effects of the scheme are also described in documents (reference 2/7 and 2/7A) presented at the 1990 Public Inquiry. The loss of some verges, displacements of small areas of open space, together with the change in the landscape and townscape would be widely perceived by the local community. In addition, the increased scale of the road and its new alignment in the Elm Avenue to Baronsmede section would expose a different pattern of properties to visual obstruction and visual intrusion.

3.1.5 Away from the trunk road corridor, many residential roads would benefit environmentally through the removal of rat running traffic. There would be consequential reductions in noise and air pollution and improved safety. The scheme would enable other environmental improvements to take place such as the restoration of the badly rutted verges on the section of Gunnersbury Avenue which would be stopped up.

3.1.6 In terms of traffic noise, the realignment of the road would also have significant effects. For buildings situated on either side of the existing NCR between Leopold Road and Baronsmede, overall, properties would generally experience a significant reduction in noise. In particular the placing of the trunk road in tunnel beneath Ealing Common would reduce the existing noise impact. Users of the common would notice a reduction of 3dBA over 35% of the total grassed area. Properties backing onto the new off-line section of road would have increased traffic noise, though those on the west side of Gunnersbury Avenue would have more significant traffic noise reductions on their front facades.

3.1.7 At present the severe congestion and slow vehicle movements cause relatively high emission of pollutants. A smoother flow of traffic would lead to a reduction in this congestion induced

pollution. As with traffic noise, the tunnel would considerably reduce the atmospheric pollution on the Common. However, some of the benefits in reduced pollution along the by-passed section of Gunnersbury Avenue would be offset by increased levels along the St. Paul's Close corridor. Details of the effects of the proposals upon air quality are to be found in the Air Quality Report which was issued prior to the 1990 Public Inquiry (reference Inquiry Documents 3/6A and 3/7). The proposed eastward realignment of the scheme would have no material effect on the findings described in this report. In the case of those properties that are expected to show a disbenefit from the scheme, none would experience an air quality level worse than the acceptable international standard. It is important to note that specific conclusions concerning atmospheric pollution are very difficult to make. The level of pollution is dependent upon an interplay of parameters which include vehicle size, design, age, state of maintenance and speed. Current Government policy is directed towards improved vehicle emissions and all these factors may therefore vary significantly in the future.

3.1.8 In order to maintain the existing capacity of the NCR during construction, temporary traffic diversions would be required. The building of the tunnel and associated northern approach retaining walls at Uxbridge Road would introduce a series of phased traffic diversions requiring the temporary use of additional areas of the Common. This accounts for a significant number of the trees lost as previously described. Essential access across the Common would be required to construct the main length of the tunnel. The extent of the site as described by the CPO would be defined by the erection of a temporary fence and where necessary, protection of individual trees close to the works would be provided to prevent accidental damage. The traffic management measures would include adequate provision for the diversion of pedestrians.

3.1.9 Despite the contractor's activities being limited and controlled, the construction works would create some additional environmental impacts. Access to the site would only be permitted by means of the existing trunk road with no construction traffic allowed

along residential roads. Construction noise levels would be fully discussed with the Environmental Officer of Health from the London Borough of Ealing and restrictions placed in the Contract. Whilst most construction would be restricted to normal working hours, for safety reasons—certain operations over the railway lines can only be carried out at night when no trains are running. These would require possession periods, which would be kept to a minimum, to be negotiated with the railway operators. The modified layout would not significantly affect the Contractor's method of working or any of the restrictions within which he will be required to work and described in more detail in Sections 5.9 and 5.4 of Public Inquiry Documents 1/9 and 2/4 respectively.

3.1.10 An inventory of these unavoidable impacts can be found in the appraisal framework in Chapter 4.

3.2 Measures to Mitigate

3.2.1 Many of the unavoidable impacts created by the proposals, can be mitigated, for example; severance, caused by physical barriers, by providing pedestrian crossing points and underpasses; loss of trees by replanting; noise measures by constructing fences and earth mounds. These mitigation measures which themselves create consequential impacts, are described in the following paragraphs.

3.2.2 An envelope of land in the vicinity of the tunnel would be affected by excavation and by temporary traffic diversions, resulting in the loss of some mature trees at the borders of the Common and at the avenue along the Warwick Road. To mitigate the effects of construction it is planned to protect the majority of the Common including where appropriate individual trees, to restore disturbed areas such that in time at ground level there would be minimal evidence of the tunnel below. The whole construction area would be restored by regrassing and replanting trees broadly to their existing pattern. This would include tree planting over the completed tunnel where possible. A small length of redundant carriageway close to the Uxbridge Road junction would also be grassed and planted with trees. Once

constructed, the tunnel would minimise the existing environmental disruption to the Common caused by the heavy flows of traffic on the NCR resulting in an enhancement compared with existing conditions. The area of land to be permanently acquired from the Common is approximately 1·4ha. This figure includes the area above the tunnel roof which is to be restored to the Common and amounts to over 1ha.

3.2.3 In exchange for the land occupied both during and after the construction of the proposals at Ealing Common, the Department of Transport proposes to acquire an equal area of land at Blackberry Corner for use as Public Open Space. This land shown on Plan 4 adjoins the St. Mark's Church Conservation Area which contains the Hanwell Flight of locks on the Grand Union Canal. It has been designated as Metropolitan Open Lane, forms part of the River Brent Park and is considered by the Borough as having both considerable landscape amenity and nature conservation value. In addition to the existing means of access to this area of land, a new public footpath would be provided from Trumpers Way alongside the railway. Adjoining the footpath would be a private access track providing vehicular access for the maintenance authority. Notwithstanding the intention to provide exchange land, much of the area at Ealing Common affected by the works would be fully restored to its present status, albeit that the landscape would take time to fully heal. The location of the proposed exchange land relative to Ealing Common is shown on Plan 5.

3.2.4 The service building proposed to be built over the south portal would be designed to blend sympathetically with the existing properties in Elm Avenue as seen from the Common. The area in front of the building would be planted with shrubs and trees in containers. Similar criteria would be employed in the design of the smaller service building over the north portal.

3.2.5 Between the British Rail Western Region Bridge and the Uxbridge Road, the majority of the prominent wooded avenue of 68 mature limes and chestnuts on the western border of the road would be retained. Trees lost would be confined to 14 in the vicinity of Hamilton Road. Thus the sylvan appearance of this section of the

North Circular Road, which forms a noteworthy feature, would be largely retained. Attention would be paid to landscaping in this area with protective measures for trees which can be retained and replanting to reinforce the avenue of trees. On the eastern border, a double row of trees within the grass verge is also proposed to replace trees lost in this vicinity.

3.2.6 A landscaped earth mound two metres above proposed carriageway level would be constructed in the north eastern corner of Popefield Playing Field from the Piccadilly Line bridge to 63 Gunnersbury Avenue. This barrier would be planted with native shrubs and trees providing both a noise barrier and a visual containment of the road when viewed across Popefield Playing Field from the properties in Baronsmede and Aspen Close.

3.2.7 While many properties would gain by receiving noise reductions, the changed alignment and profile of the road regrettably increases noise levels for others. Many of the worst affected residential properties near the proposed route can be expected to qualify for insulation work under the terms of The Noise Insulation Regulations 1975. Such improved facade insulation would minimise the adverse effects on the domestic noise environment. The Department would also use its best offices to try and ensure that the future use of any land which became available on completion of the works was utilised in a way which assisted in ameliorating the effects of traffic noise on adjacent property.

3.2.8 Between Inglis Road and Freeland Road a 3 metre high noise barrier would protect the rear facades and gardens of properties exposed when properties along the east side of Hanger Lane are demolished. A further 3m high noise barrier will also extend from Freeland Road south to the boundary with the dairy.

3.2.9 Between the south portal and the Piccadilly Line, the rear facades and gardens of the Gunnersbury Avenue and the St. Paul's Close properties abutting the new highway boundary would be protected by noise barriers. The existing two metre brick wall forming the rear boundaries for houses in St. Paul's Close would

have a one metre extension. This could consist of a translucent polycarbonate screen which would give added protection from noise whilst still allowing as much light as possible to reach the gardens. On the east side of the road, near the railway a two and a half metre increasing to three metres high brick wall screen would be built. Native trees and shrubs would be planted in front of these acoustic barriers to soften the view from the road.

3.2.10 The Piccadilly Line bridge would be bordered by a two metre high parapet wall which would also screen noise from adjacent properties. This barrier would continue southwards to end at a position opposite 53 Gunnersbury Avenue.

3.2.11 A more detailed description of the effects of noise is to be found in Public Inquiry document No. 3/5. The proposed revised alignment north of Uxbridge Road would have an insignificant effect on the predicted noise changes contained in this document.

3.2.12 Combined pedestrian/cyclist subways would be provided relieving severance, to link the stopped up Hamilton Road with Inglis Road and link Baronsmede with the stopped-up length of Gunnersbury Avenue. The subways would be wide to give them an open and light appearance. In their design consideration is being given to the use of styles and materials to reflect the local architectural character of surrounding buildings. The approach side slopes would be planted with low shrubs and ground cover plants to complement the light, open appearance of the subways.

3.2.11 A pedestrian/cyclist signal controlled crossing is proposed to link North Common Road with Creffield Road. This crossing, positioned above the tunnel portal would be bordered by grassed area over the tunnel roof with a backdrop of shrubs in containers around the services building over the portal and trees in planters along the footway.

CHAPTER 4

ASSESSMENT FRAMEWORK

FRAMEWORK
THE A406 TRUNK ROAD
(GUNNERSBURY AVENUE IMPROVEMENT)

DATE PREPARED : FEBRUARY 1992

GROUP 1 : TRAVELLERS

SUB-GROUP	EFFECTS	UNITS	PROPOSED SCHEME	DO NOTHING	COMMENTS
All Vehicle Travellers	Reduction in Casualties:				
	Fatal	Number	-1	0	The figures indicate the probable total reduction in casualties over the whole of the 30 years assessment period if the national average and distribution between groups apply. They take no account of the safety implications of the detailed design of the new route.
	Serious	Number	79	0	
	Slight	Number	421	0	
	Driver Stress	-	Moderate	High	
	View from the road	-	Residential / Open Space (Suburban) Restricted view with a tunnel and associated retaining walls.	Residential / Open Space (Suburban)	
Pedestrians	Change in Amenity	-	Amenity improved - segregation for pedestrians from traffic at combined pedestrian / cyclist subways at Hamilton Road / Inglis Road and Baronsmede / Gunnersbury Avenue. Amenity improved - Through traffic removed from ground level and taken in tunnel. Amenity improved - Reduction in traffic flow of more than 80% on Gunnersbury Avenue between Uxbridge Road and Baronsmede.	No change	12 hr Pedestrian Movement Pelican crossing at Hamilton Road 389 Uxbridge Road Junction North - South 269 Uxbridge Road Junction East - West 2088 Pelican Crossing at Warwick Road 1252 Popes Lane Junction North - South 389 Popes Lane Junction East - West 948 Along Gunnersbury Avenue North-South 798 (just north of Baronsmede)
	Safety	-	Segregation of pedestrians and vehicles with the construction of the subways and tunnel will reduce the danger of accidents to pedestrians. Green man crossings at traffic signal controlled juctions will improve safety.	No change	

GROUP 1 : TRAVELLERS (continued)

SUB-GROUP	EFFECTS	UNITS	PROPOSED SCHEME	DO NOTHING	COMMENTS
Pedestrians (continued)	Severance (i) BR railway to Uxbridge		Slight severance due to increased width in carriageway and central reserve barrier. Pedestrians cross at a new ramped subway.	Pedestrians cross at pelican crossing.	
	(ii) Uxbridge Road to Baronsmede		Moderate relief from severance due to a reduction in traffic flows along the bypassed section of Gunnersbury Avenue. Pedestrians cross at traffic signals at Uxbridge Road under the protection of green man phase in signals and at the existing pelican crossing. Moderate severance for pedestrians crossing Elm Avenue due to new roundabout connection to tunnel sliproads.	No specific pedestrian facilities at Uxbridge Road traffic signals. Pelican crossing opposite to Leopold Road.	
	(iii) Baronsmede to Popes Lane		Slight severance due to increased width in carriageway and central reserve barrier. Pedestrians cross in a new ramped subway at Baronsmede and cross at traffic signals at Popes Lane under the protection of green man signals to three arms of the junction.	Limited facilities at Popes Lane traffic signals with green man phase to only the northern arm of the junction.	
Cyclists	Change in Amenity		Amenity improved - segregation at subways and a reduction in traffic flows along the bypassed section of Gunnersbury Avenue.	No change	12 hr Cyclist Movements Pelican crossing at Hamilton Road 17 Uxbridge Road Junction North-South 25 Uxbridge Road Junction East-West 762 Pelican Crossing at Warwick Road 132 Popes Lane Junction East-West 198

FRAMEWORK
THE A406 TRUNK ROAD
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DATE PREPARED : FEBRUARY 1992

GROUP 1 : TRAVELLERS (continued)

SUB-GROUP	EFFECTS	UNITS	PROPOSED SCHEME	DO NOTHING	COMMENTS
Cyclists (continued)	Safety	-	Improvement Cycle tracks to be provided via the two subways and at Uxbridge Road junction. Cyclists can avoid the trunk road by using Gunnersbury Avenue. A reduction in the traffic flows along residential streets would improve safety.	No change	
	Severance (i) BR Railway to Uxbridge Road	-	Slight severance due to increased width in carriageway and central reserve barrier. Cyclists cross at a new ramped subway.	Cyclists may dismount and cross at pelican crossing.	
	(ii) Uxbridge Road to Baronsmede	-	Moderate relief from severance due to a reduction in traffic flows along the bypassed section of Gunnersbury Avenue. Cyclists cross at traffic signals at Uxbridge Road under the protection of green men phases in signals and at the existing cyclist crossing at Leopold Road. Moderate severance for cyclists at Elm Avenue due to new roundabout connection to tunnel slip roads.	No specific cyclist facilities at Uxbridge Road traffic signals. Cyclist crossing at Leopold Road.	

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GROUP 1 : TRAVELLERS (continued)

SUB-GROUP	EFFECTS	UNITS	PROPOSED SCHEME	DO NOTHING	COMMENTS
Cyclists (continued)	(iii) Baronsmede to Popes Lane		Slight severance due to increased width in carriageway and central reserve barrier. Cyclists cross via a new ramped subway at Baronsmede and cross at traffic signals at Popes Lane under the protection of green man signals to three arms of the junction.	Limited facilities at Popes Lane traffic signals with green man phase to only the northern arm of the junction.	

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GROUP 2 : OCCUPIERS

SUB-GROUP	EFFECTS	UNITS	PROPOSED SCHEME	DO NOTHING	COMMENTS
Residential	Properties demolished	No. (Households)	19 (95)	0	The number of households is equal to the number of family units within the property. This includes 13 houses, 1 Home for the Aged (30 family units) and 4 Hostels for the Homeless (43 family units). 13 of the properties are owned by the Department of Transport.
	Properties losing part of garden	Number	32 houses and 4 blocks of flats totalling 107 households	-	This does not include 11 houses from which the Department of Transport requires the right to construct ground anchors beneath the properties.
	Noise	Number of households experiencing an increase of more than 15dB(A) L10	3 (3)	0	These noise levels have been calculated in accordance with the "Calcuation of Road Traffic Noise", HMSO 1988. The changes in the noise levels are the difference between both the "do nothing" and the "do something" in 2010 and the existing levels (i.e. 15 years after opening). The units are dB(A) L10 18 hr 6am - midnight. Allowance has been made for the presence of noise barriers in calculating these figures. The figures in parentheses are for those houses entitled to double glazing. Some households would experience both an increase and decrease on different facades. Therefore these properties have been counted twice.
		10 - 15dB	9 (8)	0	
		5 - 10dB	119 (32)	0	
		3 - 5dB	256 (85)	0	
		Number of households experiencing an decrease of more than 15dB(A) L10	32	0	
		10 - 15dB	52	0	
		5 - 10dB	85	0	
		3 - 5dB	259	0	
	Visual Obstruction	Number of housholds within the visual envelope subject to:-			
		High	190	323	
		Moderate	123	65	
		Slight	120	48	
	Visual Intrusion	Number of households within the visual envelope subject to:-			
		High	315	372	
		Moderate	228	113	
		Slight	478	514	

From / To	High	Moderate	Slight	Zero
High	159	24	1	6
Moderate	52	33	13	23
Slight	8	-	20	94
Zero	25	8	9	822
Demolished	80	-	15	-

From / To	High	Moderate	Slight	Zero
High	250	20	4	41
Moderate	27	75	66	60
Slight	7	1	410	60
Zero	9	2	34	267
Demolished	79	15	-	-

FRAMEWORK
THE A406 TRUNK ROAD
(GUNNERSBURY AVENUE IMPROVEMENT)

DATE PREPARED : FEBRUARY 1992

GROUP 2 : OCCUPIERS (continued)

SUB-GROUP	EFFECTS	UNITS	PROPOSED SCHEME	DO NOTHING	COMMENTS
	Air Pollution	Number of households experiencing an increased concentration in levels of:			The provision of the tunnel would result in a free flow of traffic along the trunk road with an associated reduction in carbon monoxide emissions.
		Carbon Monoxide	223	0	Emission from vehicles in the tunnel would be emitted at the tunnel portals. These emissions would desperse rapidly, giving rise to only small areas of increased concentrations immediately adjacent to the portals.
		Lead	192	0	
		Nitrogen Oxides	159	0	
		Hydrocarbons	47	0	
		Number of households experiencing a decreased concentration in levels of:			
		Carbon Monoxide	686	0	
		Lead	664	0	
		Nitrogen Oxides	1243	0	
		Hydrocarbons	1378	0	
		Number of households experiencing a concentration in excess of the international standard:			
		Carbon Monoxide	42	5	
		Lead	0	0	
	Severance (new)		Slight		All left turns are permitted in the Do Nothing situation with the following exceptions:- Elm Avenue (stopped up) Popes Lane (west) - no left turn out The following roads would be cul-de-sacs for the do-something situation:- Inglis Road Hamilton Road Gunnersbury Avenue (part) Elm Avenue (part) Baronsmede and Tudor Way would not have access to the trunk road.

FRAMEWORK
THE A406 TRUNK ROAD
(GUNNERSBURY AVENUE IMPROVEMENT)

DATE PREPARED : FEBRUARY 1992

GROUP 2 : OCCUPIERS (continued)

SUB-GROUP	EFFECTS		UNITS	PROPOSED SCHEME	DO NOTHING	COMMENTS
Residential (continued)	Disruption during construction		No	1038 Households within 100 metres of site will be disrupted of which 409 will be intensely disrupted during 20 months piling and diaphragm walling at the tunnel and retaining walls. 42 households will be intensely disrupted during 3 months piling at bridge D57.		
Industrial and Commercial						
a. Office Buildings	Properties losing part of land		No	1	0	113 - 117 Gunnersbury Avenue
	Noise	Number subject to a decrease of more than 5dB(A) L10		1	0	
	Visual Intrusion	Number of buildings within the visual envelope subject to:-				
		High		3	3	
		Slight		1	0	
	Severance (new)			Moderate for southbound traffic		
	Access arrangements			Service road removed to shops in Park Parade		

FRAMEWORK
THE A406 TRUNK ROAD
(GUNNERSBURY AVENUE IMPROVEMENT)

DATE PREPARED : FEBRUARY 1992

GROUP 2 : OCCUPIERS (continued)

SUB-GROUP	EFFECTS	UNITS	PROPOSED SCHEME	DO NOTHING	COMMENTS
Industrial and Commercial Properties (continued)					
c. Other Businesses	Demolished	Number	2	None	Ealing Riding Stables Part of Dairy Crest Depot, 12 Hanger Lane
	Businesses losing part of land	Number	2	None	Service Station, 118 Gunnersbury Avenue Gunnersbury Servicing Centre
	Noise	Number subject to a decrease of more than 5dB(A) L10	1	0	
	Visual Intrusion	Number of buildings within the visual envelope subject to:-			
		High	2	6	
		Moderate	3	0	
		Slight	0	1	
	Disruption during construction		Access to be maintained but some disruption expected.		
Schools: The Beacon House School 15 Gunnersbury Avenue (120 pupils)	Noise	dB(A) L10	61	78	Worst facade changes from front to back for do something situation.
	Severance (relief)		Moderate relief from severance due to a reduction in traffic flow of more than 80% on the by-passed section of Gunnersbury Avenue.		
	Visual Obstruction		Moderate	High	
	Visual Intrusion		High	High	

FRAMEWORK
THE A406 TRUNK ROAD
(GUNNERSBURY AVENUE IMPROVEMENT)

GROUP 2 : OCCUPIERS (continued)

DATE PREPARED : FEBRUARY 1992

SUB-GROUP	EFFECTS	UNITS	PROPOSED SCHEME	DO NOTHING	COMMENTS
Open Space:					
a. Ealing Common Businesses	Permanent Land Take	Hectares	1.36	-	During construction 3.36 ha. of Ealing Common would be occupied of which about 2 ha. would be returned once the construction works were completed. In addition, the area directly over the tunnel, approximately 1.1 ha. would be restored to Public use. Landtake lies within the Ealing Common Conservation area which was designated by LBE on 1st September 1982. Land at Blackberry Corner / Jubilee Meadows, Hanwell to be offered as exchange open space. The loss of 92 mature trees will be mitigated by the planting of an equivalent number of new trees, placed in a similar patter to those removed. Effects on users appears in Group 3.
	Temporary Land Take	Hectares	2.0	-	
	Restored to Public Use	Hectares	1.1	-	
	Effective net loss	Hectares	0.26	-	
b. Popefield Playing Field	Land Take	Hectares	0.269	0	Area includes an existing access. Effects on users appears in group 3.
c. General	Tree Loss	No.	123 street trees	None	In addition a large number of small trees and groups would be removed.

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FRAMEWORK
THE A406 TRUNK ROAD
(GUNNERSBURY AVENUE IMPROVEMENT)

GROUP 3 : USERS OF FACILITIES

DATE PREPARED : FEBRUARY 1992

SUB-GROUP USERS OF:	EFFECTS	UNITS	PROPOSED SCHEME	DO NOTHING	COMMENTS
Shops in Park Parade	Effect on access		Part of service road removed. Increase in Pedestrian / Vehicle conflict.	No change	
St. Matthews Church	Severance		North Common Road restricted to exit only at its eastern end.		
Ealing Common Conservation Area	Vehicle / Pedestrian conflict		Conflict between pedestrians and vehicles will reduce with the construction of the tunnel.		
	Noise		A reduction of 3dBA over 35% of Common will be experienced.	No change	
	Visual Intrusion		Increased initially due to construction impacts and tree losses but reduced when the new road is opened.	No change	
Popefield Playing Fields	Effect on Access		New access from Baronsmede	No change	The loss of land affects the present pitch layout. Earth mounding and a 4m high chain link fence would be provided between the new road and playing fields for screening purposes.
	Noise	dB(A)	54 - 69	50 - 57	
	Visual Intrusion		Low		Effects mitigated by screening mound reinforced by planting.
Allotments opposite Baronsmede (between Nos.66 and 68 Gunnersbury Avenue)	Effect on Access		Access from west of trunk road improved for pedestrians, but less convenient for vehicles.	No change	New subway at Baronsmede
St. Colomba's Tennis Club	Effect on Access		Access from west of trunk road improved for pedestrians, but less convenient for vehicles.	No change	

FRAMEWORK
THE A406 TRUNK ROAD
(GUNNERSBURY AVENUE IMPROVEMENT)

GROUP 3 : USERS OF FACILITIES (continued)

DATE PREPARED : FEBRUARY 1992

SUB-GROUP USERS OF:	EFFECTS	UNITS	PROPOSED SCHEME	DO NOTHING	COMMENTS
Old Actonians Rugby Club and adjoining facilities	Effect on Access		Southbound Gunnersbury Avenue traffic must approach from Popes Lane.	No Change	
Surgeries Doctors / Dentists	Effect on Access		Access improved for a Dental surgery in by-passed section of Gunnersbury Ave.	No Change	No. 32 Gunnersbury Avenue. 6 No. surgeries within 300m of proposed centre line are largely unaffected.

FRAMEWORK
THE A406 TRUNK ROAD
(GUNNERSBURY AVENUE IMPROVEMENT)

GROUP 4 : POLICIES FOR CONSERVING AND ENHANCING THE AREA

DATE PREPARED : FEBRUARY 1992

POLICY OF ISSUE	AUTHORITY	AIMS	PROPOSED SCHEME	DO NOTHING	COMMENTS
To improve the environment by removing through traffic from unsuitable roads to alleviate problems caused by adverse traffic conditions.	Department of Transport London Borough of Ealing	Improve safety and environmental quality of the area by reducing the impact of vehicular traffic.	Improvement of the environment by a reduction in noise and air pollution and decrease in accident potential. There would be a decrease in the amount of through traffic in residential areas.	Steadily deteriorating environment dominated by through traffic. Perpetuation of rat running.	Reference: Policy for Roads: England 1987. Statement on Transport in London 1989. Reference: Ealing Borough Plan U1.
To establish Public Open Space as opportunity and resources allow.	London Borough of Ealing	To increase open space areas available for public use.	Land at Blackberry Corner / Jubilee Meadows offered as permanent open space in exchange for that which would be used both permanently and temporarily, including the area over the tunnel to be returned to the Common.	No change	Reference: Ealing Borough Plan OL9.
Protect and enhance the environment of Conservation areas.	London Borough of Ealing	To preserve and enhance Ealing Common Conservation Area.	Whilst 1.4 ha (9%) of the conservation area would be permanently required for the road scheme, the construction of a tunnel minimises the permanent loss and allows the Common to be restored after construction. Its environment would be enhanced by the removal of road traffic from ground level.	No change	Reference: Ealing Borough Plan U10.
Support of local shopping centres to encourage best use of local shopping parades.	London Borough of Ealing	To ensure local shops are available for the less mobile.	Scheme involves loss of segregated service road to Park Parade shops.	No change	Reference: Ealing Borough Plan S.7.

FRAMEWORK
THE A406 TRUNK ROAD
(GUNNERSBURY AVENUE IMPROVEMENT)

DATE PREPARED : FEBRUARY 1992

GROUP 5 : TRANSPORT, DEVELOPMENT AND ECONOMIC POLICIES

POLICY OF ISSUE	AUTHORITY	AIMS	PROPOSED SCHEME	DO NOTHING	COMMENTS
To improve trunk roads	Department of Transport	To provide improved connections within the London and national road networks.	Improved Traffic Flow	Increasing congestion in trunk road. Rat running traffic.	Reference: Policy for Roads in England: 1987. Statement on Transport in London.
To reduce congestion	Department of Transport	Reduction in delays to goods vehicles buses and emergence service vehicles.	Segregation of through traffic and increased operational efficiency reduces delays.	No change	Reference: Policy for Roads in England: 1987. Statement on Transport in London.
To establish efficient transport networks to improve access to areas of major activity.	London Borough of Ealing	Reduction in congestion and vehicle conflict.	Improvement	Deterioration in time.	Reference: Ealing Borough Plan 2.18.
To improve bus sevices.	Department of Transport London Borough of Ealing LRT	Reduces traffic delays on bus routes.	Reduction in congestion would reduce operators' running costs and provide a more reliable service.	Buses will continue to be affected by worsening congestion.	Reference: Ealing Borough Plan T3.
To promote employment and ensure good conditions for business enterprise.	London Borough of Ealing	Reduced congestion improves access to businesses and benefits local and national economics.	Improvement reduces congestion.	Gradual deteriation	Reference: Ealing Borough Plan EMP1.
To promote convenient and safe pedestrian movements.	Department of Transport London Borough of Ealing	Ensure safe attractive and well maintained pedestrian routes and where routes cross vehicular traffic, appropriate facilities are provided.	Improved junction layouts and phased crossing facilities would improve safety wide sided subways provided at two locations.	Conditions are likely to deteriorate in time.	Reference: Ealing Borough Plan T8.

FRAMEWORK
THE A406 TRUNK ROAD
(GUNNERSBURY AVENUE IMPROVEMENT)

DATE PREPARED : FEBRUARY 1992

GROUP 5 : TRANSPORT, DEVELOPMENT AND ECONOMIC POLICIES (continued)

POLICY OF ISSUE	AUTHORITY	AIMS	PROPOSED SCHEME	DO NOTHING	COMMENTS
To facilitated cycle movements	London Borough of Ealing	Establish a strategic network of cycle routes.	Provides cycle routes compatible with the Borough strategic network of cycle routes. Cycle tracks provided through new subways.	No change	Reference: Ealing Borough Plan T9.
To enhance road safety	Department of Transport	Reduce road casualties	Accidents will reduce due to provision of a safe road network.	No change	Reference: Policy for Roads in England: 1987.
To reduce transport costs	Department of Transport	Assist economic growth	Congestion will lessen reducing vehicle operating costs.	No change	Reference: Policy for Roads in England: 1987.

5. ALTERNATIVES CONSIDERED

5.1 The Public Inquiry held in 1983/84 considered a scheme for improving this section of the North Circular Road which followed a broadly similar alignment to the published proposals but remained at existing ground level over Ealing Common.

5.2 Both the option presented at the 83/84 Public Inquiry and any improvement scheme dependent upon further widening of Gunnersbury Avenue were rejected. Instead, the inspector recommended that the tunnel proposed by the London Borough of Ealing, whilst costing more and increasing disruption due to construction, was necessary to overcome an environmental issue of strategic concern i.e. the long term aim of preserving the open and recreational character of Ealing Common and reducing severance. This recommendation was accepted by the Secretaries of State for Environment and Transport when they announced their decision in December 1987.

5.3 A Public Inquiry held in 1990 reconsidered the southern section of the scheme incorporating a tunnel under Ealing Common. The Inspector in his report following the Inquiry recommended further consideration of an eastward realignment north of Uxbridge Road. This realignment is the subject of the present Supplementary Orders (March 1992).

ANNEX 1

MODIFICATIONS TO THE SCHEME

INTRODUCTION

The Department, having taken into account the Inspector's comments from the Public Inquiry held in 1990, has introduced a number of modifications to the scheme as described in the following paragraphs:

i) North Circular Road Alignment

Between the British Rail Western Region railway bridge and Warwick Road the North Circular Road has been realigned to the east of the scheme published in 1990. This realignment would begin just south of the British Rail bridge and would achieve an easterly shift of less than 0.5m at Inglis Road, increasing to approximately 9m at Freeland Road and a maximum of approximately 15m in the vicinity of the dairy. South of the dairy the easterly shift would reduce as the North Circular Road passes into tunnel, regaining the alignment published in 1990 when it reaches Warwick Road. This realignment is the minimum necessary to preserve the avenue of trees on the west side of Hanger Lane.

ii) Cyclist/Pedestrian Facility

The layout on the west side of the combined cycle/pedestrian subway linking Hamilton Road to Inglis Road has been revised. The footway and cycle track adjacent to the North Circular Road south of the British Rail Western Region bridge would extend farther south over the subway before turning north to approach the subway. This arrangement would reduce the gradients on the subway approach ramps. Redevelopment at 51 - 53 Hamilton Road with revised vehicle access arrangements means that the access road included in the scheme published in 1990 will no longer be required.

iii) Bus Facilities

Bus bays have been introduced on both slip roads north of Uxbridge Road. On the northbound slip road the bus bay would be positioned immediately south of Hamilton Road. Here the footway has been repositioned adjacent to the slip road to coincide with the bus bay position. On the southbound slip road the bus bay would be positioned immediately south of Freeland Road.

iv) North Common Road

The scheme published in 1990 included the permanent closure of North Common Road at its eastern end, creating a cul de sac. The revised layout provides one way vehicle access from the eastern end of North Common Road onto the northbound slip road. North Common Road itself would remain two-way.

v) Exchange Land Access

Access to land, adjacent to the Hanwell Flight of Locks on the Grand Union Canal, which is to be purchased as replacement public open space for all areas of Common affected both temporarily and permanently, would be improved by the provision of a public footpath from Trumpers Way (see Plan 4).

ANNEX 2

ENVIRONMENTAL EFFECTS OF MODIFICATIONS

INTRODUCTION

The environmental effects of the modifications to the scheme described in Annex I are summarised as follows:

i) Property

The eastward shift of the NCR alignment would affect additional buildings. The residential property at No. 11 Hanger Lane and parts of the Dairy Crest Depot at No. 12 Hanger Lane would be partly demolished. The garden of No. 20 North Common Road would no longer be affected.

ii) Landscape

The modifications to the NCR alignment and the subway layout at Hamilton Road would preserve the majority of the avenue of mature trees along the west side of Hanger Lane. These modifications would also reduce the land taken permanently from Ealing Common by 0.1 ha. The number of trees which would be felled or put at risk as a result of the scheme would be reduced to 115 and 8 respectively.

iii) Visual Impact

Visual impact would be reduced for properties at the east end of North Common Road and increased for properties at the west end of Freeland Road. On the scheme as a whole the modifications would change the number of households subject to a high level of visual obstruction from 192 to 190, those subject to a moderate level from 135 to 123, and those subject to a slight level from 99 to 120. The number subject to visual intrusion would also undergo slight changes; from 312 to 315 households in the high category, from 230 to 228 in the moderate category and from 479 to 478 in the slight category.

iv) Noise

The total number of households that would experience an increase

or decrease of more than 3db(A) would remain unchanged at 387 and 428 respectively. Within these figures, the number of households subject to an increase within the bands of 3-5db (A), 5-10db (A), 10-15db (A) and greater than 15db (A) would be unaltered. Whereas for those households experiencing a decrease within the 5-10db (A) band would increase by 2 to 85 and those experiencing a decrease of 3-5db (A) would decrease by 2 to 259. The number of households in the remaining decrease band would remain unaltered. A summary of the revised figures is given in Table 1 and Table 2 compares the predicted levels in the year 2010 under Do-Nothing and revised Do-Something conditions.

v) Air Quality

There would be no significant changes to the air quality predictions as a result of the modifications. The number of households experiencing an increased concentration in the level of pollutants would remain unaltered. The number of households experiencing a decreased concentration in level of Carbon Monoxide and Lead would change from 681 to 686 and from 662 to 664 respectively. The number of households experiencing decreases in Nitrogen Oxide and Hydrocarbons would remain unaltered.

Table 1 :Year 2010WS (With - Scheme)

Number of properties* within each noise band, L10 (18 - hour) dB(A)

Property Types	44 & Less dB(A)	45 to 49 dB(A)	50 to 54 dB(A)	55 to 59 dB(A)	60 to 64 dB(A)	65 to 69 dB(A)	70 to 74 dB(A)	75 to 79 dB(A)	80 & More dB(A)
Houses & Flats	0	0	63	548	533	296	99	92	70
Buisinesses & Shops	0	0	0	1	6	4	4	14	5
Schools & Hospitals	0	0	0	0	1	0	0	0	0
Churches & Public Bldgs	0	0	0	0	1	1	1	1	0

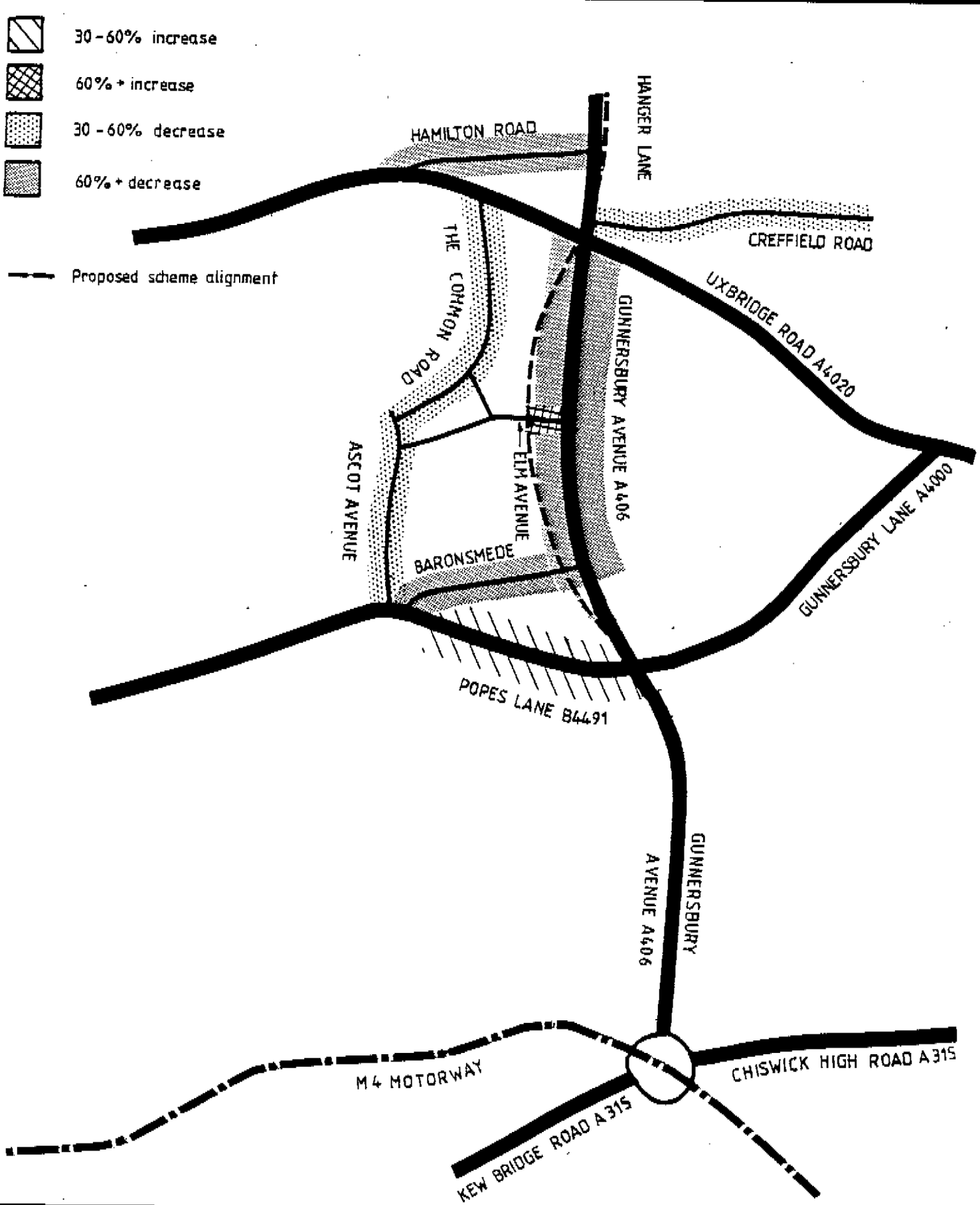
*Note that in the case of residential properties the values given are for the numbers of households.

Table 2 :Year 2010DN (Do - Nothing) to 2010WS (With - Scheme)

Number of properties* within each noise change band, L10 (18 - hour) dB(A)

Property Types	Decreases						No Change	Increases					
	21 & More dB(A)	16 to 20 dB(A)	11 to 15 dB(A)	6 to 10 dB(A)	3 to 5 dB(A)	1 to 2 dB(A)		1 to 2 dB(A)	3 to 5 dB(A)	6 to 10 dB(A)	11 to 15 dB(A)	16 to 20 dB(A)	21 & More dB(A)
Houses & Flats	0	41	71	110	334	402	169	259	236	73	3	2	1
Buisinesses & Shops	0	0	0	3	2	6	0	8	15	0	0	0	0
Schools & Hospitals	0	0	0	0	0	0	0	0	0	1	0	0	0
Churches & Public Bldgs	0	0	0	0	0	1	1	2	0	0	0	0	0

*Note that in the case of residential properties the values given are for the numbers of households.



THE A406 TRUNK ROAD
GUNNERSBURY AVENUE IMPROVEMENT

CHANGES IN TRAFFIC FLOW
AT SCHEME OPENING (1997)

Date March 1992

Not to scale

Plan No.
3

HA 044/027/000548 1

ENVIRONMENT & LANDSCAPE
Environmental Statement

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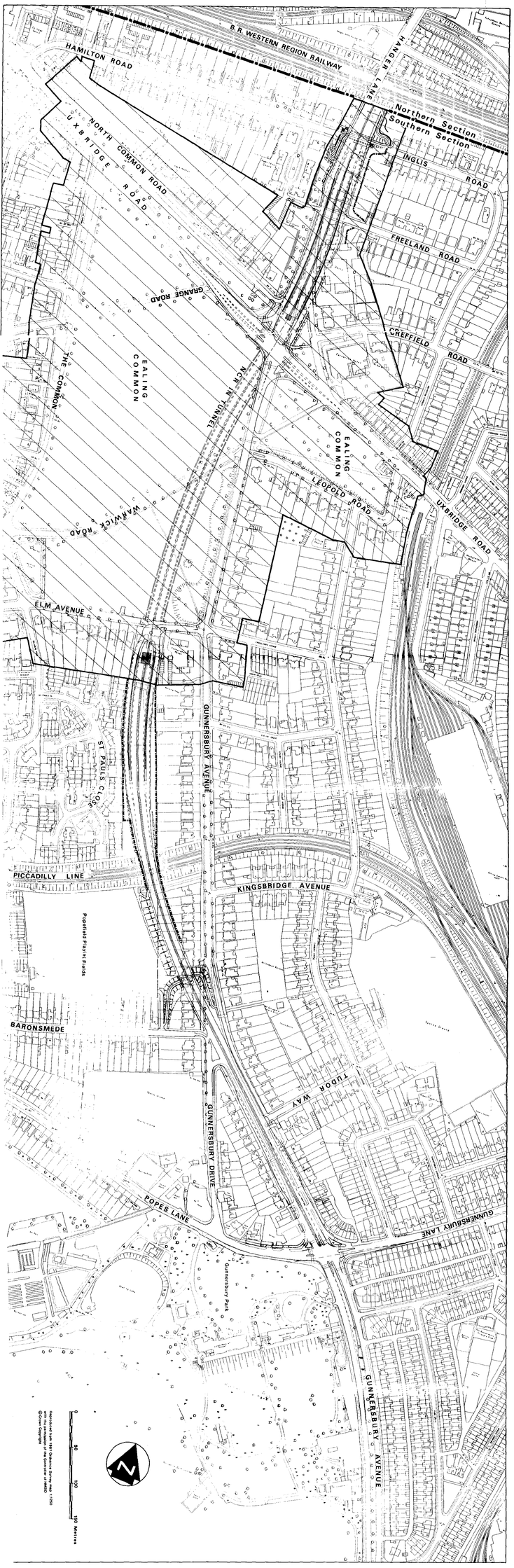
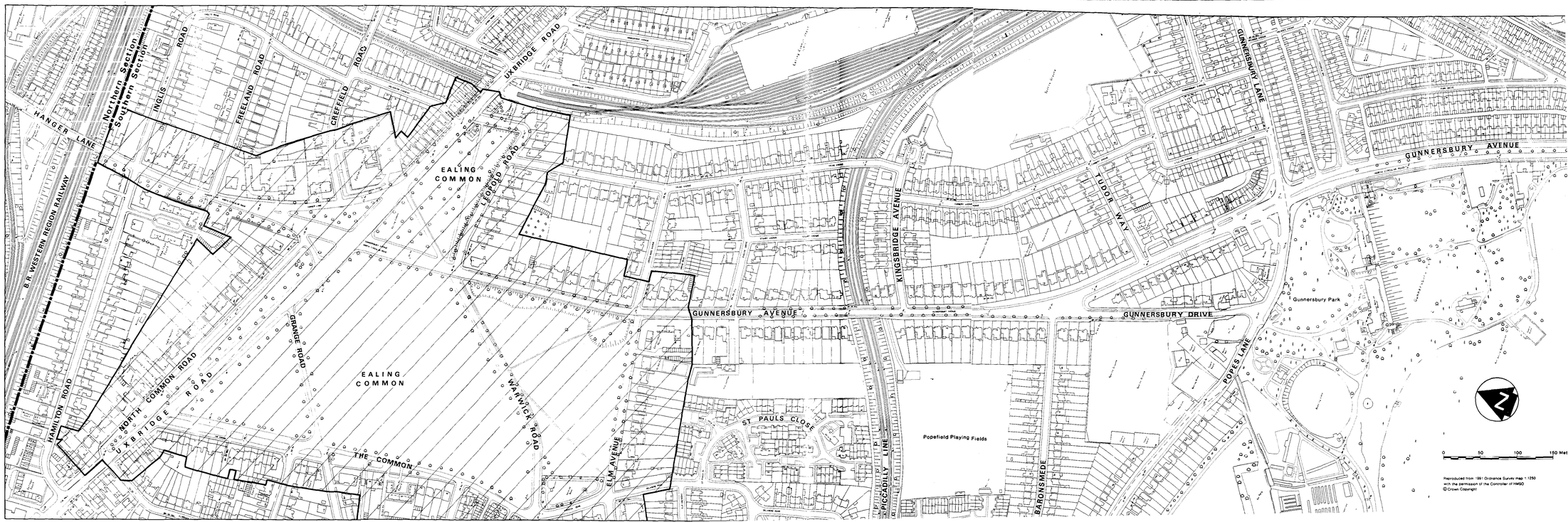
A406 GUNNERSBURY AVENUE IMPROVEMENT – ENVIRONMENTAL STATEMENT VOL 1 02/92



THE A406 TRUNK ROAD
(GUNNERSBURY AVENUE IMPROVEMENT)
SCHEME PLAN

Plan 1


HANGER LANE
Northern Section
Southern Section
INGLIS ROAD
FREELAND ROAD
CREFIELD ROAD
UXBRIDGE ROAD
B.R. WESTERN REGION RAILWAY
HAMILTON ROAD
NORTH COMMON ROAD
UXBRIDGE ROAD
GRANGE ROAD
EALING COMMON
LEOPOLD ROAD
EALING COMMON
THE COMMON
WARWICK ROAD
ELM AVENUE
GUNNERSBURY AVENUE
PICCADILLY LINE
KINGSBRIDGE AVENUE
TUDOR WAY
GUNNERSBURY LANE
GUNNERSBURY AVENUE
GUNNERSBURY DRIVE
POPES LANE
ST PAULS CLOSE
Popefield Playing Fields
BARONSMEDE
Gunnersbury Park
0 50 100 150 Metres
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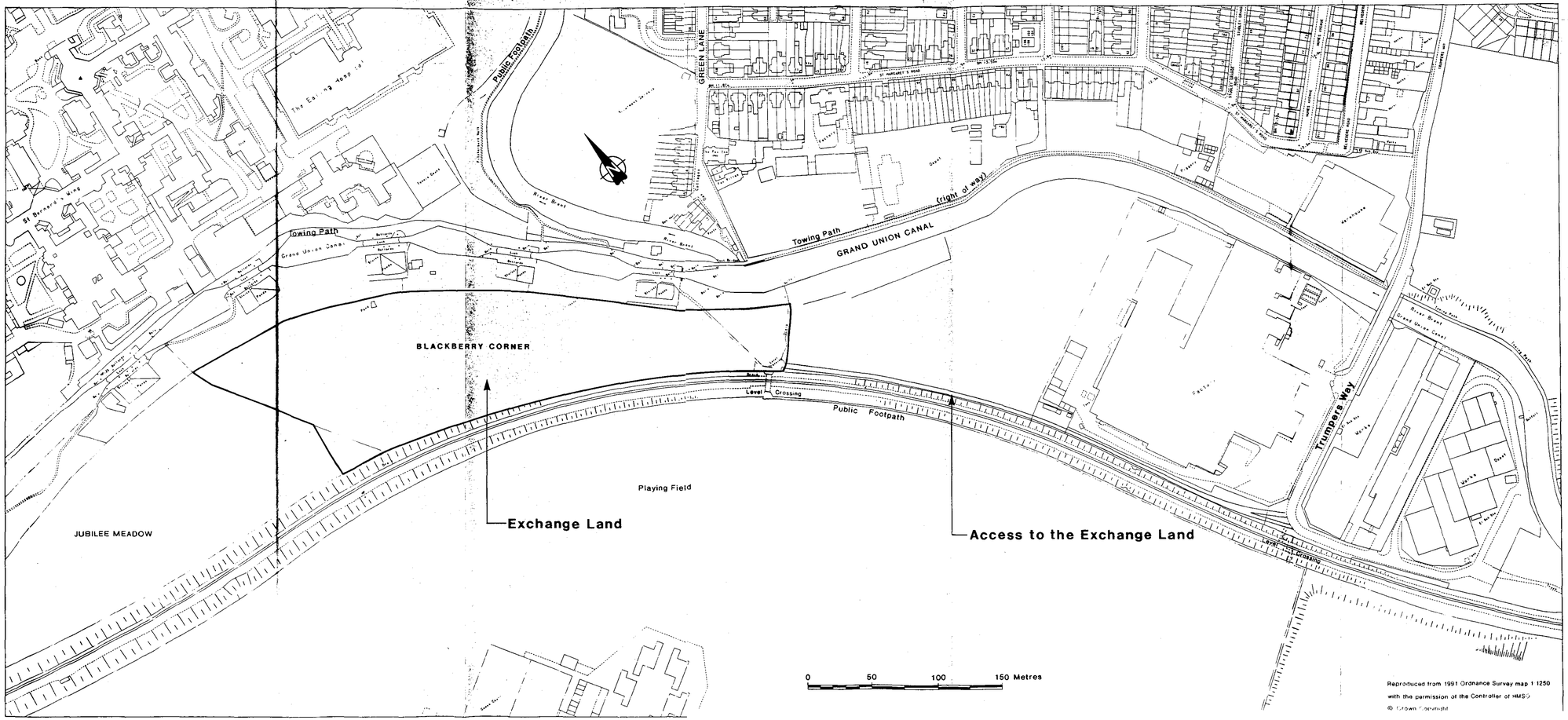
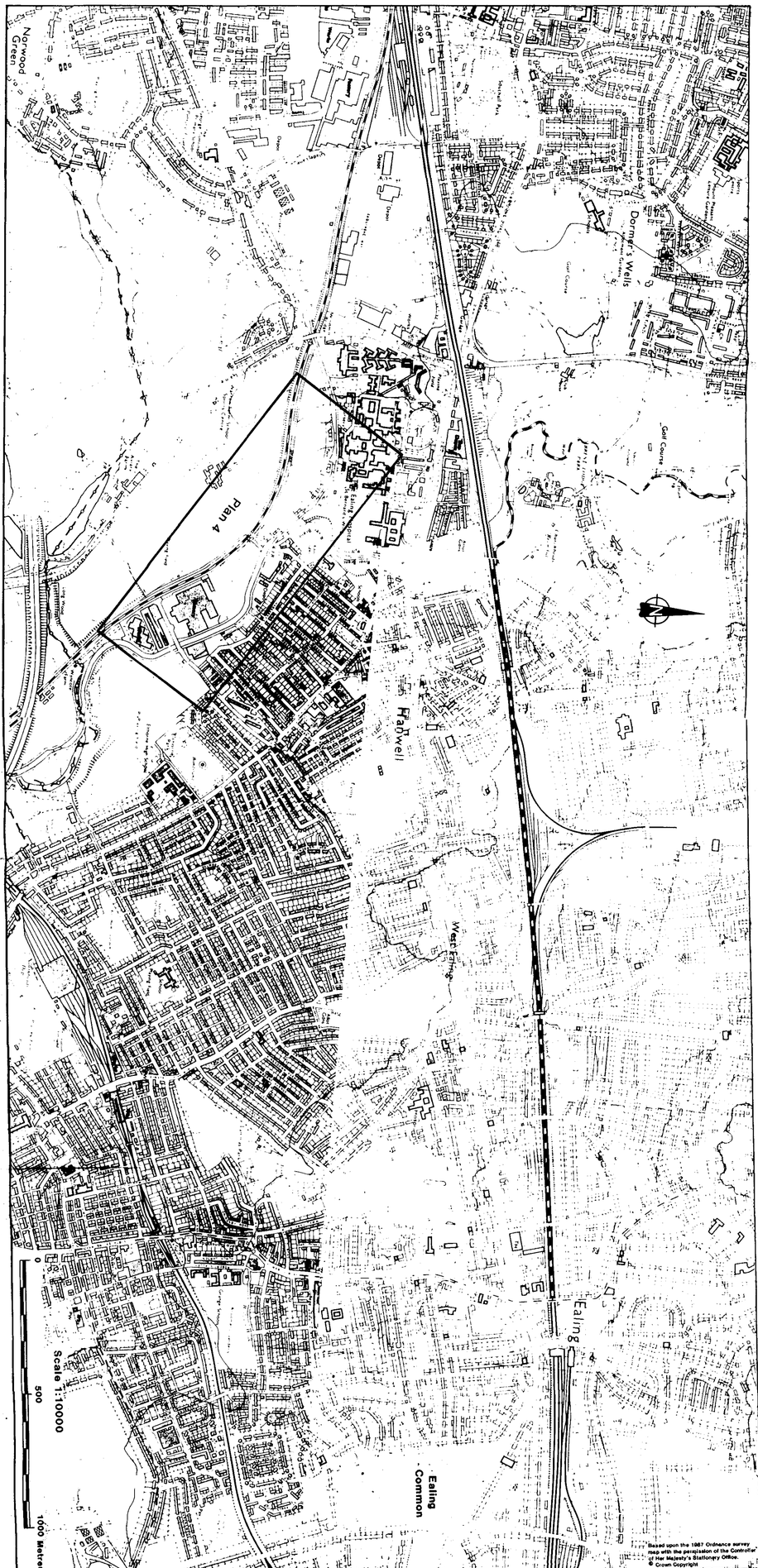


THE A406 TRUNK ROAD (GUNNERSBURY AVENUE IMPROVEMENT) EXCHANGE LAND

Plan 4



THE A406 TRUNK ROAD
(GUNNERSBURY AVENUE IMPROVEMENT,
LOCATION OF EXCHANGE LAND

Plan 5