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Scheme Title M40 BORTON PUTS	Details Arch approval Stage 1
Road Number M40	Date Oct '96
Contractor Bucks CC	
County Bucks	
OS Reference SU98	
Single sided <input checked="" type="checkbox"/>	
Double sided	
A3 2	
Colour 0	



BUCKINGHAMSHIRE
C O U N T Y
MUSEUM

**M40 BORROW PITS
ARCHAEOLOGICAL APPRAISAL
STAGE 1**

REPORT No. 393



**BUCKINGHAMSHIRE COUNTY MUSEUM
ARCHAEOLOGICAL SERVICE**

FOR

**TARMAC LAING
JOINT VENTURE**

OCTOBER 1996

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ILLUSTRATIONS

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- Figure 2: Location Plan of Hyde Farm and Chaley's Farm Proposals.
- Figure 3: First Edition 6" OS (1883), showing location of Hyde Farm and Charley's Farm Proposals.

SUMMARY

This report, commissioned by Tarmac Laing Joint Venture, is an appraisal (Stage 1) of the archaeological potential of two prospective borrow pits associated with the proposed widening of the M40 (J1A - J3).

The data is compiled from a limited number of existing sources, including the County Sites and Monuments Record, and the County Aerial Photographic collection, held at Buckinghamshire County Museum. The limited time available for this appraisal prevented a fuller Desk-Based Assessment (Stage 2).

On the basis of the sources consulted there are no known sites within the prospective Hyde Farm borrow pit site, and a possible site (CAS 1541) within the prospective Charley's Farm site. Undiscovered sites are possible within the prospective sites, particularly the larger Charley's Farm site. Further studies are recommended (see below).

1. INTRODUCTION

This report was commissioned by Tarmac Laing Joint Venture to assist in the compilation of a feasibility study prior to submitting a planning application.

This document is an appraisal (Stage 1) of the potential archaeological impact of two prospective borrow pits associated with the widening of the M40 (J1A - J3) (Figure 1). It is not a full archaeological Desk-Based Assessment (Stages 2 and 3 - see 1.1).

1.1 Stages of Archaeological Appraisal, Assessment and Evaluation

- Stage 1. *Desk-Based Appraisal - a review of the existing data held in the County Sites and Monuments Record.*
- Stage 2. Initial Assessment - a documentary study and initial rapid field study (see 5.1).
- Stage 3. Detailed Non-interventional Assessment - fieldwork including: (a) systematic fieldwalking and topographic survey, and (b) geophysical survey.

- Stage 4. Detailed Interventional Evaluation - machine trench excavation.
- Stage 5. Mitigatory Measures - either protection (by re-route or design modification) or detailed excavation of those sites which it is not possible or desirable to protect.
- Stage 6. Watching Brief - during the initial stages of construction.
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- Stage 7. Archive and Publication - synthesis and dissemination of results; this stage leads on from each of the Stages 2 to 6.
- Stage 8. Long Term Monitoring - monitoring of the long term secondary effects of development on the archaeological resource.

2. BACKGROUND

Two prospective borrow pits are proposed for the widening of the M40 (J1A - J3), between the M25 and west of Beaconsfield in South Buckinghamshire:

1. Hyde Farm proposal (centred on SU 961881), covers an area about 3.5 ha, adjacent to the M40, on its southwest side, approximately 1.5km to the northwest of Hedgerley village. The site is situated at c.90m OD upon a relatively flat plateau area, at the top of a small north-south dry valley, parallel to the valley occupied by Hedgerley. These valleys connect to the dry valley discussed below as a tributary valley of the Colne (Figure 2).

The underlying geology is glacial sand and gravel, although mottled clays of the Reading Beds of Eocene date, and possibly Cretaceous Upper Chalk may be exposed at the head of the valley, within the study area (BGS 1922).

2. Charley's Farm proposal (centred on SU 983871), covers an area about 17 ha, adjacent to the M40, on its northeast and southwest side, approximately 1.5km to the east of Hedgerley village. The site is situated at c.55m OD upon a relatively flat area, at the confluence of two dry valleys, and at the head of a northwest-southeast orientated valley, a former tributary valley of the Colne to the southeast (Figure 2).

The underlying geology is predominantly Dry Valley deposits consisting of sands and gravels of unknown age, and also possibly outcrops of Cretaceous Upper Chalk and Eocene Reading Beds (BGS 1922).

3. SOURCES

During this Stage 1 survey, the following records were consulted:

- . County Sites and Monuments Record (SMR)
- . Aerial Photographic collection held at BCM
- . British Geological Survey Maps (1:50000)
- . First Edition 6" Ordnance Survey Maps

4. ARCHAEOLOGICAL IMPLICATIONS

Hydc Farm: No archaeological sites are recorded within the proposed study area. No significant features were identified by the cartographic and aerial photographic survey.

Charley's Farm : The SMR details a site (CAS 1541) at the south side of the study area. Possible features are shown on an RAF photograph (1947). A ground inspection in 1974 revealed no significant visual features.

The southern end of the proposed borrow pit lies within Hedgerley Park (OS 1883) (Figure 3).

A small scarp-like feature of unknown origin is visible at the southwest corner of the study area (OS 1978).

5. DISCUSSION

The prospective borrow pits are located within a relatively unexplored archaeological landscape. The varied basal geologies associated with the numerous tributary dry valleys of the Colne, provide a rich eco-system, making this area especially attractive to occupation and exploitation in the past. However, the pattern of known settlement is largely a dispersed one, making it difficult to predict or model the location of occupation sites.

The locally available resources, particularly clay, timber and water (from streams and ponds) provide a high potential for rural industries. In particular, there is a very high potential for kiln sites. A major Romano-British pottery kiln site (CAS 1523, centred on SU 97308830) was excavated near Hedgerley (ROB 1936), within the present

Tarmac Laing compound area. Other kilns of Roman and later date are known within a one kilometre radius (CAS 2569, 2145, 1531, 0141 and 5048).

Cartographic sources show the surrounding area to be dominated by old parklands; Bulstrode Park and Chalfont Park to the northeast, and Wilton Park to the north (Figure 3). The southern part of the Charley's Farm site is situated within "Hedgerley Park", which was possibly formerly attached to an early 19th century building called Hedgerley Park House (CAS 5983). The 'park' does not exhibit typical parkland characteristics, and its history prior to the 19th century has not been recorded.

Prehistoric flint scatters are known in the surrounding area (e.g. CAS 1529 and 2383), and further sites are likely.

To summarise, the landscape within which the prospective borrow pits are to be located is one of archaeological potential. This is particularly demonstrated by the number of new sites which were found along the course of the M40 during its construction.

5.1 Further Archaeological Assessment

The following list outlines the work which is normally required of a Stage 2 Desk-Based Assessment (see 1.1) (an asterisk * identifies remaining sources to be consulted).

SMR

Aerial Photographs

Cartographic Sources

. Ordnance Survey

. Tithe *

. Enclosure Award *

. Parish *

Historical documents *

Archaeological books and journals *

Unpublished reports and archives *

Geophysical, geotechnical and borehole data *

Local archaeological societies *

Local specialists *

Local landowners *

However, it is likely that the County Archaeologist will require the study to proceed to Stage 3 (see 1.1).

6. RECOMMENDATIONS

This document is an appraisal of the potential archaeological impact of two prospective borrow pits. Further archaeological investigation, in the form of a thorough desk-based assessment and site walkover (Stage 2) and detailed non-interventional assessment (Stage 3) may be required.

Within the landscape under consideration, the size of a prospective development area will be the main factor affecting the likelihood of it containing an archaeological site.

The absence of known archaeology within the Hyde Farm proposal and its small size (c.3.5 ha) combine to give this area a low archaeological potential, on the basis of information available so far.

The possible presence of an archaeological site (CAS 1541) within the Charley's Farm proposal and its large area (c.17 ha) combine to give this a high archaeological potential.

7. SOURCES CONSULTED

Aerial Photographs

BKS Services Ltd: Job No. 1880, Frame 580755.

Cambridge Committee for Aerial Photographs: ref RC8 - HG 90-91 (6th March 1985).

Cambridge Committee for Aerial Photographs: ref RC8 - HF 260 (6th March 1985).

JAS AIR: ref 62 89 098-099 (20th June 1989).

JAS AIR: ref 62 89 139 (20th June 1989).

Cartographic Sources

OS 1883. First Edition 6" Ordnance Survey (1878/85) sheets 53 and 58.

OS 1978. Ordnance Survey, sheet SU 98 NE (1:10000)

BGS 1922. British Geological Survey, **Beaconsfield** sheet 255, Drift Geology, scale 1:50000 (reprinted 1971).

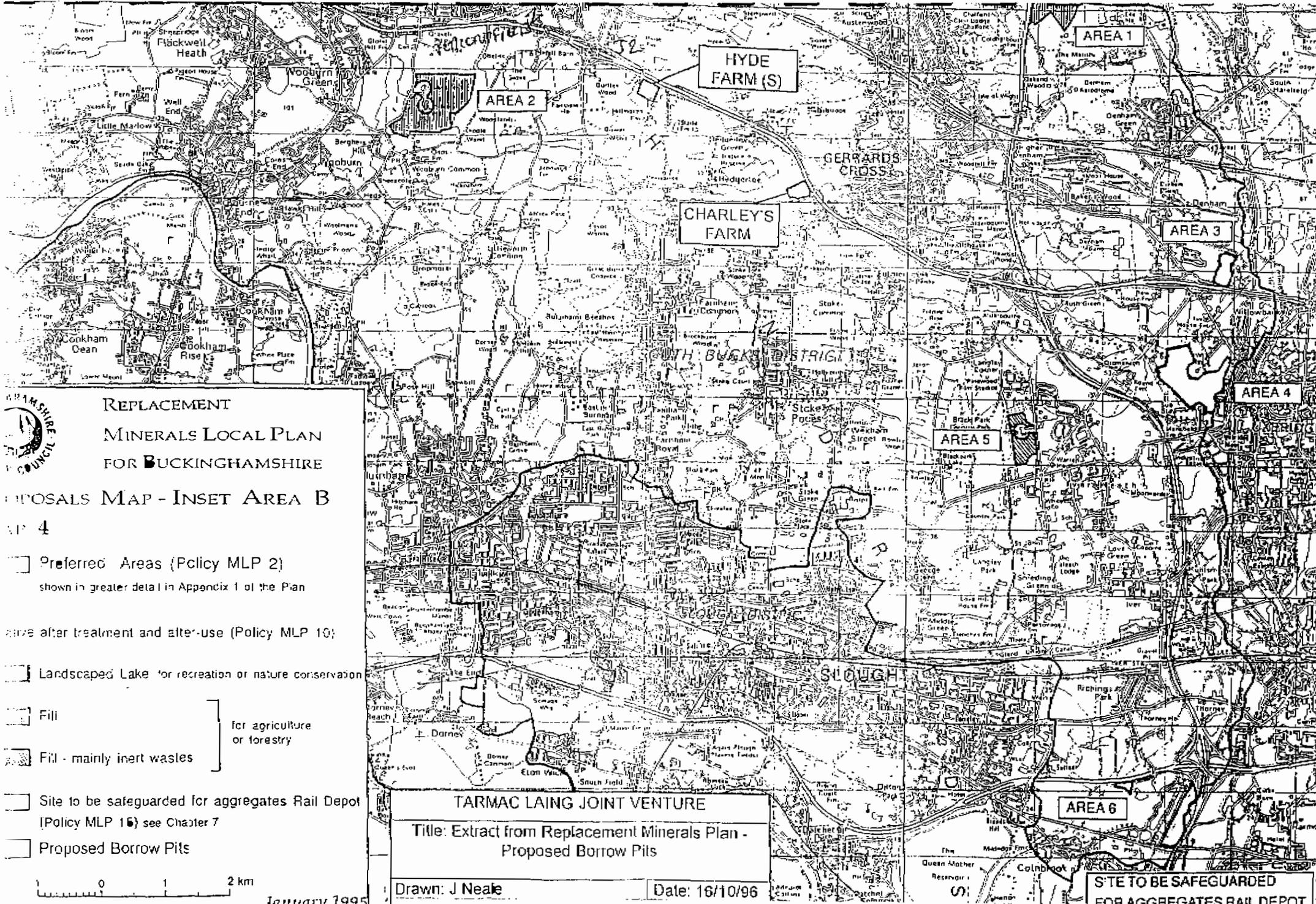


Figure 1: Location Plan of Prospective Borrow Pits in relation to the M40

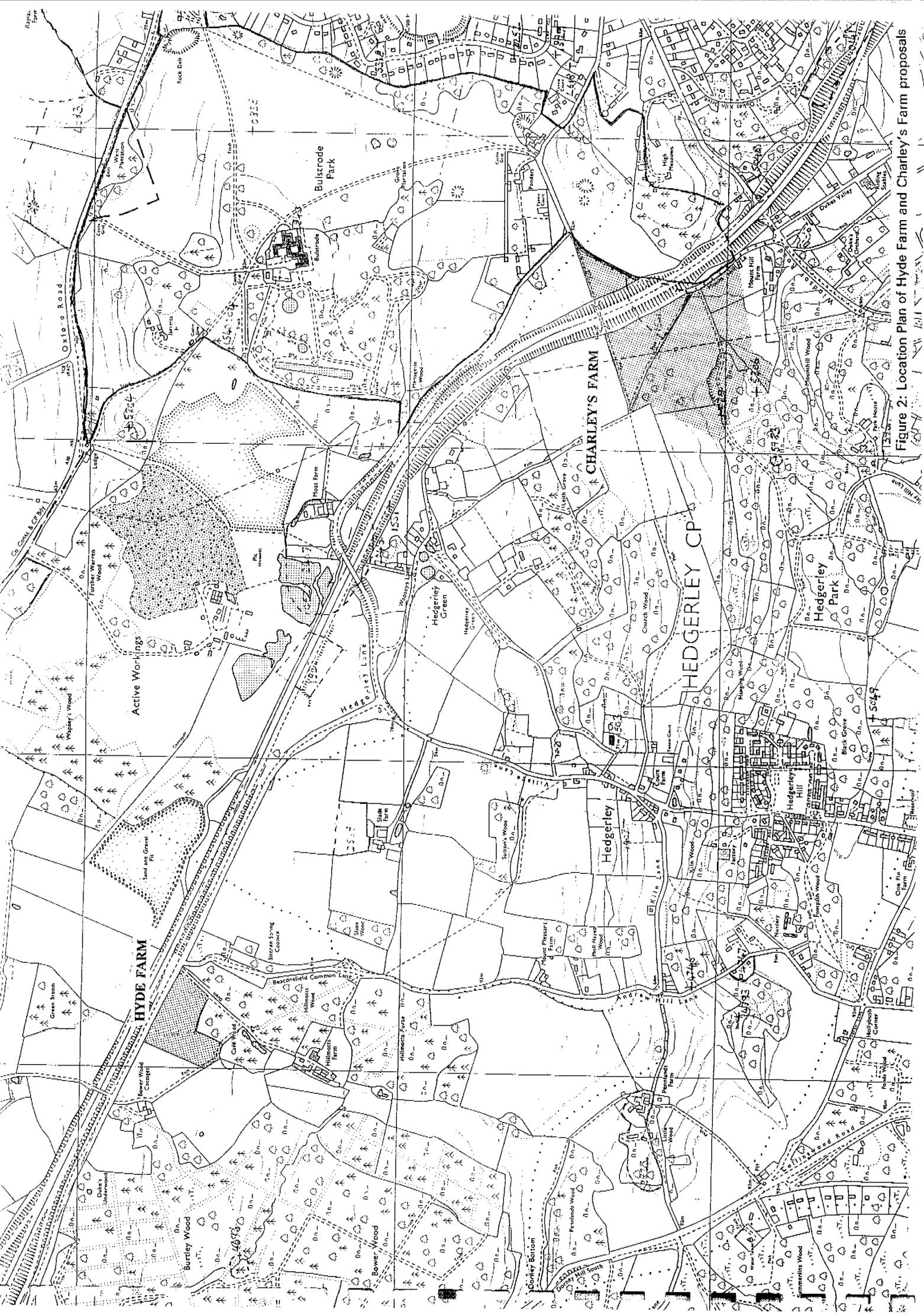


Figure 2: Location Plan of Hyde Farm and Charley's Farm proposals

