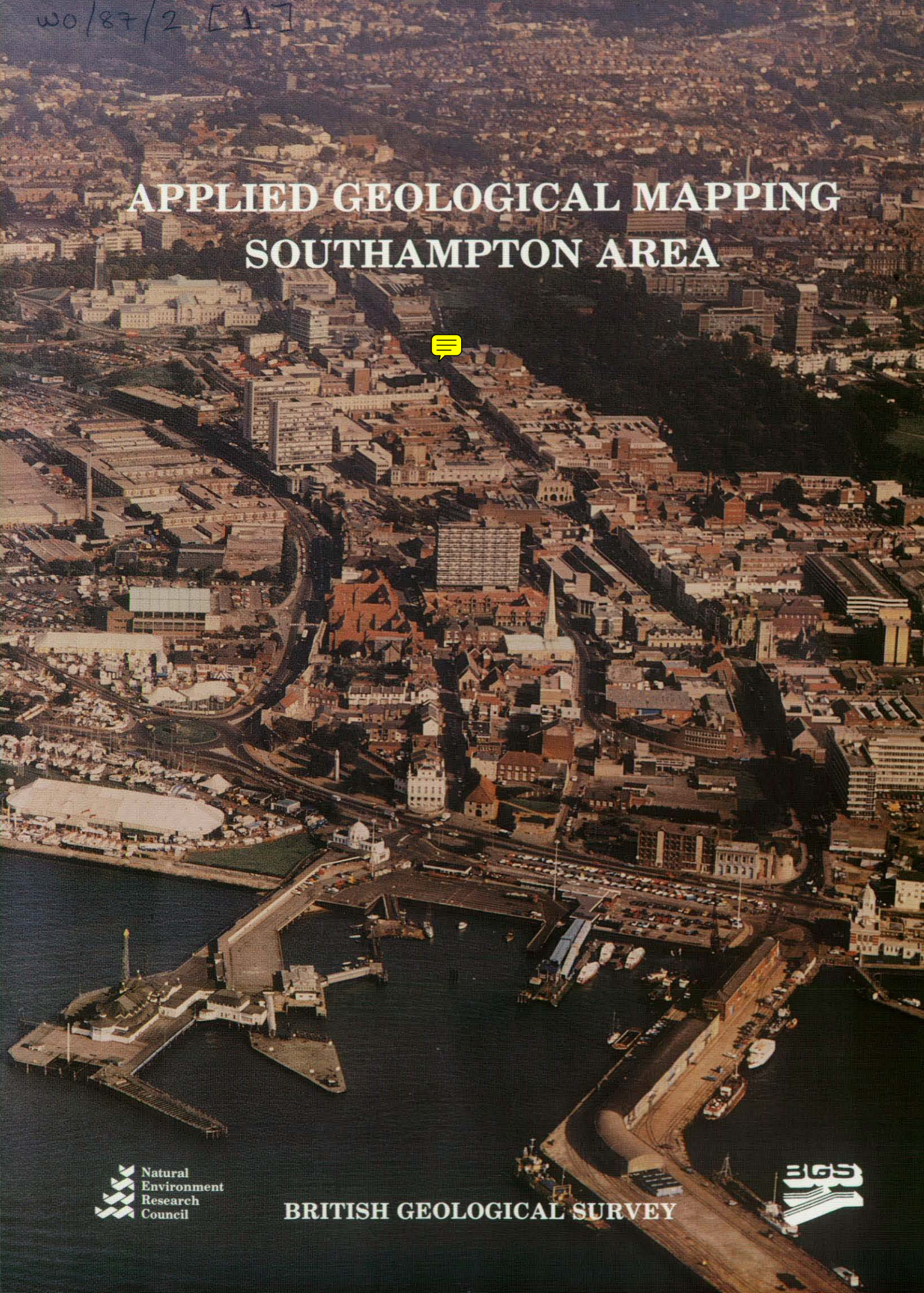
APPLIED GEOLOGICAL MAPPING SOUTHAMPTON AREA



Natural Environment Research Council

BRITISH GEOLOGICAL SURVEY

BGS

Cover photograph

We see Southampton city centre from the air, looking northwards over the Royal Pier and Mayflower Park (where a Boat show is taking place) in the foreground. The low-lying area in the left centre, occupied mainly by industrial buildings, is formed of reclaimed land over Estuarine Alluvium deposits. Most of the rest of the city is built on River Terrace Deposits overlying formations of the Bracklesham Group.

Natural Environment Research Council
BRITISH GEOLOGICAL SURVEY

APPLIED GEOLOGICAL MAPPING SOUTHAMPTON AREA

Area covered by
1:50 000 Geological sheet No. 315 (Southampton)
Parts of OS 1:10 000 sheets SU20, SU21, SU22, SU30, SU31, SU32, SU40, SU41, SU42, SU50, SU51 and SU52

VOLUME 3: MAPS OF DRIFT GEOLOGY

R. A. Edwards, R. C. Scrivener and A. Forster

Production of this report was supported by the Department of the Environment but the views expressed in it are not necessarily those of the Department

Bibliographic reference
EDWARDS, R.A., SCRIVENER, R.C. and FORSTER, A. 1987.
Applied geological mapping: Southampton area.
Research Report of the British Geological Survey, No ICSO/87/2, vol 3.

Authors
R. A. Edwards BSc PhD
R. C. Scrivener BSc PhD
British Geological Survey
St Just
30 Pennsylvania Road
Exeter EX4 6BX

A. Forster BSc

British Geological Survey
Keyworth
Nottingham NG12 5GG

EXETER BRITISH GEOLOGICAL SURVEY 1987

MAPS OF DRIFT GEOLOGY (B1-B6)

VOLUME 3

BGS Research Report ICSO/87/2

Notes to the user

There is considerable variation in the quality and reliability of the source data used to compile this report and the accompanying set of applied geology maps, as well as a great disparity in the density of site investigation data within the study area. Therefore, the accuracy and reliability of the interpreted information reflects that of the source data. However, emphasis has been placed throughout on the most reliable data, particularly those derived from authoritative sources such as geotechnical engineers and geologists.

Thus the report and maps are to be regarded as the *best interpretation of the information available at the time of compilation. They should be used for preliminary studies only and are not intended as a substitute for on-site investigations or detailed local searches.* The responsibility for assuring that geological, geotechnical and mineral and water resource data for any given site are as indicated in the maps and in the figures and text of this report must remain solely that of the user.

The possible occurrence of undetected anomalous site conditions should always be anticipated. The indicated occurrences of mineral deposits do not necessarily imply an economic resource. The possible presence of unmapped variable thicknesses of superficial deposits and Made Ground, particularly within the urban area of Southampton, should also be taken into account in any planning procedures.

There is no substitute for the knowledge provided by a detailed site investigation that takes into consideration the extent, nature and location of a proposed development. Therefore the report and maps are intended a) to give guidance on when to seek specialist advice and b) to aid developers in formulating effective investigations.

No information made available after the end of 1986 has been taken into account in this report.

All National Grid references in the report lie within the 100km square SU. Grid references are given to either eight figures (accurate to within 10m), or six figures for more extensive locations.

Data used in preparing this report and associated maps is lodged at the Exeter office of the British Geological Survey. Any enquiries concerning these documents should be directed to that office. Enquiries concerning the computer techniques or methodology should be directed to the Edinburgh or Keyworth office of the Survey. Enquiries about purchase of the report or maps should be directed to the National Geosciences Data Centre, British Geological Survey, Keyworth, Nottingham NG12 5GG.

DESCRIPTION OF THE APPLIED GEOLOGY MAPS

Drift geology (Maps B1-B6)

This set of maps consist of six sheets at the 1:25 000 scale showing the distribution of the drift deposits (Quaternary and Recent) and Made Ground that overlie the solid formations of the study area.

The maps are derived directly from 1:10 000 scale geological maps produced during the most recent (1973-80) survey of the area, by digitising the drift lines and transferring them, with the appropriate scale-change, onto 1:25 000 base maps.

Description of the drift deposits shown on the map are given in the Appendix.

SOUTHAMPTON WATER AND FAREHAM

ORDNANCE SURVEY

SHEET SU 40/50

B6

THEMATIC GEOLOGY MAP SOUTHAMPTON

(SU 40/50)

DRIFT GEOLOGY

EXPLANATION

- Worked ground
- Made ground
- Alluvium
- Estuarine alluvium
- Clay and loam associated with terrace deposits
- Terrace deposits 1 to 7, as numbered
- Buried channel deposits of Southampton Water
- Drift absent or below water

Based on geological survey at 1:10 560 scale by C. Reid and W. Whitaker from 1891 to 1898. Resurveyed at 1:10 000 scale by E. C. Freshney from 1978 to 1980.

Compiled by J. L. Laxton and K. C. Mennim, BGS Edinburgh, June 1987.

Any enquiries concerning this map should be directed to

British Geological Survey
St Just
30 Pennsylvania Road
Exeter
EX4 6BX

This map and the accompanying report were commissioned and financed by the Department of the Environment.

Topography, Ordnance Survey 1:25 000 Series

Thematic geology overprint, British Geological Survey

This map provides only general indications of ground conditions and must not be relied upon as a source of detailed information about specific areas, or as a substitute for site investigations or ground surveys. Users must satisfy themselves, by seeking appropriate professional advice and carrying out ground surveys and site investigations if necessary, that ground conditions are suitable for any particular land-use or development.

WO/87/2

Scale 1:25 000

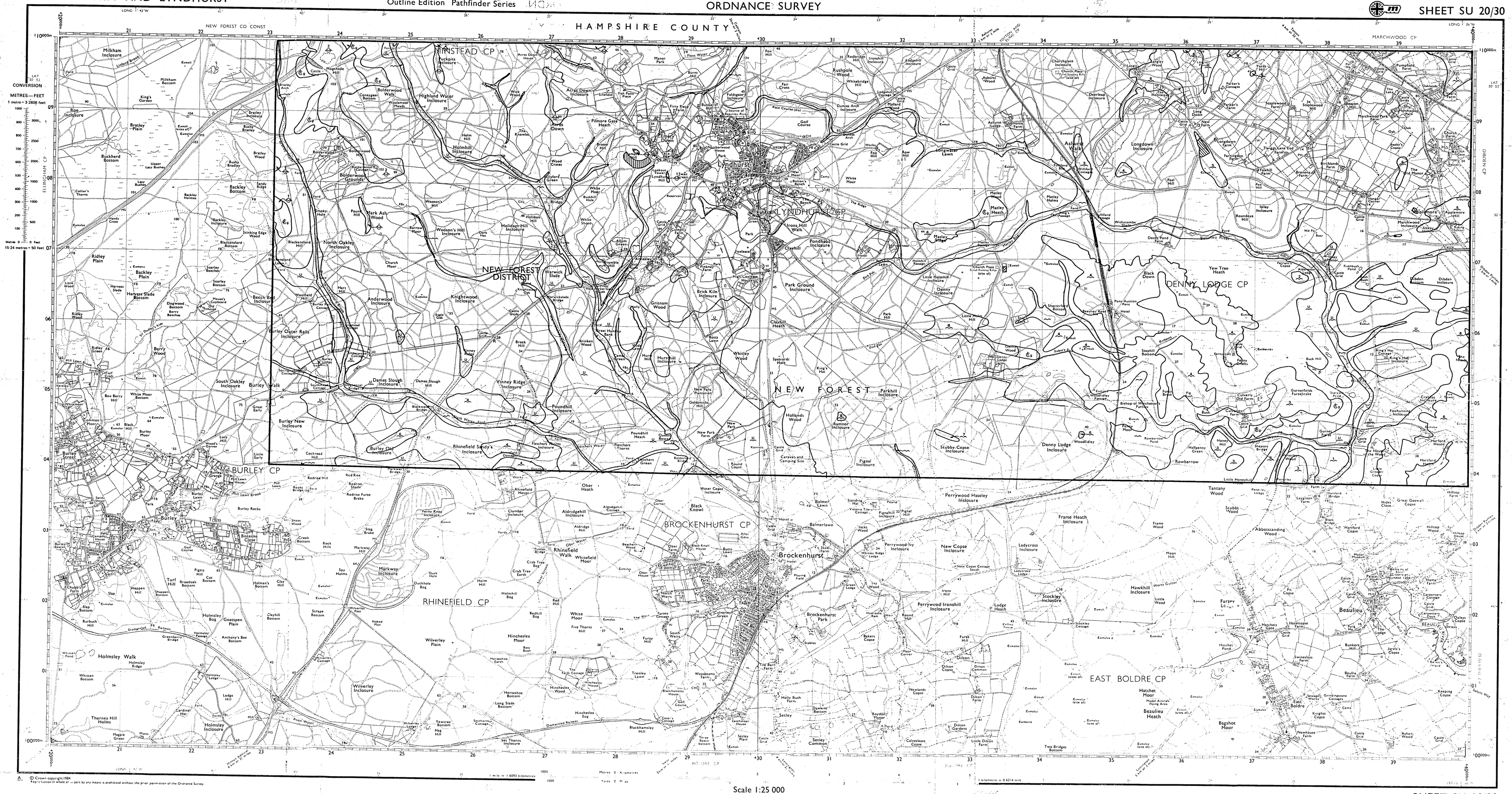
SHEET SU 40/50

BROCKENHURST AND LYNDHURST

Outline Edition Pathfinder Series

ORDNANCE SURVEY

SHEET SU 20/30



SHEET SU 20/30

B5

THEMATIC GEOLOGY MAP SOUTHAMPTON

(SU 20/30)

DRIFT GEOLOGY

EXPLANATION

- Worked ground
- Made ground
- Landslip
- Head gravel
- Alluvium
- Terrace deposits 1 to 8, as numbered
- Terrace deposits undifferentiated
- Older river gravels levels 1 to 2 as numbered
- Drift absent or below water

Based on geological survey at 1:10 560 scale by C. Reid in 1892 and 1897.
Resurveyed at 1:10 000 scale by E.C.Freshney and R.C. Scrivener from 1975 to 1978.

Compiled by J. L. Laxton and K. C. Mennim, BGS Edinburgh, June 1987.

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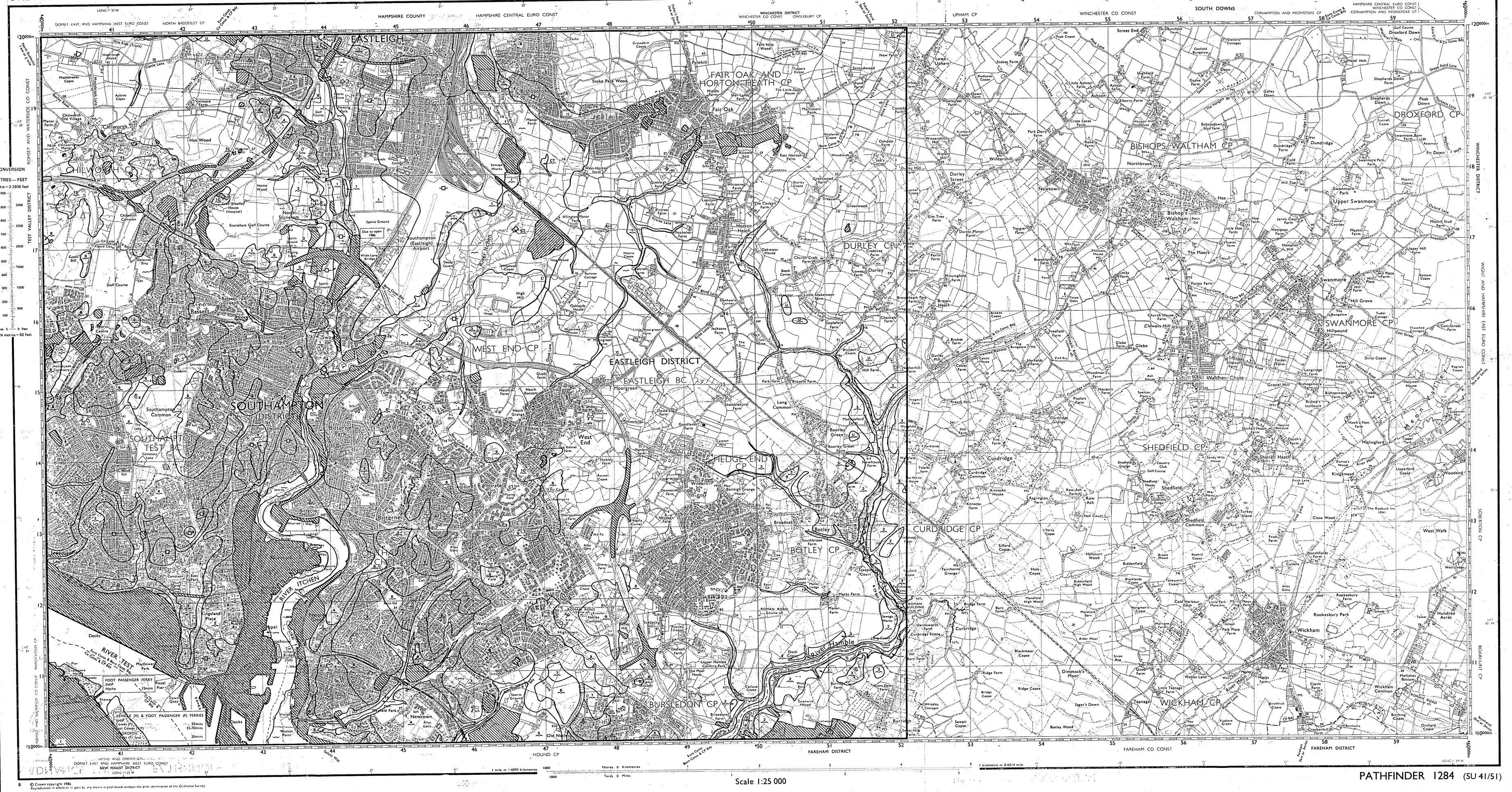
WO/87/2

ORDNANCE SURVEY PATHFINDER 1284 (SU 41/51)

SOUTHAMPTON

PATHFINDER 1284



Scale 1:25 000

PATHFINDER 1284 (SU 41/51)

B4

THEMATIC GEOLOGY MAP SOUTHAMPTON

(SU 41/51)

DRIFT GEOLOGY

EXPLANATION

- Worked ground
- Made ground
- Head
- Head gravel
- Alluvium
- Estuarine alluvium
- Calcareous tufa
- Clay and loam associated with terrace deposits
- Terrace deposits 1 to 11, as numbered
- Terrace deposits undifferentiated
- Drift absent or below water

Based on geological survey at 1:10 560 scale by C. Reid and W. Whitaker from 1889 to 1893. Resurveyed at 1:10 000 scale by E.C. Freshney, M.T. Halder, R.A. Edwards and R.C. Scrivener from 1979 to 1980

Compiled by J. L. Laxton and K. C. Mennim, BGS Edinburgh, June 1987.

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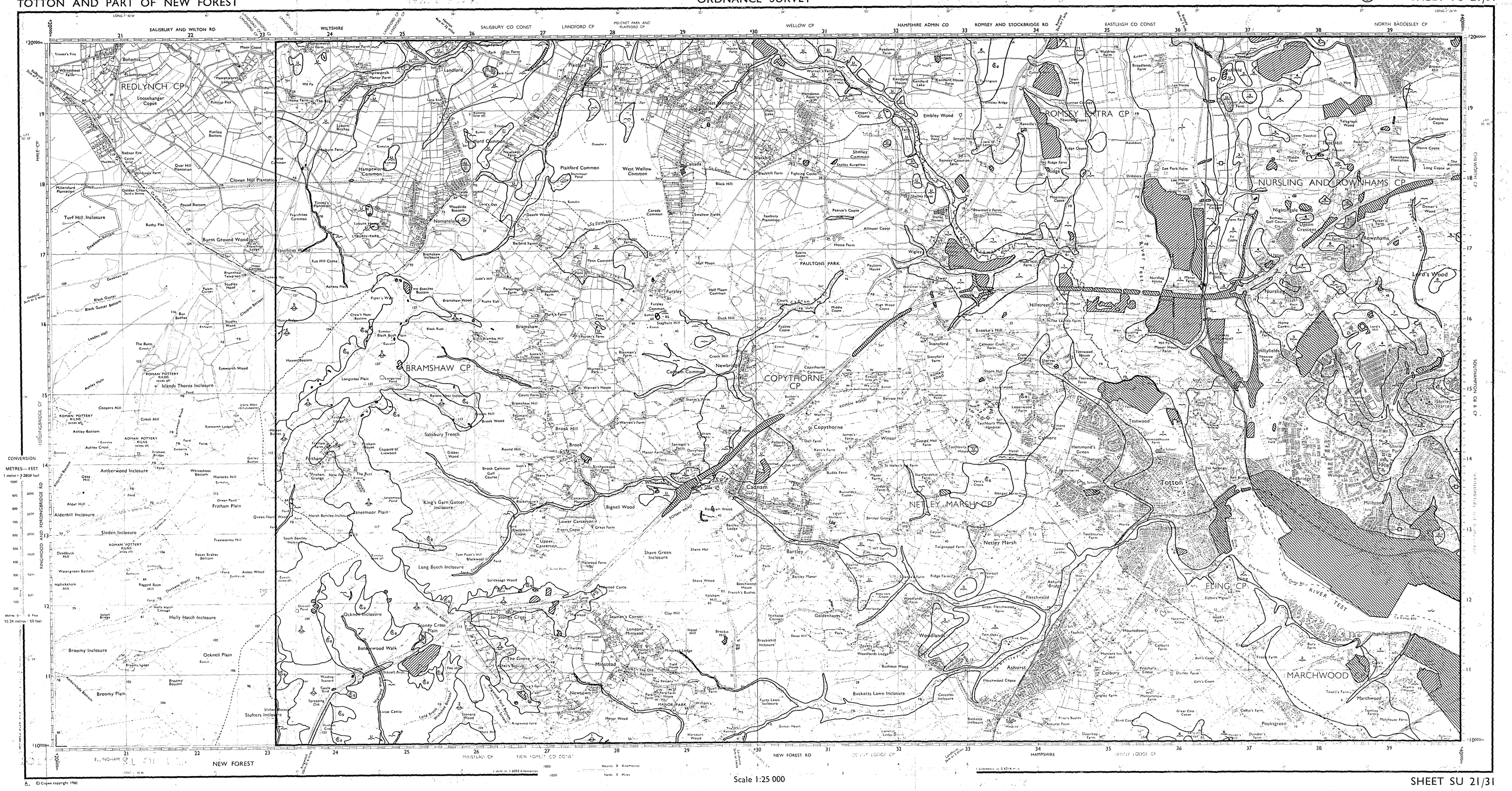
W0/87/2

TOTTON AND PART OF NEW FOREST

ORDNANCE SURVEY

SHEET SU 21/31



SHEET SU 21/31

B

THEMATIC GEOLOGY MA
SOUTHAMPTON
(SU 21/31)

DRIFT GEOLOGY

EXPLANATION

- Worked ground
- Made ground
- Head gravel
- Peat
- Alluvium
- Estuarine alluvium
- Clay and loam associated with terrace deposits
- 1–10 Terrace deposits 1 to 10, as numbered
- Terrace deposits undifferentiated
- 1–5 Glider river gravels levels 1 to 5 as numbered
- Drift absent or below water

Based on geological survey at 1:10 560 scale by C. Reid and W. Whitaker from 1889 to 1899. Resurveyed at 1:10 000 scale by R.A. Edwards and E.C. Freshney from 1975 to 1980.

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W0/87/2

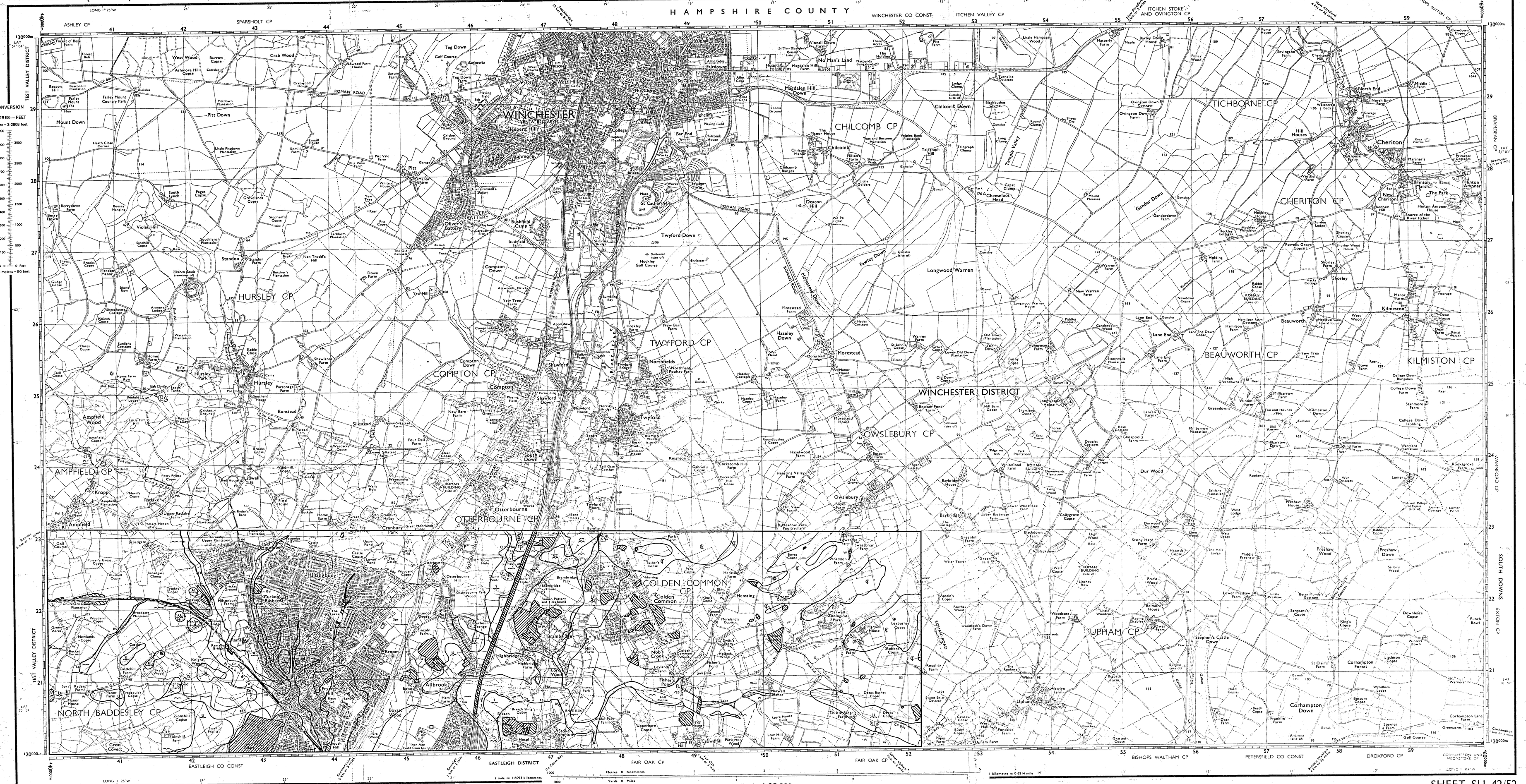
B2

WINCHESTER (SOUTH)

ORDNANCE SURVEY

SHEET SU 42/52

THEMATIC GEOLOGY MAP
SOUTHAMPTON
(SU 42/52)
DRIFT GEOLOGY



Scale 1:25 000

SHEET SU 42/52

EXPLANATION

- Worked ground
- Made ground
- Head
- Alluvium
- Calcareous tufa
- Clay and loam associated with terrace deposits
- Terrace deposits 1 to 4, as numbered
- Terrace deposits undifferentiated
- Clay with flints
- Drift absent or below watsr

Based on geological survey at 1:10 560 scale by W. Whitaker and C.E. Hawkins from 1889 to 1895. Resurveyed at 1:10 000 scale by R. A. Edwards, M.T. Holder and R.C. Scrivener from 1979 to 1980.

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WO/87/2

B1

THEMATIC GEOLOGY MAP SOUTHAMPTON

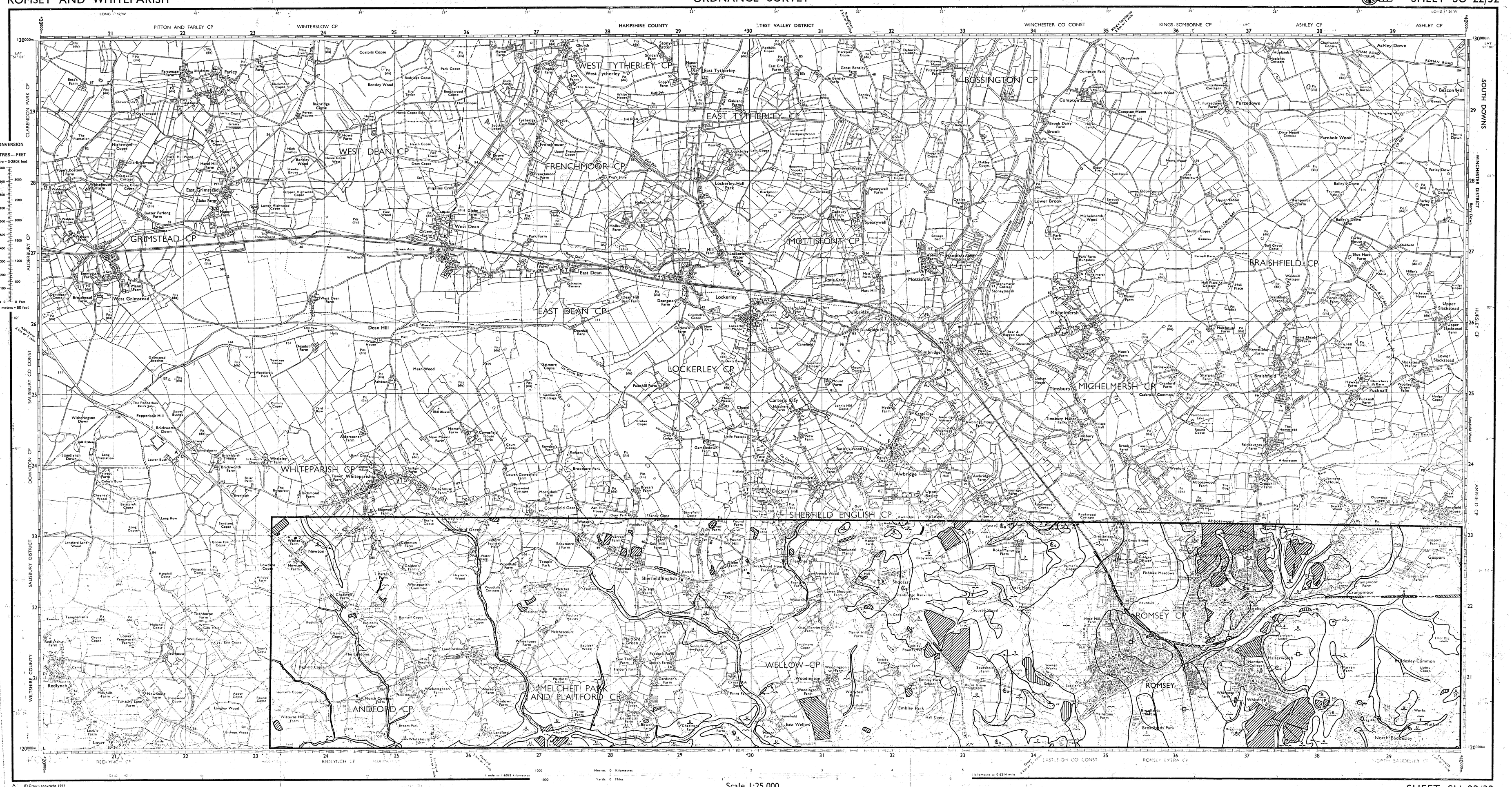
(SU 22/32)

DRIFT GEOLOGY

ROMSEY AND WHITEPARISH

ORDNANCE SURVEY

SHEET SU 22/32



EXPLANATION

- Worked ground
- Made ground
- Landslip
- Head gravel
- Alluvium
- Clay and loam associated with terrace deposits
- Terrace deposits 1 to 9, as numbered
- Terrace deposits undifferentiated
- Drift absent or below water

Based on geological survey at 1:10 560 scale by W. Whitaker and C. Reid from 1888 to 1898. Resurveyed at 1:10 000 scale by R.A. Edwards from 1977 to 1980.

Compiled by J. L. Laxton and K. C. Mennim, BGS Edinburgh, June 1987.

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