



AGRICULTURAL LAND COMMISSION

AGRICULTURE ACT 1947

Romney Marsh
Investigation
REPORT

LONDON: HIS MAJESTY'S STATIONERY OFFICE

1949

TWO SHILLINGS NET

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ROMNEY MARSH INVESTIGATION

To the Right Hon. TOM WILLIAMS, M.P., Minister of Agriculture
and Fisheries

SIR,

1. We, the Agricultural Land Commission, have the honour to submit our report upon our investigation into the agricultural use of Romney Marsh which you referred to us on the 29th February, 1948, in the following terms:—

“Enactment under which Reference is being made

(i) Section 84, 1 (a) of the Agriculture Act provides that where the Minister is satisfied in the case of any agricultural land that full and efficient use of the land for agriculture is being prevented by reason of work not being carried out, or fixed equipment not being provided, and that having regard to the nature of the work or equipment required for such use of the land as aforesaid it cannot reasonably be expected to be carried out or provided unless the Minister exercises his powers under this sub-section, then if the Minister proposes to secure the carrying out of the work, the provision or maintenance of the equipment, or the use of land in conjunction with other land, he may acquire the land or any part thereof by compulsory purchase or by hiring.

(ii) Sub-section 2 of Section 84 provides that, before proceeding with the acquisition of land under this Section of the Act, the Minister shall refer to the Agricultural Land Commission for their report thereon the question whether the conditions are fulfilled as to which the Minister must be satisfied before acquiring the land.

Subject matter of Reference

(iii) One of the areas calling for urgent consideration under this Section of the Act is Romney Marsh, an area of over 50,000 acres lying mainly in Kent, but partly in East Sussex, and between the Royal Military Canal and the sea. This area is almost entirely a large alluvial stretch of land which, on account of its high water table, was before the war devoted mainly to the grazing of sheep and cattle; the area under arable cultivation amounted to little more than 3,000 acres. During the war the demands for maximum home food production resulted in a considerable extension of arable acreage which, at the peak period, approached 17,000 acres in extent. This switch-over from pastoral to arable farming was made possible by the availability of additional labour from the Women's Land Army, from the Services, including Prisoners of War labour, and harvest camps, and the increased arable acreage yielded good crops of cereals, potatoes, root crops and other vegetables.

(iv) The excellence of the results obtained from arable cultivation raises the question whether it is in the national interest that the future agricultural economy of the Romney Marsh area should be based to a large extent on arable farming or mainly on the grazing of sheep and cattle. This has recently been considered, so far as that part of Romney Marsh lying in Kent is concerned, by the Kent County Council, who convened a conference of representatives of the Kent War Agricultural Executive Committee, the Kent Rivers Catchment Board, the Lydd and New Romney Borough Councils and the Romney Marsh, East Ashford, and Tenterden Rural District Councils and the National Farmers' Union to consider the matter and the following resolution was submitted to the Minister of Agriculture:—

That this conference is of the opinion that, provided a reasonable future for the farming industry is assured, it is in the best national and other interests that the agricultural development of Romney Marsh should be directed to the provision and maintenance of upwards of 20,000 acres under arable cultivation.

(v) In acknowledging the resolution, the Minister of Agriculture, although unwilling without more detailed consideration to commit himself to the

figure of 20,000 acres of arable cultivation suggested, expressed his agreement in principle with the object of the resolution. He emphasised, however, that the attainment of the objective was dependent upon a number of factors, e.g., the attraction of an increased supply of permanent labour; the supply of housing accommodation for that labour; the carrying out of land drainage schemes in the area; and the provision of hard roads and other fixed farming equipment such as buildings. He intimated that Romney Marsh was essentially the kind of area which should be investigated by the Agricultural Land Commission.

Terms of Reference

(vi) The Agricultural Land Commission are therefore asked to investigate and report upon the area delineated on the accompanying map, and known generally as Romney Marsh, in accordance with the provisions of Sub-sections 2 to 5 of Section 84 of the Agriculture Act; and in particular to report upon:—

(a) the extent of the arable cultivation which it would be in the national interest to maintain in the Romney Marsh area;

(b) the pre-requisite conditions for the maintenance of any increased arable acreage suggested, e.g., attraction of workers and provision of houses; land drainage works; provision of hard roads and fixed equipment on the farms;

and to express their considered opinion whether there is a case in the national interests for the Minister to exercise his powers of compulsory purchase or powers of hiring under Section 84 so far as the Romney Marsh area is concerned."

SECTION I.—INTRODUCTION

(i) PROCEDURE

2. Section 84, Sub-section 3, of the Agriculture Act, 1947, provides that "on such reference, the Commission, after inspecting the land in question, and making such other enquiries as appear to them requisite, shall prepare a draft report to the Minister on the question referred to them . . ." We have interpreted this provision for inspection and enquiries in the widest sense and, quite apart from visits paid by our technical staff, we have ourselves spent 25 days in Romney Marsh, during the course of which we met a large number of owners and occupiers. In addition, we interviewed representatives of the following organisations all of which are interested in the agricultural future of Romney Marsh:—

Kent County Council,
East Sussex County Council,
Kent Agricultural Executive Committee,
East Sussex Agricultural Executive Committee,
Kent Rivers Catchment Board,
Rother and Jury's Gut Catchment Board,
Denge and Southbrooks Internal Drainage Board,
Romney Marsh Internal Drainage Board,
Walland Marsh Internal Drainage Board,
Pett Internal Drainage Board,

Local Authorities directly concerned with housing, viz.:

Borough of Hythe,
Borough of Lydd,
Borough of New Romney,
Borough of Rye,
Rural District Council of Battle,
Rural District Council of East Ashford,
Rural District Council of Romney Marsh,
Rural District Council of Tenterden,

Joint Committee set up by the Kent Branches of the Central Land-owners Association and National Farmers' Union.

National Union of Agricultural Workers,
Wye College, near Ashford, Kent.

The Agricultural Section of the Transport and General Workers Union submitted a memorandum of evidence and many of the organisations referred to above submitted written evidence and explanatory memoranda to supplement discussion.

3. At the initial stage of our enquiry we felt it desirable to seek the co-operation and assistance of Marsh men themselves, many of whom have an intimate knowledge of the area, its farming and its problems. This co-operation was willingly given and we desire to express our appreciation of the courteous and helpful way in which we were everywhere received both by owners and occupiers and by representatives of the various bodies and organisations with whom we came into contact. We have heard many and varied expressions of opinion on Marsh farming and its problems and we have given them all due weight in formulating our own views which are set out later in this report. To comply with the requirements of Sub-section 4 of Section 84 of the Act notices were inserted in two successive weekly issues of the "Farmers' Weekly," "Farmer and Stockbreeder," "Estates Gazette," "Kent Messenger," "Folkstone, Hythe and District Herald," and the "Hastings and St. Leonards Observer" informing the owners, lessees and occupiers of land in the area under reference that the draft of this report was available and could be obtained upon application. Owners, lessees and occupiers were given six weeks from the first publication of the notice in which to make written representations against the contents of the draft or inform us that they would like to make verbal representations at a time and place to be arranged. No representations were received. This report is, therefore, substantially the same as the draft, but we should like to make it clear that the detailed recommendations in respect of buildings, water supply, roads, etc., are made in the light of our inspection of the Marsh in 1948. One or two public authorities and private land owners have in fact informed us that some progress has already been made towards putting some of them into effect.

(ii) DESCRIPTION OF AREA

4. The area referred to us for investigation occupies that part of Kent and Sussex which is bounded to the north and west by the Royal Military Canal and to the east and south by the sea. The Royal Military Canal, although in fact it now forms part of the "main river" of the Kent Rivers Catchment Board, is an artificial waterway constructed as a defence measure during the Napoleonic wars: it extends from Hythe to Rye along the foot of the Wealden Hills which rise steeply from its northern bank.

5. The area as a whole is generally known as Romney Marsh—and it will be referred to as such in this report—but as will be seen from Map No. 1 attached to this report, it includes not only Romney Marsh proper lying to the north-east of the Rhee Wall, along which now runs the road from Appledore to New Romney, but also the Walland Marsh, Denge Marsh, the New Romney Levels, Broomhill Level and the East Pett Levels. The total area computed from the Ordnance Survey Maps is made up as follows:—

	<i>Acres</i>
Agricultural land	49,637
Beach and waste	7,578
Built-up area, roads, etc.	1,650
Total area	<u>58,865</u>

6. The whole area under reference is flat—a characteristic accentuated by the Wealden Hills skirting it to the north and west. Practically all of it lies below high water spring tides, the lowest portion, namely the Dowels area in the neighbourhood of Appledore, being 10 to 11 feet below. Variations in the level of the land are small but although scarcely noticeable to the casual observer they are of considerable importance to the land drainage engineer and farmer. As might be expected from the situation of the Marsh, the annual rainfall is low—approximately 25 in., increasing to 28 in. as the Wealden Hills are approached. The incidence of the rainfall is of course not constant and during the summer months the loss of water by evaporation appreciably exceeds the rainfall. The other physical characteristic of note is the exposure of the area which is reflected in bleak winter conditions and a noticeable scarcity of trees.

7. In spite of its bleak and low lying character, Romney Marsh has a distinctive and subtle charm. It is predominantly agricultural but no one can remain completely indifferent to the pleasant towns and villages with their historical associations and traditions, or fail to remark, like Cobbett, on the many fine churches which now serve so small a population.* New Romney and Lydd are the only towns wholly in the Marsh, although the Cinque Port of Hythe and the ancient town of Rye lie on its eastern and western boundary respectively and serve in part the requirements of the Marsh dweller for amenities such as weekly shopping and entertainment. Apart from these towns the Marsh population is housed in villages such as Brenzett, Brookland and Dymchurch, or in scattered hamlets. There has been some recent development mainly of the bungalow type along the coastline between Lydd and Dymchurch.

8. Interesting though it would be, it would not be appropriate to delve too deeply into the historical associations of Romney Marsh, but this report would be incomplete without a brief reference to the two historic Corporations which have been associated with the administration of Romney Marsh proper for many centuries.

9. Romney Marsh proper is reputed to be the first area in this country within which definite regulations for drainage and sea defences were enforced. There is evidence that as long ago as the Thirteenth Century, 24 sworn men or jurats were elected by the Commonalty for the duty of enforcing contributions from landowners within the Marsh towards the maintenance of sea walls and water courses. In 1252, the Corporation of the Lords Bailiff and Jurats of Romney Marsh (the Level of Romney Marsh) received their Charter from Henry III, and were responsible for land drainage and sea defences until the Land Drainage Act of 1930 relieved them of that responsibility. In 1461, a sister Corporation of the Bailiff, Jurats and Commonalty (the Liberty of Romney Marsh) received their Charter from Edward IV which bestowed a number of privileges including exemption from all national taxation and the privilege of exercising criminal jurisdiction throughout the Liberty. Both these historic Corporations survive. In spite of the loss of land drainage powers the Level of Romney Marsh still remain as a reputed Corporation with property to administer; and, although the Liberty of Romney Marsh have lost all administrative functions and income, they still exercise judicial powers and the Jurats elect annually from among themselves four of their Liberty to sit as Justices and Coroners for the ensuing year.†

* Rural Rides—Everyman Edition, Vol. I, page 235.

† Teichman Derville—The Level and the Liberty of Romney Marsh.

SECTION II.—SOILS, SEA-DEFENCE AND LAND DRAINAGE

(i) SOILS

10. By geological standards Romney Marsh is regarded as recent. J. K. Dubey writes :—

“By whom or how long ago, Romney Marsh proper was recovered from the sea, there is no record to show. It has been suggested that the tract has, in comparatively recent times, in Pleistocene and Neolithic days, been subject to many and profound changes. It has undergone uplifts and subsidences, and has been alternately sea and grassland or woodland. The presence of moorlogs at Appledore Dowels is evidence of subsidence, for this is an area now $13\frac{1}{2}$ ft. below the highwater mark of spring tides, showing that the land must have been, at one time, at a higher level than at present to permit the growth of forest trees ; while the underlying sea sand (showing that before the growth of the forest the region was actually covered by sea) means that an uplift took place at a still earlier time. As a result of these alternations, the tract has been radically altered in form, elevations have been eroded and hollows have been filled in.

During the recession of the sea, the bay of the River Rother continually changed its form under the influence of tides and local currents, forming a succession of lagoons and alluvial flats, each one to be swept away and succeeded by another, until the hand of nature, by the formation of a graded shore profile, and of man, by the building of sea-walls, arrested the process.

The activity of the rivers has affected soil formation in a number of ways—by changing their courses, by eroding the land, by frequency of flooding and by such variation in velocity that the deposition of different kinds of sediments has occurred. The sea has also had a modifying influence on soil formation by bringing in sand and by removing soil materials. It is therefore clear that great variation in the soil of the Marsh is bound to occur.”*

11. It is generally assumed however that the reclamation of Romney Marsh proper was completed by the construction in Roman times of the Rhee Wall. The reclamation of the Marshes and Levels to the south was undertaken in the main by dignitaries of the Church between the Eighth and Sixteenth Centuries.

12. Whatever be the details of the geology and reclamation, two matters appear to be commonly accepted. First, the high fertility of much of the land in Romney Marsh is due to the rich nature of the material brought down from the Weald or deposited by the sea ; and secondly, the complicated geological history has resulted in the considerable variation in Marsh soils, even between one field and its neighbour.

13. This variation of soils is reflected in the differing stock-carrying capacity and “fating” quality of the Marsh pastures which have long been regarded as something of a mystery. The Marsh graziers recognise four grades of pasture :—

Grade I. Fating Pastures

These occur on the most productive soils and fatten from 6 to 10 sheep per acre in summer. On some of the most famous of these pastures even higher numbers can be fattened.

Grade II. Breeding Pastures

These are found on soils slightly inferior to and normally heavier than the fating pastures. They support from 4 to 6 sheep per acre in growing condition in the summer.

* Dubey—Soil Profiles of Romney Marsh Pastures (Journal of Ministry of Agriculture, Vol. XL, No. 2, May, 1933.)

Grade III. Breeding Pastures

These are found on still poorer soils which are either too heavy or are too light for optimum moisture retention. They carry from 2 to 4 sheep in summer.

Grade IV. Rough Grazing Land

These very shallow soils carry 2 sheep or less per acre in summer.

14. It is not surprising in view of the predominantly pastoral activities of the Marsh in the past that such research as has been undertaken into soil problems should have related to pasture performance. The first authoritative investigation was that undertaken by Häll and Russell in their survey of the Agriculture and Soils of Kent, Surrey and Sussex, the results of which were published in 1911. In their report, Hall and Russell say "that the amount of stock the most famous fields of the Marsh will carry and fatten is incredible, and these rich fields are sometimes only separated by a ditch or a fence from others that would do no more than keep the sheep on them in growing condition", and add, "the chemical analyses of the Marsh soils fail to throw any light on the superiority of one field over its neighbour."

15. Other research work undertaken by Furneaux, Brade-Birks, Cole and Dubey has, however, related pasture performance and fertility to the soil profile. By 1932 some nine soils series in the Romney Marsh area had been established, of which the most important are the Finn Series, the New Romney Series, the Ivychurch Series, the Newchurch Series, the Appledore Series and the Lydd Series. The diagram on page 11 illustrates the profile of these Series in relation to the qualities and use of the pastures. * and †.

16. It will be seen that the famous Marshland fattening pastures occur on the Finn Series and the New Romney Series. The texture of the Finn Series is loam to silty loam: it is a well-drained and well aerated soil reputed to retain sufficient water in the summer to maintain vigorous growth. The texture range of the New Romney Series is a very fine sandy loam to loam; the drainage is good although the pastures are apt to "burn" in a dry summer. Unfortunately, maps showing the detailed location of the best fattening pastures are not available.

17. The Ivychurch and Newchurch Series are heavier soils overlying clay and on these Series is found the majority of the breeding pastures.

18. There is no doubt that, taken as a whole, the Romney Marsh area is inherently very fertile, and is capable of producing not only the finest grass but also arable crops comparable with those of our best silt lands. Indeed, although it cannot be regarded as good farming practice, we ourselves found instances where land had been cropped continuously since 1940 without the use of fertiliser and without apparent reduction in yield.

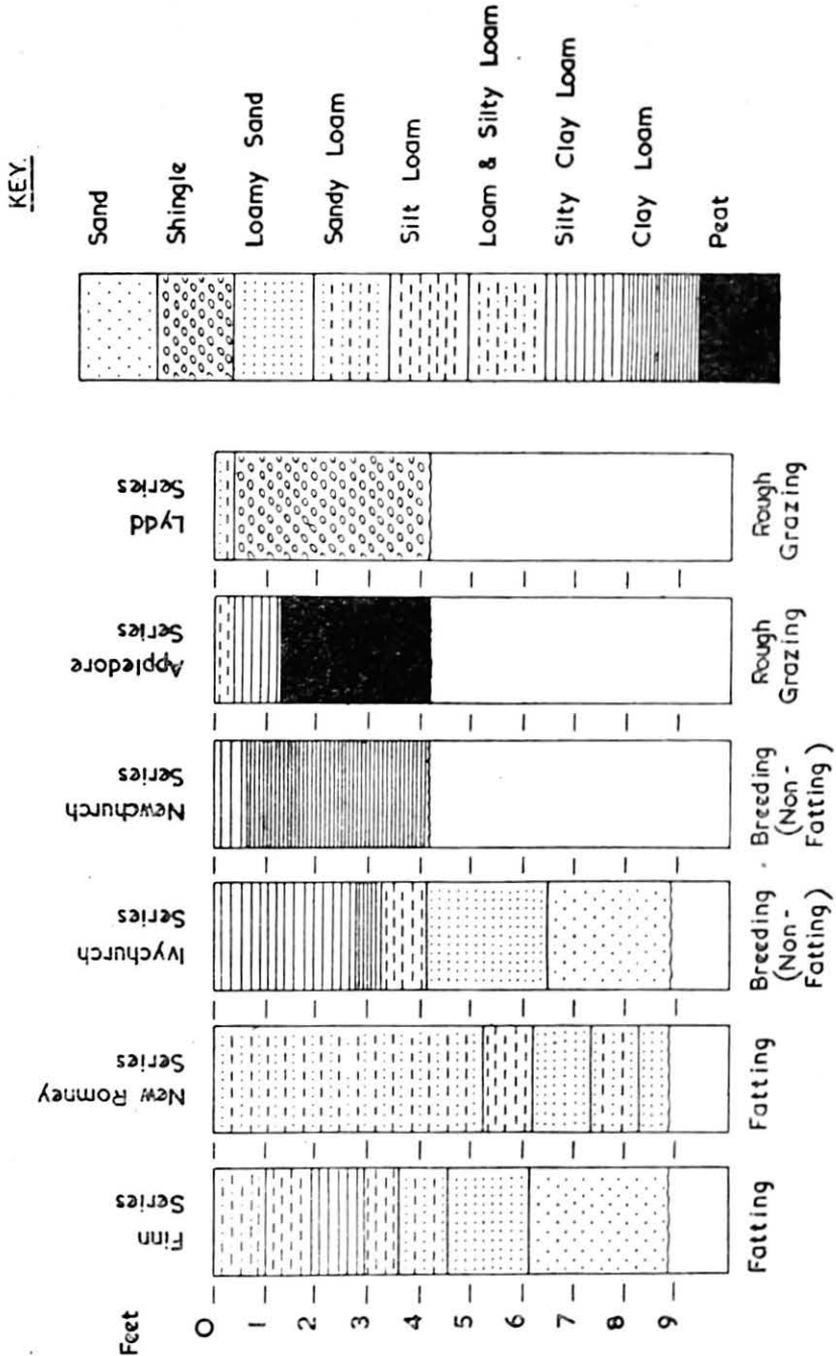
(ii) SEA-DEFENCE

19. The level nature of the Marsh and the fact that the bulk of it lies below high water level create considerable problems of sea-defence, the solution of which is primarily the responsibility of two Catchment Boards, the Kent Rivers Catchment Board and the Rother and Jury's Gut Catchment Board. There are fringes of higher land along the coast which give partial protection from the sea, as, for example, the shingle banks to the west of Rye Harbour and the sand-dunes to the east. These, of course, involve continuous maintenance work on the part of the Catchment Boards who in addition are responsible for an extensive length of artificial sea wall without which the area would be subject to tidal inundation and unfit for either agriculture or habitation. The Kent Rivers Catchment Board have a considerable length of

* Cole and Dubey, "Soil Profile in relation to Pasture Performance in Romney Marsh". *Journal of Wye College*, July, 1933.

† Stamp, *The Land of Britain*, Pt. 85, Kent.

PROFILE OF ROMNEY MARSH SOILS (AFTER COLE AND DUBEY). SHOWING
 RELATIONSHIPS TO THE QUALITIES AND USE OF THE PASTURES
 (VIDE PARAGRAPH 15)



sea wall at Dymchurch and Littlestone and the Rother and Jury's Gut Catchment Board are at present engaged on building a new sea wall of original shape and construction at Pett Level. The capital cost of these sea-defences is grant aided by the County Councils and the Ministry of Agriculture and Fisheries, but the Catchment Boards are normally responsible for maintenance costs.

(iii) LAND DRAINAGE

20. Responsibility for land drainage is divided between the same two Catchment Boards and it will be convenient to consider separately the area covered by each Board.

21. *Kent Rivers Catchment Board.* This Board are responsible for the extensive triangular area formed by Appledore, Hythe and New Romney, together with Denge Marsh lying to the south and bounded on its eastern and southern sides by the sea. The Board's area includes the Royal Military Canal from Hythe westward to Iden Lock on the River Rother, but does not include lands on either side of the stretch west of Appledore. The three Internal Drainage Boards in this area are the Romney Marsh Level, Denge and Southbrooks, and the Level of New Romney:

22. The area in general is fringed on the north by the Wealden Hills the run-off from which passes south to the Royal Military Canal. From Ham Street to West Hythe the lands to the north are sufficiently high to drain by gravitation into the Canal. Between Ham Street and Appledore, however, the lands to the north of the Canal are too low to drain naturally into it; part of the drainage from them passes through syphons under the Canal into the lowland area to the south which is being pumped; part is collected in recently constructed high level channels which can discharge their water direct into the Canal. All water discharged into the Canal throughout its length from Iden Lock to West Hythe flows eastward and enters the sea via a specially constructed waterway known as the Canal Cut. There is a dam at the northern end of the Canal Cut and the length of the Royal Military Canal from this point eastwards does not form part of the Marsh drainage system but is, by agreement with the Catchment Board, under the control of the Hythe Corporation.

23. The Military Canal is, in fact, a reservoir collecting the run-off from the land to the north of the Marsh. The quantity of water going into the Marsh from outside is not excessive since the chalk hills dip northwards away from the Marsh and the chalk "sponge" has to be filled before there is any overspill to the south.

24. Between the Royal Military Canal and the coast the land is almost level and there is extremely little fall on any of the numerous watercourses or "sewers" which intersect it; and unfortunately, from the drainage point of view, the land farthest away from the seven sea outfalls is the lowest of all. As, however, the difference in the surface level is so small the bulk of the water in the drainage channels can be regulated by control sluices during all seasons of the year. In extremely wet seasons the water is passed out to the sea as quickly as possible and in prolonged droughts it is conserved.

25. There are about 70 points at which the water levels on the "main river" and Internal Drainage Board watercourses can be controlled and a large number of lesser controls on the private watercourses which are operated by the individual farmers. At the end of each winter season these controls, which consist in the main of suitably constructed stop boards in masonry slots, are operated with the object of trapping the last of the winter flow and so retaining water in all "main rivers" and watercourses at levels which past experience has proved to be most suitable to the type of farming practised along the length of the watercourse. In dry seasons the water so retained tends to be lost by evaporation and seepage and some of the main channels actually go dry. With the onset of autumn rains when the flow recommences, the control stops are gradually raised and in times of extreme run-off all such controls are fully opened and the greatest possible volume of water is passed out to the sea during each low-tide period. On the rising tide the main sea outfalls become tide-locked and during that period the water from the land has to be stored in the channels themselves until the fall of the tide again permits discharge to the sea.

26. To overcome the difficulties arising from the shortage of water during the summer months, the Catchment Board and the Romney Marsh Level

Internal Drainage Board jointly carried out a water level scheme by which water is impounded in the Royal Military Canal each spring to form a reservoir from which it can be fed into the watercourses through feed pipes in the Canal bank. A number of additional control stops were also constructed to help regulate the level of the water in private, main and lesser watercourses.

27. The problem area for the Kent Rivers Catchment Board is the low-lying land east of Appledore and mainly south of the Canal which amounts to approximately 4,250 acres. Of this area, the 650 acres close to Appledore and known as the Dowels is the lowest part of the Marsh and cannot be drained naturally; without pumping, this area would be a permanent lake. The balance of 3,600 acres lies rather higher than the Dowels and normally drains by gravitation to the sea. In periods of heavy rainfall, however, satisfactory drainage in this particular area can only be maintained by pumping. The whole area is therefore served by two pumps, one at Appledore, an old steam-driven centrifugal pump, to serve the Dowels; and the other at Kenardington, a modern installation comprising two horizontal screw type Gwynne pumps which was installed before the recent World War to drain the remainder of the area. These pump the water into the Royal Military Canal.

28. The old pump at Appledore is not satisfactory and the Dowels area lies wet. The Catchment Board have received approval of their proposal to replace the Appledore Pumping Station by a modern one. At the same time the main sewers carrying water to Kenardington and Appledore will be enlarged, deepened and regraded, so that the two pumping stations interconnected hydraulically will together serve not only the 4,250 acres at present pumped but an additional 3,500 acres. The benefits will be two-fold in that a greater area of land will receive directly improved drainage whilst the pumping will reduce the quantity of water entering the head of the main sewers which flow eastward to the Jesson and Marshland outfalls on the coast. It will then be possible in wet periods to maintain lower water levels in these main channels; in addition the enhanced size of the improved channels will give greater storage capacity and thus minimise the effect of evaporation.

29. The Catchment Board also have in mind the construction of new sluices at the Marshland outfall to replace the temporary sluices fitted as a result of bomb damage. The New Romney Marsh Level Internal Drainage Board with the assistance of the Catchment Board are also preparing a pumping scheme for the Greatstone area which it is expected will improve drainage conditions both for the agricultural lands and the built-up area of Greatstone.

30. *Rother and Jury's Gut Catchment Board.* This Catchment Board are responsible for the remainder of Romney Marsh lying west of the Rhee Wall and of the Denge Marsh. This comprises the Walland Marsh, mainly in the Walland Internal Drainage District but partly in that of the Rother Internal Drainage Board, and Pett Level which falls within the area of the Pett Internal Drainage Board.

31. The drainage system of the area as a whole is similar in character to that on the other side of the Rhee Wall. Most of the area drains into the Rother but the drainage of some 4,000 acres is to the Jury's Gut sluice to the east of Camber. This sluice is to be reconstructed and the Jury's Gut sewer will be dredged to obtain full benefit from the reconstruction. Apart from this sewer all the main river amounting to over 20 miles has been dredged in recent years.

32. The most difficult areas to drain are at Brack, 678 acres, Indraft, 282 acres and Barnfleet, 666 acres. Brack and Indraft are already satisfactorily dealt with by the Walland Internal Drainage Board; and consideration is now being given to the possibility of draining the Barnfleet area which is a relatively small part of the Catchment area.

33. By far the most difficult problem facing the Rother and Jury's Gut Catchment Board is the outfall at Rye Harbour because of the littoral drift from west to east and the consequent sealing of the harbour entrance. The problem is one of many years standing. By 1926 conditions had seriously deteriorated: a high shingle spit extended right across the mouth of the harbour and had diverted the channel of the Rother a mile to the east. This blocking of the outfall had a serious effect on the drainage of the Marsh land depending on it. A channel was therefore dredged and both harbour arms were extended. The maintenance of this outfall is the key to the drainage of most of the Board's territory in Romney Marsh and it is likely to be a continuous source of expense and anxiety since the littoral drift along the coast from the west continues to accumulate sand and shingle and necessitates constant dredging of the Rother and periodic extensions of the harbour arm.

34. The Board are at present considering an irrigation scheme for the Walland Marsh section of their area. This tract is entirely dependent on its own rainfall. The average rainfall in the area is 26 inches but the loss from evaporation is 21 inches. The incidence is not constant throughout the year and from April to August evaporation exceeds rainfall by 7.6 inches and the land dries out. This causes considerable difficulty both for the arable farmer and the grazier and the Catchment Board are considering the possibility of making good part of this deficiency by bringing water from the River Rother. The scheme would involve the construction of two pumping stations and forty structures.

35. The foregoing paragraphs (Nos. 20 to 34) are intended to give a general picture of the drainage in the Marsh. We revert to this question in paragraph 94 et seq.

SECTION III.—ROMNEY MARSH AGRICULTURE—PAST AND PRESENT

36. Some appreciation of the agricultural use of the Marsh both past and present is necessary for a proper understanding of the recommendations we make subsequently in this Report for its full and efficient use. The Marsh is popularly thought of as an area of permanent pasture grazed by the famous Kent or Romney Marsh breed of sheep. Up to 1939 this conception was broadly correct, but undoubtedly there has always been a nucleus of arable land in the area which has expanded or contracted according to the economic conditions of the time and which reached its lowest figure in the great depression of the early 1930s. Hall and Russell say:—

“The depopulation of Romney Marsh is said to have begun with the Black Death up to which time it was mainly under the plough; much of it was again broken up at the time of the Napoleonic wars and again about 1850-60 when corn prices were high but since then it has returned to pasture. Many of the field names show that they were at one time arable.”*

* Hall and Russell, *Agriculture and Soils of Kent, Surrey and Sussex*, page 58.

William Cobbett visited Romney Marsh in September, 1823, and his first impression was evidently one of an area devoted to sheep and cattle raising, for he says:—

“In quitting this Appledore I crossed a canal and entered on Romney Marsh. This was grass-land on both sides of me to a great distance. The flocks and herds immense. The sheep are of a breed that takes its name from the Marsh. They are called Romney Marsh sheep. Very pretty and large. . . . The cattle appear to be all of the Sussex Breed. . . . With cattle of this kind and with sheep such as I have spoken of before, this Marsh abounds in every part of it; and the sight is most beautiful.”

But, after travelling from Appledore through Snargate to Brenzett, Cobbett records:—

“The next village, which was two miles further on, was Old Romney, and along here I had, for great part of the way, cornfields on one side of me and grass-land on the other. I asked what the amount of the crop of wheat would be. They told me better than five quarters to the acre. . . . I never saw corn like this before.”

And again of his travels from New Romney to Dymchurch, Cobbett says:—

“From New Romney to Dymchurch is about four miles: all along I had the sea-beach on my right, and, on my left, sometimes grass-land and sometimes corn-land.”*

37. Certainly the agricultural statistics suggest that there was a not inconsiderable area of tillage in the Marsh up to the 1920s. The statistics in the table hereunder cover the parishes of Burmarsh, Newchurch, Dymchurch, St. Mary's, Brenzett, Snargate, Brookland, Ivychurch, Old Romney, New Romney, Lydd, St. Thomas the Apostle, East Guldeford and Broomhill. These parishes fall wholly within the Marsh and account for approximately 40,000 acres of a total agricultural area of nearly 50,000 acres. It is not unreasonable to assume therefore that the statistics give a good indication of agricultural trends in the Marsh as a whole since agricultural returns were first collected in 1866. It will be seen from the table that the tillage acreage declined from approximately 20 per cent. of the agricultural area in the eighties of last century to approximately 7 per cent. in the early thirties of this century; and that there was a sharp rise to 37 per cent. during World War II.

AGRICULTURAL STATISTICS OF CROPS AND LIVESTOCK FOR FOURTEEN PARISHES WHOLLY WITHIN THE ROMNEY MARSH AREA

Year	Tillage acres	Temporary grass acres	Permanent grass acres	Rough grazing acres	Total area, acres	Cattle	Sheep
1866 ...	5,776	711	31,606	—	38,093	1,104	77,168
1870 ...	7,049	472	32,101	—	39,622	1,974	169,960
1881 ...	8,159	1,036	31,971	—	41,166	2,660	172,922
1891 ...	7,819	1,454	33,739	—	43,012	2,838	179,633
1901 ...	6,214	841	33,340	1,845	42,240	2,163	150,401
1911 ...	6,520	767	32,035	2,401	41,723	3,626	165,156
1918 ...	8,018	1,100	30,600	3,366	43,084	3,431	137,196
1921 ...	7,313	1,175	28,834	2,546	39,868	3,256	129,229
1931 ...	2,824	590	32,917	3,145	39,476	3,849	160,057
1939 ...	3,892	765	35,178	3,767	43,602	3,739	178,176
1944 ...	14,141	2,174	21,085	974	38,374	3,509	99,990
1948 ...	13,884	3,654	21,629	1,652	40,819	5,748	98,713

We will briefly consider the agriculture of Romney Marsh during the last eighty years, distinguishing between the period 1866-1939; the War Period 1939-1945; and the present time.

* *Rural Rides*. Everyman Edition, Vol. I, pp. 234-235.

(i) PERIOD 1866-1939

38. Prior to 1939 sheep farming was the principal system of farming in Romney Marsh and the area became world-famous as the home of the Kent or Romney Marsh sheep. This breed, said to be of Flemish origin, is very hardy and well-acclimatised to the bleak and exposed character of the Marsh in winter. Because of their hardiness and ability to adjust themselves to changes of climate, the Romney Marsh sheep were in great demand in New Zealand, Australia and South America where, crossed with a Merino, a good dual-purpose animal was produced. They yield a good clip of wool, have a big frame, and have the additional merit that they graze pastures evenly. They are not, however, very prolific and the lambing average does not compare favourably with other breeds.

39. As mentioned in paragraph 13, the Romney Marsh grazier distinguishes four grades of pasture: fattening pasture, two grades of breeding pasture and rough grazing. Fattening pastures are regarded by many Marsh graziers as almost sacred and it may be true that no complete explanation can yet be given why one pasture will fatten 12 sheep to the acre during the summer months and another nearby will not. Cole and Dubey have correlated the distribution of fattening pastures with soil profile and have pointed out that the fattening pastures occur on the Finn and New Romney Series which have a surface layer of 10 in. to 20 in. of loam to silty loam, the texture becoming heavier with depth but which at the depth of 2 ft. to 3 ft. becomes lighter again. One cannot fail to be impressed by these rich-looking pastures. Their herbage is predominantly perennial rye grass, crested dog's tail, rough stalk meadow grass and wild white clover. A typical fattening pasture examined by Mr. William Davies, then of the Welsh Plant Breeding Station at Aberystwyth, was found to contain 91 per cent. of these four species of which the clover accounted for only 5 per cent. Not all the pastures in the Finn and New Romney Series are however of fattening quality since management plays a part—which suggests that given proper management most of the grass on these two soil series could be brought up to fattening standard.

40. The fattening pastures have not been scheduled on a scientific basis but the local branches of the National Farmers' Union and Central Landowners Association estimate that they amount to nearly 8,000 acres. The line of demarcation between fattening pastures and the best breeding pastures is however difficult to draw and we feel that the area of really first grade fattening pastures is less than this.

41. The fattening pastures and indeed the breeding pastures naturally cannot carry the same number of stock in winter as in summer: there is therefore a considerable movement of sheep out of and into the Marsh in the early autumn and spring respectively. At the end of the grazing season the fat sheep are sold off and the lambs sold or sent away to winter on the upland farms leaving the older sheep to winter in the Marsh at the rate of between two and three per acre. In the spring the sheep agisted on the uplands are brought back and, if necessary, additional sheep purchased to deal with the summer flush of grass.

42. This traditional system of sheep farming depended for its success on the profitability of wool and meat and difficulties were experienced when the price of these commodities declined during the 1930s. An excellent description of the Romney Marsh sheep industry and an analysis of its difficulties at this time will be found in G. H. Garrad's "The Romney Marsh Problem" which was published by the Kent Education Committee in 1936. For overcoming the difficulties he makes certain recommendations which include some diversification of agriculture by the ploughing up of selected breeding pastures for seed and market garden crops.

(ii) WAR PERIOD (1939-1945)

43. The figures given in the table on page 15 show the considerable increase in the cropping acreage which resulted from the Government's food production policy during the war years. On the other side of the picture is a reduction in the sheep population due in part to the reduction in the grazing area and in part to the dispersal of sheep from the Marsh under the threat of invasion in 1940. In that year some 85,000 sheep or nearly 40 per cent. of the sheep population were dispersed to other areas as a result of Government intervention and until March, 1942, the movement of animals into the Marsh was prohibited except under licence.

44. The increase in arable acreage is an indication of the resource and courage of the agricultural community in Romney Marsh. The geographical location of the area necessarily meant that throughout the whole of the war agricultural operations were carried out under considerable difficulties, starting with the threat of invasion of the country in the early part of the war, followed by almost continuous air raids and culminating in the flying bomb menace. Damage was caused to houses, buildings and land. In addition, the activities of the Service Departments in a front line area like Romney Marsh inevitably rendered farming operations more difficult. In spite of these difficulties and uncertainties the agricultural community continued to farm the land and in fact succeeded in increasing the arable acreage more than four-fold.

45. The Marsh farmers had also to contend with circumstances not directly attributable to enemy action. They were asked to change over from an essentially pastoral economy to a system of mixed farming and naturally encountered difficulties which, although not peculiar to the Marsh, were nevertheless real. The traditional system of sheep farming had made small demands on labour and fixed equipment, and none at all on machinery; furthermore, many of the farmers and their workers had only a limited experience of arable farming. However, with the active assistance of the War Agricultural Executive Committees who established camps, hostels and machinery depots on the Marsh these difficulties were overcome.

46. In concluding this account of war-time agriculture in the Marsh we would refer to the 700 acres at the south-western corner of the area known as the Pett Level. By breaching the sea walls, this area of good grassland was flooded as a defence measure during the war. It was reclaimed from the sea in 1944 and some eighteen months were allowed to elapse for the salt to be washed out of the soil during which time the Rother and Jury's Gut Catchment Board cleared the ditches while the East Sussex War Agricultural Executive Committee kept the weeds under control. The Committee rightly decided that the area would be unsuitable for some time for arable cultivation and should therefore be re-seeded. About half the area was re-seeded in 1946 with indigenous wild white clover and perennial rye grass and the remainder was re-seeded in 1947 when the Catchment Board had completed their drainage work. We have inspected this area and seen the successful results which can be achieved by direct re-seeding, even under conditions which might be considered unfavourable.

(iii) THE PRESENT (1948)

47. Hitherto our agricultural statistics have related to the 14 parishes falling wholly within the Marsh, that is, some 40,000 acres of the 49,637 acres of agricultural land in the area referred to us. There are some 15 other Parishes which fall partly within the Romney Marsh area but mainly outside it and

we felt that any attempt to apportion statistics between that portion falling within the Marsh and that falling outside would be open to doubt. We preferred for the purpose of comparison to adhere to statistics which could be justified by reference to the Parish statistics supplied by the Ministry of Agriculture. For 1948, the principal statistics for the whole area are as under:

	<i>Acres</i>	<i>Per cent.</i>
Tillage	17,517	35.3
Grass	32,120	64.7
Total agricultural area	49,637	100.0

Of the total grass it is estimated that 4,690 acres are temporary.

48. There is no doubt of the suitability of the soil for a wide range of crops and that the farmers have in the main taken advantage of this to grow crops that are intensive in production. The crops grown include the following:—

<i>Farm Crops</i>	<i>Crops grown for seed</i>	<i>Market Garden crops</i>
Wheat	Red Clover	Spinach
Oats	Beet	Runner Beans
Beans	Spinach	French Beans
Linseed	Mangolds	Strawberries
Potatoes	Runner Beans	Raspberries
Millet	Dwarf Beans	Beetroot
Peas	Carrots	Parsnips
Mangolds	Swedes	Lettuce
Sugar Beet	Wild White Clover	Sprouts
Kale	Cocksfoot	Cabbage
Rape		Carrots
Swedes		Onions
Barley		Asparagus
Lucerne		
Maize		

The prominence of seed crops in the rotation is a noticeable feature of the farming. The Marsh appears to be particularly suitable for this type of production. Its soil is fertile and its location in relation to sea and land means there is less danger of severe frost and cross-pollination.

49. We have not given statistics in respect of livestock for the Marsh as a whole because there is a considerable seasonal fluctuation in livestock population. The figures given in the table on page 15, however, show that the sheep and cattle population in the 14 Parishes wholly within the Marsh amounted to 98,713 and 5,748 respectively in June, 1948. On this basis, the sheep population of the whole Marsh at that time can be estimated at 120,000 and the cattle population at something over 7,000.

SECTION IV.—A RESTATEMENT OF THE PROBLEM

50. The foregoing pages give some account of the conditions in Romney Marsh so far as agriculture is concerned and with this as a background we are now in a position to consider our terms of reference which fall broadly into three categories:—

- (1) to consider what constitutes the full and efficient use of Romney Marsh for agriculture and in particular to consider the arable acreage which it would be in the national interest to maintain;

- (2) to consider whether the full and efficient use of the Marsh for agriculture is being prevented by reason of work not being carried out or fixed equipment not being provided, and in particular to say what, if anything, would be needed in the way of additional labour, houses, drainage works, hard roads and fixed equipment on farms; and
- (3) to express an opinion whether any work or fixed equipment we recommend can reasonably be expected to be carried out or provided without the Minister exercising his powers of compulsory purchase or hiring under Section 84 of the Act.

SECTION V.—POSSIBLE FARMING SYSTEMS FOR FULL AND EFFICIENT PRODUCTION IN THE MARSH

51. Before we could consider our detailed terms of reference we had first to decide upon the system of farming to be adopted if the Marsh is to be fully and efficiently farmed and make its proper contribution to the country's food production. The task of British farming is to make this country as self sufficient in food supplies as is practicable and the theme of self sufficiency runs through the whole agricultural programme. The need for maximum production is likely to be a long-term one for two reasons. Firstly, there is a world food shortage which will take many years to solve because the world population is rising at a rate from 20 million to 25 million a year and agricultural production is not keeping pace with it. Secondly, even if the food were available, this country is unlikely for some time to come to have the foreign exchange to purchase it, especially as any surplus food-stuffs are likely to arise in the hard currency countries. To meet these difficulties the Government launched, in August, 1947, an agricultural expansion programme calling for an increase of £100 million in agricultural production by 1952. While the emphasis of British agriculture is on livestock and livestock products with the maximum production of home-grown feeding-stuffs, the programme means that 11½ million acres in England and Wales must be under the plough.

52. How best can Romney Marsh make its contribution to food production? We have considered this from the practical point of view, bearing in mind that the nation's resources of labour, material and capital goods are not unlimited, and that any proposals that we put forward must be capable of early realisation. Furthermore, we have felt it necessary to pay some regard to the human element. Whatever proposals we make, farmers and farm workers will in the last resort be responsible for producing the food from the land, and there would be no point in recommending a system of farming which would require specialist knowledge which is not generally available or a large increase in the number of farm workers which it may not be possible to attract into the area.

53. We have considered a number of farming systems which could be adopted in Romney Marsh and of which the following are the principal:—

- (i) Sheep Farming.
- (ii) Dairy Farming.
- (iii) Arable Farming, including Market Gardening.
- (iv) Ley Farming.

(i) SHEEP FARMING

54. Our attention has been drawn on many occasions to the excellence of the Marsh pastures; to the importance of the Romney Marsh breed of sheep; to the traditional skill of the Marsh grazier and to the natural

advantages of the area for sheep farming. It has been suggested that the best long-term use of the area is a reversion to sheep farming on pre-war lines and that under such a system the Marsh would be making its greatest contribution to the national well-being. We do not subscribe to this view. A reversion to sheep farming on pre-war lines would not in our opinion be the full and efficient use of an area as inherently fertile as Romney Marsh. A balanced system of crops and stock will give more food than a system of pastoral farming, however good the stock farming may be. It is not proposed however to pursue this matter at length because we feel that a reversion to the traditional sheep farming system of the Marsh is unlikely. The present trend in the Marsh is already towards a system of ley farming with a balance between crops and stock and in our view this development is likely to continue.

(ii) DAIRY FARMING

55. At present very little dairy farming is carried on in the Marsh and little, if any, milk is sent away. Production is barely sufficient for the needs of the resident population and in the summer months milk has to be imported to meet the needs of the holiday makers on the coastal strip. Nevertheless, there is theoretically no reason why the fine Marsh pastures should not support a system of dairy farming, and there is little doubt that a high standard of agricultural production could thus be achieved. There are however practical difficulties. The bleak and exposed conditions of the Marsh and also the tendency of many pastures to tread in winter, would necessitate proper accommodation for the satisfactory wintering of cattle. There are at present very few premises which are adequate or suitable for conversion to milk production and the provision of the necessary buildings and equipment for intensive dairying would in our view make inordinate demands on material and equipment. It would necessitate a speedy extension of a piped water supply to farms and fields. Although it is eminently desirable that the public water supply should be extended in Romney Marsh in common with all other rural areas, it would be absolutely essential for dairy farming and would involve a much more elaborate and expensive system than would otherwise be necessary.

56. Apart from the practical problems which would be raised by any recommendation in favour of dairy farming in the Marsh there is the human factor which, although not over-riding, cannot be completely ignored. The Marsh farmer has had little or no experience of dairy farming and, even if it were reasonable to expect him to change over to this type of production, we are more than doubtful whether it would be possible to attract into the Marsh sufficient labour to make dairy farming on a large scale a practical proposition.

(iii) ARABLE FARMING, INCLUDING MARKET GARDENING

57. During the past few years a number of arable farmers have migrated into the Marsh and adopted the arable system associated with the fenlands. They have shown a complete disregard of the traditional farming methods in the Marsh and do not withhold the plough even from the fattening pastures. Their plough policy is backed by long experience, necessary capital and modern machinery and they are undoubtedly producing up to a very high standard. We have considered this method of high plough production with the minimum of stock as a possible system for adoption generally in Romney Marsh, and although we accept its immediate advantage to food production if carried out on suitable soils and with the necessary

technical and practical skill, we do not feel for a number of reasons that we can recommend it for general adoption. In the first instance the soils of the Marsh are not uniformly good or of the same structure: they vary from heavy clay to thin sandy soil. The newcomers to the Marsh have naturally selected their soils with some care and the adoption of this system of farming for the Marsh as a whole and on the lighter soils might well lead to "blowing" if the humus content were allowed to fall as a result of an intensive plough policy. There would be, too, an increased danger of crop failures due to overcropping and it would be most unfortunate if diseases such as eel-worm or take-all, for instance, were to establish themselves in the relatively disease-free area of the Marsh. Furthermore, the system makes a relatively high demand for labour. We shall refer to labour requirements in paragraph 82, and, although we allow for an increase in the labour force in the Marsh, we doubt whether sufficient labour would be forthcoming for the arable cultivation of the whole area. Lastly, the system of arable cultivation would mean a very heavy reduction in sheep population. As the Marsh is virtually the home of a hardy breed which has some export value, we consider the system of holding a balance between stock and crops is on the whole safer as a long term policy.

58. It may be suggested that Romney Marsh should be devoted in the main to market garden and horticultural production to make good the loss of market garden land in the Thames Valley to urban development and gravel winning. Many farmers in the Marsh are already successfully growing market garden crops but, quite apart from the practical difficulty of recruiting the necessary labour for intensive market gardening on such a large scale, we should hesitate to recommend market gardening and horticultural cultivation as the main system of farming for the Marsh. There are already signs that, taking the country as a whole, the acreage devoted to such crops is adequate and we feel that any increase in this type of production in the Marsh must come voluntarily as more growers acquire experience in production and marketing and are assured that there will be a market for their produce at a remunerative price.

59. Although we do not recommend a system of arable farming for general application to the Marsh we should like to make it clear that where it can be extended voluntarily it should be given every encouragement subject to proper rotation and safeguards against overcropping.

(iv) LEY FARMING

60. This is the system which seems to us best suited to the needs of the Marsh as a whole to ensure its full and efficient use for agriculture. Not only is it a logical development of the change-over effected during the war years from the predominating system of sheep farming to a system of crops and stock but it is in fact already being practised by a number of Marsh farmers. The ley system is adaptable and is reasonable in its demands on the scarce supplies of labour and materials. It will not only enable the Marsh to make its appropriate contribution to the tillage acreage of the country but will ensure the maintenance of fertility by the periodical resting of the land under grass and also the maintenance of stock-carrying capacity.

61. The adaptability of the ley system is particularly suited to the Marsh. It can be varied to suit local conditions and in particular the inherent fertility of the soil. For example, on the best soils the cropping rotation could be lengthened considerably beyond the normal five or six years, provided always that a proper rotation is practised, appropriate fertilisers

applied, and the humus content of the soil safeguarded. Likewise when this good land is returned to grass it would be sound practice to leave it down for a correspondingly longer period. On second-class soils, where the inherent fertility is not so high, a normal cropping rotation of five years or so would be appropriate before putting the land back to grass for a similar period. Indeed, on these second-class soils a policy of ley farming would not only yield an increased production of tillage crops but the subsequent ley would carry more stock than the original pasture. It may be that tile drainage will be necessary before some of the pastures on the heavier land can be brought into the cropping rotation under a ley system. We anticipate, however, that such pastures would not be amongst the first to be ploughed and that, by bringing them into the ploughing programme at a later date, there will be time to undertake tile drainage where it is necessary.

62. We conclude therefore that a system of ley farming with a proper balance of crops and stock is the appropriate one for the full and efficient agricultural use of Romney Marsh as a whole.

SECTION VI.—THE TILLAGE AREA UNDER A LEY SYSTEM

(i) EXTENT OF TILLAGE ACREAGE

63. Having decided that ley farming is the appropriate system for the Marsh as a whole we are in a position to answer the first of the specific points mentioned in our terms of reference, namely, the extent of the arable cultivation which it would be in the national interest to maintain in the Marsh. We should like to make it clear, however, that a recommendation as to the arable acreage would mean very little unless the proportion of the arable acreage to be devoted to tillage crops was prescribed. The term "arable" includes "tillage" and "temporary grass," and it would be possible to increase the arable acreage by ploughing up, say, 1,000 acres of existing grassland and at the same time putting down to temporary grass an equivalent area of existing ploughland.

64. We therefore feel it essential to prescribe a tillage acreage for Romney Marsh. At the time of our inspection the area under tillage amounted to 17,500 acres, and we recommend that the tillage area should be increased to not less than 20,000 acres. This would mean that under a system of ley farming, with something like 5,000 acres of land under temporary grass at any one time, the total arable acreage of the Marsh would be approximately 25,000 acres or approximately 50 per cent. of the total agricultural area.

65. There should be no undue difficulty in obtaining this increased tillage acreage, but it will be necessary to ensure that the right land is ploughed. There would obviously be little benefit if, simply to hit a tillage target, land capable of yielding only poor arable crops were ploughed whilst the land really suitable for the plough were left under grass. We do not suggest how the area of tillage should be allocated among the holdings in Romney Marsh. The actual choice of land for ploughing must rest with people with an intimate knowledge of the area, but we consider that two areas in particular should make a substantial contribution to the increase in tillage acreage, viz.: the area in Walland Marsh lying between Lydd and East Guldeford, and the district of Burmarsh. The former area contains a high proportion of grassland and has not hitherto been ploughed,

presumably on account of its inaccessibility:- we shall revert to this aspect of the matter in paragraph 92. The latter is more easily accessible but has doubtlessly remained under grass because it is considered to include a relatively high proportion of fattening pasture. In addition, we should expect an extension of the tillage acreage in the vicinity of the Dowels as soon as the Kent Rivers Catchment Board's proposal for improving the drainage has been put into effect (see paragraph 28).

(ii) FATTING PASTURES AND THE PLOUGH

66. There will be a natural reluctance to plough the fattening pastures, but we would not, in principle, exclude them from a system of ley farming since they occur on the best soils and would produce the best arable crops. Nevertheless, we are not suggesting that *all* fattening pastures should be ploughed, for we appreciate the risk of treading temporary pastures in winter and the desirability of retaining a balance of old pasture and new leys on the majority of holdings. There are extensive areas of land—alleged to come within the category of fattening pastures—which cannot be regarded as being fully and efficiently used at the present time. We have in mind particularly the area in Walland Marsh referred to in the last paragraph where there is some of the best potential arable land: we feel that it is a misdirection of our national resources that this land should be left almost entirely under grass. The ploughing of a proportion of this area on a ley system would lead to a substantial increase in food production.

67. Some Marsh farmers consider that after ploughing and cropping the best pastures, they cannot be returned to grass with success and to produce pastures as good as the original. There is, however, evidence to show that the practice of seeding direct without a nurse crop is very satisfactory and that with this system a first class pasture can be obtained in an area of relatively low rainfall such as this more quickly than by undersowing.

(iii) CROPPING PROBLEMS

68. *Choice of crops.* The Marsh soil is particularly suitable for wheat and potatoes and from the considerable variety of crops already grown, a matter to which we have already referred in paragraph 48, there should be no difficulty in selecting a sound rotation. The increased tillage acreage should be devoted in the main to agricultural crops for which prices relative to the cost of production are guaranteed under the Agriculture Act, 1947. Although there is no urgent national need at present to extend market gardening or horticultural production, a system of ley farming will permit a voluntary extension of it as and when justified by the demand.

69. *Excess fertility.* We recognise that for the first few years after ploughing up grassland there will be a problem of excess fertility on the best soils. Many Marsh farmers have already met the problem and are overcoming it by wisely deferring the growing of cereals until the fourth or fifth year in the rotation.

70. *Crop rotation and the avoidance of disease.* The Marsh is relatively free from diseases commonly associated with arable farming and there is no reason why this freedom should not be maintained under a ley system. As we have already said, it would be most unfortunate if the adoption of unsound farming practices such as continuous cropping should result in the introduction of diseases like eel-worm and take-all.

(iv) USE OF MACHINERY

71. Before leaving this Section on the tillage acreage it is appropriate to point out that Romney Marsh is eminently suitable for mechanical farming

on account of its level nature and its freedom from stones. We have heard several complaints about the difficulties of securing delivery of machinery and we would urge that if our recommendation for an increased tillage acreage in Romney Marsh is to be made effective some steps should be taken to ensure the delivery of the necessary farm machinery.

SECTION VII.—LIVESTOCK UNDER A LEY SYSTEM

72. *Sheep.* Although we recommend that a further 2,500 acres of grassland, including some fattening pasture, should be ploughed because it would be making a greater contribution to the nation's food supply under the plough than by grazing sheep, this is not in our view incompatible with the continuance of sheep farming on the Marsh. We are of the opinion that the loss of this amount of pasture need not result in any considerable fall in the number of sheep maintained on the Marsh.

73. The normal practice is to use the best pastures for fattening mature sheep, and these pastures are well managed and in good condition. The second-class pastures are grazed with breeding ewes and growing sheep; growing sheep are heavier in their demands on phosphates from the soil and there appears generally to be insufficient attention given to the need for making good the resultant loss of phosphates on these second-class pastures. We formed the view, and indeed had evidence, that quite often the first-class pastures have been unduly favoured at the expense of the second-class, and that the stock-carrying capacity of the latter could be substantially improved by ploughing, cropping and re-seeding. Under a ley system, most of the second-class pastures would, in fact, come under the plough in due turn. Meanwhile, production from these pastures could be increased by the application of fertilisers, in particular phosphates, which would not only increase stock-carrying capacity but would be reflected later in the higher yields from arable crops. There are in addition poorer pastures on some of the light land soils whose stock-carrying capacity could be considerably improved by direct re-seeding with the application of appropriate fertilisers.

74. *Mixed Grazing.* Sheep are the traditional livestock of the Marsh; relatively few cattle and hardly any pigs are kept. Mixed grazing of sheep and cattle on the fattening pastures is not generally practised but we feel that judicious mixed grazing on the new leys would lead to an increase in meat production and we accordingly suggest that farmers with facilities for the wintering of cattle should consider this possibility.

75. *Pigs.* We also feel that there is scope in the Marsh for an extension of pig keeping and this need not involve elaborate or expensive equipment. In a system of ley farming the pig can play a part in maintaining meat production and also assist in treading straw into manure. It is an economical converter of chat potatoes and tail corn.

76. The full use of all accommodation for wintering stock; the proper use of young pastures with mixed stock; the improved stock-carrying capacity of the new leys as compared with some of the older pastures; a policy of re-seeding direct some of the poor light-land pastures; and the application of more fertiliser to existing old pastures should enable meat production in the Marsh to be maintained at about its present level, whilst the increased tillage acreage would lead to a direct increase in the national food supply.

SECTION VIII.—THE PRE-REQUISITE CONDITIONS FOR A SYSTEM OF LEY FARMING IN ROMNEY MARSH

77. We have recommended a system of ley farming with 20,000 acres of tillage as being the full and efficient use of Romney Marsh and we now consider under the following five main heads what is necessary in the way of work and fixed equipment to enable this system to be permanently adopted.

- (i) Farming Efficiency,
- (ii) Labour and Housing,
- (iii) Buildings and Roads,
- (iv) Land Drainage,
- (v) Public Services.

(i) FARMING EFFICIENCY

78. A system of ley farming such as we propose should present no difficulty to the average Marsh farmer who has gained considerable experience of arable farming since 1940. On any matters of particular difficulty he can seek the advice of the National Agricultural Advisory Service. There are two matters, however, which have a bearing on farming efficiency, namely, non-resident occupation and the size and lay-out of holdings.

79. *Non-resident occupation.* There is a noticeable high proportion of non-resident occupiers in the Marsh. In many cases the farmers reside in towns or villages within the Marsh or on the fringe of it and this is in no way detrimental to farming or food production. In some cases, however, the farmer resides well outside the Marsh and we feel bound to comment on this from the point of view of production from the Marsh land which he occupies. The area held by people residing outside the Marsh is approximately 10,000 acres but of this almost 50 per cent. is in self-contained units and is adequately farmed. There are, however, many cases where the land is merely a by-take to an upland farm and is used in summer for grazing stock and in winter hardly at all. Some of this land was ploughed during the war but many of the occupiers desire to put it back to grass for summer grazing and some have in fact already done so. It has been argued that the occupation of some Marsh land together with an upland farm is a good system since the Marsh provides grazing for the sheep bred on the upland farm and enables the tillage area on the home farm to be extended. But in our view Romney Marsh is generally far too good for use as a by-take and this system is not in the best interests of the full and efficient use of the land. The Marsh land could be more fully productive if brought within the ley farming system with full provision for a sound farming economy of its own and made to carry its quota of cropping acreage. We recommend therefore that the occupiers of these by-takes should not be excused from ploughing in the Marsh on the ground that they are finding their quota of ploughland elsewhere.

80. *Size and lay-out of holdings.* The size and lay-out of holdings is a factor affecting efficiency and the following table, based on statistics supplied by the Ministry of Agriculture, shows the distribution of holdings in the Marsh among various size groups.

<i>Size groups acres</i>						<i>Number of holdings</i>
Under 5	...	...	...	...	...	19
5—9½	...	...	...	...	...	43
10—14½	...	...	...	...	...	36
15—19½	...	...	...	...	...	32
20—24½	...	...	...	...	...	18
25—29½	...	...	...	...	...	27
30—49½	...	...	...	...	...	64
50—74½	...	...	...	...	...	54
75—99½	...	...	...	...	...	26
100—149½	...	...	...	...	...	53
150—199½	...	...	...	...	...	25
200—249½	...	...	...	...	...	17
250—299½	...	...	...	...	...	13
300—399½	...	...	...	...	...	17
400—499½	...	...	...	...	...	4
500—699½	...	...	...	...	...	2
700—999½	...	...	...	...	...	6
1,000—2,499½	...	...	...	...	...	5
						461

We have referred to the suitability of the Marsh for mechanical farming and large units have advantages from this point of view. We do not feel, however, that the present lay-out in the Marsh can be said to be preventing full and efficient production. The Marsh land is so fertile that relatively small holdings will yield a living to a competent and experienced occupier and there are numerous instances of farm workers who have purchased or rented fields as they became available and have now a remunerative, if rather fragmented, holding. The small holdings in the Marsh provide a useful ladder for men of this type.

(ii) LABOUR AND HOUSING

81. *Permanent agricultural workers.* The existing labour force on the Marsh is in the region of 1,250 of which 850 are permanent. These figures exclude the farmer and family labour and average 1 worker for approximately 40 acres.

82. We consider that some 90 additional agricultural workers will be needed of which 50 are required to make good the existing deficiency and 40 to meet the demands that will arise from the increased tillage acreage. These figures are the minimum that will be necessary and the question arises whether this additional labour can be attracted into agriculture in the Marsh. It has been suggested that the Marsh climate is too severe in winter for any but true Marshmen. On the other hand it has been said that agricultural workers could be attracted into the Marsh if modern houses were provided in existing towns and villages.

83. We have already commented on the pleasant character of many of the villages and towns in and around Romney Marsh and we feel that there should be no insuperable difficulty in attracting the modest number of workers which we mention: indeed, we are strengthened in our view by the knowledge that a number of families have come into the Marsh for agricultural employment since 1945. The additional labour should be

housed wherever possible in existing towns and villages where the basic services such as water supply, electricity, sewage disposal, etc., can be made available and where there will be some community life. The need for adequate transport between the villages and the larger centres cannot be over-emphasised ; the inadequacy of the bus services has been mentioned to us on numerous occasions as one reason why workers were often not prepared to live in some of the smaller hamlets. Whilst facilities should be given for improving existing farm cottages in the Marsh we are of opinion that generally speaking the provision of houses for the workers we have in mind should be undertaken by the local housing authorities. The local authorities are responsible for the proper housing of people already within their administrative areas and we understand from our consultations with them that they are willing and anxious to co-operate in every way by providing additional houses to accommodate the increased number of agricultural workers, whether they be recruited from within or without the Marsh.

84. To house the increased labour force which we recommend, 67 houses will be required and we consider that the needs of agriculture will best be served if the houses are located as follows:—

Appledore	...	...	...	...	...	...	3
Bilsington	...	...	...	...	...	...	2
Brookland	...	...	...	...	...	...	5
Camber	...	...	...	...	...	...	2
Brenzett	...	...	...	...	...	...	2
Burmarsh	...	...	...	...	...	...	10
Guldeford Lane Corner	...	...	...	...	...	...	8
Ivychurch	...	...	...	...	...	...	3
Lydd	...	...	...	...	...	...	4
Midley	...	...	...	...	...	...	7
Newchurch	...	...	...	...	...	...	7
Rye	...	...	...	...	...	...	6
Snave	...	...	...	...	...	...	3
Warehorne	...	...	...	...	...	...	5
							67

The locations suggested are existing towns or villages with the exception of Guldeford Lane Corner and Midley. At both these places, however, there are already a few cottages. We feel that there is a good case on agricultural grounds for enlarging these two hamlets although we appreciate that this may mean some improvement in the present system of water supply or, indeed, an extension of the public supply from the nearest convenient main.

85. The local housing authorities are energetically tackling the task of providing houses for agricultural workers now living in the Marsh but under unsatisfactory conditions ; they are to be congratulated on the progress they have made. In the Marsh or adjacent villages over 500 houses were either completed or nearing completion by February, 1949: some 90 had already been let to agricultural workers and another 70 such lettings were confidently expected. The immediate future building programme of the local authorities envisages the erection of another 230 houses and it is not unreasonable to assume that when constructed a substantial proportion of these will also be let to agricultural workers.

86. *Permanent land drainage workers.* In addition to agricultural workers there is a need for labour to undertake maintenance and improvement work on the drainage system. The Kent Rivers Catchment Board have experienced considerable difficulty in recruiting labour suitable for this type of work and they estimate that 75 additional men are required to meet their long-term drainage and sea-defence requirements in Romney Marsh. Maintenance of the land drainage system and the sea-defences is essential if the Marsh is to be fully and efficiently used for agriculture and the provision of the necessary labour on a permanent basis is an urgent need. It is emphasised by the Catchment Board that this labour will only be forthcoming if houses are available. There would be considerable advantage in siting the necessary houses in the existing towns and villages since the larger communities would provide a wider social life and make more economic the provision of basic services. The Kent Rivers Catchment Board have suggested that the houses required might be located as follows and we are of opinion that the Board should pursue this matter further with the Housing Authorities who we have reason to believe will readily co-operate:—

Appledore village	...	...	...	...	...	3
Burmarsh	...	...	...	...	...	5
Dymchurch	...	...	...	...	...	30
Kenardington	...	...	...	...	...	2
St. Mary's Bay	...	...	...	...	...	10
						50

87. *Seasonal agricultural labour.* The question of seasonal labour is bound to arise at peak periods of cultivation and harvesting but this is not a problem peculiar to the Marsh. In common with the rest of the country the Marsh can rely upon some help from harvest camps and the like, but in our view the seasonal labour problem is one for the farmer himself to solve with the assistance where necessary of the Ministry of Labour: a number of farmers are, in fact, already bringing in casual labour from Hastings and other centres of population.

(iii) BUILDINGS AND ROADS

88. We have already dealt with the housing requirements for the increased labour force which will be necessary for a ley farming system with 20,000 acres tillage. There remains to consider the question of fixed equipment. The Marsh as a whole is short of farm buildings. The old system of sheep farming made few demands for fixed equipment: a "looker's" cottage and a wool store were generally sufficient. To provide full sets of farm buildings on traditional lines for an area of some 50,000 acres would be unduly extravagant in labour and material. Nor is it necessary; for it is one of the merits of a system of ley farming with sheep as the principal livestock that its demands for fixed equipment are modest.

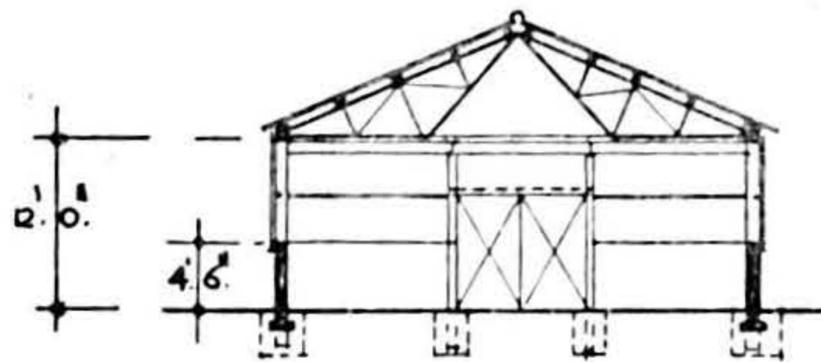
89. *Cattle yards.* Under a ley system fertility can be maintained without the application of large quantities of farm yard manure, providing always that a proper rotation is practised, adequate fertilisers are applied and the land is rested periodically under grass. Whilst not underestimating the advantages of cattle yards in maintaining fertility, we do not regard them as essential to a ley system; moreover, apart from the practical difficulties of providing them of adequate size and in sufficient numbers for an area like the Marsh, we are doubtful whether they would be fully used, if provided.

90. *Other farm buildings.* The main need in the way of buildings is adequate accommodation for implements and for the storage of harvested crops, seed grain, fertilisers, etc. At the present time much of the land under cultivation lacks buildings, and farmers have had to dispose of their produce immediately after harvesting. This may not always be possible. We recommend, therefore, the provision of implement sheds and/or stores on holdings as listed in Appendix I. The buildings we recommend can be constructed quite satisfactorily from the Ministry of Agriculture's standard components and a plan of an implement shed and store suitable for a farm of 200-250 acres is given on page 30.

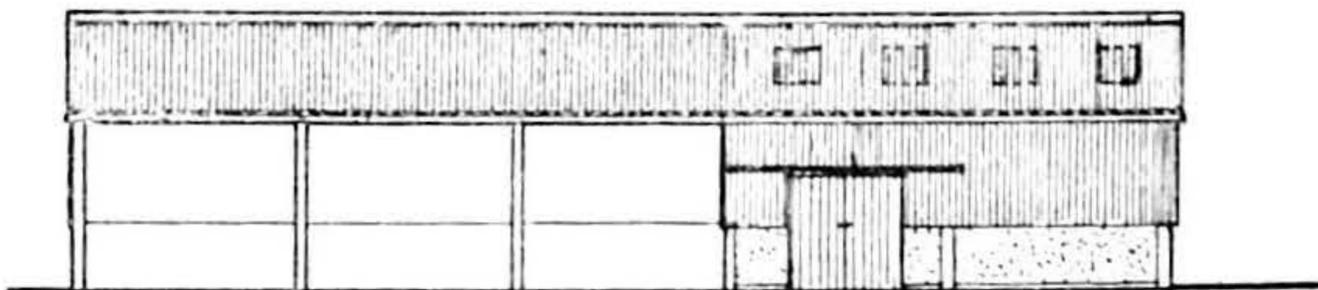
91. *Roads.* For a system of ley farming the land must be accessible by a serviceable road. We are satisfied that in general the Romney Marsh area and, in particular, Romney Marsh proper is adequately served by roads, both public and farm roads. The public roads are tortuous but on the whole well maintained. There is, however, one area where full and efficient production for agriculture is being prevented by the lack of adequate roads, namely, the portion of Walland Marsh lying between Lydd and East Guldeford which, as we have already stated, is particularly suitable for the plough. The area is sparsely populated and it would be unreasonable to expect the County Council to undertake the construction of roads for which there is no public demand.

92. There is under consideration a proposal to construct a trunk road from Rye across Walland Marsh in substitution for the circuitous road at present linking Rye and New Romney by way of Brookland. Although the trunk road will inevitably make some encroachment on agricultural land and access to it will be limited, it will in our view bring some advantages to agriculture. It will not only enable agricultural production from adjoining land to be increased and facilitate the transport of produce to market but it will add to the amenities of the Marsh dwellers. This trunk road is a long-term project which is unlikely to materialise for some considerable time. Meanwhile, the fertile soils of this part of Walland Marsh must be brought into fuller production and this will entail the construction of farm roads. We therefore recommend the construction of approximately four miles of new farm road and the improvement of just over one mile of existing farm roads to enable them to take heavier traffic. Our proposals are shown diagrammatically on Map No. 2 and details showing the reputed owners of the land affected are given in Appendix II. As will be seen, our recommendations include the extension of existing farm roads and this will raise problems of rights of way for the various owners affected. We feel, however, that with good will on all sides this problem can be resolved and that our recommendations, involving as they do the construction of five "feeders" into Walland Marsh, should be sufficient to enable this area to be cropped and brought into a ley system.

93. We do not think it necessary to suggest a particular type of construction but the roads should be serviceable farm roads capable of carrying modern farm traffic. In our opinion the most satisfactory is the reinforced concrete road which, although initially expensive, requires little expenditure on maintenance. The latest figure we have obtained for the cost of laying a suitable concrete road is 15s. per square yard and we are satisfied that expenditure of this order on the roads we recommend would be justified by the improved value of the area of benefit. Indeed, Trinity College, Cambridge and All Souls' College, Oxford, both landowners in the Marsh, have constructed roads of this particular type which appear to be very

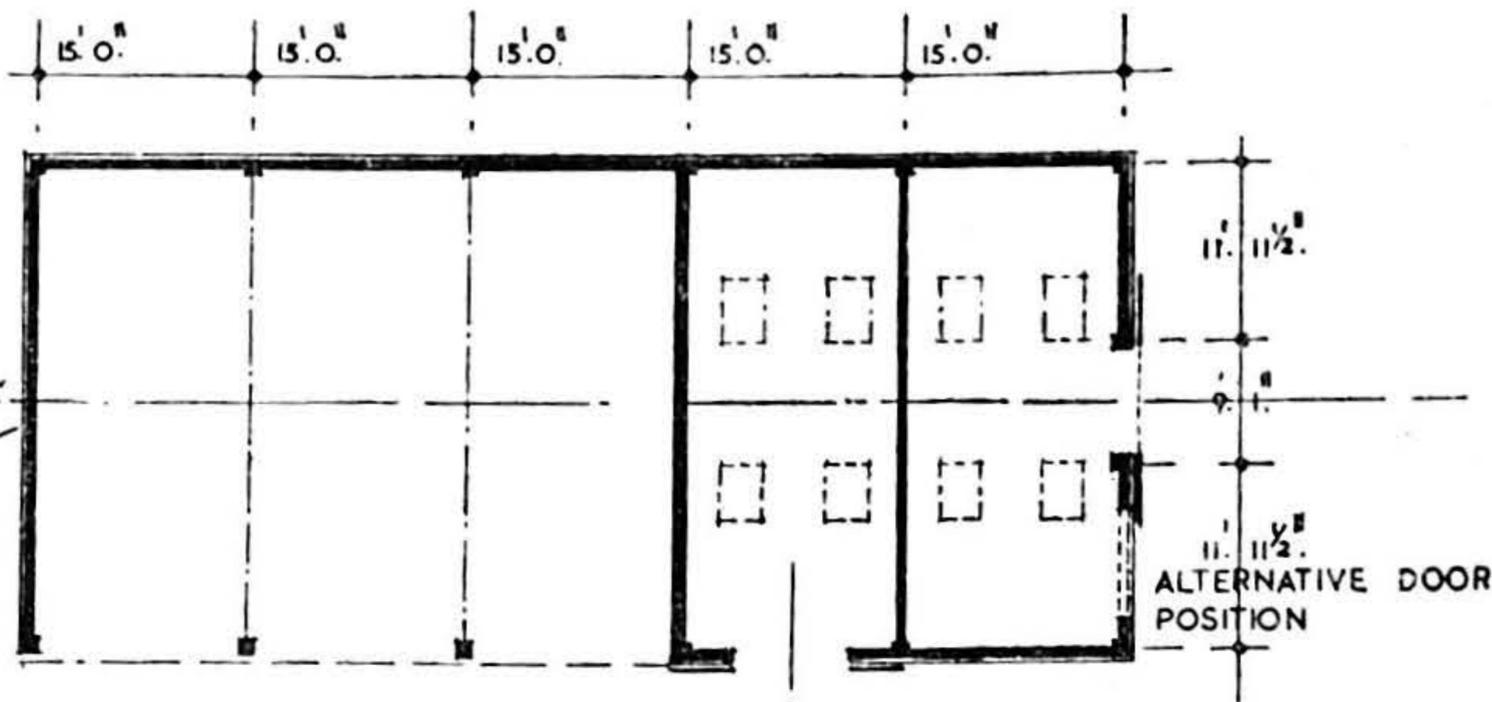
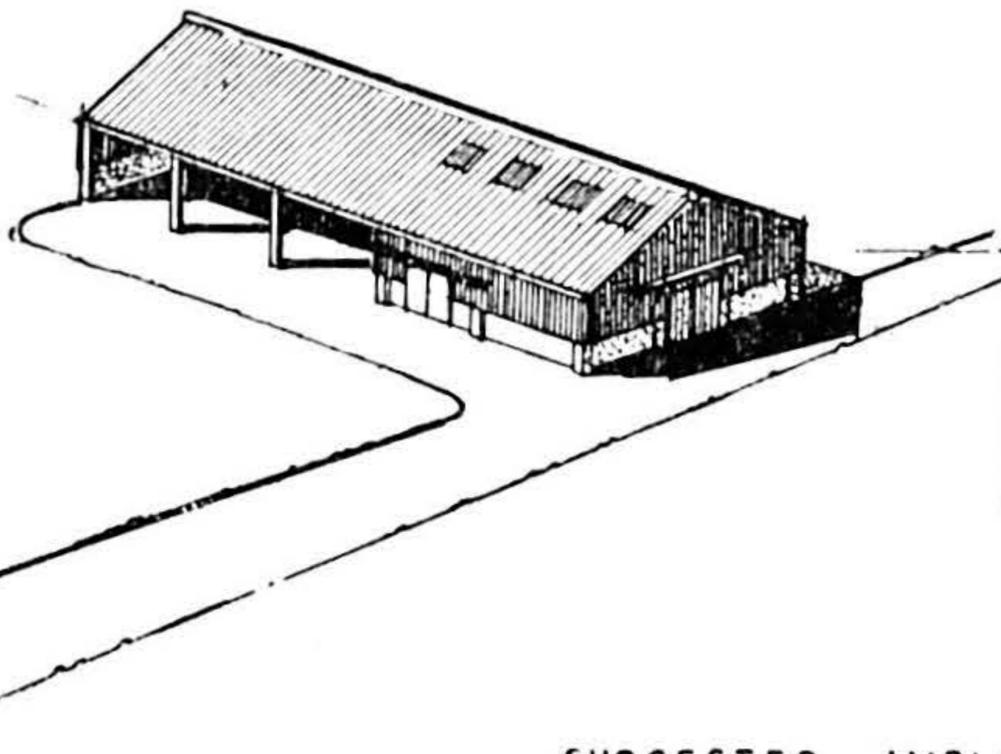


CROSS SECTION



FRONT ELEVATION

30



PLAN

SUGGESTED IMPLEMENT SHED AND STORE
FOR 200.-250. ACRE FARM

satisfactory: there is no doubt that these roads have made possible the more intensive use of the land for agriculture.

(iv) LAND DRAINAGE

94. We have already given an account of the drainage system and sea-defence works and very little remains to be added. We paid special attention to drainage during our visits to the Marsh and we were impressed by the high standard of efficiency achieved by the Catchment and Internal Drainage Boards. There are only two areas where the drainage is not yet as satisfactory as it might be, namely, the Dowels to the south-east of Appledore and the Barnfleet area of Walland Marsh; but these form a small part of the whole Marsh and, as we mentioned in paragraphs 28 and 32, the Catchment Boards already have proposals for their improvement in hand. The major drainage problem in the area is in fact being successfully solved by two very competent Catchment Boards and Internal Drainage Boards with the co-operation of the County Councils. The Catchment Boards and their engineering staffs are to be congratulated on the results achieved which have been facilitated by the cordial relationship existing among the various bodies interested.

95. *Rushes.* Some reference must be made to the prevalence of rushes in Romney Marsh since their presence is usually attributed to bad drainage. We found that rushes were often flourishing where the water table was some feet below the surface and we formed the opinion that their presence is not necessarily a sign of bad drainage. The eradication of rushes is a matter of some difficulty for even after successive ploughing they will appear in a re-seeded ley. Rushes can, and of course should, be kept in check by frequent mowing. They may still remain an eye-sore to the passer-by but they will be considerably weakened and detract little from the feeding value of the pasture.

96. *Sewers and Fences.* One of the problems which we were warned to expect was a conflict of interest between the arable farmer and the grazier on the level of the water maintained in the sewers—the arable farmer requiring a lower level and the grazier a higher one. This conflict of interest undoubtedly exists but in fact we heard very few complaints and we came to the conclusion that the Catchment Boards had effected a good compromise. On one or two occasions we were told that the lowering of the water level for arable cultivation had caused some of the sewers to dry out and to lose their value as wet fences against stock. In our view, however, it is too much to expect a drainage channel in all seasons to perform the dual role of drain and fence. In the interests of food production the grazier must, where necessary, provide fencing.

97. *Investigation into water levels.* Although the two Catchment Boards maintain a water level generally satisfactory to both the grazier and the arable farmer, this level has been determined empirically over a period of years. No attempt is made to vary it to suit a particular type of soil or a particular crop and indeed there is little or no scientific evidence on which such variation could be made. We feel that in Romney Marsh where drainage is so much under man's control there are facilities for conducting experiments on the water level appropriate to different types of soils and crops. The information so gained would be of considerable scientific and practical value. Work on these lines has, we believe, already begun in Holland and we recommend that consideration should be given to the possibility of undertaking similar experimental work in Romney Marsh in which the drainage engineer, the scientist and the farmer could co-operate.

98. *Farmers ditches.* The maintenance of the existing drainage system in a state of full efficiency will need constant vigilance not only on the part of the Drainage Authorities but also on the part of the farmers who, by neglecting their private ditches, might very well cause trouble beyond the boundaries of their own holding.

(v) PUBLIC SERVICES

99. *Water supply.* The Romney Marsh area is served by the following authorities:—

- Mid-Kent Water Company.
- Littlestone-on-Sea and District Water Company.
- Battle Rural District Council.
- Elham Valley Water Company.
- Hastings Corporation.
- Hythe Borough.
- Tenterden Rural District Council.

The Mid-Kent Water Company and the Littlestone-on-Sea and District Water Company between them cover the greater part of the area.

100. We are grateful to these Authorities for supplying us with particulars of the public mains in the area and with such proposals as they have in mind for extensions. This information is given on Map No. 1. There is water in every Parish in the Marsh with the exception of Broomhill which includes Camber, but it is understood that water will be available to this area when the new reservoir at present under construction by the Hastings Corporation is completed. The line of this extension is still under discussion and that shown in Map No. 1 must be regarded as provisional.

101. There are, nevertheless, many farms in the area which have no piped water supply. Some rely on shallow wells and others on rain-water storage. Neither source is satisfactory. The wells often yield a brackish water and, like rain-water storage, they tend to fail in dry periods: there are numerous farms where at some period of every year water has to be carried. A piped water supply is an amenity which should be extended to rural areas immediately conditions permit and we realise that this is the policy of H.M. Government. The Romney Marsh area is probably no worse off so far as public water supply is concerned than many other rural areas in England, although it is difficult for private owners to provide an alternative supply by boring owing to the brackish nature of the water. Whilst it would be inappropriate to single out Romney Marsh as an area where the inadequacy of the water supply is preventing full and efficient production, the inadequacy must obviously have some effect on production and cause unnecessary hardship to the farming community: it is certainly preventing any considerable extension of dairying in the area. Furthermore, as mixed grazing becomes more general under a ley farming system a piped water supply will become more and more essential if the maximum production from the new leys is to be obtained.

102. We therefore recommend that the water authorities concerned should give urgent consideration to the extension of the public water supply system in Romney Marsh and we would suggest that the extensions indicated on Map No. 1 and detailed in Appendix III should be given some priority as they are in our view particularly desirable in the interests of agriculture. When the mains are extended there is no doubt that owners and occupiers of agricultural land in the Marsh will be only too ready to take advantage of the grants in aid of farm water supply and will connect up with the mains.

103. *Electricity.* This is again one of the basic services which it is the Government's policy to see extended to rural areas as quickly as conditions allow. The present supply lines are shown on Map No. 1 but we ourselves put forward no specific recommendations. This does not mean that we do not appreciate the importance of electricity in rural areas. It not only adds to the amenities but its installation in farm buildings often makes possible more economic use of scarce agricultural labour. However, the lack of electricity is not, in our view, preventing to any appreciable extent the full and efficient use of the area for agriculture, and we would not suggest that Romney Marsh is in greater need of electrification than the English countryside generally. We express the hope nevertheless that the South-Eastern Electricity Board will speed up the extension of their supply lines in the area and take steps to improve the supply in the Appledore District where, we are told, the voltage is at present inadequate.

104. One administrative point of some importance about the installation of electricity on farms came to our notice during our investigation. Apparently, the South-Eastern Electricity Board normally require farmers to pay their contribution to the capital cost of installation in a lump sum, and this falls heavily on the agricultural community. We feel that it would be of considerable advantage if a system could be devised whereby the farmers' contribution could be spread over a period of years.

SECTION IX.—OTHER MATTERS AFFECTING AGRICULTURE IN ROMNEY MARSH

(i) INVESTIGATION AND RESEARCH

105. The change-over from a sheep economy to a system of ley farming with nearly 50 per cent. arable may raise technical problems. The National Agricultural Advisory Service are, however, available for guidance and advice on matters of this kind and they can, if necessary, call upon specialist knowledge. It has been suggested that Romney Marsh presents such special problems that any further change in the farming system there should be deferred until further investigational and research work has been carried out. We do not agree with this. The particular feature about the Marsh is its controlled high water table and we have already suggested in paragraph 97 that the opportunity should be taken of carrying out some investigation into the relationship between the water level and various types of soils and crops.

106. There are of course many problems which with the changed system of farming in the Marsh could with advantage be investigated, including, for example, the best methods and times for re-seeding pastures where the water table is relatively high and the rainfall relatively low. But these problems, to which we understand Wye College is already giving thought, need not delay the introduction of a ley farming system in the Marsh. Facilities for their investigation already exist and we hope that the scientists, farmers and landowners will readily co-operate in any investigational work that may be put in hand.

(ii) FUTURE PLANNING AND LAND USE

107. In accordance with our terms of reference we have restricted our investigation in Romney Marsh to problems connected with its full and efficient use for agriculture. We have avoided trespassing upon the fields of town and country planning but we must stress the high quality of the land in the Marsh and the need for preserving it for agricultural use for

all time. Fortunately, the urban development which has already taken place is restricted in the main to the poorer land along the coast but there is evidence of encroachment on some of the better land and in particular we saw some very good land to the north side of the Dymchurch Railway used as a camp site. In our opinion this is indefensible when the need for food production is so important and when there is moreover between the Dymchurch Railway and the sea an area of land so poor or so affected by existing urban development as to be of little long-term agricultural value.

SECTION X.—CONCLUSION

(i) SUMMARY OF RECOMMENDATIONS

108. Having now covered the first two parts of our terms of reference we are in a position to express an opinion whether the recommendations we make can reasonably be expected to be undertaken without the Minister exercising his powers of compulsory purchase or hiring under Section 84 of the Agriculture Act, 1947. Our principal recommendations may be summarised as follows:—

- (i) Ley farming is the proper system for general adoption in Romney Marsh to ensure full and efficient use of the land for agriculture (paragraph 62); although intensive arable farming and market gardening should not be discouraged where conditions are suitable (paragraph 59).
- (ii) In the national interest there should be maintained in Romney Marsh a minimum tillage area of 20,000 acres which, allowing for the area necessarily under temporary grass, will give an arable acreage of 25,000 (paragraph 64).
- (iii) An additional permanent agricultural labour force of some 90 workers will be necessary (paragraph 82).
- (iv) Sixty-seven houses will be required for the additional labour force and these should be provided by local housing authorities (paragraphs 83 and 84).
- (v) The 50 houses estimated by the Kent Rivers Catchment Board to be required for the 75 additional permanent drainage workers should be sited in existing towns and villages and the Catchment Board should pursue this matter with the local housing authorities (paragraph 86).
- (vi) Fixed equipment should be provided as follows:—

(a) 45 Implement sheds	}	(Paragraph 90 and Appendix I).
(b) 30 Stores		
(c) Four miles of new farm road and the improvement of just over one mile of existing road. (Paragraph 92 and Appendix II).		
- (vii) Consideration should be given to the possibility of taking advantage of the controlled drainage of Romney Marsh to investigate the relationship between the water level and the various types of soils and crops (paragraph 97).
- (viii) The Public Services of water and electricity should be extended as quickly as circumstances permit but priority should be given to the extension of the water mains recommended (paragraph 102 and Appendix III).

(ii) COMPULSORY PURCHASE OR HIRING UNDER SECTION 84 OF THE AGRICULTURE ACT, 1947

109. In our view the occupiers in the Marsh can reasonably be expected to adopt a ley farming system with a minimum of 20,000 acres of tillage.

110. The cottages required for the additional agricultural workers can be provided by the housing authorities who have already intimated their willingness to co-operate by building the required number.

111. The fixed equipment recommended will involve landowners in the Marsh in some expenditure but we consider that they can reasonably be expected to provide it, bearing in mind the facilities open to them for obtaining loans for capital works of this nature and the provisions of the Income Tax Act, 1945.

112. We conclude therefore that all the recommendations we have put forward for work to be carried out and fixed equipment to be provided for the full and efficient use of the land can reasonably be expected to be put into effect by the owners, lessees and occupiers in Romney Marsh, and we do not consider it is necessary for the Minister to exercise his powers of compulsory purchase or hiring under Sub-section 1 of Section 84 of the Agriculture Act, 1947.

We have the honour to be,

Sir,

Your obedient Servants,

(Signed) FREDERICK J. BURROWS
Chairman.

C. BRYNER JONES
GEOFFREY J. BOURKE
WATSON JONES
F. V. WYLIE

C. H. A. DUKE, *Secretary.*

20 September, 1949.

Agricultural Land Commission,
9, South Street,
London, W.1.

APPENDIX I

Holdings on which additional Buildings are Recommended (Vide Paragraphs 88-90)

Reputed Owner	Reputed Occupier	Name of Holding	Buildings recommended
All Souls' College, Oxford	G. T. Paine ...	Sandylands, Broomhill.	Implement shed and store.
All Soul's College, Oxford	H. Finn-Kelcey & Ashworth.	Scotney Court, Lydd	Implement shed and store. (Adaptation of existing buildings).
All Souls' College, Oxford	A. B. & J. Long...	Lower Agney, Lydd	Implement shed and store.
Bailey & Cogger, High Street, Tonbridge.	C. Paine ...	Cheyne Court, Brookland.	Implement shed.
F. A. Baker, Lord's Land, East Guldeford.	Owner/Occupier...	Lord's Land, East Guldeford.	Implement shed and store.
R. Balcomb, Melgrove Villa, Lydd.	Owner/Occupier...	Horsebones, Lydd	Implement shed
G. Barton, Brisley Farm, Kingsnorth.	Owner/Occupier...	Land at Stockbridge, Snave.	Implement shed.
E. E. Bath, Laurel House, New Romney.	Owner/Occupier...	Golding Land, Brookland.	Implement shed and store.
Messrs. Bevin and Felin, c/o J. H. E. Hobbs.	J. H. E. Hobbs, Stone Farm, Saltwood, Hythe.	Burmarsh Land, Burmarsh.	Implement shed and store.
G. Body, Waystreet Farm, Ruckinge.	Owner/Occupier...	Oxpound, Newchurch	Implement shed and store.
Bracher, Son and Miskin, Star House, Maidstone.	C. Paine ...	Land near Terry House, Snargate.	Implement shed.
H. Burra, Springfield, Playden.	J. Saunders and Sons.	Land at Camber ...	Implement shed and store.
G. Carey, Hothfield, Kent	J. A. Weller ...	Land in the Dowels, Kenardington.	Implement shed.
A. B. Catt, Mount Farm, Warehorne.	G. N. Boulden and Sons.	Hurst Farm, Hurst...	Implement shed and store.
Christ Church College, Oxford.	H. F. Clemen ...	Manse and Goose Land, St. Mary's.	Implement shed and store.
A. Clifton, Court Lodge, Appledore.	Owner/Occupier...	Brockmans Land, East Guldeford.	Implement shed and store.
A. Clifton, Court Lodge, Appledore.	A. B. & J. Long ...	Knatchbull Land, Ivychurch.	Implement shed and store.
W. Cook, Mount Farm, East Guldeford.	Owner/Occupier...	Mount Farm, East Guldeford.	Implement shed and store.
W. E. Crump, Stoddard Farm, Beckley, Sussex.	A. T. Skinner ...	Puddick Land, Brookland.	Implement shed.
Major Teichman Derville, Red House, Littlestone.	S. Buck ...	Manor Farm, Snave	Implement shed.
Mrs. Duthoit, Bridge Farm, Warehorne.	J. A. Duthoit ...	Land at Stockbridge, Snave.	Implement shed.
Exors. F. E. Fehr, Slodden Farm, Dymchurch.	L. R. Uden ...	Willow Pound, Dymchurch.	Implement shed and store.
E. Finn, North Street, New Romney.	Owner/Occupier...	Ballard Land, New Romney.	Implement shed.
H. F. Finn-Kelcey, Estate Offices, Lyminge, Kent.	Owner/Occupier...	The Hague, Burmarsh	Implement shed and store.
W. J. Finn-Kelcey, Scots Hall, Smeeth.	Owner/Occupier...	Scots Marsh, Lydd	Implement shed and store.
W. E. Frith, Willow Farm, Clench Norton.	Owner/Occupier...	Shipton Land, Eastbridge.	Implement shed and store.
Mrs. Godden, New House Farm, Bilsington.	A. Godden ...	Jimmetts Land, Snave	Implement shed and store.
F. A. Griffin, Windy Ridge, Brede.	Owner/Occupier...	Land at Guldeford Lane, Corner.	Implement shed and store.

Reputed Owner	Reputed Occupier	Name of Holding	Buildings recommended
E. C. Heritage, Coolinge Farm, Folkestone.	J. A. Heritage ...	Stone Reaches, Burmarsh.	Implement shed and store.
Exors. A. Hickman, c/o Swan and Co., Bank Street, Ashford.	T. H. Chown ...	Codhall Farm, Brenzett.	Implement shed and store.
Higham Farms, Ltd., The Strand, Rye.	Owner/Occupier...	Kent Ditch Land ...	Implement shed and store.
Kent County Council, Maidstone.	R. Blacklocks ...	Isles Bridge, New Romney.	Implement shed.
S. Little, Borough Green, Kent.	S. E. Homewood	Land at Turngates Bridge, St. Mary's.	Implement shed and store.
S. May, Sharvells Farm, Peasmarsh.	H. Terry	Land near Iden Lock, Iden.	Implement shed and store.
F. Nevard, c/o Burtenshaw and Sons, Tenderden, Sussex.	G. N. Boulden and Sons.	Frogmore, Hurst ...	Implement shed.
R. Piper and Sons, Coghurst, Hawkhurst.	East Sussex Agricultural Executive Committee.	Castle Farm, Rye ...	Implement shed and store.
R. Piper and Sons, Hawkhurst.	T. Glass	Upper Agney, Lydd	Implement shed.
C. J. Player, Cameron, Stone in Oxney, Kent.	G. Coleman ...	Land near Boonhill Bridge, Playden.	Implement shed and store.
B. E. Prior, Running Waters, New Romney.	E. Prior	Kemp's Hill, New Romney.	Implement shed.
C. Southerden, Prospect Farm, Old Romney.	Owner/Occupier..	Prospect Farm, Old Romney.	Implement shed.
R. H. Stoneham, Tylands Lane, Maidstone.	Owner/Occupier...	Land near Appledore Station.	Implement shed and store.
F. R. Swain, Dungdale Farm, Pembury.	Owner/Occupier...	Land near Appledore Station.	Implement shed and store.
Trinity College, Cambridge	J. Tetley ...	Tame Lane, Burmarsh	Implement shed and store.
J. and S. Waddell, Hope-all-Saints.	Owner/Occupier...	Bald Head, New Romney.	Implement shed.
H. L. Wimble, Manor Farm, Newchurch	Owner/Occupier...	Pt. Manor Farm, Newchurch.	Implement shed and store.

APPENDIX II

New Farm Roads and Improvements to Existing Farm Roads Recommended (Vide Paragraphs 91-93)

Location of proposed work	Approximate length of road	Reputed owners of land through which road would pass	Reputed owners of land which the roads will serve
New road extension from Money Penny to Sisley Land (O.S. No. 28).	yds. 2,700	R. Vinson, Nettlestead Place, Wateringbury.	R. Vinson ... 290 acres W. Cooke ... 140 " J. H. Cooke ... 157 " Higham Farms ... 117 " J. Saunders ... 14 " <hr style="width: 10%; margin-left: auto; margin-right: 0;"/> 718 " <hr style="width: 10%; margin-left: auto; margin-right: 0;"/>
New road extension from Little Cheyne Court Corner to boundary Messrs. Cooke and Long's land (O.S. No. 470).	900	A. Clifton, Court Lodge, Appledore.	A. Clifton ... 283 "
New road extension from Little Scotney to Lower Agney.	1,750	All Souls' College, Oxford.	All Souls College 471 "
New road extension from the ex-Air Ministry road to Scots Marsh (O.S. No. 1).	800	W. J. Finn-Kelcey, Scots Hall, Smeeth. <i>Note: The ex-Air Ministry road passes over land belonging to R. Piper and Sons.</i>	W. J. Finn-Kelcey 212 "
(i) Improve road from Wall House Farm to Sandylands.	700	All Souls' College, Oxford.	} All Souls' College 234 " F. Reeves ... 89 " G. C. Baker ... 32 " <hr style="width: 10%; margin-left: auto; margin-right: 0;"/> 355 "
(ii) New road extension from Sandylands to Corner of Mr. G. T. Paine's land (O.S. No. 110).	900	All Souls' College, Oxford. F. Reeves, Lea Farm, Peasmarsh.	
Improvement of existing road to Upper Agney.	1,150	R. Piper & Sons, Coghurst, Hawkhurst.	J. Piper ... 310 "

Total length of new road—4 miles
Improvements to existing roads—1 mile

} Area of benefit: 2,350 acres (approx)

APPENDIX III

Water Supply Extensions Recommended (Vide Paragraphs 99-102)

From existing supply at	Estimated length of piping required	Water Supply Authority concerned
Hurst Farm, Eastbridge to Oak Farm, Hurst.	yards 600	Mid-Kent Water Company.
Honeywood Farm to Frogmore ...	1,400	" " "
Ham Mill Green to Nest Cottage ...	900	" " "
Cuckolds Corner to Bridge Farm, Warehorne.	2,800	" " "
Snargate to Bowdell	900	" " "
Brookland to Ashen Tree Land ...	1,600	" " "
Puddledock Bridge to King Farm ...	2,800	" " "
Rhee Wall to Prospect House and Beggars Bush, Brenzett.	300	" " "
Stockbridge to Oxpound	2,300	" " "
Newchurch to Norwood	1,600	" " "
Road Junction south of Chapel Farm to Orgarswick.	1,300	Mid-Kent Water Company and vacant statutory area.
Hurst Farm, Eastbridge, to Lone Barn Farm, West Hythe.	5,500	Mid-Kent Water Company and Elham Valley Water Company.
Starveacre Bridge to Brodnyx Road via Turngates Bridges.	3,100	Mid-Kent Water Company and Littlestone-on-Sea and District Water Company.
The corner near Hope Farm, New Romney, to Poplar Pound.	1,500	Littlestone-on-Sea and District Water Company.
Westbrook House, Lydd, to Birds Kitchen.	800	" " "
Lydd Station along the New Romney Road.	1,600	" " "
Camber to Broomhill House with extensions to Wallhouse Farm and Broomhill Farm.	4,200	Hastings Borough Corporation.
Money Penny Corner, East Guldeford, to Beach Field.	1,300	Battle Rural District Council.
East Guldeford to Lamb Farm, Gulde- ford Lane Corner.	4,000	" " "
	21 miles 1,540 yds.	

S. No.	Name of Industry	Nutrient Analyses of meals										Calories
		Proteins		Fats (g)	Carbo- hydrates (g)	Minerals		Vitamins				
		Total (g)	Animal (g)			Ca. (g)	Fe. (mg)	A (I.U.)	B1 (I.U.)	C (mg)		
(1)	(2)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	
<i>VI.—Details of meals served at annas 8 per plate.</i>												
1	Air India, Ltd.	34.6	4.8	31.8	148.6	0.40	11.8	474	266	17	1,020	
1	Do.	42.7	17.7	42.3	131.8	0.25	12.2	366	288	17	1,079	
2	Allied Chemicals, Ltd.	39.1	15.8	30.9	131.4	0.25	14.8	268	104	17	960	
5	B. E. S. T. Colaba Depot	22.7	8.4	32.6	101.9	0.18	7.9	425	202	22	792	
15	Burmah Shell Refinery (Workers)	29.6	10.5	51.4	146.0	0.26	10.2	679	253	32	1,165	
16	Do. (Clerical Staff)	28.3	10.5	51.2	137.9	0.25	9.6	667	233	32	1,126	
19	Central Railway, V. T.	27.3	3.6	35.0	122.1	0.35	9.7	519	195	30	913	
28	Firestone Tyre and Rubber	20.5	..	44.0	110.1	0.21	12.2	1,541	209	47	918	
30	Geoffery Manners Co.	23.5	..	26.0	156.3	0.21	13.3	1,639	214	49	953	
35	Hind Cycle, Ltd.	24.1	2.4	32.7	113.3	0.40	15.0	2,777	194	65	844	
44	Indian Naval Dockyard	30.3	15.4	38.6	102.3	0.24	9.8	1,748	188	27	878	
61	Oriental Metal Press Works	31.9	2.3	30.5	176.6	0.34	11.1	499	183	25	1,108	
79	Volkart Bros.	31.6	1.6	32.6	144.8	0.25	11.1	372	218	18	993	
84	Arvind Mills, Ltd.	44.3	0.3	55.8	250.7	0.40	25.5	3,056	439	56	1,682	
85	Calico Mills, Ltd.	29.9	0.4	31.6	163.4	0.20	15.8	1,058	356	61	1,057	
94	Ammunition Factory	26.3	1.2	17.7	139.8	0.19	11.4	510	194	23	824	
101	CIBA Pharma, Ltd.	29.5	..	21.6	176.9	0.15	11.7	194	177	34	1,020	

APPENDIX F—cont.

Composition of meals in Ozs.

S. No.	Name of Industry	Composition of meals in Ozs.									
		Cereals	Pulses	Leafy vegetables	Non-leafy vegetables	Fruits	Sugar and gur	Oil and ghee	Milk	Fleshy food	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
<i>VII.—Details of meals served at annas 10 per plate.</i>											
11	Bombay Tel. Workshop	6.3	0.3	..	4.1	..	0.4	0.2	..	1.6	
52	Firestone Tyre and Rubber Co.	4.0	0.8	1.0	4.2	..	..	1.5	..	2.0
52	Khatau M. Mills (Staff)	5.7	1.0	1.0	6.7	1.3	0.6	1.3	3.0	..	
69	Shree Ram Mills (Staff)	7.1	3.3	0.9	9.1	..	1.1	1.0	2.8	..	
79	Volkart Bros.	4.3	1.8	..	3.2	..	..	1.0	1.3	1.6
101	CIBA Pharma, Ltd	6.2	1.7	..	4.9	..	..	0.7	..	2.3

Nutrient analyses of meals

S. No.	Name of Industry	Nutrient analyses of meals									
		Proteins		Fats	Carbo- hydrates	Minerals		Vitamins			Calories
		Total (g)	Animal (g)			Ca. (g)	Fe. (mg)	A (I.U.)	B1 (I.U.)	C (mg)	
(1)	(2)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
<i>VII.—Details of meals served at annas 10 per plate.</i>											
11	Bombay Tel. Workshop	29.3	7.7	14.5	162.4	0.15	11.1	377	131	27	898
52	Firestone Tyre and Rubber Co.	31.0	10.5	51.6	110.1	0.30	13.6	1,559	243	47	1,029
52	Khatau M. Mills (Staff)	31.5	3.7	46.3	190.9	0.45	18.0	2,608	334	78	1,307
69	Shree Ram Mills (Staff)	54.0	3.4	37.6	256.6	0.53	26.8	1,852	489	80	1,581
79	Volkart Bros.	34.8	10.0	38.3	131.5	0.29	10.8	351	223	18	1,010
101	CIBA Pharma, Ltd.	39.3	11.6	30.2	188.8	0.24	11.3	333	214	24	1,184