

Development Brief

Abbott Laboratories Limited
Land East of Whiteway Road
Queenborough, Isle of Sheppey



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Development Brief

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1

Introduction

- 1.1 This development brief has been prepared by Terence O'Rourke on behalf of Abbott Laboratories Ltd. The brief is a requirement of policy B23 of the adopted Swale Borough Local Plan, July 2000.
- 1.2 Policy B23 of the Swale Borough Local Plan identifies Abbott Laboratories land, east of Whiteway Road, Queenborough, as being suitable for development relating to the existing pharmaceutical/health care works sited on the west of Whiteway Road. The land is generally defined by a boundary with Whiteway Road to the west and north, and the A249(T) Brielle Way to the east. The settlement of Queenborough forms the southern boundary.
- 1.3 The Local Plan proposals map is reproduced in Figure 1.1, which shows the policy designations and the existing Laboratory facility, in context with the rest of Queenborough. The adopted policy is shown at Figure 1.2.
- 1.4 The site forms part of an expanse of the North Kent coastal grazing marsh that includes the Diggs, Sheppey Court and Minster Marshes, stretching approximately 4 km to the northeast. It is designated as a Site of Nature Conservation Interest in Kent; hence in accordance with policy E2 of the Local Plan, any development on this site has to pay particular regard to the nature conservation interest on site, and provide an equivalent and viable area of land to compensate for and mitigate against any habitat loss.
- 1.5 This development brief sets out:
 - the planning policy context
 - an appraisal of the existing site
 - why the site is required for development
 - Abbott Laboratories' plans for the future development of the land designated under policy B23



Figure 1.1: Local Plan proposals map

- an appraisal of the effects of the proposals, and
 - how the nature conservation interest on site will be re-established elsewhere.
- 1.6 This development brief has been based upon the following information:
 - (i) a landscape appraisal produced by Terence O'Rourke
 - (ii) an environmental scoping report produced by Terence O'Rourke and agreed with Swale Borough Council
 - (iii) a phase II geo-environmental site assessment by Gibb Ltd.
 - (iv) breeding bird survey reports by Ecological Planning & Research
 - (v) discussions with English Nature on the nature conservation mitigation and compensation measures, and
 - (vi) a Transport Assessment by TPK Consulting, including a draft site travel plan.
 - 1.7 Abbott Laboratories control all the land east and south of Whiteway Road. This land is divided into three separate parcels, as shown in Figure 1.3. This development brief focuses on Area 1, as this will be where the main development will occur and where the nature conservation interest is most significant.

Policy B23

Land is identified east of Whiteway Road and south of West Minster as indicated on the Proposals Map specifically for development relating to the existing pharmaceutical/health care works sited on land west of Whiteway Road (currently known as Abbott Laboratories), being land within the company's sole ownership, and for which the Borough Council has accepted there is an overriding need.

Development shall take place:

- (1) subject to the Borough Council being satisfied that it cannot be accommodated on the existing site west of Whiteway Road;
- (2) subject to the agreement of the Borough Council, and having regard to the advice of English Nature, to a package of on-site mitigation and/or off-site compensatory measures that will ensure that the loss of nature conservation interest in the policy area is minimised and that there is no net loss of the key nature conservation interest of grazing marsh in the locality;
- (3) only in accordance with a comprehensive development brief to be approved by the Borough Council, including a programme that will ensure that adequate physical mitigation and compensation measures for nature conservation are undertaken before development commences, and that an appropriate management and monitoring programme is in place; and
- (4) subject to any necessary legal agreements being secured, including arrangements for the long-term management of any mitigation and compensatory habitats.

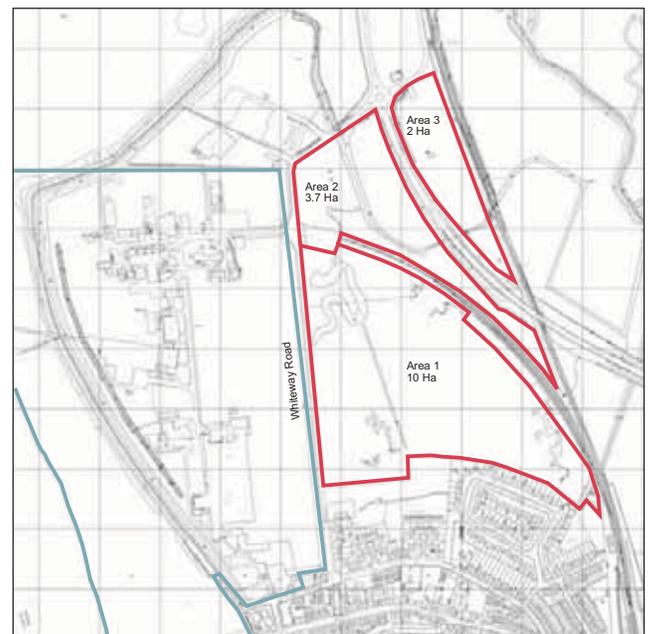
The development brief for the site will need to be approved within 12 months of the adoption date of this plan and will be required to address amongst others the following issues:

- the level and scale of a range of likely development scenarios having regard to their likely impact on nature conservation, residential amenity, visual impact, access, circulation and traffic generation, both during construction and in operation;
- measures to safeguard any remaining areas of nature conservation interest within the site;
- details of any mitigation/compensation agreement required in response to loss of habitat within the site; and
- principles of design and layout including use of materials, and any external lighting schemes.

Figure 1.2: Adopted policy

1.8 Area 2 is safeguarded under Swale Borough Local Plan Policy B20 which proposes its use as part of a southern access point into Sheerness Docks, and will be subject to separate criteria.

1.9 Area 3, although subject to policies B23 and E29, has no significant nature conservation interest. It has no plant species of note and has no water feature on it. No redshanks or lapwings (the birds considered to be of particular significance) have been recorded on this site since 1997. The site also shows evidence of previous development. This relatively small area of land is likely to be used by Abbott Laboratories as a storage and warehouse site. Detailed matters of design, internal access, etc for this area are not dealt with in this brief; but will, more appropriately be dealt with through the planning application process.



Existing Abbott Laboratories site
Area boundaries

Figure 1.3: Abbotts Laboratories site

2

Planning Policy Context

- 2.1 The site, like the rest of the Isle of Sheppey, is included in the Regional Planning Guidance for the South East, as part of the Thames Gateway Economic Priority Area. As a result, there is a particular focus of attention for employment-creating activity to help mitigate against the immediate and persistent economic problems of the area. This designation is reflected in policies S5, NK3 and ED3 of the Kent Structure Plan 1996.
- 2.2 Policy ENV6 of the Kent Structure Plan protects the site from development that would materially harm the scientific or wildlife interests of sites of nature conservation interest unless there is a need that outweighs the local wildlife or habitat interest.
- 2.3 This optimisation of the economic potential of the area is reflected in the Swale Borough Local Plan 2000, through its Strategic Policy II and policies B1, B23 and IN4. The Local Plan policies are reproduced at Appendix 1 of this brief.
- 2.4 The nature conservation interests are protected by policy E29.
- 2.5 Other policies that have been taken into consideration in this development brief are:
 - G1, General development criteria
 - E1, contamination of land
 - E6, light pollution
 - E24 and E25, flooding
 - E47, enhancement of strategic routes
 - E49, landscaping of development
 - IN7, car parking, and
 - IN8, provision for cyclesThese policies are reproduced, for ease, at Appendix 1 of this brief.

3

Site Appraisal

The Site and its Context

- 3.1 The site, subject of this development brief is Area 1, shown on Figure 1.3. It is approximately 10 hectares in size. It has previously been grazed by cattle and contains some surface water bodies that appear to be relics of former saltmarsh creeks.
- 3.2 The site is on relatively flat land at less than 5m AOD and is within the natural flood plain of the Swale Estuary. However, flood defences have been present since the 1860's such as the West Minster Drain. The site is very open with little tree cover.
- 3.3 The landscape is characterised by grazing marsh; but all areas are currently ungrazed following the recent Foot and Mouth Disease Outbreak. The site has been listed as a non-statutory Site of Nature Conservation Interest and the RSPB has identified the site as being of significant ornithological importance, principally due to the presence of breeding redshank, lapwing and other waterfowl.
- 3.4 The site is very open and has little tree cover. There is recent screen planting along the boundary of the existing Abbott Laboratories complex and the Whiteway Road(B2007). Along the embankments of the A249(T) and the railway lines there is some scrubby vegetation.
- 3.5 There is currently no direct access to the development site. As part of the development a new access would be established onto Whiteway Road. This would also provide a new main site access to Abbott Laboratories current operational site to the west of Whiteway Road.

Planning and Environmental Constraints

- 3.6 The development potential of the landholding has been determined by the planning and environmental constraints on site. The constraints have been identified through a landscape appraisal, an environmental scoping report, a phase II

geo-environmental site assessment and breeding bird survey reports.

- 3.7 The environmental scoping report identified the following issues as being of primary significance:

- Natural heritage
- Water, and
- Social, community and economic effects.

- 3.8 The issues of secondary significance were identified as:

- Noise
- Air quality
- Land and contamination
- Cultural heritage, and
- Landscape

These issues are discussed in more detail below.

Natural heritage

- 3.9 Natural heritage is identified as an issue of primary significance. Through discussions with English Nature it was concluded that it is the bird population on site, which should be focussed upon, in particular the breeding of threatened waterfowl (i.e. lapwings and redshanks). In the view of English Nature, the invertebrates on site do not, in themselves, warrant specific monitoring; although they are an intrinsic part of the marshland habitat. A study has already been undertaken, and further survey work will be undertaken prior to the development taking place. The Kent Reptile and Amphibian Group does not have a record of any important species in their database. Appropriate steps will be taken if any are identified in the future.

- 3.10 Abbott Laboratories has, through specialists EPR ecological consultants, undertaken breeding bird surveys every year since 1999. Surveys in 1996 and 1997 were undertaken by the RSPB. The key bird species of interest, surveyed by EPR and the RSPB, are the lapwing (*Vanellus vanellus*), the redshank (*Tringa totanus*), the grey partridge (*Perdix perdix*), the shelduck (*Tadorna tadorna*) and the oystercatcher (*Haematopus ostralegus*). Table 1 shows the numbers of breeding pairs of these bird species from 1996 – 2000. Figure 3.1 shows the main bird territories on site.

Bird species	1996	1997	1999	2000
Grey partridge	1	0	3	1
Oystercatcher	0	0	1	3
Lapwing	11	8	7	13
Redshank	6	11	6	8
Shelduck	4	3	4	7

(i) Table 1- Number of breeding pairs on Abbott Laboratories Land from 1996 – 2000.

3.11 The latest survey, based on four years worth of data (conducted by EPR in June 2000) has shown an increase in the number of breeding pairs and diversity on the site. English Nature agree with EPR that the probable reason for this is the increased water levels during the preceding wet spring, which increased the availability of nesting and feeding habitats for waterfowl and wading birds.

3.12 Comparisons of the 2000 bird distributions with those from 1999 show the key areas to be those with expanses of surface water, as shown in Figure 3.1. Overall, the surveys show that Abbott Laboratories land is important for the redshank, and more locally for its breeding lapwing.



Sensitive habitats/territories for breeding waterfowl
Exposed industrial edge
Exposed urban edge
Views into the site
Possible landfill area

Figure 3.1:

3.13 The site also supports a number of rare plant species. The divided sedge *Carex divisa* is abundant, often dominating with greater than 80% ground coverage. The stinking goosefoot *Chenopodium vulvaria*, a Red Data Book Species in the British Isles, has been found on the railway embankment. The main surface water feature to the north of the site is dominated by sea club-rush *Scirpus maritimus*.

Water

3.14 Water is also an issue of primary significance as the site drains into the Swale Estuary, a designated Special Protection Area (SPA) under the European Birds Directive. The hydraulic nature of grazing marsh land (low permeability), together with the existence of significant bodies of surface water on the site imply that horizontal drainage may be as significant as vertical drainage (surface infiltration).

3.15 However, it is thought that horizontal drainage will more likely drain into the immediate surface water bodies, rather than the Swale Estuary, with potential water quality implications for the natural heritage. Consultation will take place with the Drainage Authority to ensure that any development will maintain existing drainage systems.

3.16 Alluvium deposits associated with the River Swale underlie the site. This alluvium deposit overlies the solid geological deposit of the London Clay Formation. A phase II geo-environmental site assessment by Gibb Ltd. (November 2000) concluded that these deposits are non-aquifers and that any groundwater underlying the site is not vulnerable to surface contamination.

Social and community issues

3.17 Abbott Laboratories currently employ 800 people, most of who live locally.

3.18 The development site is immediately adjacent to the northern edge of Queenborough. The potential impacts on the amenity of Queenborough residents are material planning considerations. Following consultation, the location of development has been refined by the requirement to minimise any disturbance.

- Noise**
- 3.19 The baseline noise environment at the site is not rural in nature with a significant noise contribution from traffic on the B2007 and the A249. A daytime noise survey was undertaken on Wednesday 4 April and a night-time survey on Friday 4 May 2001 (the full noise report is attached at Appendix 2 of this brief). This determined that the measured daytime noise levels are subjectively considered to be moderately high, but typical for a mixed residential and industrial location near to a trunk road. At night, the road network has a high proportion of HGVs accessing local industries and Sheerness Port.
- 3.20 The key noise source is therefore from roads. The existing Abbotts Plant operations are generally quiet, with no record of noise complaints having been received or problems experienced. The development principles set out in paragraph 5.17 will help to ensure that noise and disturbance from the new development will be minimised in terms of impact on residents and nature conservation interests.
- Air quality**
- 3.21 The air quality data (1997) indicate that the air quality at Queenborough is not significantly impacted by the surrounding urban and industrial areas (the full report is attached at Appendix 3 of this brief). Air quality data revealed that bar minor threshold exceedences (mostly caused by industry to the southwest or by humid and stable weather conditions during the summer months), local air quality is good. It should be noted that Abbott Laboratories have a good environmental record in relation to atmospheric emissions.
- Land and contamination**
- 3.22 The potential impacts from the presence of an old landfill, used prior to the occupation of the land by Abbott Laboratories, were determined in the geo-environmental site investigation. The study revealed the landfill to be characteristic of waste products of the early 20th century, consisting of glass, bottles, brick pottery fragments, wooden fibres and pieces of metal. The location of the landfill is shown on Figure 3.1.
- 3.23 The results of the intrusive assessment concluded that the areas in question are not significantly contaminated and the human health risk associated with the contamination is considered negligible.
- 3.24 However, the landfill will be removed to an approved disposal site as an early phase of the development. Fencing will be used as a precautionary measure to ensure that no harm occurs to grazing animals.
- Cultural heritage**
- 3.25 A desk-top survey was undertaken and showed that there is no known archaeological interest on the development site. The cultural heritage implications for the proposals are therefore likely to be negligible. This is a matter which can be satisfactorily dealt with by means of a condition at the planning application stage, should this be considered necessary.
- Landscape**
- 3.26 A landscape baseline report has been prepared by Terence O'Rourke, and is attached in full at Appendix 4 of this brief. It notes that the landscape around Queenborough comprises part of an extensive area of relatively flat, low-lying, open landscape. The main surface features consist of open grazing pastures with a network of ancient and modern reed-fringed drainage ditches, dykes, and numerous creeks. Few vertical boundaries, such as hedges or fences, exist within the marshland.
- 3.27 However, it was noted that there is considerable pressure around the major estuaries (including the Medway) from urban, industrial and recreational developments.
- 3.28 There are no landscape designations covering the development site and it is not considered to be of national, county or local significance.
- 3.29 The scenic quality of the site is considered to be generally poor. It is divided by railway lines and the A249 flyover, which severs visually and physically the site from the wider marsh landscape. It is clear, however, that the site does fulfil a local role in providing a gap between Queensborough and Sheerness. This local role has also influenced the siting of development.

4

Background to the Proposals

- 4.1 Criterion (I) of policy B23 of the local plan requires Abbott Laboratories to justify why development should occur on the land to the east of Whiteway Road in addition to that on land to the west of Whiteway Road. In order to do that, a context has to be set.
- Global context**
- 4.2 Since its foundation in 1888, Abbott Laboratories has developed into a diversified international health care company. Abbott Laboratories has evolved from being a United States based prescription medicine manufacturer into a global and versatile health care innovator now regarded as one of the world's leading health care companies.
- 4.3 The company aims to build core franchises in important areas of medicine and to concentrate its efforts in areas of commercial presence and scientific expertise in specialties such as AIDS, urology and anti-infectives, where Abbott is considered to be a world leader. Abbott also aims to become a significant participant in areas such as cancer, diabetes and vascular medicine. Currently, Abbott serves customers in more than 130 countries and has over 70,000 staff at more than 135 manufacturing, research and development, and distribution locations. In 1999, Abbott achieved record sales and net earnings of \$13.2 billion and \$2.4 billion respectively.
- UK perspective**
- 4.4 Abbott Laboratories is a major UK company. It has a strong presence in England with facilities in Kent, Berkshire and Oxfordshire. The company employs almost 2500 people in the UK, about a third of who are graduates or professionally qualified.
- 4.5 Approximately 800 staff are based at Abbott's main manufacturing and production facility is at Queenborough, which produces pharmaceutical and hospital products.
- 4.6 The Pharmaceutical Division accounts for nearly half of Abbott UK's turnover. The antibiotic market is the key product within this division. The coming decade is considered to be an exciting prospect for the division, with the antibiotic research of the last 10 years generating new products for the years ahead. This should ensure that the division is well placed to be a major UK antibiotic house.
- 4.7 Other divisions based at Queenborough are the Hospital Products Division and the Ross Medical Nutrition Division. The Hospital Products Division sells a range of high quality medical products and a wide range of intensive care monitoring equipment. Ross Laboratories is the nutritional division of Abbott and is the fastest growing.
- Abbott Laboratories past development in the UK**
- 4.8 Abbott UK was established in west London in 1937. Abbott Laboratories moved to Queenborough in the early 1960s from Jarrow, in the northeast of England. The main reasons for relocation were the availability and low cost of development land, development grants and proximity to London and its international airports. The initial buildings consisted of a pharmaceutical plant, administration offices, a chemical plant, despatch warehouse, engineering buildings and a boilerhouse.
- Reasons for the required expansion**
- 4.11 During the time at Queenborough, manufacturing has grown by 10 to 20% each year and the distribution activities have also grown substantially. Approximately 70% of the Queenborough site activity goes into the export business. The site was recognised with the Queens Award for Export in 1994. This expansion was achieved through efficient use of the original space and through utilisation of spare infrastructure. However in recent times, the scope for expansion at the existing facility has been very limited.
- 4.12 The site has frequently been considered and asked to bid for new business by the US-based divisions of Abbott Laboratories. Queenborough has been successful in attracting new manufacturing, primarily in the pharmaceutical division.
- 4.13 During the past five years the company has purchased two diagnostic businesses based in the UK, at Oxfordshire and Dartford. Only the site in Oxfordshire has room for expansion. Such possibilities are limited at

Dartford, which utilises a leased site. Thus for Abbott to expand its products portfolio, further development around the Queenborough site (already in Abbott's ownership) is required.

Development of the existing west site at Queenborough

4.14 Expansion of the existing site has already been planned for the western side of the B2007 (Whiteway Road). Such an expansion will be based around the pharmaceutical business. Plans for the existing site include:

- provision of a new site entrance midway along the western side of Whiteway Road (to improve traffic flow and control and facilitate development of the land to the east of Whiteway Road).
- a new material transfer store (next to the existing pharmaceutical building)
- a new pharmaceutical building (formulation, production and packaging of products) to be located east of the existing building
- minor expansion of chemical production
- provision for growth of associated activities, such as administration and other support functions
- a biological effluent treatment plant (north of the site, to allow direct discharge to the Swale Estuary).

4.15 The existing west site has adequate space, utility and infrastructure to address the expansion envisaged over the next 10 years, following the installation of additional electricity capacity in 2001. The utility capacity can also support the development of the eastern site.

Expansion at the proposed development east site

4.16 Central to Abbott's business plan is the development of a wider portfolio of products. It is envisaged that the existing (west) site will address expansion of the pharmaceutical division with the east side (proposed development site) allowing expansion of the other divisions, principally nutritional, diagnostics and hospital products.

4.17 It is considered 'good practice' to segregate differing production and manufacturing divisions (such as pharmaceuticals and diagnostics) to separate sites, but within a

single location. The logistics, potential technical difficulties and aspects of quality control (for example, potential raw material/product contamination) ensure that separate sites are required for differing product manufacturing and packaging. However, locating differing production and manufacturing plants in adjacent (yet separate) premises, as is being proposed at Queenborough, is advantageous. It allows significant cost advantages in terms of infrastructure and operational costs, sharing administration, engineering utilities, security and on-site storage and distribution.

4.18 Abbott Laboratories' expansion plans are fully in accordance with Swale Borough Council's three strategic aims:

- Thriving community
- Healthy environment
- Strong economy

4.19 Swale Borough Council has consistently pursued an active policy of support for economic development, as can be seen by its Local Plan policies and its economic development strategy. It's first objective is to assist local companies to grow and develop to the benefit of Swale. The expansion of Abbott Laboratories will not only do that, but it will also be in accordance with the Council's other economic objectives: to improve Swale's ability to attract inward investment and to improve the skills and job prospects of the local workforce and community.

5

Proposed Development

- 5.1 The development is required to enable Abbott Laboratories to expand onto their land adjacent to the current operational site for reasons set out in Section 4 of this brief. The development site is zoned in the Swale Borough Local Plan under Policy B23, specifically for this purpose.
- 5.2 The development proposed will be an extension to the Company's current facility with a similar operational profile and requirements. The development proposals are for a healthcare production facility, with associated offices and car parking.
- 5.4 At this point in time, Abbott Laboratories is not in a position to be specific about the detailed development of this site. Hence, this brief sets out the principles that will be adopted by Abbott Laboratories when developing this area. These principles have been approved by Swale Borough Council, following public consultation.
- 5.5 Policy B23 requires the development brief to address the scale of a range of likely development scenarios having regard to their likely impact on nature conservation, residential amenity, visual impact, access circulation and traffic generation both during construction and operation.
- 5.6 Three possible development scenarios were identified for consideration:
- Option (i) Build development on the western part of the site (along Whiteway Road) and use the eastern area to mitigate against any habitat loss.
 - Option (ii) Develop the southern part of the site and use the northern area to mitigate against any habitat loss.
 - Option (iii) Develop the whole site.
- 5.7 These scenarios are illustrated in Figures 5.1, 5.2 and 5.3, and are discussed in more detail overleaf.



Figure 5.1:
Development option (i)

Developable area 
Habitat mitigation area 



Figure 5.2:
Development option (ii)

Developable area 
Remaining wetland 
Residential buffer 



Figure 5.3:
Development option (iii)

Developable area 
Habitat mitigation area 
Residential buffer 

- Option (i) - Develop along Whiteway Road**
- 5.8 This pattern of development would relate well to the existing laboratory facility and make access easier (see Figure 5.1). It would minimise any impact on the residents on the southern boundary of the site, whilst leaving a substantial area of marshland for habitat mitigation.
- 5.9 However, the marshland that would be left would not be the primary ecological area on the site. Abbott Laboratories approach has been one of trying to retain as much high quality habitat as possible, despite the requirement to mitigate against any loss off site as well.
- 5.10 Further, the work required to create an improved habitat of equal value on site would require a large amount of earth-moving works as the site levels would have to be lowered and the hydrology would have to be recreated and ditches dug. There would also be a significant lead-in time in order to prove that the habitat was establishing and that it was viable.
- 5.11 In planning terms, the resulting built development would be of linear form and could be more incongruous in the landscape, as it would not be seen against the backdrop of Queenborough.

Option (ii) – Develop the southern part of the site

- 5.12 This option optimises the retention of the primary ecological areas on site around the water body to the north (see Figure 5.2). The development would still relate well to the existing facility to the west of Whiteway Road, whilst the built form would sit more comfortably against the backdrop of Queenborough.
- 5.13 A buffer zone would be provided to protect residential amenities of local residents on the southern boundary. The buffer would be considered in detail at the application stage, but is likely to be made up of existing habitat with possible further planting of native and appropriate species.

Option (iii) - Develop the whole site

- 5.14 Investigations have taken place to find appropriate sites for off-site compensatory habitat creation (see Section 7 of this brief). Sites have been found that will more than meet the like-for-like replacement of habitat on site, and may provide for better long-term nature conservation. As such, the development of the whole site could have become a longer-term option for Abbott Laboratories (see Figure 5.3).

The chosen option

- 5.15 It is a refinement of the second of these development scenarios that was approved by the Borough Council following public consultation between February and April 2002, and it is this approved scenario which is reflected in this development brief.
- 5.16 This option has been developed in order to give a clear understanding as to the type and form of development that could be achieved on this part of the site, again considering all the relevant planning and environmental issues. Figures 5.4 and 5.5 provide an illustrative layout for this option, and provide more detail on the principles involved. Figure 5.4 identifies the area proposed for built development, and for illustrative purposes Figure 5.5 presents a possible broad arrangement of associated uses within the built area, e.g. manufacturing and offices, car parking, and storage, as well as areas for landscaping / buffering.
- 5.17 Through discussion with Swale Borough Council the key development principles for this 'refined' version of option (ii) have been agreed, so that development best addresses the key interests identified under Policy B23 and the concerns raised through the consultation exercise.

Key development principles

Scale of development

- A minimum 20m landscape buffer will be provided between the rear boundary of neighbouring residential dwellings and the nearest facade of any building within the site. This area is to remain as a landscaped buffer.
- Buildings nearest the residential areas to be mainly single storey and limited to office/laboratory type uses, with all vents and extractors located on facades facing away from the neighbouring residential buildings. This will ensure that there is no overlooking of dwellings.
- The main two and three storey elements to be located towards the centre and west of the site, to minimise visual intrusion.
- The floorspace is anticipated to be approximately 22,000 square metres.

- The developable area will only be covered by 40% built development, the rest of the area will be made up of internal roads, servicing areas, parking and a large proportion of open space.
- The open space / landscape scheme will be used to create a loose form of development to reflect the site's location on the periphery of Queenborough.

Access and parking

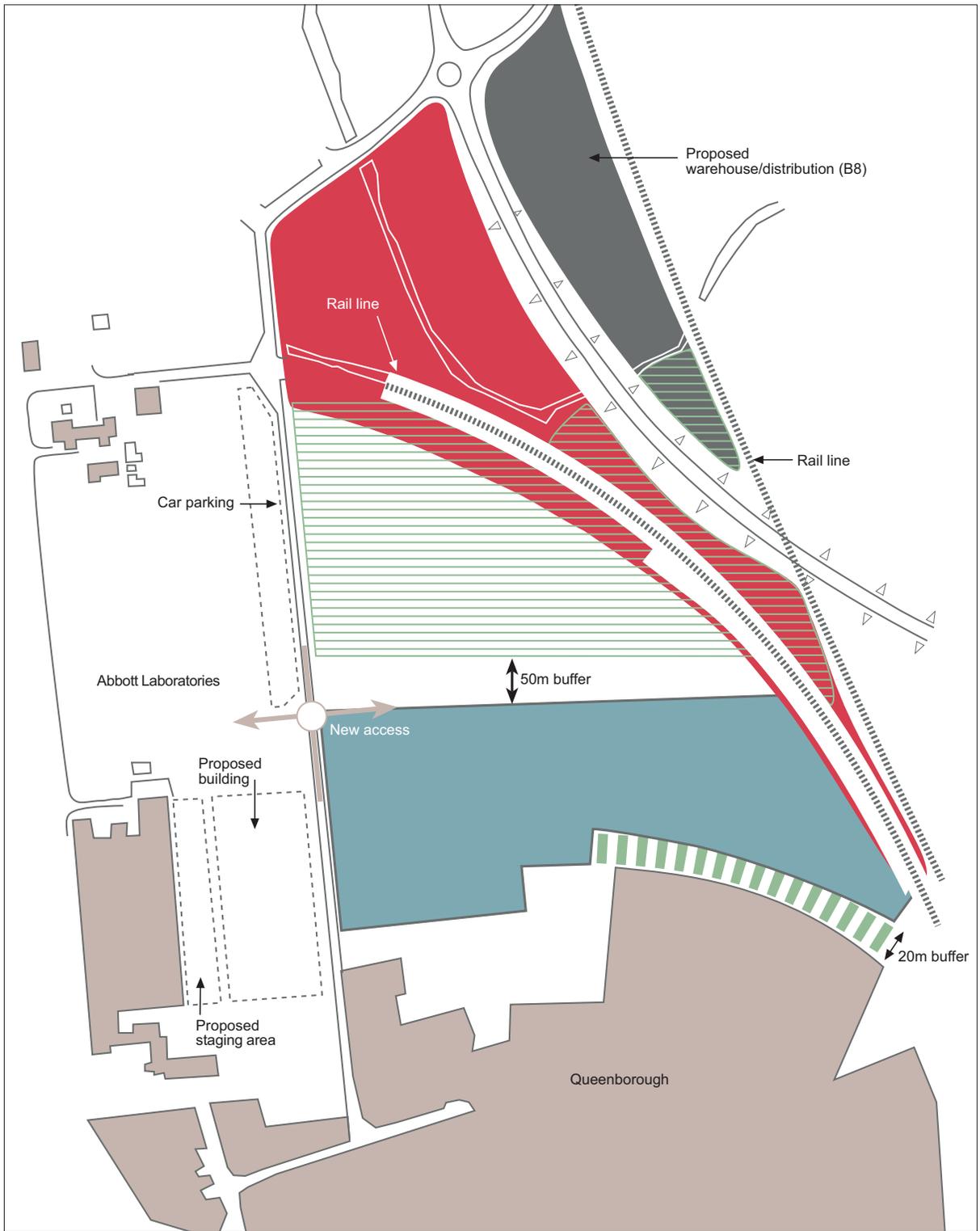
- Access will be achieved from a roundabout on Whiteway Road, with the main access being of linear form allowing smaller internal roads to branch from it to serve clusters of development.
- The road will lie within a buffer zone that will help protect the marshland habitat and its inhabitants from the built form on the site.
- Locating the road in this position helps integrate this site with the existing Abbott Laboratories facility on the other side of the road. It also ensures that residents will not be disturbed by noise of traffic movement.
- Car parking and open storage operational areas to be located to the north and west of the site, away from residential areas to help screen dwellings from noise and disturbance associated with vehicle use and internal traffic movements.
- A travel plan is to be prepared in association with a planning application for the development. The travel plan will develop a programme and framework of action. Development will need to take account of maximum car parking standards set by the highway authority and will seek to provide suitable facilities for cyclists, such as secure parking.

Drainage

- The hydrology of the site is important in maintaining its nature conservation interest, but it is also important that development within the site does not result in loss of residential or public amenity due to increased risk of flooding. Adequate and appropriate sustainable drainage systems will therefore be installed on any development. The drainage of the site will be controlled to allow surface drainage water to be cleaned and fed back into the marshland habitat to the north. This should help control the hydrology to the north and minimise any impact from the development to the south, and therefore give a positive benefit to the area.

External lighting

- External lighting will be kept to a minimum, but allow the buildings to function safely. Particular care will be taken to minimise light spillage by considering the location, height and screening of light sources, in order to protect both residential and nature conservation interests.



- Existing development
- Developable area for B1 & B2 use
- Remaining habitats
- Proposed B8 (warehouse/distribution)
- Policy B20-Land with planning permission for operational use and port related business
- Residential buffer (20m minimum distance)

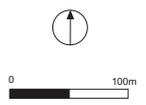
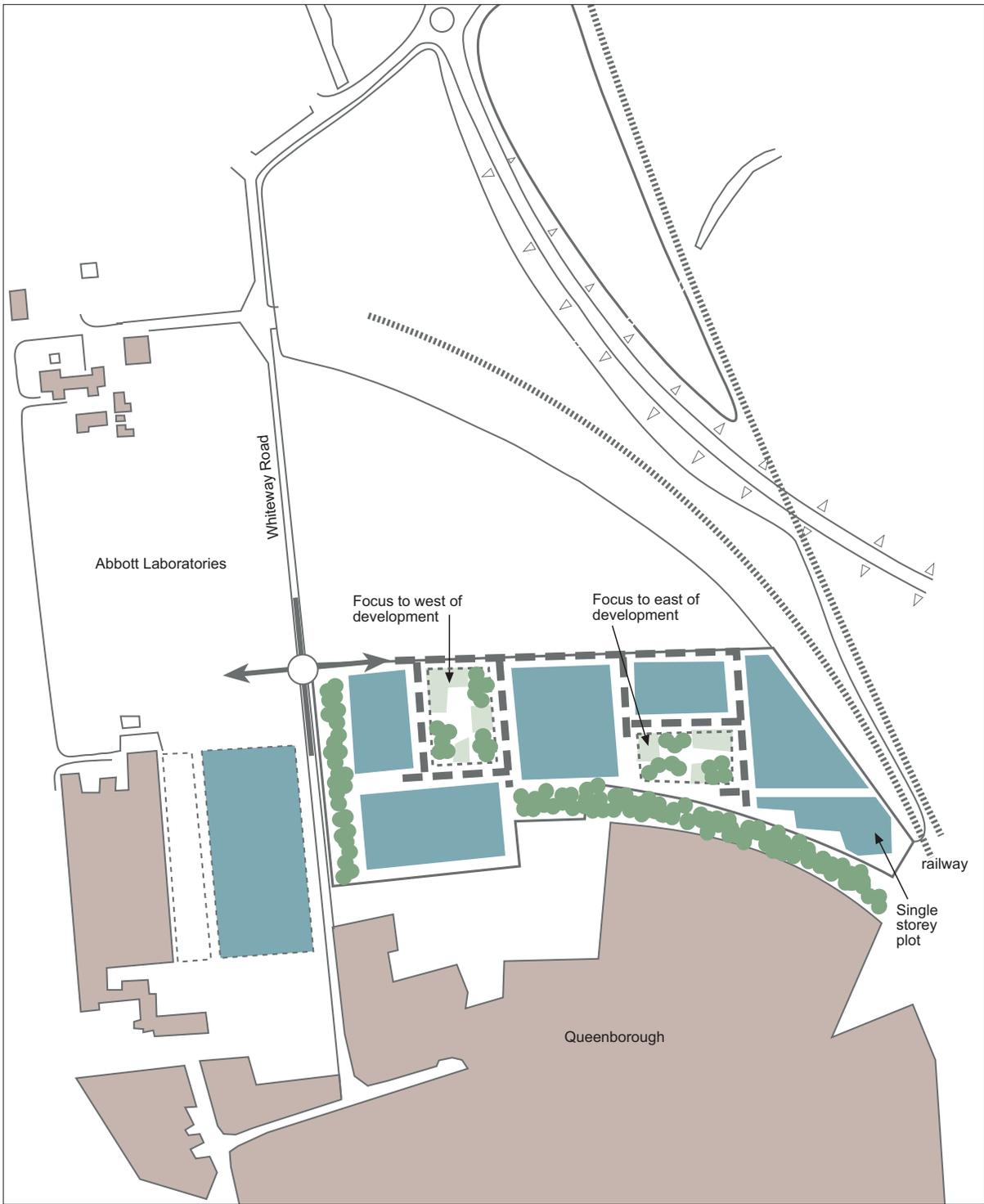


Figure 5.4: Illustrative layout for site



Existing development
 Possible development plots (including parking)

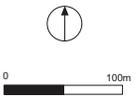


Figure 5.5: Illustrative layout for development

6

Planning and Environmental Appraisal of Proposed Development

- 6.1 The planning and environmental issues discussed in Section 3 of this brief have been considered in the light of the approved development option being further developed and the development principles established. This Section presents the outcome of this appraisal.

Natural heritage and water

- 6.2 The main water body and primary area of ecological interest is being retained under the preferred option. This area will be improved, and associated detailed drainage issues will be addressed as part of a planning application. Off-site compensatory works will be undertaken to replace the loss of the marshland to development. The consideration of off-site compensation is discussed in more detail in Section 7 of the brief.

Social, community and economic effects

- 6.3 It is envisaged that the development proposals may ultimately provide more than 400 new jobs, based on a steady and progressive development. This represents a potential increase of more than 50% on existing employment at Queenborough. This controlled pace of potential employment is a benefit to the community as the existing infrastructure, facilities and service provision will not be placed under immediate stress (through increased usage) and will have time to adjust to the employment expansion at Queenborough.
- 6.4 Public health and safety will be improved in Queenborough, as the development will provide a new access diverting all goods-related traffic (such as raw materials, products) away from the Queenborough entrance to the existing facility. New access will be provided from Whiteway Road. This will reduce the volume of goods traffic using Queenborough, thereby reducing the risk associated with road accidents. See the Transport Assessment, by TPK Consulting, for more detail. In addition consideration will be given at the time of the development to extending the cycleway from Sheerness, which currently ends at Whiteway roundabout, to encourage more use of cycles.

- 6.5 The above measures would also improve the noise, vibration and local air quality impacts associated with goods traffic.

Noise

- 6.6 It is envisaged that the development proposals will not result in a significant elevation of noise levels on the existing baseline noise levels. The existing facility is a minor component of the baseline noise environment. The proposed facility will be different in nature (i.e. non-manufacturing, B1 and B2 land uses) to the existing facility and will not have a significant noise impact.
- 6.7 Construction-related noise and vibration may have an impact on key receptors, the residents to the south of the development site and the breeding birds within the northern part of the site. However, this will be temporary in nature and can be limited to normal working hours and time of year. These issues are most appropriately dealt with at detailed planning application stage, by means of suitable conditions. In addition, the development principles adopted will further serve to limit noise and disturbance for residents.
- 6.8 The perception of the local noise environment in Queenborough may be improved through the traffic measures to be undertaken as part of the development proposals. By diverting goods-related traffic away from Queenborough, the local residents' perception of the noise impact from goods-related traffic may be reduced. Overall, there is sufficient and adequate noise mitigating measures available that enable noise from the development to be significantly attenuated below the appropriate rating level.

Air quality

- 6.9 The proposed development will not be a major production or manufacturing facility and will not impact upon the local air quality of Queenborough.
- 6.10 Construction may result in temporary air quality impacts (e.g. dust, particulates) but standard mitigation measures (e.g. dust suppression water cannons, careful storage of construction materials) will minimise this impact. Key receptors are the residents to the south of the development site.
- 6.11 The proposed new access and consequent change in traffic movement will improve the local residents' perception of local air quality in Queenborough. In quantified air quality terms, the actual improvement in local air quality may not be significant, but the residents' perception

- of the air quality improvements is still an important positive effect.
- Land and contamination**
- 6.12 An intensive investigation with pits and boreholes on the site confirmed the presence of a small shallow area of surface dumped landfill, characteristic of early 20th century wasteproducs, prior to occupation by Abbott. Although this contamination is considered to present negligible risk to human health and to ground water contamination, it is considered prudent to fence the area to grazing animals as a precautionary measure, and to remove the landfill to a suitable waste facility if to be permanently used for agriculture.
- 6.13 As the area is to be developed the landfill should receive appropriate treatment, which could include on-site encapsulation, partial reuse of materials or removal. The presence of soft alluvium was also confirmed that will require piling for all but the lightest structures. Excavations will encounter groundwater at less than one metre depth, which can be removed by conventional pumping due to the low permeability of the alluvium. Subsurface concrete will not require the use of sulphate resistant cement on the basis of groundwater test results. Ground gas monitoring results demonstrate that no specific gas mitigation will be required for the construction of new commercial buildings.
- 6.14 These findings will present no problems for the management plan agreed with English Nature, but a suitable planning condition could be imposed, if it is still considered appropriate, at the detailed planning stage.
- Cultural heritage**
- 6.15 There is no known archaeological interest at the development site. The cultural heritage implications for the proposals are therefore negligible. A suitable planning condition requiring a watching brief could however be included at planning application stage, if considered necessary.
- Landscape**
- 6.16 There are no landscape designations covering the development site and it is not considered to be of national, county or local significance. Despite the scenic quality of the site being generally poor, the development proposal has been designed to integrate with the surrounding landscape as much as possible to minimise any incongruity. The buffer zone to the marshland and the internal open spaces will be designed to relate to the surrounding landscape whilst enhancing it where possible.
- 6.17 External lighting has potential for significant landscape impact outside of daylight hours, but the measures proposed, as set out in the development principles, to minimise light spillage from the development site should prevent this occurring. A planning condition requiring an external lighting scheme to be agreed can be included at planning application stage, if considered necessary.
- Traffic**
- 6.18 Traffic was not identified in the scoping report as a Transport Assessment was undertaken separately. The conclusions of the assessment were as follows:
- (i) The increase in traffic resulting from the proposed development would be minimal and would not have a detrimental impact on the operation of the surrounding highway network
 - (ii) There will be safety benefits achieved by an improved access arrangement over the existing situation
 - (iii) The proposed new site access roundabout would have more than sufficient capacity to accommodate the forecast traffic for either access options (i) or (ii) in both proposed opening year (2003) and 15 years post opening of the proposed development (2018).
- 6.19 Furthermore, Abbott Laboratories is committed to reviewing and developing a Company Travel Plan for both their current and potential future operations. The Transport Assessment and its conclusions have been accepted in full and agreed by the Highways Agency and Kent County Council.
- 6.20 The Company Travel Plan's principal aim is to minimise or limit the number of trips by single occupancy cars, increase the use of public transport and promote other modes of travel such as walking and cycling. It will be a 'working' document that will evolve over time to reflect the requirements of Abbott Laboratories and its staff, whilst promoting sustainable transport solutions as part of the further development of the site. A detailed Travel Plan will be submitted alongside any application on this site. At this time, consideration will be given to extending the cycleway from Sheerness, which currently ends at Whiteway roundabout, to encourage more use of cycles. A draft of the Travel Plan is attached at Appendix 5 of this development brief.

7

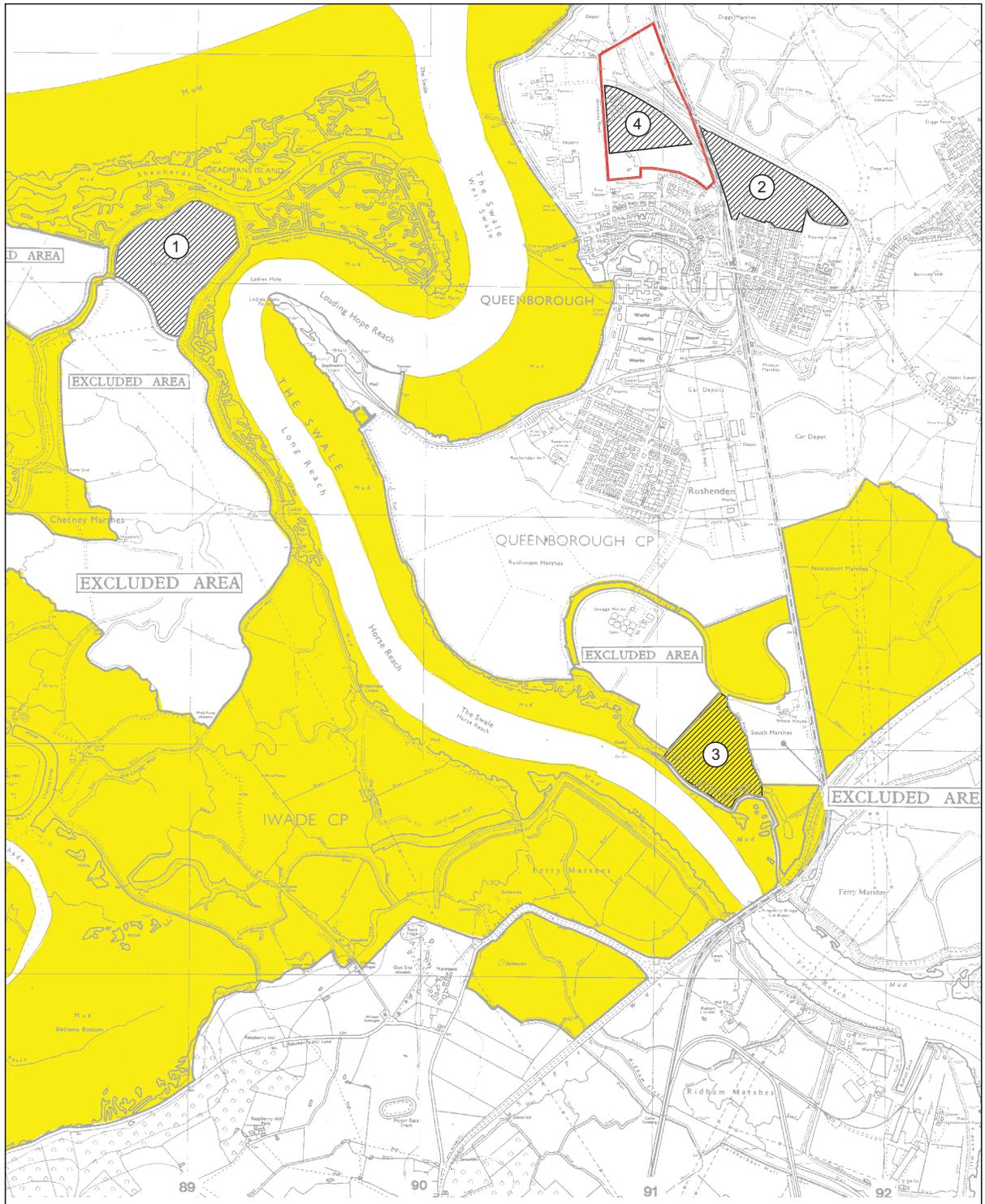
Nature Conservation Mitigation and Compensation Strategy

- 7.1 Policy B23 of the Swale Local Plan requires this brief to set out a strategy to deal with mitigation and compensatory measures, the programming of any required works and their management and monitoring.
- 7.2 During the preparation of this development brief, four options were assessed for suitability as mitigation or compensation for the loss of wetland and associated waterfowl breeding habitat at the Queenborough site. Three of these involved off-site habitat recreation while the final option was on-site habitat enhancement. The options are shown in Figure 7.1, and are listed below.
- Option 1- Chetney Marshes**
- 7.3 This is land on the Chetney peninsula and is in the process of being converted to conservation land. It is primarily managed by sheep grazing with some cattle grazing in the summer. Part of the peninsula is covered by the Medway Estuary and Marshes SSSI, SPA and Ramsar designations.
- 7.4 There were advantages and disadvantages to using this site. However, the site was dismissed due to the difficulty in recreating the required habitat, and the associated capital expenditure. The site is also a relatively long distance away from the development site, 2 kilometres across the Swale.
- Option 2- Land east of the Brielle Way**
- 7.5 The site is south-east of the proposed development site. It is bounded to the north by the Brielle Way bypass, to the east by the railway line and to the south by a residential area of Queenborough. It is bisected by a large drain and an embankment.

7.6 This site was dismissed due to its considerable disadvantages. The wetland part of the site is of local conservation interest and would not benefit from habitat enhancement, even assuming this could be achieved. Controlling water levels (central to any habitat creation) would be difficult on the remainder of this site, especially with the potential for disturbance from nearby residents. The site was also considered to be too small for the requirements of English Nature.

Option 3- South Marshes

- 7.7 This site is located between The Swale and the Joan Fleet, west of the railway line. The site can be sub-divided in two with the eastern half having been improved with the western half (approximately 22 acres) unimproved. This half is species-rich and contains a few sedges, grasses and wildflowers that occur on the development site and still retains the basic topographic detail of a grazing marsh.
- 7.8 The site did not appear to have any particular bird interest, although there were a few waterfowl in the Fleet and outside the adjacent sea wall. Some lapwings were in the field, but it is unknown if they breed here.
- 7.9 The landowner has full control over water levels and the restoration of the western section of the site that is suitable for habitat creation can be very easily completed through adjusting the two water-level control gates. Some minor works will be required to a track and bridge across the Joan Fleet to retain agricultural access to the eastern half of the site.
- 7.10 The main advantage of the site is that the required works are relatively easy and quick to complete. The ecological potential is also good and the area of the site is satisfactory.
- Option 4- On-site mitigation**
- 7.11 The location of the on-site habitat enhancement is north of the proposed development site, with a 50 metre buffer zone separating both areas. This will require a large element of earth works including topographic variation, new creeks and drainage features, new ditches (for water voles), water-level controls and subsequent grazing management.
- 7.12 The ecological potential of this option is not as great as options 1 and 3 and there may be difficulties in creating the habitat as there will be extensive capital works and associated costs.



- SSSI
- Development site
- 1 Chetney Marshes
- 2 Land adjacent to Braille Way
- 3 South Marshes
- 4 On-site mitigation

Figure 7.1: Potential sites for replacement habitat

The Chosen Option

- 7.13 The table below summarises the opportunities of each option for mitigation and compensation of the loss of marshland habitat.
- 7.14 Following discussions with English Nature, South Marshes was chosen to be the mitigation site, based on the information above. Negotiations have taken place with the landowner and a site management plan has been drawn up. This has been approved by English Nature. The management plan is attached at Appendix 6 of this brief.
- 7.15 The management plan covers 11.3 hectares, more than twice the area proposed to be developed by Abbott Laboratories, and will cover a period of 20 years. After this time, it is fully expected that the drainage system on this site will be self-sustaining. The management plan stipulates that the water levels should be increased and maintained, and that breeding birds should be monitored and protected from disturbance.
- 7.16 The mitigation works were undertaken in early 2002, in order for the site to be a prime breeding habitat for lapwings and redshanks later in the year. A two year 'lead in' time will be allowed for the South Marshes mitigation site to become fully established. Once this time has elapsed and monitoring has shown that South Marshes is of equivalent nature conservation value to that at east of Whiteway Road, development may be commenced on Abbott Laboratories land in accordance with this development brief and any requisite planning permission.
- 7.17 In addition, to this off-site mitigation and compensation, Abbott Laboratories will also maintain the land north of the development proposals to maintain water levels, as it has done since occupying the site to the west of Whiteway Road. Access to this part of the site will be limited.

Option	Ease of re-creation.	Proximity to SSSI	Owners control of water levels	Ecological potential	Site size	Likely capital costs	Long-term reliability.	Disturbance levels	Distance from Abbott's
1-Chetney Marshes	ML	MB	MB	MB	MB	ML	MB	MB	mb
2- Land east of the Brielle Way	ML	ml	ML	ml	ML	ML	ML	ML	MB
3- South Marshes	MB	MB	MB	MB	MB	MB	mb	mb	mb
4- On-site mitigation	ml	ml	MB	mb	ML	ML	ml	ML	MB

ML: Major liability
ml: Minor liability
MB: Major benefit
mb: Minor benefit

Appendix 1

*Strategic
Policy 11*

The Borough Council will seek to optimise the economic potential of the Borough by improving and broadening Swale's economic base in order to create a strong and more diverse local economy and offering secure and good quality employment. This will be achieved by:

- (1) taking full advantage of the opportunities presented by the international deep water port at Sheerness, and the Thames Gateway Planning Framework in Sittingbourne and on the Isle of Sheppey, to provide a wide choice of development sites for new industrial, business and distribution activities which are well related to new and improved infrastructure;
- (2) bringing forward sites in the shorter term, given the severe unemployment position and the opportunities currently available;
- (3) improving local employment opportunities at Faversham by the provision of a limited number of new employment development sites; and
- (4) ensuring that sufficient employment opportunities are available in the rural areas in order to sustain local communities.

*Policy
B1*

Permission for new employment development has been or will be granted for sites:

- (1) shown as such on the Proposals Map;
- (2) within the built-up area which do not conflict with other policies in the Plan;
- (3) in the countryside which accord with Policy B4; and
- (4) which satisfy the appropriate criteria in Policy G1.

*Policy
B23*

Land is identified east of Whiteway Road and south of West Minster as indicated on the Proposals Map specifically for development relating to the existing pharmaceutical/health care works sited on land west of Whiteway Road (currently known as Abbott Laboratories), being land within the company's sole ownership, and for which the Borough Council has accepted there is an overriding need.

Development shall take place:

- (1) subject to the Borough Council being satisfied that it cannot be accommodated on the existing site west of Whiteway Road;
- (2) subject to the agreement of the Borough Council, and having regard to the advice of English Nature, to a package of on-site mitigation and/or off-site compensatory measures that will ensure that the loss of nature conservation interest in the policy area is minimised and that there is no net loss of the key nature conservation interest of grazing marsh in the locality;
- (3) only in accordance with a comprehensive development brief to be approved by the Borough Council, including a programme that will ensure that adequate physical mitigation and compensation measures for nature conservation are undertaken before development commences, and that an appropriate management and monitoring programme is in place; and
- (4) subject to any necessary legal agreements being secured, including arrangements for the long-term management of any mitigation and compensatory habitats.

*Policy
B23 cont.*

The development brief for the site will need to be approved within 12 months of the adoption date of this plan and will be required to address amongst others the following issues:

- the level and scale of a range of likely development scenarios having regard to their likely impact on nature conservation, residential amenity, visual impact, access, circulation and traffic generation, both during construction and in operation;
- measures to safeguard any remaining areas of nature conservation interest within the site;
- details of any mitigation/compensation agreement required in response to loss of habitat within the site; and
- principles of design and layout including use of materials, and any external lighting schemes.

*Policy
IN4*

The Borough Council will grant planning permission for new development proposals provided that they:

- (1) are appropriately related to the primary and secondary route network and are accessible to public transport;
- (2) do not generate volumes of traffic in excess of the capacity of the highway network;
- (3) do not lead to the formation of a new access, or the intensification of any existing access, onto a primary or secondary distributor road or route, unless it can be created in a location which is acceptable to the Local Planning Authority, or where an access can be improved to an acceptable standard and achieve a high standard of safety through design; and
- (4) have full regard to the highway impact on, and potential for improvement to, landscape.

*Policy
E29*

The Borough Council will seek to protect the following sites which are of importance in Kent for nature conservation, as shown on the Proposals Map:

- (1) Ancient Woodlands;
- (2) Sites of Nature Conservation Interest; and
- (3) Local Nature Reserves not covered by Policy E28.

Development will not be permitted within these areas unless there is a need for it which outweighs the local wildlife or habitat interest, and provided that the habitat lost is re-established by the developer on an equivalent and viable area of land nearby.

*Policy
G1*

All development proposals will be expected to:

- (1) accord with the policies and proposals of the Plan unless material considerations indicate otherwise;
- (2) have regard to the characteristics and features of the site and locality;
- (3) avoid an unacceptable impact on the natural and built environment;
- (4) be well sited and of a scale, design and appearance appropriate to the location with a high standard of landscaping;
- (5) cause no demonstrable harm to residential amenity and other sensitive neighbouring uses;
- (6) provide convenient and safe pedestrian (including disabled) and vehicular access and avoid any unacceptable consequences in highway and infrastructure terms; and
- (7) provide parking and servicing facilities sufficient for the traffic likely to be generated.

*Policy
E1*

Applications for new development on land suspected or known to be contaminated shall include a detailed site investigation of all likely contaminants, and appropriate measures to deal with any unacceptable risks to health or the environment, taking into account the actual or intended use of the land. These measures should be agreed by the Borough Council.

*Policy
E6*

The Borough Council will seek to minimise light pollution from all forms of development. Where an external lighting scheme requiring consent is envisaged for any development, details will be required to be submitted as part of the planning application. The Borough Council will need to be satisfied that the lighting scheme proposed is the minimum needed for security and working purposes and that it minimises potential pollution from glare and spillage, particularly in relation to:

- (1) residential and commercial areas;
- (2) areas of nature conservation interest; and
- (3) areas whose open or remote landscape qualities would be affected.

*Policy
E24*

Development will not be permitted within areas at risk of fluvial or tidal flooding (i.e. below 5.58m Ordnance Datum Newlyn) unless it is otherwise acceptable to the Local Planning Authority in the context of the other relevant policies in the Plan, and suitable measures are incorporated regarding flood containment and public safety.

*Policy
E25*

Where flood protection measures are necessary as part of development, consideration will need to be given to the effects of this on:

- (1) existing flood defences and the possibility of further defence measures to integrate the new with the existing;
- (2) the wider environment, particularly the natural movement of material along the coast; and
- (3) existing conservation, geomorphological and archaeological interest associated (with the site of any new defence works.

New development will not be permitted if it is concluded that the effects of new flood defences would be detrimental to existing flood defences and/or would have a significant impact on natural coastal processes.

*Policy
E47*

The Borough Council will seek and promote initiatives that will enhance the appearance of strategic routes within the Borough. Development proposals alongside these routes will be expected to enhance the appearance of the route and contribute to the local environment by way of design, layout and landscaping.

*Policy
E49*

The Borough Council will, in appropriate case, require the submission of landscaping proposals in connection with development proposals involving new building.

*Policy
IN7*

The Council will not grant planning permission for new development or the change of use of existing premises unless adequate vehicle parking is available.

*Policy
IN8*

On new development, the Borough Council will require that cycle parking facilities be provided in accordance with its cycle parking standards, in a location and design to the satisfaction of the Borough Council.

Appendix 2

Baseline Noise Survey – Abbott Laboratories, Queenborough.

A preliminary baseline noise survey in and around the Abbott Laboratories site which was undertaken during Wednesday, 4 April and Friday, 4 May 2001.

Measurements were taken at a height of 1.5 metres and well away from any reflecting surfaces at three locations around the development site. All of the measurements were made using a CEL-480 C1 precision integrating sound level meter fitted with a type 250 half-inch electret microphone, which itself was fitted with a windshield.

The survey was carried out in accordance with the principles of **BS 7445 : 1991 : Parts 1-3, Description and measurement of environmental noise**. The meter was calibrated both before and after the measurements, using a CEL type 284/2 Acoustic Calibrator which has itself been calibrated within the last three months against a reference set traceable to National and International Standards. No significant calibration drifts were found to have occurred.

During the daytime measurements the weather conditions were overcast, with occasional showers, and a slight-moderate westerly wind. However no noise measurements were made during any of the showers.

For the night-time survey conditions were cool, partially cloudy with a light north-easterly wind. For both surveys climatic conditions were considered generally conducive to noise measurements.

Subjectively the dominant noise source at all of the measurement positions was road traffic on the A249 and the associated road networks. However at the most westerly positioned measurement locations HVAC plant noise from the adjacent Abbott Production Laboratories was also clearly discernible.

A summary of the noise levels recorded at the measurement position can be found below, including the equivalent continuous sound level, ($L_{Aeq, T}$), background noise level, ($L_{A90, T}$) and the A-weighted maximum RMS level (L_{Amax}).

Location	Lg Ave	$L_{Aeq, T}$	Lowest	$L_{A90, T}$	Max	L_{Amax}
	Day	Night	Day	Night	Day	Night
R/o 9-12 Jubilee Gardens	58.0 dB	55.5 dB	53.0 dB	49.5 dB	73.1 dB	72.1 dB
Adj. 15 Foxley Road	56.9 dB	50.3 dB	53.5 dB	43.0 dB	72.4 dB	73.9 dB
Adj 37-38 Foxley Road	51.0 dB	48.4 dB	48.5 dB	40.5 dB	73.7 dB	72.5 dB

Generally noise levels were fairly steady in nature throughout the measurements, except for the occasional movements of localised motor vehicles on the residential roads near to the measurement positions. The measured daytime noise levels are subjectively considered to be moderately high, but typical for a mixed residential and industrial location near to a trunk road. During the night-time the road network has a high proportion of HGV vehicle accessing local industries and the Sheerness Port facility.

Current Government policy on planning and noise is set out within **Planning Policy Guidance Note PPG24, Planning and Noise** published by DETR. It states the following:

Much of the development which is necessary for the creation of jobs and the construction and improvement of essential infrastructure will generate noise. The planning system should not place unjustifiable obstacles in the way of such development.

It continues as follows:

In the case of industrial development for example, the character of the noise should be taken into account as well as its levels

The guidance recommends in Annex 3 that for noise from industrial and commercial development the likelihood of complaints can be assessed, where the standard is appropriate, using guidance **BS 4142 : 1997, Method for rating industrial noise affecting mixed residential and industrial areas.**

Broadly the standard states that a difference of +10 dB or more between the rating level of the specific noise source under investigation, corrected as appropriate for any tonal or impulsive characteristics, and the background noise level indicates that complaints are likely. A difference of around +5 dB is of marginal significance and a difference of -10 dB is a positive indication that noise complaints are unlikely. The standard requires the assessment to be made both during the night and day.

It is generally recognised that the **BS 4142** test of ‘marginal significance’ represents a reasonable balance between the economic and practical constraints facing the business proprietor and the need to protect residents from unacceptable noise intrusion.

Swale Borough Council has no specific policies or guidelines on the control of noise from industrial and commercial development. In such cases each individual application is assessed on its merits and the developer is encouraged to agree noise control measures with the local authority having regard to the balance of need for the specific project.

The overall objective is to ensure that there is no significant adverse change to the existing noise climate at any noise-sensitive building. Swale Borough Council has also confirmed that they have not received any complaints of noise disturbance from the activities undertaken at the existing Abbots Laboratories facility.

From the measurement survey it has been established that the lowest measured day-time background noise level is 49 dB $L_{A90, 30 \text{ mins}}$ whilst the lowest measured night-time background noise level is 41 dB $L_{A90, 10 \text{ mins}}$.

The Local Authority is concerned that noise emanating from industrial premises may lead to disturbance within the residential properties throughout the neighbouring vicinity. Therefore based on the **BS 4142** test of ‘marginal significance’ the *rating* level of noise from the plant should not exceed the lowest measured background noise level at the nearest noise sensitive property by more than 3 dB between 07.00 and 23.00 hours and should not exceed the lowest measured background noise level at any other time.

Consequently it has been determined that in order to achieve these target levels noise from the development should not exceed 41 dB $L_{Aeq,T}$ night-time, measured at a distance of 3.5 metres from the most affected façade of the nearest noise sensitive property and 52 dB $L_{Aeq,T}$ daytime.

In addition, PPG24 also states that for noise from industrial and commercial developments:

General guidance on acceptable noise levels within buildings can be found in BS 8233 : 1987 (recently superseded by BS 8233 : 1999, sound insulation and noise reduction for buildings - Code of Practice).

This standard suggests suitable internal noise levels within different types of buildings, including residential dwellings. It suggests that an internal noise level of 30 dB $L_{Aeq,T}$ within bedrooms is a ‘good’ standard, whilst 35 dB $L_{Aeq,T}$ is a ‘reasonable’ standard. For living areas in the daytime, the standard recommends 30 dB $L_{Aeq,T}$ as a good standard and 40 dB $L_{Aeq,T}$ as being a reasonable standard. BS8233 also states that individual noise events should not exceed 45 dB L_{Amax} in bedrooms at night.

By meeting the recommended permissible external noise levels at least a reasonable standard would be achieved internally even with a partially open window in any building façade.

That notwithstanding the proposed development may be considered more appropriate for B1 (Business) use rather than the general industrial seen at the existing production facility, however, with an adequate level of sound attenuating measures noise levels would be controlled to the recommended levels stated above.

Such measures may include one, or more, of the following:

- The inclusion of a blockwork façade facing the nearest noise-sensitive properties;
- The use of screening or bunding at the southern boundary, and;
- The provision of sound attenuating measures to any fixed plant or ventilation systems.

Overall it is my opinion that, whilst noise is likely to be a material consideration for any industrial development at this location, there is sufficient and adequate noise mitigating measures available that would enable noise from the development to be significantly attenuated below the appropriate rating level.

Furthermore the local planning authority may consider the use of planning conditions to restrict noise emitted from industrial or commercial sites to enable any development proposals to proceed. However LPA's should follow the guidance given in Department of Environment Circular 1/85 'The Use of Conditions in Planning Permissions' and have particular regard to local conditions and characteristics.

Appendix 3

Report on Air Quality at Queenborough

There is no direct air quality data available for the Queenborough, not for the surrounding settlements. However, there is data available from a nearby monitoring point, and at a national level from the National Air Quality Database.

The nearest air quality data is from Stoke, on the Isle of Grain. This is approximately 8 km north-west of Queenborough. Existing data indicates that the air quality around Stoke is not badly polluted. There have been some minor exceedences of the air quality threshold (mostly related to local industry or humid, stable weather conditions in the summer) but generally air quality is good. This data can be extrapolated across to Queenborough, although caution must be used in doing so. However, it does indicate that local air quality in Queenborough is of good quality.

Another indirect source for air quality in Queenborough is from the 'Estimated Background Pollutant Concentrations in the UK', also found on the National Air Quality Database. In this case, specific estimation for Queenborough are available. It is predicted that for three critical parameters (PM_{10} , NO_2 and CO), the estimated background concentrations will be inside the required standard in the target year by over 50%. This further indicates that the local air quality in Queenborough is of good quality.

The proposed development is not anticipated to have significant emissions.

The potential for significant air quality effects may arise from construction and construction traffic. However, standard mitigation techniques (dust suppressors, wheel washes, covered HGV's, specialised storage areas for materials etc) can reduce these temporary air quality effects.

Appendix 4

**Abbott laboratories Ltd,
Queenborough**

LANDSCAPE BASELINE REPORT

For:

Abbott Laboratories Ltd.

Terence O'Rourke plc

October 2000

TOR 163302B

ILLUSTRATIVE MATERIAL**Drawings**

<i>Figure 1</i>	Site Location
<i>Figure 2</i>	Site Sub-divisions
<i>Figure 3</i>	Aerial Photograph
<i>Figure 4</i>	Local Area Topography
<i>Figure 5</i>	Local Plan Policies
<i>Figure 6</i>	Landscape Character Areas
<i>Figure 7</i>	Public Rights of Way
<i>Figure 8</i>	Site Analysis
<i>Figure 9</i>	Visual Envelope
<i>Figure 10</i>	Viewpoints
<i>Figure 11</i>	Photographs 1 and 2
<i>Figure 12</i>	Photographs 3 and 4
<i>Figure 13</i>	Photographs 5 and 6

1.0 ASSESMENT METHODOLOGY

- 1.0.1 This assessment has been undertaken in accordance with the Countryside Commission Guidelines for Landscape Assessment (CCP 423) and the Guidelines for Landscape and Visual Impact Assessment published by the Landscape Institute and the Institute of Environmental Assessment 1995.
- 1.0.2 This report has been compiled initially to determine the baseline landscape conditions of both the site and the surrounding landscape. This procedure forms an integral part of the Environmental Assessment process.
- 1.0.3 The area of assessment was determined by a desk study to establish the topography of the wider landscape, built development, any landscape designations and the likely zone of visual influence. All these findings were then confirmed by a field survey during October 2000. The photographs were taken with a 50mm lens from a range of public viewpoints. The field information has been expanded by an extensive desktop study of maps, aerial photographs and other sources of printed information.

2.0 DESCRIPTION

2.1 Location of site

2.1.1 The site is located north of Queenborough on the Isle of Sheppey, Kent. It is bounded by the Whiteway Road (B2007) to the north and west with the existing Abbott Laboratories complex situated immediately west of this road. The Sheerness to Sittingbourne railway line and the A249(T) form the eastern boundary of the site while the development edge of Queenborough forms the southern boundary. See Figure 1.

2.2 Site description

2.2.1 The site lies within the natural flood plain area on relatively flat land, less than 5m AOD. The total site area covers approximately 16 hectares but is sub-divided by a railway spur and the A249(T) into three smaller areas of approximately 10 hectares, 4 hectares and 2 hectares. See figure 2. Within the site are a number of drainage ditches and ponds. See figure 3.

2.2.2 The landscape is characterised by grazing marsh with most of area 1 being managed by grazing. Areas 2 and 3 are currently ungrazed. Area 2 contains the largest drainage feature, which flows approximately northwest across the site and is culverted under the A249(T). The site has been listed as a non-statutory Site of Nature Conservation Interest and the RSPB has identified the site as being of significant ornithological importance.

2.2.3 The site is very open and has little tree cover. There is recent screen planting along the boundary of the existing Abbott Laboratories complex and the Whiteway Road (B2007). Along the embankments of the A249(T) and the railway lines there is some tree planting.

2.3 Topography

2.3.1 The topography of the Queenborough area is of generally flat, open marshland below 10m. Much of the surrounding land is within the floodplain area of the River Swale however man's intervention in the form of sea wall flood defenses have been present since the 1860's, the last recorded flood being in 1953 when levels reached +5.7m

AOD. Within this essentially flat landscape there is a low ridgeline which rises to 26m at Barrows Hill and 42m at Furze Hill which lie to the southeast of the A250. This landform essentially encloses the site to the southeast restricting views into the site from further east. To the east of Minster the land begins to rise, reaching a maximum of 76m at Shrubsoles Hill. There are a series of valleys within this elevated landform which run north south descending from the higher ground to the coast, cutting through the undulating cliffs. See Figure 4.

2.4 Settlement and Development

- 2.4.1 The landform is overlain by an extensive urban development within the immediate coastal zone to the north of the Isle of Sheppey, the largest of these being the towns of Minster and Sheerness. The settlements have developed along the northern edges of the Isle of Sheppey close to the River Medway and the Thames estuary, generally on the higher land. From the coastal edges the developments appear to have expanded along major routes and up to the edges of the Marshes. Sheerness was a garrison town in the early 19th century, which attracted industries in the form of glass works, coal washing plants, cement works and potteries. The area still retains its industrial quality with large car depots and factories. It is located on the northwestern point of the Isle of Sheppey and has been developed up to the canal, which almost bisects Sheerness from the rest of the Isle of Sheppey. The canal runs along the disused Barton's Point & Queenborough railway lines and effectively separates the development of Sheerness from Diggs Marshes, Sheppey Court Marshes and Minster Marshes, which are designated Sites of Nature Conservation Importance in Kent.
- 2.4.2 Around the edges of the settlements close to the coastline are a number of chalet and caravan parks. Three of these lie within the Minster Marshes a Site of Nature Conservation Importance in Kent, between the towns of Minster and Sheerness.
- 2.4.3 The area has a large network of roads the main communications route being the A249(T), which runs from the main land across the Isle of Sheppey to the port of Sheerness. The site is bounded by the B2007 to the north and west and is bisected in the northeast corner by the A249(T), which crosses the site via a flyover.

- 2.4.4 The main Sheerness to Sittingbourne railway line forms the boundary of the site to the west. This line has a railway spur which bisects the site, terminating at Whiteway Road where an area of hard standing is present. This effectively divides the site in two.

2.5 Vegetation

- 2.5.1 The area is generally notable for its lack of trees and hedgerows both within the site and the surrounding landscape. The prominent vegetation of the surrounding land is grass, both for amenity and for grazing. The Landscape and Nature Conservation Guidelines produced by Kent County Council in March 1993 describe the land use as formerly pasture, with occasional orchards, although there is an increasing proportion of arable. The orchards and arable farmland can be found on the higher ground, the orchards enclosed by hedgerows, tree lines and windbreaks. There has been some recent tree planting along the boundary of the existing Abbott Laboratory complex and the B2007, and along the embankments of the A249(T) flyover. The extensive open spaces of the marshland give a strong feeling of remoteness. It is unlikely that there will be much seasonal change due to the absence of trees and hedgerows, with winter bringing a slightly more bleak feeling to an already remote landscape.
- 2.5.2 The southern part of the site is currently used as grazing marsh with an interconnecting dyke system and isolated ponds. The grazing is generally semi-improved and species poor with various species of grass, thistles and nettle. Nationally rare species of divided sedge *Carex divisa*, stinking goosefoot *Chenopodium vulvaria* and small red goosefoot *Chenopodium botryodes* are present on the site, while the rare soft hornwort *Ceratophyllum submersum* is present within most of the dykes. The northeastern corner of the site is currently ungrazed.
- 2.5.3 Narrow drainage ditches crisscross much of the flat surrounding marshland. Some of these, close to residential areas have been enlarged to form modern water features attracting birds, which are fed by local residents. Numerous creeks wind their way through the landscape and in some instances have been culverted. Within the site area there are a number of drainage features present. In the northern part of the site is a widened drainage ditch, which has been culverted under the A249(T) and Whiteway Road. This forms a very attractive reed lined water feature, which attracts a variety

of birds. In the middle of the site south of the railway line close to Whiteway Road are some pools of standing water, which could even be the remains of ox bow lake features. The rest of the site is crisscrossed by numerous drainage ditches.

2.5.4 Hedgerows are largely absent from the marsh areas but begin to be seen in the landscape as the marsh ceases and the land begins to rise. Generally tree cover is limited to farmsteads and dwellings on the higher land although there is evidence of recent tree planting forming localised boundary screen planting to industrial development and planting along roads. The main species are Poplar, Hawthorn, Blackthorn although these are often stunted and windswept. Historically the area had elm trees scattered around the marshland, however Dutch Elm disease has destroyed many of these trees altering the character of the landscape.

2.6 Landscape related planning designations

2.6.1 The Kent Structure Plan (adopted 1996) and the Swale Borough Local Plan (Deposit Draft January 1996) identify a number of designations, which relate to the landscape of Queenborough and its wider setting. See Figure 5. These include:

- **The Special Landscape Area**

This area is considered “worthy of being preserved” and the designation seeks to safeguard The North Downs and the North Kent Marshes from detrimental development. It covers the North Kent Marshes and aims to safeguard them from detrimental development. The Kent Structure Plan, Policy ENV4 and The Swale Borough Local Plan, Policy E16 state that “the Borough Council will give priority to the conservation and enhancement of the landscapes over other planning considerations, whilst having regard to the economic and social well-being of the areas.”

- **Designated Nature Conservation Site and Sites of Nature Conservation Importance in Kent**

Most of the North Kent Marsh area is also classified as a designated Nature Conservation Site.

- Kent County Council have identified the site as a site of Nature Conservation Importance in Kent, a local designation intended to protect sites the Borough feel are of local importance. In deciding which sites are of local importance they have studied the Kent Habitat Survey and the Kent Biological Records.
- The settlement boundary of Sheerness and Queenborough is drawn tightly around the boundaries of the existing settlements and forms the boundary of the site on the north, west and south.
- Much of the site, the subject of this assessment, is identified as a “Proposed Employment Site” with the central area between the railway spur and the A249(T) allocated as an “Employment Site with Planning Permission”.
- There are proposed housing sites and housing sites with Planning Permission within the settlement boundaries.

2.7 Public access

2.7.1 The landscape surrounding Queenborough is well provided with a network of public rights of way in addition to the highway network. See Figure 7. This indicates that with widespread access to the local countryside the potential for views to the site could be extensive. The site is devoid of public rights of way however to the south of the site close to the boundary of Queenborough there is an area of public informal access.

2.8 Views (See figures 10-13)

2.8.1 A series of specific viewpoints of the landscape surrounding Queenborough have been visited and photographed to provide a broad understanding of the existing local landscape.

2.8.2 View 1: from the residential development of Queenborough looking northwest across the site.

- The foreground of this view reveals an open informal recreation area, which the public use on a daily basis, walking dogs etc. This area appears to have been

recently improved for recreation by building an ornamental bridge over one of the drainage ditches and by the provision of bins. The grass within the foreground is obviously mown at intervals throughout the year up to the drainage ditch. The fenced area to the right of the photograph is the boundary to allotments used by local residents of Queenborough. The landform is almost flat marshland with no hedgerows, only isolated trees and a few fencelines. The entire skyline is dominated by industrial development comprising low industrial sheds and taller chimneys, cranes and lighting. The tallest chimney in the center of the photograph is the chimney from Grain Power Station on the Isle of Grain on the northern bank of the River Medway. To the right of the photograph the flyover of the A249(T) forms the skyline.

- The site is extremely visible within this view, extending from the foreground, to the industrial development to the west and north and the flyover of the A249(T) to the east. Part of the area appears to be managed by the grazing of cattle.

2.8.3 **View 2: from the footbridge crossing the railway line looking south.**

- This photograph was taken while standing on the footbridge crossing the main Sheerness to Sittingbourne railway line looking south towards the site. The residential development edge of Sheerness is pictured in the foreground to the left of the picture with gardens backing onto the railway line. The land is flat with scrub planting along the road and railway edges. The landscape is extremely industrialised with a parking lot in the foreground and a car depot and Abbott laboratories existing complex to the right of the photograph. The distant landscape is clearly visible as an area of elevated ground, which is the ridgeline of the Medway. Cranes, chimneys, pylons and lighting break the skyline, in particular the lighting for the car depot.
- The site can be identified as the area of flat grassland in front of the residential development at Queenborough. The church of Queenborough can be clearly seen in this photograph. The roundabout identified in the photograph marks the northern edge whilst the western edge is more difficult to define due to industrial development and scrub vegetation.

2.8.4 View 3: from residential development northeast of Diggs Marshes looking southwest.

- The photograph was taken from the edge of the residential development, which cuts across the canal along the former Barton Point and Queenborough railway line from Sheerness into the marshes. In the foreground of the photograph a drainage ditch can be seen. This appears to have been widened and is of a more formal nature than other drainage ditches across the marshes, probably due to its close proximity to the development edge. To the right of the photograph the development edge of Sheerness can be seen. The flat marshland occupies much of this view with very few trees and fencelines. Cattle can be seen grazing much of the marshland. The skyline is made up of the development edge of Queenborough and of the chimneys, cranes and buildings of the industrial works. The prominent lines of electricity pylons and telegraph poles running across the marsh further erode the rural quality of this view.
- The site location can be identified by the A249(T) flyover, which can be seen in the centre of the photograph. Much of the site is located behind the therefore is partially obscured from view, however a small part of the site is located immediately in front of the A249(T). This is also difficult to discern due to distance, scrub vegetation and the A249(T).

2.8.5 View 4: from playing fields of Sheppey Sports Ground looking west across the site.

- The photograph was taken from the edge of the playing field of Sheppey Sports Ground. The barbed wire fence in the foreground forms the boundary to the sports field. The landform is flat marshland with no hedgerows, only isolated trees and a few fencelines, which divide the marsh into different areas for grazing. In the foreground sheep graze, whilst in the field beyond cattle graze and the brown field to the left of the photograph appears to be arable land. The A249(T) can be clearly identified by the flyover, which is visible in the centre of the photograph to the left of the two electricity pylons. The electricity towers

and cables are prominent within this view and the industrial development can be clearly seen in the ground beyond. The large chimney to the left of the electricity pylons is the chimney of Grain Power Station on the Isle of Grain and the distant elevated land the ridgeline of the Medway.

- The site occupies flat ground beyond the elevated A249(T). It extends this side of the A249(T) into an area behind the electricity pylons.

2.8.6 **View 5: from public footpath at Furze Hill looking northwest across the site.**

- This photograph was taken from a local high point at Furze hill to the east of Queenborough. This higher land is very different in character to the low marshland, which can be seen in the distance. Much of the higher land is arable and is divided by hedgerows or the remnants of hedgerows. From the top of Furze hill the Downs can be seen forming a ridge along the skyline. To the left of the photograph the Kingsferry Bridge, which is the only bridge onto the Isle of Sheppey can be seen. The development edge of Queenborough can be seen in the centre of the photograph whilst the strip of residential development to the right of the photograph is the outer edge of Minster. Sheerness is to the right of the photograph beyond the flat land of Diggs Marshes and Sheppey Court Marshes. Much of the foreground appears rural in character however along both sides of the River Medway and The Swale is industrial development. To the far left of the picture smoke can be seen emerging from the chimneys of industrial works and towards the centre and the right of the photograph can be seen the huge chimneys of Power stations, the largest being that of Grain Power Station. Vast areas within this industrial landscape are vehicle storage depots upon which thousands of shimmering vehicles can be seen.
- The site can be seen in the center of the photograph. It is the pale green area in the middle distance to the right of Queenborough residential development and extends just beyond the A249(T), which can be seen on the elevated flyover.

2.8.7 View 6: from the Haven Holiday Centre entrance on the A250 looking southwest across Sheppey Court Marshes.

- This photograph was taken from the A250 opposite the haven holiday centre. The development seen to the left of the photograph is the edge of Sheerness. Immediately in front of the development edge is a slightly elevated embankment along which the canal runs. The flat open marshland of Sheppey Court Marshes and Diggs Marshes occupies much of this view. There are almost no trees or hedgerows in this view, the marshland being divided into grazing fields by fencelines. To the left of the photograph the land begins to rise up to Barrows Hill a height of 26m. Electricity pylons and lines run across the landscape of the marshes and can clearly be seen against the skyline.
- The site can only be identified by the A429(T) flyover, which can just be seen in the centre of the photograph just below the horizon.

3.0 VISUAL ENVELOPE

- 3.0.1 A local visual envelope has been determined within 2.5km from the centre of the site. See figure 9. This distance was considered sufficient to identify the local visual envelope due to the flat character of the landscape and inaccessibility to the marshland via public rights of way. This identifies the area from which it might be possible to see the site allowing for the potential local modifying effects of trees and buildings etc. It does not identify views from the River Medway, Thames estuary and The Swale.
- 3.0.2 The visual envelope has been determined by desktop topographical analysis supported by field assessment. The extent of the visual envelope has been identified in the field where possible from points of public access. The extent of the visual envelope between points of public access has been predicted by interpolation of map and site based topographic and vegetation information. Where it is considered probable that private properties (particularly from first floor windows) could have views to the site, even if these cannot be determined from ground level areas of public access, they have been included within the visual envelope.
- 3.0.3 The visual envelope does not indicate the significance of views to the site, it only identifies the areas from which it is anticipated that any part of the site may be visible.
- 3.0.4 The visual envelope reveals the extensive areas to the northeast of the site from which it is visible. Significantly, this includes substantial areas of the Local Plan designation, Sites of Nature Conservation Importance in the Kent. Further studies will be required to identify if the visual envelope extends beyond the 2.5km radius examined.

4.0 LANDSCAPE CHARACTER – CLASSIFICATION

4.0.1 The Countryside Agency's, Countryside Character nationwide assessment of the English Landscape Volume 7 identifies the area around Queenborough as being located within "Character Area" 81, the "Greater Thames Estuary". This is a substantial character area that covers most of the coastline between the Swale estuary on the Kent coast to the south and the river Stour on the Essex/Suffolk border to the north. The "key characteristics" of this landscape are described, with those appropriate to the landscape around Queenborough being highlighted in bold:

- **Extensive open spaces dominated by the sky within a predominately flat, low-lying landscape.**
- Strong feeling of remoteness and wilderness persists on the open beaches and salt marshes.
- **Traditional unimproved wet pasture grazed with sheep and cattle.**
- **Open grazing pastures patterned by a network of ancient and modern reed-fringed drainage ditches and dykes, numerous creeks and few vertical boundaries such as hedges or fences.**
- **Hedgerows are absent from the large, rectilinear fields with trees beginning where marsh ceases and the ground starts to rise.**
- Distinctive military heritage on coastline.
- **Contrast and variety within the Estuary is provided by Sheppey, a long low island rising from a stretch of very flat marsh along the Swale estuary in Kent with low, steep, clay cliffs facing towards Essex across the Thames estuary.**
- Numerous small villages and hamlets related to the coastal economy of fishing, boatbuilding and yachting.
- Modern day pattern of local parishes reflects the historical layout of settlements.
- **Pressure on edges, particularly around major estuaries from urban, industrial and recreational developments together with the associated infrastructure requirements often on highly visible sites against which the marshes are often viewed.**
- **The Thames edge marshes are themselves subject to chaotic activity of various major developments including ports, waste disposal, mineral**

extraction and prominent power stations plus numerous other industry-related activities such as petrochemical complexes.

This indicates that the landscape of Queenborough is considered typical of the “Greater Thames Estuary Character Area”.

4.0.2 Kent County Council Structure Plan (adopted 1996) does not identify any character areas however, in March 1993 Kent County Council produced a document entitled “Landscape and Nature Conservation Guidelines” which identifies nine distinct Landscape Character Areas. Within this report the Isle of Sheppey has been divided into two character areas, Sheppey to the north and The Coastal Marshes to the south. See figure 6. The key features of Sheppey character area are described as:

- *An increasingly open landscape as a result of Dutch Elm Disease, field enlargement and coastal exposure.*
- *Impact of urban areas and extensive holiday parks on adjacent, predominantly open countryside.*

The key features of The Coastal Marshes character area are described as:

- *High nature conservation and landscape value of wet grazing marshes, dykes, mudflats and more limited sand-dunes and shingle ridges.*
- *High agricultural quality of much of the reclaimed marshland.*
- *The huge open skies, bracing air, sense of freedom and solitude.*

The site falls within the Sheppey character area and contains many of the attributes identified within the key features listed above.

4.0.3 Kent County Council and the Countryside Commission produced a Landscape Assessment and Indicative Landscape Strategy for The Kent Thames Gateway in July 1995. The site falls into the North Sheppey Local Landscape Character Area. This

has been sub-divided into Prominent Wooded/Farmed Hills, Flat or Undulating Open Farmland, Rural Fringe and Marshland Fringe. The site is described as “Marshland with Urban/Industrial Dominance” while the nearby marshes are described as “Marshland with Urban/Industrial influences. This emphasises the different character of the marshland to the west and east of the road and rail corridor. The area to the western end of Diggs Marsh is bisected with roads, railways and pylons and peripheral housing and industry are visually intrusive, dominating the marshland character. Further to the northeast, on Sheppey Court and Minster Marshes, the character is less degraded, however fringe development and amenity land-uses have a localised and urbanising effect. The report states that “proposals for further development at Whiteway Road are confined to areas to the west of the railway line and road which already suffer from significant visual and physical degradation. Strong planting along the line of the railway and road would provide a valuable buffer between these areas and the more intact marshland areas to the east and enhance their character.”

5.0 EVALUATION

5.1 Value of local landscape

5.1.1 The different landscape classifications which cover the area of Queenborough and the site all concur that it is located within an area of island marsh landscape. The broader landscape is considered important at a County level however, there are no landscape designations actually covering the site.

5.2 Landscape as a resource

5.2.1 The landscape of the site has been assessed in terms of quality at a National level. No part of the site or surrounding landscape is considered of sufficient quality to be included within a National Park, Area of Outstanding National Beauty or Heritage Coast designation therefore the quality of the site is not considered of National significance.

5.2.2 At County level the Structure Plan designates Special Landscape Areas which cover the North Kent Marshes. No part of the site falls within this designation therefore it is not considered of County significance.

5.2.3 There are a number of Local Landscape Areas identified throughout the Borough, four of which are within the Sheppey Planning Area however none of these fall within any part of the site. Rushenden Hill at Queenborough, which is the closest Local landscape Area to the site was visited to see if the site could be viewed from the hill. No part of the site could be seen due to extensive residential and industrial development at Queenborough, therefore it is not considered to be locally significant.

5.2.4 The site lies within a larger area of common character, that of Diggs Marshes, Sheppey Court Marshes and Minster Marshes and within a wider context, the Marshes of the Swale, therefore is not considered a scarce or unique resource. Although the site forms part of Diggs Marsh it is considered characteristically different from the Marshland to the east. The Sittingbourne to Sheerness railway line forms a clear division

5.2.5 The scenic quality of the site is considered generally poor. The site is bisected with railway lines and the A249(T) flyover, which severs the site from the wider marsh landscape. The reed edged drainage ditch to the north of the site is an attractive feature within the site, however this is not particularly scarce or unique within the surrounding countryside. The site does not have an unspoilt character being highly affected by visually intrusive industrial and residential development. Along the development edge of Queenborough an informal recreation area and a children's play area are gradually encroaching into the site giving urban characteristics to the edges of the marshland.

6.0 SITE DEVELOPMENT

6.0.1 Development of the scale proposed will inevitably result in a number of issues needing to be addressed. The site is bisected by the physical barriers of the A249(T) and the railway line. These effectively split the site into three smaller areas, reducing its development potential. Queenboroughs residential development edge backs onto the site and any development may cause issues with noise and visual intrusion. A children's play area and area of public access close to the development edge of Queenborough are within the site boundary and access problems may arise. The site is on land designated of Nature Conservation Importance in Kent.



Figure 1 - Site location

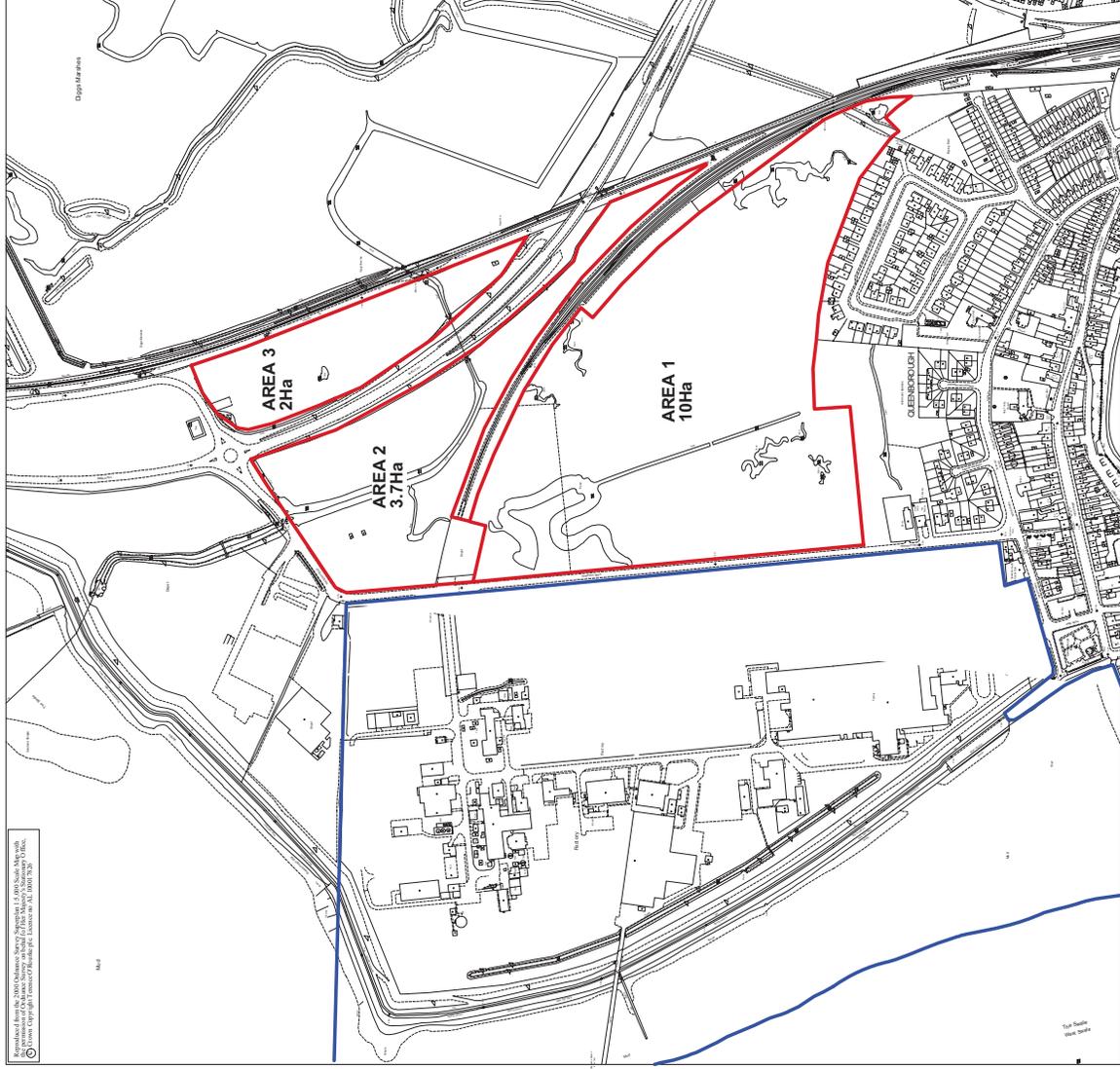


Figure 2 - Site Sub-divisions



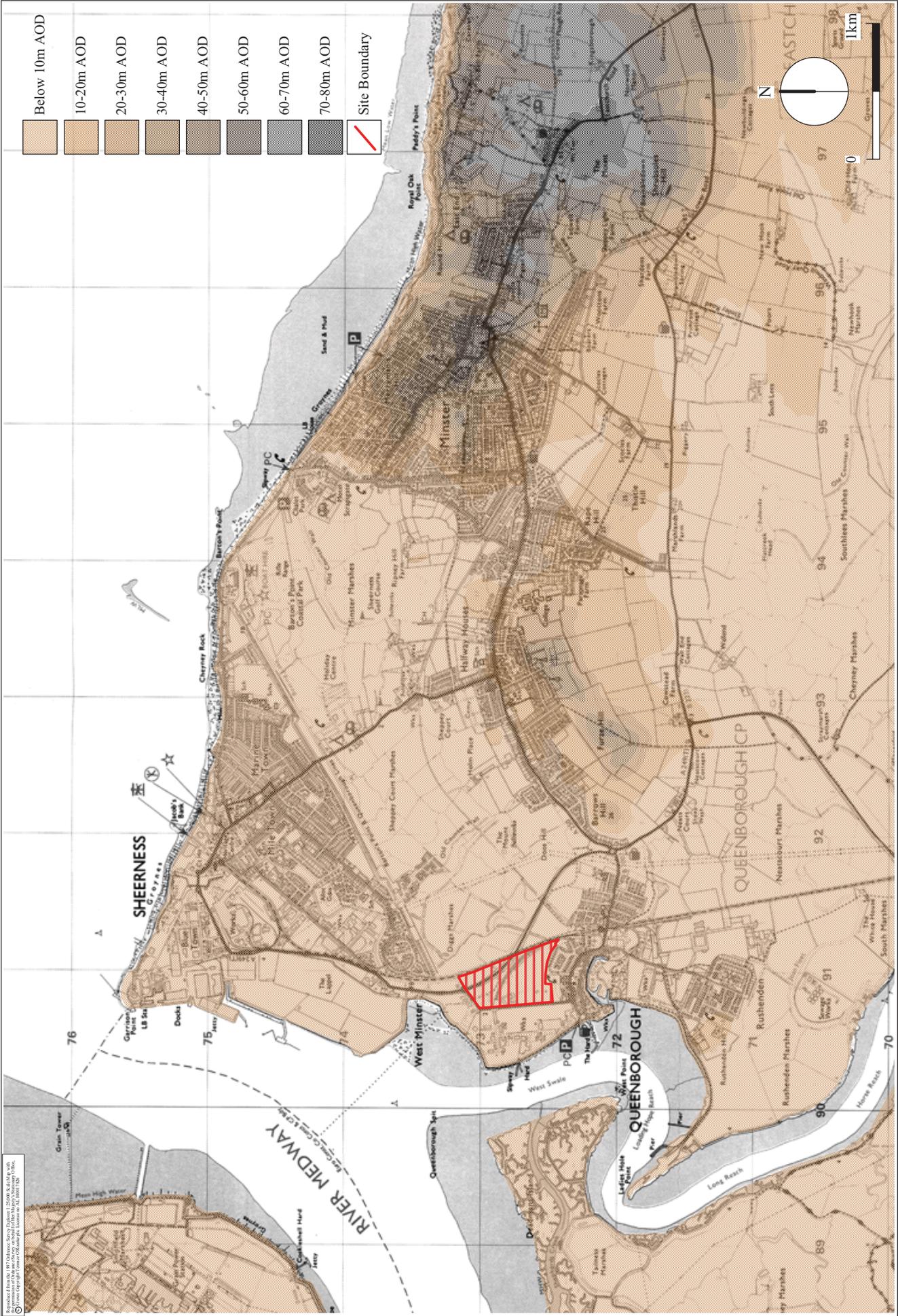


Figure 4 - Local Area Topography

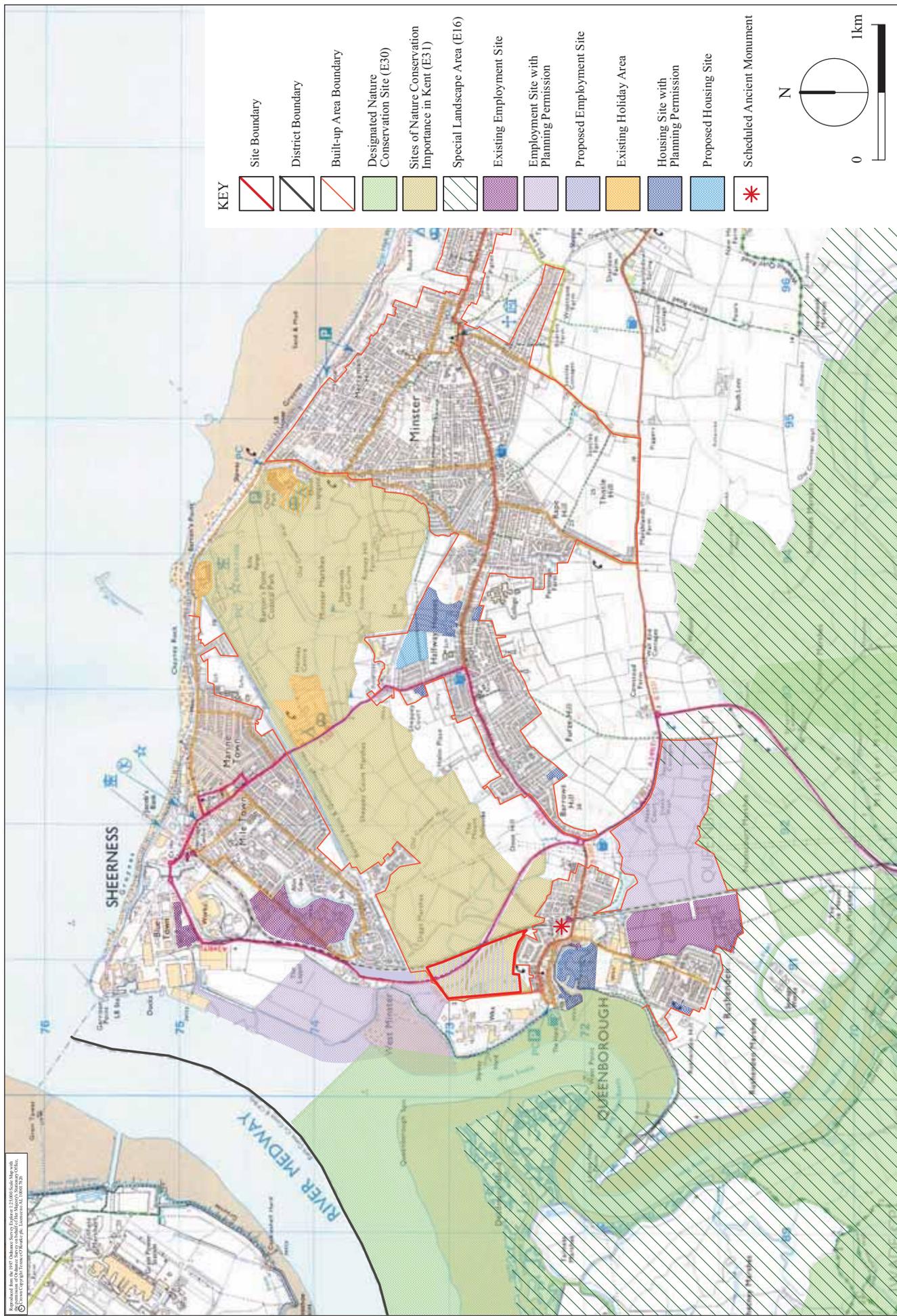




Figure 7 - Public Rights of Way

Reproduced from the 1997 Ordnance Survey Explorer 1:25,000 Scale Map with permission of Ordnance Survey and the Ordnance Survey Licensing Office.





Figure 10 - Viewpoints



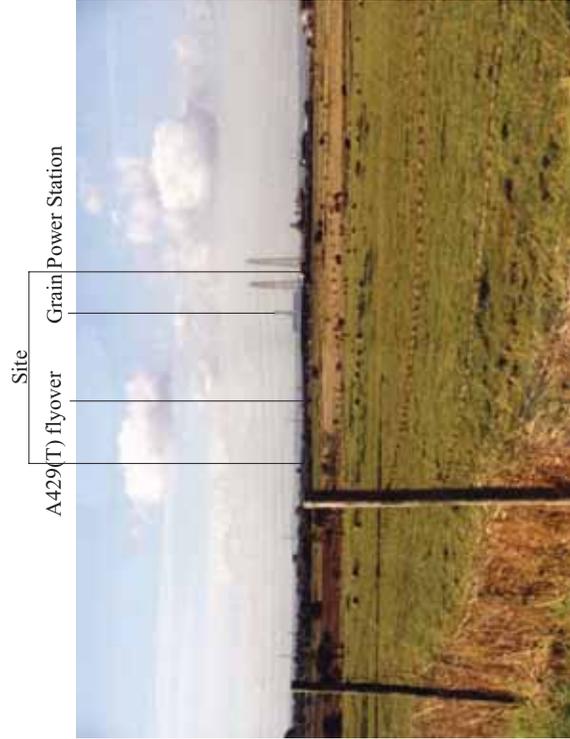
View 1
View from residential development of Queenborough looking northwest across the site.



View 2
View from the footbridge crossing the railway looking south



View 3
View from residential development northeast of Diggs Marsh looking southwest



View 4
View from playing fields of Sheppey Sports Ground looking west across the site



View 5
View from public footpath at Furze Hill looking northwest across the site



View 6
View from the Haven Holiday Centre entrance on the A250 looking southwest across Sheppey Court Marshes

Appendix 5



**COMPANY TRAVEL PLAN FRAMEWORK
ABBOTT LABORATORIES
ISLE OF SHEPPEY**

**COMPANY TRAVEL PLAN FRAMEWORK
ABBOTT LABORATORIES, ISLE OF SHEPPEY**

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FIGURES

Figure 1	Site Location
Figure 2	Existing Bus Routes

1.0 INTRODUCTION

- 1.1 This Company Travel Plan (CTP) Framework has been prepared by TPK Consulting Ltd on behalf of Abbott Laboratories for their existing site at Queenborough, Isle of Sheppey, and to support the proposed development of their land to the east of Whiteway Road (**Figure 1**). It is presented as a 'working document' for discussion with Swale Borough Council (SBC) and Kent County Council (KCC) from which a structure for a formal CTP can be agreed.
- 1.2 Draft Planning Policy Guidance Note 13 (PPG13) outlines the requirements for Green Travel Plans. The objectives are to reduce car usage (particularly single occupancy journeys) and promote walking, cycling and public transport use as real alternatives to the private car. Draft PPG13 also states that GTPs should seek to reduce traffic speeds whilst improving safety for pedestrians and cyclists. Whilst GTPs can be developed to form part of a wider strategy involving Local Authorities and other developments, they can also be presented to specifically address issues associated with individual developments/companies and it is in this latter respect that this CTP Framework is presented.
- 1.3 This document concentrates on sustainability issues and outlines a package of measures that could be investigated to encourage a reduction in overall travel by the private car. It outlines the Framework of the CTP for discussion with SBC and KCC.
- 1.4 Abbott Laboratories are committed to promoting sustainable transport solutions, where appropriate and practical. Recent Government transport and planning policy statements have formalised guidelines for the production of GTPs and it is within this context that this Framework is produced.

2.0 SITE CHARACTERISTICS

- 2.1 The location of the Queenborough Site is shown on **Figure 1**, this shows the current operational site and the proposed development.
- 2.2 The current operational site is accessed from the southwest of the site via Queenborough and there is also an HGV access from Whiteway Road. The proposed development, to the east of Whiteway Road, is intended to have a single access off Whiteway Road.
- 2.3 In public transport terms the Queenborough area is served by three bus services, which cover Minster, Eastchurch, Leysdown and Sheerness. The routes of these services are shown on **Figure 2**. These services provide reasonable service frequency in the AM, off peak and PM peak hours; the last bus is at approximately 2220 hours.
- 2.4 Queenborough railway station affords access by rail to Sheerness and Sittingbourne, and is within 800 metres from the existing site access by foot which is an acceptable walking distance. Although it must be noted that the proposed single access off Whiteway Road will increase this distance to approximately 1200.
- 2.5 Abbott Laboratories operate 24 hours a day, with 780 staff currently employed at the existing site, of which 29% work shift patterns. The proposed development will increase the number of employees to 1302 in total across the two sites.
- 2.6 The CTP will aim to address all forms of transport movement associated with the Company's business, although it should be accepted that it is likely to be more effective in relation to staff travel, i.e. where Abbott Laboratories can directly attempt to influence travel behaviour. It is also probable that some alternative transport modes will be unsuitable for this site due to its location,

the public transport provision in the area, the nature of the shift patterns and the impact on travel choices of 24 hour working.

3.0 OBJECTIVES AND SCOPE

3.1 The principle objective of any CTP is to encourage a reduction in overall travel by private car, particularly single occupancy use. This can be achieved by 'carrot and stick' measures such as encouraging alternative modes of travel and controlling parking. The CTP for Abbott Laboratories at Queenborough will be a strategy to encourage sustainable travel choices to the site for both staff and visitors by a range of modes.

3.2 To achieve the above objective three distinct tasks have been identified:

- Assessment of the accessibility of the site by non-car modes
- Development of proposals to improve accessibility by non-car modes
- Development of measures to encourage staff and visitors to travel to the site by means other than the private car

3.3 In assessing the above and developing the CTP, the location and nature of the site must be taken into consideration. Although 67% of the existing employees actually live on the Isle of Sheppey, shift working limits the travel choices available. For those employees who live on the mainland, choice is even more restricted.

3.4 The strategy will aim to deliver two main benefits:

- Improvements in the local environment, particularly in Queenborough, due to a reduction in non essential vehicular traffic to the site. This will be delivered in conjunction with the proposed reorientation of the main site access to Whiteway Road.
- Improvements in the transport choices, available to staff.

3.5 The CTP will concentrate on two types of people movement:

- Staff travel

- Visitor travel

There is little scope for influencing the operational characteristics of Abbott Laboratories business travel and this traffic will not be considered by the CTP.

4.0 SHORT-TERM MEASURES

4.1 Possible short-term measures are outlined below and will be evaluated to determine their suitability for inclusion in the final CTP. Short-term options are often a way of quickly gaining staff support and raising awareness of the benefits of sustainable travel choices. They have the added advantage of low implementation costs, minimum infrastructure requirements and a rapid realisation cycle, and as such are often a good starting point for new CTPs.

4.2 Such measures include:

- The selection of a CTP co-ordinator by the company.
- The provision of information regarding the benefits of using alternative modes of travel, both fiscal and environmental.
- A public transport notice board, including timetable, route and fare information.
- The provision of incentives to persons prepared to give up their car; these don't necessarily have to be financial.
- Appropriate signing, at the entrance and within the site, indicating the best routes for different transport modes.
- The development of a car sharing register/database matching staff with similar home destinations and shift patterns.
- Preferential parking spaces for staff who car share and a guaranteed ride home in the case of emergencies.
- Management of the parking stock.
- A staff travel survey to determine the present modal split and staff attitudes to sustainable transport.

4.3 The final options selected for implementation will be dependent upon the results of the staff travel survey. This can then be monitored to determine the effectiveness of the CTP when implemented.

5.0 PUBLIC TRANSPORT

5.1 The main way to reduce reliance on the private car is to encourage the use of public transport alternatives. As part of the CTP process we would investigate the following.

5.2 Staff need to be made aware of the public transport facilities available to them. User friendly and up-to-date timetables, route and fare information should be made available to all staff. This information should be for the bus stop/train station nearest to the site. Methods of advertisement to staff for this include a dedicated travel notice board, promotional leaflets attached to pay slips, or information on the company intranet.

5.3 Negotiations with local bus and train operators with regard to the following should be undertaken, although it should be accepted that these may be difficult to achieve in the privatised public transport arena:

- Discounted fares and season tickets
- Cheaper fares on the production of works ID card
- The re-routing of existing services to pass the site and cover areas where employees live
- The re-timing of existing services to correspond with shift patterns and/or the implementation of longer operation hours

5.4 In locations where existing public transport provision is inadequate, or operational shift patterns limit the patronage of such services, benefit may be gained from the implementation of a 'works' bus and the feasibility of this will be investigated. This has the advantage of being able to coincide with shift patterns and can be either entirely funded by the company, or discounted fares made available dependent on demand and capital cost.

6.0 CYCLING

- 6.1 The Energy Efficiency Best Practice Programme have estimated that staff living within 5 miles of work are potential cyclists. Providing the right cycling facilities can therefore encourage greater use of this mode. Outlined below are measures that could be introduced as part of the CTP to encourage cycling. These will need assessing in further detail to determine their suitability in terms of the Abbott Laboratories site.
- 6.2 The lack of secure storage for cycles on site can act as a major deterrent to cyclists. Therefore, providing good quality parking facilities in suitable, well-lit locations can enhance the attractiveness of this mode. Other measures include the provision of secure lockers for cycle equipment, changing and shower facilities.
- 6.3 The provision of interest free loans for the initial purchase of cycles and equipment or negotiations with a local cycle dealer to provide discounts for staff can also act as an excellent incentive.
- 6.4 However, in relation to the Abbott Laboratories site the promotion of cycling as a real alternative to the private car is more suited to daylight hours and therefore is unlikely to be a popular mode for staff working twilight shifts.

7.0

WALKING

7.1

Measures to encourage staff to walk to work include the production of maps to show safe pedestrian routes, including indications of times and distances to useful destinations near the work place, particularly public transport nodes.

7.2

Implementing improvements to site entry points to provide short cuts and ensuring crossing points meet pedestrian desire lines are also helpful to promote walking.

7.3

It must be noted that although walking can be considered a viable mode of travel for staff living within close proximity to the site, it may be considered unreasonable to expect staff working unsociable shifts to walk to/from work, not least for safety and security reasons.

8.0 VISITORS

8.1 The extent to which visitors to the site can be encouraged to use modes other than the private car is limited but the following could be adopted to increase the number of trips by more sustainable modes:

- Sending details of public transport services and distances to the site from public transport nodes to visitors when confirming appointments
- Providing lifts to and from the station for visitors
- Promoting other modes by sending details of cycling/walking routes
- Arranging co-ordinated travel and meetings between Abbott's sites at Queenborough and Maidenhead.

8.2 Whilst the influence on this form of travel, particularly to a location such as the Isle of Sheppey, is limited, it should not be ignored by the CTP.

9.0 KEY ACTIONS

9.1 The following five stages should be undertaken in the development and implementation of the CTP:

- Select a CTP co-ordinator
- Commence the consultation process with staff, SBC, local transport operators and possibly other local companies
- Determine information needs, i.e. undertake staff travel survey
- Assess modal splits relative to current behaviour
- Formulate and agree the CTP
- Monitor the effectiveness of the final GTP and revise where appropriate on an annual basis.

CTP Co-ordinator

9.2. The appointment of a CTP co-ordinator should be made from within the staff body to liaise with the company representatives during the preparation and implementation of the CTP. This person will also be able to put forward staff questions and concerns, discuss proposed schemes and report on feedback to initiatives.

Consultation

9.3 The development of suitable options for the CTP will require consultation to establish which measures will be most effective, which are unfeasible, or unpopular and to create a sense of staff ownership.

9.4 Staff involvement will be essential to deliver the changes in personal travel choices and to overcome natural resistance to measures that discourage car use.

- 9.5 The above can be achieved through a launch meeting to describe to staff the purpose of the CTP. This meeting should be used to gain staff support for the CTP, identify existing problems and explain why the Plan is necessary.

Staff Travel Survey

- 9.6 The evaluation of options to achieve modal shift can be influenced by the results of a staff travel survey. A staff travel survey will also help to:
- Raise awareness of the CTP
 - Obtain suggestions from staff
 - Identify staff who may want to join a particular mode group, i.e. potential car sharers

- 9.7 It is important that the results of the staff travel survey are used to develop goals for the CTP.

Assess Modal Split, Formulate and Agree the CTP

- 9.8 The modal split and current travel behaviour should be assessed and used as the foundation for the CTP. It is important that the CTP is tailored to meet the operational requirements of Abbott Laboratories site. The principle goal being to reduce the number of single occupancy car journeys to and from work.
- 9.9 The measures should be selected using analysis of employee residence data, existing modal splits and data on the number of staff with essential car user status, following the collection and collation of the survey data.

Monitoring

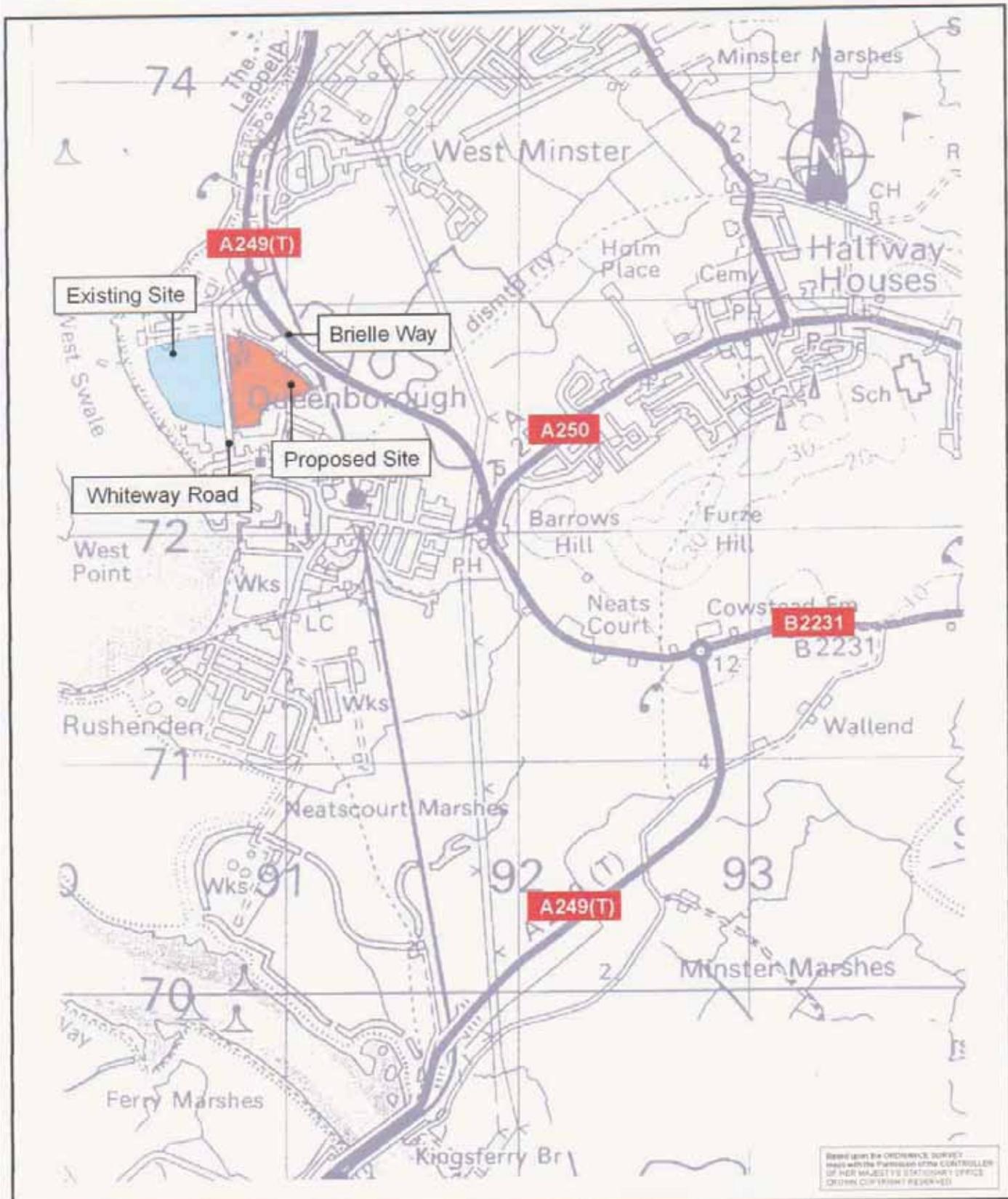
- 9.10 A regular review of the CTP should be undertaken. Monitoring is important to assess the effectiveness of the measures chosen and will indicate whether any modifications are required. The following parameters should be monitored:

- Change in modal split
- Car park occupancy
- Staff satisfaction
- Future options

10.0 SUMMARY AND CONCLUSIONS

- 10.1 The principle aim of the CTP will be to reduce the number of trips by single occupancy private cars, increase the use of public transport, and promote other modes such as walking and cycling.
- 10.2 The CTP will be a 'working' document that will evolve to reflect the requirements of Abbott Laboratories and its staff, whilst promoting sustainable transport solutions as part of the further development of the site.
- 10.3 The CTP will consider why staff and visitors choose to travel as they do and will promote measures to influence their behaviour towards sustainable transport choices.
- 10.4 Given the operational shift patterns at Abbott Laboratories site there is a clear requirement to maintain a high level of flexibility of mode. It is recognised that walking and cycling are not necessarily suitable or safe modes of travel for staff working unsociable hours and that public transport operating times do not accord with a 24 hour shift working regime.
- 10.5 The Abbott Laboratories' CTP Framework provides a firm basis for the agreement of the structure of a CTP with SBC and KCC.

FIGURES



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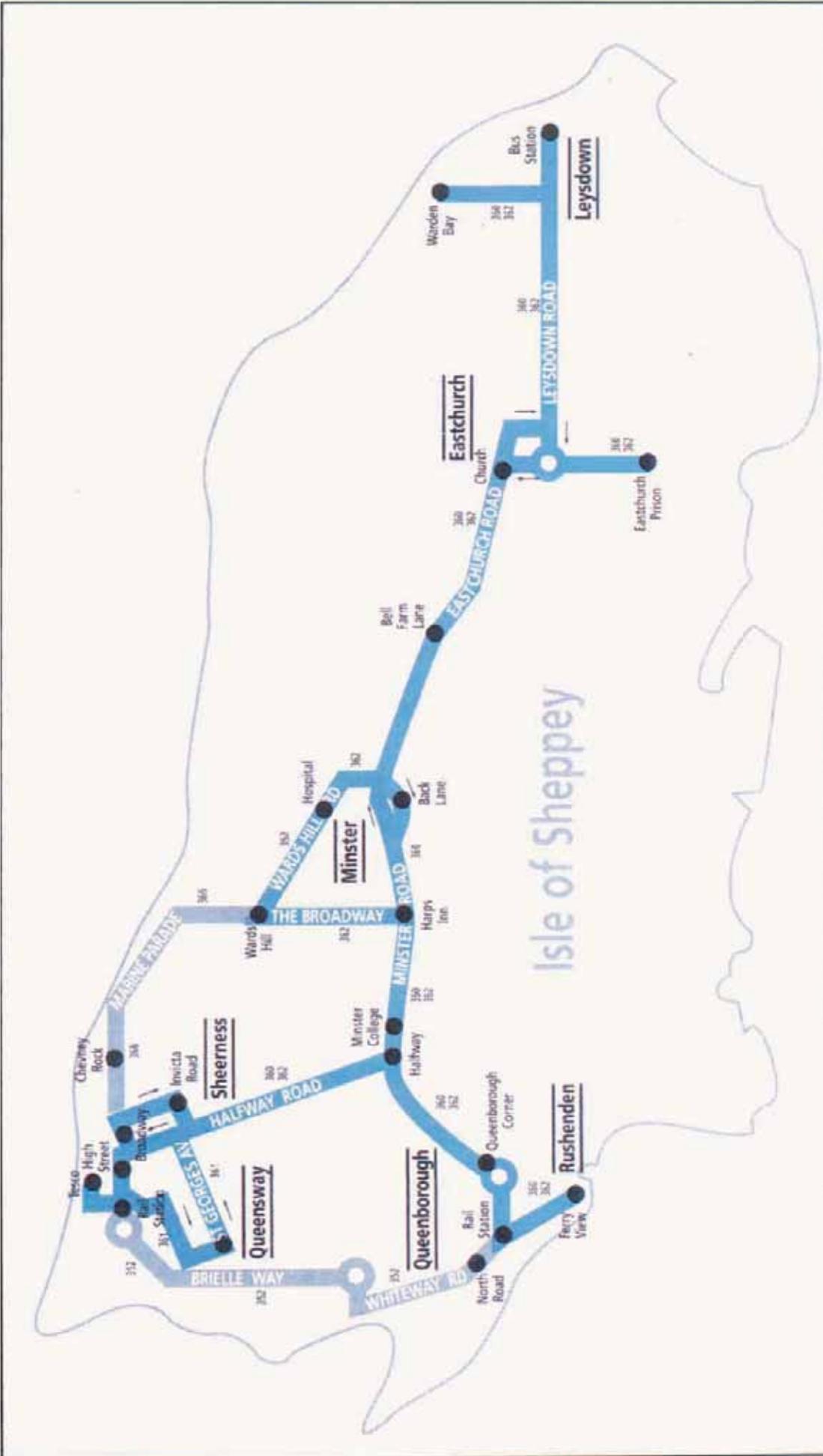
Drawing Title **Abbott Laboratories, Queenborough**

SITE LOCATION



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Tel: 0161 237 9858 Fax: 0161 237 3315

Drawn by LS	Checked by 	Traced by JW	Date MAR 01	Scale NTS	Ref. FIGURE 1	Drawing No. 13577 - 07	Proj.
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DRAWING TITLE		Abbott Laboratories, Queenborough		REV.	
EXISTING BUS ROUTES		SCALE		DRAWING NUMBER	
DRAWN BY		DATE		REF.	
LS		MAR01		FIGURE 2	
CHECKED BY		TRACED BY		DRAWING NUMBER	
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REVISIONS		SCALE		REV.	
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Appendix 6

Management Plan 2003-2022

Site

Abbott land to east of Whiteway Road

Map

OS Sheet 178
Grid TQ 910 725
Landranger 1: 50,000

Status

The three areas of land owned by Abbott are designated in the Swale Local Plan for future development by Abbott as set out in policies B20 and B23.

The 15.7 hectare site is also designated as a site of nature conservation interest and has been identified as a local site for breeding wading birds, in particular Lapwing and Redshank. It also supports a number of relatively scarce plant species, which include divided sedge (*Carex divisa*), lady's bedstraw (*Galium verum*) and small red goosefoot (*Chenopodium botryodes*).

In the past Abbott has allowed the land to be grazed, which has resulted in the maintenance of salt marsh habitat giving good conditions for breeding waders.

A management agreement for 11.3 hectares of South Marshes, Sheppey, has been set up as full compensation for future development of the site.

Objectives

To maintain the ecological value of the brackish marsh, not under development, by a suitable grazing regime and the maintenance of natural water levels to the north of the larger area.

To maintain the site as a useful site for breeding wading birds and existing scarce flora, as far as is reasonably practicable.

Prescription

Grazing and stock feeding

The pasture should be grazed by cattle and sheep, if possible, taking care to avoid excessive poaching, and aiming to achieve a short (4cm approx.) sward in winter, and a shortish (5-15cm) more tussocky sward in spring and early summer.

Management of water courses

Existing ditches, ponds and low lying wet areas will be maintained. Ditches will be cleared on a rotational basis when they become choked, or prone to dry out, or when it is necessary to prevent livestock mortality. Spoil from dredging should be spread on the land some distance from the ditch so

that if herbicides are later used to control thistles or other weeds growing on it, then the ditch plants will not be harmed.

Water levels

High water levels will be maintained in winter, with full ditches and some surface flooding of low lying parts, where practicable. The water levels should be allowed to drop gradually during the summer, to create a muddy margin for insects, water's edge plants and feeding birds.

Monitoring

Bird surveys have been carried out since 1998 and these show a reasonable consistent level of breeding wading birds. Similar surveys will be carried out at least every five years while the land remains undeveloped. Surveys will be carried out for two consecutive years following any phase of development.