# Appendix 1: Theme 4.1 – Historic Roads, Routes and Lanes



# Theme 4.1 – Historic Roads, Routes and Lanes

## Summary

4.1 The District's road network, its lanes, streets and footpaths has its roots in ancient times. Cropmarks shown on aerial photographs illustrate the numerous prehistoric trackways that followed the ridges and valleys of the North Downs allowing movement of early peoples around the coastal area and into the heart of Kent. The arrival of the Romans saw the creation of major roads connecting the coastal ports with Canterbury, London and each other; roads which in many places still form a part of the principal road network. The main road to Dover became a major route for pilgrims on their route to Europe. The towns of Sandwich and Deal have well preserved medieval and post medieval street patterns

which contribute immensely to their much valued sense of place.

## Introduction

### Ancient trackways

4.2 The earliest ancient road or route way in Dover district is the North Downs Way. This ran across Kent, from east to west, largely following the southern edge of the chalk escarpment of the North Downs. It possibly ran inland from the Folkestone area up to Dover, enabling trade from the continent access into the heart of Kent.

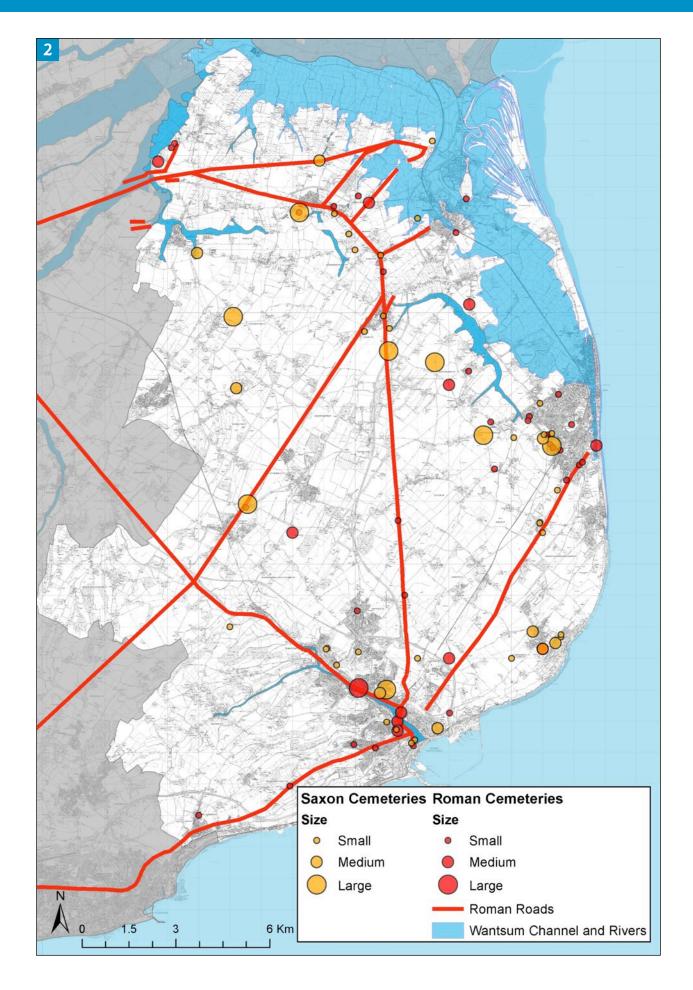
4.3 There also existed a network of minor routes and trackways, often only linking settlements and neighbouring fields, rather than forming any coherent or organised roadway system as we are more familiar with today. Cropmarks seen on aerial photographs, illustrate the presence of this network running along the ridges and valleys of the District's chalk North Downs allowing the movement of early peoples around the landscape and from the coastal areas inland.

### Roman roads

4.4 Whereas communication networks



CoverMedieval streets and alleys in Sandwich - Fisher StreetFigure 1Cropmarks of early trackways



before the coming of the Romans had been inward looking and connecting locally from settlement to settlement, the need to connect with the wider infrastructure of the empire and the province brought with it the development of a major network of roads. These roads, which connected the coastal ports with Canterbury, London and each other in many places still form a part of the principal road network.

4.5 The first major road, developed soon after the invasion at the behest of the military, would have been from Richborough to Canterbury and then on to the crossing of the Thames at London. Later the road from Dover to Canterbury developed, the civitas capital acting as a hub for the network in Kent. Other roads developed linking Dover with Richborough and Dover with the fort at Lympne to the west. Other lesser routes have been inferred from the presence of land boundaries, Roman and Saxon cemeteries which often focused on the principal roads and the distribution of settlement sites. The routes from Richborough and Dover to Canterbury are listed in the 2nd century Antonine Itinerary.

### Saxon and Medieval roads

4.6 Following the abandonment of the Roman administration in Britain, the archaeological evidence of Saxon cemeteries found close by suggests that the principal Roman routes remained in use and it is probable that the lesser routes did likewise. With the practice of transhumance, droves were established through the North Downs that linked the Saxon estate centres with the pig pastures of the Wealden Forest, a practice that lasted to the 13th century. Other droves can be seen in the reclaimed marshlands of the Wantsum and Lydden Valley allowing access to the grazing marsh.

4.7 The main road between Dover and Canterbury and on to London remained an

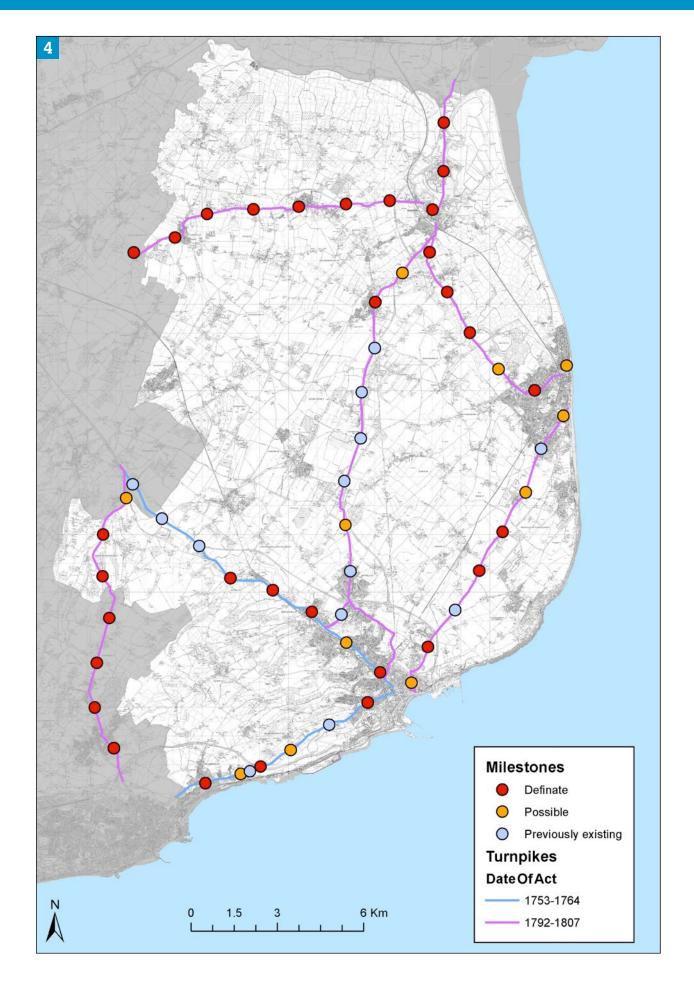


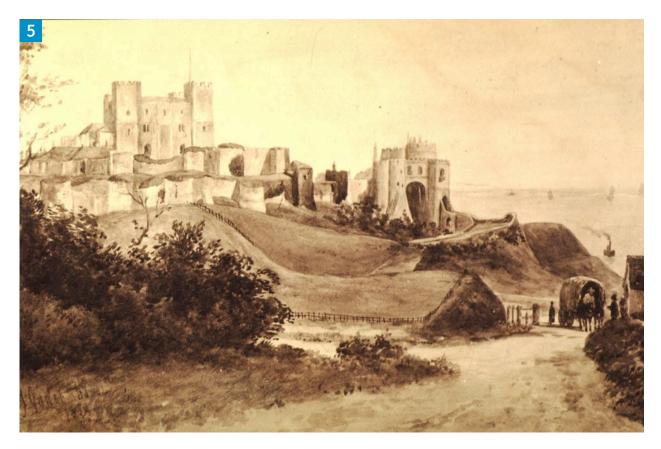


important route. Dover was the main port of embarkation for English pilgrims overseas and many passed along the road or followed the ancient trackway along the North Downs which has become known as the Pilgrim's Way. Pilgrimage increased with the martyrdom of Thomas Becket in Canterbury in 11780. Many places along the main road tapped into the passing pilgrims: almshouses were built to house the travellers as well as the poor and needy of the parish. Inns and accommodation for travellers were established in many of the villages and towns along the main coast road, a phenomenon which continues to the present day.

### Turnpikes

4.8 It was not until the post medieval period that roads were significantly improved or new routes created. A national dissatisfaction with the state of roads resulted in an Act of Parliament creating Turnpike Trusts. Under the Act, groups of local entrepreneurs were granted powers to





improve existing roads and create new roads in return for being able to charge tolls at various points on the route. The turnpike roads in Kent can be grouped into three main phases in the century and a half following the original 1709 Act.

4.9 In the first phase following the 1709 Act, the Watling Street route to Dover, being the principal route through the county, received particular attention. Within the district, the section between Dover and Barham Downs became a turnpike. In addition the coastal road between Dover and Folkestone was also turnpiked. No turnpikes were created in the District during the second phase of 'turnpike mania' (1760-1773). The third phase between the 1790s and 1840s saw a concentration on the turnpiking of roads in East Kent including in the District the Dover - Deal, Deal - Sandwich, Sandwich - Eastry, Eastry - Dover, Sandwich -Canterbury and Sandwich - Thanet roads. The improvement of roads around this period may have been in part assisted by the military who saw logistics of movement as an

important element of the defence against the threatened French invaders. The turnpike roads demised with the establishment of the railway in the second half of the 19th century and in 1862 an Act of Parliament set up Highways Districts to take over the care and maintenance of roads. Responsibility was passed to the County Council later in the century.

#### Town street patterns

4.10 The District has a number of historic towns where the original street pattern is well preserved.

4.11 The street pattern at the great Roman port of Richborough derives from the axis of the main Roman road emerging from the port through to Canterbury. Perpendicular side streets branch off this main road to create the grid of the town. Another principal road curves off south westward to meet a crossing point to the south and the road to Dover.

4.12 The Roman road network in the port

at Dover is more difficult to establish and the route of the emerging Watling Street has not been fully established. The main road out of Dover along the Dour Valley established the axis for settlement along its length. The early post medieval town developed along a series of streets running parallel to the shore line and harbour across the mouth of the Dour. As the town increased in size the town extended up the Dour valley and into the adjoining valleys.

4.13 Many of the streets within the historic port of Sandwich have their origins in the medieval walled town. The principal access routes into the town are through the four main gates in the town walls or via the bridge across the Stour. Within the town the streets are narrow and flanked by tenement plots, many of which still contain buildings dating back to medieval times.

4.14 The street pattern in Deal dates back to the 17th century and the establishment of the town on the shingle ridge behind the Henrician defences. Although development was originally haphazard and uncontrolled, topographical factors such as the defences and the sea valley to landward dictated the focus on three parallel streets (now the High Street, Middle Street and Beach Street) with a network of side cross streets. The resulting network of narrow streets and alleyways is particularly well preserved. As Deal expanded, development grew landward along the original road between the medieval village at Upper Deal and the new town area. The town then expanded out from this road and into the lower valley areas to the rear of the historic town. The town also extended southward along the sea front to merge with Walmer.

4.15 Another settlement with a noteworthy road pattern is that of the planned coalfield village at Aylesham. The new village was built in the 1920s to house up to 3000 families from the nearby colliery at Snowdown and was to be provided with all the facilities needed by the mining community. Sir Patrick Abercrombie's innovative design laid out the new village's streets to resemble the shape of a pit head winding frame.

## Description of the Heritage Assets

### Ancient trackways

4.16 There is no firm evidence that a major prehistoric route way followed the edge of the North Down's chalk escarpment through Kent to the coast though it seems likely that the **North Downs Way** at least west of Folkestone had its roots in ancient times. From Folkestone the route would probably have taken a line close to the coastline to access landing places in the Dour Valley.

4.17 There is substantial evidence however for numerous local trackways linking prehistoric settlements and farmsteads with each other and the coastline. This evidence takes the form of visible cropmarks on aerial photographs of the chalk downlands. Many of the prehistoric trackways follow the natural south west to north east alignment of the topography, running along the exposed ridges of the Downs. Others can be seen crossing the valleys to link routes.

4.18 Although there has been very little archaeological investigation of the network of trackways, their association with cropmarks of minor settlements and field enclosures that appear to be of later prehistoric form suggest that many are pre-Roman. A particular fine example is visible in the area around Tilmanstone where trackways following the natural grain of the landscape are bisected by the north to south aligned Roman road. Elsewhere archaeological investigation of prehistoric trackways has shown examples of hollow ways eroded deeply into the subsoil, others that have been metalled with gravel and in many cases simply



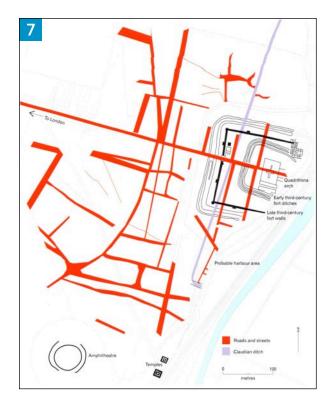
defined by flanking drainage ditches.

4.19 Archaeological investigation elsewhere in the county and in particular at Saltwood as part of the excavations for the Channel Tunnel Rail Link have demonstrated that there Iron Age trackways have been preserved as features in the present landscape and even form the alignment of present minor roads. Detailed analysis of aerial photographs and cropmarks of the District's agricultural land may help to shed some light on the antiquity of the buried communication routes and illustrate where these remain as extant heritage assets.

### Roman roads

4.20 Tracing the **Roman road network** in the district can be a challenge. In places the major roads can be clearly seen running straight across the landscape and being followed by roads today. The clearest example of this being the road running northwards from Dover through the countryside towards Richborough. Other roads are less clear and have been traced in places through cropmark evidence on aerial photographs, through the presence of historic landscape features such as boundaries, tracks and hedges which delineate the route and through careful examination of the distribution of the Roman and Saxon archaeological evidence and in particular the location of cemeteries which often flanked roads.

4.21 The Richborough to Canterbury Roman road has been difficult to trace. The start of the road at Richborough can be clearly seen and is picked up in part by Castle Road. Heading west off Richborough island, probably via a causeway or ford, the road is considered to turn south west towards Cooper Street and then directly towards Canterbury via Cop Street, Hoaden and Walmestone. The straight road, part of the A257 between Shatterling and Wingham is



erroneously referred to as the Roman road.

4.22 The **Dover to Richborough** Roman road can be clearly traced from north of Dover to as far north as Woodnesborough. The road which runs straight over this part of its route is largely followed by the local road network though some parts at Betteshanger, Great Napchester Farm and Buckland are not. The route through Dover from the Roman centre is not fully evidenced. At Woodnesbrough the road is considered to split with a north east branch to Sandwich and a north west branch to Ash and on to meet the Richborough to Canterbury road on the western edge of the district. The full road system in this area needs a detailed study to establish the routes to Richborough but routes from Ash to Cooper Street and another through Each End Ash are considered as likely to link to the Roman port. The Each End route has been partially confirmed through excavation works on the Ash bypass which found a metalled road heading in the direction of Richborough. The road likely took advantage of a natural promontory into the marshland and a series

of raised islands to link with a road seen to run south westward from the fort and which has recently been partially excavated during pipeline works on the island at Richborough. The complexity of the road network in the area is probably a reflection of the complexity of the Roman landscape at the mouth of the Wantsum Channel, the marginal nature of the land and the natural processes at work in the area. As shingle rendered areas of the channel unnavigable the consequent impact on any adjacent small wharfs and settlements that were served would possibly have impacted on the road network. It is also possible that areas of the approach roads to Richborough which lie on the low lying marginal areas would have been less usable during winter months.

4.23 The date of the Richborough to Dover road is not known and the route is not referred to in the 2nd century Antonine *ltinerary*, although that would be unlikely as the ltinerary dealt with routes into the province from the coastal ports. The route would certainly have been in place by the time of the construction of the Shore Forts and formed an important link between the two ports. A further important link in that defensive network is a possible road that linked **Richborough** with the port and fort at Lympne (PORTVS LEMANIS). Evidence in the form of modern roads and tracks, field boundaries, cropmarks and the location of Saxon burials indicate a road that branched from the Dover to Richborough road southward along Thornton Lane and through the farmed landscape to meet the Dover to Canterbury road close to Lydden Hill. The route south westward from there is more speculative though investigations at Saltwood on the Channel Tunnel rail link recorded a road running in this direction and thought to be part of the link with Lympne.

4.24 The main Roman road from **Dover to Canterbury**, mentioned in the *Antonine* 

*Itinerary* is thought to have developed after that from Richborough to Canterbury though it quickly became the prime route as Dover flourished and was later that referred to as Watling Street. The pre-eminence of this route over the others may be illustrated by the street layout of Roman Canterbury which used the Dover road as its axis rather than that of the Richborough road though there may have been other factors that influenced this.

4.25 The road network in Dover has not been evidenced by excavation and the route the road network took from the fort in the lower Dour Valley has yet to be fully established. The road would have had to cross the Dour, possibly around the junction of the High Street and London Road, certainly to meet the branch with the north road to Richborough.Whether the road followed the north bank of the Dour or continued along the south to cross around Buckland is still a matter of conjecture and Roman burial evidence has been found on both banks though that does not in itself confirm the presence of the main road. From Buckland the road follows the northern side of the Dour valley in to the Lydden Valley where it runs north west on a more visible route towards Canterbury.

4.26 A further road running from the port at **Dover towards Lympne** is thought to have headed south west along the Folkestone Road to meet and follow the dry valley at Stepping Down and on to Church Hougham and Capel.

4.27 As well as the principle roads linking the major ports, forts and Canterbury a **network of minor roads and tracks** would have linked the various areas of settlement, farmsteads and the coast. Much of this network is likely to have retained the complex of tracks that served the pre-Roman communities and in most cases these routes were influenced by the prevailing north west to south east topography of the chalk downland and the presence of the marginal lands on the fringes of the Wantsum Channel and the Lydden Valley. A route of some significance is suggested to run between **Walmer, Deal and Eastry** by the distribution of burial sites on the Mill Hill ridge and at Northbourne. A further significant route has been conjectured to run southward from around **Walmestone towards Watling Street** and is followed in part by both the District boundary and Adisham Road.

4.28 In summary the Roman network in the District provides a complex set of assets which includes elements which have been fossilised into the present road network and settlement pattern of the district, elements which survive as visible traces through features in the rural landscape and elements which only survive in archaeological form and which require further investigation to confirm their routes and chronology.

### Anglo-Saxon and medieval

4.29 During the Anglo-Saxon period, no major additional infrastructure was constructed but the continuing use of the Roman road network is evident in the distribution of Anglo-Saxon cemeteries, which cluster along the corridors around these routes.

4.30 Droveways were established for the movement of livestock between the coastal areas, across the Downs into the forest of the Weald. The Saxon royal centre of Eastry is recorded as having Wealden denns (areas with pasture rights) including Walkehurst and Sarrenden in Benenden and Henselle and Little Hearsell in Hawkehurst. Analysis of the most efficient drove route between Eastry and these pastures (Brookes 2007) suggests a route to the west of the Roman route between Eastry and Lydden Hill.

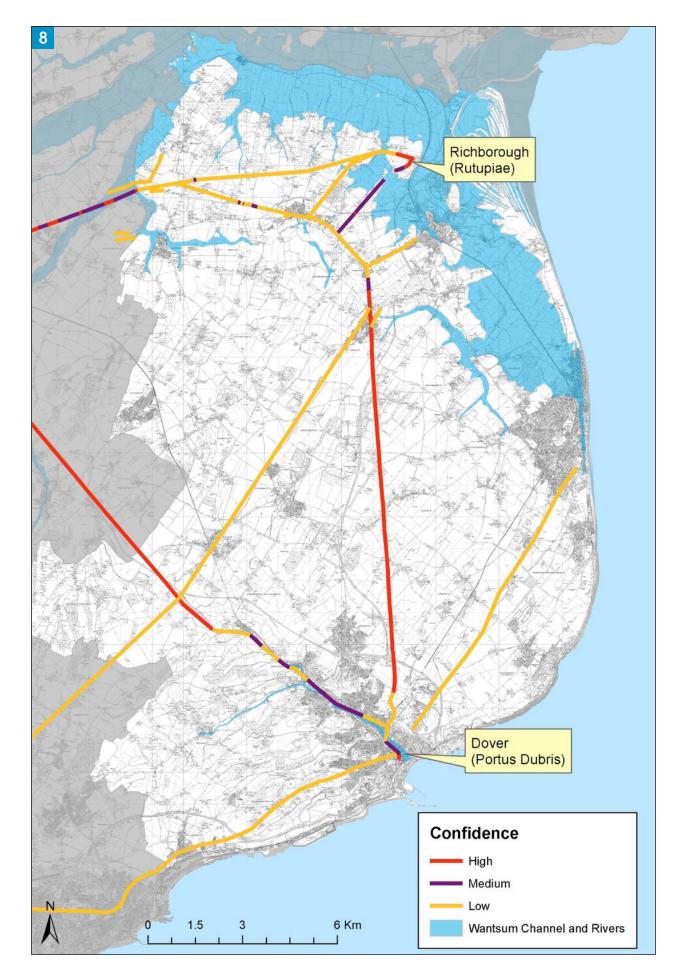


Figure 8 Roman Roads and their certainty



4.31 Droves into the reclaimed marsh lands of both the Wantsum and the Lydden Valley survive as raised embankments flanked by drainage ditches (see Appendix I Theme I). Many are described as 'walls' or 'droveways' on modern Ordnance Survey maps and may have their origins in Saxon times though many will be medieval.

### Turnpike roads

4.32 The turnpike roads in the District remain as part of the primary road network. In return for the upgrade and maintenance of the road, the Turnpike Trusts were able to erect gates and bars with accompanying toll houses to collect payment from those who used the road. Although more detailed research may find remains associated with the toll gates, it is thought that none of the District's toll houses survive. The location of gates on each of the roads is descried briefly below:

4.33 On the **Dover to Folkestone** 

**Turnpike**, a toll-gate was erected on the Elms turning at the junction of Elms Road and Folkestone Road. The toll keeper's house was erected on the triangular plot of land between the two roads and is marked on the First edition OS map. The house was removed in 1877 and the **Elms Turning Tollgate** removed soon after. A trough and fountain was erected at the junction and this has since been relocated into Market Square in Dover.

4.34 The first gate on the **Dover to London Turnpike** was erected in Charlton near the junction of High Street, London Road and Bridge Street. The **Charlton Tollgate** and the gate-keeper's cottage were demolished in 1855. A second gate was erected on Crabble Hill. The Crabble Hill Tollgate was closed in 1871 though the house was used to collect coal-dues for a number of years later.

4.35 The tollgate at the Dover end of the Sandwich, Eastry, Dover Turnpike stood at the top of Whitfield Hill. The keeper's cottage was demolished to make way for the new A2 roundabout on the site.

4.36 The Sandwich, Deal Dover Turnpike had several gates. The first was at the top of Castle Hill in Dover near to the castle entrance. A second tollgate stood near to where the Swingate Inn stands today.

10	
	SANDWICH TOLL BRIDGE
	For every Charlot Landes Berlin Chelse Char Catesh or other Vehicle: drawn by 6 or more Horses or other beasts. drawn by 3 Horses or other beasts. drawn by 3 Horses or other beasts. drawn by 1 Horse or other beasts. drawn by 1 Horse or other beasts. drawn by 1 Horse or other beasts. for every Waggon Wein Dray Car, or other Carriage.
	drawn by do more Horses or Oxen. Less than 4 Horses or Oxen. For every Horse or Mule laden or unladen and not drawing. Troke of Oxen. Cows. or Neat Cattle per Score. Droke of Oxen. Cows. or Neat Cattle per Score. and attent hat rate for any granter or less number. Droke of Oxen. Cows. or Neat Cattle per Score. Droke of Oxen. Droke Strekey of Image Sper Score. Droke of Oxen. Droke Strekey of Image Stre
	and after that rate for any greater or less number.
	For each wheel of any Wagon Wain Cart Carriage. or other Whicle. drawn or propelled by any-Locomotive oil exceeding 5 Tons. 2 Guideal Sandwich June 19/1905

Further gates stood at **Deal Castle** (including a bar in Walmer), **Upper Deal** (including a bar in Sholden) and **Stone Cross** in Sandwich. The Turnpike struggled financially and particularly the Deal to Sandwich section following the opening of the railway to Deal. The Trust wound up in 1874.

4.37 Tolls were collected for the Sandwich to Thanet Turnpike from the late 14th century Barbican Gate into the town. This Barbican which originally collected tolls from the Stonar ferry crossing, stood one end of a new toll bridge built across the Stour in 1773. The Barbican is a Grade I Listed

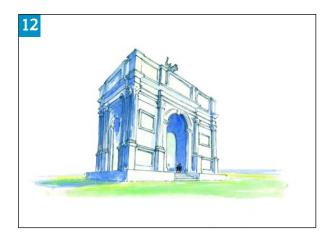


Figure 10The Barbican Sandwich, tolls boardFigure 11Sandwich Bridge

Building with two towers constructed on a base of ashlar and a superstructure of flint and stone chequer pattern. The road passed between the towers beneath a timber barrelled roof that connected the towers. The bridge was constructed of Portland stone with arched spans on either side of the river. The central span was originally likely to have been a wooden platform that could be raised to allow vessels to pass beneath. In 1892 this was replaced by an iron swing bridge that still operates today. The last tolls were collected on the bridge in 1977. The bridge is Grade II Listed.

4.38 Further research is required to identify the locations of the tollgates on the **Sandwich to Canterbury Turnpike**. The First Edition Ordnance Survey suggests a tollgate at **Each End** near Ash on this road.

4.39 Heritage assets associated with the turnpike roads include milestones which were a common feature. Twenty eight **milestones** have been recorded with Dover District including a number which are



protected through Listed Building status. Other evidence is the series of a small quarry pits that can be found close by which provided local material for the maintenance of the roads.

4.40 As with earlier periods, there are a great many lanes and minor routes forming a network between the major roads. Many of these have been developed into the rural road network of today but maintain in their form their original organic and informal development. This is their chief importance; they preserve the impression of the Dover countryside and traditional means of movement through it, dating back over many hundreds of years.

### **Town Streets**

4.41 The street pattern of the Roman port town at **Richborough** has been seen through recent research work by English Heritage involving the examination of aerial photographs and a geophysical survey. A grid of streets extending over 10 hectares in area has been recorded with potentially more extending outside the area of survey. Investigation of the streets within the Roman town has been limited to the area within the Shore fort. In this area several phases of street development were noted coinciding with the change in character of the settlement from supply depot, to town and its return to a military fortification.

4.42 The streets of the Claudian supply fort

comprised a central east to west axis, the road that forms the start of the main road from the town towards Canterbury. This road was 22 feet wide and surfaced by a layer of tightly rammed pebbles. Side roads slightly narrower extended north and south of the main axis. The main road was flanked by wood lined drains. The next phase from around AD 85 saw the construction at the eastern end of the road of the great monumental arch forming the ceremonial entry gate to the province. The main road was positioned slightly south of the original and was re-laid with black pebble metalling. It was flanked by large ditches on each side. During the second century the roads were not resurfaced and they seem to have become somewhat dilapidated with rubbish accumulating on the surface and in the side ditches. The third century saw the construction of the Shore Fort and the resurfacing of the roads. The main axis was maintained but located slightly further north than the previous. The side streets were surfaced with rough cobbling.

4.43 To the west of Richborough the road has been excavated at the point where it enters the marsh land to join on to the Kent mainland (known as the **Fleet Causeway**). Here it is seen to sit on a causeway formed from a layer of blue clay with a double layer of 6 inch rounded flint cobbles as a base for the 23 feet wide road. A further 18" of mixed stone was capped by a surface of small sized pebbling.

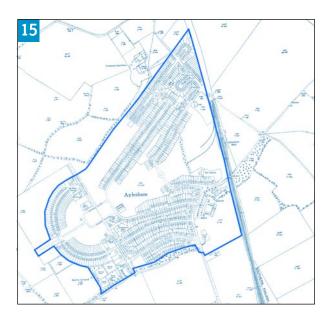
4.44 Within the walled town of **Sandwich** the **medieval street layout** is well preserved in the modern layout we see today. The narrow streets are flanked by numerous historic buildings, many of which are the tenements of the late medieval town with others both later and earlier. Together the streets and the historic buildings form one of the best preserved medieval towns in the country and provide a sense of a truly



historic place. The location of the early markets can be seen in the widened Market Street and High Street. Most of the streets are now surfaced in tarmac with stone drainage and curb edging. Pavements tend to be of flagstone or block paving. No detailed research has been carried out to identify any significant heritage assets amongst the street furniture within the town. Lighting comprises both stand alone columns and wall mounted lights.

4.45 Like Sandwich, **Deal** is an outstanding example of a preserved historic town and its street pattern and character contributes greatly to its significance. The original 17th century formal layout of three parallel streets on the shingle ridge behind the Henrician defences survives as the core of the historic town. Here the series of narrow cross streets and alleyways linking the town with the sea front add to the historic character. As the town extended, Georgian and Victorian properties flank streets extending into the lower lying valley to the era of the spit and extending up the original road to the medieval village centre at Upper Deal.As with Sandwich, the modern streets are surfaced with tarmac potentially sealing earlier





surfaces beneath. It is known that the cross streets were once used for hauling boats from the boatyards to the rear of the town and **South Street** for example once had a central line of cobbling to help this. Many of the streets have flagstone paving with stone curb stones. Further research is needed to identify significant heritage assets amongst the street furniture of Deal.

4.46 The pit village of Aylesham was never completed to the full design intended by Abercrombie although the distinctive pit head winding frame can be seen in the layout and most of the original features survive. Expansion of the town beyond the original bounds has not taken account of the original intentions.

4.47 Across the District there are likely to be many important heritage assets connected with the historic routes. **Bridges, street furniture** such as telephone boxes, post boxes, shelters, street lighting, bollards, signs, milestones, troughs and fountains all make small but significant contributions to the historic street character of the towns and villages of the District. Analysis of the Listed Buildings in the District (see Appendix I Theme 12) has established that 22 Listed Buildings fall within the category of 'Street Furniture'. In addition there are 6 Listed bridges and 15 telephone kiosks. The Listed Buildings are likely to form only a small part of the heritage assets and many more locally important features are likely to be found in the District that are not afforded protection through designation.

## Statement of Significance

4.48 The historic roads, routes and lanes of Dover District include abundant evidence of the network of prehistoric trackways, the earliest major roads built by the Romans in their new province, nationally important examples of Roman, medieval and post medieval streetscapes and examples of turnpike roads. They are of **moderate to considerable significance**.

### **Evidential Value**

4.49 The historic roads and trackways of the District have outstanding evidential value. Analysis of aerial photography supported by targeted archaeological investigation could



help to map the network of prehistoric trackways and subsequent Roman roads widespread through the District. Important evidence that could help us to better understand prehistoric settlement patterns, means of communication and travel between settlements and the effect of Roman rule on the communication network could be gathered from the District's archaeological resource. Important evidence on the form and construction of the earliest Roman roads in the country could be gained from excavation of preserved areas of the principal Roman road network.

4.50 Archaeological remains of the historic streets at Richborough and Dover may be able to enhance our understanding of the development of the two Roman ports, their form and character. Similarly examination of the historic street patterns in Sandwich and Deal and the surfaces and features that may survive buried beneath them can provide important evidence on their historic character.

### Historical Illustrative Value

4.51 The numerous ancient trackways that lie buried beneath the Districts farm lands are an outstanding illustration of the development of organised landscapes and the settlement patterns of later prehistory. The major Roman roads include the first in the country and illustrate the need for rapid movement of peoples in the new Roman province and the development of formal corridors of movement of people and trade between the continent and the inland areas of the province. The importance of the route between London and the port at Dover is emphasised through the continued use of Watling Street for pilgrimage through the medieval period and its becoming the first turnpike road in the county. The efforts taken to reclaim salt marsh for pasture during the medieval period can be seen through the droveways extending into the Lydden Valley

and Wantsum Channel.

4.52 The well preserved streets of medieval Sandwich and 17th to 19th century Deal are nationally important examples of port towns of those periods.

### Historical Associative Value

4.53 The Roman road network has strong associations with the arrival and development of Roman administration in Britain. The road emerging from the Claudian supply fort at Richborough was the first Roman road in the country. The great monumental arch at Richborough was constructed to celebrate the completion of the Roman conquest.

4.54 The network of narrow streets and alleys in Deal can be closely related to the story of the town's naval prominence and the practice of smuggling for which the town was infamous.

### Aesthetic Value

4.55 The well preserved streets of both Sandwich and the old town area of Deal are of considerable aesthetic value. The network of narrow streets linked by alleys, flanked by numerous historic buildings make a significant contribution to the historic character and charm of the two towns.

4.56 The major Roman roads are distinctive, well defined landscape features that cut across the topographical and ancient grain of the District.

4.57 The street pattern at Aylesham contributes to the visually interesting plan form and design of the mining village.

4.58 The Grade I Listed Barbican Gate at Sandwich, with its patterned towers is an attractive building commanding the entry to the town across the Sandwich Tollbridge. The stone arches of the bridge also have strong aesthetic qualities.



4.59 The detailing of the District's streets through their surfaces, curbs and street furniture make an important contribution to the character of the historic places. The street features can themselves be attractive in design.

### **Communal Value**

4.60 Many of the historic roads, routes and lanes in the District remain in use as part of the major and minor road network. Where roads have fallen out of use they are often used as public footpaths and rights of way.

## Vulnerabilities

4.61 The most vulnerable of the District's historic roads and routes are those that are not in use as part of the present road network. The numerous trackways seen on aerial photographs of the District's chalk downlands are subject to plough attrition, particularly those that lie on the exposed ridges. The streets of the Roman port town at Richborough are mostly within ploughed farmland. Historic alignments occasionally survive as landscape features and these can often be removed or the alignment crossed by new development.

4.62 Those historic routes that are in present use are unlikely to suffer from wholesale change. The main threat to these routes comes from the maintenance of the highways and streets or their upgrade to keep pace with modern traffic needs. Such works can result in the loss of historic features, the resurfacing of roads with materials that are not in keeping with their historic character or the use of inappropriate signage. Excavations within the roads for utilities development may affect buried surfaces and features. Resurfacing of roads can lead to a general rise in levels that buries features such as milestones on the edges. Historic road features such as shelters and signage are also vulnerable to vandalism and theft.

## **Opportunities**

4.63 Where new development is proposed, master plans should take account as far as possible any historic routes that cross the development area. Sites such as the extension of the White Cliffs Business Park in Whitfield are crossed by a Roman road corridor which should be taken into account in the park layout.

4.64 Where significant roads have been abandoned, opportunities should be taken to maintain the line of the roads through the use of footpaths or landscape features.

4.65 An inventory of highway heritage assets would help those maintaining the District's roads to take account of the assets when planning their works. The development of local lists to cover key assets would also assist in management of key undesignated assets. Guidance for the treatment of heritage assets on roads could be usefully developed.

4.66 Local communities could become involved in researching the antiquity of their roads. Toolkits are being developed that will help volunteers to map and assess roads in their parishes. Mapping and analysis of cropmark sites and examination of the archaeological finds in the District will help us to understand more about the prehistoric and Roman road networks. 4.67 The droveways in the Lydden Valley should be maintained as public access routes into the valley and could be enhanced in conjunction with development in North Deal. Interpretation could be improved in the valley.

4.68 Archaeological monitoring of utilities development and maintenance in the historic towns of Sandwich and Deal may help to enhance our understanding of the early streets.

4.69 Future expansion of Aylesham should take account of the Abercrombie planned layout and be sympathetic to the original design intentions.

# Sources Used & Additional Information

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National Heritage List for England

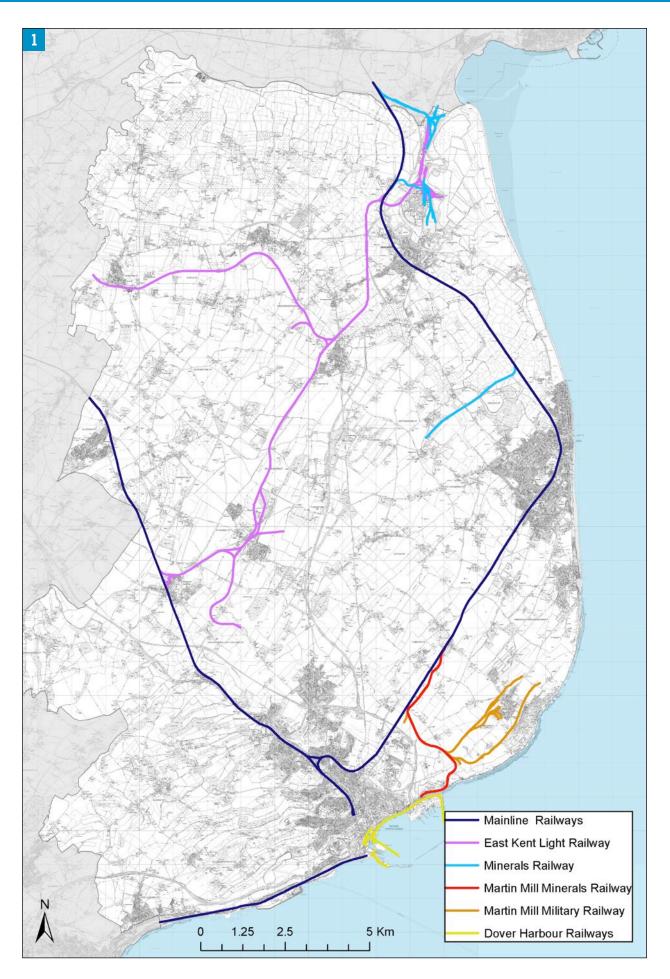
http://www.dover.freeuk.com/turnpikes

## Key Heritage Assets

Asset	Form	Designation & Protection	Accessibility	Interpretation
North Downs Way	Buried Archaeology	None	Public open space	Guidebooks, way markers, trails
Prehistoric Trackways	Buried Archaeology	None	Mainly undeveloped private land	None
Roman Road Network	Buried Archaeology, Historic Routes, Historic Landscape Features	Some Conservation Area protection	Public highways/ Undeveloped private land/ footpath network	None
Saxon and Medieval Droveways	Buried Archaeology, Earthworks	None	Open access land and Undeveloped private land	None
Turnpike Roads	Historic Routes	None	Public highways	None
Tollgate and houses	Buried Archaeology	None	Public highway and Private land	None
Milestones	Historic Structure	Some Listed	Public highways	None
Barbican Gate, Sandwich	Historic Building	Listed Building	Access to outside	Interpretation panel
Sandwich Toll Bridge	Historic Structure	Listed Building	Accessible	Interpretation panel
Richborough Roman Town streets	Buried Archaeology	Part Scheduled Monument	Part managed visitor site / part agricultural land	English Heritage Site
Richborough Monumental Arch	Historic Structure (ruinous)	Scheduled Monument	Managed visitor site	English Heritage Site
Fleet Causeway	Buried Archaeology	None	Private undeveloped land	None
Sandwich medieval streets	Historic Streetscape, Buried Archaeology	Conservation Area	Public Highway	Interpretation panels in town
Deal 17th-19th century streets	Historic Streetscape, Buried Archaeology	Conservation Area	Public Highway	Interpretation panels in town
Aylesham	Planned settlement	None	Public Highway	None
Historic Bridges	Historic Structures	Some Listed	Public Highways	None
Historic Street Furniture	Historic Structures and features	Some Listed	Public Highways	None

# Appendix 1: **Theme 4.2 – Railways**







# Theme 4.2 – Railways

## Summary

4.70 The coming of the railways helped to feed the rapid development of Dover as a major cross-Channel port. The railway first arrived in the District in 1844 and by the end of the nineteenth century the town of Dover benefitted from three mainline railway stations with connections towards London, Folkestone, Canterbury and Deal. In the rural areas of the District a network of Light Railway lines and tramways served rural industries and communities as well as the Kent Coalfields, whilst Dover Town benefitted from an electric tramway operated by the Corporation.

## Introduction

### Mainline Railways

4.71 The first major mainline railway line to be built in Kent was the South Eastern Railway's (SER) line from London to Dover (via Ashford and Folkestone). The line opened in sections, finally reaching Dover in 1844. The railway ran to a station (Dover Town) close to the harbour. Deal was the next town in the District to be connected to the railway network, when the SER opened a branch to the town in 1847 connecting off its line from



Ashford to Margate (via Canterbury).

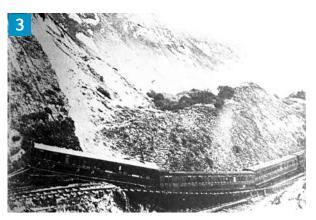
4.72 Competition for the SER arrived in Dover in 1861 when the London, Chatham & Dover Railway (LCDR) opened its own competing line to the town. This new line connected London to the Channel coast via Chatham and Canterbury. The railway line initially terminated at a new station at Dover Priory, but a 685 yard tunnel excavated under the Western Heights allowed the LCDR to extend its line closer to the harbour and constructed a new terminus called Dover Harbour Station.

4.73 The two railways operated in competition with each other to service the cross-Channel trade. In 1862 the SER extended their line from Dover Town Station onto the Admiralty Pier in order to connect directly with the cross-Channel steamers running from the port. The LCDR responded by opening its own connection onto Admiralty Pier in 1864. A war of competition between the two companies (combined with opening ever less-profitable routes elsewhere in the County) meant that neither company proved to be as profitable as might have been expected.

4.74 In 1881 the SER and LCDR agreed to jointly operate a new joint line known as the Dover and Deal Joint Railway (DDJR). The DDJR line ran from Dover to Deal (via Martin Mill and Walmer) and was the final piece in the jigsaw of mainline railways in the District. As part of the DDJR works a new direct link was built between the SER's Dover Town Station and the LCDR's Dover Harbour Station. In 1899 the two companies agreed to work even closer together and formed themselves into an economic 'working union' under the South Eastern & Chatham Railway (SE&CR) name.

4.75 In 1909 the SE&CR started work on a new station on Admiralty Pier. The new station, known as Dover Marine, was nearly

Figure 2 Train, Archcliffe beach. © Dover Museum (d02339)



complete when the First World War broke out. The station was therefore initially used for ambulance and military traffic, before finally opening to passenger traffic in 1920. In 1915 a large landslip occurred that blocked the former SER Folkestone to Dover line and this meant that all traffic during the First World War had to use the line from Canterbury. The completion of Dover Marine Station meant that the SER's Town and LCDR's Harbour stations were now largely redundant, the former closing to passengers

just before the war, the later closing after the war. Dover's passenger traffic was now consolidated on two stations (Dover Priory and Dover Marine).

4.76 Under the 1923 Grouping, the South Eastern & Chatham Railway became part of the newly formed Southern Railway. In 1933 the SR began construction work on a new Train Ferry Dock at Dover which allowed roll-on, roll-off rail services to operate from the port. The train ferry was largely used for freight traffic, but also carried passengers on the famous Night Ferry service. The Night Ferry was a joint operation between the SR and the French national railway company (SNCR). The Night Ferry service was withdrawn in 1980 and the dedicated dock has now been largely in-filled. One of the last acts undertaken by the Southern Railway was the production of an electrification scheme from the Kent Coast Lines. As with much of the rest of the



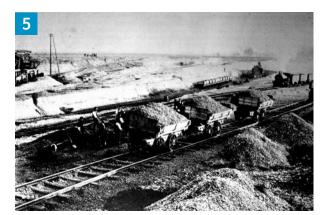
Figure 3Landslip at the Warren between Folkestone and Dover. © Dover Museum (d00147)Figure 4Poster for Southern Railway, Golden Arrow Service. © Dover Museum (d00002)

south-east the electrification scheme made use of a third-rail system, rather than overhead wires. The scheme was completed under the auspices of British Railways (following nationalisation in 1948). At the same time lines were rationalised, some stations rebuilt and signalling rationalised.

## Light Railways, Mineral Lines & Tramways

4.77 In addition to the mainline railways a number of smaller light railways, mineral railways and tramways were constructed in the District. The most famous of these was perhaps the East Kent Light Railway (EKLR); one of Colonel Stephens' cheaply built rural light railways. The EKLR was conceived in 1909 to connect a number of proposed collieries in the Kent Coalfield. The railway opened in stages, with passenger services commencing in 1916 from Shepherdswell to Wingham. A branch from Eastry to the Port of Richborough was constructed in the early 1920s and was officially opened to traffic by the end of that decade. Also in the early 1920s the line was extended closer to the town of Wingham where a new station was built (named Wingham Town, with the original terminus re-named Wingham Colliery). The line was further extended just beyond Wingham to the District border and a third station (Wingham Canterbury Road) built. The intention was for the line to extend to Canterbury but this never came to fruition.

4.78 The Port of Richborough was never a commercial success and many of the proposed collieries never took off. With passenger traffic being relatively light the main source of income came from traffic from Snowdown and Tilmanstone Collieries. The line became increasingly run-down and was closed to passenger traffic in 1948. Some freight traffic continued until 1951 when the majority of the line closed. The exception was the short 2.5 mile section of line between Shepherdswell and Tilmanstone Colliery



which remained in use until the miners' strike of 1984.

4.79 Betteshanger Colliery which opened in the 1920s was one of the biggest and most successful collieries in the East Kent coalfield but was not connected to the EKLR. Instead the colliery was served by its own dedicated railway branch which left the mainline between Deal and Sandwich. The colliery was served by its own extensive array of sidings and tramway lines.

4.80 The EKLR was not the first line to serve Richborough Port. S Pearson & Sons had previously constructed a branch off the SECR mainline from a junction close to Richborough Castle. Pearson's Railway was constructed to serve their gravel quarries at Stonar, where a network of sidings was laid out and a quay constructed. The gravel pits served by Pearson's Railway were used for materials for the construction of Admiralty Harbour. The War Office took over the site for a massive supply port during the First World War. Pearson's railway was abandoned by the War Office and a new rail connection from Weatherlees Junction was established and miles of sidings lain across the Richborough site. The SECR temporarily managed the port following the war until it was sold to Pearson Dorman & Long. It was under their ownership when the EKLR arrived.

4.81 Holman F. Stephens (latterly better known as Colonel Stephens) had previously



been involved in a light railway enterprise in East Kent before the EKLR. In 1895 he was involved with proposals to construct a new steam tramway from Sandwich to the coast, serving the golf links, beaches and Earl Guilford's lands. This enterprise did not take off, nor did the later idea of a light railway. The idea of a tramway to Sandwich Bay however was not totally abandoned. To serve the construction of the Sandwich Bay Estate on the Earl's lands a tramway was constructed from a wharf on the Stour to the coast. The Guilford Tramway, of narrow 3'6" gauge, ran from Guilford Quay via Sandown Road and Guilford Road to the proposed estate. The original intention for the line to carry passengers was not carried through (although reports suggest golfers were sometimes carried unofficially), and instead the tramway was limited to carrying building materials. The line was used briefly by the military during the First World War. The tramway returned to carrying construction materials after the war before being finally abandoned in the late 1920s/early 1930s.

4.82 As part of the works to construct the new Admiralty Harbour, a light railway line,

known as the Martin Mill Mineral Railway, was constructed from the main line at Martin Mill to the cliffs above the new harbour. This railway line was used for the transportation of gravel from quarries at Stonar and other materials for the casting of the concrete blocks used in the harbour construction. The railway line originally terminated close to the present National Trust White Cliffs Visitor Centre. Initially materials were simply tipped over the cliff edge, but later a funicular railway was installed to transport materials down the cliff face.

4.83 Following the completion of the harbour plans were put forward by Messrs Pearson (head of S Pearson & Son Ltd who had been the main contractor for the harbour works), Crundall and Jackson for the construction of a new tramway (connecting with the Dover Corporation network) from East Cliff to St Margaret's. A Light Railway Order was granted in 1909 for this new electric tramway. The Light Railway Order was worded to allow for the excavation and retention of the chalk removed during the creation of the line. In 1909 plans were also agreed with S Pearson & Son Ltd for the

construction of Dover Marine Station on an area of reclaimed land adjacent to the Admiralty Pier which required a significant amount of in-fill material. The solution was to trimback the cliffs above the eastern harbour and to cut a long, sloping 'road' for the proposed tramway up the cliff face, with the resulting chalk spoil used for infilling at the Marine Station. The tramway up the cliff was never built and it is tempting to see the Light Railway Order as simply being a means for Pearsons to easily acquire excavated chalk for the station construction works. The cliff road was cut from ground-level at the docks, with rails being laid as work progressed in order to transport the chalk down to the water's edge where it was loaded into barges and floated across to the construction site at the western docks. As the railway progressed up the cliff face the opportunity arose to connect this new construction line with the existing mineral railway on the cliff-top. To allow this connection a zigzag switchback was cut into the cliff face.

4.84 Following the completion of the Marine Station Pearson also tendered for and won a contract to lay a new railway to connect the Eastern and Western Docks. Track lifted from redundant sections of the Martin Mill Mineral Railway were re-lain along the seafront and became known as the Promenade Railway. The railway line was single track and was used by the Admiralty for the conveyance of equipment and materials from the main line to the Eastern Docks. Later the railway line was used for the transport of scrap metal and coal for industries which were established adjacent to the docks. The Promenade Railway finally closed in the 1960s as berths for roll on, roll off ferry services replaced industry at the Eastern Docks.

### **Dover Corporation Trams**

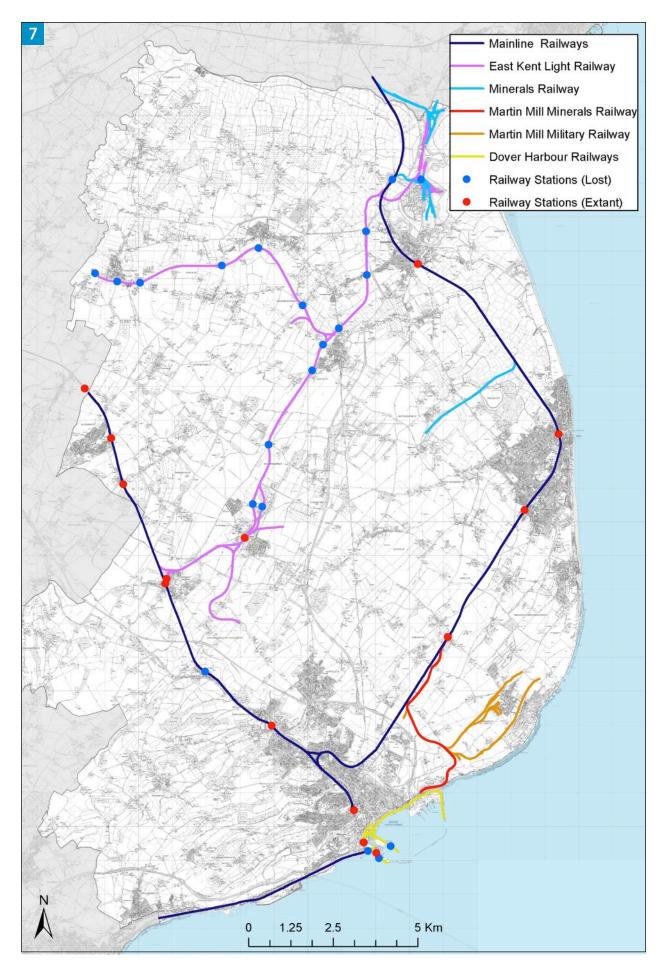
4.85 The Dover Corporation Tramway system was opened in September 1897 and was one of the first overhead powered electric tramway systems to be constructed in the United Kingdom. The initial line ran from Admiralty Pier to Buckland with a branch running from Worthington Street to Maxton. The system was run from two depots, one at the Maxton end of the tramway and the other at Buckland. The tramway proved to be successful and within four years passenger numbers had risen to in excess of two and a half million journeys per year.

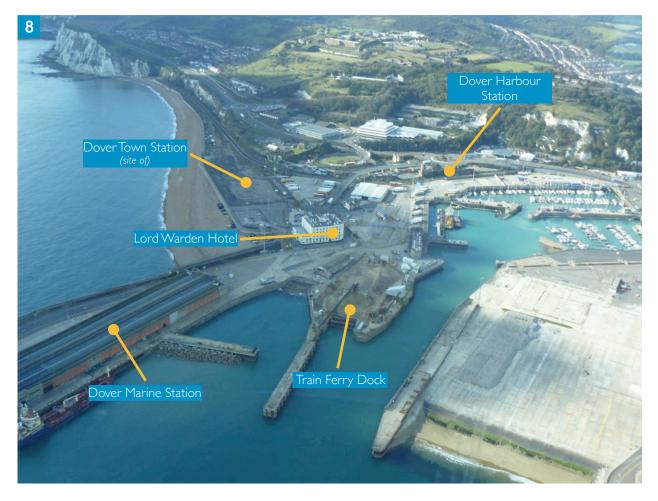
4.86 In order to reduce delays caused by trams having to wait at railway crossings the network was shortened in 1898, with the section from Strond Street to Admiralty Lane being abandoned. As the town of Dover expanded the line was extended from Buckland to River. The tramway continued to be used through the First World War, but it became apparent in the 1920s that the system has suffered from a lack of maintenance during the war. Some remedial repairs were made to the tramway in the 1920s, but the decision was taken to close the system in the 1930s and Dover's last tram service ran on New Year's Eve 1936.

## Description of the Heritage Assets

### **Railway Stations**

4.87 Dover has had a number of railway stations constructed over the years. This is partly a result of competition between the South Eastern Railway and the London Chatham & Dover Railway. The SER's **Dover Town Station** has been demolished and nothing survives above ground. The site is now used for lorry and car parking. To accommodate passengers wishing to stay overnight in the town the railway built the **Lord Warden Hotel** adjacent to Dover Town Station. The grand Lord Warden Hotel survives and is now owned by Dover Harbour Board; it is a Grade II Listed Building





and is used as offices.

4.88 The two stations of the competing LC&DR both survive. Dover Priory Station is now the town's only railway station and has been redeveloped and rationalised over the years. The current station buildings largely date to 1932 when Dover Priory was rebuilt by the Southern Railway. The goods yard associated with the station is now used for car parking. The Board of Ordnance had a depot adjacent to Dover Priory station that was served by the railway line. The main station building of the LC&DR's Dover Harbour Station also survives, although the platforms themselves and covered train-shed, along with associated infrastructure have been removed. The station building, which dates to 1861, is a Grade II Listed Building.

4.89 The station at **Dover Marine** survives, however it is no longer connected to the rail network and instead acts as a terminal for cruise liners docking at the port. The former Marine Station is a Grade II Listed Building. The 1936 Train Ferry Dock has been partially in-filled. Before the construction of Dover Marine Station both Admiralty Pier and the Prince of Wales Piers were provided with rudimentary stations, but nothing now survives of either, save for alcoves for passengers to shelter in along Admiralty Pier.

4.90 Other stations on the LC&DR were constructed at Kearsney and Shepherdswell. Both stations still form part of the national rail network. The main building at **Kearsney Station** is of 1862 date and is of typical LC&DR design. The lattice footbridge at the station is also of LC&DR design and was originally located at Chatham, being relocated to Kearsney in 1886. The main building at **Shepherds Well Station** is again of LC&DR design. An 1878 signal box of LC&DR design also survives at Shepherdswell. In addition to the main stations there were a number of



halts constructed on the LC&DR line, mainly to serve the East Kent coalfields. Such halts were provided at Snowdown, Aylesham and Stonehall (Lydden). A small halt survived at Stonehall into the 1950s, served by occasional trains, but nothing now survives. Both Snowdown and Aylesham are still on the national rail network. The 1914 halt at Snowdown was entirely rebuilt in the 1950s, whilst Aylesham Halt, which opened in 1928, was rebuilt in the late 1960s/70s.

4.9 **Deal Station** was originally built in 1847 as a terminus for the SER's branch via Sandwich. With the construction of the D&D|R in 1881 the terminus station was converted to a through station, with the original terminus station building being reused. The architecture of the station is therefore wholly SER in style. The station was originally equipped with an engine shed, but this was closed in the 1930s and the site is now used for housing. Rationalisation has also meant that sidings to the north of the station (now housing) and goods yard (now the station car park) have also been lost. The station retains its lattice footbridge and there is also a rare Southern Railway 'glasshouse' style signal box just to the north of the level crossing.

4.92 **Sandwich Station** is a well-preserved SER station, with the architecture of the main buildings being typical of that company.At Sandwich there is a fine main station building (of similar design to Deal) on the 'down'





platform, whilst the 'up' side is equipped with a small wooden waiting shelter. A lattice footbridge of late nineteenth century date and a 1938 Southern Railway signal box complete the surviving station buildings at Sandwich. The station's good's yard, which was closed in the 1960s, is now partly covered by housing and the goods shed building has been lost.

4.93 Although the D&DJR was a joint operation between the SER and the LC&DR the new station buildings at Walmer and Martin Mill are purely SER style in their parentage. Walmer Station and Martin Mill Station are both similar in their design. Both are rare examples of late SER style brick-built station buildings. Walmer Station was the larger of the two and was originally equipped with substantial brick-built station buildings on both platforms, although only the main building now survives. A goods shed was provided to the north of the station, but this has now been removed. Martin Mill was similarly equipped with brick buildings on both platforms, although of a smaller scale than at Walmer. Again the secondary station building has subsequently been demolished, as has the goods shed and goods yard which has been built over. The station master's house on Station Road survives at Martin Mill as does a row of railway workers' cottages.

4.94 The stations of the East Kent Light Railway (as the line's name suggests) were much less substantial than their main-line counterparts. Two stations - Shepherds Well Station and Eythorne Station - remain in use as part of a short heritage railway. The stations of the heritage line have been substantially rebuilt and nothing remains of the Colonel Stephens period stations at either site. The stations of the EKLR typically comprised of a relatively short platform on one line, sometimes timber built and sometimes faced in brick. Platform facilities were similarly rudimentary, generally consisting of a small wooden shelter, lit by gaslight where manned. At Elvington Station some remains of the EKLR can be seen, with a section of brick-built platform surviving in woodland to the north of Burgess Hill. This is the only one of the EKLR stations to retain any visible remains.

### Other Railway Infrastructure

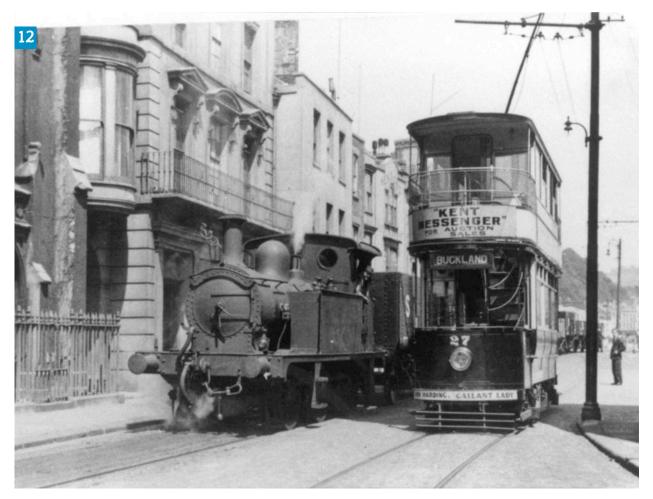
4.95 The SER's main London to Dover line (via Folkestone) and their Deal branch along with the LC&DR's London to Dover Line (via Canterbury) and the D&DJR's line from Dover to Deal all survive as part of the modern railway network. Surviving railway infrastructure can be seen along these lines, including tunnels (such as the 2,138 m. long **Shepherds Well Tunnel**), bridges (both over and under roads), cuttings and embankments.

4.96 Other than a short section between Eythorne and Shepherdswell the track of the EKLR has now been lifted and has either returned to agricultural use or occasionally has been built over. The line of the trackway can still be clearly traced in places on aerial photographs, and can also be traced in sections on the ground. The nature of the line, as a light railway, means that surviving infrastructure is rarer. Road crossings generally took the form of level-crossings and bridges were rare. The major piece of engineering on the line was the 500 m. long Golgotha Tunnel. It was originally intended that the tunnel should be double-tracked, but material was only partially bored out as a temporary economy measure and the tunnel (along with the rest of the railway) remained single track only. The brick-built piers and approaching embankments for a low viaduct that carried the EKLR over Richborough Road and the SER mainline survive at Great Stonar.

4.97 The route of the Betteshanger Colliery branch off of the SER mainline can again be easily traced on aerial photographs and in part on the ground. The lines have again been lifted and surviving railway remains are again limited. A Southern Railway period **signal box** to control the junction with the mineral line remains adjacent to the Kent Coast Line.

4.98 No above ground remains survive of the Guilford Tramway, although its route can largely be traced along farm tracks and the roads of the Sandwich Bay Estate. It is reported that some rails were still in place in the 1970s and may simply have been tarmaced over. Remains of Guilford Wharf where materials for the construction of the estate were transhipped from boat to rail still survive on the banks of the River Stour.

4.99 The tracks of the Martin Mill Mineral Railway have again been lifted, but the course of the line can be partially traced both on the ground and from aerial photographs. On The Lane (formerly Hangman's Lane) and near East Langdon there are surviving **bridge piers** where the mineral line passed over the road, whilst a partially in-filled single arch



bridge can be seen where the railway passed under the main Dover to Deal road. The line of the original cliff-top mineral railway can be hard to trace, but the sloping tramway road survives (apart from its lowermost end which has been removed by later works at the docks) as does the sharp zigzag switch-back (where traces of timber sleepers can be occasionally seen). An indent marking the top of the funicular railway used for carrying materials for the harbour construction can



also be seen. Part of the Martin Mill railway was re-used by the military during the Second World War and remains associated with this re-use are discussed in Theme 3.7. Nothing is known to survive of the Promenade Railway also constructed by S Pearson & Sons.

### Dover Tramway Infrastructure

4.100 There are relatively few surviving *insitu* remains relating to the Dover Corporation Tramway visible within the town. The **Buckland Tram Depot** has survived and the depot building is currently used as a motor garage and car showroom. The depot at the Maxton end of the system has been demolished and the site has been redeveloped for housing.

4.101 An early twentieth century **tram stop shelter** survives at the junction of Elms Vale Road and Folkestone Road. The shelter

Figure 12Tram-car Number 27 and a Train in Strond Street, Dover. © Dover Museum (d00496)Figure 13Tram-stop shelter at the junction of Elms Vale Road and Folkestone Road

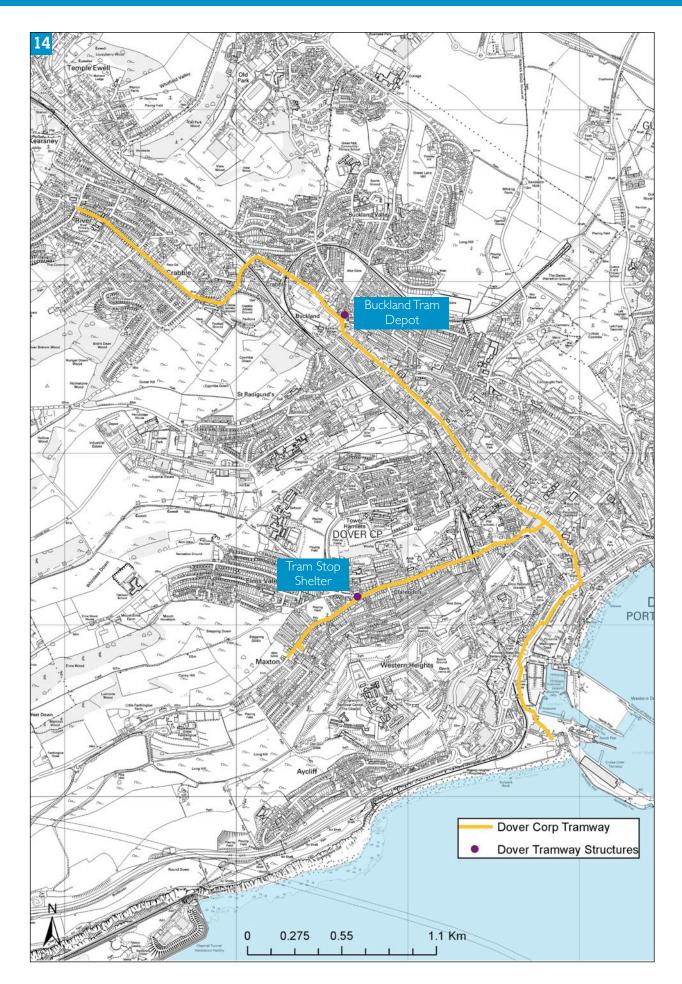
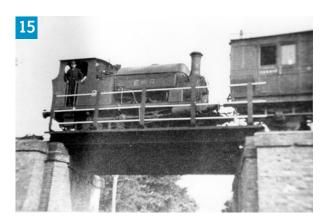


Figure 14 The Dover Tramway system with surviving infrastructure marked



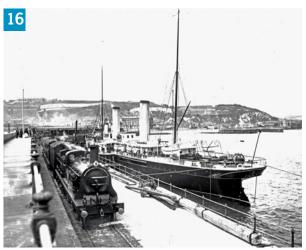
is constructed from cast and wrought iron and glazed. The tram stop shelter is a Grade II Listed Building.

## Statement of Significance

4.102 The arrival of the railways in the District heralded a period of growth allowing rapid transport to London and across the country as well as providing links to the growing cross-Channel steamer traffic. Dover's position as an important Channel port meant that it was a natural railway destination and it is no surprise that two competing companies vied for traffic to the town. The town also benefited from its own electric tramway system, one of the first such tramways constructed in the United Kingdom. Other towns such as Deal, Walmer and Sandwich also benefitted from the arrival of the railways. The East Kent Light Railway was largely constructed as a direct response to the discovery of coal in the East Kent coalfield and its fortunes largely mirrored those of the coalfield it served. Other railways such as the Guilford Tramway and Martin Mill Mineral Railway were constructed in response to specific construction projects and lived relatively short lives. Overall the surviving remains of the railways, light railways and tramways of Dover District are considered to be of moderate significance.

### **Evidential Value**

4.103 Buried archaeological remains associated with the railways, light railways and



tramways of Dover District may be able to provide some additional evidence for their construction, design and everyday running, however in general the evidential value is probably limited

### **Historical Value**

4.104 The surviving railway related remains are illustrative of a period of expansion, both in terms of domestic travel, but also in the coming of industry and major construction projects. The multitude of stations constructed in Dover in the later nineteenth century illustrates the importance of the town for commercial and passenger shipping and in particular the growth of cross-channel traffic. The East Kent Light Railway is synonymous with Colonel Stephens, a major promoter of light railways in England and Wales.

### **Aesthetic Value**

4.105 The surviving railway related heritage assets are of mixed aesthetic value. Some of



- Figure 15 EKLR locomotive on a bridge in the 1920s. © Dover Museum (d34463)
- Figure 16 Ferry and Train Admiralty Pier Dover. © Dover Museum (d55961)
- Figure 17 Deal Signal Box

the railway stations, such as Sandwich and Shepherdswell were designed in an architectural 'house-style' and remain attractive buildings in their own right. Redevelopment, rationalisation and modernisation of some stations have limited their aesthetic value. Overall the remains in their present form are of limited aesthetic value.

### **Communal Value**

4.106 Many of the District's surviving mainline stations are used by large numbers of commuters on a daily basis and the surviving historic railway fabric, such as the station buildings provide a link to the railway's past. The preserved section of the East Kent Light Railway has a strong communal value as a heritage railway and a reminder of the network of lost light railway lines that crossed the District. The East Kent Light Railway also provides a link with the Kent Coalfields with sections of line having been built to specifically to serve the colliery operations.

## Vulnerabilities

4.107 Much of Dover District's mainline railway infrastructure remains in use as part of the national rail network. Whilst there has been much rationalisation, both historic and in recent times many of the key heritage assets, particularly the main mainline railway stations remain in everyday use. Whilst this brings with it its own issues and vulnerabilities it also provides some protection, with the buildings being subject to planned maintenance routines. Where historic stations are no longer in use, such as the buildings of Dover Harbour Station, then these are vulnerable to decay, deterioration and vandalism.

4.108 The upgrading and modernisation of the railways does present a risk to historic infrastructure and railway features, particularly those elements that are not currently designated or are not currently used. Historic line-side structures and features that are characteristic of the railway (such as cast railings and historic signage for



Figure 18 Dover Marine Station - walkway in vulnerable state



example) are vulnerable to removal (authorised and non-authorised) as well as graffiti and criminal damage. Similarly signalling apparatus is vulnerable to loss through modernisation programmes and associated rationalisation. Where features have been removed, their replacements are often not in character or of poorer quality and detract from the historic qualities of the sites.

4.109 Away from the mainline passenger infrastructure there has been significant loss of railway freight infrastructure in the District, with little freight traffic remaining. With the exception of a short section of the East Kent Light Railway, none of the District's light railways, mineral lines or tramways remains in use. Whilst the lines themselves have been lifted it is still possible to trace much of this former network in the modern landscape. Much of the former rail corridor of the East Kent Light Railway survives for example with areas of cutting, embankment, trackbed, the occasional remains of platforms and the piers of bridges surviving. Similarly parts of the Martin Mill Mineral Railway and the subsequent Military Railway also survive and can be traced. These remains are vulnerable to being lost in the landscape

through development, removal of hedgerows and other clearance works.

### Opportunities

4.110 Those stations that remain part of the national railway network are generally well used by locals and visitors alike. The quality of information available at railway stations is somewhat mixed and there is an opportunity to better interpret not only the heritage interest in the stations themselves, but also for these stations to act as an information point and link to other heritage asset in the towns and villages that they serve. The opportunity should be sought to use the District's railway stations to better promote the heritage of the District and to orientate and sign the key heritage assets of the area to people arriving at these stations.

4.111 Part of the East Kent Light Railway is operated as a heritage line. This line is perhaps not as well publicised as it could be and as such does not have the profile of other heritage railways elsewhere in Kent or the country. Some tourist or heritage railways act as major local visitor attractions. The relatively short length of the line that remains operational will limit the tourist potential of the line in comparison with other heritage railways, nevertheless opportunity should be sought to better promote the line locally. Some of the dismantled sections of the East Kent Light Railway are accessible and can be easily traced on the ground, whilst other sections remain traceable, but are currently overgrown or inaccessible. Options for reopening sections of the line as a public footpath could be considered, potentially as part of a heritage trail.

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The Kent Rail website available at http:// www.kentrail.co.uk/

The Disused Stations website available at http://www.disused-stations.org.uk/

## Key Heritage Assets

Asset	Form	Designation & Protection	Accessibility	Interpretation
Dover Town Station	Buried Archaeology	No	No	None
Dover Priory Station	Historic Buildings and Structures	No	Yes (working station)	None
Dover Harbour Station	Historic Building	Listed Building	Exterior only	None
Dover Marine Station (Cruise Liner Terminal)	Historic Building	Listed Building	Cruise Liner Terminal	None
Lord Warden Hotel	Historic Building	Listed Building	No	None
Train Ferry Dock	Historic Structure (partially in-filled)	No	No	None
Kearsney Station	Historic Buildings and Structures	No	Yes (working station)	None
Shepherds Well Station	Historic Buildings and Structures	No	Yes (working station)	None
Deal Station	Historic Buildings and Structures	No	Yes (working station)	None
Sandwich Station	Historic Buildings and Structures	No	Yes (working station)	None
Walmer Station	Historic Buildings and Structures	No	Yes (working station)	None
Martin Mill Station	Historic Buildings and Structures	No	Yes (working station)	None
Elvington Station	Historic Structure	No	No	None
Shepherds Well Tunnel	Historic Structure	No	No (working railway tunnel)	None
Golgotha Tunnel	Historic Structure	No	No	None
Great Stonar EKLR viaduct	Historic Structure	No	Yes	None
Martin Mill Mineral Railway (East Langdon bridge piers)	Historic Structure	No	Yes	None
Martin Mill Mineral Railway (Hangman's Lane bridge piers)	Historic Structure	No	Yes	None
Martin Mill Mineral Railway Tunnel	Historic Structure	No	Yes	None

Asset	Form	Designation & Protection	Accessibility	Interpretation
Dover Tramway depot (Buckland)	Historic Structure	No	Yes (car sales room)	None
Dover Tramway waiting shelter	Historic Structure	Listed Building	Yes	None

## Appendix 1: Theme 4.3 – Cross-Channel Travel





## Theme 4.3 – Cross-Channel Travel

## Summary

4.112 The proximity of Dover to Continental Europe has meant that it has longacted as a conduit for cross-Channel travel. Discoveries such as the Langdon Bay Wreck and the Dover Bronze Age Boat highlight the importance of the area to early prehistoric seafarers. In the Roman period Dover developed into a major port of entry for the province. In the nineteenth and twentieth centuries Dover became a major port for both commercial and pleasure travel. Dover is now established as the country's premier cross-Channel port. The Town and District contains outstanding evidence for the history and development of early travel, whilst the modern-day port illustrates the rapid technological advances made in the nineteenth and twentieth centuries.

## Introduction

### Ancient Links

4.113 It is no surprise, given Dover District's nodal position on the south-east-tip of Britain, that the District has long had links with continental Europe. The written history of cross-Channel travel is dominated by the voyages of invading fleets, from the arrival of Caesar in 55BC to the Norman Conquest in AD 1066. In between we have the Claudian Invasion of AD 43 and the arrival of St Augustine in AD 597. However along-side these epoch changing voyages, there is also evidence for more mundane travel, with people, ideas and goods regularly travelling across the Channel for the past four thousand years.

4.114 The most obvious indicator of early cross-Channel travel in the District was the discovery of the Dover Bronze Age Boat in 1992. Evidence for cross-Channel trade is also revealed in the recovery of 'exotic' goods at archaeological sites in the District. For example amber that originated in the Baltic has been found in Bronze Age contexts within the District. In the neighbouring District of Thanet recent investigations at Cliffs End Farm have discovered the skeletons



CoverCross-Channel ferrry and replica Dover Bronze Age Boat. © Canterbury Archaeological TrustFigure 1Advert for the Ostend-Dover Service of c. 1905. © Dover Museum (d02415)Figure 2Excavating the Dover Bronze Age Boat. © Canterbury Archaeological Trust

of Bronze Age people that isotope analysis shows came from Scandinavia and the Iberian Peninsula.

4.115 The movement of goods and people across the Channel continued through the Iron Age and Romano-British period. In Roman times both Richborough and Dover were important ports, with the latter being a base for the fleet of the Classis Britannica. The trading of goods continues to be represented in the District's archaeological record for this period. For example amphora fragments found at Dover suggests the movement of goods (perhaps oil or wine) from the Mediterranean and it is likely that Dover District formed part of an extensive trade network in Roman times.

4.116 The Christian mission led by St Augustine which landed at Pegwell Bay in AD 597 marked the arrival of Christianity to the British Isles and Kent became the country's first Christian kingdom. As well as religious ideas crossing the Channel, vessels continued to transport goods and people to and from continental Europe in the early medieval and medieval periods. Pottery from north-east France has been found in Anglo-Saxon domestic contexts at Church Whitfield, whilst continental jewellery has been recorded from burial sites across the District.

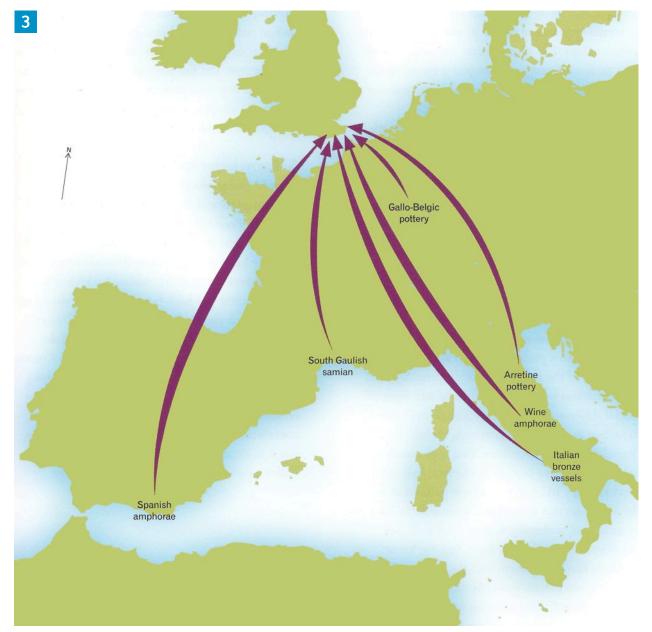


Figure 3 Map showing late Iron Age imports into Kent



4.117 In the medieval and early postmedieval period the Channel acted as both a link for continued and ever expanding cross-Channel trade, but also a barrier and defence against foreign invasion. It is in this period that we see the expansion of the coastal ports of Dover, Sandwich and latterly Deal where cross-Channel trade and traffic is well attested. Dover became an important entry point to England and Dover Castle regularly housed diplomats, dignitaries and the occasional Royal retinue on their way to or from the continent. The sixteenth century painting The Embarkation of Henry VIII shows one such Royal convoy departing Dover in AD 1520. Sandwich and Deal were also both used as embarkation and transport bases for continental military expeditions.

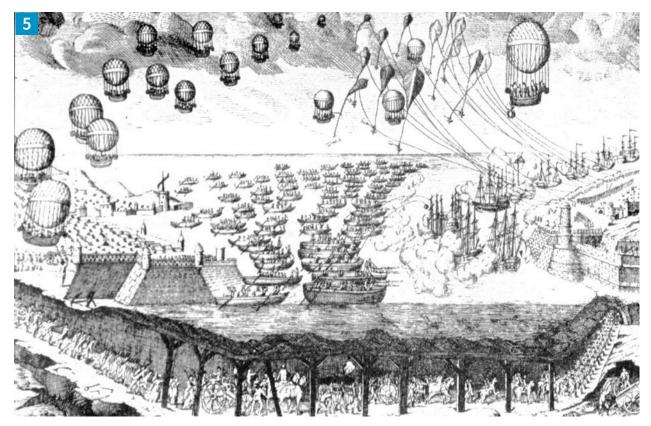
#### **Technological Advances**

4.118 Until the nineteenth century cross-Channel travel remained a slow, relatively expensive and sometimes dangerous activity. Cross-Channel travel was an activity for reserved for traders, soldiers and pilgrims as well as for the rich and for the social elite. Travel over any great distance for the average person would have been a rare, if not unheard of, activity.

nineteenth century were to change the face of cross-Channel travel. In 1820 the first cross-Channel steamship started operating from Dover to Calais. Steamships developed into a fast and reliable means of crossing the Channel. The arrival of the railway to Dover in 1844 opened up new travel links and journeys that would have once been a major adventure could now be easily completed in a day. It is in this period that Dover expanded massively as a port and a new class of pleasure traveller emerged. The construction of Admiralty Pier at Dover in the midnineteenth century meant that bigger vessels could land their passengers and that boats arriving at the port were no longer restricted by the state of the tide.

4.120 It was at the beginning of the nineteenth century that the idea of a transport tunnel beneath the channel was first raised. Despite military concerns engineers and inventors on both sides of the Channel put forward schemes for a tunnel beneath the sea. None of these were to ever get off the drawing board; however the growth of the railways provided a new stimulus for the creation of a Channel Tunnel. The first serious attempt at constructing such a tunnel began in 1881. The 1881 tunnelling works involved excavation on both sides of

4.119 Rapid technological advances in the



the Channel; work on the English side involved the commencement of two borings, one at Abbott's Cliff and the other at Shakespeare's Cliff just to the west of Dover. Here a boring machine dug a tunnel nearly 2000 metres long before the scheme was eventually abandoned. The reason for the abandonment of this early scheme was not due to technological failure however, rather due to military security fears.

4.121 Despite further proposals it was not until the 1950s that defence arguments against constructing a tunnel finally went away. Following a series of technical surveys a second attempt at constructing a Channel Tunnel was started in 1974. This scheme again involved boring from the French and English sides. Although a short test tunnel, some 300 m. in length, was started close to the 1881 attempt this scheme was rapidly abandoned due to political and cost issues. In 1988 Tunnelling for a third, this time successful, Channel tunnel scheme started. Boring from the English side again commenced at Shakespeare's Cliff and made use of the aborted 1974 tunnel. A break-through

ceremony was held in October 1990 and the Channel Tunnel was officially opened in May 1994.

4.122 With the long gestation period of the Channel Tunnel alternative solutions for rail traffic to the continent were sought. A roll on, roll off service was briefly operated out of Richborough Port using the First World War train ferry docks (see Theme 3.6) for the return of equipment from the continent. This service ran from 1919 to 1922. A civilian service for perishable goods was also operated in 1921, but this was not followed up. The train ferries were also briefly used to provide a roll on, roll off service for motor vehicles, transporting cars, lorries and buses

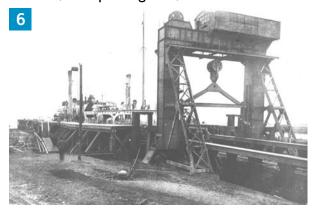


Figure 5 A cartoon of 1803, suggesting how the Napoleonic armies might invade England both by a tunnel and with the help of a fleet of troop carrying balloons. Early proposals for a Channel Tunnel were often discussed in terms of the fear of invasion from France. © Dover Museum (d02341)

#### Dover District Heritage Strategy



back from the France at the end of the war. In 1923 the train ferries and associated equipment were sold off and transferred to Harwich. Following the withdrawal of the Richborough service there were no roll on, roll off services operating out of Dover District until 1936 when the Southern Railway started their own service out of Dover. The installation of Train Ferry Docks at Dover and Dunkerque in 1936 allowed roll-on roll-off train services to return. These included the Southern Railway's famous Night Ferry service.

4.123 If the coming of the railways combined with faster steamships heralded the arrival of large scale pleasure travel, it was the mass adoption of the motor car which saw such travel truly blossom. The first cross-Channel car ferry service started in the interwar period, operated by a Captain Townsend. Townsend's service was worked from the eastern end of the harbour. In lieu of roll-on, roll-off facilities, cars were instead hoisted onto the ferry by crane. The service proved popular and the Southern Railway soon introduced its own competing service.

4.124 The growth of leisure traffic saw the Eastern Docks redeveloped and new roll-on, roll-off berths were finally installed in the 1950s. The Eastern Docks have acted as the hub for cross-Channel ferry services ever since. In the 1950s the invention of the Hovercraft meant that much faster journey

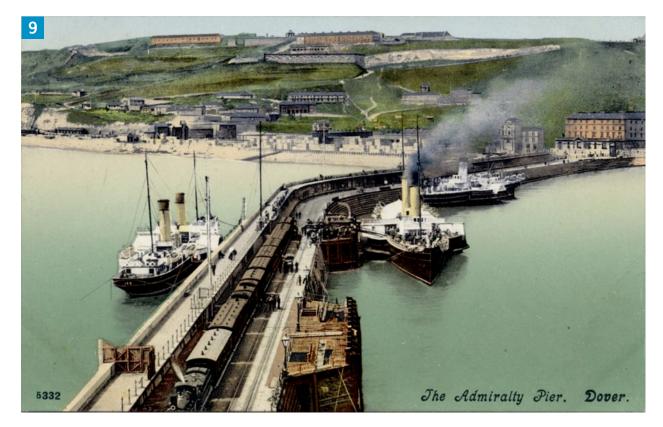


times could be achieved. The first working prototype hovercraft made the inaugural crossing from Dover to Calais in 1959, landing on the beach at Dover. In 1968 a regular car and passenger service commenced from a specially constructed hoverport at the Eastern Docks. In 1978 the hovercraft service was improved and a new hoverport was located at the Western Docks (adjacent to the Prince of Wales Pier) allowing the roll-on, roll-off services at the Eastern Docks to be expanded. Rising costs (and the abolition of duty free) led to the hovercraft service being withdrawn in 2000. The hovercraft holds the record for the fastest Channel crossing, completing the journey in just 22 minutes in 1995.

### Description of the Heritage Assets

#### Ancient Links

4.125 Evidence for the early development of the harbour at Dover as well as the coastal ports of Sandwich and Deal are discussed in detail in Theme 2 and it is not intended to repeat this information here. The relevant heritage assets are tabulated below however. Archaeological sites showing evidence for continental trade from the prehistoric period onwards are relatively common in the District and likewise it is not intended to provide a complete list here. It is likely that ongoing archaeological research, especially where use is made of modern scientific techniques such as isotope analysis will



continue to further our knowledge of the extensive links in the prehistoric and early historic periods.

#### **Technological Advances**

4.126 The technological advances in the nineteenth century led to the District's cross-Channel travel being focussed on the Port of Dover. The surviving railway infrastructure that supported this cross-Channel transport has been discussed elsewhere in Theme 4 and the key features of the nineteenth century development of the Port of Dover in Theme 2. The relevant heritage asset entries from these themes are tabulated below. Redevelopment of the Eastern Docks from the 1970s onwards has meant that most evidence for the early car ferry services and first roll-on, roll-off ferry docks have been removed and/or built over. Dover's first hoverport, located at the Eastern Docks has likewise been subsumed by later harbour works. At the Western Docks a number of historic features relating to twentieth century cross-Channel travel survive. These include the 1936 Train Ferry Dock which has been

partially in-filled. The large concrete apron for the 1978 Hoverport adjacent to the Prince of Wales Pier survives, although the terminal buildings themselves have been recently demolished. A hovercraft propeller is currently mounted on a plinth at the entrance to the former terminal.

4 1 2 7 Tunnels for the 1881 Channel Tunnel attempt survive at Abbot's Cliff where the 1881 No.1 Boring has been intersected by a drainage adit driven under the main Folkestone to Dover railway line. The tunnel remains accessible but is closed to the public. In 1988 a section of the No.2 boring from Shakespeare's Cliff was intersected by modern Channel Tunnel construction workers. The works of the 1974 Channel Tunnel attempt have been incorporated into the current Channel Tunnel. The access road tunnel to Samphire Hoe was constructed in 1974 as part of the enabling works for the aborted scheme. Samphire Hoe itself is created from 4.9 million cubic metres of up-cast from the successful 1994 Channel Tunnel.

## Statement of Significance

The District's position on the south-4.128 eastern tip of Britain at the shortest crossing point of the Channel has meant that it has been a gateway for cross-Channel trade since the prehistoric period. Archaeological remains, and in particular the frequent discovery of exotic and imported items, attest to the wide stretching trade and transport networks which the District was linked to. In the nineteenth and twentieth centuries Dover established itself as the country's premier cross-Channel port. It is no surprise that the area has therefore earned itself the title of the gateway to England. The continuing development of the port has meant that much of the physical evidence for the more recent developments in cross-Channel transport have been swept away under later improvements. Nevertheless some remains such as the 1936 train ferry dock and 1978 hoverport survive in part and are a reminder of the rapid pace of change in cross-Channel travel. Overall the heritage assets in the District are considered to be of considerable significance in the history of cross-Channel travel.

### **Evidential Value**

4.129 Archaeological remains of the prehistoric and early historic periods are of exceptional evidential value for the information that they might contain relating to early cross-Channel travel and trading. Recent isotope analysis of Bronze Age skeletons at Cliffs End Farm (just outside of the District) has revealed internationally important information relating to the movement of people in the prehistoric period. Archaeological remains from Dover District have the potential to yield similar information. The District's archaeological remains also have the potential to provide significant evidence for the movement of goods and to help build-up a picture of continental trading links in the prehistoric



and early historic periods.

4.130 The remains of the nineteenth and twentieth century cross-Channel travel from the port of Dover are considered to be of more limited evidential value.

### **Historical Value**

4.131 The heritage assets of the District are of considerable value in illustrating the history and development of cross-Channel travel; for the movement of peoples, ideas and goods. The archaeological remains of the prehistoric and early historic periods help to draw a picture of Britain being part of a much wider trading network.

4.132 The growth of Dover Harbour in the nineteenth century and in particular in the twentieth century highlights the developments and changing fashions in cross-Channel travel. The train ferries, roll-on, rolloff ferries, hovercraft and Channel Tunnel all illustrate the rapid technological advances of the age as well as the growth of travel as a leisure pursuit.

### **Aesthetic Value**

4.133 The surviving heritage assets relating to cross-Channel travel are generally of



limited aesthetic value. Samphire Hoe which was created from the up-cast from the most recent Channel Tunnel construction has been turned into a haven for wildlife and is aesthetically valued for its plant-life, dramatic setting and views of the White Cliffs.

### **Communal Value**

4.134 The archaeological remains relating to the movement of people and goods in the prehistoric and early historic periods have a communal value in the role they can play in linking people with their ancestors and the world in which they lived. Later remains such as the hovercraft terminal are a reminder of the more recent past and are also a symbol of British engineering and invention. These remains help to fortify the idea of Dover being a link to the continent and also the gateway to England.

## Vulnerabilities

4.135 Archaeological remains associated with cross-Channel trade should be expected at the ports of Dover, Sandwich, Stonar, Richborough and Deal, whilst evidence for

imported goods may be encountered across the District. It is likely that exceptionally rich and well-preserved remains will survive, particularly at the port towns. Archaeological remains are susceptible to all forms of development and need to be carefully managed to avoid harm to the significance of these assets. An appropriate level of archaeological investigation should accompany development works that have the potential to affect archaeological remains. The discovery of the Dover Bronze Age Boat highlights the potential for internationally important waterlogged deposits to survive where conditions are favourable for such preservation. In addition to direct physical impacts such waterlogged deposits would be susceptible to harm through changes to the local hydrology.

4.136 The port of Dover was the focus for cross-Channel trade in the District from the nineteenth century onwards. The postmedieval and modern harbours in the town remain in active use and this brings its own challenges. The working harbour includes a wide range of historic assets that tell the story of the ports development. Some of these assets, particularly the harbour's military defences, do not have a current use and are not publicly accessible. These assets, which are located in a particularly exposed location, are vulnerable to weathering, neglect and decay.

4.137 The historic harbour works of the Western Harbour are particularly vulnerable to any major port development. In its current form it is possible to read and appreciate the development of the Western Harbour from the Elizabethan harbour focussed on the 'Great Pent' to the large modern harbour we see today. This palimpsest of harbour works from the Elizabethan period to the modern day is a key element of the historic significance of the harbour. There are pressures on key assets of the Western



Docks associated with harbour extension proposals; such development could cause substantial harm from its impact on the historic integrity and character of historic core of the harbour.

## **Opportunities**

4.138 Archaeological research and scientific analysis of existing collections of material and new material arising from future fieldwork projects has the potential to further our understanding of cross-Channel trade, particularly for the pre-historic and early historic periods. Recent scientific analysis involving the use of isotope analysis of Bronze Age skeletons from Cliffs End Farm (just outside of the District) has revealed internationally important information relating to the movement of people in the prehistoric period.

4.139 The internationally important Dover Bronze Age Boat is currently displayed in a dedicated gallery at Dover Castle.Opportunities should be sought to continue to promote the gallery to locals and visitor alike.

4.140 Dover Harbour includes a number of significant heritage assets, including a number of Listed Buildings and Scheduled Monuments. Consideration should be given to linking the historic assets within the harbour to provide an integrated story that charts the development of the harbour and tells the story of cross-Channel trade. Opening up access to those assets, which are currently hidden or inaccessible, would allow the significance of the harbour to be better appreciated. One of the key aims for Dover should be to make the town a destination in its own right, rather than simply a place that visitors pass through. Celebrating and promoting the heritage of the town should form a key part of this process. Properly developed the heritage of the harbour area can reinforce Dover's role as an interface between the UK and continental Europe with corresponding economic and social benefits.

# Sources Used & Additional Information

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Clarke, P. (ed.), 2004a: *The Dover Bronze Age Boat*. London: English Heritage.

Williams, J. (ed.) 2007: The Archaeology of Kent to AD 800. Woodbridge: The Boydell Press.

The Dover – Lock and Key of the Kingdom website available at http://www.dover-kent.co.uk/

The Kent Rail website available at http:// www.kentrail.co.uk/

The National Heritage List for England available at http://list.english-heritage.org.uk

## Key Heritage Assets

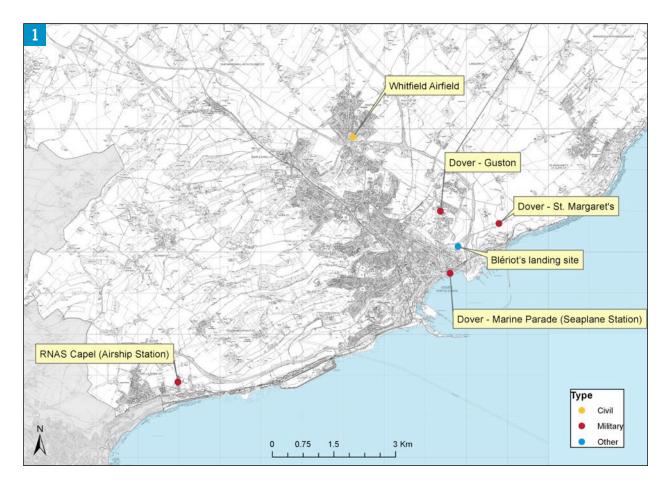
Asset	Form	Designation & Protection	Accessibility	Interpretation
Langdon Bay Wreck	Wreck site	Protected Wreck Site	N/A (sub-marine, offshore)	No
Dover Bronze Age Boat	Buried Archaeology and historic artefact	None	Lifted section of Boat is on display in Dover Museum	Dover Bronze Age Boat Gallery, Dover Museum
Medieval port and town of Stonar	Buried Archaeology	Scheduled Monument	Private Land	No
Medieval river front, wharfs and quays at Sandwich	Buried Archaeology	Conservation Area	Mixed	Yes
Sandwich Ship	Buried Archaeology	None	Find spot is open access	No
Richborough Port	Historic Buildings, Structures and Buried Archaeology	None	Partially accessible	No
Fort of the Classis Britannica	Buried Archaeology	Scheduled Monument (part)	No	No
Roman Harbour Wall (mole/pier)	Buried Archaeology	None	No	No
Roman quayside/ wharfs	Buried Archaeology	None	No	No
Roman Pharos (Dover Castle)	Historic Structure	Scheduled Monument	Managed visitor attraction	English Heritage site
Roman Pharos (Western Heights)	Buried Archaeology	Scheduled Monument	On selected open- days	No
Wellington Dock	Historic Structure	Listed Building	Yes	Interpretation Panel
Fairburn Crane	Historic Structure	Scheduled Monument	Yes	No
Granville Dock	Historic Structure	No	Yes	Interpretation Panel
Inner Harbour	Historic Structure	No	Yes	Interpretation Panel
Admiralty Pier	Historic Structure	Listed Building	Partially?	No?
Prince of Wales Pier	Historic Structure	Listed Building	Yes	No
Admiralty Pier Extension	Historic Structure	Listed Building	No	No
Outer Breakwater	Historic Structure	No	No	No
Eastern Arm	Historic Structure	No	No	No

Asset	Form	Designation & Protection	Accessibility	Interpretation
Dover Town Station	Buried Archaeology	No	No	No
Dover Priory Station	Historic Buildings and Structures	No	Yes (working station)	No
Dover Harbour Station	Historic Building	Listed Building	No	No
Dover Marine Station (Cruise Liner Terminal)	Historic Building	Listed Building	Cruise Liner Terminal	No
Lord Warden Hotel	Historic Building	Listed Building	No	No
Train Ferry Dock	Historic Structure (partially in-filled)	No	No	No
Hoverport (1978)	Historic Structure	No	No	No
Hovercraft propeller	Historic Artefact	No	No	No
1881 Channel Tunnel attempt	Historic Structure	No	No	No
1974 Channel Tunnel Attempt	Historic Structure	No	Yes (works access tunnel)	No

## Appendix 1: Theme 4.4 – Flight



LA TRAVERSÉE DU PAS-DE-CALAIS EN AÉROPLANE



# Theme 4.4 – Flight

### Summary

4.141 The Channel had long been seen as a physical barrier offering protection from mainland Europe. Crossing the Channel was therefore a natural challenge for early aviators. Early manned balloon flights, and in particular the first powered flight by Louis Blériot in 1909, brought about a change to our perception of island impregnability. This was brought to life during the First World War when aerial conflict became part of modernwarfare with airfields and air stations being established in the District.

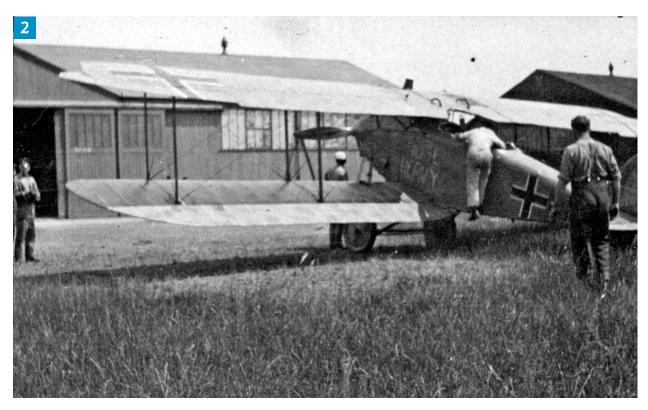
## Introduction

4.142 The first recorded manned balloon flight was made in a hot air balloon in 1783

and this launched a brief period of balloon mania. It was but two years later when the French aviator Jean-Pierre Blanchard made the first flight across the channel. On the 7th January 1785 he set off with a Dr John Jeffries from Dover Castle and arrived in Guînes in the Pas-de-Calais some two and a half hours later. Some 124 years later Dover was the site of another aviation first, when Louis Blériot made the first powered flight across the channel in July 1909. Blériot's landing site was in Northfall Meadow just to the east of Dover Castle.

4.143 Jacques De Lesseps followed Blériot across the channel, landing at Wanstone Court Farm in May 1910 and in August 1910 John B. Moisant carried the first passenger across the channel when he and his mechanic landed at Tilmanstone. Only two years after Blériot's pioneering cross-Channel flight a competitive Circuit of Europe flying competition was set up (Paris-Liege-Spa-Utrecht-Brussels-Calais-London-Calais-Paris).

CoverLe Petit Journal reports Louis Blériot's flight over the Channel. © Dover Museum (d00825)Figure 1Airfields, Seaplane Stations and Airship Stations around Dover



At Whitfield a meadow was used as a staging post for the competition and this is reputed to be the first "air station" to be established in England. By 1912 a Dover Aero Club had been formed and had its base at Whitfield.

4.144 The airfield at Whitfield had a short life and by the time the First World War broke out the Royal Flying Corps had established its own airfield nearby at Swingate. Other First World War airfields were established at Guston, Marine Parade (for sea planes), Walmer (Hawkshill Downs) and Capel (for airships). These early military airfields had a relatively short life and were not developed further following the war. The District's exposed position meant that no



airfields were used in the District in the Second World War (save for an emergency landing ground at Ewell Minnis).

### Description of the Heritage Assets

4.145 Blériot's Landing Site to the east of Dover Castle is marked by a recently refurbished memorial. Contemporary accounts strongly indicate that the monument was accurately located on the actual spot where Blériot landed. The monument, which takes the form of a full size plan in granite of the plane used to cross the channel, was erected by the Aero Club of the United Kingdom sometime between December 1909 and February 1910. The monument was funded by Alexander Duckham and was officially unveiled on 8 April 1910. As part of the centenary celebrations of this first flight the monument was recently refurbished and new accessible paths built to it.

4.146 Whitfield Airfield was located on open ground close to the Archer Public House.The flying meadow was equipped with

Figure 2 A captured German Airplane at Swingate Airfield, Dover. © Dover Museum (d00825)
Figure 3 Airship and Crew at Capel. Note the windbreaks that were necessary at the exposed site. © Dover Museum (d02759)



rudimentary facilities with sheds and a small hanger (where it is reputed at least one flying machine was built). Nothing now remains of the Whitfield site which has subsequently been built over.

4.147 The nearby Royal Flying Corps airfield was located on Swingate Downs and known as Dover (St Margaret's). Some roads and hut/hanger bases relating to the airfield survive. A second military airfield, known as Dover (Guston), was located on the other side of the Dover to Deal road next to Fort Burgoyne. Nothing now survives at the Guston site, although the footprint of the adjacent hutted accommodation camp (locally known as 'Tin Town') can still be seen.

4.148 As well as airfields for conventional aircraft a third facility for seaplanes, known as RNAS Dover (Marine Parade), was established in the town at the foot of the cliffs below the Castle. The seaplane station included three hangers (now demolished), a mess room, accommodation, stores, workshops and administration buildings. The administration building survives, but is currently derelict. An outstation to RNAS Dover was established at Walmer in 1917. RNAS Walmer was located on Hawkshill Downs, but was abandoned by 1919 and nothing now survives at the site which is marked by a memorial to lost pilots erected shortly after the war.

4.149 As well as airplanes use was made in World War I of non-rigid airships and a RNAS base was established to the west of Dover at Capel. RNAS Capel not only acted as a base for airships it was also used for their development and construction. The airships were used to carry out patrols along the Channel and to spot submarines when escorting shipping. The airstation at Capel included three large hangers and grassed landing areas. The airstation was closed in 1919. The airship hangers have been demolished, although the plan of the concrete base for No. 3 Hanger can be clearly seen on modern satellite aerial photographs of the site. It is understood that the pits where the airships were docked also survive, but are now in-filled. The concrete perimeter road also survives, having been incorporated into the layout of the present caravan park that occupies part of the former airstation site.



Figure 4Picture of an "air pageant", believed to be at Whitfield. © Dover Museum (d80322)Figure 5RNAS Dover Seaplane Station - surviving administration building

## Statement of Significance

4.150 The lure of the challenge of cross-Channel flight meant that Dover was the site of two early aviation feats, the first manned flight across the channel by balloon and the first powered flight across the channel. Blériot's historic flight captured the public imagination, highlighting the airplane's revolutionary potential, and also called in to question the perception of England's "island impregnability". The aviation remains in Dover District are considered to be of moderate significance.

### **Evidential Value**

4.151 The temporary nature of the early airfields and landing sites means that buried archaeological remains are likely to be ephemeral in nature. Nothing is expected to survive below ground at Blériot's landing site or the early Whitfield airfield. There may be some buried archaeological evidence associated with the structures at the early military airfields that could provide some information on their day to day functioning and the lives of the pilots who flew from them. Overall the aviation remains in Dover District are considered to be of limited evidential value.

### **Historical Value**

4.152 The pioneering cross-Channel flights by balloon and powered aircraft captured the public's imagination and are illustrative of the pioneering adventurer spirit of the early aviation age. The aviation sites at Dover are associated with some pioneering aviators, with Louis Blériot being perhaps the most celebrated. Other pioneering aviators such as Harriet Quimby (the first Woman to fly across the Channel) and Gustav Hamel (the first pilot to fly from England to Germany) chose Whitfield as the starting points for their historic flights.

### **Aesthetic Value**

4.153 None of the surviving heritage assets relating to early flight are considered to have a strong aesthetic value.

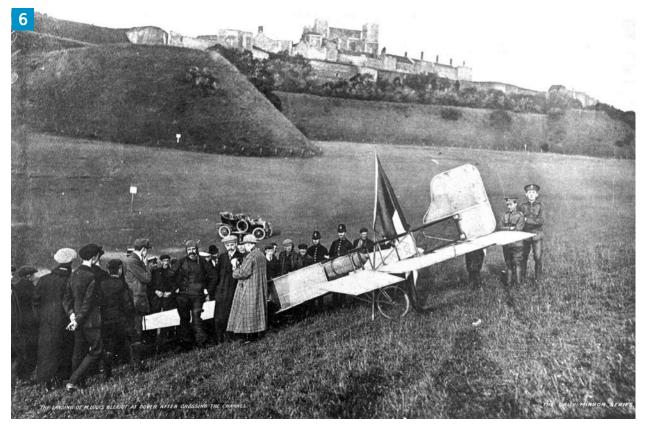


Figure 6 Bleriot's Landing at Northfall Meadow, Dover. © Dover Museum (d00370)



### **Communal Value**

4.154 The Blériot Memorial at Northfall Meadow has a communal value in commemorating the aviator's pioneering flight. The flight challenges our perception of England's "island impregnability". The early military airfields in the District (two of which now have memorials to lost pilots) are a reminder of the role that aviation in the District played in the First World War.

### Vulnerabilities

4.155 With the exception of the surviving building at the Dover (Marine Parade) sea plane station (which lies within a Conservation Area) none of the District's flight related heritage assets have any form of statutory protection. As such any surviving structural remains or buried archaeology at these sites are susceptible to all forms of development. 4.156 The surviving administration building at the Dover (Marine Parade) sea plane station is currently derelict and as such is vulnerable both to neglect, vandalism and decay, as well as to loss as part of any future redevelopment of the site. The building is located in a prominent position beneath the White Cliffs and immediately adjacent to the A20 into Dover from the Eastern Docks.

### **Opportunities**

4.157 The Blériot Memorial at Northfall Meadow was recently refurbished and accessible paths installed from a car park off Upper Road. The memorial is close to both the National Trust's White Cliffs visitor centre and Dover Castle but there is little or no information at these sites to let visitors know about the memorial's location. Opportunities should be sought to raise the profile of the memorial site.

4.158 Opportunities at the former airfields and airships stations are probably limited, although some form of interpretation could be provided at these sites to celebrate the role of the District's early aviators.

# Sources Used & Additional Information

The Dover Society website, flight pages available at http:// doversociety.homestead.com/flight.html

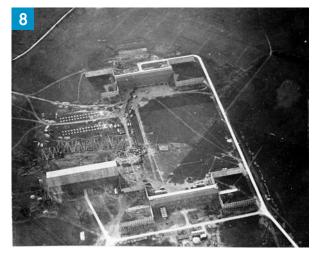


Figure 7Bleriot Memorial, Northfall MeadowFigure 8First World War aerial photograph of Capel-Le-Ferne R.N.A.S. Airship Station. © Dover Museum (d17877)

## Key Heritage Assets

Asset	Form	Designation & Protection	Accessibility	Interpretation
Blériot's Landing Site	Historic Monument	None	Yes	Yes
Whitfield Airfield	Historic Place	None	No	No
Dover (St	?Buried Archaeology	None	Uncertain	No
Dover (Guston) airfield	?Buried Archaeology	None	Limited public access	No
Dover (Marine Parade) seaplane station	Historic Building and ?Buried Archaeology	Historic Building and ?Buried Archaeology	Not publicly accessible, but visible from road	No
RNAS Walmer airfield	?Buried Archaeology	None	Limited public access	War memorial
RNAS Capel airship station	Buried Archaeology, Structures	None	Not publicly accessible - farmland & private caravan park	No