# Appendix 1: Theme 2.1 – The Coastal Ports of Sandwich and Stonar



# Theme 2.1 – The Coastal Ports of Sandwich and Stonar

#### Summary

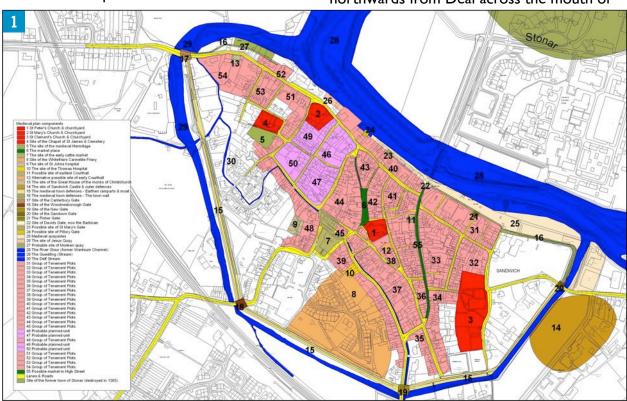
2.1 Sandwich and Stonar are both outstandingly important examples of medieval coastal ports. Both sites contain archaeological remains of the highest quality, including well-preserved waterlogged deposits. Whilst Stonar survives only as buried archaeological remains, Sandwich is blessed with many fine medieval buildings flanking its winding historic streets.

#### Introduction

2.2 The twin ports of Sandwich and Stonar

were once locations of considerable significance. In the Middle Ages Sandwich was a major royal military assembly and supply port where troops, provisions and equipment were marshalled before being sent to France. Both sites were also important commercial ports, having trading links along the Channel coast as well as with northern Europe and the Mediterranean. Sandwich was one of the original five Cinque Ports.

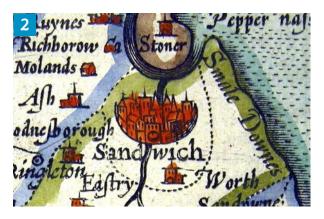
The development and decline of the ports of Sandwich and Stonar is intrinsically linked with their location on the Wantsum Channel. The Wantsum was once a major waterway in the south-east, separating the Isle of Thanet from the mainland of Kent. Some six thousand years ago a shingle bank began to develop in the Wantsum Channel to the north of modern-day Sandwich. Known as the Stonar Bank the shingle ridge continued to develop in the Roman period and by the later Roman period probably lay above sea level. By the tenth century it is likely that the Stonar bank had formed into a substantial area of dry-land. At the same time a shingle spit started to progressively extend northwards from Deal across the mouth of



Cover Sandwich Quay. © Explore Kent

Figure 1 Man of Sandwich showing Medieval Pl

Figure 1 Map of Sandwich showing Medieval Plan Components



the Wantsum towards the Isle of Thanet. The combination of the Stonar Bank and Deal Spit created a wide haven at the mouth of the Wantsum Channel. It is on this haven that the ports of Sandwich and Stonar developed.

2.4 The precise date for the foundation of either settlement is uncertain. There is some evidence for early settlement on the sands to the east of Sandwich and The name Sandwich is first mentioned in the early eighth century. Evidence for the Anglo-Saxon settlement of Sandwich has proved elusive however and it is not until the early eleventh century that both towns start to flourish. Sandwich was probably always the more important of the two ports and by the mid to late eleventh century Sandwich (perhaps along with Dover) was second only to Canterbury in size among Kent's towns. Nevertheless it is clear from the archaeological record, and in particular

the rich pottery assemblage from the town, that Stonar was a trading port of some considerable wealth.

In the second half of the fourteenth century disaster struck Stonar. In 1365/6 the town was inundated by the sea and largely destroyed. By the mid sixteenth century the church was described as being in ruins and it is clear that the town never recovered from this inundation. Sandwich did not suffer the same fate, and despite problems of crop failures and the Black Death in the early fourteenth century, continued to flourish through the later fourteenth and fifteenth centuries. Despite the rapid growth of Sandwich in the Middle Ages it would have appeared to have entered into a period of decline by the mid sixteenth century. The town's position on the Wantsum which had been responsible for its rapid rise was also in part to blame for its decline. The changing coastline and silting of Sandwich Haven made the port less viable. No longer was Sandwich a town of rich merchants with international links. Instead Sandwich became a smaller port, focused on more local domestic trading. Although the fortunes of the town picked up briefly in the second half of the sixteenth century when an influx of migrants from the Low Countries arrived this was a short lived revival. By the 1620s it was clear that natural silting and coastal changes meant that Sandwich was no longer viable as a port.

# Description of the Heritage Assets

2.6 The heritage assets described in this section relate specifically to the role of Sandwich and Stonar as medieval ports and trading centres. Theme 1: Coastal Processes and Landscapes describes the evolution, management and silting of the Wantsum Channel and Sandwich Haven, whilst Theme 8: Settlement looks at the wider development of the historic town of Sandwich. The

Figure 2 Saxton's map of 1575 showing Sandwich and Stonar
Figure 3 Fourteenth century seal of the Port of Sandwich. © Ray Harlow / Sandwich Guildhall Museum



defences of Sandwich are described in Theme 3.3: Medieval Defences.

2.7 In the early twentieth century the bank on which the town and port of **Stonar** was established was quarried for gravel. The gravel extracted from the bank was used in the construction of the Admiralty Harbour at Dover. This gravel extraction destroyed much of the remains of medieval Stonar. Although some archaeological investigations were undertaken the information obtained largely related to recovered pottery, but little information of the structure or form of the town was recorded. The **Church of St** 

Nicholas at Stonar was first investigated in the 1820s when a plan of the church was produced. It is suggested that the church is of at least eleventh century date. Further excavation was undertaken in the 1940s when it was found that the churchyard was still being used for burials into the sixteenth century. Excavations at Stonar in the late 1960s and early 1970s recovered a number of burials from the town's cemetery. The remaining parts of the medieval port and town of Stonar are designated as a Scheduled Monument, but much of the town has now been lost to quarrying.

2.8 The remains of the medieval port town of Sandwich are much better preserved; in fact it has been described as 'the completest medieval town in England'. The importance of medieval Sandwich is clearly shown by the number of Listed Buildings of medieval date that survive in the town. In the area fronting the town's quays a number of substantial and well appointed merchant's houses are attested. In total the medieval waterfront at Sandwich probably extended for around I

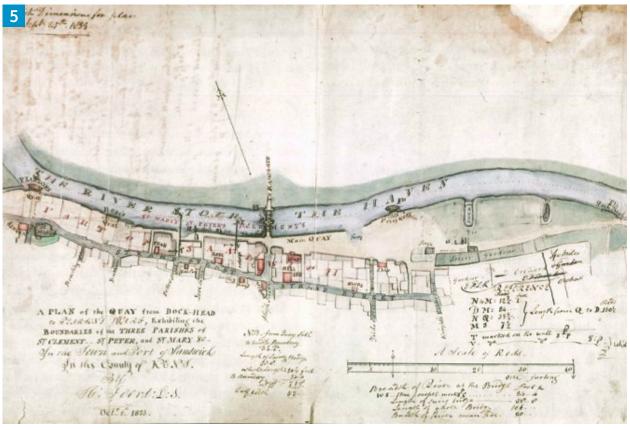
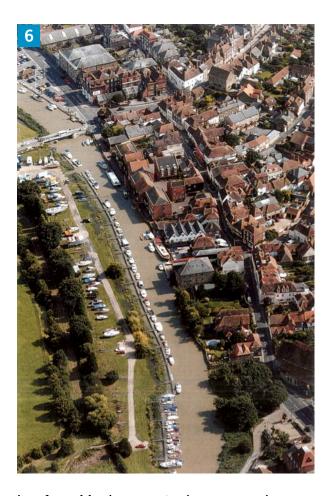
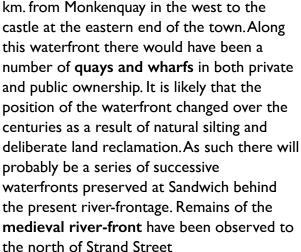


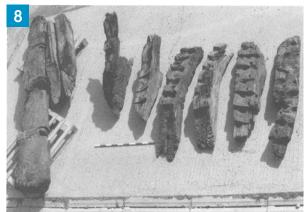
Figure 4 Stonar from Sandwich - J L Roget Watercolour April 1889. © Dover Museum (d21644)
Figure 5 Plan of Sandwich Quay from 1833. © English Heritage





2.9 The wealth of the town in the Middle Ages is attested from the archaeological record, with imported pottery demonstrating the town's trading links. The importance of the town as a port in the medieval period is also shown by the town's **fortifications** including town walls, castle and Bulwark (see Theme 3.3 for more details). In 1973 timbers from a fourteenth century ship were found in a silted creek near Sandown Road. The





Sandwich Ship was an oak-built merchant vessel, probably built in south-east England and most likely employed in continental trading.

#### Statement of Significance

2.10 Although not apparent from their modern day appearance, both Sandwich and Stonar were medieval ports of considerable significance. The buried archaeological record surviving at both towns is of great importance to the study of medieval trade and commerce. Sandwich also contains an incredible wealth of historic buildings. Overall the heritage assets associated with the two port towns of Sandwich and Stonar are considered to be of outstanding significance.

#### **Evidential Value**

2.11 The buried remains at both towns have exceptional archaeological value.

Figure 6

Aerial view of Sandwich showing relaimed land between medieval Strand Street and the present river frontage. © Engliah Heritage

Figures 7 & 8

Timbers from the Sandwich Ship upon discovery (7 © Dover Museum (d10281) and during recording (8 from Arch Cant CXXIV 2004, photo S Miller)



Archaeological remains at both sites have the potential to not only inform our understanding of the development and expansion of the towns themselves, but also to add significantly to our understanding of trade and trading patterns in medieval England. The potential for key ceramic assemblages as well as important groups of waterlogged deposits add significantly to the importance of the archaeological evidence of the town.

2.12 In Sandwich the surviving buildings also contain important information within their fabric, reflecting not only the changing role of individual properties over time, but also of the wealth of the town as a whole. This archaeological and built heritage evidence is further strengthened by the survival of documentary evidence. The importance of these different strands of evidence has been highlighted through a recently published multidisciplinary study of Sandwich (Sandwich – The 'Completest Medieval Town in England': A study of the Town and Port from its Origins to 1600).

#### Historical Value

2.13 Both towns illustrate the importance of coastal and continental trade in medieval England. The rapid growth of these towns shows how important such trading links were and the wealth that could be accrued. Sandwich's importance as a port is testified in its links with a number of national and



international events such as the Hundred Years War and the French Raid of 1457.

#### **Aesthetic Value**

2.14 Sandwich is now viewed as a somewhat quite small rural market town and it is this character and charm that means that it is a popular destination for locals and visitors alike. The surviving medieval plan with its narrow and winding streets is of a high aesthetic quality, as are the town's surviving historic buildings. The quayside is a particularly popular destination and this is largely due to its aesthetic quality.

2.15 Quarrying and recent development works, particularly the construction of the Pfizers site and the Sandwich Industrial Estate means that the site of the port of Stonar is of more limited aesthetic value.

#### Communal Value

2.16 The historic character of Sandwich is strongly valued by the community that live in the town and this is reflected in the number of active civic, historical and amenity societies within the town. The historic character of the town is a key part of its local and regional identity and there are strong links between the community and the town's heritage. There are a number of historic trails and information panels across the town and Sandwich also benefits from having its own museum.

Figure 9 St Clement's Church, Sandwich. Analysis of the buildings fabric has shown parts of the building are of eleventh century origin

Figure 10 Sandwich's attractive historic quayside

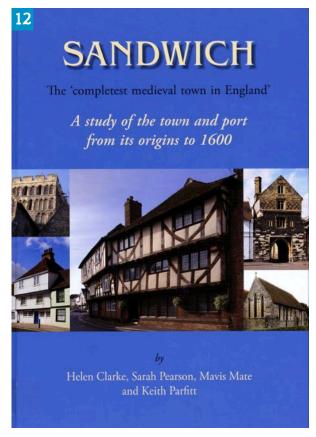


#### **Vulnerabilities**

- 2.17 The historic core of Sandwich is generally well protected through its Conservation Area designation and the Article 4(2) Direction covering the historic core of the town. In addition many of the town's historic buildings are individually designated as Listed Buildings, whilst much of Sandwich's defences are designated as a Scheduled Monument.
- 2.18 Significant development within the core of the town is unlikely. However it is worth noting that important archaeological deposits have been found across the historic core and these are often found at shallow depth, sometimes less than 1500 mm. from the modern street level. As such any development works, no matter how minor, in the core of the historic town have the potential to impact upon important archaeological remains. In the areas fronting the river such archaeological remains could potentially include waterlogged archaeology in conditions that will ensure excellent preservation of organic and environmental deposits.
- 2.19 Alterations, extensions and conversion works to historic buildings within the town have the potential to expose and reveal historic detail and fabric that is currently hidden or not currently recognised. Historic Building Recording work ahead of and/or

- during conversion works could help to ensure that such information is adequately recorded and may provide additional insight into the life of the town and its prosperity as a major medieval port. The condition of the town's historic buildings is generally good, thanks in part to the Article 4(2) Direction that covers the historic core.
- 2.20 In recent years the economic prosperity of Sandwich has been closely linked to the nearby Pfizer's site. Pfizer has recently announced a phased withdrawal from East Kent. To offset Pfizer's withdrawal the site has been declared an Enterprise Zone. Any economic decline in the area could impact upon the built historic environment and could lead to properties becoming empty or maintenance of buildings being neglected.
- 2.21 The town's position on the River Stour, surrounded by low lying former marshland, means that it is vulnerable to flooding and any increase in sea levels associated with climate change. The protection of these historic assets should be fully considered as a priority in future flood protection strategies. Proposals are currently being put forward for flood defence works by the Environment Agency and such works may affect important archaeological deposits. Provision should therefore be made for appropriate design and mitigation measures in any flood defence proposals to protect and enhance the historic assets and character of the town.
- 2.22 Whilst part of the shingle bank on which the town of Stonar was located has been quarried away, the remaining part of the town is designated as a Scheduled Monument which provides archaeological protection. Any development in non-designated areas of the former shingle bank, especially on the fringes of Stonar Lake could potentially impact upon significant archaeological remains.

#### **Opportunities**



2.23 Although there have been a number of rescue excavation programmes undertaken at the site of Stonar none of these have been published to modern standards. In particular the rescue excavations undertaken by the Ministry of Public Building and Works in the 1970s remain unpublished. Opportunity should be sought to secure detailed study and analysis of the results of these excavation so that they can be properly published and the results disseminated.

2.24 A recent comprehensive and pioneering multidisciplinary study has been undertaken of the archaeology and history of the town of Sandwich. This has generated considerable local interest in the heritage of the town and emphasis should be placed on maintaining and developing this local heritage interest through other projects and initiatives. Further archaeological research and investigation will

help to provide more information on the nature, extent and location of archaeological remains – particularly any evidence for any Saxon origins of the town. The publication of the recent study (Sandwich – The 'Completest Medieval Town in England': A study of the Town and Port from its Origins to 1600) provides further research aims that could form the focus for any future research into the town's history.

2.25 Sandwich is a popular location for local, national and international visitors. The town has a number of heritage trails, however the narrow and winding nature of the streets and the locations of the town's carparks mean that it can be disorientating to visitors who are unfamiliar with the layout of the place. Opportunity should be sought to help better orientate, signpost and link-up the heritage assets in the town. Sandwich has a good tourist potential, however this is somewhat under-utilised and more could be made of this potential so as to improve the economic viability of the town. Any increase in visitor number would need to be carefully managed and balanced so as not to harm the character and charm of the town.

# Sources Used & Additional Information

Clarke, H., et al., 2010: Sandwich – the 'completest medieval town in England': A study of the town and port from its origins to 1600. Oxford: Oxbow Books.

The Dover – Lock and Key of the Kingdom website available at http://www.dover-kent.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
Medieval port and town of Stonar	Buried Archaeology	Scheduled Monument	Private Land	None
Church of St Nicholas, Stonar	Buried Archaeology	Scheduled Monument	Private Land	None
Sandwich Medieval Town	Historic Buildings, Historic Structures, Earthworks and Buried Archaeology	Listed Buildings, Conservation Area and Scheduled Monuments	Mixed	Yes
Church of St Clement, Sandwich	Historic Building and Buried Archaeology	Listed Building and Conservation Area	Yes	Yes
Church of St Peter, Sandwich	Historic Building and Buried Archaeology	Listed Building and Conservation Area	Yes	Yes
Church of St Mary, Sandwich	Historic Building and Buried Archaeology	Listed Building and Conservation Area	Yes	Yes
Sandwich Guildhall	Historic Building and Buried Archaeology	Listed Building and Conservation Area	Yes	Yes
Medieval river front, wharfs and quays	Buried Archaeology	Conservation Area	Mixed	Yes
Sandwich Town Fortifications	Historic Buildings, Historic Structures, Earthworks and Buried Archaeology	Listed Buildings, Conservation Area and Scheduled Monuments	Mixed	Yes
Sandwich Ship	Buried Archaeology	None	Discovery site is public open space	?

# Appendix 1: Theme 2.2 – Deal Port and The Downs



# Theme 2.2 – Deal Port and The Downs

#### Summary

2.26 Now a quiet sea-side town, Deal was once among the most important naval ports in the Country. Vessels at Deal made use of the major anchorage of The Downs, protected by three powerful castles built by Henry VIII. In the seventeenth, eighteenth and nineteenth centuries numerous ships would have been seen anchored off the coast, supplied by cutters, ferrying supplies and men from the shore. Although the naval vessels have gone Deal retains an outstanding collection of buildings dating to the town's heyday in the eighteenth and nineteenth centuries.

#### Introduction

2.27 The emphasis of this theme paper is to consider Deal as a historic port serving the important naval anchorage of The Downs. To that extent the paper will cover the relevant aspects of Walmer, which has expanded to merge with Deal. More detailed discussion of the origins and growth of Deal can be found in the Kent Historic Towns Survey – Deal (2004) document published by Kent County Council that has been drawn upon significantly for the following account.

#### **Origins**

2.28 During the medieval period Deal consisted of the village that is now known as Upper Deal about a mile from the coast and centred upon the parish church of St Leonard, which was probably founded around 1180. The present town was originally known as Lower Deal and grew following the

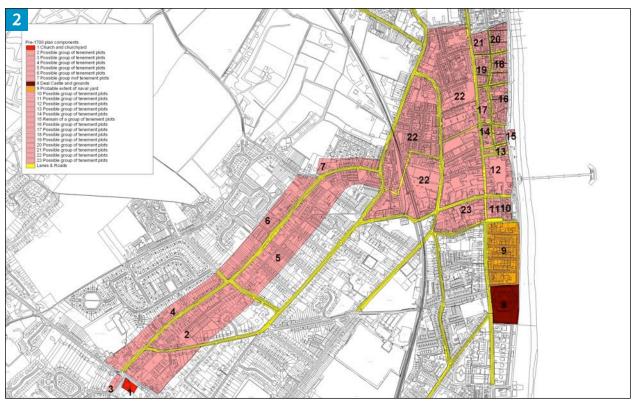
Cover Fishing boat off Deal
Figure 1 St Leonards Church, Upper Deal



establishment of the Henrician Device Forts (see Theme 3.4) in 1539. The town did not become incorporated until 1699.

2.29 One of the earliest written references to Deal (that is Upper Deal) dates to 1229 when it was named as one of the members of the Cinque Port of Sandwich. It remained subservient to Sandwich for the next 470 years although it may have been beginning to break away from its head port as early as the late fifteenth century, when Sandwich Haven was beginning to silt up. It seems then that The Downs, the stretch of sea immediately east of Deal between the mainland and the Goodwin Sands (see Theme 1), came into prominence as a sheltered anchorage for vessels that could no longer easily reach the port of Sandwich.

2.30 In 1242 a pilot from Deal sailed to France with Henry III and in 1415 Deal and its neighbouring village of Mongeham provided victuals for Henry V's army in Calais. Deal's Cinque Ports connections were emphasised in 1512 when, with Walmer, it had to provide one ship for the King's service. During the whole of this period Deal was essentially an inland settlement although its proximity to the sea probably encouraged fishing and other maritime trades, and by c. 1530 there seem to have been a few wooden storehouses and tenements beside the shingle ridge on the sea frontage. It was not until the construction of Henry VIII's defences on the foreshore in 1539-40 that the sea



began to play a significant role in the development of the town.

#### Pre 1700

2.31 The construction of the castles and defences along the storm gravel ridge along the sea frontage stimulated the development of tenements along the ridge and on newly drained land to its rear. Although built primarily as a defence against French threats at the end of Henry VIII's reign, Deal Castle remained in active use with a garrison in the following centuries. When Deal Castle was first built its defenders were keen to see the removal of the huts straggling northwards along the beach as they intruded on their lines of fire.

2.32 The town's development from the sixteenth century concentrated on the wasteland within the Archbishop of Canterbury's manor of Deal Prebend. The Archbishop seems to have had little interest in the control of building on his lands throughout his tenure and as a result development was both speculative and uncontrolled in its planning. Despite attempts

to prevent building along the beach line, the settlement grew north of the castle. In the 1620s there seems to have been already about 40 houses and a population up to 250. In 1645 squatters on the former beach appealed to be left to live there as they were in royal service. By 1675 a formal layout of three north – south streets (Beach Street parallel to the shore, Lower Street along the boundary of the manorial waste, and Middle Street) had emerged on the line of the

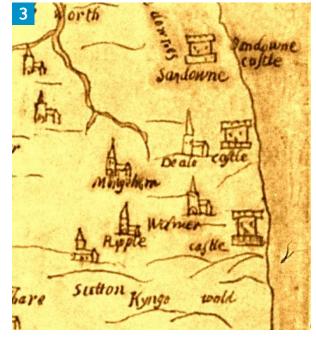


Figure 2 Map of Deal showing Post Medieval Town Components

Figure 3 Symonson's map of Deal dated 1596 showing the three Castles of the Downs and the village of Upper Deal (Deale)



shingle ridge and the valley west of it. The expansion of the town was extraordinary; by 1676 the population was over 1,000 and by 1699 around 3,000. St Leonard remained the parish church of the expanding sixteenth and seventeenth century coastal settlement.

2.33 Although Deal remained 'a sea-port without a harbour' as Fussell called it in 1818, it was one of the most important naval centres in England from the middle of the seventeenth century until after the Napoleonic Wars. This was mainly due to its situation on the coast beside The Downs, where ships of all types, though mainly royal naval vessels anchored to escape bad weather and to acquire fresh supplies. Victuals were ferried to the ships by small boats launched from the shelving shingle beach, and there were never any harbour installations.

2.34 The origins of a navy yard at Deal may be traced back to the 1540s when the first captain of Deal Castle acted as one of the victuallers for the royal fleet. Its formal beginning, however, seems to have been in the early seventeenth century, perhaps a result not only of victualling but also of the practice of hauling naval vessels on to the beach for repairs and inspections. In 1651 John Cullin of Deal stated that he was responsible for victualling and supervising naval long boats and pinnaces while on shore, as had his farther been before him. He also sold off abandoned boats and provided shingle ballast, capstans and ropes. He may have been responsible for the six or seven storehouses

that stood in Deal in 1660.

2.35 A report of 1652 referred to a lack of provisions in the yard's stores and a naval hospital had already been founded. Official navy records for the yard are preserved from 1658 and thirty years later a patent was granted to construct a conduit head, wharf and other buildings on the beach to supply water to the ships. It is not clear if any of these structures were in fact built.

2.36 The site of the first navy yard has not been pinpointed, although the 1660 storehouses were situated on waste ground probably along the Sea Valley and shingle ridge. In the late seventeenth century the navy yard was moved from its original site 'at the back of the town' to an area immediately north of the castle where it remained until the middle of the nineteenth century.

2.37 The main occupations at Deal in the sixteenth and seventeenth centuries were related to the naval and military presence. The boatmen were renowned for their skills in handling the vessels (known as Deal cutters) to supply the naval ships in The Downs and ferry personnel to and from the shore. Other activities associated with filling the needs of the castle and fleet also provide a livelihood and in 1617 there is the first mention of what was to become the predominant trade of the eighteenth century, smuggling.

#### 1700 - 1900

2.38 In 1699 Deal, by then a town of around 3,000 inhabitants, appealed for a charter of incorporation to free itself from the jurisdiction of Sandwich. This charter officially recognised Deal's status as a town. The eighteenth century was the town's heyday; it thrived on war, firstly during the Seven Years War (1756 – 1763) when it was regarded as one of the four great ports of England (Chatham, Portsmouth and Plymouth being



the others) and then during the French and Napoleonic Wars (1793-1815). The reliance on war is reflected in the contemporary saying 'As dull as Deal in times of peace'. During this time the town changed dramatically through major developments. The lack of controlled building evident in the seventeenth century continued throughout the main expansion of the town. St Leonard's continued as the parish church until St George's was built in Lower Deal in 1706 – 1716 and this was joined by St Andrew's in West Street in 1848 -1850. The Baptists and the Congregational churches also had establishments in the nineteenth century.

2.39 Deal Castle remained as a garrisoned but mainly administrative military centre until the middle of the nineteenth century. During this time a number of large barracks were built in the town and further south in Walmer (see Theme 3.8). The earthworks that originally linked the three castles of Sandown, Deal and Walmer may have been destroyed at this time through the growth of housing along

Beach Street.

2.40 The naval yard known as the 'King's Storehouse' in the early eighteenth century would have dominated the town from the end of the seventeenth century to its closure in 1863. At its greatest extent during the French and Napoleonic Wars, the yard covered around 20 hectares stretching from Deal Castle northwards to South Street, west to Prospect Place (now Victoria Road) and eastwards to the Naval Promenade. On its seaward side there were huge slipways for ships. High walls surrounded the yard with entrances in Prospect Place and South Street, where the Storekeeper's House stood and the Royal Signal Tower (a semaphore tower for communication with the Admiralty in London) was erected in 1795 - 1796. The Time Ball Tower was built on its site in 1855. In 1814 more land was leased to extend the yard to the north but the end of the Napoleonic Wars the next year stopped the proposed extension. The yard never recovered from the end to hostilities and was run down until its closure in 1864. Its arrangements and buildings are shown on a plan of 1831. The naval yard was finally demolished after 1865 and the area that it occupied was developed with residential properties as Victoria Town.

2.41 The rapid growth of the town in the eighteenth century saw an explosion of speculative development along the three main roads (Lower, Middle and Beach Streets) and the east west streets connecting them and the beach. There were c. 700 houses in Lower Deal in 1758 and this rose to 1348 by 1811. The town spilled into the side roads and on to market gardens on the west side of the High Street. Until 1865 the Navy Yard formed the southern boundary of the residential town while North Street formed that at the north.

2.42 The town had reached its peak by the end of the Napoleonic Wars and soon



declined. The military and naval barracks were said to be in a great state of dilapidation by 1823.

2.43 By the end of the nineteenth century, Deal had attempted to establish itself as a seaside resort. Hotels, the Royal Adelaide Baths, a reading room and other attractions for visitors were built along the beach. Bathing machines had been installed in 1754. A theatre and assembly rooms were built in 1800 though probably to entertain the military and naval personal and their families as much as for holidaymakers. From 1826 the annual Deal Regatta was established and in 1834 the seafront improved by the demolition of houses on the east side of



Beach Street to make way for the North Parade and the South Parade. In 1838 John Rennie was commissioned to build a pier just north of the Royal Hotel. Although started it was never finished and was destroyed by a storm in 1857. It was replaced by an iron structure in 1864 that survived until the Second World War when it was struck by a mined Dutch ship. The present concrete and steel pier, the last intact leisure pier in Kent, was opened in 1957 by the Duke of Edinburgh. Deal never realised its ambitions as a successful resort town, not even when the railway reached it in 1847 and was extended to Dover in 1881.

2.44 The naval presence in Deal stimulated maritime activities both in the town and the naval yard. The most important of these were boat building and there were boat yards in Deal until the end of the nineteenth century. The navy adopted the Deal cutter as its official lighter in 1740 and for the next 50 years these were all built in the town. Other small craft such as luggers, yachts and ten oared galleys for smugglers were also built. As late as 1847, there were still six boat yards in

Figure 6 Nineteenth century engraving of a view of the north end of Deal Beach, with fishermen and their boats on the shore. Note the (early) bathing-machine. © Dover Museum (d00150)

Figure 7 Deal Pier opened in 1957 was the third in Deal, the original being built by John Rennie in 1838



the town despite the general decline of the trade. The last boat was built in 1896 in Nicholas' Yard at the north end of the town. As Deal had only a shelving beach and no harbour facilities the yards would have been situated close to the shore and employed slipways across the beach. The site of one yard is known on the west side of South Street. The central strip of the street was cobbled to act as a slipway and finished vessels were hauled along it from the yard to the sea. Many of the east west streets may have served the same purpose. The cutters of The Downs were replaced by steam tugs from 1840 and the boatmen lost their livelihood. The Deal Maritime and Local History Museum has amongst it's displays the last surviving Deal Galley.

2.45 Other trades grew to serve the navy and other mariners. Ropes, sails and sacks were made; there were tallow chandlers and gunsmiths. There were large numbers of inns to provide entertainment and lodgings for the

military and naval personnel.

2.46 Smuggling was rife in Deal and played an important part in the town's economy. At its peak between 1730 and 1780 more than half the town's male population gained their livelihood from it. In 1784, the government ordered the destruction of the Deal boatmen's boats on the shore in an effort to control the smuggling. This was unsuccessful and the practice continued throughout the French wars. When the government again clamped down on smuggling at the end of the Napoleonic War, mounting a coastal blockade many people were reduced to poverty forcing a high proportion to the workhouse. Nevertheless, the expansion of the town saw the growth of a brick making industry in the town's surroundings. A number of the clay pits are still visible today.

2.47 The navigational hazard of the Goodwin Sands, colloquially known as "The Ship Swallower" led to the wrecking of numerous vessels. The boatmen of Deal, skilled in sailing the waters of The Downs and the Goodwins

became proficient in the rescue of stricken mariners. By the early nineteenth century such rescues were formalised with the establishment of three lifeboats at North Deal, South Deal and Walmer and lifeboat stations built in the middle nineteenth century. Today only the Walmer Lifeboat survives, housed in a station built in 1871.

#### Post 1900

2.48 In the twentieth century the military and marine barracks on the outskirts of the town were influential in extending Deal's built-up area into Walmer and Upper Deal. The establishment of the East Kent Coalfields influenced the expansion of the town in the pre-war years, particularly in the Mill Hill area to the west. By 1981 the census recorded a population of over 26,000 in Deal and Walmer. The barracks were closed during the 1980s and 1990s with a resultant decline in the prosperity of the town and a decline in its population.

# Description of the Heritage Assets

2.49 Deal is fairly typical of many small towns in England in that there has, as yet been very little significant archaeological research within the settlement itself though more recently archaeological work has produced an impressive amount of information about the earlier, pre-town times in the surroundings of Deal and Walmer.

2.50 The main body of evidence for urban



Deal comes from the standing buildings in its extremely well preserved historic core, where eighteenth and nineteenth century houses predominate. The centre of the post-medieval town has been only slightly altered by modern development and much of the area is today protected through Conservation Areas and its buildings through Listed Building Status.

2.51 Little survives of the original village in Upper Deal other than the parish church of St Leonard's and the road to Sandwich. None of the wooden huts on the shingle ridge survive and the only extant remains of the Henrician Device Forts are the three castles of Sandown, Deal and Walmer. A number of seventeenth century buildings survive though these are scattered along the road between Upper and Lower Deal and within the evolving town. Further archaeological evidence for the early settlement and the origins of the town are likely to survive both in buried form and within the cellars and fabric of later buildings. The parallel street pattern established in the seventeenth century survives to this day. Nothing remains visible of the early naval yard and its location has in fact yet to be established. Similarly there is no evidence for the seventeenth century storehouses. Again archaeology could provide significant evidence on the yard, the storehouses and other features representing the maritime associations of the port.

2.52 Evidence for the eighteenth and nineteenth century development of the town and its maritime associations is plentiful. The original street pattern survives and many of the Listed Buildings in the Conservation Areas relate to this time. As well as residential properties, the buildings are likely to include a range of properties whose specific function relates, at least in part to servicing the navy. There are likely to be the remains of shops, stores, hotels and inns as

Figure 9 Middle Street Deal, one of the original streets in the town with numerous 18th and 19th century buildings provides a strong sense of a historic place



well as the traces of those occupations involved with the supply and provisioning of the fleet, such as bakeries, chandlers and breweries. St George's Church and St Andrew's Church survive, as do various other chapels and churches that sprung up as the population expanded.

2.53 Little survives of the naval yard other than the Time Ball Tower. This historic feature is protected as a Listed Building and is occupied by the Deal Timeball Tower Museum. The site of the naval yard is today occupied by the late nineteenth century development known as Victoria Town and remains are likely to be confined to the archaeological record. Nothing remains of the slip ways from the naval yard on to the beach (although possible mounds for windlasses still survive on Walmer Green) and further more detailed study is needed to establish what features associated with Deal's naval and maritime associations in this period survive on the shoreline. Further study is also needed to establish how much of the boat building



industry can be traced in the town. The remains of Hayward's Yard still stand as a house and workshop at the junction of Wellington Road and the High Street. The cobbled strip along the centre of South Street has been lost beneath the tarmac of the present road. Remains of the smuggling history of the town may survive in the form of cellars and vaults beneath the historic properties where goods would have been hidden from the eyes of the authorities.

2.54 In Walmer, the remains of the military and naval barracks survive and have recently been developed, with many of the historic buildings retained. Evidence for their development and use has been gained from the archaeological investigation and building survey work that has taken place on the barrack sites in conjunction with their redevelopment, demonstrating the value of this work.

2.55 Of the assets of the resort town, the present pier is the third built at Deal and dates to 1957. It has significance as the last surviving leisure pier in the county. Many of the original leisure buildings such as the baths and assembly rooms have been lost beneath modern development. Some buildings survive including the picture house adjacent to the Timeball Tower. Many of the hotels built to house visitors to the resort survive in the town.

2.56 The Walmer Lifeboat still operates from its station on The Strand in Walmer built in 1871. The North Deal Lifeboat Station was closed but stands on Beach

Figure 10 The Ship Inn, Middle Street which dates to 1764. In the 19th century Middle Street and its alleys had a terrible reputation. In 1857 The landlord of the Ship Inn murdered a naval ensign for 'being cheeky' to his



Street and is presently occupied by the Deal Angling Club.

2.57 A key asset for Deal Port is the Deal Maritime and Local History Museum. This museum, which was temporarily closed during the writing of this paper, contains a wealth of material and collections relating to the development of the port and later resort town and the Naval use of The Downs, the lives and activities of the Deal Boatmen including the last surviving Deal Galley, smuggling, lifesaving and the wrecks of the Goodwin Sands and the role of the Royal Marines in the town's history.

#### Statement of Significance

2.58 The remains of the historic port town of Deal, at one time one of the most important naval towns in England are of **outstanding significance**.

#### **Evidential Value**

2.59 There is considerable evidence potentially contained within both the buried archaeological record and the fabric of the numerous historic buildings that survive in Deal that can provide a much greater understanding on the origins of the port, the way it and the town developed and the activities that took place in the town to support the anchorage. The remains of the Naval Yard, though likely to have been significantly affected by the development of Victoria Town could provide significant information on the workings of a naval



dockyard that grew in prominence during the major conflicts of the eighteenth and nineteenth century. The resource as a whole can provide further evidence on the life of the seventeenth, eighteenth and nineteenth century navy and its people, a period when the navy played a leading role in the fortunes of the nation.

#### Historical Illustrative Value

2.60 The historic assets of Deal Town illustrate the development of one of the most important naval ports in England. The historic core of Deal, with its three narrow main streets established in the seventeenth century and a considerable number of historic buildings, many of which are Listed, is one of the best preserved towns of the eighteenth and nineteenth century in England. Although much of the naval fabric is today hidden, the range of buildings that survive illustrate the needs of the navy, their personnel and their families at a time that the navy played a prominent role in the country.

#### Historical Associative Value

2.61 The growth of Deal has mainly been brought about through its association with the navy at a time of conflict or external threat. The development of the three Henrician castles and their associations is dealt with in a separate paper. The growth of the town through its association with the navy at the time of the Seven Years War and



in particular the French and Napoleonic Wars is particularly strong. The presence of the fleet anchorage meant that many of the famous naval personalities of the time would have visited or stayed at Deal including Nelson. This topic generates considerable public interest particularly through the fictional writings of Forester, O Brian, Donachie and others who describe The Downs anchorage in their works on the navy at the time of Nelson.

#### **Aesthetic Value**

2.62 The historic core of Deal is characterised by a relatively unaltered, well preserved eighteenth and nineteenth century streetscape. The narrow streets at the core of



the town, with the numerous historic buildings which include residences, shops and public houses provide a strong aesthetic value and a sense of a truly historic area. The sea front backed by the historic properties provides a sense of the historic relationship with the anchorage though the naval aspect has been supplanted with the promenades and attempts to develop the leisure use of the sea front from the nineteenth century. The pier allows clear views out to The Downs and back onto the historic town frontage.

#### Communal Value

2.63 Deal has developed a strong sense of its identity with the naval and military use of the anchorage and it protection by the three castles. The town (including Walmer Castle) has four museums which focus on different aspects of the town's history: Deal Castle concentrates on the events that led to Henry VIII constructing the defences and the castle's subsequent history; Walmer Castle concentrates more on it's post Tudor role as a residence for the Lord Wardens; The Deal Maritime and Local History Museum has

Figure 14 A view of Deal Seafront looking North, with the Royal Hotel to the left and Sandown Castle in the background. Watercolour by J. M. W. Turner c.1825. © Dover Museum (d02622)

Figure 15 Attractive buildings can be seen throughout the core of the historic town at Deal



exhibits of boats, smuggler galleys and model naval ships, presents the history of the Deal and Walmer lifeboats and the local history of the parish; the Timeball Tower museum concentrates on the importance of timekeeping at sea and the function of the building. As well as the museums, Deal has a number of interpretation boards scattered through the town that explain the history of the port and specific sites. A number of buildings include plaques and highlight their dates of construction, all adding to the sense of an historic place and demonstrating local pride in the town's history. The town's historic links with the Royal Marines is celebrated annually when the Royal Marines band return to play to large crowds.

#### **Vulnerabilities**

2.64 The historic core of Deal is well protected through its Conservation Area designations, Middle Street in fact being the first Conservation Area designated in Kent. There is some evidence for general decay of

Figure 16 The Timeball Tower Museum
Figure 17 Flooding in Deal. © Dover Museum (d28545)



the Conservation Areas adjoining Middle Street that are not afforded the additional protection of Article 4(2) Direction (see Theme 13 Conservation Areas).

2.65 Significant redevelopment of the historic core is unlikely but where development is proposed full consideration should be given to the archaeological remains that remain buried there and in particular in key locations such as the Naval Yards, the bulwark forts (see Theme 3.4) and the location of the boat yards and storehouses. Considerable attention should be given to the setting of key sites such as Deal Castle and the Timeball Tower and where possible development should be encouraged to enhance the present setting of key assets and reflect the maritime connections of the town.

2.66 Conversion of buildings could result in the loss of historic fabric including detail that is presently hidden, and of evidence for the historic use of the buildings that may provide an insight to the life of the town at the time of the naval presence.

2.67 The town itself has expanded outwards from Deal Castle, initially northwards and later westwards towards Upper Deal and south towards Walmer. The castles of Sandown and Walmer represent the extent of the historic frontage of the town to the sea and development on the front outside this extent would be out of keeping with the historic development.

2.68 Historic properties within the town,

especially those built off the shingle ridge on the former sea valley may be come vulnerable to rising sea levels. The protection of these historic assets should be fully considered as a priority in future flood protection strategies.

2.69 The evidence for the early slipways running through the cross streets of the historic core may survive beneath the modern tarmac. Archaeological monitoring of road maintenance and utilities works within the town may enable the original character of the road surfaces to be determined and provide an opportunity for design of the public realm that reflects the former slipway use (for example cobble runners along the street centre where appropriate).

2.70 Development of the Royal Marines barracks has taken place over recent years and sympathetically retained many of the historic buildings and been accompanied by archaeological investigation and historic building recording. Further works on the barracks or other prime features of the historic town should be similarly treated including for the eighteenth and nineteenth century churches and leisure features.

#### **Opportunities**

2.71 Deal (and to an extent Walmer) would benefit from a more detailed survey of its historic fabric, documentary sources and review of the archaeological record perhaps in the form that English Heritage have





recently carried out at Queenborough on the Isle of Sheppey. This would allow a much more detailed appreciation of the historic assets of the town and identify in particular those that do not have any protection at present and the origins of those that do.

2.72 Such a survey would provide the basis for a review of the Conservation Areas and the impetus for appraisals of those areas that presently do not have them (all bar Middle Street). Consideration should be given to widening the use of Article 4(2) Direction in the Conservation Areas.

2.73 There may be an opportunity to better link the heritage assets within Deal into one coherent story that the various main visitor attractions (Deal Castle, Walmer Castle, Timeball Tower and Maritime Museum) and the public realm, inns and other facilities can all link in to.

# Sources Used & Additional Information

Bower, J., 1995: 'A Traditional Community in Decline; The Deal Boatmen in the Nineteenth Century', in Southern History Volume 17 (1995), pp 98-114.

Kent County Council, 2004: Kent Historic Towns Survey: Deal Archaeological Assessment Document. Maidstone: Kent County Council.

# **Key Heritage Assets**

Asset	Form	Designation & Protection	Accessibility	Interpretation
St Leonard's Church	Historic Building	Listed Building, Conservation Area	Parish Church	Unknown
Medieval Village (later Upper Deal)	Archaeology	Conservation Area	Private	None
Castles of the Downs (see Theme 3.4)	Historic Buildings, Buried Archaeology Ruinous structure	Scheduled Monument, Conservation Area, Registered Historic Park and Garden	Walmer and Deal Castles are English Heritage operated visitor sites, Sandown Castle is open space	Museum display at castles plus interpretation boards in public realm
Wrecks of Vessels in The Downs & Goodwin Sands	Wrecks	Protected Wrecks	Submerged	Deal Maritime & Local History Museum
Sixteenth century huts and tenements	Archaeology – low survival potential	Conservation Area	Mainly private developed land	None
Seventeenth century town	Historic street pattern Historic Buildings Archaeology	Listed Building, Conservation Area	Public realm, private properties	Possible interpretation panels
Sixteenth century Navy Yard	Archaeology (location unknown)	Conservation Area	Mainly private developed land	None
1660 storehouses	Archaeology (location unknown)	Conservation Area	Mainly private developed land	None
Seventeenth century naval hospital	Archaeology (location unknown)	Conservation Area (possibly)	Mainly private developed land	None
Seventeenth century conduit & watering wharf	Archaeology (location unknown)	Conservation Area (possibly)	Beach area (possibly)	None
Seventeenth to nineteenth century Navy yard	Archaeology	Conservation Area	Mainly private developed land (Victoria Town)	None
Provisioning and Servicing the Navy and mariners	Historic Buildings, Archaeology, Historic Structures Wrecks	Conservation Area, Listed Buildings	Mainly private developed land	Deal Maritime & Local History Museum
Smuggling	Historic Buildings and Structures Archaeology	Conservation Area, Listed Buildings	Mainly private developed land	Deal Maritime & Local History Museum, Interpretation panels
Eighteenth and nineteenth century port town	Historic Buildings and Structures Archaeology Street Pattern Public Spaces	Conservation Area, Listed Buildings	Private developed land Public Realm	Deal Maritime & Local History Museum, Interpretation panels

# **Key Heritage Assets**

Asset	Form	Designation & Protection	Accessibility	Interpretation
St George's Church	Historic Building	Conservation Area, Listed Building	Church	Unknown
St Andrew's Church	Historic Building	Conservation Area, Listed Building	Church	Unknown
Eighteenth and nineteenth century churches and chapels	Historic Building Archaeology	Conservation Area	Various uses	Unknown
Naval & Military Barracks (see Theme 3.8)	Historic Building Archaeology	Conservation Area, Listed Buildings	Various uses	Deal Maritime & Local History Museum, Royal Marines annual commemoration, memorial
Navy Storekeeper's House	Archaeology	Conservation Area	Private developed Land	None
Royal Signal Tower	Archaeology	Conservation Area	Site ofTimeball Tower	Timeball Tower Museum
Timeball Tower	Historic Building	Conservation Area, Listed Building	Museum attraction	Timeball Tower Museum
Naval Slips	Archaeology – low survival potential	Conservation Area	Sea Front	None
Admiralty House	Archaeology Historic Building	Conservation Area	Private Developed Land	None
Resort Town	Historic Buildings Historic Structures Public Realm Archaeology	Conservation Area Listed Buildings	Public realm Hotels Various uses Piers and Promenades	Deal Maritime & Local History Museum, Annual Regatta
Deal Pier	Historic structure	?	Public Access	Deal Maritime & Local History Museum, Interpretation Panel
Boat building Yards	Historic Building Archaeology	Conservation Area Listed Buildings	Private properties Cross Streets	None
Clay pits	Topographic features	None	Private developed land	None
Lifeboat Stations	Historic Buildings	Conservation Area Listed Building	Limited Access	Working lifeboat at Walmer Deal Maritime & Local History Museum

# Appendix 1: Theme 2.3 – Dover Harbour



# Theme 2.3 – Dover Harbour



#### Summary

2.74 Dover contains an exceptional collection of heritage assets that tell the story of cross-Channel travel through the ages. Lying at the shortest crossing point of the Channel and nestling in a break in the formidable White Cliffs Dover has seen maritime vessels plying its waters since prehistoric times. The town contains an unrivalled palimpsest of archaeological and above ground remains that reveal the development and growth of the harbour from a major port of entry in the Roman period to the bustling ferry port of today.

#### Introduction

2.75 The development of a substantial harbour at Dover is not surprising, given its sheltered position at the tip of south-east England at the closest crossing point of the

English Channel. To the west and east of Dover the white cliffs provide an impenetrable barrier preventing easy landing; at Dover however the River Dour has carved a natural break in the cliffs and it is likely that the mouth of the Dour has been used as a safe-haven for sea-going vessels since prehistoric times. The discovery of the Dover Bronze Age boat (of c. 1550 BC) as well as the Langdon Bay Wreck (dated to 1200 – 1000 BC) attest to this early cross-Channel traffic.

2.76 The strategic position that Dover offered for a harbour was not lost on the Romans who established a harbour in the area to the east and north-east of Market Square. The exact extent of this harbour is not fully understood, however archaeological and geoarchaeological evidence suggests that it was likely to have been extensive and equipped with wharfs and a harbour mole/ piers. The harbour is suggested to have developed from the Flavian period (second half of the first century AD). The harbour was also a home base for the fleet of the Classis Britannica (the Roman fleet for the province of Britannia) and a fort occupied by the fleet is known in Dover. Two lighthouses, one on the eastern side of the harbour (now within Dover Castle) and the other on the Western Heights marked the entrance to the port in Roman times.

2.77 In the late-Roman period and through the early medieval period the Roman harbour was suffering from continual issues of silting. It is possible that some elements of the Roman harbour installations were usable in the earlier Anglo-Saxon period, although archaeological evidence is scant. By the end of the Anglo-Saxon period the former harbour had probably entirely silted up.

2.78 The precise location and extent of any fixed harbour works in the early medieval period is uncertain. Royal fleets mustered at Dover in the period immediately before the



Norman Conquest and it was one of the five original Cinque Ports. It is probable that fixed harbour works at Dover were minimal, with boats being anchored offshore or drawn onto the shingle beach as required. Although there is little surviving in the archaeological record relating to the harbour itself, significant medieval remains (most notably at Townwall Street) have been investigated belonging to the contemporary seafaring settlement. By the later medieval period Dover was seemingly a relatively minor port, suffering from the dual effects of silting and long-shore drift. Problems of silting of the port of Sandwich in the fifteenth century again brought the harbour at Dover to the fore and in the late fifteenth/early sixteenth century a new harbour was established at Archcliffe around a sheltered inlet/pool known locally as the Paradise Pent. A new commercial and residential District, known as the 'Pier District' developed around the harbour and the Wyke.

2.79 To prevent this new harbour at Archcliffe becoming blocked by moving shingle a number of new piers and jetties were constructed at the harbour mouth. It would seem that these new piers altered the tidal depositional patters in the bay and by the mid sixteenth century a shingle bar had developed across the bay that extended to connect with the foot of the East Cliff and enclosed a strip of tidal water to its rear. The line of this tidal strip is represented by today's Esplanade and Waterloo Crescent. By 1556 the old harbour at the Paradise had



been largely blocked and Queen Elizabeth I was petitioned to help restore a harbour at Dover.

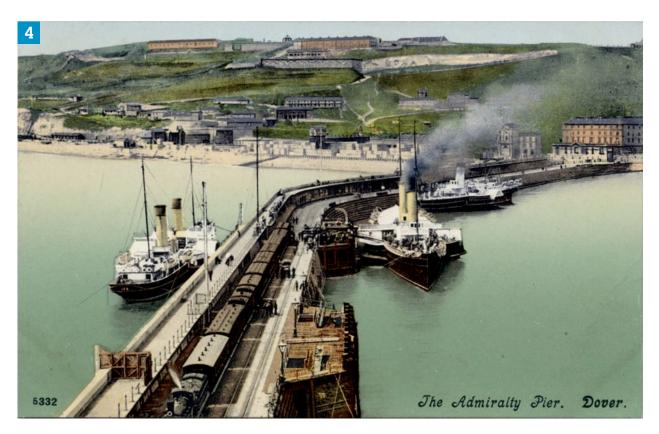
2.80 The tract of tidal water sheltered by the newly formed spit created a natural opportunity for revising the harbour arrangement. Provisions were put in place to reinforce this shingle spit and this tract of water still forms the basis of the Inner Harbour (Wellington Dock, Granville Dock and the Inner Tidal Harbour). In the Elizabethan period this tract of water was known as the Great Pent and sluices to control the flow of the Dour were installed as part of the Elizabethan works. These sluices allowed the waters of the Dour to be used to flush the harbour basin clear of any shingle or silting.

2.81 Although the sluices were somewhat effective, Dover's harbour continued to suffer from shingle blocking its mouth. This problem was finally solved in the mid nineteenth century with the construction of the Admiralty Pier out into deep water. Admiralty Pier was constructed in phases between 1847 and 1893. In 1847 work began on the western arm of the Harbour of Refuge designed by James Walker and commissioned by the Admiralty. By 1851 the pier had reached a sufficient length to solve the problem of shingle in the harbour mouth and cross-Channel steamers were able to berth alongside.

#### 2.82 The South Eastern Railway reached

Figure 2 An impression of the Roman port of Dubris (Dover) with its two lighthouses. The print is adapted from one originally drawn by the noted 18th century antiquarian William Stukeley. © Dover Museum (d05960)

Figure 3 Engraving taken from an Elizabethan plan of the works at Dover Harbour. This shows the enclosure of the Pent. © Dover Museum (d00368)



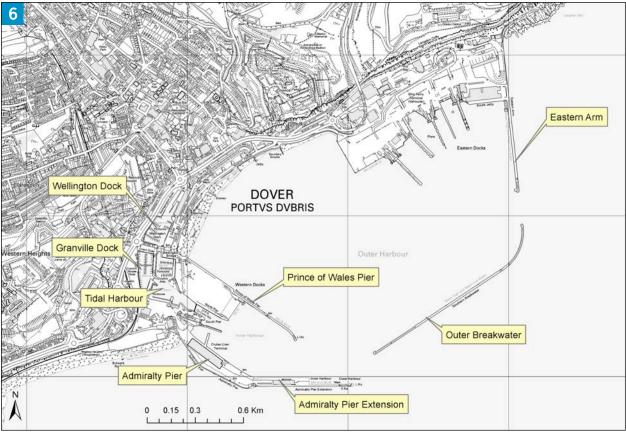
Dover via Folkestone in 1844 and the plans for the pier were altered to provide a station that could deliver passengers and goods directly to the gangplanks of the channel boats. Traffic increased with the arrival of the London, Chatham & Dover Railway line in 1861 which was connected to the pier in 1864. The first phase of the pier was completed in 1854, and the second in 1864, but the third phase was delayed by discussion as how it should finish at the seaward end. It was finally decided that a fort with two powerful 80 ton guns be placed there but it was not until 1880 that the first structure was complete and 1885 before the guns were



Figure 4 Steamships and trains at the Admiralty Pier Dover. © Mr Gunnett (loaned to Dover Museum d28984)
Figure 5 Loading a car on to Townsend's Ferry. © Dover Museum / B Hollingsbee (d43452)

first fired. It became known as the Admiralty Pier Gun Turret.

2.83 The next major addition at Dover was the Prince of Wales Pier constructed from 1892. Finally in the late nineteenth century the Admiralty approved the construction of a vast harbour of refuge at Dover. The new Outer Harbour was formed by extending and widening Admiralty Pier and the creation of a new Eastern Arm and construction of the Outer Breakwater. This harbour of refuge was completed in 1909 and enclosed an area of some 270 hectares. The Admiralty Harbour played an important military role in both World Wars. The twentieth century also saw a dramatic increase in the amount of civilian traffic passing through the docks. The Western Docks were developed as a major train ferry port. There had been a station at the docks (known as Dover Town Station) since 1844 with services connecting to cross-Channel steamers, however the rail facilities were substantially improved following the construction of the Admiralty Harbour. A new railway station, Dover Marine, was opened on the pier itself and was opened to civilian



traffic in 1920 following the cessation of the First World War. A Train Ferry Dock was added to the Western Harbour in 1936.

2.84 The area that is now Dover Eastern Docks was in naval occupation until after the Second World War when it was passed to the Dover Harbour Board. During the war submarine pens were constructed within an inner harbour and remains of these survive beneath the general cargo berth today. Other installations such as storage caves and oil tanks also survive in the chalk cliffs to the rear of the harbour.

2.85 The growth of private motoring in the post-war period led to a new source of traffic for Dover in the form of roll on, roll off car, coach and lorry services. The first cross-Channel car service from Dover actually began in the interwar period when a Captain Townsend purchased a former mine sweeper that he converted to carry private cars. Rather than a roll on, roll off arrangement this service relied on cars being lifted by crane onto the vessel. Captain

Townsend's service operated out of the eastern dock and it is here that the new roll on, roll off car ferry berths were constructed in the 1950s. In the 1960s a hoverport was established at the Eastern Docks, but this was moved to the Western Docks by the 1970s when the Eastern Docks were redeveloped and more ferry berths added.

# Description of the Heritage Assets

2.86 The Langdon Bay Wreck lies just to the east of the Eastern Arm of Dover harbour, some 400 m. from the present coastline. The site of the wreck was identified in the 1970s when members of the Dover Sub-Aqua group found a large number of Bronze Age (1200 to 1000 BC) bronze implements on the sea floor. Nothing of the structure of the vessel is known, but in excess of 400 bronze objects have been found at the site. The bronzes are thought to be of continental origin and are suggested as being the cargo of a sea-going vessel that



sank just outside the safety of the Dour Estuary. The Langdon Bay Wreck is a Protected Wreck site.

2.87 The **Dover Bronze Age Boat** was discovered in 1992 some 6 m. below the present ground surface during the construction of a new underpass as part of the A20 improvement project. The boat was discovered in silts within the prehistoric river estuary and comprised most of a partially disassembled vessel. The majority of the boat was lifted in 1992 and is now on display in Dover museum. The remaining portion of the boat (the northern end) remains in situ. The Dover Bronze Age Boat has been dated to *c*. 1550 BC and is one of the most complete vessels of this period.

2.88 Evidence for Roman harbour works has been found at a number of locations within the town. Sealing the Dover Bronze Age Boat were timbers of Roman date. These timbers formed one side of a box-framed harbour wall. Further sections of Roman harbour wall (or mole/pier) were found to the northeast in the area of Dolphin Lane in 1855. The Dolphin Lane section was again formed from box-timber section, but was clearly a separate structure to that found overlying the Bronze Age boat. Further evidence for Roman wharf and quayside remains have been found on Dolphin Lane where groins, piles and mooring rings were observed in the 1860s, whilst a section of a chalk block quay (supported on wooden piles and planking) and a short length of letty were identified on

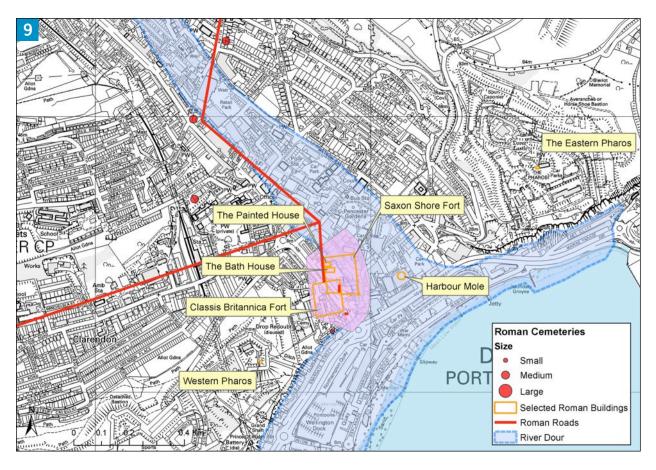
Castle Street in 1956. A further possible section of Roman waterfront has also been identified at Bench Street.

2.89 It is likely that further buried archaeological remains, including waterlogged timbers associated with the Roman harbour and harbour infrastructure will survive across central Dover. The exact extent of the potential harbour is unknown, although it has been suggested it could extend up to Pencester Gardens and potentially as far as Bridge Street. The silts and sediments infilling the Dover harbour may provide further information about the development and subsequent abandonment of the Roman harbour. Rich geoarchaeological deposits have been found across the site of the former Dour Estuary.

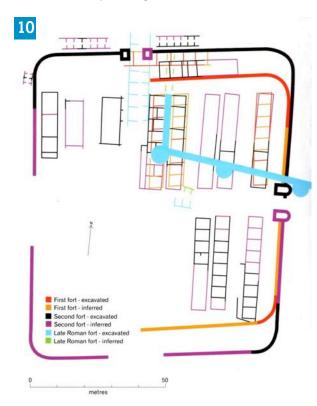
2.90 The entrance to the Roman harbour was marked by two Roman lighthouses (pharoi), one on the Western Heights and one on the Eastern Heights (Castle Hill). The Eastern Pharos is well preserved, standing to a



Figure 7 The Dover Bronze Age Boat discovered in 1992 and now on display in Dover Museum. © Dover Museum / Dover Bronze Age Boat Trust (d02660)



height of some 13 m. and is the tallest surviving Roman building in Britain. The Western *Pharos* was largely removed when the nineteenth century fortifications were constructed (although a buried section



remains). Both *pharoi* are located within Scheduled Monuments. On the western side of the Roman harbour was the **Fort of the** *Classis Britannica*. The Fort was constructed from *circa* AD 130 (although there is evidence for an underlying earlier and uncompleted fort dating to the start of the second century) and was home to marines in the second and early third centuries AD.

2.9 The Fort of the *Classis Britannica* is one of the most important Roman forts in the country and is partly designated as a Scheduled Monument. The Fort of the *Classis Britannica* is discussed in more detail in Theme 3.1 as is the third century Fort of the Saxon Shore.

2.92 No surviving remains are known of either the Anglo-Saxon or medieval harbours at Dover. No archaeological remains of the subsequent fifteenth/sixteenth century harbour at the Wyke are known to survive either, although buried archaeological remains of the harbour and associated settlement

Figure 9 Features of the Roman harbour, forts and vicus at Dover (Dvbris)

Figure 10 Layouts of the excavated forts of the Classis Britannica and the Saxon Shore at Dover



known at the Pier District may survive.

2.93 The layout of the Elizabethan harbour survives with Granville Dock, Wellington Dock, Crosswall Quay and the Inner Tidal Harbour following the approximate outline of the sixteenth century harbour. Wellington Dock itself is of early nineteenth century date, with the dock sitting within the area of the Elizabethan 'Great Pent'. Work in lining the Great Pent in stone began in 1832 when the Commercial Quay (originally Pent Quay) section of Wellington Dock was constructed. A second section of stone quay was built in

1833—4. The maritime engineer James Walker completed the lining of the remainder of the Pent in 1844. Wellington Dock is now used as a marina and is a Grade II Listed Structure.

2.94 On Wellington Dock there is a Crane manufactured by the Fairburn Engineering Co. of Manchester. The crane was used by the Ordnance depot and is a Scheduled Monument and Grade II Listed Structure. The Granville Dock was similarly lined in stone in the 1840s, as was the Inner Tidal Harbour. The demolition of the old Amherst Battery and the excavation of the land upon which it sat allowed the tidal harbour to be doubled in size in 1844. At the same time a new bridge and tidal gates were installed to separate the Inner Tidal harbour from the new basins in the Pent.

2.95 In the 1840s an enquiry and report by a Royal Commission recommended that Dover Harbour be developed to form a 'harbour of refuge' (a sheltered harbour capable of accommodating any naval vessel and accessible in any weather or tide). In 1847 work was commissioned to start construction of this harbour of refuge with the first works being to create a western arm, known as the Admiralty Pier. Admiralty Pier was designed by the marine engineer James Walker (also responsible for the Inner Harbour works) and was built by the civilian contractor Henry Lee & Sons. The pier was constructed phases between 1847 and 1872,



Figure 11 Fairburn Crane on Wellington Dock is the District's smallest Scheduled Monument
Figure 12 Panoramic view of Dover Harbour



with the works terminating at the site of the Pier Gun Turret. Admiralty Pier is constructed of granite and concrete and is a Grade II Listed building. The Admiralty Pier was the only element of the 1847 Harbour of Refuge works to be complete. Although the harbour scheme was not completed the construction of the pier, extending out to deep water, finally resolved the issues of silting that had long plagued Dover's Inner Harbour.

2.96 Although the eastern arm of the 1847 Harbour of Refuge was never begun plans were made by the Dover Harbour Board to build a second parallel pier in order to form a smaller commercial harbour. Construction of the eastern arm of the Commercial Harbour was started in 1892 and was completed in 1902. The eastern arm was named **Prince of Wales Pier** and was designed by Sir John Coode and built by the contractors Sir John Jackson Ltd. The Pier was built of a latticework of cast iron girders to its

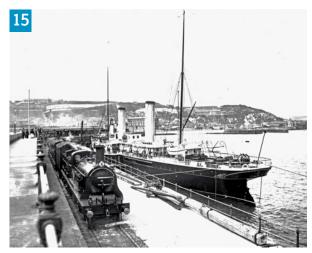


landward end, whilst the seaward end was constructed of stone. The cast iron latticework has been subsequently encased in later concrete and pile additions. The Prince of Wales Pier is a Grade II Listed Building.

2.97 At the end of the nineteenth century plans were again put in place to build a Harbour of Refuge at Dover. These plans were drawn up in 1897 and the harbour was completed in 1909. The new Admiralty Harbour as it became known enclosed an area of some 270 hectares. The Admiralty Harbour was formed by the construction of Admiralty Pier Extension (almost doubling the length of the existing Admiralty Pier) a new Eastern Arm and the formation of the Outer Breakwater. Messrs Coode, Son and Matthews designed the new works and the construction contract was awarded to S Pearson & Son. In order to construct the harbour a large tract of land had to be reclaimed along the shoreline beneath the East Cliff. The construction of the harbour



Figure 13 Dover Harbour, Admiralty Pier Extension battery and lighthouse Figure 14 Dover Harbour, Eastern Arm. © Dover Museum (d95583)



arms and breakwater was a major feat of engineering. The arms and breakwater are constructed from massive concrete blocks (each weighing between 26 and 42 tons each). Before these blocks could be positioned the seabed was prepared and levelled by divers and these massive blocks were lain directly onto the levelled surface from overhead gantry cranes. Above the sea level the works are faced with tooled granite ashlars.

2.98 The massive concrete blocks used in the construction of the Admiralty Harbour were cast in a forming yard on the reclaimed area below the East Cliffs. A light railway line 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. The railway line, known as the Martin Mill Mineral Railway would have 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. The line of the Martin Mill Mineral Railway and the scar of the funicular railway can still be seen.

2.99 The harbour at Dover has been served by rail since 1844 when the South Eastern Railway opened a line to the town from London via Folkestone. The original terminus for the line was originally known simply as



Dover, but by 1863 had become **Dover Town Station**. The line provided a connection from the cross-Channel steamer plying from the harbour with the capital. To accommodate passengers wishing to overnight in the town the railway built the **Lord Warden Hotel** adjacent to Dover Town Station. The Port acquired its second railway station in 1861 when the London Chatham & Dover Railway extended their line from Dover Priory to the harbour. Their new station was known as **Dover Harbour Station**.

2.100 In 1862 the South Eastern Railway extended their line from Dover Town Station onto Admiralty Pier itself, allowing trains to run alongside the vessels docked there. The London Chatham and Dover Railway followed suit and in 1864 opened their connection from Dover Harbour Station to the Admiralty Pier line. A small platform was provided on Admiralty Pier, but this was in an exposed position and open to the elements. The decision was taken in 1909 to reclaim land adjacent to Admiralty Pier for the



construction of a large new railway station. The new terminal was named **Dover Marine Station**. The station was near completion at the outbreak of the First World War and was first used for the transport of troops to and from the front. After the cessation of hostilities work on the station was completed and it opened to passengers in 1920.

Dover Town Station closed to passenger traffic just before the war and Dover Harbour Station was closed in 1927, leaving Dover Marine as the only Station serving the harbour. In 1933 construction work started on a new Train Ferry Dock allowing roll-on, roll-off rail services from the port. The train ferry was largely used for freight traffic, but also carried passengers on the famous Night Ferry service. By the late twentieth century rail passenger numbers had declined dramatically and Dover Marine Station closed in 1994. No above ground remains of Dover's first station (Dover Town) survive, but there may be surviving buried elements. The grand Lord Warden Hotel survives as offices and is now owned by Dover Harbour Board - it is a Grade II Listed Building. The buildings of Dover Harbour Station survive and are Grade II Listed, the covered train shed and platforms have been

removed however. The station at Dover Marine survives; 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.

#### Statement of Significance

Dover has played a long-standing and significant role in cross-Channel trade and the defence of the realm. It is for this reason that Dover Castle has long been known as the 'lock and key of the kingdom', but the same could be said of the town and its harbour. The discovery of a remarkable sewn plank boat and the site of a wreck, both of Bronze Age date, suggest that the safe haven of Dover has provided shelter to boats for over three and a half thousand years. The strategic importance of Dover was also recognised by the Romans who established a major naval base here. The archaeological and built environment of Dover demonstrates the significance of the harbour, where rich remains charting the development of the port and harbour have been recorded. Overall the port and harbour at Dover is considered to be of outstanding significance.

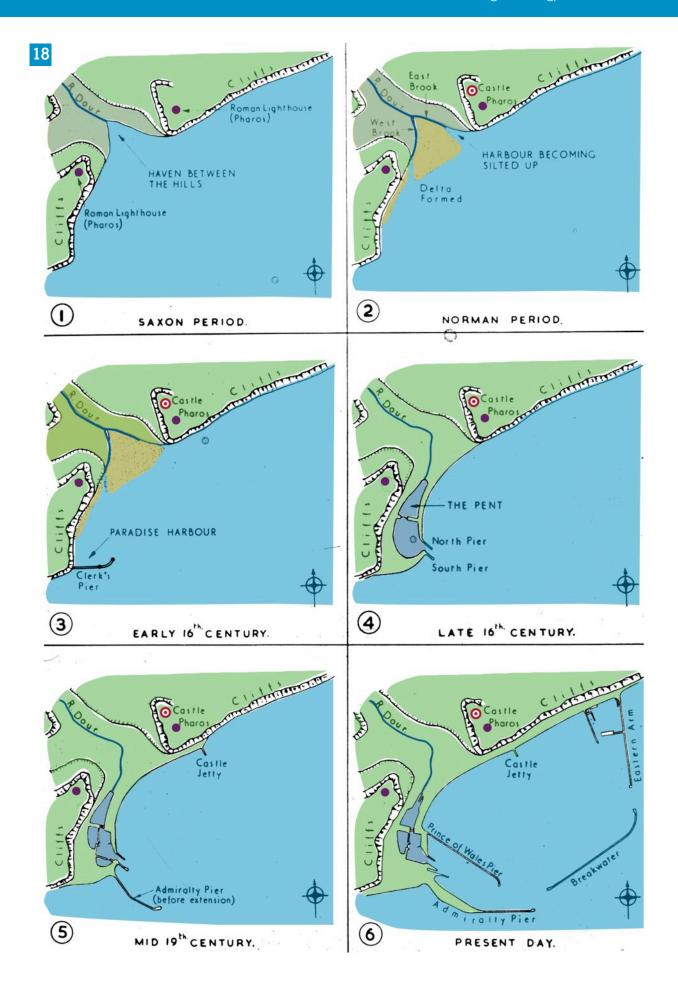


Figure 18 The evolution of Dover Harbour. Drawing based on image provided by Dover Museum



#### **Evidential Value**

2.103 Archaeological evidence from the centre of modern-day Dover suggest that there are likely to be significant surviving buried remains which could provide vital knowledge on the use of Dover for harbouring and shelter of vessels in the prehistoric and Roman periods. We know relatively little of the harbour installations of the Anglo-Saxon or medieval periods, but again buried archaeological remains could provide vital information to improve our knowledge of the town in these periods. For the post-medieval and modern periods we have better documentary evidence, both written accounts and maps to inform our understanding of the place. That being said archaeological remains (both above and below ground) could still provide vital information to inform our understanding of the more recent development as well as to provide evidence for the working and living conditions of those working and utilising the harbour.



#### Historical Value

2.104 The port of Dover has many strong historical associations. Its archaeology and heritage illustrate many key events at a national level, from the Roman control of Britain to the arrival of the railway age and the birth of cross-Channel leisure traffic. A string of monarchs and notable marine engineers have shaped the development of the harbour. In more recent times the harbour has played a key role in a number of conflicts, including two World Wars.

#### **Aesthetic Value**

Dover has developed into a substantial modern port. It is one of Europe's largest passenger ports, with in excess of fourteen million travellers passing through the harbour each year. The modern expansion of the port has had an impact on the site's aesthetic value. Nevertheless areas such as Wellington Dock and Granville Dock (currently used as a marina) have a distinct character and the historic environment makes a major contribution to the aesthetic value and character of the place. The port's position nestled in a natural break in the White Cliffs is iconic and the approach to the port from the sea provides a strong visual reminder of the impenetrability of the cliffs. It is the visual impact of this approach that users of the port often remember.

#### **Communal Value**

2.106 The port of Dover is a key part of



the town and the local community's identity. The historic association of the Castle, town and port as the gateway to England provides a strong identity to the local community. Archaeological evidence such as the Dover Bronze Age boat helps to re-enforce the historical connections between Dover and the continent and are a communal reminder of the important role that Dover has played in cross-Channel trade for over three millennia.

#### **Vulnerabilities**

2.107 Archaeological remains and geoarchaeological deposits associated with the prehistoric use of the River Dour as well as the Roman and medieval harbouring at Dover is potentially susceptible to all forms of development and this needs to be carefully managed to avoid harm to the significance of these assets. It is likely that exceptionally rich and well-preserved remains underlie the town and that these would include waterlogged deposits. In addition to direct physical impacts such waterlogged deposits would be susceptible to harm through changes to the local hydrology.

2.108 The post-medieval 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 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.

The historic harbour works of the 2.109 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**

2.110 The port of Dover will play a key role in the economic future of the District. It is important however that in addition to securing the economic future of the port, opportunity is taken to celebrate the role that the harbour has played in shaping the town. The historic assets in the harbour make a positive contribution to the character of the area and add interest to the working port.

2.111 The harbour area 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. Opening up access to those assets, which are currently hidden or inaccessible, would allow the significance of the harbour to be better appreciated.

2.112 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

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

Williams, J. (ed.) 2008: 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 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)	Interpretation panel on seafront
Dover Bronze Age Boat	Buried Archaeology	None	Lifted section of Boat is on display in Dover Museum	Dover Bronze Age Boat Gallery, Dover Museum
Fort of the Classis Britannica	Buried Archaeology	Scheduled Monument (part)	No	?No
Fort of the Saxon Shore	Buried Archaeology	Scheduled Monument (part)	Some remains are visible	?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
Geoarchaeological deposits within Roman harbour	Buried Archaeology	None	No	No
Medieval harbour and relationship with town wall	Buried Archaeology	None	No	Information panels telling the general story of Dover
Wellington Dock	Historic Structure	Listed Building	Yes	General interpretation panel for the harbour
Granville Dock	Historic Structure	None	Yes	General interpretation panel for the harbour
Inner Harbour	Historic Structure	None	Yes	General interpretation panel for the harbour
Admiralty Pier	Historic Structure	Listed Building	No	General interpretation panel for the harbour
Prince of Wales Pier	Historic Structure	Listed Building	Yes	General interpretation panel for the harbour
Admiralty Pier Extension	Historic Structure	Listed Building	No	General interpretation panel for the harbour
Outer Breakwater	Historic Structure	None	No	General interpretation panel for the harbour

# **Key Heritage Assets**

Asset	Form	Designation & Protection	Accessibility	Interpretation
Eastern Arm	Historic Structure	None	No	General interpretation panel for the harbour
Dover Town Station	Buried Archaeology	None	No	No
Dover Marine Station (Cruise Liner Terminal)	Historic Building	Listed Building	Cruise Liner Terminal	No
Dover Harbour Station	Historic Building	Listed Building	Exterior only	No
Lord Warden Hotel	Historic Building	Listed Building	No	No
Train Ferry Dock	Historic Structure (partially in-filled)	None	No	No
Customs Watch House	Historic Building	Listed Building	No	No
Clock Tower and Lifeboat House	Historic Building	Listed Building	Exterior only	No
Crane on Wellington Dock	Historic Structure	Listed Building and Scheduled Monument	Yes	No