

Martello Towers Research Project

March 2008



Executive Summary

"Billy Pitt had them built, Buck Mulligan said, when the French were on the sea", Ulysses, James Joyce.

The 'Martello Towers Research Project' was commissioned by Fingal County Council and Dún Laoghaire-Rathdown County Council, with the support of The Heritage Council, in order to collate all known documentation relating to the Martello Towers of the Dublin area, including those in Bray, Co. Wicklow. The project was also supported by Dublin City Council and Wicklow County Council.

Martello Towers are one of the most well-known fortifications in the world, with examples found throughout Ireland, the United Kingdom and along the trade routes to Africa, India and the Americas. The towers are typically squat, cylindrical, two-storey masonry towers positioned to defend a strategic section of coastline from an invading force, with a landward entrance at first-floor level defended by a machicolation, and mounting one or more cannons to the rooftop gun platform. The Dublin series of towers, built 1804-1805, is the only group constructed to defend a capital city, and is the most complete group of towers still existing in the world.

The report begins with contemporary accounts of the construction and significance of the original tower at Mortella Point in Corsica from 1563-5, to the famous attack on that tower in 1794, where a single engagement involving key officers in the British military became the catalyst for a global military architectural phenomenon. However, the design of the Dublin towers is not actually based on the Mortella Point tower. There was no early master plan and Military Engineers in South Africa, Jersey and West Cork independently developed their own unique designs mirroring the tactical role and application of the Mortella Point Tower. These early towers show gradual refinements in construction being developed by Royal Engineer (RE) Officers. Instead, the Dublin towers are based on the design concept of a well-defended circular fortified gun platform overlooking a strategic coastal point, The architectural design and defensive features of the Dublin towers are based on earlier towers built by British Forces in Minorca between 1798 and 1802, which were in turn based on adaptations and refinements of two towers constructed by the Spanish 1780-1781 as part of their fortification of Minorca.

The report details the construction of the towers, with contemporary accounts from the RE officers, the builders and the local newspapers, followed by consideration of their military significance during the Napoleonic crisis, and their changing fortunes after 1815 when the threat of invasion passed. A 'timeline' for each tower is provided, showing their construction, armament and re-armament, how they were used, and how that use changed over time as the towers gradually lost their military role and began to be sold off in the early 20th century, together with a thumbnail sketch of the towers as they stand today: ruined, abandoned, restored, altered, forgotten, remembered, adapted, re-used or lost to the waves or progress in times past.

Of the 28 locations where the towers and batteries were originally constructed to defend Dublin City, 6 sites are lost, and 1 was re-discovered in 2007. The towers on Bray beach, Corke Abbey and Magharagh Point in Killiney Bay were lost to coastal erosion; Battery No. 8 at Killiney was sold and the defences removed to make way for the railway line; the Glasthule tower and battery were transferred to the Board of Public Works and dismantled in the mid-19th century; and the Dun Leary tower and battery was removed in the 1820s to allow for the railway and harbour. Battery No. 5 in Loughlinstown was believed to have been dismantled in 1812, but survey work in 2007 noted that substantial sections of the defensive walls, the guard house, the powder magazine and other structures stand to full height on the cliff edge overlooking Killiney Bay. All 12 towers constructed north of Dublin City are still in place, and form a unique resource for Fingal.

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5. Bibliography

Endnotes

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Abbreviations

ASI	Archaeological Survey of Ireland
BL	British Library
BWDP	Handwritten entries contained within the "British War Department Papers 1944-1965 2/86032" document held in the Military Archives.
CUCAP	Cambridge University Committee for Air Photography
DLRCOCO	Dun Laoghaire-Rathdown County Council archives
FJ&WN*	Freeman's Journal and Wicklow Newsletter
GSI	Geological Survey of Ireland
IAA	Irish Architectural Archive
<i>Ibid.</i>	From the latin 'ibidem' meaning "the same place", used to provide a reference to a source cited previously in the text.
JRSAI	Journal of the Royal Society of Antiquaries of Ireland
Kew	The National Archives, Kew, London, England
MA/LLF	Military Archives - Loose-leafed file.
MS	Manuscript
NIAH	National Inventory of Architectural Heritage
NLI	National Library of Ireland
NLS	National Library of Scotland
OPW	Office of Public Works
OS	Ordnance Survey
PRONI	Public Record Office of Northern Ireland
QF	Quick-firing
RA	Royal Artillery
RE	Royal Engineers
RIA	Royal Irish Academy
RMP	Record of Monuments and Places
RPS	Record of Protected Structures
TCD	Trinity College Dublin

Note: All tables and quotes have been transcribed as accurately as possible from original sources where available. The transcriptions therefore include the spellings and abbreviations in use at that time. For example, 'complete' was often spelt "compleat", 'et cetera/etc.' was written as "&c", 'horse' appears as "horfe" and 'Mr Ross' was written as "Mr Rofs". Placenames were often written phonetically, for example Glasthule may appear as "Glafstool", "Glass tool" and "Galastool". All costs are given in imperial (pounds, shillings and pence) figures such as £2921 15s. 1d. Measurements are similarly faithfully transcribed as found, and not converted into the modern metric system. Owing to the age and fragility of some of the documents, some parts could not be read, and the transcribed or quoted text may include [illegible] inserted into a sentence to denote an unreadable word. Secondary sources have also been used, and cited in the Author/Date format. The text also includes endnote references indicating a specific document or passage, quotes or observations from later commentators, or other additional information which was considered best placed in this section, to avoid interruption to the flow of the main text.

1. Introduction and Purpose of the Project

The 'Martello Towers Research Project' was commissioned by Fingal County Council and Dún Laoghaire-Rathdown County Council, with the support of The Heritage Council. The purpose of the project is to collate all known documentation relating to the 28 Martello Towers of Co. Dublin and north Co. Wicklow. For ease of reading the report, the report will collectively refer to the fortifications as Dublin towers, even though two Wicklow towers are included, and two of the sites were batteries without towers.

A further aim was to consider the significance of the towers, and this is perhaps the most challenging aspect of the study. At a simplistic level, the towers are gun platforms of a standard design, erected according to the prevailing military strategic and tactical ideas of the period in response to a specific military threat, which passed quickly into obsolescence due to rapid advances in weapons technology during the 19th century. However, considering Martello towers simply as the series of military installations originally envisioned is to ignore the agglomeration of heritage values the towers have amassed over the past two centuries.

The towers have a rich history, beginning with the construction of the conceptual model of martellos - the Genoese tower at Mortella Point in Corsica in the mid-16th century. A naval engagement in 1794 in the Gulf of San Fiorenzo underlined the military potential of coastal towers to key decision-makers. The success of the Martello towers, physically modeled after 16th and 18th century Spanish coastal towers, is reflected in their global dissemination throughout the British Empire between 1796 and 1915. The towers which form such notable contemporary landmarks on the Dublin coast are also to be found defending strategic coastlines and trade routes in England, the Channel Islands, Minorca, South Africa, Sierra Leone, Mauritius, Sri Lanka, Canada, the United States of America, Bermuda, and the Caribbean.

The enduring architectural significance of Dublin's Martello towers, and the association of the Sandycove Tower with James Joyce's *Ulysses*, has prompted many 20th century authors to write histories and gazetteers of the towers. This current study aims to collate the surviving original documentation to tell the story of the Martello towers and batteries built to defend Dublin City, the first cohesive defensive strategy for the defense of the capital since the construction of Dublin

Castle in the early 13th century. The current study begins with the origins of the towers in the Mediterranean, centered on a period of crisis in the late 18th and early 19th centuries. The research shows how the design of the towers arose, borrowed and adapted from existing fortifications elsewhere by a handful of officers within the British armed forces. The towers and batteries were not simply a collection of similar buildings, but part of a carefully thought-out and comprehensive defence network for Dublin City, and the only known use of these buildings as the sole means of protecting a major city. The towers also contributed to opening up the coastal landscape to change and development. New roads were constructed providing access to the coast, and as their military importance declined, these roads became the focus of development and public access to the seaside. This process occurred alongside the use, re-use and change of use of the towers as they were periodically re-armed, transferred to the Coast Guard, and the gradual attrition of military values as many plots were divided into lettings and encroachments, and eventually many passed into private hands.

Towers and batteries were originally constructed at twenty-eight coastal locations to defend the approaches to Dublin City. All of the towers built north of Dublin City survive as an intact 'chain' of defensive towers. Six of the sixteen sites south of Dublin City no longer survive. The fortifications on Bray beach (No.1), Corke Abbey (No.3) and Magharagh Point (No.4) in Killiney Bay were lost to coastal erosion. Battery No. 8 was sold to the railway company in the mid-nineteenth century, and the defences removed to make way for the railway line, though the guardhouses survived for another 100 years before being removed and replaced with a new dwelling on the site. The tower and battery at Glasthule (No.12) were transferred to the Board of Public Works. The tower was dismantled c.1850, though the battery survived without alteration until 1907, but was removed 1907-1912 to allow for the construction of Dun Laoghaire Baths. The tower and battery at Dun Leary (No.13) was removed c.1837 to allow for the development of the railway and the new harbour. Battery No. 5 in Loughlinstown was believed to have been dismantled in 1812, but survey work in 2007 noted that substantial sections of the defensive walls, the guard house, the powder magazine and other structures stand to full height on the cliff edge overlooking Killiney Bay.

2. Significance of the Towers

Assessing the significance of the Martello towers of Dublin is not as simple as identifying the key architectural features shared by a group of buildings. The towers can be understood and interpreted as having historical, military, architectural, archaeological, and cultural significances - each of which contributes to an understanding of why these towers are important now in the 21st century. The historical context is a necessary starting place, as the significance and importance of the towers has not remained static over the last two centuries. The historical context explains why and how they were built, and their relationships with Martello towers in the rest of Ireland, in the United Kingdom, and those found in along the trade routes of Africa, India, and the Americas, and is a necessary precursor in assessing their continuing significance as iconic structures of not just Irish, but global architectural heritage.

2.1 Historical Context

The historical context of the towers is rooted in the international political landscape of the late 18th and early 19th centuries. The late 18th century presented a number of threats to the British Empire, comprising both rebellion from within the Empire, and military conflicts with French, Spanish & Dutch forces among others. Growing resistance to government without adequate representation in the 'New World' led to the American Declaration of Independence in July 1776. After the defeat of British forces at Saratoga in 1777, France entered the war forming a Treaty of Alliance with the United States on February 6th, 1778, challenging British naval forces off the United States, but also seeking to gain control of British lands in the Caribbean. Spain entered the conflict as an ally of France in June 1779, with the aim of recapturing Gibraltar and Minorca, which had been lost to Britain in 1704. Further conflicts also occurred in India, with the French ally of the Sultan of Mysore and the British Government in Madras engaged in a bloody but inconclusive war from 1780-1784. British forces were also engaged in the Anglo-Dutch war until 1784 with the United Provinces of the Netherlands as the Dutch mercantile navy continued to trade and give aid to the United States. Britain remained on a constant war footing after the French Revolution of 1789 with a particular focus on maintaining coalitions challenging France, while conducting low-intensity land and naval conflicts throughout the globe. This included engagements to secure and retain

strategic points along trading routes in the Mediterranean, the Caribbean, Africa, and Asia.

In Ireland, this global situation, and the influence of the ideas of the American and French revolutions, led to the foundation of the United Irishmen in 1791 initially pushing policies of democratic reform and Catholic emancipation, with events rapidly leading to aid from French revolutionary forces to assist with a rebellion. The last years of the 18th century saw ill-fated French landings at Bantry in December 1796 and Killala in August 1798, and the 1798 Rising leading to the Act of Union. As a result of this international situation, the failure of the Peace of Amiens, and the threatened invasion by Napoleon Bonaparte, defending vulnerable coastlines became an immediate priority. The military on both sides were involved in detailed preparations, with General Douglas' 1819 treatise¹ on fortifications citing French preparations:

"Detailed instructions, for the very difficult operations of embarking and disembarking troops, were drawn up to regulate the embarkation, at Boulogne and other ports, of the army for the invasion of England, and for the debarkation of that army on some part of the English coast, and were published for the first time in 1809, in a "Traité sur le Service de l'Etat-Major Général des Armées par M. le Général Grimoard".

2.1.1 A Coastal Tower at Mortella Point, Corsica

The origin for the Martello towers constructed around the world in the late 18th and 19th centuries has been traced by many authors (e.g. Mead 1948, Sutcliffe 1972, Clements 1999) to a coastal tower in Corsica, and specifically to an engagement between that tower and the Royal Navy in 1794. However, coastal towers and fortifications can be found throughout the Mediterranean, associated with many nations, and cultures across the historical spectrum. These range from the square and round towers defending Piraeus, the harbour town of Athens, in the 5th century B.C. (Bass 1972), to single isolated watch towers, to the complex coastal defences developed by medieval and renaissance maritime republics such as Venetian defences of Corfu, Crete and Cyprus and Venice itself (Howard 2004). The coast of Ireland had prominent medieval coastal fortifications including Anglo-Norman Castles such as the Black Castle of Wicklow (Pavia & Bolton 2001) and later coastal tower houses such as Doe Castle and McSwyne's Castle in Donegal (Lacy 1983), and other European seafaring empires had built specialized defensive coastal towers such as the Torre de Belém of Lisbon, Portugal (Almeida 2000). Why then was the tower at Mortella Point so significant in the influence and dissemination of the Martello tower design throughout the British Empire?

Between 1483 and 1562, Corsica was ruled by a private company of the Republic of Genoa, the "Banco di San Giorgio", who administered the land as a business investment. Corsica was invaded and most of the key fortresses occupied by Franco-Ottoman forces between 1553 and 1559 until the Banco negotiated the recovery of the island. The increasing costs of defence reduced the appeal of the island as an investment to the Banco, and they sold the island to the Republic of Genoa in 1562. In January 1563, the Genoese government appointed a Colonel of the Genoese army and an engineer to modernise the medieval Corsican defences to defend it from further Franco-Ottoman aggression and from Corsican independence movements. One of the key instructions of this fortification programme was recorded by the historian Michele Merello in 1602:

"& che si edificasse vn forte allal Mortella per maggior sicurezza del golfo di Sanfiorenzo"

"and that a fort had to be built on Mortella Point to ensure greater security to the Gulf of San Fiorenzo"².

The engineer responsible for the Mortella Point tower was Giovan Giacomo Paleari Fratino, though in this multi-cultural and multi-lingual period he was also called 'Giacopo Fratino' or 'Jacopo Frattino' by different 16th century writers³. Fratino

was one of four brothers, born in Morcote near Lugano in the Duchy of Milan, and at that time part of the Swiss confederacy. Fratino served initially in the French army, but after his capture by the Spanish in 1588, he joined the army of Philip II in Milan and was a leading authority on military architecture and fortification for the King of Spain for over thirty years. Giacomo and his younger brother Giorgio both served as engineers to the Spanish, and were responsible for the design and construction of hundreds of fortifications in Milan, Corsica, Sardinia, the Balearic Islands, Spain and Portugal. Designs of many of Fratino's drawings of star-shaped forts and other fortifications survive in the archives of Milan in Italy, and Navarra and Pamplona in Spain (Viganò 2004). These include modifications to the defences of the Castillo de Milan in 1578⁴, Alexandria in Egypt c.1560⁵, and Pamplona in Spain, c.1571⁶. The King of Spain had lent both Fratino brothers to the Governor of Milan to improve the fortifications of the ancient Castello Sforzesco of the city, and after a request by the Genoese ambassador for an engineer capable of fortifying the island of Corsica, the services of Giacomo Fratino were temporarily lent to the Genoese.

Fratino arrived in Corsica on 29th January 1563 with Colonel Doria of the Genoese Army with specific instructions from the Spanish ambassador in Genoa and the Genoese Senate to construct a fort at San Fiorenzo and a tower at Mortella Point

"A San Fiorenzo si è già posto mano per assicurare quell Golfo, e si è stabilito di fortificar il luogo medesimo con ridurlo però à minor sito, con far di più vna torre all Mortella, che vieti, e disturbi l'entrata".⁷

"In San Fiorenzo works have already started to secure that Gulf and it has been decided to build a fortification in the same place, but making it a smaller site, and to build a tower in Mortella that denies or disturbs the entrance"

Fratino's inspections of the Gulf of San Fiorenzo and Mortella Point were returned in his first report dated 10th February 1563:

"Doppo la nostra partenza da Gen[ou].^a siamo co' l'aiuto di n'ro S[igno].^{re} iddio gionti a saluamento in questo locho in compagnia del S[igno].^{or} Coll[onel].^o, che per la buona compagnia che Sua S[ignore].^{ia} me ha fatto siamo venuti molto allegramente et a piacere. Gionti che siamo stati qui habbiamo reuisto il luogha di la Mortella co'tutti questi porti chi vi sono, e non ho trouato luogha da fare la fortezza meglio e piu comodo che in San firenze si como le S[ignore]. Ie vostre molte Ill[ustri].^{me} ".⁸

"After our departure from Genoa we came with the help of God in this place with the Colonel who was of good company for the trip. When we arrived we re-saw the place of Mortella and all its harbours and we did not find a better place to build the fortification than the Gulf of San Fiorenzo".

Fratino spent ten months touring Corsica setting in place new coastal fortifications and improving the existing citadels of Calvi, Ajaccio Bastia and Bonifacio, leaving for

Milan on the 26th December 1563. The Mortella Point tower was a complement to the fortification of the town of San Fiorenzo, by guarding the entrance to the gulf. Fratino did not provide a specification or drawing for the tower at Mortella Point to the Genoese in Corsica until after his departure for Milan, and did not return to Corsica to see the completed tower. However, both the drawing⁹ and Fratino's description survive in the archives of Genoa dated 30th December 1563.

Instructions to construct the tower at Capo Mortella, Gulf of San Fiorenzo, Corsica, by Giovan Giacomo Paleari Fratino, 30th December 1563¹⁰.

The Mortella tower has to be built in the shape drawn. It has to be round and built where it has been marked. It has to have inside a net area of 40 spans diameter. The wall has to be 18 spans thick so that the total diameter will be 76 spans, and has to be sloped on the outside up till the height of 18 spans, starting this height from the sea-facing side and it has to have such an inclination that at the height of 18 spans it will get 6 spans narrower. It will have to remain of this thickness of 12 spans and go straight of plumb until the summit, actually until the parapet. The total height of the tower, parapet included, from the base on the seaside till the top, has to be 60 spans. In this tower, there have to be three vaults. The first will be at the height of 14 spans from the base on the sea side, and underneath it there will be the cistern. On the first area of this vault, two openings for the cannons have to be made. These openings must look towards the sea and San Fiorenzo harbour, with their mouth from three spans from the vault base. This mouth has to be three spans wide and two-and-a-half spans high. These openings have to be inclined, sloping down towards the sea, at the discretion of who will be in charge. However, attention has to be paid to put top-hung timber doors so that they can open and close the embrasure from inside and outside. For the ones on the outside, a joint will be left so that when open, they will stay inside the wall without hindering firing. They will be opened from inside. The other two vaults will distribute the remaining height in half, making of these vaults a round hole in the centre with a diameter of three spans. On the sides, the stairs will be built. These holes will have iron bars, and they will serve for providing light, and as an advantage to foil an artillery attack from below and smoke. On the last vault, some little windows could be made that could also serve as embrasures. On the open space on the top, there will be the parapet that will be 6 spans thick and approximately 5 spans high on the inside so that it could protect the fire and has to be sloping towards the outside at good discretion so that as I already said, can protect the fire, and because we have to make economies and for the weakness that is caused by corbels and machicolations there could be some openings for the defence of plumb halfway in the parapet and they will be more effective than corbels as it was already agreed with the Commissioner and the Master Mason. Furthermore, a door will be built above the first vault, that will look into San Fiorenzo. On the top of the parapet, on the landside, there will be an ordinary wall taller than on the seaside of at least 3 or 4 spans. This has to terminate halfway round [the circumference] of the tower, and it will serve for the men not to be seen from the mountain. A shelter will be placed with the sides already designed that will be used as defence and repair for soldiers and constructors. The other towers that have to be built in Fornali and Vecchiaia will have the same shape but their open space will not be larger than 36 spans and the wall will be 8 spans thick and at the bottom 12 spans.

Table 1: Instruction for the Construction of the tower at Mortella Point, Corsica.

Fratino's drawing show the cylindrical three-storey tower to be thicker on the seaward side than at landward, and supporting an embrasured rooftop gun platform without a defending machicolation, which Fratino considered to be a point of weakness. Fratino's design was innovative at the time, and went against the preferences of Genoese and Corsican officers who preferred a square tower

on a round battered base, and a defending machicolation. Fratino's design was gradually accepted during construction of the tower, and was to have a strong impact on subsequent military construction in Corsica (Viganò 2004). Construction of the tower began in 1564¹¹ and was completed by October 1565¹².

By the end of the 18th century, Corsica had become a strategic target for the Royal Navy to secure their position in the Mediterranean¹³ against allied French and Spanish naval forces. The tower at Mortella Point was attacked twice by British forces as part of their efforts to secure the strategic Gulf of San Fiorenzo. The Mortella Point tower was first taken by the *Lowestoffe* on 20th September 1793, landing an officer, 4 petty officers and 23 men with small-arms to take the tower¹⁴. This was a precursor to unsuccessful assaults by forces from the *Lowestoffe*, the *Alcide*, the *Nemisses*, HMS *Ardent*, and the *Corageux* against the fortified town of San Fiorenzo. The tower was taken with little effort, as the defending Franco-Corsican force abandoned the site prior to any serious engagement occurring. The ships log of the *Lowestoffe* reflects a 'business as usual' attitude towards the capture of the tower:

"Friday the 20th of November. At Anchor in Firango Bay, English Fort Stood in for the Tower Battery at pt. Began to fire at it & at 2 [illegible] 2 left off firing: hove too landed an Officer & Petty Officer & 23 Men with small arms: At 3 they took possession of the Battery, The French having deserted. Found one 24 & two 18 pdr with a small quantity of ammunition" National Archives of the United Kingdom, ADM 51 535.

The tower, temporarily renamed the "English Fort", was abandoned shortly after to Corsican forces on the retreat of British forces from the island. The tower was then retaken and rearmed by French forces with two 12-pound cannons, a 6-pound carronade and thirty-eight men¹⁵ under the command of Ensign Thomas le Tellier. Four months after capturing the Mortella Point tower, the British returned with a sizable force. In November 1793 they had captured the tower in less than an hour. In March 1794 at the second engagement between British forces and the Mortella Point tower, the defending French forces did not abandon their post, but presented serious resistance to a far superior British force.

This second engagement, while small in the context of the sheer number and range of military engagements occurring globally, was considered significant by both French and British forces. The attack on the Mortella Point tower generated a series of newspaper articles in London, and was also recounted as a public announcement by the French government, as reported in *The Times* in March, 1794:

"Whitehall, March 11. It appears by many difpatches which were received by the Right Honourable Henry Dundas, his Majefty's Principal Secretary of State for the Home Department, from Vice Admiral Lord Hood and Lieutenant-General David Dundas, dated St. Florenzo, in the ifland of Corfica, the 21st and 22nd of February, 1794, that the tower and garrison of Mortella furrendered on the 10th of that month; The lofs of the British confifts of 13 killed and 39 wounded, besides 6 failors of the Fortitude killed, and 56 wounded, from the fire of the fort of Mortella". Wednesday Mar 12, 1794; pg. 2; Issue 2934; col. B. From the London Gazette, March 11, Whitehall, March 11

"*Victory, St. Fiorenzo, Feb 12, 1794* anchored in a bay to the westward of Mortella Point, with the feveral fhips and transports under his command. The troops were moftly landed that evening, and poffeffion taken of a height which overlooked the tower of Mortella. The next day the General [Dundas] and Commodore [Linzee] being of opinion that it was advifable to attack the tower from the bay, the Fortitude and Juno were ordered against it, without making the leaft impression by a continued cannonade of two hours and a half; and the former fhip being very much damaged by red-hot fhot, both hauled off. The walls of the Tower were of a prodigious thicknefs, and the parapet, where there were two eighteen-pounders, was lined with bafs junk, five feet from the walls, and filled up with sand; and although it was cannonaded from the Height for two days, within 150 yards, and appeared in a very fhattered fate, the enemy still held out; but a few hot fhot fetting fire to the bafs, made them call for quarter. The number of men in the Tower were 33; only two were wounded, and thofe mortally. Monday Mar 17, 1794; pg. 1; Issue 2938; col. D. Reproduced from the London Gazette, March 15, Whitehall, March 14

New from Paris France – a letter from the National Deputy, André DumontI this infant learn that two large fhips attacked Mortelia, and have been obliged to e towed off by 10 long-boats, to extinguish the fire of the red-hot fhot. I shall impart to you the iffue of this attack. Monday, Mar 24, 1794; pg. 3; Issue 2944; col. A

Mead (1948) later summarised the attack, the significant officers involved, and the fate of the tower:

"On 8 February 1794 the attack was made from seaward by the *Fortitude*, 74 [guns] (Captain William Young) and the *Juno*, 32 [guns]. This time the resistance was extremely tough, so much so that the squadron retired with severe damage.... The only way to master the tower was from the landward side, and this was effected by putting troops ashore to the westward and hauling guns up precipices so as to take it in the rear. It is important to note that the troops were under the command of Lieut-General Sir David Dundas and Lieut. Colonel John Moore. The surrender was attributed not so much to the bombardment of the British Artillery as to a fire having been started in the fort, and the rather hopeless situation of being besieged on all sides On the evacuation of the island in 1796 Mortella Tower was blown up, but its reputation was so remarkable that it formed the subject of a drawing made by John M'Arthur, the distinguished and talented secretary to Lord Hood."

The defensive capabilities of the tower were well-appreciated by British naval and army officers active at the engagement, including Lieutenant-General Dundas who was later made responsible for the defence of the coast of Ireland and England. Two small cannons firing furnace-heated red-hot cannons balls forced two heavily armed ships, capable of combined broadsides of sixteen 24-pounders, twenty-nine 18-pounders and eight 12-pounder guns, to retreat damaged and

with six dead and fifty-four injured (Brice 1984). The infantry assault was faced with a single entrance, accessible only by a ladder, leaving the attacking soldiers vulnerable to fire from the parapet. If access was gained to the doorway, and the narrow door forced, access was only possible for a single soldier at a time, who was vulnerable from fire from within. The poorly armed Mortella Point tower that had been captured four months previously by a smaller British force in less than an hour, now formed a significant obstacle at a key invasion point, and resisted siege by a vastly superior force. It appears at this moment that the British military hierarchy relearned an age-old lesson, perhaps best-known from the pass of Thermopylae, that a few determined men in the right place could cause significant damage to an opposing force. In this case, however, the British focused on the military potential for a strategically placed coastal tower. The Mortella Point tower was drawn and surveyed, and a model made during its two year occupation by British forces until their departure from Corsica in 1796. The destruction of the Mortella Point tower by the British was recorded on 27th October 1796 by Admiral Sir John Jervis from HMS *Victory*, who wrote:

“The Mortella Tower was effectively demolished at 8 o’clock last night. Two-thirds of the circumference tumbled in numerous fragments. The other third, towards the bay, shook to the foundations. Another mine is preparing to bring it down entirely¹⁶”.

However, the standing remains in 2007¹⁷ suggest that this mine was never discharged as almost 1/3 of the circumference of the tower stands to full height, showing a slight base batter and a vertical wall-face rising to a parapet support by tapering corbels. Only one external arched opening survives, however the interior shows a series of tall arched niches flanking the internal embrasure of this opening – a feature not shown in a contemporary cross-section and plan of the tower¹⁸. The ruined remaining third of the tower may have been considered sufficiently ‘destroyed’ to render the tower irreparable.

2.1.2 Adoption and Development of the “Martello Tower” Building Type

It is important to note that the tower at Mortella Point in Corsica is not the original design model for any of the later Martello towers built by British forces throughout the world. The archetypal Martello Tower appears as a short, squat, two-storey masonry tower, with a rooftop cannon, and a first-floor entrance to the landward side defended by a machicolation. In contrast, the Mortella Point tower was a three-storey cylindrical keep with an entrance at first floor level. As a structure, it showed no particularly innovative design or construction features from earlier medieval towers found throughout the Mediterranean coast and the European mainland. First-floor entrances are known from medieval hall-houses in Ireland, and visually the Mortella Point tower would have appeared as a smaller version of the medieval keep at Nenagh Castle, Co. Tipperary.

The Mortella Point tower was an important tactical conceptual model for the British military, and though it did not directly influence the design of subsequent Martello towers, they were to mirror its tactical role and application. The story of the design of the towers is more complex. Once the concept of coastal gun towers came into vogue following the Mortella Point engagement, naval and engineering officers began to independently create new designs, and to copy and adapt pre-existing tower designs from coastal locations along their main trading routes.

The British Empire of the late 18th and early 19th century was spread throughout the globe, connected by seaborne trading routes patrolled by the Royal Navy. Individual ships, convoys and Royal naval vessels required port facilities at the beginning and end of their journeys, and at strategic points along routes which extended between continents. Key areas requiring coastal defence during this period were the shores of England, Ireland, Scotland, Wales and the Channel Islands, strongholds in the Mediterranean, ports on the route to India, and the colonies of Canada and the Caribbean in the New World.

The British adopted the concept of coastal defensive gun platforms, aimed at delaying or preventing a landing by an opposing force, and often built to support a coastal battery. These detached coastal fortifications had a number of complementary functions including denying safe landing positions, guarding river and port approaches, acting as watchtowers and providing protection for coastal shipping (Duffy 1975). Military opinions were mixed on the usefulness of detached batteries and towers¹⁹ as they typically could not offer prolonged

resistance to a siege, and were considered militarily outdated by the late 18th and early 19th centuries for inland locations. Grundy (1991) notes that when French forces built coastal fortifications to prevent British landings in Minorca c.1756-1762, they preferred extensive series of simple earthworks, each varying in plan to adapt to the local topography of vulnerable sections of the coast. These were cheap to undertake but required large numbers of troops to function effectively. The engagement at Mortella Point led British forces to respond to the same coastal defence problem with detached gun towers at strategic positions. The design of the Mortella Point tower was not reproduced in subsequent Martello towers, though they mirrored its tactical role and application. The earliest Martello towers show gradual refinements in construction being developed by RE officers.

The first "Martello towers" built were the circular Simon's Town tower, and the D-shaped Craig's Tower, in the Cape Colony of South Africa in 1796 by Captain George Bridges RE (to be posted to Minorca in 1799) under the authority of Vice-Admiral George Elphinstone who had served in the Corsican campaign (Sutcliffe 1972). These towers were the earliest constructions in a series of Martello towers of differing designs which gradually developed along the route from London to India, including Sierra Leone (1805-1807²⁰), Saint Helena (1797), five in Mauritius (1829-1834²¹), Hambantota on the south coast of Sri Lanka²² (1803-1806), and seven towers²³ in Delhi, India (c.1824).

The Cape Colony towers are normally termed "Martello towers", but though they lack many of the key features later to define a "Martello", including a first floor entrance and gun mounting to the roof. The Simon's Town tower is composed of rendered random rubble masonry without a batter or slope, with a timber machicolation defending the landward entrance, and supported a coastal battery. The tower was built from the local sandstone bedrock, using a clay bedding mortar (of 1 lime:4 clay *dagha*²⁴), and a lime pointing and rendering mortar²⁵, with rough hewn timberwork throughout showing the tooling marks²⁶ of a shipwrights adze²⁷. The tower was entered at ground floor level through timber double-doors into the 'basement', with a timber stairs giving access to the garrison floor above. This room had a slate fireplace supported on granite corbels (visible from the basement level) with a brick chimney stack which extended up through the roof structure. The timber roof, accessible by ladder only, was 'waterproofed' with a layer of bricks sets in lime mortar and covered in a thick layer of asphalt, and the roof structure was supported by a central square pier –

a building feature that would later become a characteristic of Martello towers of the south coast of England. The roof area gave access to the timber machicolation and a flagpole, but was not intended to mount a gun. Three wide windows at first (garrison) floor level defended the landward approaches to the tower. This tower therefore does not meet any of the design or functional definitions normally applied to define a Martello tower, but is generally considered as an influential interim design step. Though the tower did not function as a gun-tower after the Mortella Point model, Clements (1999) notes that both Cape Colony towers probably influenced the design of the Ladder Hill tower built in 1797 on St. Helena in the south Atlantic which mounted two 12-pounders on the roof, and both ports formed part of the important route to India.

Independently from work in Africa, three early "Martello towers" were constructed at Halifax in Canada between 1796 and 1798²⁸. However, these towers were much larger than subsequent Martello towers, with the Prince of Wales tower having a diameter of 22m and a garrison of 200 men (Clements 1999). The role and function of these towers was much more similar to the Mortella Point tower – acting as independent rooftop gun-towers without ground floor access, and protecting the approaches to an important convoy assembly point and Royal naval base. The towers defending Dublin City however were to be much more directly influenced by towers constructed in Minorca between 1798 and 1802 (see Section 2.1.3).

The rapid adoption of the "mortella point" type coastal tower is also associated with key officers serving in Corsica from 1794-1796 who had direct experience with the tower and who subsequently served as Colonel-Commandant of the Royal Engineers. These included Lieut-General Robert Morse, Inspector of Fortifications; Lieut-General Abraham D'Aubant, successor to Dundas as officer commanding troops in Corsica; Brigadier-General Twiss, an authority on Forts; and Lieut-Colonel Thomas Nepean, who served with Lord Hood in Corsica from January 1794. In addition, Lieutenant General Sir David Dundas, who attacked the Mortella Point tower in 1794, was Quartermaster-General in 1796, and responsible for considering plans for the defence of England against a threatened French invasion, and was responsible for the construction of the towers on the south and south-east coasts of England.

2.1.3 Global Distribution of Martello Towers

Martello towers are found throughout the globe, defending key positions of military value along the trade routes to Africa, India and the Americas which sustained the British Empire. The design was also adopted by the North American military between 1800 and 1870 for towers at Rhode Island, Key West, the Dry Tortugas, New Orleans, Bayou Dupre in Louisiana, Savannah in Georgia, Fort Warbuton in Maryland, Portsmouth in New Hampshire, Fort Snelling in Minneapolis, and Charleston, South Carolina (Clements 1999). Outside of Ireland and the United Kingdom, Martello towers generally function as single isolated strongpoints without a clear relationship to one other, apart from sharing design and functional principles. However, Martello towers are a clearly recognized group of coastal fortifications which developed to defend the most important and vulnerable coastlines of the British Empire.

As discussed before, the earliest towers were built to defend the Cape Colony of South Africa c.1796, and are part of a series of towers which developed along the route to India. These included Saint Helena (1797), Hambantota in Sri Lanka (1803-1806), Freetown in Sierra Leone (1805-1807), seven towers in Delhi in India (c.1824), and five in Mauritius (1829-1834). Further groups of towers were established to secure the route in the Mediterranean to Egypt (Minorca 1798-1802 and Curzola 1813), and the route to the Americas (Tobago, c.1801, a number of towers in Canada, Bermuda²⁹, c.1822-3; the Florida Keys, and the Caribbean). These towers are built to a number of distinct architectural plans and designs, and were constructed over a long period of time. A number of towers, such as Fort Denison, in Sydney Harbour, Australia are not part of a trade route, but are isolated Martello towers constructed to complement a local system of fortifications and do not appear to be part of the defence of an extended trading network in the same manner. Apart from the defences of Minorca however, these towers are constructed over quite a long time frame and do not form distinct local groups.

The greatest concentration of Martello towers was, and still is, found along the south and south-east coasts of England with over 130 towers built, though less than half survive. This immense series of coastal towers followed the same strategy as the Dublin towers – defending long, vulnerable stretches of coastline with a chain of towers with overlapping fields of fire. Towers also survive as isolated strongpoints protecting the approaches to strategic ports and coasts

elsewhere in the United Kingdom such as at Pembroke Dock in Wales (c.1848-1851), at Orkney (1812-1815) and Leith (1810-1844) in Scotland, and in the Channel Islands at Guernsey (from 1804-1805 and 1854-1856) and Jersey (1808-1810 and 1834-1837). These towers are not similar to the design of the Dublin towers, though some of the later towers elsewhere in Ireland are constructed following elliptical and cam-shaped plans from the south coast of England.

2.1.4 The Towers of Minorca and the Canary Islands

Minorca was occupied by British forces from its capture in November 1798 until it was returned to Spain after the Peace of Amiens in March 1802. The island acted as the principal Royal Navy base in the Mediterranean during this period. The natural harbour of Port Mahon had been an important port for the Royal Navy since the 17th century forming a strategic link between the Straits of Gibraltar and the Levant³⁰. During their four year occupation of Minorca, fifteen Martello towers were constructed by British forces to defend two key ports. All of these Martello towers are earlier than the towers constructed in Ireland.

The construction of the Minorcan towers was ordered by Lieutenant-General Sir Charles Stuart, commander of the expedition to capture Minorca and the islands first Governor, and an officer who had also been involved with the Corsican campaign. By the time Minorca had been captured in 1798, early Martello towers had already been constructed in South Africa, Saint Helena, the Channel Islands and Halifax in Nova Scotia. However, in Minorca the RE officers did not draw on any of these examples, nor did they draw on the design of the Corsican Mortella Point tower. Instead, they looked at the design, materials and defensive features of towers found locally in Minorca, resulting in the construction of a series of Martello towers which were almost identical to those later erected in Dublin. The military purpose of the Minorcan Martello towers is described in a letter by General Stuart dated "Mahon, 2nd March 1799"³¹:

"there are some Towers upon the Coasts calculated more for the temporary protection of different places where descents may be made, than points of permanent defence".

The design of the Minorcan martello towers constructed by British forces was not a sudden inspired innovation. Instead, the British Martello towers were based on two towers constructed twenty years previously by Spanish forces c.1780-1781, which were in turn modeled on still earlier Spanish towers built in the 1740s in the Canary Islands.

In 1781, Spanish forces under Captain Francisco Fernandez de Angulo completed two towers at Alcufer and Punta Prima, modeled on towers constructed in the 1740s on Gran Canaria³². Each of the Spanish towers was a squat, cylindrical masonry tower accessed through a single entrance at first-floor level which

opened into a circular room with a curved hemispherical "bomb-proof" roof arch, with ladder access into the basement sub-divided into three sections to separately house a well, munitions and provisions, with ventilation provided by narrow apertures visible to the exterior. A spiral staircase built inside the thickness of the wall led from the first-floor to the roof, emerging from a chamber contained within the masonry parapet. The roof platform also had a second chamber, containing a machicolation defending the first-floor doorway. This machicolation also had a shaft in the floor through which armament could be rapidly fed from the basement when the gun platform was in action. This shaft had a dual role. If the door of the tower should be forced open, the shaft acted as a 'murder hole', a concealed point from which fire could be directed at an enemy and hinder their entrance. The usefulness of the shaft as a method to transport equipment and ammunition directly influenced the architecture of the tower, as Grundy (1991) notes:

"Minorcan towers could use their hoist and shaft system to feed equipment to the gun; their crews did not have to pass cannon balls up the staircase by hand, and therefore narrower and more restricted spiral staircases could be employed"

These and other Minorcan design principles were also later adopted for the Dublin towers, such as the use of irregular octagonal interiors to avoid the vulnerabilities of 90° angles to cannon fire, as shown in the published plans of the Tower No. 10 at Bullock (Craig 1982). The roof platform of the Minorcan towers also contained a shot furnace for heating cannonballs, dramatically increasing their effectiveness against timber and sail ships.

Walsh (1803) provides a contemporary account of the layout and usefulness of the towers:

"..Mount Stuart³³, standing at the entrance to the harbour ... defended by a small round tower, cannon proof, and having a piece of heavy ordnance mounted on it's top, which is flat. This gun, being *en barbette*, and placed on a traversing carriage, can be used against any wished for point. In the tower is a guard of a sergeant and twelve men, who are always provided with ten days provisions. Within the tower is a well, and the only entrance is by means of a ladder, so that this is being drawn up, all access is very difficult. It is an excellent means of defence and every creek or bay in the island, where there is a possibility of making a descent, is defended by a tower of this description".

The last tower in a series of thirteen built to defend the north and east coastlines of Minorca was at Adaya between 1799-1800. The plan of the tower at Adaya has been suggested as the model for the towers constructed south of the river Liffey, and the proportions, height, base and gun platform diameters, intra-mural

staircase and general layout of the Adaya tower are identical to most of the south Dublin towers³⁴. Kerrigan (1983) has postulated that Captain Birch is the connecting link, as this officer was posted from Minorca to Ireland in July 1802 (Ward 1949) and was very supportive of defensive 'Corsican' or 'Martello' towers during a tour of Ireland's defences³⁵. The first floor arrangement is particularly distinctive, composed of two elliptically concave curved internal walls perpendicular to the entrance passage. However, Grundy (1991) notes that the Minorcan martellos are a stage in the evolution in the design of Martello towers, and that variation in design can be found within the Minorcan group itself. The Adaya tower not only strongly influenced the towers built in Dublin, but also directed the design of the a final tower built in Minorca – this time by Spanish forces who constructed a Martello tower at Son Bou in 1804 after they regained control of the island.

Fig : Adaya "Plan of the tower erected at Adaya for a traversing gun, for the service of a Garrison of Eighteen Men and Stores & Provisions for them for One Month. Erected in 1800". From Thomas Walsh (1803) Journal of the Late Campaign in Egypt.

The process of borrowing and adapting the design from the Canary Islands towers in the 1740s, to the Minorcan towers of the 1780s, to the British Minorcan Martello towers built 1798-1802 directly influenced the design and appearance of the Martello towers built along the south coast of England and those defending Dublin city. The towers constructed along the south coast of England were based on Spanish towers from the Canary Islands³⁶, while the majority of Irish towers and all the Dublin tower are constructed following the design adopted in Minorca. The main difference between he two designs is that the rendered rubble masonry Canary Island towers have a central pillar supporting the arched roof and gun platform (typical of English towers), while the Minorcan towers appear almost identical to the towers found around Dublin.

2.1.5 Coastal Fortifications in Ireland prior to the Construction of Dublin's Martello Towers

Irish medieval fortifications took on a range of forms, and served a number of functions. The classic citadels such as the Anglo-Norman castles of Trim, Carlow, and Ferns functioned as fortresses, but also as administrative centres for judicial, tax, and business purposes (McNeill 1997, Sweetman 1999). Other medieval fortifications included walled cities (e.g. Dublin, Kilkenny and Waterford), towns (e.g. Dalkey, Co. Dublin, Athenry, Co. Galway, Kilmallock, Co. Limerick) and fortified dwelling such as hall-houses and tower houses. Many of these castles and fortified settlements are located in coastal locations (e.g. the Black Castle, Wicklow³⁷) commanding the approaches, and key points along the major inland waterways. However, these fortifications were not "forts" in the military sense. Militarily, they were defensive strong-points without offensive capability, and medieval military engagements were primarily based on land-based warfare techniques and control of the local area. Coastal towers can be found internationally and were well-known to seafarers, but militarily functioned as watchtowers. Coastal raiding, in the form of piracy, followed raid-and-retreat methods such as early Viking raiding activity, and was a form of warfare which continued throughout the medieval period both in Ireland and internationally.

Advances in military technology and tactics in 16th century Europe led to the development of citadels outside of, but defending, the city limits or the approaches thereto. From the 16th century naval ships began to carry cannon, and coastal forts began to develop, adopting cannon as a countermeasure to the newly emerging military threat. These forts were not based on the model of a single, free-standing tower, but on bastioned "star-shaped" forts. The widespread adoption and development of cannon in 16th century Europe resulted in rapid change in how fortresses were constructed, with fortified cities in the north of Italy often at the forefront of technological advances. These principals were also used for the construction of coastal forts, with Henry VIII constructing a chain of coastal forts along the south coast of England before his death in 1547. However, there was no consideration of the defence of the Irish coast until 1587, two years after the outbreak of war between England and Spain, when Fort Duncannon was constructed to protect Waterford Harbour³⁸. The concept of a continuous defensive line of coastal fortifications was prohibitively costly, with Douglas (1859) commenting:

“To establish fixed batteries all along the contour of the island of Great Britain would be a great misappropriation of our limited military means, if even it were possible. By this equalization of our strength everywhere, our coast would be uniformly weak and nowhere strong Forts and fixed batteries there must be, to defend and protect our principal commercial ports, towns and harbours”.

The dominance of naval warfare during this period, and the difficulties of navigating the Irish Sea as opposed to the ease with which the south coast of Ireland could be reached from Europe, led to the majority of coastal defences from the 16th to the early 19th century being focused on defending the natural harbours of the south and west of the country, with only isolated fortresses elsewhere. Dublin City does not seem to have been considered a vulnerable military position during this 250 year period, as its existing defences (the castle and city wall) fell into disrepair³⁹, and no significant new defences were set in place⁴⁰. A number of military appraisals of Ireland were made in the late 18th century. Viscount Townshend’s report of October 1770⁴¹ recommended “a good fort to secure the records, valuable effects and the arsenal” of Dublin City⁴², whose defensive fortifications were centered on the medieval castle of Dublin built by the Anglo-Normans in the early thirteenth century (MacNeill 1997), and were militarily obsolete some six centuries later. However, Dublin was not generally considered a likely military target, with most military assessments of Ireland focusing on the defence of the ports of the south coast, and potential landing places for an invading force on the south and west coasts. The first military leader to recognize the vulnerability of Dublin City as a point of invasion was the Earl of Carhampton, Master General of the Ordnance in Ireland in March 1796⁴³:

“of all Ireland the part most exposed is its capital .. its infatuated inhabitants seem lulled into a fatal security ... a body of 3,000 men, and a few field pieces might be equipped unknown to us from ... these ports [Brest, Port l’Orient & Rochfort], be landed in the vicinity of Dublin and possess it, before the inhabitants were well aware of the attempt. In the space of 24 hours, a million of money at least might be raised ... the city handed over to a municipality formed of the dregs of the people, who armed with pikes and whiskey, would probably plunder and burn the town, and the whole kingdom be undone for a century to come ... I do assert that an attempt of this nature could not fail of success at this very hour: a wind from the west to south ... lasting three days, would serve to bring over and disembark a body of troops sufficient for the attempt; two more days to effect their purpose and re-embark, and were it then to blow from another quarter, they could escape from superior force, by Belfast, without a probability of being overtaken ...[;] should a westerly wind prevail for four or five days, no ships of war could come to your assistance from the English Channel in time to save your capital ...Such an armament would probably be the first messenger of its own approach”.

The strength of Carhampton’s conviction on the vulnerability of Dublin is seen in his actions when appointed commander of the forces in Ireland the following year

with the erection of a camp for six battalions at Loughlinstown⁴⁴, and his view that temporary batteries should be erected to defend Killiney Bay, the entrance to Dublin at Poolbeg and north of Howth⁴⁵, and that the enemy were unlikely to march 160 miles from the south coast to the capital if by leaving Dublin City unprotected "you offered them a cheap bargain of it" (McEnery 2006). During this period however, the general consensus among the military was that the south coast of Ireland was the most vulnerable area in Ireland, a view shared by Carhampton's own staff⁴⁶ and by Lieutenant-General Dundas⁴⁷ who had led the attack on the Mortella Point tower in Corsica in 1794, and was now responsible for the defence of the coasts of both Britain and Ireland. He was to become a key figure in the introduction of Martello towers in both islands.

After the departure of Carhampton in December 1797 to take up the position of Master-general of the Ordnance in London, concerns over the vulnerability of Dublin were no longer voiced, and subsequent commanders, Lieutenant-General Sir Ralph Abercromby (1797-1798) and General Cornwallis (1798-1801⁴⁸) focused their attentions on fortifications elsewhere.

The lack of concern regarding the defences in Dublin is perhaps understandable given the poor reports of fortifications defending Ireland's natural harbours such as Cork, Waterford and Wexford during this period. General Vallancy considered Fort Duncannon defending Waterford 'of no use' except against privateers, the river Shannon to be defenceless (McEnery 2006). Worse still, the Cork defences were built to repel a naval attack, but were vulnerable to landward assault. The Cork defences were notoriously badly positioned, with the military acutely aware that if any of the batteries were taken, they could be immediately turned on other fortifications defending the harbour (Stevenson 1999). Regardless of the vulnerability of the south coast defences, at this time Dublin City was almost defenceless. However, in May 1798 the Pigeon House at Ringsend⁴⁹ was fortified, with ammunition and stores from Dublin Castle moved to the Pigeon House blockhouse and temporary barracks erected there. There were also significant numbers of different armed forces in the country who could be called on for defence against an invading force. Maurice-Jones (1959) notes:

"In 1796, when Hoche made his attempted invasion at Bantry Bay, there were about 40,000 Regulars, 23,000 *Militia*, and 25,000 Volunteers for the defence of Ireland. There were permanent coast-defences at:- Carrickfergus, Charles Fort (Kinsale), Cork, Drogheda, Dublin Harbour, Dundalk, Duncannon Fort (Waterford), Galway Bay, Tarbert Island. These were manned by detachments from the "Marching Companies" of the Royal Irish Artillery plus "additional gunners" from the Irish *militia* regiments".

McEnery (2006) argues as follows:

“The reality was that the Irish Government simply did not have the necessary funds [to provide adequate coastal defences]. It was only because of the Act of Union, which came into effect on 1 January 1801, that significant resources became available for use in 1803 onwards when a French invasion threatened once again”.

The process of the provision of fortifications in Ireland was dramatically altered by the Act of Union in 1801, with the existing Royal Irish Artillery Regiments disbanded and absorbed into Royal Artillery “Marching Companies” (Maurice-Jones 1959), and the existing Irish Board of Ordnance⁵⁰ suppressed and authority transferred to the Board of Ordnance in London. The Board appointed 6 persons as Respective Officers to Ireland: four civilians (storekeeper, clerk of check, clerk of survey & treasurer) and two military officers (the senior Royal Artillery [RA] and Royal Engineers [RE] officer in Ireland⁵¹). This apparently simple administrative change was to have profound implications in the ability for military structures such as towers, batteries and other fortifications to be quickly commissioned and constructed in Ireland.

The Board of Ordnance had complete authority and power in law to erect permanent fortification, accommodations and munitions. The Board was independent from the army, the navy and the Lord Lieutenant in Ireland. It had a substantial budget, and its head was both Master-General and sat as a member of Cabinet within the Privy Council. In addition, the Board trained RA and RE officers as professional soldiers, and appointed these officers to design, commission and oversee works. McEnery (2006) notes:

“So far as Ireland was concerned, the Board furnished RE officers for general service, who came under the Commander of the Forces in Ireland and were available for the erection of fieldworks, and officers for special service, who were under the control of the Director General and concerned with the building of permanent fortificationsIt was their job to put forward plans for the approval of the Director General and then estimates of cost for the approval of the Board. Once approval was obtained, they could either carry out the project themselves or make a contract with a builder of their choice, they did not need to seek competitive tender”.

The Respective Officers of the Board of Ordnance in Ireland were established “for conducting the Business of the Ordnance Department in Ireland Pursuant to His Majesty’s Warrant dated and commencing 19th November 1804” (WO 54 222).

The Board of Ordnance

The Board of Ordnance was responsible for the approval, construction and maintenance of fortifications as well as providing weapons and munitions for the army and navy. The board was composed of both civilian and military members, chaired by the Master General of the Ordnance who sat on the Privy Council of Government, and had political power, military authority and funding separate from the Board of Admiralty and the Commander-in-Chief for the maintenance of the army. Other Board members included the Lieutenant-General of the Ordnance, and the Inspector General of Fortifications - the most senior Engineer in the military who commanded⁵² the Royal Engineers who were to build the Martello towers, and the Royal Artillery who were to man them.

The Board originated from the 14th century development of the Wardrobe of Arms into the Privy Wardrobe of the Tower, responsible for the provisions of arms and war stores, with the first known Master of Ordnance, Master Nicholas Merbury, appointed in 1414. After 1483, all Masters were knights or peers, and the department was expanded in 1543 when Henry VIII created the officers of Lieutenant, Storekeeper, Surveyor and Clerk of Deliveries to assist the Master of Ordnance. In 1597, these officers were constituted as a Board.

The Board was concerned with all weapons, ammunition and stores and though its early development preceded the introduction of firearms, guns became the most important of the Board's responsibilities. In 1683, the Board assumed an organisational structure it held until its functions were transferred to the War Department in the middle of the 19th century - a Master-General, or in his absence a Lieutenant-General, presided over a civil and military Board of four Principal Officers. The officers reported individually on their departments to the Master-General, and he reported for the Board to the King.

The Board was initially divided into Sea and Land services, with the Sea Service by far the larger. The Sea Service was responsible for the issue of guns and war stores to both ships and forts, whose guns and gunners were essentially interchangeable. The Land Service was responsible for small arms, wagons, tents and stores. The 1683 reform of the Board had also included responsibilities for artillery and engineers, an area that grew exponentially during the expansion of the army under William III and the wars of the 18th century, leading to an increasingly military organization commanding a large standing corps of Artillery and Engineers, and the establishment of the Royal Arsenal, Royal Academy and Royal Laboratory at Woolwich, and powder mills at Faversham and Waltham Abbey.

The Inspector General's office prepared plans, budgets and was responsible for supervising the construction, repair of all fortifications, barracks and other buildings. A number of authors (e.g. Maurice-Jones 1959) have noted that in order to begin construction prior to authorisation by the Board of Ordnance, some works were begun as temporary 'field works' using funds from other sources, and later transferred to the Board of Ordnance. The Dublin Martello towers were constructed in this manner, using funds from the Irish Government and transferred to the Board of Ordnance from 1806 onwards.

It should be noted that in 1805, the Corps of Royal Engineers was relatively small, amounting to 121 officers and 37 surveyors and draughtsmen (Clements 1999)⁵³. Many of the officers had direct experience of the Spanish towers of the Canary Islands, the towers constructed in Minorca 1796-1802, and/or the tower at Mortella Point in Corsica.

Table 2: Significance of the Board of Ordnance for the planning, design, construction and maintenance of Martello towers.

When the Respective Officers of the Board of Ordnance assumed authority for fortifications in Ireland, military commanders continued to evaluate the state of coastal defences against either a raiding incursion by a relatively small force or a much larger invasion aimed at conquest. The new military commander of Ireland, General Sir William Medows (who had replaced General Cornwallis) submitted a report⁵⁴ in 1801 on the defence of Ireland to the Duke of York, Commander-in-Chief of the Forces in the United Empire, which was passed to Lieutenant General

Dundas, the officer with overall responsibility for coastal defence, for comment. He considered that the east of Ireland:

“containing the capital and a rich and important country, is from the situation looked upon as inaccessible by sea to a powerful enemy while we retain our naval superiority”⁵⁵.

The debate on the defence of Dublin continued after the signing of the peace Treaty of Amiens in March 1802 between Joseph Bonaparte and General Cornwallis (now commander of Britain’s military forces). This led to a cessation of hostilities between France and the United Kingdom. The reports on the defence of Ireland were passed to Lieutenant General the Earl of Chatham, Master General of the Ordnance, who sent Colonel Twiss to inspect Irish fortifications resulting in a new report recommending the provision of a fort in the Phoenix Park and three large towers to defend Dublin city from landward and seaward attack⁵⁶. This view was strongly rejected by the author of the 1801 report on the defence of Ireland⁵⁷ and by General Cornwallis⁵⁸. At the end of these analyses, the prevailing military opinion in mid-1803 was that the east coast of Ireland did not require fortification.

The situation was to change later that year as the new military commander of Ireland, Lieutenant General Cathcart, toured the defences of Ireland in November and December in the company of Captain Birch, an officer with experience of the Martello towers in Minorca. At this time a Royal Navy squadron under the command of Rear Admiral Sir Robert Calder was stationed at Berehaven in Co. Cork and responsible for the defence of the south-west coast⁵⁹. Calder requested fortifications for Bere Island⁶⁰ to defend supply ships anchoring in Laurence Cove on the north shore of Bere Island. In January 1804, Cathcart responded⁶¹ by sending Captain Birch with instructions to fortify the island immediately with some of the earliest Martello towers constructed in Ireland:

“My object is to construct some Battery’s with towers or other works to defend them in the most expeditious manner at the entrances and particularly the eastern or upper entrance to Berehaven – and that these works shall be defrayed as field works by government and not upon ordnance estimate”.

At the same time, intelligence was received suggesting a threat of invasion of Ireland by landings on the east coast⁶², and after a delay of five months, Lieutenant-Colonel Benjamin Fisher RE, was authorized on 2nd June 1804 “to superintend the construction off all such towers, field or other works as may be undertaken”, and the construction of the Martello towers to defend the coast of Dublin and north Wicklow began.

2.1.6 The Construction of the Martello Towers in Dublin and north Wicklow, 1804-1805

Martello Towers and Batteries were built at twenty-eight coastal sites north and south of Dublin City between 1804 and 1805. The towers were referred to by both number and name in official documents – e.g. No. 1 Bray Head, No. 2 Bray Point etc until No. 16 Sandymount. However, the numbering system was repeated north of Dublin City (No. 1 Sutton, No. 2 Howth etc. until No. 12 Balbriggan) with consequent repetition of tower numbers. The towers and batteries are therefore always referred to in historical sources with both the site number and the placename.

The construction of the towers to defend Dublin commenced under the command of Lieutenant Benjamin Fisher RE, under direct orders from Lord Cathcart by virtue of authority granted by the Lord Lieutenant to construct the towers and batteries, and to employ assistants, overseers and legal advice to carry out this task. Fishers reply is recorded in a letter dated 3rd June 1804 to Lieutenant General Morse:

“Sir, I lose no time in communicating to you for the information of the Master General the Copy of a letter which I have received from the Secretary to the Commander of the Forces directing me to take charge of and superintend the Construction of all such Towers, Field or other Works as may be undertaken in virtue of the authority granted by His Excellency the Lord Lieutenant”. WO 55/831

Fisher commissioned a Mr. Thomas as Law Agent to draw up the Contract for the towers, and to negotiate with both the occupants and landowners regarding the erection of the towers. By June 1804⁶³, sites for towers and batteries had been proposed for south Dublin with these sites marked out and surveyed by 28th August 1804. There were intended as:

	Towers	Batteries	Guns		Mortars		
			18prs	24prs	10in	13in	
North side of Dublin, from Howth to Balbriggan	11	4	12	12	2	-	It is proposed to have fifty rounds of Ammunition, for each Gun, on the Tower, and one hundred for each Gun on Battery.
South side of Dublin, from Bray-head to Pigeon-House	14	11	17	40	-	3	

Table 3: Initial proposals for towers and batteries to defend the Dublin area. PRO 55 831.

Construction commenced at Bray and moved northwards (Sutcliffe 1972). The short time-scale of construction of the towers meant that many of the towers

were effectively constructed simultaneously. The locations, purposes and details of the towers located south of Dublin were described in a return dated June 30th 1804:

The Towers are to have a gun or Carronade placed on them, and are to co-operate in the Defence of the Coast, but are principally intended for the protection of, and as Keeps to the Batteries.		
No. 1	Tower near Bray Head	For the protection of the Strand and Anchorage near Bray head, the Works on the point being too far for that purpose.
No. 2	Tower and enclosed 4 Gun Battery, on Bray point, with guard house & accommodation for Men, enclosed in the rear, with [illegible] guardhouses.	To command the Beach on either side, and protect the tower and Harbour and river of Bray.
No.3	Tower on the strand near Old Cork	To co-operate with No.2 in the Defence of that part of the shore.
No. 4	Tower and two 2 Gun Batteries, on projecting point in Killiney Bay.	As this point is very broad, a single Battery without going to a great extent would not see the Strand on both sides, it is therefore thought advisable to have two Batteries, for that purpose at about 290 yards distance from each other and the Tower to be placed intermediately. Though this Tower and Batteries be found too far distant from Tower No. 3, an intermediate one may be erected, but as the Cliff in this district is in general steep and rather difficult of a [illegible], and has but few pafes thr it, the closing that by Barrier & small Defensible guardhouses – may be deemed sufficient.
No. 5	Between Loughlinstown River and projecting Point.	A Battery to scour the beach & co-operate with No.6 in Defense of that part of the Bay.
No. 6	Tower & Battery left of Loughlinstown river	To defend the Anchorage and beach to the right & left of the River.
No. 7	Tower & Battery on Tarrong Hill	This work will stand on a very Commanding eminence, will protect the Batteries below to the right & left, and see the Roads from Bray, Loughlinstown and Dublin.
No. 8	Battery near the Lime Kiln	This work is well situated for the Strand, and will scour apart, but imperfectly seen from No.7
No.9	Tower & Battery on Dalkey Island	For the Defence of the Sound, and pafsage between the Muglins, to keep an Enemy's boats & vessels at a Distance and oblige them to work up to fetch the South Bull.
No. 10	Tower at Bullock	To protect the little harbour of Bullock & that part of the shore of Dalkey Sound.
No. 11	Tower & Battery on Sandycove Point	To command the anchorage and Defend Scotchmans bay.
No. 12	Tower & Battery Glafstool	For the Anchorage, SScotchmans bay, Shore %c.
No. 13	Tower & Battery Dun Leary	For the Anchorage and Shore
No. 14	A tower on the Bathing Point	D.º [ditto]
No.15	A tower Seafort Parade	A tower of larger dimensions is here proposed with a raised parapet or screen as a cover from the neighbouring houses.
No. 16	A Work for 4 Guns on the South Bull	To be placed at an intermediate distance, between the last mentioned Battery, and the Pigeon House, to prevent a Debarkation on the Strand, to keep up the chain of communication and close the Defences on that side. Note. It being thought advisable to suspend the execution of this work & Tower No. 19 is proposed near Sandycove.

Table 4: Return dated June 30th 1804 for towers and batteries along "the Coast from Bray-head to the Pigeon-house". WO 55 831.

Contemporary newspaper reports recorded the progress of building:

"The Building the Martello towers for the protection of the coast from Bray to Dublin proceeds with unexampled difpatch; they are in general about forty feet in

diameter, precisely circular, and built of hewn granite, closely jointed:—Some are already thirty feet high, and exhibit proofs of the most admirable masonry: one has just begun at Williamstown near the Black Rock: those from Dalkey to Bray are nearly finished”. The Freeman’s Journal. September 29 1804

“The building the Martello Towers for the protection of the coast from Bray to Dublin, proceeds with unexampled dispatch; they are in general about forty feet in diameter, precisely circular, and built of hewn granite, closely jointed: some are already thirty feet high, and exhibit proofs of the most admirable masonry”. The Times, dated 3rd October 1804

The south Dublin towers were completed by February 1805, with details of towers north of Dublin sent to Lieutenant General Robert Morse (Inspector General of Fortifications) on 28th August 1804⁶⁴ noting:

“Sir, I request to lay before the Commander of the Forces the enclosed Return of Towers from Howth to Balbriggan &c. which his Lordship has directed to be proceeded upon immediately. The sites have been marked out to Mr. Rofs the Contractor, and circular Letters have been written to the different proprietors of the ground to which answers have been received expressing in general an acquiescence on their part and a readiness to meet the wishes of Government”.

A further letter dated 1st September 1804 notes “eleven sites chosen for immediate execution”, though twelve were to be eventually constructed. Fisher provided written descriptions⁶⁵ of where the towers were to be located, and the property owners:

N.1X	One Gun Tower, with an Epaulement towards the Hill, on a projecting rocky point, near the White house, at Sutton, to command the Creek.	N.1.X In possession of Mr. Crosbie, lease expired, said to be the property of W.Newcomen.
2X	One Gun Tower – Howth mount – three gun Battery Howth Point, looking towards Polscadden Bay, Baldoyle Creek and anchorage towards Ireland’s Eye.	N.2.X D.° of W.Hannon, holds of W. Robt. Hutchinson, Dorset Street – said to be the property of Lord Howth.
3	Forge Point – three gun Battery with defensible Guard-house, closing the rear.	N.3 D.° Lord Howth.
4X	Two gun Tower, on Steer point, Ireland’s Eye, to command the Anchorage. For the further protection of the Anchorage, another Tower would be necessary, on the Shullock point.	N.4.X D.° D.°
5X	One gun Tower – right side of Malahide Creek.	N.5.X Near Carrick Hill, on point of Road, between house and corner of wall, tenant W. William, said to be the property of Mr. Plunkett of Portmarnock – it will be necessary to turn the present road behind the house, & take a piece of the adjoining field, for that purpose.
6X	One Gun Tower – Portrain Point	N.6.X. In a wheat-field – 6 feet from corner of the Fence – said to be the

		property of W. Green.
7X	One Gun Tower – Rush, two 2 gun Batteries	N.7.X. In a field, 49 feet from N. corner of wall – said to be the property of W. Palmer, a prisoner in France – Agent Sir Jn. Brown – Rush House.
No. 8	One gun Tower – Drumanagh point	N 8, Middle of the Point, about 150 yards from each side, and 50 yards back from the front, said to be the property of W. Palmer.
9X	One Gun Tower – Shenex Island	N. 9X Highest point on the island – said to be the property of Hans Hamilton Esq.
10X	One Gun Tower – Skerries	N. 10X. In the centre of the Peninsula or field, called Red Island, said to the property of H. Hamilton Esq.
11X	One Gun Tower – Balbriggan	N.11X Projecting Point, to the N. of the harbour – part of an old Danish Fort, and part in a field, rented by Jn. Quinn said to be the property of Counsellor Hamilton.
Note	The Towers marked X are proposed first to be begun upon – the other Towers, with the necessary intermediate Batteries, for the defence of the Creeks, Strands, &c., are, an account of the lateness of the season, deferred for the present.	

Table 5: "Return of Towers & Batteries proposed, from the Hill of Howth to Balbriggan, to command the Anchorages, protect the Strands, &c.". dated 1st September 1804. WO 55 831

A return dated "Dublin, 24th December 1805" lists all of the Dublin towers and batteries with their armament, and states:

"These Tower and Batteries are all armed and complete, except fixing the Flaggstuffs and some small articles that been omitted – completing Roads, fences &c. several of these Towers and Batteries having now being Manned a considerable time, will of course be subject to the customary wear & tear, and require contingent repairs – this it was supposed might amount annually to about £500 exclusive of the Boats and Boats Crews for Dalkey Island and Ireland eye – two Overseers / one for the North, and one for the South side / are retained for the purpose of inspecting the Towers and Batteries, reporting to the Commanding Royal Engineer, any Defeciciencies and inspecting such incidental repairs as may from time to time be ordered – but it is to be observed that the Traversing Platforms with the expense of conveyance and mounting, the copper work, &c. to all the magazines, the Berths and Bedsteads for the Troops, and the sheds for side arms, &c, &c. with the leveling the ground round the Towers, fencing, &c, were not included in the calculation, nor the Purchase of Boats, with the hire of Crews, &c. nor the forming of the small harbours for the protection of the Boats in bad weather, one at Bullock, the other on Dalkey Island". HO 11 132

Construction costs varied from tower to tower, though a General Estimate dated 30th June 1804 indicated costs of £1800 per Tower, and £1200 per Battery, with additional sums required for "Towers being proposed of larger Dimensions", and Tower No. 3 at Corke Abbey north of Bray to secure the foundations of the tower at the high water mark. Kelly (1940) reproducing the business papers of Bryan Bolger, a "measurer" (quantity surveyor) connected with the construction costs:

"Mason work done for the Rt. Honble, Lieut-General Lord Cathcart, Commander of His Majesty's Forces, at the Martello Tower No 8 on Dalkey Island, furnishing Materials by Wm. Ross, extra more than on a common cut stone Tower" in February and March 1805, the amount being £1177 18s. 1d. The Tower on Ireland's Eye was evidently a more difficult job, for the mason work measured for the same contractor in October 1805 comes to £2921 15s. 1d.

The Tower at "Glass Toole", No. 11, not fully priced, came to over £2000, in February 1805. The Sutton tower (No. 1 Tower) seems to have been a modest job; the figure is £616 12s. 6d., priced in the same month".

The lands appear to have been seized by Lt. Fisher RE

The lands appear to have been seized by the Board of Ordnance to allow building to commence immediately. The deeds of transfer of ownership to Lt. Fisher RE invariably date to 1806 or later, after the towers had been completed for some time. The legality of this came into question regarding seizure of the lands of Lord de Vesci in Dun Laoghaire, and an offer of £80. In a letter to Lord de Vesci from his Dublin agents dated 21st August 1805⁶⁶, they assured him:

"upon the subject of the Compensation tendered by the Government for the parcels of Land requir'd for the publick Service ... find, that Government have acted totally irregularly from the Beginning in having taken possession of the Ground before they were legally authoris'd to do so under the proceedings required by the Act of Parliament we have been desir'd to consider the Sums already tender'd merely in the light of a nominal Compensation, and to be increas'd so as to give compleat satisfaction to your Lordship..... Your Lordship will please to observe that the Sale of these parvcels of Land will not so operate as to create or occasion any Extinguishment of any part of the Rent at present payable thereout to your Lordship".

A return of 1830 records how, from whom, and at what cost the towers north of Dublin were appropriated:

Sutton or No. 1 Tower	From Thomas Newcomen & John Crosbie Esq, for ever for the Sun of £110. No rent.
Howth, or No.2 Tower	For ever from the Earl of Howth in consideration of £600 with a Right of passage by a Road through his Lordships grounds from the high road to No.2 Tower and a right of Passage 3 yards wide to a well 106 yards distant from No.3 Tower. No Rent.
Ireland Eye of No.3 Tower	
Carrick Hill of No.4 Tower	Conveyance for ever from Tho. Plunkett and Tho. William for the sum of £186.5 with a right of Passage – No Rent.
Robbs Hall or No.5 Tower	For Ever from John Harper and Tho. Edmond Esq. for the sum of £50.5 No Rent.
Ballcarrick or No.6 Tower	From H. Evans Esq & John McMahon for Ever, for the sum of £53.15 with a right of Passage from high Road to No.7 by a Road through the grounds of J.Green. No Rent.
Portrain or No.7 Tower	
Rush or No.8 Tower	Conveyance for ever from Roger Palmer Esq for the sum of £132.13.9 with right of Passage to both Towers. No Rent.
Dromonagh or No.9 Tower	

Shenick Island or No.10 Tower	For Ever from Hans Hamilton Esq. for the sum of £114 with a right of Passage to both Towers – No Rent
Red Island or No.11 Tower (Skerries)	
Balbriggan or No.12 Tower, with Road leading thereto.	For Ever from John Rotton & Alexander Hamilton Esq. for the sum of £11.17.6 with the Road leading thereto – No Rent.

Table 6: Return of 1830 "A Statement of the Ordnance Lands at the Towers North of Dublin Bay not described in the Papers Nos 2 and 3, shewing in what manner the same is appropriated". WO 55/2684

The towers adjacent to Dun Laoghaire appear to have been inspected by the Scottish Engineer responsible for Dun Laoghaire Harbour, John Rennie (1761-1821) in the early 19th century⁶⁷, with correspondence between Rennie and the builder John Murray regarding Towers No. 11-14 surviving in the National Library of Scotland⁶⁸. These give a contemporary account of the difficulties between the military engineers and the civil contractors engaged in constructing the towers:

"Specification was given that all the outer part of the work was to be hammer dressed stones – this gave an Estimate accordingly, & Colonel Fisher told me to begin the work, which I did; there was a Capt Corneille put over the work which told me when I begun that all the outer walls was to be ashlar. I told him that I had only estimated for the stones to be hammer dressed then he told me that every extra thing would be allowed so I went on according to his desire % as the work was in four different places I left part of it to a Man recommended to me by Colonel Fisher & as my Estimate was ten pence the foot fair measure hammer dressed; to make ashlar cost two shillings & four pence the foot fair measure for quarrying carting and dressing – so when the man saw he could not do the work at the money, he keep up the money I gave him & when I took the work out of his hands was obliged to pay his men he did not pay....".

The towers show a strong Minorcan influence both in design, and in the use of local materials. The Minorcan martellos were constructed from the local sandstone, which allowed use of a readily available building material and also marginally disguised as they blended in with the surrounding rocky landscape. The Dublin area towers appear to have followed this model of locally sourced material. All the known south Dublin martellos are of granite ashlar, while the north Dublin towers are of rendered rubble masonry. A number of the towers show quarrying activity adjacent to the site, with quarry faces visible at No. 9 Dalkey Island and No. 10 Bartra. The towers located on the coastline south of Killiney Head however were not built on granite bedrock, and stone had to be quarried and brought to these sites. The topographer Samuel Lewis recounts in 1837:

"About the commencement of the present century, a circle of granite blocks enclosing a cromlech was standing on the [Dalkey] common; but the cromlech and the stones surrounding it were blasted with gunpowder and carried away, to furnish materials for the erection of a martello tower on the coast".

While the towers share common architectural features, there is sufficient variation in design for each of the towers to be considered unique. This arises from variations in the design of the tower, its location and land parcel, and the number and arrangement of ancillary buildings which formed an integral part of each of the sites. The variations in tower design may be subtle features such as the number of corbels supporting the machicolation, or can be more substantial such as the angle and dimensions of the tower. The 'double towers' (towers intended to mount two rather than one cannon to the roof platform) show greater variation in design principles from the rest of the group. Tower No. 15 Williamstown was built on the foreshore, and was flooded during high tides. The tower does not feature a machicolation, but instead has 'murder holes' flanking the original first-floor entrance to the double-corbels supporting the parapet. Tower No. 9 Dalkey Island shows even greater deviation from the standard model. Early photographs of the tower clearly show that the tower was entered via the roof, and had no door at first or ground floor level. The basis for this appears to be that as the tower was built to defend Dalkey Sound, it was therefore vulnerable to fire from shipping from all sides, though this design was not repeated at Ireland's Eye. The iron fittings supporting the ladder still survive to the roof of the tower, and the existing first floor doorway appears to be a later insertion.

2.1.7 The Military Significance of the Towers 1805-1815

The Martello Towers formed an integral part of the coastal defence strategy for Ireland, defending the capital city from a seaborne invasion. The towers acted as watch towers, signal towers, and most importantly gun towers.

"Bray is a near little town, and most cheerily situated near the coast, about a half a mile distant from the sea, into which the Powerscourt River flows here. On each side are Martello towers; that on the right, as you front the sea, mounts one long eighteen pounder moving on a pivot, on the summit of the tower; and five twenty-five pounders on the rampart of turf below. It is built most substantially, with granite brought from the seashore, its walls are seven feet thick, and twenty-one feet high; are circular, being the top beveled so that balls striking it may glance off. It contains only one chamber, to which you ascend by means of a ladder, through a door about twelve feet from the ground, above which is a place similar to those in ancient gateways, for the purpose of showering down stone, &c. on assailants". Anon, 1809⁶⁹.

Schematic drawings of the guns mounted on the towers survive⁷⁰, in addition to text descriptions of how they were to be mounted and used:

"A sliding carriage was mounted on a traversing platform and was used in coast batteries where rapidity of traversing was required, the objects fired at from such batteries being seldom stationery; it was similar in construction to the garrison-standing carriage but instead of axle-trees it had two blocks on which it rested on the platform, the part of the block between the cheeks being deeper and passing between them so as to keep the carriage in its place. A common traversing platform was employed to raise a gun high enough to fire over a parapet and was made of either wood or iron. The wooden platform consisted of two long side pieces placed on four legs having trucks (namely wheels) which ran on circular racers (namely tram-lines) let into the ground. When a gun was mounted on a round tower, the central pivot was employed in order to traverse the platform in any direction. The platform had a slope-up on 1 in 12 rearwards to check the recoil and to help running the gun forward"⁷¹.

A contemporary account of military exercises at Sandymount in 1806 records how the towers functioned as a complement to other military forces:

"INTERESTING MILITARY SPECTACLE At an early hour on Friday morning the troop of horse artillery, and two car brigades of light artillery marched on the sands between the Pigeon-house fort and Sandymount ... a shell was thrown from the Pigeon-house fort as a signal for the commencement of the novel and interesting scene that was to follow: the the horse artillery immediately advanced from behind Sandymount, as did the light artillery from Ringfend and Irishtown (where they had been concealed), upon the sands, where targets were placed for their practice; during their advance, the Pigeon-house fort and the Martello towers on that line of coast kept up a steady fire of shot and shell". The Freeman's Journal. Wednesday, September 24, 1806.

Martello Towers had a number of complementary functions: to hinder the passage and approach of enemy shipping, to resist a landing by an invader, and to provide a strong fort which could effectively withstand both bombardment and siege by a

superior force to allow reinforcements to arrive. The series of towers and batteries built along the coast of Dublin also had overlapping fields of fire, allowing both converging fire on ships from both flanks, and reinforcement of a tower or battery by its neighbours. Douglas (1859) provides detailed descriptions of how he intended to use coastal defences in this period:

“8 and 10 inch mortars [found at Nos. 12 Glasthule and No. 11 Sandycove], mounted on traveling carriages, and capable of being used for firing shells at high elevations or horizontally, may be very advantageously employed against an attempt of an enemy to effect a landing on our coast. They may be used, first, as mortars, against crowded ships of war and transports constituting an invading armade; then, as the numerous boats filled with troops advance towards the shore, by diminishing the elevation of the pieces, and without intermitting the fire, they may be used as howitzers to project shells, and subsequently sea-service grenades; and, finally, to sweep the surface of the sea with grape-shot till the moment of landing. The mortars might be laid on the beach near the water’s edge, and their fire should be combined with that of troops placed to prevent the enemy from gaining a footing on the shore. This at least is the way in which the author determined to use such artillery, had the enemy afforded the opportunity in 1803”.

The towers also acted as part of a communications system established around the coast of Ireland by Rear Admiral Whitshed who was responsible for the construction of the Signal Towers found along strategic sections of the Irish coast. The flag-staffs mounted on the Martello towers were an important means of transmitting information quickly along a coastline, and allowing communication between towers, batteries and other military forces in times of battle. A letter to Lord Cathcart from the Right Hon William Wickham notes this:

“that the Lord Lieutenant had desired Rear Admiral Whitshed (who has had a late opportunity of minutely inspecting the different positions on the Coast leading from Drogheda to Wexford, and of selecting sites, whereon it might be advisable to establish Flag-stafs)” WO 55 831.

Once the immediate threat of war and invasion had past, the military significance of the towers began to be considered from the view point of the costs of keeping them up. Previous authors such as Maurice-Jones (1959) and McEnery (2006) have noted how fortifications quickly pasc into disrepair and abandonment once a period of warfare has passed. As early as 1811, the House of Commons issue a report beginning to consider the responsibility for maintaining the defences of the Dublin coast:

“It is only within these three or four years past that the projects of Military Works in Ireland have been submitted to the consideration of the Inspector-General, and the communications which he now receives are carried on under the directions of the Ordnance. But it has been lately decided to put under the care of the same department the Round Towers which had been erected in the neighbourhood of Dublin under other orders and we learn that a Committee of Engineers was appointed in the last years to confide how far it might be advisable to keep these up”. 15th Report of the Committee of Military Enquiry, 23rd July 1811

The military usefulness of Martello towers was the subject of some debate during this period, perhaps prompted in part by the costs involved in manning and maintaining them. A return of dated 4th April 1812⁷² notes that the overall cost of the Dublin towers “& Keeping them for nearly seven years” amounted to £104,722 – 1 – 8 ³/₄:

“Towers & Batteries North and South of Dublin Bay – 14 Towers & 11 Batteries from Bray to Sandy view & 12 Towers from Howth to Balbriggan, & Keeping them in repair for nearly seven years”. WO 55 835

Fishers estimates of 1804 noted that while a Battery would cost £1200, a tower would be approximately £1800, and many did not see any advantage of towers over batteries. Further, there was strong resistance from the Admiralty who preferred Government funding to focus on the Royal Navy and control of the seas. The exponents of the towers cited the Mortella Point engagement, and the obvious advantages of a small number significantly delaying and damaging a more superior force, while the detractors had many arguments regarding the cost of the towers as opposed to building earthen coastal batteries and investing in greater naval power. Although the towers were very resistant to cannon fire, they were vulnerable to landward assault, especially as a number of the towers such as Bray No.1, Sutton, Howth and Robswall were overlooked by higher ground to the rear. The military significance of the towers was not tested during the Napoleonic Wars. However, the model proved theoretically sound enough to be adopted by the American armies during the mid-19th century, and at strategic points by British forces in the first half of the 19th century until the advent of new more powerful weaponry, with isolated examples thereafter until the construction of the final towers during World War One to defend the Medway (Clements 2001).

By 1815, the threat of invasion was no more, and the network of Martello towers and batteries was largely intact. While Battery No. 5 had been ‘dismantled’ c.1812 and was no longer in use, the towers and batteries at No. 4 Magheragh to the south and No. 6 Loughlinstown to the north still provided adequate defence for that particular stretch of coastline. The towers continued to be manned by ‘invalid’ artillerymen, and the construction of a breakwater to protect Tower No. 3 at Corke Abbey in 1815 indicates that they retained sufficient military significance in peacetime to warrant reasonable outlay in maintaining them as active coastal fortifications.

2.1.8 The Towers after the end of the Napoleonic Wars, 1815

After the end of the Napoleonic Wars, the Martello Towers remained the responsibility of the Board of Ordnance, a mix of military officers and civilian civil servants – the senior RE and RA officers, a Clerk of the Cheque, and a Storekeeper. From the end of the Napoleonic Wars to 1833, “detachments for the Irish coast-defences were found mostly from the companies stationed at Island Bridge, Dublin” (Maurice-Jones 1959). At this time, all the towers and batteries were in active service, apart from No. 5 Loughlinstown which had been dismantled by 1815⁷³. The reason for this first loss to the Dublin defences is not clear. The purpose of that battery was “to scour the beach & co-operate with No.6 in Defense of that part of the Bay”. However, given the proximity of No. 4 Tower at Magheragh Point with its flanking batteries, it is not clear how essential No. 5 battery was to the defence of the coast. Towers No. 3 and 4 further south were too far apart to offer overlapping fields of fire, however no intermediate tower or battery was constructed to defend the coastline. There was a proposal in 1811 to replace the battery with a tower, but nothing came of this. Coastal erosion may have been a factor in the decision to dismantle the battery, as a breakwater was constructed to protect Tower No. 3 in 1815 from the encroachment by the sea. However, the battery was not dismantled entirely, as the remains of the western sector, including a guard house, brick-vaulted powder magazine and the north and west walls survive.

At the end of the Napoleonic Wars, The towers were under the immediate authority of a Master-Gunner, a quasi-military/civilian subordinate of the Board of Ordnance and though always a former artilleryman, was no longer part of the Royal Artillery. Two Master-Gunners appear in the returns of the Board of Ordnance, with authority over the north and the south of Dublin respectively. Each Master-Gunner oversaw squads of “district gunners” of invalid artillerymen, whose duty was to maintain and account for the towers, the guns, ammunition and stores. An 1805 return⁷⁴ notes Felix Reid and Patrick Finneran as Master-Gunners north of Dublin Bay, and Robert Lartham and Thomas Hilton as Master-Gunners of the towers “southward of Dublin Bay”. An 1824 return by Lieutenant-General Robert Douglas, Master General of the Ordnance, records two Master-Gunners for Dublin, Robert Leatham with eight Invalids, and John Patterson with no Invalids, and who would have had to “either borrow from the nearest R.A. company in garrison or employ civilians⁷⁵”. Douglas’ return of Master-Gunners also clarified their duties and responsibilities:

"The general duties of master-gunners are to see that the Ordnance, Carriages, Ammunition, and Stores are preserved in good order and report defects; to keep the batteries clean, to fire salutes where ordered, and hoist the flag; also to render quarterly and annual accounts of the Ordnance and Stores in their charge to the Principal Storekeeper's Office at the Tower. All the master-gunners detailed in this Return had served sixteen years or upwards in the Royal Artillery previous to being appointed master-gunner".

The "invalids", commanded by the Master-Gunners, were essentially retired or invalid artillerymen, and the towers and batteries appear to have retained their original armament. The Invalid Battalion, Royal Artillery was disbanded in 1819, however, an Invalid Detachment was retained under the overall command of an Adjutant and Quartermaster stationed at Woolwich, and these artillerymen manned the towers in the years after 1815:

"ROYAL ARTILLERY IN IRELAND – Captain Darley's company embarked at the Royal Arsenal, Woolwich; and at the same time a large detachment, consisting of 56 gunners and drivers, steady and well-conducted men, who have seen 16 to 18 years' service at least, and are thoroughly acquainted with the duties of their profession, embarked for the same destination [Ireland]. These men will be stationed at the Martello towers in Ireland, and the young men only will move with their companies when their quarters are changed". *The Times*. Monday, Jul 17, 1843; pg. 6; Issue 18350; col. F

"The Invalids themselves were as usual scattered among the coast-defences carrying out the duties of "district gunners", but as at first their strength was very low, only 107 in 1824, there were not enough of them to do this at all stations. As the century progressed, the strength of the Invalid Detachment increased until by 1859 it reached 450.⁷⁶"

A review of the towers was carried out in early 1816, as part of an overview of the defences in Ireland, resulting in a letter from General Mann dated "Dublin, 6th February, 1816":

"Herewith I transmit the Return (No.1) called for in your confidential letter of the 29th "of the Towers and other Works of Defence in Ireland, the number of Guns in each, and the smallest number of men, distinguishing Artillery, in my opinion necessary to protect them, and preserve their Ammunition and Stores". I beg leave to state that, from every thing I have had an opportunity of observing with regard to the disposition of the populace in this Country, I do not think any of the Works should be left without Artillery. I trust you will excuse me for repeating the wish, expressed by me in a previous Letter, that a small number of the Sappers and Miners could be posted at each of those Works – they would prevent them (the Works) from sustaining damages".

The towers required ongoing repairs and maintenance, details of which survive from the 1825-1827 returns for the "Towers and Batteries South of Dublin under the charge of Master Gunner John Cummings" and the "Towers North of Dublin under the charge of Master Gunner John Patterson". The repair needs of these towers are similar throughout, timber and paint failures, failure of the mortar to

the parapets, broken glazing and consequent water ingress, as for example this entry for Tower No. 6 Balcarrick:

“One 24 Pounder mounted as before. Gun Carriages and Platform serviceable painted at the same time and in the same manner as the others. The Tower and Magazine are both damp from the state of the Cement on the Parapet. The floor of the Magazine requires to be new laid as some of the rafters have given way and loads of ceiling has also falling in. The three Iron window Rods are still broken and one pair of Glafs has been broken since last inspecting by the falling of some of the Cement is stated by the Gunner” WO 54 747

Regardless of the poor state of repairs many of the towers, with three towers “shut up” -Nos. 3 Cork Abbey, No. 14 Seapoint, and No. 3 Ireland’s Eye (Shut up since 1819), the general situation was considered acceptable in the 1825 return:

“The Detachments stationed in these Towers [north of Dublin] consists of six Invalid Gunners who are steady men live an regularly settled with Weekly by their Master Gunner and have no complaints. Master Gunner Mr. John Patterson appears to be attentive and capable of his duties.

The Detachment station at this line [south of Dublin] consists of six Effective Gunners and Divers one Bombadier and have Gunner of Invalid Artillery who have been regularly settled with Weekly and have no complaints”.

List of Towers, batteries and armament c.1830, drawn from RA and Board of Ordnance Returns (after McEney 2006:82-83)				
Tower	Tower/Battery	18-pounder	24-pounder	10-inch mortar
1. Bray Head	S	1		
2. Bray Point	S	1		
	B		4	
3. Corke Abbey	S	1		
4. Magharagh Point East Battery West Battery	S	1		
	B		2	
	B		2	
5. Loughlinstown Battery	B		4 ^(*)	
6. Loughlinstown	S	1		
	B		4	
7. Tara Hill	S	1		
	B		3	
8. Limekiln Battery	B		4	
9. Dalkey Island	D		2	
	B		3	
10. Bullock	B	1		
11. Sandycove	S	1		
	B		5	2
12. Glasthule	S	1		
	B		3	
13. Dun Leary	S	1		
	B		4	2
14. Seapoint	S	1		
15. Williamstown	D		2	
16. Sandymount	D		2	
1. Red Rock, Sutton	S	1		
2. Howth	S	1		
3. Ireland’s Eye	D	2		
4. Carrick	S	1		
5. Robswall	S	1		
6. Balcarrick	S	1		
7. Portrane	S	1		
8. Rush	S	1		
9. Drumanagh	S	1		
10. Shennicks Island	S	1		

11. Red Island, Skerries	S	1		
12. Balbriggan	S	1		
S= standard tower; D= double tower; B= battery. (*) Battery No. 5 demolished 1812-1815 estimated as having 4 24-pounders on basis of comparison with other batteries in series.				

Table 7: List of Towers, batteries and armament c.1830, drawn from RA and Board of Ordnance Returns (after McEnery 2006:82-83)

The Invalids manning the towers however were not considered as a serious military force, and both contemporary accounts and later writers portray them in a very negative light:

“In Ireland the one Invalid Company of the Royal Irish Artillery was even too “invalid” to provide for the care and maintenance detachments for the coast-defences, the majority of its personnel being quite beyond any form of duty. This is not surprising when we learn that in June 1786 a gunner, who had been discharged from the R.I.A. for insanity, was admitted into the Invalid Company” (Maurice-Jones, 1959, P.79)

“John Clifford, who is in Wicklow Jail, charged with having feloniously assaulted five young girls, applied that he be admitted to bail. The prisoner is a pensioner, over 70 years of age, and for many years he had been in charge of the Martello Tower at Bray”. The Irish Times, Wednesday May 26, 1886

The periodic returns for the towers show a picture of ongoing repair and maintenance issues arising for towers with no active military function, but other functions beginning to appear for the towers. The 1830 return was accompanied by two bound books containing a list of the towers, a text description of the legal manner in which they were held and any rights of way or other land-holding information, along with coloured plans of the towers. The returns show that militarily the towers remained static, manned by retired artillerymen and with no new weaponry, equipment or provision for training mentioned. The 1820 return for “Towers & Batteries S. of Dublin Bay” (WO 55 2685) states:

“Between Dublin and Bray Head, forming the South Coast of Dublin Bay, there are fourteen Martello Towers; and Ten Batteries, nine of which are dependent upon the Toers. The Towers are strongly built of primitive granite, of which formation the rocks boundings this bold coast consist, and are constructed to mount one or two Guns on the Top, and to afford accommodation for the necessary number of Artillerymen with Amunition and Stores for their defence. The Batteries (as well as the Towers) occupy positions considered most eligible for defending the Entrance to Dublin Harbour, and each contains Barrack Accomodation in One Storied buildings, for the Artillerymen requisite to work the Guns and defend the Battery. The accompanying Plans [coloured plans dated 1831] will show the construction of these works of defence: & the dimensions of the buildings, with the Strength of Ordnance and Men they are calculated to afford, will be seen in the following statement.

At present, most of the Guns are dismantled, & the buildings merely occupied by the Gunners in charge, with the exception of those occupied by the Preventative Water Guard, namely Nos. 2,6,11,12,13 & 15 Towers and Batteries”.

However, the returns also state that not all the towers remained under the direct charge of the Board of Ordnance. The ambiguous military status of the towers in the years after the Napoleonic crisis is reflected in changes of use of some towers to quasi-military roles, though all the sites are indicated (though not named) in an 1822 map of "permanent and temporary barracks" in Ireland⁷⁷. Tower No. 13 Dun Leary is "occupied by the Revenue", Tower No. 4 Magheragh Point is let to General Cockburn, and Tower No. 12 Glasthule is noted in the 1826 return:

"The Magazine of the Tower is occupied by the superintendent of the new Harbour with Gun powder for blasting the quarries".

The most important new tenant for many of the towers was the Preventative Water Guard (later known as the the Coast Guard) to assist in their anti-smuggling operations (see Table 7). The 1825 return notes towers north and south of Dublin then in the possession of the Preventative Water Guard, e.g. "This Tower [Howth] was given to the Preventative Water Guard by order of the respective officer of the 30th May 1825." WO 54 747". This new use allowed some of the towers to remain in active military use, and to later act as a focus for training with new equipment and techniques. More importantly, the towers in use by the Preventative Wate Guard are reported in the returns as being of either good or excellent condition, which contrasted sharply with the poor repair efforts of the Invalid Artillerymen - Tower No. 12 Balbriggan "*This Tower is in charge of the Preventative Water Guard and is in good condition. One pain of Glafs is broken*" (WO 54 747). The 1830 return by the commanding Royal Engineer in Dublin recorded the condition and armament of each tower and battery, and notes:

"On the Coast North of Dublin extending as far as Balbriggan, a distance of twenty miles, there are twelve Martello Towers. Eleven of these are constructed or One Gun each and are each 35 feet in exterior diameter at the base; the twelfth (No.3 at Irelands Eye) is intended to mount two Guns and is 45 feet in diameter. Seven of the Towers Nos. 1,4,5,6,8,10. & 11 are in charge of Gunners of the Royal Artillery, & the remainder are occupied by the Revenue Coast Guard". WO 55 2684

Martello Towers and Smuggling

The location of the Martello towers along the coast adjacent to a major city led to their adoption for anti-smuggling operations. Smuggling was a major industry in the 18th and 19th centuries, an activity that had been fuelled for centuries by taxes imposed in the medieval period on imports and exports. Customs officers searched cargoes and collected dues in ports, and Customs Revenue cruisers patrolled the coasts for vessels illegally offloading cargo. From 1698, the first 'Riding Officers, responsible for the preventing the movement inland of smuggled goods that had evaded the Revenue cruisers, were established and gradually were appointed throughout the United Kingdom. Smuggling, or 'free trade', was highly profitable and widespread in the Irish Sea region:

"It happened that on the 26th of June 1750, that Captain Dow, commanding H.M. cruiser *Sincerity* was, according to the orders received from the Board of Customs, on duty in Douglas Roads. A notorious Irish smuggling wherry came in from Ireland and ran under the *Sincerity's* stern, while the smugglers "with opprobrious, treasonable, and abusive language abused His Majesty King George and all that belonged to or served under him." This, of course, was too much for any naval officer to endure, and Captain Dow immediately caused the ship to come alongside, and, after being rummaged, she was found to have concealed in a jar of butter-milk twenty-five English guineas tied up in a bag. There were also papers on board which proved that this money was to be expended in the purchase of brandies and tea, &c., and that, having obtained these articles, she was then to return to Ireland. The English captain therefore promptly seized both money and papers...

Their violence was rivalled only by their impudence; and fleets of wherries would sail in company into Ireland and Scotland loaded with cargoes of cheap brandy, which had been brought from Holland for that purpose". Chatterton (1912)

In addition to the Revenue Cruisers and the Riding Officers, a Preventative Water Guard was established in 1809 under the control of the Board of Customs to monitor inshore waters and to deal with any smugglers who had evaded the Revenue Cruisers of the Board of Excise who sought smuggling ships. Smuggling was very profitable due to the high taxes imposed on many goods such as alcohol and tea. The general sparsity of settlement along the coast from Wexford to Dublin and difficulties of patrolling the highly tidal coastline of the area contributed to poor control over smuggling activity.

"In the other cottage near the [Bray] Head lived an elderly woman and her daughter, whose ostensible means of livelihood were seeking and selling the pebbles peculiar to the locality, known as Wicklow pebbles, but who really were engaged in the profitable business of smuggling, and, in conjunction with others, acted as agents for the various overseas craft that then frequented this coast for the contraband trade.

The mother was a woman of great courage and strength of character, and always went about armed; she was known to have amassed a considerable fortune by her operations, and was, at least on one occasion, engaged in an affray with the Preventive men. When she died many years afterwards, her daughter found herself a rich woman.

The wild and lonely coast of Wicklow offered so many facilities for smuggling that the efforts of the Government were unable to accomplish more than barely to interrupt and at most delay the well-laid schemes of the contrabandists.

The usual plan adopted by smuggling vessels plying here was, under cover of night or misty weather, to send their contraband goods ashore in boats to the preconcerted places of concealment on the coast, and then to sail openly with their legitimate cargo to Dublin or other port, and thus hoodwink the Revenue authorities". Joyce (1920)

The location of Martello towers stretched along the coastline adjacent to the prosperous city of Dublin led to a number being utilised by the Preventative Water Guard. Though initially focused on ending smuggling, the Guard gradually adopted extra duties, including taking responsibilities of shipwrecks to safeguard cargoes and vessels from looters, and also training with life-saving equipment supplied by the Board of Ordnance (training with a rocket was recorded at Balbriggan Martello Tower in 1873). In 1816, the Guard was transferred to the Treasury, and the majority of the Revenue Cruisers passed to the Admiralty. In 1822, the Preventative Water Guard, the Riding Officers and the Revenue cruisers were amalgamated to form the Coast Guard⁷⁸. The Preventative Water Guard was essentially a military force, under the command of a naval officer. The Coast Guard was praised for its success in reducing smuggling, and the Admiralty gradually re-styled the Coast Guard with naval style uniform and drill. This process was formalised after the Crimean War with the Coastguard Service Act 1856 (Webb 1976), as the service

became a reserve force for the Royal Navy, made responsible for assisting with the defence of the coast and protecting the revenue in addition to its existing duties. However, the end of smuggling came about through mid-19th century changes in legislation and taxation, which meant it was no longer profitable to smuggle, and the 'trade' died out.

There were also early attempts to change the military function of some of the towers, and re-use the sites for other public or private uses. There were requests as early as 1816 to have the Dun Leary fortifications decommissioned and the lands incorporated in the development of the new harbour:

"Sir, In answer to Lieut. Colonel Mann's letter of the 5th last respecting the request of the Commissioners of Dunleary Harbour for the surrender of the Tower and Battery at that place, - I beg leave to state, that, I am not aware of the expediency of putting the Commissioners in permanent possession of those Works. Upon inspecting the Plan, they do not appear to interfere with the intended Pier and Harbour, otherwise than by tending to protect them from a hostile enterprise against the Country. I am of opinion some Works of Defence are indispensably necessary at this place, and that none can be substituted for the existing Works, equally conducive to its security from an Enemy, without very great additional expense to the Public". Letter dated 21st September 1816 from W.Fyers RE. WO 55/836

Tower No. 4 at Magheragh Point was let to General Cockburn from 1820, and Mr. James Crofton, the former landowner of the site of No. 13 Tower Dun Leary, sought to regain possession of this Tower and his former lands by writing to the Duke of Wellington in a letter dated 3rd January 1825. This prompted a rapid response by the Board of Ordnance dated 15th January 1825 which objected to the demilitarization of either towers or batteries due to their strategic value:

"I [W. Fyers] am of the opinion it would be highly improper to transfer the occupancy of either that Tower [No.13] or No.12, to any Individual. Mr Crofton is I understand a very respectable Gentleman, but from the importance I attach to those Towers, and those Batteries they Command, I am of the opinion they should be occupied by a Military force, and kept in order and repair by the Ordnance. I understand their utility has greatly increased since the formation of the Pier & Harbour of Kingstown, where the Ships of War and Transports of an Enemy, might enter, and disembark Troops, within two hours march of the Irish Capital".

In the 1830s, repair and refurbishment costs were also included in the returns. The towers may have undergone refurbishment work in the 1850s, and were re-armed with heavier guns in 1858.

"THE COAST DEFENCES The Board of Ordnance have just advertised for tenders for the repair of the towers and batteries (in all 25) erected on the northern and southern coasts of Dublin, and better known as the "Martello towers," which were first built over half a century since" The Times, Saturday, 25th September 1852

"A detachment of the Royal Artillery, assisted by a company of the Royal Forfarshire Militia Artillery, detached for that service from the head-quarters at Bray, have been for some days past mounting 56 and 68 pounder guns in the Martello Towers, Dublin Bay, which completely command the entrance to the harbour". The Times, Wednesday, Oct 20, 1858

Correspondence relating to the proposed sale of Tower No. 4 in Killiney Bay, dated 24th September 1849⁷⁹ notes:

"This Tower is constructed for and mounted with one 18 Pd. Gun on an iron traversing platform – the Batteries are not and cannot be armed at present – it must be admitted that an 18 Pd. Gun would be wholly insufficient to act against shipping and can be considered offensive only against Boats of Small Craft; the only strength therefore of this Post would consist in Guns of heavy calibre placed in the Auxiliary Batteries".

The correspondence highlighted the obsolescence of the weaponry mounted on the martello towers. Though these were considered quite capable of repelling or significantly delaying an invading force in 1804, the technological and tactical innovations of the intervening half-century had rendered them of limited usefulness against a serious attack. The new guns and ordnance introduced in the 1850s after the Crimean War were also beyond the capabilities of the retired or invalid artillerymen that manned the towers:

"the guns of the period under review were no longer the simple smooth-bore, muzzle loaders of the preceding centuries, but developed into high-velocity, rifled, breech-loading weapons which required complicated instruments to control them and highly trained gunners⁸⁰".

In 1855, the Board of Ordnance was abolished and its duties merged with those of the War Office, who took over ownership of the Martello towers and authority over the artillerymen. In 1859, the Invalid Detachment and the Royal Artillery Invalids, comprising 450 officers and men, were dissolved, and their duties taken over by ten divisions of the Coast Brigade, two of which were stationed in Ireland – in Dublin and Cork. The duties of the new Coast Brigade were identical to that of the former Invalid Detachment, but with the advantage of the efficiency of serving professional soldiers.

By 1860, all the north Dublin towers were standing, but in addition to the dismantling of Battery No. 5 at Loughlinstown, three of the south Dublin sites had been removed. Sites No. 13 Dun Leary (c.1836) and No. 8 Limekiln (c.1853) were removed as a result of the construction of railway lines, while the fate of No. 12 Glasthule (removed c.1849) is less clear. Neither the tower nor battery at Glasthule were directly on the line of the railway line, and the pre-existing railways from the quarries at Killiney Hill and what is now termed the People's

Park in Dun Laoghaire had bypassed both sites. Detailed plans and maps of both the tower and the battery were drawn up for the Ordnance Solicitor in 1849, showing encroachments by the Board of Works quarrying activity to the foot of the Tower, however it is not clear exactly why or under what circumstances the Tower and Battery were dismantled. The remaining Dublin area sites were surveyed by R.E. officers, now under the authority of the War Department, and new plans were published in 1862 noting the towers and batteries, associated structures, and the complement of N.C.O.s and men. The armament of the towers, though upgraded in many cases from the original 18- and 24-pounder cannons, was still considered obsolete in the light of new artillery being developed in the post-Crimean war period. A writer in the Irish Times on the 5th August 1862 comments:

"A great deal of satire was once lavished upon the Martello towers round the coast of Ireland; yet recent experiments have proved that they form an extremely valuable class of coast defences. At all events, we have them round our coast at the most vulnerable places, Government assents to their utility, for they are armed and in some sort manned. As long as they are kept up the least that can be required is that they are serviceable. Yet, the cannon mounted on them are of an obsolete description. The guns have been exposed to air and weather for a great number of years until they have become rusty and honey-combed".

The attrition of military value of martello towers as a gun platform and defensive structure was relatively rapid. A little over half a century after their initial construction, the towers were militarily redundant. So much so that in England one of the towers was used for target practice to test the effectiveness of new artillery pieces:

"ARTILLERY EXPERIMENTS NEAR EASTBOURNE – Within half a mile of the redoubt of Eastbourne stands No. 71 Martello Tower, which, having become useless, was selected for the trial of Sir W. Armstrong's guns on Tuesday last". The Times. Thursday, Aug 09, 1860

"ARMSTRONG GUN – we now have precise information respecting the experiments conducted recently with an Armstrong gun against a Martello tower at Eastbourne. The guns employed were a 40-pounder of 31 cwt, and 80-pounder of 63 cwt, and a short 100-pounder weighing only 53 cwt. The distance was 1,032 yards, and the projectiles employed were partly solid shot and partly percussive shells. The tower was built of very strong brickwork, the thickness of the walls being 9 feet 3 inches on the land side, and 9 inches on the side next to the sea. The roof and platform consisted of a massive vault of great strength, supported by the walls and a solid pillar of brickwork occupying the centre of the tower, The 80-pounder shot was found to pass quite through the wall into the tower, piercing 7 feet 3 inches of brickwork; the others lodged in the wall at a depth of about 5 feet. Live shells were then fired, and with so much effect that after eight or ten rounds from each gun the interior of the tower became exposed to view. The centre pillar supporting the bomb-proof roof was speedily knocked away, but the structure was so compact that the vault continued to stand, and was only brought down by a succession of shells exploded in the brickwork. Nothing could exceed the precision with which

these shells were thrown. The broken section of the vault was itself but a small object to hit, but this was done with unerring certainty that the very spot selected was invariably struck. The total number of shot and shell fired was 170, of which only a small proportion was from the 100-pounder. The 100-pounder gun used on this occasion throw shell, which weigh 100lb, and contain 8lb of powder, and yet the weight of the gun with which these tremendous projectiles are discharged is less than that of an ordinary 32-pounder, the weight of which is 56 cwt". The Irish Times, Monday August 20, 1860

Military strategy and tactics regarding coastal defence had also bypassed the concept of a strong tower in favour of a combination of firepower and speed of response, coupled with "strong forts". Douglas (1859) argued that the rapid troop movements afforded by roads and railways are equivalent to adding 50,000 men to coastal defence, quoting the Duke of Wellington to reinforce his tactical standpoint: "Look at those splendid heights all along this coast:-give me communications which admit rapid flank movement along those heights, and I might set anything in defiance".

The usefulness of Martello towers as a form of coastal defence gradually diminished with the rapid developments in ordnance seen from 1860 until the early 20th century, and they were gradually abandoned as coastal defensive stations during the second half of the 19th century. The improvements in ordnance were not simply the range of the guns, but the type of shell used, the velocities of the shell, and the rapidity with which the gun could be loaded and re-positioned. The original guns mounted on the Martello towers were breech-loading cannons firing solid cannonballs and grapeshot, and would have been familiar to any artilleryman, naval gunner or pirate from the preceding two hundred years. The new guns of the second half of the 19th century were much more complicated, using new explosive shells and mounted on increasingly complex carriages and platforms, and requiring specialized training and practice to operate. These guns were also intended to be used on new, faster, better-armed vessels than the sailing 'ships of the line' of 1804 which were relatively slow and restricted in maneuverability. The warships of the later 19th century were clad in iron, and were powered by steam and sail which gave greater speed and control.

McEnery (2006) notes that the most powerful artillery pieces in 1860 were smooth-bored 68-pounders firing solid shot, and smooth-bored 10- and 8- inch guns firing hollow shells. However, by the end of the decade, weapons technology had advanced so quickly that new armament consisted of more powerful and accurate rifled muzzle-loading guns of 12-, 10- and 7-inch calibers, with earlier

smooth-bore guns being "rifled converted" in an effort to add capability. By the 1880s, even these guns were out-dated as foreign vessels were already carrying far superior rifled breech-loading guns, and coastal defences began to change armament again and also incorporating submarine mines and QF (quick-firing) guns to cope with increasingly faster-moving watercraft.

The Coast Brigade in Ireland gradually allowed the towers to pass out of active use. McEnery suggests that all towers north of No.1 Sutton were vacated in 1865 when the Coast Brigade's strength fell from 34 to 22. In 1873, the Irish Times records Balbriggan Coast Guard using No. 12 Balbriggan Tower in training with a new "Life-saving Rocket Apparatus" in the aftermath of the wreck of the *Sarah* in winter storms, and the 1874 return shows two north Dublin towers empty, and the others either let or in use by the Coast Guard. Tower No. 3 north of Bray is also found "shaken at the foundations" in 1864 and collapses.

In 1874, only five sites are in active use – Towers No. 9 Dalkey, 10. Bartra, 11. Sandycove, No. 14 Seapoint and No. 1 Sutton, while the other towers appear to have been vacated c.1869 and let out. Tower No. 1 at Bray is undermined in 1884, and is sold to re-use its masonry in the sea-wall (concealed beneath the 2001 coastal protection works at Bray), while Tower No. 4 Magheragh is also undermined and collapses sometime in the late 19th century. Bartra is vacated in 1879, Seapoint and Sutton in 1881, Dalkey Island in 1886, and finally Sandycove in 1897.

The Coast-Brigade was abolished in 1891, and the detachments became "District Establishments" within Royal Artillery garrisons under a District (Armament) Officer, becoming part of the Royal Garrison Artillery in 1899. The final years of the 19th century see the consideration of various different towers for disposal, and the towers come up for sale during the early 20th century as, with the abolition of the Coastguard service, more towers become vacant, and are considered to no longer have a practical military or public use. Some are bought by local councils while others are sold into private ownership, and the majority of 20th century references are focused on the sale, attempted sales and re-selling of various towers.

"Doom of the Coastguards: We live in piping times of peace and need no longer fear the armed invader. The martello towers that dot the coast are for sale, and it is proposed to abolish the coastguard service, which has existed for nearly a century The deprivations of the smuggling fraternity, Englishmen as well as Frenchmen and Dutchmen, were severely felt by the Revenue Authorities and a force called the Coast Brigade was organized and located in the martello towers.

This was in turn succeeded by the Preventative Water Guard administered by the Customs authorities, though with naval officers in control of the local stations. Then in 1860 the coastguard was absorbed by the Navy, and at that date formed the only reserve for the British fleets. Now the Navy has other reserves, and the coastguard, according to the proposal of an inter-Departmental Committee, is to be gradually reduced to stopping all further entries, while the Board of Customs is to take over the revenue and other extraneous duties hitherto performed by the coastguardmen. The Admiralty will retain certain Naval coastguard stations, which, in Ireland will be restricted to the requirements of naval signal and wireless telegraphy stations". Irish Independent. Tuesday, June 2, 1908

2.1.9 Martello Towers in the Rest of Ireland

The Martello Towers and Batteries constructed to defend Dublin were not the only such towers in Ireland, nor were they the first to be built. The late 18th and early 19th century military appraisals of the defences of Ireland had identified a number of key coastal areas which were vulnerable to landings by an invading force. Martello towers were constructed to defend the approaches to Wexford, Waterford, Cork, Galway, Athlone, Londonderry, Drogheda and the natural harbours of West Cork. Irish Martello Towers are built in two phases – the earliest towers and batteries are constructed between 1804-1806, followed by a later phase between 1810-1815. However, Ireland was split into a number of different regions, and the south, east, west and north coasts were separate engineering districts. Consequently, the other Irish Martello towers differed significantly both in construction and design from the Dublin series.

The earliest Martello towers built in Ireland were the fortifications of Bere Island, requested by the Royal Navy to defend the sheltered natural harbour on the north. Lord Cathcart, the military commander for the country, sent Captain Birch RE, an officer who had recently served in Minorca between 1799 and 1802, to defend the island with “towers or other works” (See Section 2.1.4). Birch started work on the 21st January 1804, five months before work was to begin in Dublin, to construct stone Martello towers and earthwork batteries, but was called to special duty in October 1804 with the work unfinished. McEnery (2006) gives a detailed account of the ongoing problems of maintenance and repair for the Bere Island Martello towers, and by 1809 the towers were still incomplete with the Board of Ordnance refusing to take possession of them until they were made good. Another early Cork tower was the tower at Garinish Island, off Glenariff in West Cork was also to be built in this period, but to a unique plan drawn up by the Committee of Engineers at the request of General Morse in May 1803. McEnery (2006) notes the towers as “being built to the earliest plan devised for a Martello tower in the British isles”. The tower was a simple round cylindrical tower mounting a 24-pounder gun, completed in June 1805.

Two towers were built in Wexford between 1804 and July 1806, at Rosslare Point at the approaches to Wexford Harbour, and at Baginbun Head, overlooking the site where the Anglo-Normans first landed in Ireland in the late 12th century. The Rosslare Fort tower was lost to coastal erosion in 1817. However, the surviving Baginbun tower appears very similar in design to the South Dublin towers, perhaps as they were also under the authority of Benjamin Fisher RE in the

Dublin office. The Baginbun tower differs slightly in design to the Dublin towers, being unique as it has four machicolations at the four points of the compass, rather than a single one over the door as found elsewhere. These towers were not part of a group, but were single isolated stations, armed with a 24 Pounder Gun and a 24 Pounder carronade each.

The three-storey tower at Millmount in Drogheda, Co. Louth is unusual. While commonly considered a Martello tower, some authors such as Clements 1999 "described as a guardhouse for a battery of guns and was to act as a signal tower". The tower was built in 1808, in the lull of Martello building in Ireland. The massive dimensions of the tower distinguish it from all other Irish towers, and in design it has more in common with the massive Martello towers known from Canada than the early Bere Island design, the Minorcan design used in Dublin, or the later English Martello tower design employed in towers constructed in Ireland from 1812 onwards. The topographer Samuel Lewis considered it a fort in 1837, known as Richmond Fort.

The second phase of Martello towers brings new designs to Ireland, with the Board of Ordnance writing to Major-Generals Mann and Twiss, and to Lieutenant General Morse, Inspector-General of Fortifications in Dublin recommending that the designs of English towers should be preferred:

"There are no plans for Towers here for two heavy guns; therefore if the mode adopted by the Brigadier-General Fisher for mounting two guns on the Towers he has already erected in Ireland answer the ends proposed, and are not materially objected to by the officers of the Artillery, there can be no reason why that method should not be continued where two-gun towers are intended to be built. But there is another design of Tower lately adopted and generally approved here for one heavy gun (24pdr) and two smaller ones (24pdr short guns or 5½ in howitzers) which construction it is presumed may be applied in many situations in Ireland with as much advantage as in England. It is therefore desirable that Brigadier-General Fisher should be furnished with Plans of these tower, to be adopted where it may be thought advisable". 28th March 1810. WO 55/833

In 1810, the second phase of Martello building began with three Martello towers constructed to defend strategic points in Galway Bay under Captain Mann. These were located at Rossaveal, at Aughinish, and Finavarra, and formed a belated response to General Cathcart's recommendation in 1803 to construct martellos at Galway Bay to make it "the most inexpedient instead of the most expedient point of debarkation for an enemy". General Cathcart had also recommended martellos to defend the River Shannon, and these were constructed at Banagher, Keelogue and Meelick between 1813 and 1815. These towers were very different from the

Dublin towers however, being elliptical or cam-shaped in plan and more similar to towers on the south coast of England in design.

Towers were also constructed in this second phase to defend the most important natural harbours in Ireland. Loughs Foyle and Swilly in Donegal and Derry were defended by towers at Knockalla, Mucakamish, Greencastle, and Magilligan Point. However, these were a series of five Martello Towers were constructed to assist in the defence of Cork Harbour, at Rossleague, Belvelly, Marino Point, Haulbowline, and Ringaskiddy. These were initially considered for construction in 1811 by the Cork District Royal Engineering office. However, building did not begin in earnest until October 1813 and the towers were not completed until January 1818. The towers are built of local Cork limestone, and to a design refined by the local engineers, Captain Fenwick who as early as 1809 had determined that the walls of the new Martello towers should be vertical and not sloping in order to prevent water penetration and damp⁸¹. The Cork towers are mainly remembered as having the only Irish tower which saw quasi-military action:

“The tower at Marino Point, sometimes known as the Monning Tower, is one of two Martello Towers ever to see action, when it was surprised on 26 December 1867, by a band of Fenians who removed all the arms and ammunition”. Stevenson (1999)

2.1.10 'Bloomsday' and Rise of Interest in the Martello Towers 1954-present

Martello Towers quickly became redundant due to developments in tactics and technology through the 19th century, and the fact that the expected French invasion never arrived on the shores of Dublin led many commentators in the 19th and 20th centuries to consider the towers useless unaesthetic structures, and a visible irritant on a number of levels to a nation intent on independence. With demilitarisation of many of the towers in England and Ireland, conversion to private residence became one of the most common fates for the towers in the early 20th century. The towers were however much too small to be living accommodation for those who could afford to purchase them. This led to the common practice of altering and extending the towers to provide additional living space. Many of the towers were let out to tenants, with a number were considered as possible retreats for writers and artists such as Rudyard Kipling in England, and James Joyce in Ireland.

"Do you pay rent for this tower?

--Twelve quid, Buck Mulligan said.

--To the secretary of state for war, Stephen added over his shoulder.

They halted while Haines surveyed the tower and said at last:

--Rather bleak in wintertime, I should say. Martello you call it?

--Billy Pitt had them built, Buck Mulligan said, when the French were on the sea. But ours is the OMPHALOS".

Joyce, James. *Ulysses*. Paris: Shakespeare and Co., 1922.

'Bloomsday', the 16th of June, is an annual commemoration of the life of James Joyce (1882-1941), best known for his 1922 novel *Ulysses* which opens inside the Martello tower at Sandycove. 'Bloomsday', first celebrated in Paris, and in Dublin since 1954, is named after Leopold Bloom, the protagonist of *Ulysses*, and marks a week of cultural activities centered on readings and re-enactments of the events in the novel. Joyce famously spent only a few nights in the tower, awakening in the night to find his host, Oliver Gogarty firing a pistol at a panther he had imagined in the fireplace. Joyce fled, sending a note later for his baggage, and soon after he moved to Paris. However, the significance of the physical places Joyce selected in his novels has been linked to a number of the themes which run through his work:

"In *Ulysses* Joyce uses real place names and, admittedly, Odyssean parallels to inform his novel. The Martello Tower, setting of the Telemachus episode, evokes several of Joyce's themes, among them usurpation and betrayal. The Martello Towers were built by the British to protect John Bull's Other Island from possible invasion by the French during the Napoleonic Wars, one hundred years before Bloom's Day. Whereas the English were defending their colonial property, the Irish

would have welcomed their coreligionists, the French. The towers are thus symbols of militant British hegemony in Ireland, but in *Ulysses* two Irishmen have rented the tower, by then superfluous, hence themselves usurping a run-down bastion of empire". Black (2002)

The strong association of Tower No. 11 at Sandycove with Joyce led directly to its purchase in 1954 by Michael Scott, a Dublin architect who intended it to be used as the first Joyce museum. Restoration was carried out in the 1960s by the Dublin Joyce Society, and the inclusion of the tower in the 'Bloomsday' celebrations meant the tower had ongoing exposure to an international audience with a strong interest in cultural issues. The enduring cultural significance of 'Bloomsday' has led to the tower becoming probably the most photographed, the most-referred to, and the most well-known Martello tower in the world, and has contributed to the general high level of awareness of the towers as an important element of Ireland's architectural heritage.

2.1.11 Dublin's Martello Towers in the 21st Century

The Martello towers built to defend the coasts of Dublin from an invading army are now over two centuries old. One of the most significant aspects of the Dublin series of towers is how intact the group is – the entire chain of towers north of Dublin survives, and nine of the sixteen sites south of Dublin survive. The lost towers include South Towers No. 1, 3 and 4 lost to coastal erosion on the soft shorelines of Killiney Bay. Tower No. 13 at Dun Leary and Battery No. 8 on the shores of Killiney were demolished to make way for the railway, while Tower No. 12 at Glasthule disappears in 1849 after its sale to the Commissioners of Public Works. Today, many of the towers are ruined and derelict. Unfortunately some of these are the ones in public ownership such as the tower and battery on Dalkey Island, the towers at Williamstown south of Dublin, and at Skerries and Balbriggan north of Dublin. The poor state of these sites stand in stark contrast to other towers in public ownership which have found new uses as heritage and cultural centres – such as the James Joyce Museum at Sandycove, the Irish Genealogical Society archive at Seapoint, and as a centre for communications heritage at Howth.

Many of the towers are now in private ownership, with a number having been converted to residential use. Some attract famous residents such as Joyce at Sandycove and Bono at Bray, but this use required major interventions and alterations to the site, the ancillary buildings and features, and to the towers themselves. These changes include new doorways and windows, roof structures, agglomerations of attached buildings, and challenges to planning authorities and heritage professionals in how to protect and retain architectural significance and character while adapting a military structure to domestic and private use and 21st century living requirements. The Robswall Tower in Malahide, now known as 'Hick's Tower' due to its extensive early twentieth century alterations by Frederick George Hicks, is unusual in adding layers of additional architectural significance and importance as an Arts and Crafts Building in addition to its impact as a Martello.

One of the most significant finds of the project, was the discovery that Battery No. 5 was not entirely dismantled as reported in the historical sources. The Battery survives in a fragmentary state on the cliffs above Killiney beach commanding a view of the Loughlinstown River. While most of the defences are gone, presumably dismantled as ordered in 1815, the barrel-vaulted powder

magazine (similar to that seen on Dalkey Island), guard house, some earthwork features, and the north and west walls of the battery survive. These features, the polygonal plot layout and a coastal road were recorded on the first edition ordnance survey maps (County Dublin Sheet 26/2). However, these features were omitted from subsequent map editions for military security purposes, as were other military camps and fortifications around the country (most famously the Curragh Camp in Co. Kildare disappears from ordnance survey mapping in this period). The structures were not re-recorded during twentieth century revisions, and the historical and archaeological significance of the site was lost.

2.2 Assessment of Significance

The Martello towers are two-storey masonry towers, with battered walls and a defined parapet, mounting one or more cannons to the rooftop gun platform, and built in a 'chain' to defend the Dublin coastline from an invading force. The towers are entered on the landward side, through a door at 1st floor level defended by a machicolis, and have two internal communications routes – a pedestrian route through the winding staircase contained within the wall, and a route from the powder magazine to the roof through the trap door in the ground floor and the mis-termed 'murder hole' in the entrance passage for gunpowder, cannonballs and shot. The towers originally housed a small garrison of Officers and Men, and may often have had an associated guard house, battery, road and associated ancillary features and structures.

The Martello Towers have a wide range of values, reflected in their unusual status as being both Protected Structures (included on the RPS and therefore of architectural significance) and Recorded Monuments (included on the RMP as an archaeological monument).

- **Architectural Values** – the Martello towers are an 'iconic' architectural structure. Their location along strategic points on a coastline has meant that they are prominent, visible, distinctive buildings, which availed of local building materials. The significance of the building lies not just with its external and internal appearance, or its use of local stone, but also the internal arrangement of the structure, and how it was meant to be used and understood. These values also extend out beyond the tower itself to include the batteries, the property boundaries and original approach, ancillary buildings and structures such as boundary stones, privys and out buildings.
- **Group values** – The Dublin area towers form a group as a historical 'chain' of towers erected during an 18 month building phase in a period of crisis, constructed to a similar design, yet retaining sufficient variation on a building by building basis for each tower to be individually recognizable. The variation between towers north and south of the city have less to do with variation in design, than with compliance with design principles in the use of local materials – granite south of the city, and local stone types north of Dublin. The Dublin area group also forms the most distinctive element in the Irish series of Martello towers. It is the largest group in

Ireland, as the other Irish groups at Wexford, Waterford, Cork, Bere Island Harbours and Galway Bay are formed of three or less towers.

- **Military Significance:** The original military concept driving the construction of the Dublin towers was innovative, unique and of great significance for the adoption and development of the Martello tower design around the world. The Dublin towers are the only Martello towers in the world used as the primary fortification system to defend a city. The towers of Cork and New Dehli, India also defend cities, but were constructed to fill gaps identified in the existing defences and were not a coherent stand-alone group of structures from a functional point of view. The placement of the towers also marked a complete departure in military thinking for Ireland, which had previously focused on the defence of the south and west coasts. The Dublin series of towers were the group design model for the later, much more extensive series of towers constructed on the south coast of England – composed of a linked series of towers and batteries, which could offer a coordinated defence network through signaling and overlapping fields of fire to repel or significantly delay an invading force.
- **Cultural Significance:** The Dublin Martello towers have achieved iconic status due largely to the writings of James Joyce and their association with the annual “Bloomsbury” celebrations, and the Sandycove Tower is probably the most photographed, most referred-to, and most well-known Martello tower in the world. The towers have become an ever-present feature of the Dublin landscape, forming personal landmarks within people’s daily experience and as such holds strong contemporary cultural significance.
- **Global Significance:** the Dublin towers form the complete series of Martello towers built in the world, with historical, cultural and architectural links to towers built throughout the English-speaking world, and specifically to a distinct group of identical towers in Minorca.
- **Site & Landscape Values** – The placement of the towers, commanding prominent positions along the coastlines in many countries, led to their instant recognizability from both land and sea as distinctive landmarks of the Dublin coast. The towers at Williamstown, Seapoint, and Loughlinstown are arguably the most striking structures visible from the DART, and the island towers of Dalkey, Ireland’s Eye and Shenicks have become integral parts of the coastal landscape.
- **Associated features & structures** – Many of the associated features marked on the earliest 19th century maps of the Martello towers still

survive, including the curtilage, the circular enclosure, the right of passage, ancillary privy, piggery, stores, well, quarries, rocket stations, boundary stones etc. all have architectural values, and are protected under the National Monuments Acts and the Planning and Development Act 2000 as integral to the archaeological monuments.

- **Curtilage:** The circular site plot is also a distinctive feature, and was originally formed by mud or stone fences or by positioning boundary stones, first by the Board of Ordnance and later by the War Department in the 1850s. The distinctive plan surviving at No. 8 Rush and No. 10 Bullock are important components of the site.
- **Materials** – The materials are significant, choosing local Leinster granite for ashlar masonry south of Dublin, bonded in hydraulic lime mortar and pointed in a Roman Cement, and mostly local limestone stone types from the shores of North Dublin, secured beneath a distinctive external render. The iron gun fixtures, the gun tracks, pivots and rings, internal and door fittings, the shot furnace, door & window elements, fixtures, and original timber elements & features (such as the trapdoor accessing the basement) all have architectural and archaeological significance, yet only stone is currently seriously being retained in conservation works. Metal fittings are often allowed to be removed, when simple metal conservation measures will allow their retention without damage to surrounding materials. Original mortar pointing and renders are also routinely removed as part of 'conservation' works in the erroneous understanding that they are 'sacrificial' materials⁸². Original lime-based pointing and bedding mortars, c.1804-1805, and pinkish Roman Cement pointing mortars c.1850-1860 should be understood as a strong contributor to the character of the building and retained wherever possible.
- **Historic Significance** – The towers have accumulation of historic values from their 16th century Mediterranean origins to the present day. These enduring values have fueled continuing popular appeal and academic study into the historic and continuing relevance of these structures.

3. Timeline History & Known Documentation for each of the Towers

A 'timeline' for each of the towers has been constructed below, derived from both primary and secondary historical sources. The range and quality of information available for particular towers can vary considerably, but may include plans and elevation drawings, historical photographs, locations on maps of varying scales, and text references to the towers.

The towers have been listed in the order of how they were originally intended to be built – beginning at the southernmost point of the string below Bray Head in Co. Wicklow, and finishing at Balbriggan, Co. Dublin. The entry for each tower is introduced by a brief synopsis of the known history of the tower.

3.1 South 1 Bray Head

Martello Tower No. 1 was formerly located on the storm beach⁸³ of Bray, Co. Wicklow, to the east of the gate lodge at the entrance to Sans Souci, in a position close to that of the existing bandstand of Bray. The tower is noted as "tower" on Taylor's c.1816 and Duncan's 1818 maps of the coast, but neither provide any detail of the tower or whether any ancillary structures such as boundary markers or outbuildings were in place. The 1852 Board of Ordnance drawing shows the tower with four boundary stones, and as ash pit to the north-east and privy to south-east. Surviving illustrations show an ashlar masonry Martello tower of the south Dublin type, having a machicolation defending a first-floor entrance on the landward side of the building & a chimney. The tower is recorded on all maps of the period, but omitted from T.R. Harvey's 1850 panorama of Bray. A painting held in Bray Library (reproduced as the frontispiece in Cairns & Gallagher 2003) provides the best historical depiction of the tower, including two chimney pots to the roof. Davies (1998) notes that the tower was found "shaken" in the late 1860s, and Suttle (1989) and Cairns & Gallagher *ibid.* record "In May 1884 Lord Meath granted No. 1 Martello Tower to the Town Commissioners free of charge to be utilised in the building of the sea wall", which consists of a vertical granite masonry superstructure on a greywacke substructure. Other local historians have suggested the masonry may have been salvaged to build the granite boat house at the southern end of the promenade.

Year	Description	Type	Source
1804	"No.1 Tower near Bray Head. For the protection of the Strand and Anchorage near Bray head, the Works on the point being too far for that purpose". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	"Proprietor - On Bray Common - Mr. Sharkey". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	"thofe from Dalkey to Bray are nearly finifhed". The Freeman's Journal. September 29 1804	Text	The Times
1805	Tower armed with one 18-pounder gun. Ref: PRO HO 100/132 1806 f.37, 39-40	Manuscript	Kew
1807	"Bray Tower - Conveyance for every, from 2 nd March 1807, from John Earl of Meath & others for a consideration of £368:6:8 Irish Currency. No rent" noted in 1830 return. WO 55 2685	Manuscript	Kew
1815	Position marked "Bray Head 1"	Map	TCD MS 2182
1816	"Tower" marked on shoreline, with irregular string of buildings built parallel to beach, but no road/path/track indicated.	Map	Taylor
1818	"Tower", no position marked	Map	Duncan
1825	One 18 Pounder Dismounted. Magazine and Cistern in good order. Side arms and unserviceable case shot are withdrawn to the storekeepers charge in Dublin. Tower in good condition and the serviceable shot are under cover" WO 54 757	Manuscript	Kew
1826	"The floor near the cistern has given way and	Manuscript	Kew

	require to be immediately repaired. Four squares of Glass reported to have been broken by the Wind." WO 54 747		
1829	"No. 1 Tower Bray Head. A Round Tower Constructed for 16 Men with a Store Room and Water Tank - Bombproof. Constructed for One 18 Pounder for the defence of the Beach of Killiney Bay. The floor under the cistern has given way from rottenefs - Top of the Tower requires pointing. Seven panes of Glafs broken. The Cistern is out or repair. Ordnance Dimounted. One 18 Pd Gun garriage and traversing platform given over the Storekeeper in Dublin". WO 54 757	Manuscript	Kew
1831	Site plan showing Tower A and circular plot of "No. 1 Bray" located on sandy foreshore. WO 55 2685	Plan	Kew
1837-1838	"Martello Tower", no features	Map	OS 1 st Edition
1850	Tower not shown.	Drawing	T.R. Harvey
1852	No 1 Bray Head on shoreline, indicating four boundary stones, privy (to SE) and ash pit (to NE). MPH 1 654	Plan	Kew
1853	Armament upgraded from 18-pounder to 24-pounder cannons. PRO 55/851, letter dated 10 th December 1852.	Manuscript	Kew
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnery 2006:119
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
c.1860	"Martello Tower", no features, footbridge on strand to south	Map	Geological Survey of Ireland
1864	Saturday, June 18, 1864 "A pier or jetty, commencing at or near to the Martello Tower which is situated on Bray Strand, between the railway station at Bray and the point of Bray Head called Bray Point, and running nearly straight into the sea in a north-easterly direction, for a distance of three hundred yards of thereabouts from low water mark;"	Text	Irish Times
1869	Tower with parapet & machicolis noted as edge of grassy lawn at shoreline.	Print	Gaskins Varieties
1870	Plan of tower showing wooden ladder/stairs to landward, interior divided into three rooms, window slots, and "B.M."	Map	Ordnance Survey, Bray Town
Undated	Shows parapet, machicolis, chimney structure, wooden ladder access and position as per 1870 map.	Photo	Cairns & Gallagher 2003
Undated	Drawing shows position of tower, parapet & machicolis in relation to Marine Hotel.	Newspaper Ad	Cairns & Gallagher 2003
Undated	Painting of "Bray Strand" showing tower positioned at top of steeply shelving shingle beach, with promenade passing to west.	Painting	Bray Library
Undated	Painting of steeply shelving foreshore having martello at head of beach, showing base plinth, ashlar maosnry, string courses to parapet, two chimney pots to roof at landward, four visible light holes to north façade, and landward machicolation.	Painting	Bray Library

	Reproduced in Cairns & Gallagher (2003)		
1870	"Martello Tower", no features, footbridge on strand to south	Map	Heffernan
1870	Parapet visible, tower located at head of sand/cobble beach	Engraving	Heffernan
1874	Tower noted as let to Earl of Meath, and without armament, in "Good" condition", probably disarmed in 1869. PRO 35/34 & 35/40	Manuscript	Kew
1880	"Three years license to be given by the commissioners for a gentleman's bathing place near or about martello tower No. 1".	Text	Irish Times
1884	"In May 1884 Lord Meath granted No. 1 Martello Tower to the Town Commissioners free of charge to be utilised in the building of the sea wall".	Secondary source	Cairns & Gallagher (2003)
1937	Not marked.	Map	OS
1990	Notes "demolished (after 1870)". 3/10/1990.	Report	ASI

3.2 South 2 Bray Point

The tower at Bray Point, sometimes referred to as 'Mount Park', is located on a high rocky ridge, overlooking the reclaimed land of Bray Harbour and Bray promenade, and now accessed via a cul-de-sac laneway. The 1852 Board of Ordnance drawing shows the original access was on Seapoint Road, adjacent to what is now the Carlisle Grounds, but was truncated by the construction of the railway which now runs adjacent to the site. This 1852 drawing shows eight boundary stones marking the plot, with four gun emplacements, the officers house to the north of the tower, with the guard house to the south.

The tower is currently in private ownership, partially visible from the DART, but is not publicly accessible and the extent of survival of the battery and associated buildings and features is unknown. The tower and battery defended the mouth of the Dargle River, then known as the Bray Water, and the approaches to the town of Bray. By 1825, the tower was in use to the Preventative Water Guard, later to become the Coast Guard. The site originally had a large number of structures associated with the tower, including a battery wall, four 24-pounder gun emplacements to support the 18-pounder mounted on the roof of the tower, an Officers House, Guard Room, magazine, boundary stones, privy, ash pit and other structures. The tower passed into private ownership, and by 1930 was in use as a pigeon house, and was eventually converted for residential use. A glass roof structure was added to the gun platform of the tower by its most famous resident, Paul Hewson (Bono), in 1984. The tower remains in residential use.

Year	Description	Type	Source
1804	"No.2 Tower and enclosed 4 Gun Battery, on Bray point, with guard house & accommodation for Men, enclosed in the rear, with [illegible] guardhouses. To command the Beach on either side, and protect the tower and Harbour and river of Bray.". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	"Proprietor – Mr. Sharkey". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	"thofe from Dalkey to Bray are nearly finifhed". The Freeman's Journal. September 29 1804	Text	The Times
1805	Tower armed with one 18-pounder gun. Ref: PRO HO 100/132 1806 f.37, 39-40. Battery armed with 24-pounder guns.	Manuscript	Kew
1807	"Bray Tower, Mount Park of No.2 Tower and Battery – Conveyance for every, from 2 nd March 1807, from John Earl of Meath & others for a consideration of £368:6.8 Irish Currency. No rent" noted in 1830 return. WO 55 2685	Manuscript	Kew
1809	On each side are Martello towers; that on the right, as you front the sea, mounts one long eighteen pounder moving on a pivot, on the summit of the tower; and five twenty-five pounders on the rampart of turf below. It is built most substantially, with granite brought from the seashore, its walls are seven feet	Text	Davies (2007)

	thick, and twenty-one feet high; are circular, being the top beveled so that balls striking it may glance off. It contains only one chamber, to which you ascend by means of a ladder, through a door about twelve feet from the ground, above which is a place similar to those in ancient gateways, for the purpose of showering down stone, &c. on assailants". Anon, 1809.		
1815	Position marked "Bray Point 2"	Map	TCD MS 2182
1816	"Tower & Battery" on coastal promontory overlooking the "Bay of Bray", showing circular tower within a polygonal defensive structure, having 2 rectangular structures to N & S outside the battery walls, and an access path from the east.	Map	Taylor
1821	"Tower", no position marked	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1825	"One 18 Pounder on Tower & Four 24 Pounder Guns on Battery - Dismounted. The Tower is in excellent order, its magazine and cistern in charge of the Preventative Water Guard as also the Buildings in the Batteries. The floor of one of the Guard Rooms is however out of repair. The Boards and rafter both being rotten and out of repair ought to be replaced immediately." WO 54 757	Manuscript	Kew
1826	"The Tower and Buildings are occupied by the Preventative Water Guard and are in very good order" WO 54 747	Manuscript	Kew
1829	"No. 2 Tower Bray [illegible]. A Round Tower Constructed for 16 Men with a Store Room and Water Tank and constructed at the [illegible] of an enclosed Battery. Constructed for One 18 Pounder for the defence of the Beach of Killiney Bay. This Tower is occupied by the Preventative Water Guard. The Water Tank is rotten and flooring of rooms where the Water Tank is quite decayed. Ordnance Dimounted. One 18 Pd Gun garrige and traversing platform given over the Storekeeper in Dublin". WO 54 757	Manuscript	Kew
1829	"No. 2 Battery Bray [illegible]. There are in this Battery a Guard House for an Officer and another for 30 Men, also a furnace for heating shot. Constructed for 4 - 24 Pounds for the defence of the Beach of Killiney Bay. This Battery is occupied by the Preventative Water Guard, and is in good order. The Water Tank is rotten and flooring of rooms where the Water Tank is quite decayed. Ordnance Dimounted. 4 - 24 Pdrs. Gun garriges and traversing platforms given over the Storekeeper in Dublin". WO 54 757	Manuscript	Kew
1830	In use by Preventative Service Water Guard to prevent smuggling. PRO WO 55/2684	Manuscript	Kew
1831	Site plan showing "Towers and Battery near Bray South of Dublin 1831" at "No. 2 Mount Park" showing Tower A, with flanking Guard Houses B & C to north and south, with three gun emplacements to curving east wall, single gun emplacement to south wall, and angular	Plan	Kew

	works to rear (west), with site overlooking shingle foreshore at base of promontory. WO 55 2685		
1836	Illustration of Bray No. 2 Tower by Captain Edward Jones, dated 1836, reproduced in Davies (2007, P.125) showing no adjacent buildings and sea arriving to base of promontory.	Illustration	Society of Antiquaries, London
1838	Dublin sheet showing "Martello Tower" showing structures to N & S. Wicklow sheet showing line of battery, and structures to N, S & E.	Map	OS 1 st Edition
1849	"I should prefer retaining rather than selling the Towers which now exist between Bray Point and Dalkey Island. These Towers are in general good repair. Three No. 2, 3 and 6 are occupied by the Coast Guard at Mount Park, Cork Abbey and Loughlinstown". WO 44/120. 1 st October 1849	Manuscript	Kew
1850	Tower not shown.	Drawing	T.R. Harvey
1851	"New bill, Dublin, Dundrum & Rathfarnham Rly – Road leading to Martello Tower & Battery, in parish of Bray, to be carried over the rly. by means of a bridge ... Lights to be kept burning on bridge over the river at Bray". 19/6/1851	Text	FJ&WN
1852	No 2 Mount Park indicating eight boundary stones, Officers House to N, Guard House to S, 3 gun emplacements to East and 1 emplacement to S wall. MPH 1 654	Plan	Kew
1853	Armament upgraded from 18-pounder to 24-pounder cannons. PRO 55/851, letter dated 10 th December 1852.	Manuscript	Kew
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnery 2006:119
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
1868	Sketch map showing position of tower with single structure to N and no other detail.	Map	OS
1870	Bray Town Map showing tower, basement subdivision, window openings, stair access and fireplace recess. Internal plans of structures to N & S, and 4 gun emplacements – 3 to east wall, 1 to south wall of battery. Pathways, possible privy structure and boundary stone to entrance at site.	Map	OS
1874	1874 return does not include the tower or batteries as part of Dublin defences, and may be let. WO 53 40	Manuscript	Kew
1886	John Clifford, named as formerly "in charge of the Martello Tower at Bray".	Text	Irish Times
1923	"Bray Tower No. 2 part of Sale of Nos 4 & 5 Royal Marine Terrace", 14/6/1923	Text	Irish Times
1930	"The Martello Towers scattered along the sea-coast of Ireland have now become interesting objects of antiquity. It must be confessed, however, that in their construction grace and utility were not wedded and the aesthetically-minded view them with disfavour.the owner of one of these Martello Towers – that at Bray – has successfully supplied the lacking sense of beauty into his structure by transforming it into a home for a high-bred family of white-tailed	Text	Irish Times

	pigeons", 17/12/1930		
1937	Tower not named, show as circular tower with structures to N & S.	Map	OS
1951	Saturday, November 10, 1951 "Auction of freehold residence and Martello Tower, Sancourt Lodge, Bray. The house, which has a southern aspect, stands in its own grounds, contains 3 reception rooms, 4 bedrooms, breakfast room, kitchen, bath, 2 w.c.s, pantries e.l. and gas. Gardens back and front; garage; Martello Tower. 2-roomed cottage let at 7/- per week. Vacant possession, overlooking sea.	Text	Irish Times
1966	Aerial Photo by BKS Consultative Technical Services Ltd shows no indications of gun emplacements, but flanking buildings to north and south.	Photo	DLRCOCO
1984	Permission granted for glass roof structure to roof of tower.	Planning File	Bray Town Council.
1999	Digital aerial image showing the tower set within a built up battery complex, approached via a cul-de-sac.	Photo	National Coastline Survey

3.3 South 3 Corke Abbey, Bray

This tower was constructed on the foreshore, in a similar location to Tower No. 1 Bray Head, to defend the north shore and approaches to the Dargle River, then known as the Bray Water. Due to coastal erosion, the original position of the tower is currently submerged, approximately 50 metres east of the current high water mark, and established in relation to its position on historical maps and the surviving submerged former Dublin-Wicklow railway line (Bolton 2003). The tower was poorly positioned from the outset, requiring additional costs to secure the foundations during construction in 1804, and a breakwater in 1815 due to coastal erosion. The tower was "shut up" and abandoned c.1824-1825, but was later used by the Coast Guard. The foundations were damaged by storm action in 1864 and the tower considered to be in an "unsafe state", but was still depicted as standing in reasonable condition in an engraving to Heffernan's 1870 map of Bray town (Davies 2000). The tower is noted as having collapsed c.1870 and the stone salvaged for re-use in the Bray Workingmens Home (Davies 1998). A comprehensive underwater diving survey of the site in 1998 (Bolton 2008) noted massive granite masonry associated with the adjacent submerged railway, but no masonry of suitable dimension, curvature or other features which would allow it to be attributed to Tower No. 3.

Year	Description	Type	Source
1804	"No.3 Tower on the strand near Old Cork. To co-operate with No.2 in the Defence of that part of the shore". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	"Proprietor – Colonel Wingfield". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	General estimate of costs noting "the one hear Old Cork being obliged to be erected near the high water mark & therefore requiring more attention in the foundations, the additional sum is stated as £800" Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	"thofe from Dalkey to Bray are nearly finifhed". The Freeman's Journal. September 29 1804	Text	The Times
1805	Tower armed with one 18-pounder gun. Ref: PRO HO 100/132 1806 f.37, 39-40	Manuscript	Kew
1806	"No. 3 Tower being part of the Lands of Corke Abbey – Conveyance for Ever After 25 th March 1806 from Lord Castlecoote & others. No rent" noted in 1830 return. WO 55 2685	Manuscript	Kew
1815	Position marked "Old Cork 3"	Map	TCD MS 2182
1815	3 rd April 1815 & 14 th August 1815 WO 55 835 regarding "Breakwater proposed to be erected for the Protection of the Tower No. 3 at Bray"... "to prevent the encroachment of the sea" at estimated cost of £252.15.0½ .	Manuscript	Kew
1816	"Tower" and location	Map	Taylor
1821	"Tower" marked well back from foreshore, with no access path or other adjacent features.	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew

1824	"This Tower has been shut up since June 1824" cited in 1826 return WO 54 747	Manuscript	Kew
1825	"One 18 Pounder Gun Dismounted. This Tower is shut up by order of the Respective Officers since June 1824. The Lead has been stolen from the sistran as reported." WO 54 757	Manuscript	Kew
1829	"No. 3 Tower Old Cork. A Round Tower Constructed for 16 Men with a Store Room and Water Tank. Constructed for One 18 Pounder for the defence of the Beach of Killiney Bay. The Tower has been shut up since June 1824. The pipe that conveys water from the roof to the bottom out of repairs so as to admit large quantities of water and Barrack Room floor should be immediately repaired. Ordnance Dimounted. One 18 Pd Gun garrriage and traversing platform given over the Storekeeper in Dublin". WO 54 757	Manuscript	Kew
1831	Site plan showing Tower A and circular plot of "No. 3 Cork Abbey" located on sandy foreshore, with rear walls and probable privy to north, and surved breakwater located to foreshore to east. WO 55 2685	Plan	Kew
1843	"Martello Tower" located on foreshore with no paths or adjacent structures.	Map	OS
1849	"I should prefer retaining rather than selling the Towers which now exist between Bray Point and Dalkey Island. These Towers are in general good repair. Three No. 2, 3 and 6 are occupied by the Coast Guard at Mount Park, Cork Abbey and Loughlinstown". WO 44/120. 1 st October 1849	Manuscript	Kew
1850	Tower visible set back from foreshore showing no adjacent buildings or roads.	Drawing	T.R. Harvey
1852	No. 3 Gort Abbey" on foreshore indicating four boundary stones, privy (to N). MPH 1 654	Plan	Kew
1852	Armament upgraded from 18-pounder to 24-pounder cannons. PRO 55/851, letter dated 10 th December 1852.	Manuscript	Kew
1853	Letter dated 8 th August 1853 from Colonel Emmet, Commanding Royal Engineer in Ireland in letter regarding proposed occupation fo some towers by the Coast Guard "With respect to the Tower at Bullock, the Invalid Gunner in Occupation of it, can be removed to No.3 tower, Old Cork, where there is at present an Effective Gunner and Driver" MPEE 1/248	Manuscript	Kew
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnergy 2006:119
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
1864	No. 3 Martello Tower No. 3 nr Bray has been found shaken fr. The foundation, having been sapped by the seas running in along the coast during the recent gales. It is considered to be in an unsafe (state). 29/10/1864	Text	FJ&WN
1866	The 25-inch map shows the approach roads to the tower from north and south, but the tower itself is not depicted.	Map	TCD
Undated	"The Martello Tower near Bray" undated, showing very prominent string course to the	Painting	Pearson (1998)

	centre of the tower, having cannon and flagstaff mounted to roof. Pearson (1998, P.24)		
Undated, post 1853	"An oil painting of the Warren family viewing some of their property at Ayesha Castle" post 1853 (construction date of Ayesha, formerly Victoria, Castle) showing Towers 3, 4, 6, & 7 but not Battery no. 5. Pearson (1998, P.58)	Painting	Pearson (1998)
1870	Parapet, cannon, machicolation, chimney and stair access to first floor entrance visible to tower located on foreshore overlooking entrance to Dargle River to south, and railway line running to west.	Engraving	Heffernan
1874	1874 return does not include the tower as part of Dublin defences. WO 53 40	Manscript	Kew
1937	Not marked.	Map	OS
1966	Aerial photo showing railway bridge, submerged breakwater and other submerged structures adjacent to the former location of Tower No. 3. BKS Consultative Services Ltd aerial photographic series.	Photo	DLRCOCO
1998	Underwater diving survey of the site of Tower No. 3 under archaeological dive licence located the original position. Massive blocks of granite masonry are located in the inter-tidal zone, but no masonry was identified underwater in the former position of the tower. Davies (1998) notes that the masonry was reputedly salvaged and reused in the Workingmens Home in Bray.	Report	Bolton (2008)
1999	Digital aerial image showing the now submerged landscape where the tower was formerly located. A railway bridge is visible on the foreshore, and the submerged remains of the embankment and other structures can be seen underwater.	Photo	National Coastline Survey

3.4 South 4 Magharagh Point, Killiney

This now-lost fortification was unique in the Dublin series as it featured two batteries flanking the Martello tower in order to provide covering fire to all approaches to Magharagh Point. However, the fortifications were positioned too far north of Tower No. 3 at Corke Abbey to provide overlapping fields of fire, and consequently left a gap in the Dublin coastal defences. Consideration was given to constructing another tower between Magharagh and Corke Abbey, or to providing defended guardhouses, but nothing was built. The site was let to the local landowner, General Cockburn, in 1820 but appears to have suffered from coastal erosion throughout its existence. The tower was constructed on the top of unconsolidated glacial till cliffs which stretch from Killiney to Bray. The earthwork defences were being eroded in the 1820s, and by the 1850s both north and south batteries had lost sections at the cliff-edge. However, the cost of repairs were out-weighted by changes in military tactics – it was now more cost effective to invest in a mobile brigade which could be used in a number of locations than a single point of defense which would incur ongoing expenses. The 1831 Board of Ordnance drawing records the position and layout of the single gun emplacements to the batteries and guardhouses which flanked the tower to north and south.

The tower was reported as sold in 1853, and marked as “Martello Tower (Disused)” in later ordnance survey maps, and is indicated in paintings, engravings and photographs from 1860 to 1910. The tower is lost sometime between 1912 and 1937 but the exact date is unknown. Survey of the site in 2007 showed a single granite masonry wall structure in the area of the South Battery which may be the only surviving remnant of the site.

Year	Description	Type	Source
1804	“No. 4 Tower and two 2 Gun Batteries, on projecting point in Killiney Bay. As this point is very broad, a single Battery without going to a great extent would not see the Strand on both sides, it is therefore thought advisable to have two Batteries, for that purpose at about 290 yards distance from each other and the Tower to be placed intermediately. Though this Tower and Batteries be found too far distant from Tower No. 3, an intermediate one may be erected, but as the Cliff in this district is in general steep and rather difficult of a [illegible], and has but few plaes thr it, the closing that by Barrier & small Defensible guardhouses – may be deemed sufficient.”. Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	“Proprietor – Mr. Roberts”. Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	“thofe from Dalkey to Bray are nearly finifhed”. The Freeman’s Journal. September 29 1804	Text	The Times
1805	Tower armed with one 18-pounder gun. Ref: PRO HO 100/132 1806 f.37, 39-40. Battery	Manuscript	Kew

	armed with 24-pounder guns.		
1806	"No. 4 or Maghera Point Tower and 2 Batteries, with the ground enclosed between them - Conveyance for Ever from 1806, from John Roberts & Edward Kent Esq. No rent" noted in 1830 return. WO 55 2685	Manuscript	Kew
1815	Position marked "Killiney Bay 4"	Map	TCD MS 2182
1816	"Tower" and location	Map	Taylor
1825	"This Tower was let to General Cockburn in the year 1820." WO 54 757	Manuscript	Kew
1821	"Tower & Battery" indicated showing a circular tower within a octagonal enclosure, having rectangular structures to N & S. The site is accessed by a wooded path from "Shangannon" to the east, and is set well back from the shoreline.	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1825	"One 18 Pounder on Tower, Two 24 Pounder Guns East Battery, Two 24 Pounder Guns West Battery - Dismounted." WO 54 757	Manuscript	Kew
1826	"In the Tower the hinge of the magazine door is broken and five panes of Glass are broken by storm, as reported. West Battery the Trap door in the Guard room is broken ad the sod works in both batteries have given way to the encroachment of the sea". WO 54 747	Manuscript	Kew
1829	"No. 4 Tower Killiney Bay. A Round Tower Constructed for 16 Men Bombproof situated between two Batteries at the distance of 180 yards from each Constructed for One 18 Pounder for the defence of the Beach of Killiney Bay. Tower very damp - 4 windows broken by the wind. Tank wants repairs. Ordnance Dimounted. One 18 Pd Gun garrige and traversing platform given over the Storekeeper in Dublin". WO 54 757	Manuscript	Kew
1829	"No. 4 Battery Killiney Bay. Two number Batteries with one loop holed Guard House to each and accommodation for 9 men. Constructed North Battery - 2 - 24 Pounds, South Battery - 2 - 24 Pdrs. For the defence of the Beach of Killiney Bay. North Battery in a dilapidated state. South Battery in good order both these batteries have given way to the encroachment of the sea. Ordnance Dimounted North Battery - 2 - 24 Pounds, South Battery - 2 - 24 Pdrs. Gun garriges and traversing platforms given over the Storekeeper in Dublin". WO 54 757	Manuscript	Kew
1830	"At Maghera Point, or No. 4 Tower and Batteries, a portion of Meadow Grounds, comprising near four acres, is let to General Cockburn at £2. 6. 1½ per anum" noted in 1830 return. WO 55 2685	Manuscript	Kew
1831	"Tower and Battery No. 4 Magheragh Point 1831" showing central Tower (A) set back from cliff edge and linked by paths to north and south batteries. North battery shows single gun emplacement set in rectangular work showing loss to north-east corner of cliff-edge through coastal erosion. Guard	Plan	Kew

	House (B) positioned at south-west corner beside entrance to battery. South Battery shows sub-rectangular fieldwork containing single gun emplacement, with loss to entire east wall at cliff-edge through coastal erosion, and bordered by a stream immediately to south. The Battery has a Guard House (C) to north-west corner beside the entrance. Two unspecified rectangular structures are located on the south bank of the adjacent stream. WO 55 2685		
1837	Plan dated 4 th Sept 1837 showing distances to HWM (high water mark), boundaries, and "Diameter of Boundary" & "Diameter of Tower".	Plan	Military Archives
1837	Tower marked, sheet 26 showing site approached via a laneway from the rear of Shanganagh Castle.	Map	OS
1842	Tower not shown.	Engraving	Bartlett
1849	Section of Tower, South Battery and North Battery of No. 4 Tower. WO 44/120. 31 st August 1849	Manuscript	Kew
1849	<p>WO 44/120 13th August 1849</p> <p>"The Cliff at either Battery is between 30 and 40 feet high and very precipitous, overhanging in some places, and appears quite ready to give way during a violent storm with high tides"</p> <p>Provision of money for "rebuilding the Guard Houses, termed Battery Houses, attached to the Batteries at No. 4 Tower Killiney Bay (South of Dublin) The encroachment of the sea at this Point by which the cliff was so fallen away as to leave in one part only 3 feet of the original parapet to the South Battery and a still further decay of the north Battery... I visited the Tower and Batteries and caused Plan and Sections to be prepared illustrative of the present state". 31st August 1849</p> <p>Response 5th September 1849</p> <p>"The application for the Guard Houses seems to emanate from the [illegible] Office of Artillery ... without reference to any opinion as to the relative value of the Batteries themselves as compared to the cost of maintenance. Viewing the situation of Killiney Bay, the chances of attack, the nature of these defences, I am myself quite of opinion that it would be impolitic to incur any but the most trifling expenses for maintaining them ... in case of War, a moveable Brigade of heavy Guns or many other expedients that could be obtained on the accumulated value of the money now required for them, would be far more efficacious. I would even be inclined to go still further, and of a tolerable price could be obtained for them, which I think either from [illegible] or the Railway Company might be the case, I would dispose of the land with the Works on it".</p>	Manuscript	Kew

	24 th September 1849 "This Tower is constructed for and mounted with one 18 Pd. Gun on an iron traversing platform – the Batteries are not and cannot be armed at present – it must be admitted that an 18 Pd. Gun would be wholly insufficient to act against shipping and can be considered offensive only against Boats of Small Craft; the only strength therefore of this Post would consist in Guns of heavy calibre placed in the Auxiliary Batteries".		
1850	Tower visible set back from foreshore showing no adjacent buildings or roads. Batteries not shown.	Drawing	T.R. Harvey
1852	No. 4 Maghera Point indicating "line of cliff in 1851" showing loss to south (loss of S and NE sections) and north batteries (loss of east section), six boundary stones, tower approached by two pathways to west, and break water constructed at base of cliff immediately to east of tower. MPH 1 654	Plan	Kew
1852	Tower No. 4 – account of impact of storm on tower and batteries WO 44/120	Manuscript	Kew
1852	Offer to purchase "the Tower for use as a Bathing Lodge in Summer" for £500 by Mr Christopher Duff. WO 44/120. 30 th November 1852	Manuscript	Kew
1852	Note that 'Proposed sale of Tower at Killiney not sanctioned 1852. Occupation of the Towers at Killiney, Bullock and Dalkey by the Coastguard. WO 44/120	Manuscript	Kew
1853	Letter dated 24 Sept 1853 noting "no objection to temporary occupation of "No. 4, Killiney Bay, No.9, Dalkey Island, and No.10, Bullock" by the Coast Guard. The towers were in use to store ammunition, and the Invalids were to be transferred to other locations, and the Gunners withdrawn. WO 44/120	Manuscript	Kew
1853	Consent of the Master General and the Board of Ordnance to the occupation by the Officers of the Coast Guard of the whole of the Tower of Killiney, the tower at Bullock, and the Ordnance dwelling on the island of Dalkey". 1 st November 1853	Manuscript	WO 44/120
1853	No. 4 Tower & Batteries at Magheragh Point sold. PRO WO 44/120	Manuscript	Kew
Undated, post 1853	"An oil painting of the Warren family viewing some of their property at Ayesha Castle" post 1853 (construction date of Ayesha, formerly Victoria, Castle) showing Towers 3, 4, 6, & 7 but not Battery no. 5. Pearson (1998, P.58)	Painting	Pearson (1998)
1854	"the Ordnance Towers at Killiney and Bullock were respectively taken possession of by Officers of the Coast Guard on the 1 st August last, and with respect to the premises on Dalkey Island, I am to state that the same will not now be required" 11 October 1854	Manuscript	WO 44/120
1866	Painting c.1866 by Du Noyer showing position of Tower.	Painting	GSI
1866	The 25-inch map shows the Martello Tower positioned at the cliff edge with two small	Map	TCD

	rectangular structures flanking the entrance ladder. The north battery shows a quadrangular area, with five "O.↑S" boundary stones. The south battery shows a rectangular structure at the NW corner, but the E and S battery walls appear to have eroded at the cliff edge.		
1869	The tower has been erased from the 6 inch sheet revision for military security purposes. However, the north and south battery structures are still marked.	Map	OS
1869	6 inch map revision sheet titled "Dublin Plan shewing in Red - Foreshores of War Department at No. 4 Tower Maghera Point and No. 6 Tower Loughlinstown" showing the martellos in place & extent of War Department property in red, to include all exposed shingle foreshore. MPEE 1 248	Map	Kew
1874	1874 return does not include the tower or batteries as part of Dublin defences. WO 53 40	Manscript	Kew
1880-1900	Photograph labeled "General Cockburn's Tower 1895" showing tower located at edge of sloping cliff on small point extending into Killiney Bay, with low wall (possible battery wall) to north.	Photo	Cairns & Gallagher 2007
1898	"a gentleman had been washed ashore near the Martello Tower at Shanganagh, who had been identified as Captain Jones, of Bray", 9/11/1898	Text	Irish Times Archive
1912	6 inch sheet revision noting "Martello Tower (Disused)" and four boundary stones, with no trace of the north battery and two rectangular structures and a single wall at the site of the south battery.	Map	OS
1937	Not marked, two boundary stones surviving.	Map	OS
1966	Aerial Photo by BKS Consultative Technical Services Ltd shows no indications of any standing structures at the site.	Photo	DLRCOCO
1998	Underwater diving survey of the site under archaeological dive licence located the original position. Abundant remains of hewn and shaped granite masonry are found on the beach and underwater, but no concentrations of masonry, or any curved masonry was identified which could be securely attributed to Tower No. 4 or the battery structures.	Report	Bolton (2008)
1999	Digital aerial image showing the site showing the earthworks associated with the former Dublin & Wicklow Railway line, and a rectangular building not associated with the tower or batteries.	Photo	National Coastline Survey
2007	One single masonry wall, possibly forming part of south battery, recorded as part of "Coastal Architecture Survey",	Report	Dun Laoghaire Rathdown County Council

3.5 South 5 Loughlinstown Battery, Killiney

This battery was constructed to defend the beaches approaching Loughlinstown River and offered overlapping fields of fire with South 4 Magharagh Point and South 6 Killiney. The battery does not appear on the 1815 Map of the Eastern Military District (TCD MS 2182), which has an inscription at the base of the map reading "Note – the Tower No.5 South of Dublin Bay was dismantled". Turner (1987) reproduces a letter dated 2nd May 1818 by General I.G. Cockburn⁸⁴:

"There was certainly a redoubt and fortification formerly in my north sea field – next the Martello Tower – but so much of the sea bank had fallen in, that little of it remains at this day – it had been diminished in my own memory".

The battery structures are marked on all editions of the ordnance survey from 1837 onwards, and labeled on the 25-inch Dublin county survey as "Old Battery (Ruins of)" in 1866. However, the relationship of this battery with the Dublin area Martello Towers was lost, and the significance of the site unrecognized. Consequently, unlike the other towers and batteries, this site was never recorded as part of the built heritage of the county, and is not included on the RPS or the RMP. The tower survives as a built feature on ordnance survey maps, and was recorded by the National Coastline Survey aerial photographic work in 1999. Survey work in 2007 noted that a substantial part of the battery complex still survives. These comprise the north and west walls, including battlements and gun loops, a powder magazine with a brick barrel vault similar to that seen on Dalkey Island, and a guard room, and a number of other ruined structures. The original approach road also survives as an earthwork feature and field boundary to the west of the site.

Year	Description	Type	Source
1804	"No. 5 Between Loughlinstown River and projecting Point. A Battery to scour the beach & co-operate with No.6 in Defense of that part of the Bay". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	"Proprietor – Mr. Kent". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1805	Battery armed with 24-pounder guns. Ref: PRO HO 100/132 1806 f.39-40	Manuscript	Kew
1807	Conveyance between Bishop of Kildare & Col. B. Fisher dated 5 th February 1807	Deed	Military Archives
Undated	"No. 4 or Maghera Point Tower and 2 Batteries, with the ground enclosed between them – Conveyance for Ever from 1806, from John Roberts & Edward Kent Esq. No rent. A similar conveyance from the same persons signed the Ground on which No. 5 Battery stood, which has since been dismantled, the materials solds and the ground given up" noted in 1830 return. WO 55 2685	Manuscript	Kew
1810	Battery No. 5 discontinued. PRO WO 55/835	Manuscript	Kew
1811	Return dated 29 th January 1811 proposing a	Manuscript	Kew

	sum of £3000 "To build a Tower at No. 5 south side in place of the Battery which it is proposed to Dismantle". WO 55 835		
1812	29 th December 1812 letter to Lieutenant General Mann, noting that the Office of Ordnance " in consequence of your recommendation has approved of the Battery No. 5 being dismantled" WO 55/835	Manuscript	Kew
1815	Position not marked. Noted as dismantled	Map	TCD MS 2182
1816	"This Battery was Demolished in 1816 by order" 1825 return WO 54 757	Manuscript	Kew
1816	Position not marked.	Map	Taylor
1821	Position not marked.	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position not marked. WO 44/109	Map	Kew
1826	"No.5 Battery - Demolished". WO 54 747	Manuscript	Kew
1829	"No.5 Battery - Demolished". WO 54 747	Manuscript	Kew
1837	Western section of battery shown on cliff edge overlooking Loughlinstown River, appearing as a series of defensive walls with two conjoined rectangular structures.	Map	OS
1866	The 25-inch map notes "Old Battery (Ruins of) and indicates two rectangular buildings and east and north walls approached via a footbridge over the immediately adjacent Dublin & Wicklow Railway line.	Map	TCD
1869	6-inch sheet revision. The ruined structures are indicated as on the 1837 map.	Map	OS
1912	6-inch sheet revision. The ruined structures are indicated as on the 1837 map.	Map	OS
1937	The ruined structures are indicated as on the 1837 map.	Map	OS
1999	The L-shaped battery buildings and surviving defensive walls are visible, as are earthworks indicating the original access road and the line of the former Dublin & Wicklow railway line.	Photo	National Coastline Survey
2007	Surviving remains of Battery No. 5 recorded as part of "Coastal Architecture Survey", including north and west walls, barrel-vaulted powder magazine, guard room and defensive earthworks.	Report	Dun Laoghaire Rathdown County Council

3.6 South 6 Loughlinstown, Killiney Beach

No. 6 Loughlinstown was built to prevent an invading force landing or an enemy ship finding safe anchorage to the Loughlinstown river area of Killiney Bay, was complemented by batteries Nos. 5 and 8, and No 7 tower and battery to higher ground inland of the beach. The tower was used by the Preventative Water Guard (later the Coast Guard) from at least the 1820s. The 1852 Board of Ordnance drawing shows the tower set in a semi-circular battery fronted by four gun emplacements, with detached guard houses to north and south. The construction of the Dublin & Wicklow railway line in the mid-19th century adjacent to the tower site, led to the construction of the bridge across the railway and the positioning of numbered stone boundary markers indicating War Department property, at least one of which ("W ↑D No. 15") survives⁸⁵. The tower was let out from at least 1874, and was sold in 1909.

This tower and battery is located at the end of a cul-de-sac at Strand Road on Killiney Beach to the south of the railway station. The tower is in private ownership, and was previously converted to a residence with the addition of an additional two storeys on top of the tower and additional buildings and structures built within and abutting the tower and battery. The tower and site are (2007-2008) undergoing refurbishment works.

Year	Description	Type	Source
1804	"No. 6 Tower & Battery left of Loughlinstown river. To defend the Anchorage and beach to the right & left of the River". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	"Proprietor - Mr. Day or Sherwood". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	"thofe from Dalkey to Bray are nearly finifhed". The Freeman's Journal. September 29 1804	Text	The Times
1805	Tower armed with one 18-pounder gun. Ref: PRO HO 100/132 1806 f.37, 39-40	Manuscript	Kew
1807	"Battery and Tower No. 6 Loughinstown. Conveyance for Ever from February 1807 from the Dean and Chapter of Christ Church and others - for a consideration of £943.17s.6d. Irish. No rent. Being a portion of the lands of Killiney and Loughlinstown. A Right of Passage is reserved to the Proprietors & occupiers through the Road" noted in 1830 return. WO 55 2685	Manuscript	Kew
1807	Transfer between Lord Bishop of Dublin and Col. Benjamin Fisher is recorded on 5 th February 1807	Deed	Military Archives
1810	Watercolour by William Westall, 1810 showing Martello Tower No. 6 at Loughlinstown having an attached single storey structure to NW, & Martello Tower No. 9 Dalkey Island visible on the highest point of the island. Pearson (1998, P.21).	Painting	Pearson (1998)
1815	Position marked "Loughlinstown River 6"	Map	TCD MS 2182
1815-	"View of Kiliney" attributed to Henry Brocas	Engraving	NLI

1837	Sr. (ca.1798-1873) showing position of tower.		
1816	"Tower" marked showing no adjacent detail, with "Military Road" and "Martello Farm" some distance to N.	Map	Taylor
1821	"Tower", no position marked	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1825	"One 18 Pounder on Tower, Four 24 Pounder Guns on Battery - Dismounted...The Preventative WAtE Guard have charge of the Guard houses but do not occupy them during the summer months" WO 54 757	Manuscript	Kew
1826	"The Tower is in good condition, the Guard Houses in the Battery are in charge of the Water Guard and are in good order" WO 54 747	Manuscript	Kew
1829	"No. 6 Tower Loughlinstown. A Round Tower Constructed for 16 Men with a Store Room and Water Tank - Bombproof. Constructed for One 18 Pounder for the defence of the beach of Killiney Bay. One pane of glafs broken and the Cistern out of repairs. Ordnance Dimounted. One 18 Pd Gun garrriage and traversing platform given over the Storekeeper in Dublin". WO 54 757	Manuscript	Kew
1829	"No. 6 Battery Loughlinstown. There is in this Battery a Guard House for an Officer and 30 Men, also a furnace for heating shot, constructed for 4 - 24 Pdrs for the defence of the beach of Killiney Bay. A part of the parapet wall out of repair. Guard House in the Battery in charge of the Preventative Service - and in good order. One pane of glafs broken by the wind. Ordnance Dimounted. 4 - 24 Pdrs Gun garrriages and traversing platforms given over the Storekeeper in Dublin". WO 54 757	Manuscript	Kew
1830	In use by Preventative Service Water Guard to prevent smuggling. PRO WO 55/2684	Manuscript	Kew
1831	Plan showing four gun emplacements on a sandy foreshore set in a semi-circular ring, with a Tower (A) and flanking Guard Houses (B & C), with steps and an unspecified structure, possibly a shot furnace. WO 55 2685	Plan	Kew
1837	Plan dated 4 th Sept 1837 showing distances to HWM (high water mark), boundaries, and "Diameter of Boundary" & "Diameter of Tower".	Plan	Military Archives
1842	Tower not shown.	Engraving	Bartlett
1849	"I should prefer retaining rather than selling the Towers which now exist between Bray Point and Dalkey Island. These Towers are in general good repair. Three No. 2, 3 and 6 are occupied by the Coast Guard at Mount Park, Cork Abbey and Loughlinstown". WO 44/120. 1 st October 1849	Manuscript	Kew
1850	Tower visible set back from foreshore showing no adjacent buildings or roads.	Drawing	T.R. Harvey
1852	No. 6 Loughlinstown indicating five boundary stones, guard houses to N & S, and four gun emplacements to east. Seaward boundary	Plan	Kew

	defined by "dry rubble wall", and tower approached by pathway from SE at beach. MPHH 1 654		
1853	Letter dated 8 th August 1853 from Colonel Emmet, Commanding Royal Engineer in Ireland in letter regarding proposed occupation fo some towers by the Coast Guard "The Invalid at killiney resides in the "Toer" there, and the Invalid at Dalkey occupies the "Battery".. The Battery at Killiney appears by Inspection Report dated Dublin 31 st May 1852 to be "Totally out of Repairs";- If the Guard Houses in the "Battery" be put in repair, the Coast Guard can occupy them:- and at Dalkey they can be accommodated in the "Tower":- thus leaving the 2 Invalid Gunners undisturbed, and will enable the men of the Coast Guard to perform their duties at the said posts" MPEE 1/248	Manuscript	Kew
1853	Armament upgraded from 18-pounder to 24-pounder cannons. PRO 55/851, letter dated 10 th December 1852.	Manuscript	Kew
Undated, post 1853	"An oil painting of the Warren family viewing some of their property at Ayesha Castle" post 1853 (construction date of Ayesha, formerly Victoria, Castle) showing Towers 3, 4, 6, & 7 but not Battery no. 5. Pearson (1998, P.58)	Painting	Pearson (1998)
1854	3 rd April 1854, agreement for construction of Bridge and access road to tower between Ordnance & Railway.	Manuscript	Military Archives
1855	"I am directed to acquaint you [the Inspector-General of Fortifications] that upon enquiry of ... the Coast Guard it appears that No.6 Tower is still required for the occupation of the Coast Guard but that No.10 Tower can be appropriated as proposed [to place Invalid Artillerymen in charge]" WO 44/120. 5 th September 1855	Manuscript	Kew
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnery 2006:119
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
1862	Noting 12 NCOs, 30 powder barrels and capacity for 465 gallons of water.	Plan	Military Archives
c.1862-1900	Undated plan showing site, adjacent landowners as Letting No. 314 "Traced by A.M. Sutton 18.4.10.	Map	Military Archives
1866	Painting c.1866 by Du Noyer showing Tower with machicolation.	Painting	GSI
1869	6 inch sheet revision: The tower has been erased for military security purposes.	Map	OS
1869	6 inch map revision sheet titled "Dublin Plan shewing in Red - Foreshoes of War Department at No. 4 Tower Maghera Point and No. 6 Tower Loughlinstown" showing the martellos in place & extent of War Department property in red, to include all exposed shingle foreshore. MPEE 1 248	Map	Kew
1874	Tower noted as letto Sir J. Gray without armament, and in "Good" condition, probably disarmed in 1869. PRO 35/34 & 35/40	Manuscript	Kew

1892	Erection of Gates noted with rental income	Manuscript	Military Archives
1895	Tenancy agreement between WO and Mrs O'Connor, tenant, construction of stone steps accessing "parapet of tower" on 25 th March 1895	Manuscript	Military Archives
1905-6	Boundary stones indicated as "BS W↑D" Nos. 13, 15, 12, 2 7 3 marked to Tower Bridge area to north, with "BS W↑D" Nos. 5, 11, 10, 6, 7 & 9 marked to the tower site.	Map	OS
1909	26 th March 1909 showing transfer to Carrie M. O'Connor, Inisfail Island, Drumshambo, Leitrim & Philip F.S. Stokes, 4 Stone Buildings, Lincolns Inn, London WC for £500.	Deed	Military Archives
1970	Friday, July 17, 1970 "The Tower, Strand Road, Killiney" offered for sale at auction. Photo shows stair access and rendered pillbox with two rectangular windows visible constructed to enclose the gun platform. Tower accessed by staircase running up the side of the building.	Text	Irish Times

3.7 South 7 Tara Hill, Killiney

No. 7 Tara Hill is located on the Killiney Hill road, and is visible through an iron gateway penetrating the high masonry wall which encloses the site. The site is in private ownership and has been undergoing conservation works for some years which intends to return the site, the tower, battery and a number of other structures to their early 19th century appearance. This Martello Tower is unique in having a battery and defensible guardhouse attached to one side of the tower. The battery held three gun emplacements which can still be observed in the conserved battery wall. The site is located on high ground, and unlike other Dublin series towers, is positioned well back from the shoreline, commanding a view of Killiney Bay and the landward routes to Dublin visible to the south-west. The site has been recorded in a number of landscape paintings and engravings of Killiney Bay in the 19th and 20th centuries including Bartlett in 1842 and Du Noyer in 1866.

Year	Description	Type	Source
1804	"No. 7 Tower & Battery on Tarrong Hill. This work will stand on a very Commanding eminence, will protect the Batteries below to the right & left, and see the Roads from Bray, Loughlinstown and Dublin". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	"Proprietor - Mr. Willock". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	"thofe from Dalkey to Bray are nearly finifhed". The Freeman's Journal. September 29 1804	Text	The Times
1805	Tower armed with one 18-pounder gun. Ref: PRO HO 100/132 1806 f.39-40. Battery armed with 24-pounder guns.	Manuscript	Kew
1807	"Battery and Tower No. 7 Tara Hill. Conveyance for Ever from February 1807 from the Dean and Chapter of Christ Church and others - for a consideration of £943.17s.6d. Irish. No rent. Being a portion of the lands of Killiney and Loughlinstown. A Right of Passage is reserved to the Proprietors & occupiers through the Road" noted in 1830 return. WO 55 2685	Manuscript	Kew
1815	Position marked "Tarah Hill 7"	Map	TCD MS 2182
1815-1837	"View of Kiliney" attributed to Henry Brocas Sr. (ca.1798-1873) showing tower, machicolation, flagstaff, cannon, but omitting the battery.	Engraving	NLI
1816	"Tower" marked showing no detail.	Map	Taylor
1821	"Tower", no position marked	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1825	"One 18 Pounder on Tower, Three 24 Pounder Guns on Battery - Dismounted. The Tower is in good order having been repaired. The Lock to Tower is supplied and the Glafs mended" WO 54 757	Manuscript	Kew
1826	"The Tower and Battery is in god order, the [illegible] of the Barrack Room is broke and	Manuscript	Kew

	some slates are stripped off by the wind" WO 54 747		
1829	"No. 7 Tara Hill. Round Tower Constructed for 16 Men Bombproof with a Store Room and Water Tank. Constructed for One – 18 Pounder for the defence of Killiney Bay. One pane of glafs broken in the tower, pointing required at the top. One Window frame blown out and two panes of Glafs by storm. Ordnance Dimounted. One 18 Pd Gun garriage and traversing platform given over the Storekeeper in Dublin". WO 54 757	Manuscript	Kew
1829	"No. 7 Battery Tara Hill. A Guard House in the Battery connects with the Tower, and is defensible with accommodation for 16 Men. Constructed for 3 – 24 Pdrs. For the defence of Killiney Bay. Ordnance Dimounted. 3 - 24 Pd Gun garriges and traversing platforms given over the Storekeeper in Dublin. No magazines in this Battery. One Portable Magazine Unservicable". WO 54 757	Manuscript	Kew
1831	Plan showing three gun emplacements set in a sub-rectangular area, with a Tower (A) and attached Guard House (C), boundary walls, entrance to Killiney Hill road, and two unspecified structures set against the north wall. WO 55 2685	Plan	Kew
1837	Plan dated 4 th Sept 1837 noting "Diameter of Boundary" & "Diameter of Tower".	Plan	Military Archives
1837-1837	"Martello Tower" showing structure attached to SE quadrant and sub-rectangular battery position extending to SE.	Map	OS
1842	Showing position of tower, battery not shown.	Engraving	Bartlett
1848	"MARTELLO TOWER, No.7 - - Harris, gunner in charge"	Text	Thoms Directory
1850	"MARTELLO TOWER, No.7 W. Maybury, gunner in charge"	Text	Thoms Directory
1850	Tower not visible.	Drawing	T.R. Harvey
1853	Armament of tower upgraded from 18-pounder to 24-pounder cannons. Battery armament upgraded from three 24-pounders to three long 32-pounders. PRO 55/851, letter dated 10 th December 1852.	Manuscript	Kew
Undated, post 1853	"An oil painting of the Warren family viewing some of their property at Ayesha Castle" post 1853 (construction date of Ayesha, formerly Victoria, Castle) showing Towers 3, 4, 6,& 7 but not Battery no. 5. Pearson (1998, P.58)	Painting	Pearson (1998)
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnery 2006:119
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
1862	Dated 1862 drawing, showing detail of battery, stone shed attached to SE quadrant, external stairs/ladder, coal store, piggery and privy to north wall of sub-rectangular boundary wall. 4 boundary stones, a coach building and Master-Gunners store & yard, and a tool house are found to	Plan	Military Archives

	the SW. Plan notes 12 NCOs and capacity for 490 gallons of water. MALLF.		
1866	Painting c.1866 by Du Noyer showing Tower with cannon, flagstaff & machicolation, with 2 cannons and stepped battery below (Croke 1995).	Painting	GSI
1869	6 inch sheet revision: The tower has been erased for military security purposes.	Map	OS
1874	Tower noted as let to Mr Courtney and disarmed and in "Good" condition, probably disarmed in 1869. PRO 35/34 & 35/40	Manuscript	Kew
1887-1890	Valuation and consideration of offers to purchase tower. Offers declined.	Files	Military Archives
1909	Conveyance between W.O. and George Francis Stewart of Summer Hill, Killiney, dated 26 th March 1909.	Deed	Military Archives
1966	Aerial Photo by BKS Consultative Technical Services Ltd shows overgrown site with site overgrown, rectangular building at NW section of site, and conglomeration of structures to SW corner of site.	Photo	DLRCOCO

3.8 South 8 Limekiln Battery, Killiney

This battery was built to defend the northern end of Killiney Bay, and the site is currently occupied by a private residence and the railway line. The site originally appeared as battery defences to the east, with guard-houses arranged in an L-shape to the rear (west) of the site. The site was sold in 1853 to allow for railway development, and the defensive works were removed when the railway line was laid. The L-shaped guard houses survived for some time after this, appearing on the 1937 ordnance survey map of the site, with other buildings also occupying the site. The site is in private ownership and not accessible, and the extent of and fabric of the guard houses or other structures related to the Battery which may have been retained on site or incorporated within the newer structures, is unknown.

Year	Description	Type	Source
1804	"No. 8 Battery near the Lime Kiln. This work is well situated for the Strand, and will scour apart, but imperfectly seen from No.7". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	"Proprietor - Mr. Sherwood". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1805	Battery armed with 24-pounder guns. Ref: PRO HO 100/132 1806 f.39-40	Manuscript	Kew
1807	"Battery No. 8 Killiney. Conveyance for Ever from February 1807 from the Dean and Chapter of Christ Church and others - for a consideration of £943.17s.6d. Irish. No rent. Being a portion of the lands of Killiney and Loughlinstown. A Right of Passage is reserved to the Proprietors & occupiers through the Road" noted in 1830 return. WO 55 2685	Manuscript	Kew
1815	Position marked "Limekiln Battery 8"	Map	TCD MS 2182
1816	"Battery" indicated with access from coastal path via Vico Road to north.	Map	Taylor
1821	"Tower", no position marked	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1825	"Four 24 Pounders Dismounted.... The roof if the Guard House is repaired since last report" WO 54 757	Manuscript	Kew
1826	"The Magazine flooring is bad, four squares of Glass has been broken by the wind" WO 54 747	Manuscript	Kew
1829	"No. 9 Battery Limekiln- An enclosed Work - Surrounded by a ditch then are Guard Houses for Officers and 30 Men which are loop holed, and a furnace for heating shot - Constructued for 4 - 24 pdrs for the defence of the Beach of Killiney Bay. Four squares of glafs broken by the wind, the door of Furnace unfit for use, roof of Guard house requires repairs, and floor the same. The step ladder into	Manuscript	Kew

	the battery is quite unfit for use. Ordnance Dismounted 4 - 24 Pd Gun Carriage and Traversing Platform given in to the Storekeeper in Dublin", WO 54 757		
1831	S"Road to Towers Nos. 6 & * near Killiney". WO 55 2685	Plan	Kew
1831	No. 8 showing four gun emplacements to an angled work set in a rectangular coastal plot, having an L-shaped Guard Houses labeled A,B & C to rear, and unspecified rectangular structures. WO 55 2685	Plan	Kew
1837-1843	"Battery" showing L-shaped structure to west, with sub-circular enclosure overlooking slope to east, at south-east corner of field adjacent to shore.	Map	OS 1 st Edition
1850	Battery not visible.	Drawing	T.R. Harvey
1852	Battery No.8 – Nov 19 th 1852 The basement of the Blockhouse flooded with sketched cross-section of ditch. WO 44/120	Manuscript	Kew
1853	Mentions earlier report citing "The Battery at Killiney appear by the Inspection report dated Dublin 31 st May 1852 to be "totally out of repair" ".WO 44/120	Manuscript	Kew
1853	Letter dated 18 th August 1853 "there does not appear to be objection to the occupation by the Coast Guard of the whole of the Towers and Battery Houses from Bray to Bullock under the usual regulations and with the exception of No. 8 Battery at Killiney which is to be surrendered to the Railway Company". MPEE 1/248	Manuscript	Kew
1853	No. 8 Lime Kiln Battery sold, letter dated 10 th December 1853. PRO WO 55/851	Manuscript	Kew
1869	6 inch sheet revision: The L-shaped guardroom buildings are marked on the map, however the battery wall to the east is now the site of the railway line.	Map	OS
1905-6	The L-shaped guardroom survives as marked on the 1869 map.	Map	OS
1912	L-shaped guardroom indicated.	Map	OS
1937	The L-shaped guardroom survives as marked on the 1869 map.	Map	OS
1966	Aerial Photo by BKS Consultative Technical Services Ltd shows L-shaped guardrooms as marked on 1869 map.	Photo	DLRCOCO
1999	No trace of the L-shaped guardrooms survives, with a new rectangular building occupying the site.	Photo	National Coastline Survey
2001	Mortar Analysis	Report	Pavia & Bolton (2001c)

3.9 South 9 Dalkey Island

The tower and battery on Dalkey Island are two of the most visible buildings in the Dublin series of Martello Towers, and the tower especially is one of the most distinctive landmarks of Dublin Bay. The buildings are in local authority ownership, and are unoccupied and in a derelict condition.

The Dalkey Island tower is unique as it was the only tower known to be constructed without a doorway, with access instead gained via a ladder which was secured to the roof platform. The 'double tower', so-called as it mounted two rooftop cannons, was later altered with a new doorway inserted at first-floor level in a different quadrant of the tower (to allow for the winding stairs contained within the wall and to make use of the rising topography of the surrounding rocky ground) sometime between 1862 and 1886. The interior of the tower was also altered, with an iron beam inserted to support the first floor, and the arrangement of the basement altered with the addition of brick walls (the originals visible as masonry walls). The tower has a number of immediately ancillary features including boreholes from a rocket signaling station and the original quarry. The Battery is of multi-phase construction, with additional accommodation added to the rear of the battery, and alterations to the Guard Rooms. Its development can be traced through comparison of drawings and maps from 1831, 1837/8, 1852, 1862 and later ordnance survey mapping.

The tower and battery considered for use by the Coast Guard and unoccupied for a period in the 1850s. Dalkey Island was re-manned and occasionally re-armed until the evacuation of all military personnel in 1886. The buildings remained in War Department ownership and were intentionally omitted from lists of towers to be sold in 1897. The site remained in public ownership and passed into the possession of Dun Laoghaire-Rathdown County Council in 1913, though remained in use by the Commissioners of Irish Lights until 1933 for the storage of explosives.

Year	Description	Type	Source
1804	"No. 9 Tower & Battery on Dalkey Island. For the Defence of the Sound, and passage between the Muglins, to keep an Enemy's boats & vessels at a Distance and oblige them to work up to fetch the South Bull". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	"Proprietor - Mr. Sherwood or Heslor". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	"thofe from Dalkey to Bray are nearly finished". The Freeman's Journal. September 29 1804	Text	The Times
1805	Costs: "Mason work done for the Rt. Honble, Lieut-General Lord Cathcart, Commander of His Majesty's Forces, at the Martello Tower No 8 on Dalkey Island, furnishing Materials by Wm. Ross, extra more than on a common	Text	Kelly (1940)

	cut stone Tower" in February and March 1805, the amount being £1177 18s. 1d."		
1805	"Dublin, 5 th April 1805 ... And I have to request that 24 Pounder Guns may be substituted on the Battery at Dalkey Island in stead of 18 Pounders". MFQ 1	Manuscript	Kew
1805	"The island of Dalkey in the bay of Dublin, is now fortified with a Martello Tower" 10/6/1805	Text	The Times
1805	Tower armed with two 24-pounder guns. Ref: PRO HO 100/132 1806 f.39-40. Battery armed with 24-pounder guns.	Manuscript	Kew
1805	"On Wednefday last, a duel was fought on Dalkey ifland, between Captain Farmer and Murray, of the 47 th foot: - after exchanging two fhots each ... was slightly wounded Captain Murray, the Lieutenant of the Martello Tower on the Ifland interferred, and the affair was amicably adjufted" The Times. 13/6/1805	Text	The Times
1805	"the forming of the small harbours for the protection of the Boats in bad weather, one at Bullock, the other on Dalkey Island". HO 100 132	Manuscript	Kew
1807	"the whole of Dalkey Island, on which Battery and Tower No. 9 Stands. Conveyance for Ever from February 1807 in consideration of £600 Irish from the Archbishop of Dublin & others. No rent" noted in 1830 return. WO 55 2685	Manuscript	Kew
1807	1913 Conveyance notes on 25/2/1807 "the Right Honourable and most Reverend Father in God Charles Earl of Normanton Archbishop of Dublin, the Honourable Mary Cooke of the City of Dublin, Henry Mokamp of the said City Esquire, Esther Heppenstall and Anne Snayd of the said City widow, and John Haston of the said City Esquire"	Manuscript	DLRCOCO
1810	1913 Conveyance notes on 1/9/1810 "the said Benjamin Fisher should assign and convey the said premises together with the works of Defence and Buildings hereto erected to the Ordnance Department in trust for His Majesty, his heirs and Successors".	Manuscript	DLRCOCO
1810	Watercolour by William Westall, 1810 showing Martello Tower No. 6 at Loughlinstown having an attached single storey structure to NW, & Martello Tower No. 9 Dalkey Island visible on the highest point of the island. Pearson (1998, P.21).	Painting	Pearson (1998)
1815	Position marked "Dalkey I. 9"	Map	TCD MS 2182
1816	"Tower" and "Battery" indicated.	Map	Taylor
1821	"Tower", no position marked	Map	Duncan
1825	"The Tower is very damp from being so [word missing] as also its Magazine and the woodwork of the sistern is rotten. The roof of the Magazine of the Battery has been repaired since last sinpsection and also the fourn pains of Glafs in the Guard Houses: but one now is broken by storm as stated by the Gunners." WO 54 757	Manuscript	Kew
1826	"The plastering about the Door of the Magazine in the Battery required repairs &	Manuscript	Kew

	the Floor of the store Room of the same is rotten. The Barrack rooms require whitewashing, some slates are stripped off by the wind" WO 54 747		
1829	"No. 9 Tower Dalkey - A Round Tower Constructed for 16 Men, Bombproof with a Store room and Water Tank. Situated on an Eminence on the Main land constructed for 2 -24 Pounders for the defence of Dalkey Island and Sound. The tower ladder is in a very dangerous state - a rope is required to fasten it at top. The tank is perfectly rotten and unsafe and the pipe is broken at the bottom. Ordnance Dismounted. 2 - 24 Pd Gun Carriage and Traversing Platform given in to the Storekeeper in Dublin", WO 54 757	Manuscript	Kew
1829	"No. 9 Battery Dalkey Island- An enclosed bank having two loop holed guard houses in the [illegible] constructed for 3 - 24 pdrs. For the defence of Dalkey Island and Sound. The floor of the Store room is rotten - the trap door is quite rotten and broken - the blinds of the loop holes deficient - Door of Privy rotten - Barrack rooms require whitewash. A few slates have been blown down in the last week. Ordnance Mounted 2 - 24 Pounders ... not in a sound state but may stand 40 or 50 shocks - No. 2 gun Carriage and Traversing platform serviceable ... Ordnance Dismounted - One 24 Pd Gun Carriage and Traversing Platform given in to the Storekeeper in Dublin", WO 54 757	Manuscript	Kew
1830	"The land on Dalkey Island amounting to 21 acres of poor Pasture, is let to Mr Onley" noted in 1830 return. WO 55 2685	Manuscript	Kew
1831	Site plan showing position of Tower A in relation to coast, with three-gun battery having two rectangular structures forming guard-houses to interior. WO 55 2685	Plan	Kew
1837	DALKEY: Here is also a station of the coast-guard, the limits of which extend from Dalkey Head to Irishtown, within which are batteries at Dalkey island, Sandy Cove, and Kingstown, and nine martello towers.....About the commencement of the present century, a circle of granite blocks enclosing a cromlech was standing on the common; but the cromlech and the stones surrounding it were blasted with gunpowder and carried away, to furnish materials for the erection of a martello tower on the coast. DALKEY ISLAND: The only inhabitants are a few artillerymen stationed at the battery, which mounts three 24 pounders, and has on its summit a martello tower, which is entered from the top.	Text	Lewis
1837-1843	"Martello Tower" noted without any features. Battery to S tip of island appears as sub-rectangular enclosure with polygonal emplacement to south-east, having L-shaped building along NW (rear) wall of battery.	Map	OS 1 st Edition

1848	"Dalkey Island ... the only building on it is a Martello tower and battery of three twenty-four pounders, in charge of a few of the artillery"	Text	Thoms Directory
1850	Tower shown at apex of island.	Drawing	T.R. Harvey
1852-1858	Undated (probably 1852-1858) entitled "Ordnance Towers South of Dublin Bay Nos. 9-16 inclusive" showing relative positions of tower and battery with no detail. Battery shows extension.	Plan	Military Archives
1853	Letter dated 8 th August 1853 from Colonel Emmet, Commanding Royal Engineer in Ireland in letter regarding proposed occupation of some towers by the Coast Guard "The Invalid at Killiney resides in the "Tower" there, and the Invalid at Dalkey occupies the "Battery"... The Battery at Killiney appears by Inspection Report dated Dublin 31 st May 1852 to be "Totally out of Repairs";- If the Guard Houses in the "Battery" be put in repair, the Coast Guard can occupy them:- and at Dalkey they can be accommodated in the "Tower":- thus leaving the 2 Invalid Gunners undisturbed, and will enable the men of the Coast Guard to perform their duties at the said posts" MPEE 1/248	Manuscript	Kew
1853	Letter dated 19 th September 1853 from Colonel Emmet, Commanding Royal Engineer in Ireland "The Tower on Dalkey Island is so constructed as to means of access as to be rather dangerous as a residence particularly to a family, it is therefore under the charge of the Invalid Gunner who resides in the Battery Guard rooms contiguous to the Tower". WO 44/120.	Manuscript	Kew
1853	Letter dated 24 Sept 1853 noting "no objection to temporary occupation of "No. 4, Killiney Bay, No.9, Dalkey Island, and No.10, Bullock" by the CoastGuard. The towers were in use to store ammunition, and the Invalids were to be transferred to other locations, and the Gunners withdrawn. WO 44/120	Manuscript	Kew
1853	Battery armament upgraded from three 24-pounders to three long 32-pounders. PRO 55/851, letter dated 10 th December 1852.	Manuscript	Kew
1854	"Having reference to Boards order 19 September 1853 approving of the Building on Dalkey Island and Martello Tower No. 10 at Bullock, Dublin Bay, being handed over to the Coast Guard ... notwithstanding the Invalid Gunner in charge was removed early in December last and the Building thus left free for occupation by the Coast Guard no such occupation has taken place & the property has thus been left without any care from which has resulted some damage" WO 44/120. 18 Sept 1854	Manuscript	Kew
1854	"the Ordnance Towers at Killiney and Bullock were respectively taken possession of by Officers of the Coast Guard on the 1 st August	Manuscript	Kew

	last, and with respect to the premises on Dalkey Island, I am to state that the same will not now be required" WO 44/120. 11 October 1854		
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnergy 2006:119
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
1862	Drawing notes 12 NCOs and capacity for 870 gallons of water, showing "Tower with Store" in outline only indicating position of stairs aligned with iron rings to parapet (an not to position of existing 1 st floor entrance), and position of "winding stairs" to interior. Battery shown battery wall without showing emplacement positions with "soldiers quarters" having two "Porch"es to south face abutting a store, with a coal store against internal face of south wall, having a drain outside the battery to the east. The battery has been extended to the north-west with the addition of a square hipped roof building occupying most of the new enclosed area.	Plan	National Archives
1862	Drawing notes 12 NCOs and capacity for 870 gallons of water, showing tower in outline only indicating position of stairs. Battery shown as having extensions to rear, with soldiers quarters with "porch"es, store, and coal store against internal face of south wall, having a drain outside the battery to the east.	Plan	Military Archives
1869	6 inch sheet revision: The tower has been erased for military security purposes.	Map	OS
1874	Tower noted armed & manned by the "Coast Brigade" and in "Good" condition. Armament still listed as three 32-pounders as per 1853. PRO 35/34 & 35/40	Manuscript	Kew
1886	Tower noted armed & manned. Armament upgraded to three rifled converted 68-pounders. PRO WO 33/46	Manuscript	Kew
1886	Dalkey Island evacuated by military personnel. PRO WO 396/1 index 122	Manuscript	Kew
1888	Return showing no armament at Dalkey Battery WO 396/4, and proposing 6-inch breech-loading H.P. guns. Report No. 95	Manuscript	Kew
1897	16.1.97 G.O.C. Dublin intentionally omits from list of towers to be disposed of.	Manuscript	BWDP
1913	Lease dated 13/2/1913 between "His Majesty's Principal Secretary of State for the War Department to the Commissioners of Irish Lights" that "the building thereon known as Number Nine Martello Tower (at present used by the Commissioners as a storage for explosives for signaling purposes", with accompanying sketch showing "steps to tower" to rocky outcrop to NE of tower, and steps to tower entrance at SE quadrant of tower.	Manuscript & Plan	DLRCOCO
1913	Conveyance dated 18/4/1913 between the War Department and Dalkey Urban District Council for £575 to "grant and convey unto	Manuscript & Plan	DLRCOCO

	the Council All those two Islands known respectively as Dalkey Island and Lamb Island above high water mark together with the buildings thereon ..."		
1920	"At the south-eastern extremity of the island is a dismantled battery, and adjoining, on high ground, is a Martello tower, the entrance to which was originally constructed on the top with a view to affording extra security, but was subsequently altered to the side".	Secondary	Joyce
1933	Comissioners of Irish Lights serve "formal notice of the surrender by the Commissioners of the Martello Tower on Dalkey Island" on 10/6/1933.	Manuscript	DLRCOCO
1935	"DALKEY ISLAND CEREMONY CROWNING OF THOMAS THE FIRST", " Cheers were raised for Thomas the First upon landing and , to the music of pipes, he proceeded with his attending dignitaries, to the dais beside the Martello Tower...". 5/8/1935	Text	Irish Times Archive
1937	"King Thomas the First of Dalkey solemnly abdicated yesterday in the presence of nearly two thousand of his liege subjects assembled in the capital of the historic kingdom – on the high ground near the Martello Tower ...", 2/8/1937	Text	Irish Times Archive
1959	"According to Dublin City Councils records, the Dun Laoghaire Borough Corporation is the rated owner of Dalkey Island ... the 23 acres 7 perches of the island appeared on the County Council valuation lists and the Dun Laoghaire Borough Corporation was entered as liable for a rateable valuation of £4 on the Martello Tower".	Text	Irish Times Archive
1999	Digital aerial images showing the layout of the battery, and the tower.	Photo	National Coastline Survey
2005	Assessment of significance and vulnerability of the tower and the battery in the context of a Draft Heritage Management Report commissioned by Dun Laoghaire-Rathdown County Council.	Report	Bolton et al (2005)

3.10 South 10 Bartra Rock, Bullock

The tower was constructed to protect the approaches to Bullock Harbour and the anchorage of Dalkey Sound. The originally quarry for the tower can be observed on the seaward side of the tower, positioned and shaped to add an additional defensive element to the site. The tower is in private ownership, and currently being converted to residential use. The site is located in private grounds on Harbour Road, Bullock. The position of the tower impacted on the design of the adjacent Bartra House, whose building height was limited to prevent interference with its line of fire and visibility over Dalkey Sound.

The tower remained in military occupation and was not let out to private tenants, though was left unoccupied between 1853 and 1855 when the Coast Guard were considering it as a possible station. The tower was re-occupied by the military, but disarmed and vacated of military personnel in 1879. A navigation mark painted on the seaward elevation of the tower for position-fixing c.1888 still survives. The site plot, consisting of a circular enclosure wall and approach road, was altered by late 20th century development of the site which altered the approach road and extended land for development into the foreshore area.

Year	Description	Type	Source
1804	"No. 10 Tower at Bullock. To protect the little harbour of Bullock & that part of the shore of Dalkey Sound". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	"Proprietor – Ballast Corporation". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1805	Tower armed with 18-pounder guns. Ref: PRO HO 100/132 1806 f.39-40	Manuscript	Kew
1806	"No. 10 Tower. Bullock. Conveyance for Ever from February 1806 from the Earl of Carysfort and others. No consideration. No rent." noted in 1830 return. WO 55 2685	Manuscript	Kew
1810-1846	Drawing by J.H. Brocas (ca.1790-1846) showing tower behind masonry wall, with machicolation, cannon and flagpole. Ref: NLI 2126(tx)29.	Drawing	NLI
1815	Position marked "Bullock 10"	Map	TCD MS 2182
1816	"Tower" indicated showing adjacent houses to east.	Map	Taylor
1821	"Tower", no position marked	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1825	"One 18 Pounder Gun Dismounted. The Tower is shut up by order" WO 54 757	Manuscript	Kew
1826	"This Tower is shut up by order" WO 54 747	Manuscript	Kew
1829	"No. 10 Tower Bullock – A Round Tower Constructed for 16 Men, Bombproof with a Store room and Water Tank. Situated on an Eminence on the Main land constructed for one 18 Pounder for the defence of Dalkey Island and Sound. Ordnance Dismounted.	Manuscript	Kew

	One 18 Pd Gun Carriage and Traversing Platform given in to the Storekeeper in Dublin", WO 54 757		
1831	Site plan showing position of Tower and circular plet in relation to coast, Bullock Harbour and Harbour Road. WO 55 2685	Plan	Kew
1837-1843	"Martello Tower" noted within circular enclosure, with structures to SW, NW & SE quadrants, approached by pathway from SSW.	Map	OS 1 st Edition
1839	Section drawing showing height of Martello tower at Bullock dated 20/8/1839 showing adjacent "house to be erected on the property of Edward Alderman Esq".	Plan	Military Archives
1841	"Dublin Bay: Sketch of the Coast on the southern extremity of the Bay, shewing the positions of the Towers and Batteries for its defence. 30 Nov 1841". Marked position of tower only. MFQ 1 520	Map	Kew
1842	Of Dublin Bay from Dalkey hill showing tower as coastal landmark on low hill.	Drawing	Bartlett
1850	Tower not visible.	Drawing	T.R. Harvey
1852-1858	undated (probably 1852-1858) entitled "Ordnance Towers South of Dublin Bay Nos. 9-16 inclusive" showing curtilage wall, 5 boundary stones, privy and well at existing [2007] stairwell.	Plan	Military Archives
1852	Armament upgraded from 18-pounder to 24-pounder cannons. PRO 55/851, letter dated 10 th December 1852.	Manuscript	Kew
1853	Letter dated 8 th August 1853 from Colonel Emmet, Commanding Royal Engineer in Ireland in letter regarding proposed occupation fo some towers by the Coast Guard "With respect to the Tower at Bullock, the Invalid Gunner in Occupation of it, can be removed to No.3 tower, Old Cork, where there is at present an Effective Gunner and Driver" MPEE 1/248	Manuscript	Kew
1853	Letter dated 24 Sept 1853 noting "no objection to temporary occupation of "No. 4, Killiney Bay, No.9, Dalkey Island, and No.10, Bullock" by the Coast Guard. The towers were in use to store ammunition, and the Invalids were to be transferred to other locations, and the Gunners withdrawn. WO 44/120	Manuscript	Kew
1854	"Having reference to Boards order 19 September 1853 approving of the Building on Dalkey Island and Martello Tower No. 10 at Bullock, Dublin Bay, being handed over to the Coast Guard ... notwithstanding the Invalid Gunner in charge was removed early in December last and the Building thus left free for occupation by the Coast Guard no such occupation has taken place & the property has thus been left without any care from which has resulted some damage" WO 44/120. 18 Sept 1854	Manuscript	Kew
1854	"the Ordnance Towers at Killiney and Bullock were respectively taken possession of by Officers of the Coast Guard on the 1 st August last, and with respect to the premises on	Manuscript	Kew

	Dalkey Island, I am to state that the same will not now be required" WO 44/120. 11 October 1854		
1855	Keys of No.10 Tower bullock returned to Master Gunner. WO 44/120. 24 th September 1855	Manuscript	Kew
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnery 2006:119
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
1862	1862 drawing. 2 copies (b&w and hand-coloured). Coloured copy shows encroachments (Letting No. 593), with the tenant named as Mrs. L. Broth. An ash pit is marked behind the well.	Plan	Military Archives
1862	Painted 1862 drawing showing War Department property in blue, and noting encroachments to approach road in red as: 1. Window looking out on 2. Doorway opening on 3. Projection of eaves of stable roof on 4. Palisade & gate across W.D. road Note beside tower states "end No.2504. Letting No. 593".	Plan	National Archives
1869	6 inch sheet revision: The tower has been erased for military security purposes.	Map	OS
1870-1874	"Church-road <i>The Tower</i> - James Withers, Coast Brigade, R.A."	Text	Thoms Directory
1874	Tower noted armed & manned by the "Coast Brigade" and in "Good" condition. Armament previously upgraded to three 32-pounders. PRO 35/34 & 35/40	Manuscript	Kew
1879	Tower noted as vacated in 1879 in Return for 1886. PRO WO 33/46	Manuscript	Kew
1888	Return showing no armament at Bullock Tower. A 6-inch B.L.H.P. gun is proposed. The tower is in use as a "position-fixing" station. WO 396/4. Report No. 95	Manuscript	Kew
1880-1900	"Bullock Harbour, Dalkey" showing upperworks of tower showing machicolation, chimney and flagpole. Ref: NLI LROY8920.	Photo	NLI
1887	19.7.87. "Sale recommended Tower and Land. Rent of Let £6.00"	Manuscript	BWDP
1897	16.1.97. "Dublin includes for disposal. Letting No. 593. Rent of Let £6.00"	Manuscript	BWDP
1930-1950	Photo of Dublin Bay from Dalkey hill showing tower as coastal landmark on low hill. Ref: NLI val25379.	Photo	NLI
1936-1937	"Martello Tower" noted within circular enclosure, with structures to SW and NW quadrants (NB existing privy to SE omitted).	Map	OS
1950	"For Sale ... Bartra, Harbour Road, Dalkey ..Also in the grounds is a Martello Tower for which a yearly rent of £[illegible] is paid to the Board of Works"	Text & Photo	Irish Times
1959	"For sale, Bartra, Dalkey, Co. Dublin includes martello tower within the sale". 6/6/1959	Text	Irish Times
1982	Plans (ground floor, first floor, roof plan, parapet) and Elevations (exterior & cross-section) of the Martello Tower published.	Plans	Craig (1982)

1994	Single photo from NE (below quarry face). Dated 24/9/1994.	Photo	ASI
2006	Conservation Reports identifying historic quarry face to north side of promontory, undertaking mortar analyses of pointing & bedding mortars.	Report	Bolton (2006)

3.11 South 11 Sandycove

Sandycove, due to its association with James Joyce's *Ulysses* is probably the most famous and most photographed Martello tower in the world. The tower and adjacent battery were built to defend the approaches and anchorages of Bullock Harbour and Scotman's Bay, and remained in active military use until 1897. The tower and battery were let out as individual sites to private tenants from 1897, including Oliver St. John Gogarty, whose most famous guest was James Joyce. The tower and battery were offered for sale by the War Department in 1910 and passed into private ownership. The immediate area has been substantially altered by quarrying of both the foreshore and of much of the promontory on which the tower stands, and with the construction of Sandycove Harbour and the use of the site as the "Forty Foot" bathing place. The tower has been restored, is occupied and is in use as a museum focusing on the life and works of James Joyce. The battery is in private ownership and has been converted to residential use.

Year	Description	Type	Source
1804	Letter from John Murray Ref. NLS 19,826 f.214 stating "I have 180 men at work first at Sea pint near the Black Rock and at a Battery near Dun Leary of four guns and three gun battery at Glasstool and a four gun Battery on the low rock at Sandcove[.] Lord Cathcart and the Engineers wished me to take more but I was afraid I could not finish in the time they wished [.] these four jobs I will finish before the first of Jany. 1805, as they are all [word unclear] begun and only one month since I agreed the contract is £5418".	Manuscript	NLS
1804	"No. 11 Tower & Battery on Sandycove Point. To command the anchorage and Defend Scotchmans bay". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	"Proprietor - Ballast Corporation". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1805	Tower & Battery No. 11 assigned 1 officer & 30 men. Ref: NLI MS 1,122 (Kilmainham Papers), P.334	Manuscript	NLI
1805	Tower armed with 18-pounder gun. Battery armed with 24-pounders & two 10-inch mortars. Ref: PRO HO 100/132 1806 f.39-40	Manuscript	Kew
1806	"No. 11 Tower & Battery. Sandy Cove. Conveyance for Ever from February 1806 from the Earl of Carysfort and others. No consideration. No rent." noted in 1830 return. WO 55 2685	Manuscript	Kew
1815	Position marked "Sandycove 11"	Map	TCD MS 2182
1816	"Tower" and "Battery" indicated, having access path/track from south.	Map	Taylor
1820	"Martello Tower" within circular plot drawn at 1 inch:270 feet, showing adjacent battery (with 2 buildings to southern quadrant) on shoreline, and east-west coastal pathway from creek.	Map	Rennie

1821	"Tower", no position marked	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1825	"One 18 Pounder on Tower, Three 24 Pounder Guns on Battery - Dismounted. , Two 24 Pounder Guns on Battery - Mounted. The Tower and Battery are under charge of the Preventative Water Guard and are in excellent order... The Tower is in good condition" WO 54 757	Manuscript	Kew
1826	"The Tower and Battery are occupied by the Preventative Water Guard and are in excellent order" WO 54 747	Manuscript	Kew
1829	"No. 11 Tower Sandycove - A Round Tower Constructed for 16 Men, Bombproof with a Store room and Water Tank -. Constructed for one 18 Pounder for the defence of Kingstown Harbour and approach to it. The lid of the Cistern is out of repair the Water Pipe is stopped up - the Tower is occupied by the Preventative Water Guard and is in good order. Ordnance Dismounted. One 18 Pd Gun Carriage and Traversing Platform given in to the Storekeeper in Dublin", WO 54 757	Manuscript	Kew
1829	"No. 11 Battery Sandycove - An enclosed work about 40 yards distant from ther Tower having loop holes Guard Houses in the [illegible] with the accommodation for 16 Men. The accommodation here has been temporarily altered/by permission/ for the convenience of the naval Officers at this Station ... this Battery is occupied by the Preventative Water Guard and is in excellent order. Ordnance Mounted. No 1 Gun Carriage .. Traversing platform unsound .. No. 2 Gun Carriage ... is also in a very dangerous stateWO 54 757	Manuscript	Kew
1829	"at four o'clock yesterday morning, a Whitehaven brig, the Duke, laden with coals, was discovered embayed amongst the rocks at Sandy Cove, between the East Pier at Kingstown and Dalkey, near the Martello Tower".10/6/1829	Text	The Times
1830	In use by Preventative Service Water Guard to prevent smuggling. PRO WO 55/2684	Manuscript	Kew
1831	"Tower and Battery No 11 Sandycove" showing tower on high rocky promontory with steep cliff faces to all sides but north-east quadrant. Battery shows four gun emplacements, with two Guard Houses and a number of unspecified structures to interior. Neptune Cottage and Sandycove Harbour located adjacent.	Plan	Kew
1837	"Martello Tower" overlooking Sandycove Harbour, approached by path from east, with second path terminating at base of tower to south. Main path continues to battery showing 6 structures to interior, but not marking gun positions.	Map	OS 1 st Edition
1841	"Dublin Bay: Sketch of the Coast on the southern extremity of the Bay, shewing the	Map	Kew

	positions of the Towers and Batteries for its defence. 30 Nov 1841". Battery position marked incorrectly. MFQ 1 520		
1842	Of Dublin Bay from Dalkey hill showing tower as coastal landmark on low hill.	Drawing	Bartlett
1850	Tower noted, battery not shown.	Drawing	T.R. Harvey
1852-1858	undated (probably 1852-1858) entitled "Ordnance Towers South of Dublin Bay Nos. 9-16 inclusive" showing 3 boundary stones to east, rocky outcrop to N,W, & S, extent of battery showing 2 guard houses to south of quadrangular enclosure, and 2 boundary stones, denoting plot S & E "marked on rock".	Plan	Military Archives
1853	Armament of tower upgraded from 18-pounder to 24-pounder cannons. Battery listed as unarmed. PRO 55/851, letter dated 10 th December 1852.	Manuscript	Kew
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEney 2006:119
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
1861	Plan, section and elevation - of Master-gunners store dated 1/5/1861	Plan	Military Archives
1861	Sandycove Battery, magazine and associated buildings. Plans & cross-sections indicating dimensions, materials (e.g. "brick and mortar wall"), dated 2 nd may 1863 with note "as executed 1861".	Plan	Military Archives
1862	Detailed 1862 plan indicating layout of battery (including privy, cess pit, guard room, cistern, soldiers quarters, drain to sea and stores - gun emplacements not indicated) and tower (indicating details and notes on contents of 1 st & 2 nd stories). MALLF. Kew WO 78 4732	Plan	Military Archives & Kew
1862	1862 drawing showing battery & tower with associated structures and boundaries. An active quarry noted as "The Property of the Ballast Board" has removed stone from the base of the rocky promontory of which the tower stands.	Plan	Kew
1862	Friday, October 10, 1862 "Kingstown Intelligence and Bray and Wicklow News. A correspondent suggests that two or three life buoys should be placed in charge of the coast guard at the Martello Tower, Sandycove. He mentions the case of a young man who slipped into the sea at the rocks, in front of the tower, and was with difficulty saved by a screw ferule fishing rod. There were no buoys or ropes at the guard house. We know the place to be dangerous, especially when a heavy sea is running. Indeed, one pool is ominously named "dead man's hole".	Text	Irish Times
1866	Detailed 1862 plan indicating War Department property boundaries of both tower and battery, dated "28 th Nov '66". Tower notes boundary marks at NW & SW with "undefined" semicircular boundary to	Plan	Kew

	east. Battery property formed by a large rectangular plot extending from the rear of Neptune Cottage and the Boathouse to include large portions of the foreshore area to the east and north of the battery. MPEE 1 248		
1869	"In 1869 a detachment from the Garrison Artillery took over Sandycove and the East Pier".	Secondary	McEnery 2006:131
1869	6 inch sheet revision: The tower has been erased for military security purposes. A new slip and Boat House have been constructed to the south of the battery.	Map	OS
1869	<i>Sandycove battery</i> -Master gunner Thomas Birks, in charge.	Text	Thoms Directory
1870	Battery provided with four rifled converted guns. PRO WO 33/46	Manuscript	Kew
1874	Tower noted armed & manned by the "Coast Brigade" and in "Good" condition. Armament noted as five 8-inch smooth-bore guns, one 68-pounder and one 32-pounder. PRO 35/34 & 35/40	Manuscript	Kew
1876	Tower relinquished by Garrison Artillery and taken over by Coast Brigade. PRO WO 33/46	Manuscript	Kew
1886	Armament noted as six rifled converted 64 lb guns.	Manuscript	Kew
1888	Return showing six 64-pdr RML guns to Battery (1 to the east flank, 1 to the east salient, and 2 each to the north and north-east faces). WO 396/4. Report No. 95	Manuscript	Kew
1895	Return showing armament of Sandycove Battery standing at five rifled converted 64 lb guns. WO 396/4, Report No. 96	Manuscript	Kew
1896	Tower and Battery advertised "To be let" by Commanding Royal Engineer, 22/5/1896	Text	Irish Times Archive
1897	Sandycove abandoned. 16.1.97. "Dublin includes for disposal. Vacant"	Manuscript	BWDP
1900	28.7.00 "Rev. W. Bourke asks if for sale and what price is the present tenant. 3.8.00 W.O. informs Rev. Bourke "not proposed to sell either battery or tower", might be necessary to resume for military purposes.	Manuscript	BWDP
1904	"Tender for renting No. 11 Martello Tower, Sandycove - To His majesty's Principal Secretary of State for the War Department. Sir, I, Oliver Gogarty of 5 Rutland Square, E., Dublin, am willing to become the tenant and occupy the messuage mentioned in the Schedule to this agreement as from the 24 th day of June 1904, for one whole year, and so on from year to year, determinable as herinafter mentioned, I will pay the yearly rent of eight pounds (£8) etc "Inventory of Fixtures in Martello Tower at Sandycove	Text	Irish Times Archive
	Place Numberarticles Remarks		

	<p>Entrance 1 Lock and key Door 2 Bolts & hasps 1 Stepladder</p> <p>Inventory also relates the glass in the windows was broken, and that the top of the tower had</p> <p>8 Iron rings in wall 2 racers 1 pivot block 2 Shot furnaces 1 door 1 bolt</p> <p>kitchen, magazine, artillery store, latrine with one seat and one lock and key to door Tenancy agreement signed by C.E. Haynes Lt. Col. RE CRE DLD & Oliver Gogarty". Reproduced in 16/6/1962 edition.</p>		
1910	"The battery at Sandycove offered for sale", 1/3/1910.	Text	Irish Times Archive
1912	1862 Drawing marked up to show lettings & encroachments to War Department property. Tower is noted as "Letting 1003", with a note stating "There is a public Right of Way over this portion of the Roac C.E. 4/2327 df 9/8/1912", and the Battery as "Letting 915", with three encroachments to exterior of battery wall (probably for signage) and encroachment at quay.	Plan	National Archives
1920	"Immediately adjoining Glasthule is Sandycove, a name which originated with the little haven there, and was subsequently applied to the rocky point on which a battery or fort, now dismantled, and a Martello tower were erected. The fort was, until a few years ago, occupied by the military, and at certain seasons of the year was utilised for artillery practice, the firing causing much havoc among the windows of the adjoining houses".	Text	Joyce
1930	Offered for sale: "Rockfort, Sandycove ... The Martello Tower is included in the grounds".	Text	Irish Times
1954	13/11/1954 "Ulysses" tower up for sale" with photo showing tower and environs,. 2/12/1954 "Ulysses" tower sold for £4700. Mr. Michael Scott, a Dublin architect, yesterday bought the Martello Tower at Sandycove, Co. Dublin in which James Joyce lived at the turn of the centuryMr Scott, who lives about 20 yards from the Tower, does not intend to carry out any renovations. He hopes to sell the house, included in the sale, in the near future and it is believed, intends to turn the Tower into the first Joyce museum".	Text	Irish Times
1959-1960	Showing quarry face, brick chimney structure, original iron shutters above windows & original Roman Cement pointing. Ref 0095/142. Vol. 3, P.82.	Photo	IAA
1962	Photo on cover of 6/4/1962 edition. "The Dublin Joyce Society, formed in 1954 to encourage the honouring of one of Ireland's greatest literary figures, has found funds to	Text	Irish Times

	restore the tower ..."6/6/1962		
1994	Summary Field Report, dated 29/8/1994	Report	ASI
1999	Digital aerial image showing the extent of development in the area, and the overgrown interior of the battery.	Photo	National Coastline Survey
2008	XRF <i>in situ</i> analyses of salts to exterior of masonry of Battery, and identification of quarry to foreshore to west and north of battery.	Report	Bolton (2008)

3.12 South 12 Glasthule

This tower and battery no longer stand, with no surviving trace of any of the structures. The tower was located in the area now occupied by the People's Park, and the battery was located in the area of the Dun Laoghaire Baths. Both the tower and battery are depicted in detail in an engraving on William Duncan's map of Dublin in 1821. The tower was originally constructed on the top of a rocky promontory overlooking the battery which was located on the top of the cliff at the edge of Scotman's Bay. A tram line was permitted to bisect the property in 1819 to allow for the transport of stone to build Dun Laoghaire Harbour, and an unauthorised quarry was opened by the Commissioners of Public Works to remove granite from War Department lands between 1826 and 1841 which cut a quarry face back to the foot of the tower. The construction of Dun Laoghaire harbor also led to some damage to the battery by storm damage and coastal erosion.

Neither the tower or battery were damaged by the construction of the railway line, and all War Department property was intended to be transferred to the Commissioners of Public Works in 1849 in exchange for Nos. 41,42 & 43 Great Ship Street in Dublin City. This transfer may not have been completed, as the deeds to the property held in the archives of Dun Laoghaire-Rathdown County Council make no reference to it, but instead note the sale of the property to the Commissioners for Kingstown Harbour in 1854. The Martello tower may have been removed during this period, and does not appear in an 1850 engraving. The battery survived for some time after, appearing on the 1869 ordnance survey 25-inch map, and a detailed plan accompanying the deed title of 1907. This plan shows the range of buildings to the western corner of the battery, and a detailed view of the internal subdivisions of the site. In 1907, the battery appears very similar to how it is depicted in Duncan's 1821 engraving. However, the battery was quickly removed as the site was developed as a public baths. The battery does not appear on the 1912 ordnance survey map of the site, though part of its fabric may be contained within the Dun Laoghaire Baths buildings.

Year	Description	Type	Source
1804	Letter from John Murray Ref. NLS 19,826 f.214 stating "I have 180 men at work first at Sea pint near the Black Rock and at a Battery near Dun Leary of four guns and three gun battery at Glasstool and a four gun Battery on the low rock at Sandcove[.] Lord Cathcart and the Engineers wished me to take more but I was afraid I could not finish in the time they wished [.] these four jobs I will finish before the first of Jany. 1805, as they are all [word unclear] begun and only one month since I agreed the contract is £5418".	Manuscript	NLS
1804	"No. 12 Tower & Battery Glafstool. For the Anchorage, Scotchmans bay, Shore %c.". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew

1804	"Proprietor – Mr. Sexton". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1805	Costs: "The Tower at "Glass Toole", No. 11, not fully priced, came to over £2000, in February 1805".	Text	Kelly (1940)
1805	Tower No. 12 assigned 1 sergeant & 10 men. Ref: NLI MS 1,122 (Kilmainham Papers), P.333-335	Manuscript	NLI
1805	Tower armed with 18-pounder gun. Ref: PRO HO 100/132 1806 f.39-40	Manuscript	Kew
1805	Lands legally transferred in trust to Benjamin Fisher at "an Inquisition taken at Blackrock in the County of Dublin on the Seventh day of October One thousand eight hundred and five ... for the absolute purchase of all that and those that part of the lands of Glastool in the County of Dublin on which the Battery and Martello Tower Number Twelve had lately been erected with the road thereto containing two roods and thirtysix perches Statute measure" Noted on Deed dated 14 th March 1907.	Manuscript	DLRCOCO
1806	Letter dated 30 th Nov 1841 states "In regard to the question of disposing of the Battery land, which is held by lease, for ever, granted by Lords Longford, De Vesce, and Mr Daniel Sexton, the purchase money being £90.10.0 The Deed bearing date in the year 1806" WO 44 119	Manuscript	Kew
1806	"No. 12 Tower & Battery. Glafstool. Conveyance for Ever from the Earl of Longford and others. No rent." noted in 1830 return. WO 55 2685	Manuscript	Kew
1810	Lands legally transferred from Benjamin Fisher to Board of Ordnance "By indenture dated as of the year One thousand eight hundred and ten made between Brigadier Benjamin Fisher commanding Royal Engineers in Ireland of the one part and Brigadier General trotter commanding Royal Artillery in Ireland and the Respective Officers for conducting the business of the civil and Artillery Department of the Ordnance in Ireland". Noted on Deed dated 14 th March 1907.	Manuscript	DLRCOCO
1815	Position marked "Galastool 12" TCD MS 2182	Map	TCD
1815	Tower indicated with within circular cartilage & "Battery No. 12" to N, appears as cruder version of 1820 map. Ref: NLS MS 19,662 "Plan of Proposed Railways from Dun Leary to Dalkey Commons near Dublin 1815"	Map	Rennie
1816	"Plan of Dunleary showing stained yellow, the New Pier, intended to be constructed at that Point; and also the position of the existing Towers and Batteries erected for its Defence" dated 27 th August 1816 showing "Tower No. 12" within circular area surrounded by rocky outcrop and accessed from road "to Glafstool" to south, and three-gun battery on shoreline having a rectangular Guardroom forming the west wall. WO 55/836	Plan	Kew

1816	"Tower" and location	Map	Taylor
1818	Letter from W. Fyers dated 28 th April 1818, "Gentlemen, As the late heavy Gales from the Eastward, which have done so much damage to the new Pier constructing at Dunleary, have also from the rebound of the Surge, washed away part of the bank at the N.E. angle of the Redoubt at Glafstool, No.12, and thereby endangered the wall of this building (to which as well as the Battery No.13, being the only Defences for the new Harbour, considerable importance is attached) I have directed the enclosed estimate (amounting to £58) to be made, of the expense that would attend the formation of a small breakwater for its security, and to obviate the heavy expense that would be incurred by rebuilding the Battery. In order to keep this Estimate as low as possible, it has been calculated on a presumption that the Dunleary Commissioners will consent to drop the requisite quantity of stone on the spot, as their Railway runs close to the Battery. It appears reasonable to conclude that the Commissioners will accede to your proposition to this effect, from the consideration that the injury alluded to has been occasioned by the construction of the Pier, and that the Ordnance have readily acquiesced in their application for leave to occupy the Tower No. 12, and to carry the Railway thro' the Ordnance Lands. WO 55.836	Manuscript	Kew
1819	Letter to Office of Public Works dated 5 th Nov 1841 "you request to be informed by what authority, if any, the Tram Road from Killiney Quarries to Kingstown Harbour has been carried through a portion of the Ordnance Property at No. 12 Battery Gafstool. I am directed to acquaint you that the consent of the Respective Officers was given to the occupation of this ground in 1819".	Manuscript	Kew
1820	"Martello Tower No. 12" within circular plot having access path from SWS drawn at 1 inch:270 feet. The map shows 2 rectilinear fields extending from tower to shoreline, with rocky outcrop marked to NW, and "Battery No.12" appearing as a small hexagonal coastal fort on the shoreline, with a building forming the south-west range.	Map	Rennie
1821	Engraving showing wooden stairs to 1 st floor entrance defended by a machicolation with five corbels. Tower on rocky outcrop shows coursed ashlar masonry, string courses to parapet, 3 visible window openings, with flagpole & cannon to roof. The engraving also shows the guardhouses of the battery, appearing as a complex of rendered, whitewashed single-storey buildings within a low fortification.	Engraving	Duncan
1821	"Tower" and "Battery" indicated, having separate access roads as per Rennie 1820.	Map	Duncan

1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1825	"Sketch of Kingstown Harbour, shewing the situation of the Towers Nos.12 and 13, and the Batteries defended by them. NB The Ordnance Ground coloured yellow" 19 th January 1825. WO 44 109 showing tower in circular land plot, and shoreline battery with four gun emplacements and range to west wall.	Text & Map	Kew
1825	"One 18 Pounder on Tower - Dismounted. , One 24 Pounder Guns on Battery - Mounted. The Tower is in good condition" WO 54 757	Manuscript	Kew
1826	"The Magazine of the Tower is occupied by the superintendent of the new Harbour with Gun powder for blasting the quarries. The Trap door and flooring above the store require repair and the Tower requires painting, and is damp in consequence" WO 54 747	Manuscript	Kew
1829	"No. 12 Battery Glasstool - An enclosed work having loop holes Guard Houses in the [illegible], and a Furnace for heating shot with accommodation for 16 Men. Constructed for 3 -24 Pd. For the defence of Kingstown Harbour and Approaches to it. 3 - 24 Pds. - No. 1 gun Carriage and traversing platform on the Spot - Wood Gun Carriage and Traversing Platform are Unservicable ... No. 1 Gun temporarily dismounted for the repairs. Nos. 2 and 3 Gun Carriages and Traversing Platforms given in to the Storekeeper in Dublin", WO 54 757	Manuscript	Kew
1830	In use by Preventative Service Water Guard to prevent smuggling. PRO WO 55/2684	Manuscript	Kew
1831	"Tower and Battery No 12 Glasstool" showing quarry encroaching to northern quadrant of circular tower plot. Battery formed by three gun emplacements to angled work located at top of cliff face, with rectangular Guard Room range located along north wall.	Plan	Kew
1837-1838	"Martello Tower" indicated with approach road from SW. Circular enclosure encroached by granite quarry to west, with battery and associated structure along west range marked on foreshore.	Map	1 st Edition Ordnance Survey
1841	Detail of coloured plan of battery dated 30 th November 1841 showing angled battery with three gun emplacements, internal structures and Guard house along the west wall & the extent of Ordnance Property. It should be noted that quarrying is noted at the edge of the ordnance property, but two railroads from Killiney Hill and the Peoples Park quarries intersect adjacent to the battery. Plan also includes cross-section of battery and two structures. MFQ 1 520.	Map	Kew
1841	"Dublin Bay: Sketch of the Coast on the southern extremity of the Bay, shewing the	Map	Kew

	positions of the Towers and Batteries for its defence. 30 Nov 1841". Position of tower and battery marked. MFQ 1 520		
1841	<p>Landowners and former "servants of the Ordnance" submit unsolicited offers to purchase the Ordnance property at Glasthule for sums around £300. A detailed response is issued noting that "all proprietors of the neighbouring grounds are covering their lands with buildings ... the valuation of the ground upon which the Battery alone stands, about £1000. The Battery Buildings consists of a Barrack 75 feet long and 18 feet wide calculated for 20 Men but it is not very substantial. The Sea seems to have a tendency to encroachment to undermine the cliff upon which the Battery stand ... with respect to the land on which No. 12 Tower is erected .. its site is on the border of a quarry, 60 feet above the level of No. 12 Battery and a distance therefrom of about 165 yards. This Tower and the land on which it is situated is coveted as well as its dependent Battery; it is therefore become requisite for me to proceed to represent the bearing of these Works of Defense for the protection of Dublin Bay; in which view alone the question as to the propriety of disposing of the property would appear to consist.</p> <p>The position of this Work of Defense will be seen upon inspection of the Sketch of the coast to be favourably disposed for cooperating with No.11 Tower & Battery for the defense of Sandy Cove and for the protection of the reverse of the pier forming the southern side of Kingstown Harbour. This Tower and Battery formerly co-operated with No.13 Tower & Battery, but which work, have been removed by the Commissioners for Public Works, they having been sold by the Board to that Body for £1700, per Boards Order 30th December 1836. No. 12 Tower & Battery would also very advantageously co-operate with any Works of Defense which might be erected at the entrance of Kingstown harbor, according to the understood intention of Government at the time of No. 13 Tower and Battery being taken down ... I do not think it expedient to weaken the chain of Defence which at much expense has been formed for this part of the coast ... With respect to the Stone quarried removed form the portion of the site with the Tower, as shewn in Sketch No.1, the encroachment appears to have been effected without permission, but at what date I cannot learn - It is however now discontinued and the Commissioners have formed the low parapet wall marked Q R S to prevent accidents". WO 44 119</p>	Manuscript	Kew
1848	Dated "Ordnance Solicitor 25 th March 1848" showing "battery ground" with no features,	Map	Kew

	and outline and position of "No. 12 Tower Glosethule near Kingstown". A separate sheet shows the outline of the tower and extent of adjacent quarrying, with ordnance property boundaries marked. MFQ 1 520		
1848	Dated "Ordnance Solicitor 25 th March 1848" showing site of "No. 12 Tower Glosethule near Kingstown showing in yellow that portion of the Ordnance property cut away by the Board of Works" showing loss to the SW sector of the site from quarrying. A second copy of this drawing notes "80 to 100 feet perpendicular" quarried cliff face to west of tower. MFQ 1 520	Plan	Kew
1849	Legal transfer of No.12 "Quarry Tower" and Battery at Glathule to Commissioners of Public Works, dated March 1849 "Commissioners of Public Works (Ireland) transfer to the Ordnance houses [Nos. 41, 42, 43] in Gt. Ship St in exchange for Tower and Land at Glathule (Plans of the latter) and Battery". PRO WO 44 119	Manuscript	Kew
1850	Tower not visible.	Drawing	T.R. Harvey
1854	"by deed bearing the date the Eighteenth day of September One thousand eight hundred and fifty four the said principal officers of His them Majestys Ordnance conveyed to the then commissioners of Kingstown Harbour the premises". Noted on deed dated 14 th March 1907	Manuscript	DLRCOCO
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnery 2006:119
c.1860	Copy of OS 1 st edition with details of quarried granite stone indicated as rock outcrops.	Map	Geological Survey of Ireland
1869	6 inch sheet revision: "Old Battery" still indicated to east of Royal Victoria Baths	Map	OS
1907	Deed dated 14 th March 1907 ⁸⁶ between Commisioners of Kingstown Harbour and the Kingstown Urban District Council stating sale "at the price of five hundred pounds .. all that and those that part of the lands of Glastool (now Glathule) in the county of Dublin containing Two Roods Statute measure or thereabouts be the same more or less any portion of	Manuscript	DLRCOCO
1912	6 inch sheet revision showing no trace of the Battery, with new bathing buildings and structures at the foreshore in this location.	Map	OS
1992	Desktop report cites Turner (1983) "Removed by blasting c.1860".	Report	ASI

3.13 South 13 Dun Leary

The tower and battery at Dun Leary were built to defend the original sea creek and landing place in this area. Dun Leary tower was constructed on high ground, believed to be the site of the original *Dun* or fort of Dun Leary of Leary, a local king, recorded from the early medieval period, though the size and importance of the fort has been a controversial subject over the years. The original fort appears as a circular earthen mound of high ground by the harbour on John Rocque's map of Co. Dublin in 1765. The battery was constructed on the rocky foreshore. Early plans of the tower clearly show that the building of the earliest (1831) railway line itself did not directly impact on either the tower or the battery. However, both were removed as a result of infrastructure works relating to the development of the harbor area. The removal of the tower noted by Ronan (1932)⁸⁷:

"it is a well-known fact that, when (shortly after 1834) the Martello Tower was dismantled and the mounds were leveled, the *debris* stones and earth, were utilised to fill up the dip between the Dun and the Old Dun Laoghaire, and to form a foundation for the new road".

Year	Description	Type	Source
1804	Letter from John Murray Ref. NLS 19,826 f.214 stating "I have 180 men at work first at Sea pint near the Black Rock and at a Battery near Dun Leary of four guns and three gun battery at Glasstool and a four gun Battery on the low rock at Sandcove[.] Lord Cathcart and the Engineers wished me to take more but I was afraid I could not finish in the time they wished [.] these four jobs I will finish before the first of Jany. 1805, as they are all [word unclear] begun and only one month since I agreed the contract is £5418".	Manuscript	NLS
1804	"to acquaint for the information of the Commander of the Forces that I have written in his name to the Revenue Board for permission to construct the Tower alluded to, on their land at Dunleary". Dated 29 th May 1804. WO 55 831.	Manuscript	Kew
1804	"No. 13 Tower & Battery Dun Leary. For the Anchorage and Shore". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	"Proprietor - Revenue Board". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1805	Tower and Battery No. 13 assigned 1 officer, 1 drummer, 1 sergeant & 18 men. Ref: NLI MS 1,122 (Kilmainham Papers), P.333-335	Manuscript	NLI
1805	Tower armed with 18-pounder gun. Battery armed with 24-pounders & two 10-inch mortars. Ref: PRO HO 100/132 1806 f.39-40	Manuscript	Kew
1806	"No. 13 Tower & Battery with Road leading thereto. Dunleary. Conveyance for Ever from the Earl of Longford and others. No rent." noted in 1830 return. WO 55 2685	Manuscript	Kew
1816	Letter to the Respective Officers of the	Manuscript	Kew

	<p>Ordnance dated 20th July 1816 from W.Fyers, "Gentlemen, the Commissioners appointed for executing the proposed Pier and Harbour at Dunleary having represented to The Lord Lieutenant that it will be expedient to put them in permanent possession of the Tower and Battery at Dunleary and also the Building formerly used as a Signal tower on Dalkey Hill for the purpose of the Harbour". WO 55/836</p>		
1816	<p>"Plan of Dunleary showing stained yellow, the New Pier, intended to be constructed at that Point; and also the position of the existing Towers and Batteries erected for its Defence" dated 27th August 1816 showing "Tower No. 13" within circular area forming the entrance of a passage to the "Revenue Houfes" and the wedge-shaped battery having L-shaped Guardhouses to south and four gun emplacements to north. WO 55/836</p>	Plan	Kew
1816	<p>Letter dated 27th August 1816 from W.Fyers, "Sir, Herewith I transmit Copies of several Letters which have passed relative to a requisition made by the Commissioners for Dunleary Harbour for the surrender to them of the Tower and Battery in that place. I also enclose a Plan of the projected Pier shewing the situation of the Towers Nos. 12 and 13; and their adjacent Batteries – you will be pleased to observe that the new Pier will be situated nearly half way between the two Towers & that where the fire from the two Batteries crosses (something more than 500 yards) another Battery for the defence of the new Pier might at a very small expense be constructed. The existing Batteries at this place are very advantageously placed both for the Defence of the Harbour and Anchorage, and for receiving protection from the Towers as the long 24 Prs. Mounted on them fire directly onto their Batteries. Those Batteries are revetted, and respectable for Works of that Description. The Dunleary Battery mounts four long 24 Prs. And two Howitzers and the Battery No. 12 – three long 24 Prs. WO 55/836</p>	Manuscript	Kew
1816	<p>Letter dated 21st September 1816 from W.Fyers RE "Sir, In answer to Lieut. Colonel Mann's letter of the 5th last respecting the request of the Commissioners of Dunleary Harbour for the surrender of the Tower and Battery at that place, - I beg leave to state, that, I am not aware of the expediency of putting the Commissioners in permanent possession of those Works. Upon inspecting the Plan, they do not appear to interfere with the intended Pier and Harbour, otherwise than by tending to protect them from a hostile enterprise against the Country. I am of opinion some Works of Defence are indispensably necessary at this</p>	Manuscript	Kew

	place, and that none can be substituted for the existing Works, equally conducive to it's security from an Enemy, without very great additional expense to the Public". WO 55/836		
1819	Letter dated 7 th October 1819 "to make immediate preparation for the commencement of the West Pier to said Harbour and in forming the Railway Road for this purpose a small portion of the Ground at the Battery No. 13 at Dun Leary ... will be required. As this small piece of ground is essentially necessary for the purpose of the Railway and as it not at all interfere with the Work of the Battery or the Martello Tower the Commissioners presume that no objection will be made in granting the temporary use of it for the purpose above stated.	Manuscript	Kew
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1824	the Tower No. 13 was delivered into the charge of the Revenue Department, in consequence of the Board's order of the 3 September 1824" WO 44 109	Text	Kew
1825	"Sketch of Kingstown Harbour, shewing the situation of the Towers Nos.12 and 13, and the Batteries defended by them. NB The Ordnance Ground coloured yellow" 19 th January 1825. WO 44 109 showing tower at east end of 'Old Pier' and four gun emplacements marked to the interior of the sub-triangular battery.	Text & Map	Kew
1825	"One 18 Pounder on Tower - Dismounted. , Four 24 Pounder Guns, Two 10 inch Mortars on Battery - Mounted." WO 54 757	Manuscript	Kew
1812-1836	Sketch entitled "sea and rocky shoreline at Kiliney with view of Martello Tower at Tarrong Hill". However, background shows Howth Head, and position & elevation of tower suggests this is more likely to be the Dun Leary Tower prior to construction of the harbour. NLI TX 34 & 35	Drawing	NLI
1815	Position marked "Dunleary 13"	Map	TCD MS 2182
1815	Tower indicated with within circular cartilage & "Battery" to N, appears as cruder version of 1820 map. Ref: NLS MS 19,662 "Plan of Proposed Railways from Dun Leary to Dalkey Commons near Dublin 1815"	Map	Rennie
1816	"Tower" marked.	Map	Taylor
1820	"Martello Tower No.13" drawn at 1 inch:270 feet overlooking the pier, the "ducking point" to N, and Revenue House to the ENE. The circular plot of the tower is cut by a road/path which runs behind the tower giving access to Revenue House and "Battery No. 12", a sub-rectangular coastal battery on the shoreline having an L-shaped building forming the southern angle.	Map	Rennie
1821	Tower in background showing only parapet. Tower flanked by terraced buildings to east, and three-bay possible mock-castelated	Engraving	Duncan

	building to west.		
1821	"Tower" marked overlooking the pier, the "ducking point" and "Battery" to N, and single pier of the "Asylum Harbour" to NE. Revenue House incorrectly orientated.	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1826	"The Tower is occupied by the Revenue". WO 54 747	Manuscript	Kew
1829	"No. 13 Tower Kingstown – A Round Tower Constructed for 16 Men with a Store and Water Tank – Bombproof - Constructed for one 18 Pd. for the defence of Kingstown Harbour and approaches. The top of the tower requires pointing, the under ground room of the tower and the provisions, is mainly filled with dirt and ash. The floor is also much decayed owing in good measure to the manner in which it was kept by the Preventative Water Guard. One 18 Pd Gun Carriage and Traversing Platform given in to the Storekeeper in Dublin", WO 54 757	Manuscript	Kew
1829	"No. 13 Battery Kingstown – Situated at the Bottom of Kingstown Harbour with Guard Houses and furnace for Hot Shot and Accomodation for 16 Men – Constructued for 4 – 24 Pd., 2 – 10 Irish mortars for the defence of Kingstown harbor and approaches", WO 54 757	Manuscript	Kew
1830	In use by Preventative Service Water Guard to prevent smuggling. PRO WO 55/2684	Manuscript	Kew
1831	Tower & Battery No.13 Kingstown showing circular Tower A in circular plot, with rail line running outside the plot alongside the end of the "New Pier". The Battery consists of four angled gun emplacements on a rocky foreshore having an L-shaped Guard Room to rear. PRO WO 55/2684	Manuscript	Kew
1836	Board of Ordnance agree to sell No. 13 Tower and Battery to Commissioners of Public Works to permit construction of Dublin to Kingstown Railway. Board of Ordnance order for sale dated 30 th December 1836. PRO WO 44/119.	Manuscript	Kew
1837-1838	Undefined circular feature noted adjacent to "Crofton's Terrace" at site of Martello Tower immediately to south of "Battery Bridge". Foreshore battery no longer in evidence.	Map	1 st Edition Ordnance Survey
1841	"Dublin Bay: Sketch of the Coast on the southern extremity of the Bay, shewing the positions of the Towers and Batteries for its defence. 30 Nov 1841". Neither tower or battery indicated. MFQ 1 520	Map	Kew
1850	Tower not present.	Drawing	T.R. Harvey
1994	Summary Field Report, dated 19/9/1994 citing Stokes (1893) "the position of the 'Dun' of Dunleary left of the old pier at Dun Laoghaire. A Martello tower was built in the middle of it", and Ronan (1932) "the material from the dismantled earthwork was used to block the ground and form a foundation for the road".	Report	ASI

3.14 South 14 Seapoint

Seapoint tower was built on a rocky promontory defending the approaches to old Dun Leary harbor and the beaches at Seapoint and Salthill. The tower was in manned until 1881, after which time it was let out to both private tenants and to Blackrock Urban District Council, who purchased the site in 1901. The tower was let out as a tea shop for from the 1950s until the 1980s. The immediate area surrounding the tower has changed radically since its construction, with the railway embankment extending from the corner of the site, quarrying of the rocky foreshore immediately adjacent to the tower, and the construction of public amenity areas to the south and west. The base of the tower is concealed by changing ground levels to south, and the construction of a bathing shelter attached to the seaward face of the tower c.1959.

A number of historic illustrations survive detailing Seapoint tower prior to the development of the coastal foreshore as a bathing area. J.H. Brocas shows the landward side of the tower, with wooden ladder access and a number of courses of masonry visible below the plinth level on the sloping granite foreshore. S.F. Brocas gives a general view of the tower and environs, with a cannon mounted on the roof platform of the tower. The hazardous nature of Dublin Bay to shipping of the period is reflected in contemporary accounts and depiction of a shipwreck on the rocks below is also recorded in documentary sources of the period, Brocas's illustration and Clarke's later photograph. The most recent survey of the tower was by Sean Gaynor (Corlett 2001) which included plans, elevations and cross-section of the tower. The tower, located at Brighton Terrace on Seapoint Strand, forms one of the most recognizable landmarks of Dublin Bay and is in use as an archive for the Irish Genealogical Society.

Year	Description	Type	Source
1803	1901 Conveyance for Seapoint Martello notes that on 8/9/1803 "Colonel Benjamin Fisher was duly authorised to treat and agree for the absolute purchase	Manuscript & Plan	DLRCOCO
1804	Letter from John Murray Ref. NLS 19,826 f.214 stating "I have 180 men at work first at Sea pint near the Black Rock and at a Battery near Dun Leary of four guns and three gun battery at Glasstool and a four gun Battery on the low rock at Sandcove[.] Lord Cathcart and the Engineers wished me to take more but I was afraid I could not finish in the time they wished [.] these four jobs I will finish before the first of Jany. 1805, as they are all [word unclear] begun and only one month since I agreed the contract is £5418".	Manuscript	NLS
1804	"No. 14 A tower on the Bathing Point. For the Anchorage and Shore". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1805	Tower No. 14 assigned 1 sergeant & 10 men. Ref: NLI MS 1,122 (Kilmainham	Manuscript	NLI

	Papers), P.333-335		
1805	Tower armed with 18-pounder gun. Ref: PRO HO 100/132 1806 f.39-40	Manuscript	Kew
1806	"No. 14 Tower – Sea Point (about ½ this area is in the sea) Conveyance for Ever from Wm. Honor Esq. in the name of others, with right of Passage of sufficient breadth for cars. No rent." noted in 1830 return. WO 55 2685	Manuscript	Kew
1807	1901 Conveyance for Seapoint Martello notes "Indenture dated the first of February One Hundred Eight and Seven"	Manuscript & Plan	DLRCOCO
1810-1846	B&W drawing by James Henry Brocas (ca.1790-1846) showing ladder entering tower, machicolation and parapet detail, and appearance of foreshore prior to development. Ref. NLI 2057 TX 38	Drawing	NLI
1812-1847	B&W drawing by Samuel Frederick Brocas (ca.1792-1847) depicting the wreck of the <i>Rochdale</i> at the foot of the tower. The drawing shows ladder, cannon, flagpole, and appearance of the foreshore prior to development. Ref. NLI 2064 TX 40t	Drawing	NLI
1815	Position marked "Seapoint 14"	Map	TCD MS 2182
1812-1835	Drawing attributed to Samuel Frederick Brocas (ca.1792-1847) showing Williamstown Martello prior to construction of the railroad with Seapoint Martello in the background. The tower is on a low rocky coastline showing parapet, machicolation and a flagstaff to the roof. NLI 2064(TX) 122	Drawing	NLI
1816	"Tower" marked on shoreline, with access path from SWS linking with a coastal path/track.	Map	Taylor
1821	"Tower", no position marked	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1825	"One 18 Pounder Gun Dismounted.The Tower is in good order." WO 54 757	Manuscript	Kew
1826	"The Tower is in good condition with the exception of a little cement required, a chimney top is wanted, and a padlock for the outer door." WO 54 757	Manuscript	Kew
1829	"No. 14 Tower Sea Point – A Round Tower Constructed for 16 Men with a Store and Water Tank – Bombproof - Constructed for one 18 Pd. for the defence of the South Bull and maintaining a communication with the Pigeon House. The Tower is in good condition with the exception of the window broken during a storm and a little Cement required as the Water at present penetrates the Ceiling. An 18 Pd Gun Carriage and Traversing Platform given in to the Storekeeper in Dublin", WO 54 757	Manuscript	Kew
1831	No.14 Sea Point, showing Tower A located at edge of rocky foreshore, with plot (in green) including inter-tidal area, accessed via a direct road with no adjacent development. PRO WO 55/2684	Manuscript	Kew
1837-	"Martello Tower" position marked, showing	Map	1 st Edition

1838	Tower Bridge access and undeveloped foreshore.		Ordnance Survey
1841	"Dublin Bay: Sketch of the Coast on the southern extremity of the Bay, shewing the positions of the Towers and Batteries for its defence. 30 Nov 1841". Position marked incorrectly. MFQ 1 520	Map	Kew
1842	1901 Conveyance for Seapoint Martello notes in 1842 ownership of tower transferred from care of Colonel Benjamin Fisher to His Majesty's Ordnance.	Manuscript & Plan	DLRCOCO
1850	Building in position of tower, not clearly identifiable.	Illustration	T.R. Harvey
1852-1858	Plan - undated (probably 1852-1858) entitled "Ordnance Towers South of Dublin Bay Nos. 9-16 inclusive" showing boundary with railway.	Plan	Military Archives
1853	Armament upgraded from 18-pounder to 24-pounder cannons. PRO 55/851, letter dated 10 th December 1852.	Manuscript	Kew
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnery 2006:119
1855	1901 Conveyance for Seapoint Martello notes that ownership of tower transferred from His Majesty's Ordnance to the War Department under the Ordnance Board Transfer Act 1855	Manuscript & Plan	DLRCOCO
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
1859	Map & Deed dated 22 nd February 1859 relating to Right of Way over War Department property at Seapoint. Plan depicts position of "Tower No 14" at waters edge on "War Department Property", with rectangular ancilliary structure at NW, with boundary walls to E,S & W, with gate access & two gate piers to the west wall. The adjacent shoreline is indicated as "Sir Harcourt Lees Property".	Manuscript & Plan	DLRCOCO
1862-1866	Detailed 1862 plan indicating War Department property in red, extending to north and north-east to include all exposed rocky foreshore. MPEE 1 248	Plan	Kew
1862-1883	1862 drawing with comments to January 1883 noting privy to east, seawall extending from east to tower "Bridge to be kept in repair by railway company". MALLF	Plan	Military Archives
1869	6 inch sheet revision: The tower has been erased for military security purposes.	Map	OS
1874	Tower noted armed & manned by the "Coast Brigade" and in "Good" condition. Armament upgraded (possibly in 1869) to one 8-inch smooth bore gun. PRO 35/34 & 35/40	Manuscript	Kew
1881	Tower noted as vacated in second half of 1881 in Return for 1886. PRO WO 33/46	Manuscript	Kew
1887	Towers at Seapoint & Williamstown " were let to Mr T.W. Robinson of Dublin, at £7 each", 26/7/1887	Text	Irish Times Archive
1888	Return showing no armament at Seapoint	Manuscript	Kew

	Tower. A 6-inch B.L.H.P. gun is proposed. WO 396/4. Report No. 95		
1892	Tower lease between War Department and Blackrock Urban District Council for "Martello Tower and Gardens".	Manuscript	DLRCOCO
1893	Detailed inventory dated 6/3/1893 accompanying lease between War Department and Blackrock Urban District Council, noting access by wooden ladder, magazine lined with coppers, and detailed condition report with the majority of furniture and fixtures either "decayed" or "corroded".	Manuscript	DLRCOCO
c.1895	Of the stranded barque, Palme at Monkstown showing the tower with possible chimney structure.	Photo	NLI
1897	19.7.97. "Sale recommended. Tower & Land £10.0.0. Enclosure road of approach £1.0.0"	Manuscript	BWDP
1897	G.O.C. Dublin includes in list for disposal. Tower (Letting No. 603) £.3.0.0., Enclosure Road of Approach (Letting No. 147) £1.0.0	Manuscript	BWDP
1901	14-5-1901 "Sold"	Manuscript	BWDP
1901	Tower and plot of land advertised for auction, 1/5/1901	Text	Irish Times Archive
1901	1901 Conveyance for Seapoint Martello includes advertisement and catalogue containing details of sale of tower on Public Auction, 14 th May 1901. The sale specifies "No part of the Foreshore below the High Water Mark is included in the premises for sale".	Manuscript & Plan	DLRCOCO
1901	copy of 1862 drawing noting "Sold to Blackrock Urban District Council 14 th May 1901 for £300". MALLF	Plan	Military Archives
1901	Conveyance for Seapoint Martello dated 10 th August 1901 between War Department and Blackrock Urban District Council for £300. Accompanying plan shows slip and platform immediately north of the base of the tower, with the curve of the railway embankment extending to the SE corner of the tower.	Manuscript & Plan	DLRCOCO
1902	"Specifications, Estimates and Plans for proposed improvements at Seapoint Tower at an estimated cost of £120. Access to punping station to be altered, ramparts to be raised and furnished with a parapet wall. "The wall between the boat slip and the Tower to be raised two feet in concrete", and land filled in a leveled to provide seating for six timber benches.	Manuscript	DLRCOCO
1936-1937	"Martello Tower" position marked, with bathing places to east & west, and boat slip in place.	Map	Ordnance Survey
1949	Aerial photo shows bathing platform in place to north and east sides of the tower.	Photo	Ordnance Survey
1949	Lease dated 25/7/1949 to Mr Charles Halloway "for the purpose of using the premises for the sale of ices, minerals, teas and light refreshments".	Manuscript	DLRCOCO
1950	Lease between Dun Laoghaire Borough Council and Mr Charles Halloway, with plan showing adjacent bathing place development.	Manuscript & Plan	DLRCOCO

1953	Lease dated 20/4/1953 to Palmer Products Ltd, 7 Sir John Rogerstons Quay from 1 st May 1954 for 21 years "for the purpose of using the premises for the sale of ices, minerals, teas and light refreshments".	Manuscript	DLRCOCO
1955	50 inches to 1 mile Plan accompanying lease dated 11/3/1955 showing tower and adjacent railway embankment, bathing area and public amenity area to west.	Plan	DLRCOCO
1959	"Better bathing at Seapoint – Dun Laoghaire Borough Corporation is to spend up to £2000 on improvement of bathing facilities at Seapoint. It is hoped that improvements will be completed before the summer. The Corporation has applied for permission to make the alterations under the foreshore act of 1933. The concrete platform near the Martello Tower is to be extended towards Dun Laoghaire, a shelter is to be built, and seats will be placed along the walls".	Text	Irish Times Archive
1962	Plan showing concrete promenade to be constructed, showing extent of current bathing access adjacent to tower.	Plan	DLRCOCO
1967	Letter dated 19/10/1967 noting fire damage to shelving and presses "It has also been reported that the interior is very damp, that the timber floor is damp, and is supported by a single unreliable upright, that the waste from the handbasin flows over the floor and generally that the condition is such to make the place unsuitable for public access".	Manuscript	DLRCOCO
1975	Documents referring to end of lease by Palmer Products Limited.	Manuscript	DLRCOCO
1983-4	Leases dated 26/7/1983 & 18/5/1984 to Rory and Annette Ruane for use of tower "for the sale of light snacks, ice cream, teas, sweets and minerals". Accompanying plan shows bathing area, steps attached to SW quadrant of tower, and bathing shelter attached to NE quadrant.	Manuscript & Plan	DLRCOCO
1987	Lease to Frank Magee "for the sale of light snacks, ice cream, teas, sweets and minerals".	Manuscript	DLRCOCO
1994	Summary Field Report, dated 23/7/1994, with 2 photos.	Report	ASI
1997	"The County Council at its meeting of the 14th April, 1997 approved a proposal to make the Martello Tower at Seapoint available to the Dun Laoghaire Genealogical Society (now known as the Genealogical Society of Ireland) to store their archival material".	Council Records	DLRCOCO
1999	Three digital aerial images showing the tower and the development of the adjacent shoreline.	Photo	National Coastline Survey
2001	Stone Decay Study of Tower	Report	Pavía & Bolton (2001a)
2001	Mortar Analysis	Report	Pavía & Bolton (2001b)
2001	Copy of Corlett (2001) providing account of excavation of basement floor of tower, with plan, elevation & cross-section by Sean	Report	ASI

	Gaynor.		
2002	On the 12th August, 2002 An Bord Pleanála granted planning permission to the Genealogical Society for the refurbishment of the Martello Tower and the change of use to an archive.	Council Records	DLRCOCO
2006	Conservation Report, September 2006, noting water penetration, timber and metal deterioration	Report	Blackwood Associates Architects ⁸⁸
2008	Rectangular upright boundary stone, square in cross-section, dated c. 1855-1860, inscribed W ↑ D No.5 identified during "Coastal Architecture Survey", located to former slipway to NW of tower.	Report	Dun Laoghaire Rathdown County Council
2008	XRF <i>in situ</i> analyses of salts to exterior of masonry, and identification of quarry at foot of north face of tower, and to foreshore bedrock immediately south of Seal Rock to the east.	Report	Bolton (2008)

3.15 South 15 Williamstown

The Williamstown Tower is unique among the Dublin series both for its situation partially immersed in water at low tide, and its use of flanking murder holes instead of the more common machicolation to defend the landward entrance. The inter-tidal position of the situation of the tower is clearly shown in the 1831 Board of Ordnance plan of the site, and in drawings by Nicholl and Brocas, which also show two cannons mounted to the roof of this 'double-tower'. The 1862 War Department plan of the site shows its landlocked nature, with development to landward, and the mud fence site boundary and privy in situ. The tower became landlocked in an artificial lagoon with the construction of the Dublin to Kingstown railway. Land reclamation has increased the height of the ground in this area, and the base of the tower is buried. The tower was let out to private tenants from the 1870s, and was sold at auction in 1901, and eventually passed in local authority ownership in 1907. The original first floor doorway was blocked up and a new ground floor entrance formed in the south-east quadrant of the tower. The tower is currently in local authority ownership, and was briefly used as clubrooms in the 1970s, but is currently unoccupied and in a derelict condition. The tower is set in a public park, and is a distinctive landmark to commuters from passing trains.

Year	Description	Type	Source
1804	"No. 15 A tower Seafort Parade. A tower of larger dimensions is here proposed with a raised parapet or screen as a cover from the neighbouring houses". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1804	"The Building the Martello towers ... one has just began at Williamstown near the Black Rock". The Freeman's Journal. September 29 1804	Text	The Times
1805	Tower armed with two 24-pounder guns. Ref: PRO HO 100/132 1806 f.39-40	Manuscript	Kew
1805	"Last Friday a number of shells were thrown from mortars erected at the Williamstown Martello Tower, and the Lighthouse-wall-battery, near Dublin at a mark erected on the strand contiguous. The effect, which was really awful, was felt in different parts of the metropolis". 3/10/1805	Text	The Times
1806	Copy of 1862 drawing noting "Deed 1-1-1806. There is no deed plan"	Plan	Military Archives
1806	"No. 15 Tower - Williamstown or Sea Fort (2/3 of this area is Water). Conveyance for Ever from Viscount Fitzwilliam and others, in consideration of £162.15s.0d Irish. No rent." noted in 1830 return. WO 55 2685	Manuscript	Kew
1807	Conveyance dated 11/3/1902 notes ownership of site transferred from Richard Viscount Fitzwilliam, William Vavaseur, and George and William Powell to Colonel Benjamin Fisher "to hold unto the said Benjamin Fisher in trust for His Majesty	Manuscript	DLRCOCO

	King George III his heirs and successors".		
1807	Men stationed in Tower assisted in firefighting of adjacent property. 8/10/1807	Text	Freeman's Journal
1805-1835	Drawing entitled "Near Williamstown" by Henry Brocas (ca.1762-1837). NLI 1961(TX)7 showing stylized Martello tower with no machicolation and a central flagstaff at the coastal edge prior to railway development.	Drawing	NLI
1812-1835	Drawing attributed to Samuel Frederick Brocas (ca.1792-1847) showing Williamstown Martello prior to construction of the railroad with Seapoint Martello in the background. The tower is located adjacent to the sand/boulder foreshore showing the low sea cliffs of Blackrock in the background. The tower is without machicolation, and shows two cannons (facing NE and NW) and flagstaff to the roof. NLI 2064(TX) 122	Drawing	NLI
1813	Letter dated 23 rd August 1813 (WO 55 835) containing "an Estimate for repairs at the Tower No. 15 South of Dublin amounting to £348.5.92"	Manuscript	Kew
1815	Position marked "Williamstown 15"	Map	TCD MS 2182
1816	"Tower" marked showing original detail of shoreline. Tower located on promontory extending into a shingle bank extending almost to the South Bull, and adjacent to "The Black Rock from which the town takes its name"	Map	Taylor
1821	"Tower", no position marked	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1823	"View of Dublin Bay 1823" showing Sandymount Tower from N with Williamstown Tower in background, appearing as sole feature on undeveloped shoreline.	Drawing	IAA
1825	"Two 24 Pounder Guns - Dismounted. The Tower is in good condition except for a few [illegible]. The Magazine is in good order, but the sistrn and pipe are both bursted which has caused the wood case to rot and makes the lower part of the Tower very damp. The Tower is in charge of the Preventative Water Guard" WO 54 757	Manuscript	Kew
1826	"This Tower also requires a little cement." WO 54 757	Manuscript	Kew
1829	"No. 15 Tower Williamstown - A Round Tower Constructed for 16 Men & Officers with a Store Room and Water Tank - Constructed for 2 - 24 Pounds for the defence of the South Bull and maintaining a communication with the Pigeon House. The Tower requires a little Cement and a stopped at Top for the Water Pipe - the Cistern is out of repair as reported as the then last inspection - a window broken owing to [illegible] of the sash - a part of	Manuscript	Kew

	the boundary wall towards the sea carried away by the late weather. This Tower is in Charge of the Water Guard. 2 – 24 Pd Gun Carriages and Traversing Platform given in to the Storekeeper in Dublin”, WO 54 757		
1830	In use by Preventative Service Water Guard to prevent smuggling. PRO WO 55/2684	Manuscript	Kew
1831	No. 15 Williamstown is positioned at the edge of a rocky foreshore. PRO WO 55/2684	Manuscript	Kew
1835-1840	“Dublin and Kingstown Railway, From Blackrock, looking across Dublin Bay towards Williamstown & Merrion. Dublin in the distance” attributed to John Harris (1791-1873) after an original drawing by Andrew Nicholl, (1804-1866) showing Williamstown Martello with base partially submerged at high tide. NLI ET 3167 (TX) 1	Illustration	NLI
1837-1838	“Martello Tower” standing in area “flooded at high tides”, with adjacent path leading to “bathing house” on coastal side of railway line.	Map	1 st Edition Ordnance Survey
1841	“Dublin Bay: Sketch of the Coast on the southern extremity of the Bay, shewing the positions of the Towers and Batteries for its defence. 30 Nov 1841”. Tower position marked. MFQ 1 520	Map	Kew
1842	Conveyance dated 11/3/1902 notes “by Defense Act of 1842 the interest of the said Colonel Benjamin Fisher in and to said premises subsequently become vested in the Principal Officers of His Majesty’s Ordnance”	Manuscript	DLRCOCO
1855	Conveyance dated 11/3/1902 notes “by Ordnance Board Transfer Act 1855 the interest ...is transferred inter alia to His Majesty’s Principal Secretary of State for the War Department”.	Manuscript	DLRCOCO
1850	Tower shown adjacent to railway line with flooded semi-circular artificial lagoon to rear, and path/causeway leading from Rock Road.	Drawing	T.R. Harvey
1852-1858	undated (probably 1852-1858) entitled “Ordnance Towers South of Dublin Bay Nos. 9-16 inclusive” showing twisting path through marshy land and five boundary stones. MALLF	Plan	Military Archives
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnery 2006:119
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
1862	1862 drawing indicating people’s garden to east, mud fence to west, sub-rectangular “fort of batter” boundary, privy to SW, and spring well to E. MALLF.	Plan	Military Archives
1862	1862 Drawing showing positions of stairs, winding stairs, internal privy, and external privy building to south wall.	Plan	National Archives

1869	"Garvey, Michael, martello tower".	Text	Thoms Directory
1869	6 inch sheet revision: The tower has been erased for military security purposes.	Map	OS
1869	6 inch OS sheet revision without suppression, showing Martello Tower and plot in red. WO 78 620	Map	Kew
1869	"Martello Tower – Saml. Wilcox, keeper".	Text	Thoms Directory
1874	1874 return notes the tower as disarmed and in "Good" condition. WO 53 40	Manuscript	Kew
1874	Tower noted as let, probably disarmed in 1869. PRO 35/34 & 35/40	Manuscript	Kew
1897	19.7.97. "Sale recommended. Tower & Land £10.0.0"	Manuscript	BWDP
1887	Towers at Seapoint & Williamstown " were let to Mr T.W. Robinson of Dublin, at £7 each", 26/7/1887	Text	Irish Times Archive
1897	G.O.C. Dublin includes in list for disposal. Tower (Letting No. 277) £.3.0.0	Manuscript	BWDP
1901	Tower and plot of land advertised for auction, 30/11/1901	Text	Irish Times Archive
1902	16-2-1902 "Sold"	Manuscript	BWDP
1902	Conveyance dated 11/3/1902 between War Department and Mrs Edna Mabel Johnson-Roberts.	Manuscript	DLRCOCO
1902	Deeds for Williamstown Martello Tower lodged by Mrs Edna Mabel Johnson-Roberts with Hibernian Bank Limited to secure loans totaling £255.	Manuscript	DLRCOCO
1906	Civil Bill dated 26/9/1906 between Hibernian Bank Limited and Mrs Edna Mabel Johnson-Roberts, noting non-payment of loans and possession of Williamstown Martello Tower passing to Hibernian Bank Limited.	Manuscript	DLRCOCO
1907	Public Auction 6/2/1907, Blackrock Urban District Council purchases Williamstown Martello Tower for £200	Manuscript	DLRCOCO
1907	"council decided to try and buy the Martello Tower at Williamstown if sold in or about £300". 7/2/1907	Text	Irish Times Archive
1936-1937	"Martello Tower" showing development of coast in the area.	Map	OS
1974	Lease of tower to Boro' United Football Club for use "as a clubroom and training centre".	Manuscript	DLRCOCO
1994	Summary Field Report, dated 23/7/1994, with 3 photos.	Report	ASI
1999	Two digital aerial images showing the tower set within a linear coastal park on reclaimed land inshore of the railway line.	Photo	National Coastline Survey
2001	Stone Decay Study of Tower	Report	Pavía & Bolton (2001a)
2008	XRF <i>in situ</i> analyses of salts of marine origin to exterior masonry.	Report	Bolton (2008)

3.16 South 16 Sandymount

The tower is a distinct landmark on the coast road of Sandymount. The tower was a 'double-tower' (having two cannons to the roof and slightly larger than single-gun towers) built on the foreshore to defend a landing on South Bull Island and to provide support to the Pigeon House. Flynn (1990) notes:

"the actual siting for the tower proved difficult but the builder overcame the problem of the sandy foreshore by means of baulks of oak On occasions arrested smugglers were imprisoned in the tower as they awaited transportation to prison".

The tower was slightly altered, using reversible interventions, to provide new stair access to the interior in the 1850s, and altering the ancillary buildings and boundaries. The tower was let out from the 1850s onwards, with the lease taken by the Dublin Tramways Co. who eventually bought the property in 1912. The tower was substantially altered by the Dublin Tramways Company involving the insertion of new door and window openings and a number of adjoining structures. The tower was again altered in recent years with the addition of a modern flat-roofed single-storey restaurant building attached to the seaward side of the tower.

Year	Description	Type	Source
1804	"No. 16 A Work for 4 Guns on the South Bull. To be placed at an intermediate distance, between the last mentioned Battery, and the Pigeon House, to prevent a Debarkation on the Strand, to keep up the chain of communication and close the Defences on that side. Note. It being thought advisable to suspend the execution of this work & Tower No. 19 is proposed near Sandyview.". Dated 30 th June 1804. WO 55 831.	Manuscript	Kew
1805	Tower armed with two 24-pounder guns. Ref: PRO HO 100/132 1806 f.39-40	Manuscript	Kew
1806	Copy of 1862 drawing corrected to 1883 noting "this tower deed 2/5/1806. There is no deed plan". MALLF	Plan	Military Archives
1806	"No. 16 Tower - Old Merrion or Sandy view. Conveyance from Viscount Fitzwilliam and others for Ever. No rent." noted in 1830 return. WO 55 2685	Manuscript	Kew
1815	Position marked "Sandymount 16"	Map	TCD MS 2182
1816	"Tower" marked on a coastal road leading from Sandymount to Old Merrion.	Map	Taylor
1821	"Tower", no position marked	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1823	"View of Dublin Bay 1823" showing tower from N showing seawall and altered foreshore, ladder access to original	Drawing	IAA

	landward doorway, machicolation, flagpole, parapet and rectangular N window.		
1825	"Two 24 Pounder Guns – Dismounted. The Tower is in condition but the lower floor requires some repairs." WO 54 757	Manuscript	Kew
1826	"The floor about it is much decayed" WO 54 757	Manuscript	Kew
1829	"No. 16 Tower Sandymount – A Round Tower Constructed for 2 – 24 Pounders for the defence of the South Bull and maintaining a communication with the Pigeon House. The lid of the Tank and floor about it are very much decayed – the Wood of the [illegible] is very much decayed and out of order – the Ceiling of the room admits the wet at seaward past a pain of glafs blown out by last storm. 2 – 24 Pd Gun Carriages and Traversing Platform given in to the Storekeeper in Dublin", WO 54 757	Manuscript	Kew
1831	No. 16 Old Merrion is positioned at the edge of a sandy foreshore, with a breakwater located immediately adjacent to the tower. PRO WO 55/2684	Manuscript	Kew
1841	"Dublin Bay: Sketch of the Coast on the southern extremity of the Bay, shewing the positions of the Towers and Batteries for its defence. 30 Nov 1841". Tower position marked. MFQ 1 520	Map	Kew
1841	Map of area showing ordnance boundary, Plan of tower at base & 1 st floor showing attached open yard, and privy, cess pit and coal store to seaward, with sections and elevation of attached structures and detail of stairs accessing tower. MFQ 1 520	Drawings	Kew
1850	Tower shown adjacent to shoreline	Drawing	T.R. Harvey
1850	Letters from the Commanding Royal Engineer in Ireland to the Inspector General of Fortifications dated 7 th & 20 th March 1850 proposing alterations and extensions to west face of tower "to improve the appearance ... Major Fairfield, Agent to Mr Signey Herbert, requesting permission to remove the Privy Yard on the north side of the Tower at Sandymount to the Sea Front, and also to alter the present means of access into the Tower by substituting for the Wooden Ladder now used an iron ladder and landing. It is intended that the Stairs and platform of landing shall be so constructed as to be removable at pleasure, leaving only the sockets as fixture, which receive the Cantilevers". Request approved "It should be understood that after the alterations every thing is to remain the property exclusively of the Board ... and that Stones should be placed at convenient distance to define the limits of the Ordnance Property" WO 44 119	Manuscript	Kew
1852-1858	undated (probably 1852-1858) entitled "Ordnance Towers South of Dublin Bay Nos. 9-16 inclusive" showing stairs to	Plan	Military Archives

	north.MALLF		
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnery 2006:119
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
1862	1862 drawing indicating metal stairs to east, rectangular office to N, privy, ash pit, coal store and basement tank to E; stable at SE; 3 boundary stones with a 4 th to the west noted as "sunked", and 'sauna' indicated to S outside the curtilage of the building.	Plan	Military Archives
1862-1866	Detailed 1862 plan indicating War Department property in red, extending to east with note "foreshore extends about 1200 yards to low water mark". MPEE 1 248	Plan	Kew
1869	6 inch sheet revision: The tower has been erased for military security purposes.	Map	OS
1870	"Martello Tower-Evi Crane, keeper"	Text	Thoms Directory
1872	Annotated OS map dated 10 th Sept 1872 with penciled locations of 3 boundary stones.	Map	Kew
1874	Tower noted as let, in "Good" condition, and probably disarmed in 1869. PRO 35/34 & 35/40	Manuscript	Kew
1887	"19.7.87 Sale recommended, Rent £7.00"	Manuscript	BWDP
1897	"16.1.87 Letting No.278, Rent £7.00"	Manuscript	BWDP
1906	"Martello tower-Oakes, Thomas".	Text	Thoms Directory
1906	Dublin Tramways Co. Caretaker and wife locked in tower. 26/12/1906	Text	Irish Independent
1912	Tower, then leased to Earl of Pembroke, advertised for sale by auction on 15/10/1912, and bought by Dublin Tramways Co. for £520	Text	Irish Independent
1913	copy of 1862 drawing corrected to 1883 noting "this tower deed 2/5/1806. There is no deed plan" ... "Property sold to Dublin United Tramways £520 11 MARCH 1913".	Plan	Military Archives
1936	"Martello Tower" showing adjacent "lavatories" to seaward, with Strand Road passing immediately to landward.	Map	OS
1994	Summary Field Report, dated 23/7/1994, with 2 photos.	Report	ASI
1999	Two digital aerial images showing the tower and the development of the adjacent shoreline.	Photo	National Coastline Survey
2002	Conservation Report	Report	Bolton (2002)

3.17 North 1 Red Rock, Sutton

Sutton tower was constructed to control access to Sutton Creek – an important waterway for ships which ran behind North Bull Island and was once an important shipping route into Dublin City, as it avoided the dangerous sandbar at the mouth of the Liffey. The tower was occupied by the Preventative Water Guard in the 1820s, but reoccupied by the military in the 1830s. The 1852 Board of Ordnance drawing notes eight boundary stones marking the approach path, but no details of the building or any ancillary structures. This was the last tower north of Dublin to be disarmed, probably when it was evacuated of military personnel in 1881. The tower was let out in 1897 and sold into private ownership c.1903. This tower, located off Shielmartin Road on Howth Head, is in private ownership and has been converted to a private residence. The tower is occupied and has recently undergone alterations and conservation works including rendering of the exterior.

Year	Description	Type	Source
1804	"N.1.X One Gun Tower, with an Epaulement towards the Hill, on a projecting rocky point, near the White house, at Sutton, to command the Creek. In possession of Mr. Crosbie, lease expired, said to be the property of W.Newcomen". Dated 1 st September 1804. WO 55 831	Manuscript	Kew
1805	Costs: "The Sutton tower (No. 1 Tower) seems to have been a modest job; the figure is £616 12s. 6d., priced in the same month (February 1805)".	Text	Kelly (1940)
1805	Tower armed with one 24-pounder gun. Ref: PRO HO 100/132 1806 f.39-40	Manuscript	Kew
1806	Plan to accompany Deed dating 14/4/1806. 2 Copies. Copy A shows undefined clay boundary fence and outline of tower with note "From land of Mrs. A. Jameson". Copy B shows tower & relationship with field boundaries and right of way MALLF	Plan	Military Archives
1815	Position marked "Sutton Cove No.1"	Map	TCD MS 2182
1816	"Tower" marked with access path from "Sutton House" and "Town of Sutton".	Map	Taylor
1821	"Tower", no position marked	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1825	"This Tower has one 24 Pounder Gun mounted on iron Truck Carriage on a Traversing Platform. The carriage and platform are both reparable but as both sides of the latter are unserviceable it will not be worth it they were painted July 1824 but so badly as to require it again. The Tower is in good repair; except that 3 of the windows had and 3 pains of Glafs are broken as in last inspecting. The Magazine is dry and the water &c in good order" WO 54 747	Manuscript	Kew
1826	"This Tower is in good repair except that	Manuscript	Kew

	the window sides are out of order, and some plastering is required in the barrack room - The Platform of the approach to this Tower requires repairs, and the ladder is nearly unserviceable and dangerous. The Tower is occupied by the Preventative Water Guard by order of the Respective Officer dated 30 th May 1825" WO 54 747		
1827	"The Tower is in good condition except that the Windows are out of order and plastering in the Barrack Room." WO 54 757	Manuscript	Kew
1829	"No. 1 Sutton. A Round Tower Constructed for 16 Men Bombproof with a Store Room and Water Tank. Constructed for One 24 Pounder for the defence of Sutton Creek. The Tower is in good repair except that the windows are out of order, and a pane of Glass broken. Plastering is required in the barrack room. A Boundary gate is required. Ordnance Mounted. One 24 Pd Gun carriage and traversing platform". WO 54 757	Manuscript	Kew
1830	Tower in charge of "Gunners of the Royal Artillery". WO 55/2684	Manuscript	Kew
1830	Coloured manuscript showing outline of tower and topographical features. WO 55/2684	Plan	Kew
1837	"Plan shewing the Boundaries (marked green) .." showing outline of tower, coast and land parcel owned by WO.	Plan	Military Archives
1837	"Martello Tower" with access road along coast.	Map	OS 1 st edition
1848	Coloured outline of tower showing right of passage, six boundary stones and a well. WO MPH 1 662	Plan	Kew
1851	Outline of tower and adjacent land parcels showing 11 boundary stones, dated 31/12/1851	Plan	Military Archives
1852	"No. 1 Sutton" plan of tower showing seven boundary stones and Right of Way. MPH 1 662.	Plan	Kew
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnery 2006:119
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
1862	1862 drawing indicating tower and yellow-coloured right of way, showing wooden platform to north, privy to west, cross-section of defensive ditch/clay fence & boundary stones numbered as Nos. 5,7, 2,3, 5-7.	Plan	Military Archives
1863	Plan & Cross-section of proposed retaining wall, showing outline of tower & coast. Dated 11/11/1863	Plan	Military Archives
c.1860s	Copy of OS 1 st edition, with data on rock types outcropping on foreshore inscribed in handwritten notes.	Map	GSI
1869	6 inch sheet revision: The tower has been erased for military security purposes.	Map	OS

1874	Tower noted in "Good" condition, and as only armed tower north of Dublin. Tower still armed with one 24-pounder as when originally fitted out in 1805. PRO 35/34 & 35/40	Manuscript	Kew
1881	Tower noted as vacated in second half of 1881 in Return for 1886. PRO WO 33/46	Manuscript	Kew
1888	Return showing no armament at Sutton Tower. A 6-inch B.L.H.P. gun is proposed. WO 396/4. Report No. 95	Manuscript	Kew
1897	"16.1.87 Letting No.2604, Rent £8"	Manuscript	BWDP
1903	30.2.03 Andrews Jameson sought to buy tower 22/10/02 "Mr. Andrew Jameson the owner of the land surrounding. The tenant of the above letting wishes to purchase the Tower and the approach thereto" "A. Jameson nullified accordingly"	Manuscript	BWDP
Post-1915	copy of 1862 plan showing tower letting (to Mr. A. Jameson). 2 roods, 28 perches, wall to north of tower noted "wall removed 1915". Boundary stones 2,3,5-7 removed with new stones numbered BS 5,6,7 in place.	Plan	Military Archives
1936-1937	"Martello Tower" showing access road along coast and boundary stones in 2 locations.	Map	OS
1952	"For Sale Sutton House, in the following lots ... Lot 4: Will be offered for sale WITHOUT RESERVE. It comprises a Martello Tower situated on Red Rock, and is held subject to a rent of £8 per annum".	Text	Irish Times
1959-1960	Showing timber access bridge, balcony surrounding tower and porch to landward, with timber & glazing roof structure. Ref. 0095/142	Photo	IAA
1962	Martello Tower, Red Rock, Sutton offered for sale with photo showing tower, surrounding timber walkway and timber glazed enclosure to gun platform	Text	Irish Times
1962	"The martello tower at Sutton, Co. Dublin, which was sold yesterday for £1,900". 22/11/1962	Text	Irish Times
1995	Summary Field Report, dated 6/10/1995.	Report	ASI
1999	Digital aerial image showing the tower.	Photo	National Coastline Survey
2006	Declaration	Declaration	RPS
2006	Re-rendering of exterior using a Natural Hydraulic Lime (NHL5 with a 5mm down sand and 6mm down aggregate). Photo shows scaffolded tower.	Text & Photo	Building Limes Forum Ireland, April 2007 Newsletter

3.18 North 2 Howth

This tower overlooks Howth Harbour, and is accessed via Abbey Street. The tower is in local authority ownership, and is currently in use as a museum called “Ye Olde Hurdy-Gurdy Museum of Vintage Radio” dedicated to communications heritage. The tower was built on a promontory fort, most famously depicted in a sketch by Gabriel Beranger, c.1775. The damage to the promontory fort was lamented by antiquarians such as T.S. Westropp (1922) who recounted:

“Unfortunately, in the wasteful craze for building useless Martello Towers, in the Napoleonic Wars, early in the last century, the great mound, like other interesting and historic structures was leveled; its successor alone marks its site”.

The tower was occupied by the Preventative Water Guard (later the Coast Guard) from the 1820s until at least 1897. The 1852 Board of Ordnance drawing shows twelve boundary stones (the most at used at any Dublin site) marking the sub-rectangular extent of the site and the approach path. The tower was famously used as a Marconi Station in the early years of the 20th century, and continued to function as a communications hub when ownership transferred to the Department of Posts and Telegraphs c.1920. The tower was sold by Bord Telecom to Dublin City Council in the late 1980s and is now in the possession of Fingal County Council.

Year	Description	Type	Source
1775	Sketch by Gabriel Beranger showing large flat-topped mound with outer ring & fosse recorded by Westropp (1922).	Drawing	RIA
1804	“2X. One Gun Tower – Howth mount – three gun Battery Howth Point, looking towards Polscadden Bay, Baldoyle Creek and anchorage towards Ireland’s Eye. N.2.X D.° of W.Hannon, holds of W. Robt. Hutchinson, Dorset Street – said to be the property of Lord Howth”. Dated 1 st September 1804. WO 55 831	Manuscript	Kew
1805	Tower armed with one 24-pounder gun. Ref: PRO HO 100/132 1806 f.39-40	Manuscript	Kew
1815	Position marked “Tower No. 2”	Map	TCD MS 2182
1816	“Tower” marked overlooking the harbour and Ballyscadden Rocks.	Map	Taylor
1821	“Tower”, no position marked	Map	Duncan
1823	“A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823”. Position marked. WO 44/109	Map	Kew
1825	“This Tower was given to the Preventative Water Guard by order of the respective officer of the 30 th May 1825. One 24 Pounder mounted as at No.1 The Gun Carriage is repairable by removing the upper part of the right chuk. The Traversing Platform is serviceable. They were painted at the same time as No.1 and in the same manner. The Parapet of the	Manuscript	Kew

	Tower requires repairing the Cement and three of the windows frame are taken as at last inspecting. The Magazine is dry: and the Tank in good order. This tower is to be occupied by a party of Police by order of the Respective Officers of the 1 st instance but they have not yet taking possession of it. The side arms and shot are under cover" WO 54 747		
1826	"The roof admits water, the flooring of the lower storey requires repair" WO 54 747	Manuscript	Kew
1827	"The damp is fast ageing .. would require painting." WO 54 757	Manuscript	Kew
1829	"No. 2 Tower Howth. A Round Tower Constructed for 16 Men Bombproof with a Store Room and Water Tank. Constructed for One 24 Pounder for the defence of Howth Harbour. The Roof admits the Water, the flooring of the lower storey requires repair - A cover for the Water tank is required - Trap door required to be replaced by a new one. Two panes of Glafs wanted - Flag Staff is broken. This Tower is occupied by the Police and is kept in a better state than formerly. Ordnance Mounted. One 24 Pd Gun carriage and traversing platform serviceable". WO 54 757	Manuscript	Kew
1830	In use by Revenue Coast Guard (Preventative Service Water Guard) to prevent smuggling. WO 55/2684	Manuscript	Kew
1830	Coloured outline of "No.2 Howth" showing topographical detail and passage. WO 55/2684	Plan	Kew
1837	"Howth: at the upper end of the harbour is a martello tower, by keeping which between the two pier heads by day, or at night by keeping the lights between the S. and S by W., the entrance is safely effected."	Text	Lewis
1837	"Plan shewing the Boundaries (marked green) .." showing outline of tower, coast and land parcel owned by WO.	Plan	Military Archives
1837	Indicated as "Martello Tower" showing outline of promontory and "Juan's Well" to SW.	Map	OS 1 st edition
1848	Coloured outline of tower showing right of passage, and twelve boundary stones. WO MPH 1 662	Plan	Kew
1850	7 th March 1850 showing boundary, internal boundary walls, right of way & 12 boundary stones to south	Map	Military Archives
1852	"No. 2 Howth" Unlabelled plan of tower showing twelve boundary stones. MPH 1 662.	Plan	Kew
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnery 2006:119
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
c.1860s	Copy of OS 1 st edition, with data on rock	Map	GSi

	types outcropping on foreshore inscribed in handwritten notes.		
1860-1883	Photo of Howth Harbour and Ireland's Eye showing Howth Martello Tower. NLI SP858	Photo	NLI
1869	6 inch sheet revision: The tower has been erased for military security purposes.	Map	OS
1869	6 inch OS sheet revision without suppression, showing Martello Tower and plot in red, with handwritten note indicating position of Privy to east of Tower. WO 55 1446	Map	Kew
1850	23/12/1887 showing boundary, internal boundary walls, areas not cultivated, right of way & 10 boundary stones to south.	Map	Military Archives
1862	1862 Drawing indicating positions of chimney, flag staff, machicolis, external stairs and winding stairs to interior, shot furnace and privy as conjoined structures to east to exterior of "clay fence" encircling the tower site. Labelled "Tower 1 st Story Tank, Kitchen and Master Gunners Store, 2 nd ... Soldiers Quarters" with both number and un-numbered boundary stones marking the site and the "right of passage" access.	Plan	National Archives
1874	1874 return notes the tower as disarmed and in "Good" condition. WO 53 40	Manuscript	Kew
1880-1900	Tower on promontory above "bathing place". NLI LROY 2975 showing relatively little development to the area at the base of the promontory. The tower shows a possible chimney structure to the seaward side, a white-bordered window overlooking the bathing place, the machicolation and a ladder providing access.	Photo	NLI Laurence Collection
1897	"16.1.87 Might be disposed of". Occupied by Coast Guard and Signal Station.	Manuscript	BWDP
1905	Coloured photo marked '1905 Balcaddan, Howth (Marconi station)' showing antennae & stairs to tower.	Photo	Postcard
1913	"The first telephone cable between the south of Ireland and Great Britain was laid in 1913 from the Martello tower in Howth to Nevin in North Wales, a distance of 63*4 nautical miles. This cable, one of the first of its type, was insulated with Balata and was "lump loaded ". The cable gave Dublin one circuit to London and one to Liverpool, and was retained in service till 1938 when it was abandoned on the provision of new cables"	Text	Litton (1961/1962)
1920	"To reach the path, we proceed by the road skirting Balcaddan Bay, overshadowed by Tower Hill, from the Martello tower on which the submarine cable to England is carried into the sea at Balcaddan Bay under the two notice boards marked "Telegraph." The cable formerly started from a station on the shore, but the entire structure was demolished one night in a storm, and the cable was thereupon removed to the Martello tower".	Text	Joyce
c.1920	Undated report notes "It was adapted by	Files	RPS

	the Department of Posts and Telegraphs in the early 1920's as the landfall station for the under water cable which crossed the Irish Sea. It continued as a station until it was decommissioned in the late 1980's. the tower and site were subsequently sold by Bord Telecom to Dublin County Council".		
1936-1937	"Martello Tower" within circular enclosure on top of promontory hill.	Map	OS
1993	Summary Field Report 13/5/1993 with 3 photos.	Report	ASI
1999	Aerial photo showing the tower without any ancillary buildings, on a promontory overlooking Howth harbor.	Photo	National Coastline Survey
1996-2007	Plans, elevations and cross-sections prepared by F.May, Architect.	Drawings	RPS

3.19 North 3 Ireland's Eye

This 'double-tower' is located on an island off the Dublin coast at Howth, and was positioned to defend the anchorages and approaches to Howth. The 1852 drawing shows the extent of Board of Ordnance land, with four boundary stones marking rights of way and the position of a freshwater spring. However, the only building details are the position of the stairs and the gun platform in plan. The 1862 Ward Department drawing indicates the position of the stairs, shot furnace, chimney and the function of the different rooms. The tower appears to have been unoccupied for most of its existence, and its occupation by the Preventative Water Guard may have been seasonal. The tower was reported in poor condition throughout the 19th century, and was unsuccessfully offered to let on a number of occasions before its purchase by the Earl of Howth in 1909. The tower is currently unoccupied, derelict and in private ownership.

Year	Description	Type	Source
1804	"4X. Two gun Tower, on Steer point, Ireland's Eye, to command the Anchorage. For the further protection of the Anchorage, another Tower would be necessary, on the Shullock point.". Dated 1 st September 1804. WO 55 831	Manuscript	Kew
1805	Tower armed with two 24-pounder guns. Ref: PRO HO 100/132 1806 f.39-40	Manuscript	Kew
1815	Position marked "Tower No. 3"	Map	TCD MS 2182
1816	"Tower" indicated beside "the steer" rock.	Map	Taylor
1819	"Shut up since 1819" 1825 report WO 54 575	Manuscript	Kew
1821	"Tower", no position marked	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1825	"Two 24 Pounder Guns mounted before both carriages and platform are serviceable. They were painted at the same time and manner as the others. The Tower is in the same state from wet and being shut up. The Magazine equally unserviceable from Damp and the window frames remain broken as at the last inspecting. The keys of this Tower are in the possession of Surveyor General Crampton The roof of the Magazine requires repairs as reported" WO 54 747	Manuscript	Kew
1826	"This Tower is in a wet and damp state and the cock of the cistern is out of order. The window frames are broken" WO 54 747	Manuscript	Kew
1827	"The damp is fast ageing .. would require painting." WO 54 757	Manuscript	Kew
1829	"No. 3 Tower Ireland's Eye. A Round Tower Constructed for 16 Men Bombproof with a Store Room and Water Tank. Constructed for 2- 24 Pdrs for the defence of Howth Harbour. The damp is fast injuring the floor - The furnace room is suffering the sea air	Manuscript	Kew

	and requires pointing. It would be very desirable to have the Tower occupied to prevent it being very materially injured from the effects of Damp. Ordnance Mounted. 2- 24 Pdrs Gun carriages and traversing platforms serviceable". WO 54 757		
1830	In use by Revenue Coast Guard (Preventative Service Water Guard) to prevent smuggling. WO 55/2684	Manuscript	Kew
1830	Coloured manuscript showing outline of tower and topographical features. WO 55/2684	Plan	Kew
1837	"Plan shewing the Boundaries (marked green) .." showing outline of tower, coast and land parcel owned by WO.	Plan	Military Archives
1837	Indicated as "Martello Tower"	Map	OS 1 st edition
1842	Showing Howth Castle, Harbour and Ireland's Eye Martello tower.	Engraving	Bartlett
1848	Coloured outline of tower showing right of passage, and five boundary stones. WO MPH 1 662	Plan	Kew
1850	7 th March 1850 showing boundary & 11 boundary stones to south.	Plan	Military Archives
1852	"No. 3 Ireland's Eye" Unlabelled plan of tower showing five boundary stones. MPH 1 662.	Plan	Kew
1852	" I know every inch of Ireland's Eye Landed Mr and Mrs Kirwan near the Martello tower, which is uninhabited ..." 10/12/1852	Text	The Times
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnery 2006:119
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
1861	"Modern Martello tower and the remains of Cill-mac-Nesisain are the only edifices on the island". Duffys Hibernian Magazine. Issue 3:14, August 1861, P.56	Text	Duffys Hibernian Magazine
1862-1866	Detailed 1862 plan indicating War Department property in red, to include entire north-east section of island and all exposed rocky foreshore. MPEE 1 248	Plan	Kew
c.1860s	Copy of OS 1 st edition, with rock 'strike' inscribed in handwritten ink.	Map	GSI
1869	6 inch sheet revision: The tower has been erased for military security purposes.	Map	OS
1869	6 inch OS sheet revision without suppression, showing Martello Tower and plot in red. WO 55 1446	Map	Kew
1874	Tower offered for rent through tender proposals by District Controller Dublin District 24/8/1874.	Text	Irish Times Archive
1874	1874 return notes the tower as disarmed and in "Tolerable" condition. WO 53 40	Manuscript	Kew
1909	1862 Drawing with note "Sold to the Earl of Howth for £100 Conveyance of 29/1/09 Deed No. 995".	Plan	National Archives
1936-1937	"Martello Tower" showing boundary stone.	Map	OS

1996	Summary Field Report 16/8/1996.	Report	ASI
1999	Digital aerial image showing the tower, with vegetation growing to the rooftop gun platform.	Photo	National Coastline Survey

3.20 North 4 Carrick, Portmarnock

This tower is located on Strand Road, Carrickhill in Portmarnock. The 1830 and 1852 Board of Ordnance drawing record the presence of a pier, noted as 'Pier in Ruins' in 1852, and outside the circular site marked by four boundary stones. The tower has been converted to residential use, and is currently occupied and in private ownership. The tower was altered in the 20th century with the addition of a crennelated additional story to the rooftop, and ground and first floor window openings inserted to the walls. A number of single-storey structures also abut the ground floor on the landward side.

Year	Description	Type	Source
1804	"5X. One gun Tower – right side of Malahide Creek. Near Carrick Hill, on point of Road, between house and corner of wall, tenant W. William, said to be the property of Mr. Plunkett of Portmarnock – it will be necessary to turn the present road behind the house, & take a piece of the adjoining field, for that purpose.". Dated 1 st September 1804. WO 55 831	Manuscript	Kew
1805	Tower armed with one 24-pounder gun. Ref: PRO HO 100/132 1806 f.39-40	Manuscript	Kew
1815	Position marked "Carrick Hill No. 4"	Map	TCD MS 2182
1816	"Tower" marked overlooking a curved quay and the "Rock of Portmarnock".	Map	Taylor
1820	Tower drawn at 1 inch:270 feet, showing adjacent battery on shoreline.	Map	Rennie
1821	"Tower", no position marked	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1825	"The Cement on the parapet of the Tower is in the same also except more of it has fallen off by the storms of last winter and in consequence of the quantity of wet that came in it will not be fit to be inhabited by the Gunner next winter unless repaired" WO 54 747	Manuscript	Kew
1826	"The Carriage and platform require painting the roof of the Magazine is out of repair, some repairs have been performed and the state of the Towers have been improved" WO 54 747	Manuscript	Kew
1827	"The Magazine is still damp and the [illegible] of the Tower admits wet." WO 54 757	Manuscript	Kew
1829	"No. 4 Tower Carrick. A Round Tower Constructed for 16 Men with a Store Room and Water Tank Bombproof. Constructed for One 24 Pdrs for the defence of Baldoyle Strand. Cover for the Water Tank much wanted – Trap door requires to be replaced by a new one – 6 panes of Glafs broken and one metal window broken by effects of storm. Ordnance Mounted. One 24 Pdr Gun carriage and traversing platform	Manuscript	Kew

	serviceable". WO 54 757		
1830	Tower in charge of "Gunners of the Royal Artillery". WO 55/2684	Manuscript	Kew
1830	Coloured manuscript showing outline of tower and topographical features, with "Tubbermaane Well" to SE, and curving pier to W. WO 55/2684	Plan	Kew
1837	"Plan shewing the Boundaries (marked green) .." showing outline of tower, coast and land parcel owned by WO.	Plan	Military Archives
1837	Indicated as "Carrick Hill Martello Tower" located adjacent to the "Old Quay".	Map	OS 1 st edition
1848	Coloured outline of tower showing right of passage, "Pier in Ruins to seaward, and four boundary stones. WO MPH 1 662	Plan	Kew
1850	7 th March 1850 showing 5 boundary stones.	Plan	Military Archives
1852	"No. 4 Carrick Hill" showing four boundary stones, stairs to west, and "Pier in Ruins" to seaward. MPH 1 662.	Plan	Kew
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnery 2006:119
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
c.1860s	Copy of OS 1 st edition, with data on rock types outcropping on foreshore inscribed in handwritten notes.	Map	GSI
1869	6 inch sheet revision: The tower has been erased for military security purposes.	Map	OS
1869	6 inch OS sheet revision without suppression, showing Martello Tower and plot in red. WO 55 1446	Map	Kew
1874	1874 return notes the tower as disarmed and in "Good" condition. WO 53 40	Manuscript	Kew
1937	"For Sale or Long Lease, MARTELLO TOWER, Velvet Strand, Portmarnock. Accommodation: Two reception rooms, 2 bedrooms and h. and c. basins, kitchen, garage, Tower and a portion of the land held in fee-simple, remainder on a 400 year lease; in all 3/8 acre approximate. Suitable as residence or tea house, petrol station and car park". 24/7/1937	Text	Irish Times Archive
1959-1960	Showing original pointing, machicolis & parapet. Later interventions include concrete steps to access 1 st floor doorway, ground floor window, and rooftop extension.	Photo	IAA
1999	Digital aerial image showing the tower, modern extensions and car parking area to landward.	Photo	National Coastline Survey

3.21 North 5 Robswall, Malahide

The Robswall tower was built to defend the approaches to Malahide, and is a visible and distinctive landmark on the coast road. The building, now known as 'Hick's Tower', is located on the Coast Road, Robswall in Malahide. The 1852 Board of Ordnance drawing shows a single tower with no adjacent buildings or ancillary structures, but with four boundary stones marking the extent of the curcular site plot, and a coastal road or path passing across the front of the tower. The building shows two additional storeys added to the tower beneath a conical roof, with additional buildings attached to the landward side. The tower was disarmed in the 1870s and let out until its sale at public auction in 1908. The tower was greatly altered during its conversion to a residence in the 'Arts and Crafts' style by F. Hicks c.1909-1911. The tower is occupied and in private ownership.

Year	Description	Type	Source
1805	Tower armed with one 24-pounder gun. Ref: HO 100 132 1806 f.39-40	Manuscript	Kew
1805	"Two Towers at Robbs-wall & Ballcarrick - £3,600. HO 100 132	Manuscript	Kew
1806	"The Tower is held in Fee Deed dated 21 st March 1806" noted on Deed map of transfer to F.Hicks 1909, & Irish Times newspaper report dated 10/11/1908	Manuscript	Military Archives
1815	Position marked "Robswall No. 5"	Map	TCD MS 2182
1805	Defence expenditure report dated Dec. 1805 notes £1800 for towers at Balcarrick and Robswall.	Manuscript	PRO HO 100/132 f.47
1816	"Tower" marked defending the entrance to Malahide Estuary.	Map	Taylor
1821	"Tower", no position marked	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1825	" One 24 Pounder mounted as before. Gun Carriages and Platforms both serviceable. They were painted at the same time as No.1 and in the same manner as the others. The Magazine is damp from the Cement on the Parapet of the last inspection. The six pains of Glafs are also still defective and the Tower is in consequence in the same state General as No.4. The tank is in good order. The ladder is in the same state and dangerous" WO 54 747	Manuscript	Kew
1826	"The Magazine is improved by the repair of the cement since the last inspection. The Trapdoor over the entrance is perished, and dangerous." WO 54 747	Manuscript	Kew
1829	"No. 5 Tower Robbs Wall. A Round Tower Constructed for 16 Men with a Store Room and Water Tank. Constructed for One 24 Pdrs for the defence of Malahide Strand and mouth of the River. The Crown of the	Manuscript	Kew

	Tower admits the Wet, no hinges to the Furnace – the Trap door over the entrance is Perished and dangerous. The Cover of the Tank requires repair and 12 Paines of Galfs broken. Ordnance Mounted. One 24 Pdrs Gun carriage and traversing platform Unserviceable". WO 54 757		
1830	Tower in charge of "Gunners of the Royal Artillery". WO 55/2684	Manuscript	Kew
1830	Coloured manuscript of No. 5 Robbs Wall showing outline of tower and topographical features. WO 55/2684	Plan	Kew
1837	"Plan shewing the Boundaries (marked green) .." showing outline of tower, coast and land parcel owned by WO.	Plan	Military Archives
1837	"Robs Wall Martello Tower" within sub-circular cartilage and seaward path.	Map	OS 1 st edition
1848	Coloured outline of tower showing right of passage, and four boundary stones. WO MPH 1 662	Plan	Kew
1850	7 th March 1850 showing tower with internal boundary walls, and 4 boundary stones.	Plan	Military Archives
1852	"No. 5 Robbs Wall" showing four boundary stones. MPH 1 662.	Plan	Kew
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnergy 2006:119
1859	Detail drawing of fence	Drawing	Military Archives
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
1862	Coloured copy notes circular cartilage indicated as "face of paling", with a clay and stone fence delineating the Malahide-Baldoyle road which passes on the seaward side of the tower. The drawing notes chimney, flag staff, shot furnace, winding stairs, machicolis and stairs to the tower, with a pig sty, privy and cess pit arranged as an range of buildings to the landward side of the tower within the cartilage. The map notes "1 st Story Tank, Kitchen and Master Gunners Stone, 2 nd Soldiers Quarters". The land within the curtilage but not including the road is marked as "a a Gunners Encroachment".	Map	Military Archives
c.1860s	Copy of OS 1 st edition, with data on rock types outcropping on foreshore inscribed in handwritten notes.	Map	GSI
1869	6 inch sheet revision: The tower has been erased for military security purposes.	Map	OS
1874	1874 return notes the tower as disarmed and in "Good" condition. WO 53 40	Manuscript	Kew
1897	Contract of tenancy from year to year at annual rent of £6 created by a proposal in writing dated 6 th September 1897 on behalf of Baron Talbot of Malahide. Accompanying deed dated 25/3/1909.	Manuscript	Military Archives
1908	Tower "to be sold by public auction on Tuesday the 17 th day of November 1908.	Text	Irish Times Archive

	The property consists of all that and those part of the lands of Robbswall on which the Martello Tower No. 5 has been erected, containing Thirty-Seven Perches, statute, measure or thereabouts situate in the Barony of Coolock and County of Dublin, and is held in Fee-simple under Indenture of Conveyance, dated 21 st March, 1806....The Vendor is His Majesty's Principal Secretary of State for the War Department". 10/11/1908		
1909	25 th March 1909, showing transfer to Frederick George Hicks, Engineer, of 17 Wellington Place, Clyde Road for £175. Described as "all that and those that part of the lands of Robswall on which Martello Tower No.5 has been erected containing 37 perches statute measure"	Deed	Military Archives
1911	Illustration in Irish Architect (11 March 1911) showing plans, elevation and cross-section, reproduced in Rothery (DATE). Description of conversion in Gordon Bowe & Cumming (1998) and Williams (1994).	Manuscript	IAA
1930-1950	Photograph from north showing general appearance of tower. Ref: NLI VAL 208462.	Photo	NLI
1937-1938	"The Tower" forming part of modern sub-rectangular complex.	Map	OS
1959-1960	Photo from SE showing ivy-covered rendered surface, seaward ground floor window and south ground floor window.	Photo	IAA
1965	"For Sale - The Tower, Malahide - Commanding position facing Lambay Island, detached on 1 ¼ acres, includes as central feature, original Martello Tower, 3 reception rooms, 4 bedrooms, studio, 2 garages, greenhouse, outoffices, etc". 12/6/1965	Text	Irish Times
1993	Photo dated 3/4/1993 with 1 photo.	Report	ASI
1999	Digital aerial image showing the tower as part of a complex of buildings.	Photo	National Coastline Survey

3.22 North 6 Balcarrick, Donabate

This tower is located on Donabate beach at Balcarrick Road, Balcarrick in Donabate overlooking Lambay Island. The 1852 Board of Ordnance drawing shows little detail, with a ladder to landward facing an approach path and three boundary stones. The tower was disarmed by the 1870s, and passed into private ownership in 1909. The tower was altered in the 20th century with an additional parapet wall built to enclose the rooftop gun platform on the landward side. The tower is unoccupied, derelict and in private ownership.

Year	Description	Type	Source
1805	Tower armed with one 24-pounder gun. Ref: PRO HO 100/132 1806 f.39-40	Manuscript	Kew
1805	"Two Towers at Robbs-wall & Ballcarrick - £3,600. HO 100 132	Manuscript	Kew
1806	Deed dated 21 st January 1806 between Hamden Evans, Edward McMahan and John McMahan and Col. Fisher. "all that and those that part of the lands of Ballycarrick in the Barony of Coolock and the County of Dublin containing ten thousand superficial feet or thereabouts within the Martello Tower No.6 erected thereon being portion of the lands and hereditaments comprised in and held in fee simple in trust for His Majesty under Indenture of Conveyance".	Deed	Military Archives
1809	"three original deeds returned to WO on 24/7/09"	Manuscript	Military Archives
1810	Transfer of ownership from RE to RA.	Deed	Military Archives
1815	Position marked "Balcarrick 6"	Map	TCD MS 2182
1816	"Tower" marked with no adjacent detail.	Map	Taylor
1821	"Tower", no position marked	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1825	"One 24 Pounder mounted as before. Gun Carriages and Platform serviceable painted at the same time and in the same manner as the others. The Tower and Magazine are both damp from the state of the Cement on the Parapet. The floor of the Magazine requires to be new laid as some of the rafters have given way and loads of ceiling has also falling in. The three Iron window Rods are still broken and one pair of Glafs has been broken since last inspecting by the falling of some of the Cement is stated by the Gunner" WO 54 747	Manuscript	Kew
1826	"part of the wainscoting over the door has fallen in." WO 54 747	Manuscript	Kew
1827	"The floor of the Magazine out of repair and part of the Wainscoting over the door has fallen in." WO 54 757	Manuscript	Kew
1829	"No. 6 Tower Ballaric. A Round Tower	Manuscript	Kew

	Constructed for 16 Men, Bombproof, with a Store Room and Water Tank. Constructed for One 24 Pdrs for the defence of Malahide Strand and mouth of the River. Three paines of Galfs broken by the wind. Ordnance Mounted. One 24 Pdr Gun carriage and traversing platform requires painting". WO 54 757		
1830	Tower in charge of "Gunners of the Royal Artillery". WO 55/2684	Manuscript	Kew
1830	Coloured manuscript of No. 6 Ballycarrick showing outline of tower and topographical features. WO 55/2684	Plan	Kew
1830	Dated 7 th March 1830 showing boundary stones & extent of site. Hand-coloured.	Plan	Military Archives
1837	"Plan shewing the Boundaries (marked green) .." showing outline of tower, coast and land parcel owned by WO.	Plan	Military Archives
1837	"Plan shewing the Boundaries (marked green) .." showing outline of tower, coast and land parcel owned by WO.	Plan	Military Archives
1837	Indicated as "Coast Guard Station" and appearing as a round structure within circular cartilage, approached by a coastal road from the north.	Map	OS 1 st edition
1848	Coloured outline of tower "No.6 Bellcarrick". WO MPH 1 662	Plan	Kew
1851	Copy of hand-coloured 1830 plan dated 7 th March 1851 showing boundary stones & extent of site.	Plan	Military Archives
1852	"No. 6 Belcarrick" Unlabelled plan of tower showing boundary stones Nos. 2-5 in pencil. MPH 1 662.	Plan	Kew
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnery 2006:119
1857	Copy of hand-coloured 1830 plan dated 23 rd December 1857 showing boundary stones & extent of site.	Plan	Military Archives
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
c.1860s	Copy of OS 1 st edition, with data on rock types outcropping on foreshore inscribed in handwritten notes.	Map	GSI
1862	Indicates 4 boundary stones, pig sty, privy, cess pit, & clay and stone fence	Plan	Military Archives
1869	6 inch sheet revision: The tower has been erased for military security purposes.	Map	OS
1874	1874 return notes the tower as disarmed and in "Good" condition. WO 53 40	Manuscript	Kew
1909	Indenture made 29 th day of March 1909 between His majesty's Principal Secretary of State for the War Department of the one part and John King of 38 Dawson Street in the City of Dublin, Master Carriage Builder, of the other part. £75	Manuscript	Military Archives
1936-1937	"Martello Tower" located on rocky foreshore.	Map	OS
1975	"The Martello Tower at Donabate for sale ...The present accommodation includes an	Text	Irish Times

	entrance hall enclosed within the main wall, two rooms 20ft. by 20 ft. with openings made ("at enormous expense") in the walls that were built to withstand Napoleon's cannon".		
1990	Tower advertised for sale with half-page article on current use, 21 st June 1990, Property Supplement, Page 11.	Text	Irish Times
1993	Summary Field Report 6/4/1993 with 3 photos.	Report	ASI
1999	3 page Conservation Report dated 9 th November 1999 forming part of RPS file.	Report	RPS
1999	Digital aerial image showing the tower positioned at the high water mark.	Photo	National Coastline Survey

3.23 North 7 Portrane

This tower, known as 'Tower House', is located at Quay road, Portrane. The 1852 Board of Ordnance drawing of the tower shows little detail, with a ladder to landward, four boundary stones, and a 'Hut' to the south-west contained within the circular curtilage of the site. The tower was disarmed by the 1870s and appears to have been let out to private tenants, and was eventually sold by the War Department in 1921. The tower was converted to residential use, is occupied and in private ownership.

Year	Description	Type	Source
1804	"6X. One Gun Tower – Portrain Point. In a wheat-field – 6 feet from corner of the Fence – said to be the property of W. Green.". Dated 1 st September 1804. WO 55 831	Manuscript	Kew
1805	Tower armed with one 24-pounder gun. Ref: PRO HO 100/132 1806 f.39-40	Manuscript	Kew
1806	Transfer of ownership between Hamden Evans, Edward McMahon and John McMahon to Col. Fisher on 21 st January 1806. Recorded on deed dated 29 th march 1909. MALLF.	Plan	Military Archives
1815	Position marked "Portrane 7"	Map	TCD MS 2182
1816	"Tower" marked with curved quay to N.	Map	Taylor
1820	Tower drawn at 1 inch:270 feet, showing adjacent battery on shoreline.	Map	Rennie
1821	"Tower", no position marked	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1825	"One 24 Pounder dismantled. The Carriage and Platform become unserviceable painted at the same time and in the same manner as the others. The Tower and Magazine are both damp from the state of the Cement on the Parapet. The floor of the Magazine requires to be new laid as some of the rafters have given way and loads of ceiling has also falling in. The three Iron window Rods are still broken and one pair of Glafs has been broken since last inspecting by the falling of some of the Cement is stated by the Gunner" WO 54 747	Manuscript	Kew
1826	"seven panes of Glass broken, the ladder belonging to the Tower is out of repair, the one now in use has been supplied by the Water Guard who are in occupation of this Tower, it require painting and white wash" WO 54 747	Manuscript	Kew
1829	"No. 7 Tower Portrain. A Round Tower Constructed for 16 Men, Bombproof, with a Store Room and Water Tank. Constructed for One 24 Pdrs for the defence of Rush Strand and River. The ladder has been taken away by the Engineers – the one	Manuscript	Kew

	now in use has been supplied by the Water Guard who are in occupation. The Water runs on the top, shamefully neglected and the Tower is in a very dirty state – it requires plastering and whitewashing. Ordnance Dismounted. One 24 Pdr Gun carriage and traversing platform given in to the Storekeeper in Dublin". WO 54 757		
1830	In use by Revenue Coast Guard (Preventative Service Water Guard) to prevent smuggling. WO 55/2684	Manuscript	Kew
1830	Coloured manuscript of No. 7 Portrain showing outline of tower and topographical features. WO 55/2684	Plan	Kew
1837	"Plan shewing the Boundaries (marked green) .." showing outline of tower, boundary stones coast and land parcel owned by WO. Dated 23/12/1837. Accompanied by a copy dated 31/12/1851.	Plan	Military Archives
1837	Indicated as "Martello Tower"	Map	OS 1 st edition
1848	Coloured outline of tower showing right of passage, hut to SE, and four boundary stones. WO MPH 1 662	Plan	Kew
1852	"No. 7 Portrain" Unlabelled plan of tower showing four boundary stones, and hut to SW. MPH 1 662.	Plan	Kew
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnery 2006:119
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
1862	1862 detail of tower and coastline showing b&w "Coast Guard Watch House" (noted as Rocket House on other plans) & "right of passage". Plan notes 16 NCOs and artillery men & 1300 gallons of water	Plan	Military Archives
c.1860s	Copy of OS 1 st edition, with data on rock types outcropping on foreshore inscribed in handwritten notes.	Map	GSI
1869	6 inch sheet revision: The tower has been erased for military security purposes.	Map	OS
1874	1874 return notes the tower as disarmed and in "Good" condition. WO 53 40	Manuscript	Kew
1862-1897	undated showing detailed b&w plan with coloured additions. "clay and stone fence" shown running from NW-SE, privy @ SE, clay boundary fence running NW-E showing four boundary stones. Blue-coloured area shows circular area to NNE (marked as Encroachment No.2699), Rocket House to NW (Encroachment No.770) and boat slip and boat house to east (Encroachment No. 769 Boat House and Slip for Coast Guard). A second undated copy of this plan shows Encroachment No. 2699 Telegraph Pole; 772 Rocket House; 1730 Occupation of Tower as Coast Guard Station; 769 Boat House & Slip for Coast Guard.	Plan	Military Archives
1897	"16.1.87 Included I list to be disposed of". Occupied by Coast Guard".	Manuscript	BWDP
1906	"King, John, Martello tower".	Text	Thoms

			Directory
1921	copy of 1862 map showing coloured circular area around tower with note "this tower with land and right of way was sold to Mr. Lewis Cuthams for £150. Conveyance dated 23.12.1921 W.O.D.O. 3/1/364 dated 25.5.1921".	Plan	Military Archives
1936-1937	"Martello Tower" within circular enclosure on top of promontory hill.	Map	OS
1937	"Battersby offer, £600, "The Martello Tower", Portrane, on about half acre, 6 aptments, also two-roomed cottage, garden, garage, boathouse, freehold".	Text	Irish Times
1947	Friday, June 20, 1947. Tower House, Portrane, Donabate, Co. Dublin offered for sale. Photo shows tower with inserted window openings and adjacent boathouse.	Text & Photo	Irish Times
2006	Thursday, June 8, 2006. Property supplement. Four photos showing location, side elevation and interior of extension to Portrane tower, offering tower for sale c.€1.75 million to include cut-stone boathouse and guest cottage. "Tower House is being sold by bookseller Derek Hughes of Hughes & Hughes ... On one side of the property is an old-fashioned caravan park, on the other is a row of coast guards cottages awaiting renovation....Extensions in the 1930s and the 1960s added a series of rooms to make it function as a home and give views in all directions. While this may damage its integrity as a tower, they work quite well inside, adding a curved livingroom, a diningroom, entrance hall with cute porthole windows and bedrooms overhead. The centre of the tower has an interesting timber staircase rising to the first floor - like the mahogany doors leading to the diningroom, it is said to have been salvaged from Dublin's Theatre Royal".	Text	Irish Times
2007	1:500 site plan, 1:100 & 1:500 plans, elevations and proposed alterations.	Drawings	Cathal Crimmins Architect

3.24 North 8 Rush

This tower is located on Tower Street, Rush and is now in private ownership. The site outline today is consistent with the earliest known drawn record, an 1830 Board of Ordnance plan showing the circular plot approached by a pathway behind a building on Tower Street. Three Board of Ordnance boundary stones mark the circular outline of the site in 1852, By 1862, the War Department drawing shows the circular plot as 'Foot of Paling', and records an number of structures within the curtilage including walls, paths, pig sty, ash pit and privy in addition to limited information on the layout of the tower. The tower shows one of the most understandable sites in the Dublin series, though the tower itself shows some alterations to the rooftop, probably dating to its use as a coastal station during World War II by the Irish Coastwatch. The tower is currently unoccupied but had been in use as a residence and then as a holiday home by the current owners.

Year	Description	Type	Source
1804	"7X. One Gun Tower – Rush, two 2 gun Batteries. In a field, 49 feet from N. corner of wall – said to be the property of W. Palmer, a prisoner in France – Agent Sir Jn. Brown – Rush House.". Dated 1 st September 1804. WO 55 831	Manuscript	Kew
1805	Tower armed with one 24-pounder gun. Ref: PRO HO 100/132 1806 f.39-40	Manuscript	Kew
1815	Position marked "Rush 8"	Map	TCD MS 2182
1821	"Tower", no position marked	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1825	"Requires immediate repair and white washing being nearly in so bad a state as Nos. 4 & 5 Tower" WO 54 747	Manuscript	Kew
1826	"the Magazine is improved by the painting of the Parapet, and is tolerably dry ... the whole of the Tower should be much improved by doors at the top of the staircases to keep out the weather" WO 54 747	Manuscript	Kew
1829	"No. 8 Tower Rush. A Round Tower Constructed for 16 Men, Bombproof, with a Store Room and Water Tank. Constructed for One 24 Pdrs for the defence of Rush Strand and River. The walls and top of the Tower are damp and admit the wet – a Gate is required at the entrance to the Ordnance ground. Ordnance Dismounted. WO 54 757	Manuscript	Kew
1830	Tower in charge of "Gunners of the Royal Artillery". WO 55/2684	Manuscript	Kew
1830	Coloured manuscript of No. 8 Rush showing outline of tower and topographical features, including a north-wouth aligned road with buildings marked either side to the west of the tower. WO 55/2684	Plan	Kew
1837	"Plan shewing the Boundaries (marked	Plan	Military

	green) .." showing outline of tower, coast and land parcel owned by WO.		Archives
1837	Indicated as "Martello Tower"	Map	OS 1 st edition
1848	Coloured outline of tower showing right of passage, and three boundary stones. WO MPH 1 662	Plan	Kew
1852	dated 26/2/1852, showing outline of tower, 7 boundary stones & rectangular structure	Plan	Military Archives
1852	"No. 8 Rush" showing three boundary stones and approach from west. MPH 1 662.	Plan	Kew
1853/4	Plan, elevation, section and sketch of proposed fence	Drawing	Military Archives
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnergy 2006:119
1856	dated 7/3/1856, showing hand-painted outline of tower	Plan	Military Archives
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
1859	Detail drawing of fence	Drawing	Military Archives
1862	showing 7 [nb 8 shown on 1920 drawing] boundary stones, pig sty, ash pit, privy & "foot of palling", path to High Water Mark(HWM), clay fence @ HWM, spring well to ENE, description of details of tower including 1 st storey tank, kitchen & master gunners store, 2 nd soldiers quarters, shot furnace, staff, chimney, winding stairs, stairs & machicolis	Map	Military Archives
1909	1862 Drawing showing extent of War Department property in red.	Plan	National Archives
1909	1862 Drawing showing extent of War Department property in red.	Plan	National Archives
c.1860s	Copy of OS 1 st edition, with data on rock types outcropping on foreshore inscribed in handwritten notes.	Map	GSI
1860-1930	Sketch entitled "View of a Martello tower on the coast at Rush, County Dublin, Ireland" by Alexander Williams RHA (ca.1846-1930). Ref. PD 3083 TX 1(B)	Drawing	NLI
1866	"Tower Bay" showing sub-circular boundary, boundary marker, and 2 ancillary structures within cartilage, slip to south and quarries to SE.	Map	OS
1869	6 inch sheet revision: The tower has been erased for military security purposes.	Map	OS
1874	1874 return notes the tower as disarmed and in "Good" condition. WO 53 40	Manuscript	Kew
1897	"16.1.87 Included I list to be disposed of". Occupied by Coast Guard".	Manuscript	BWDP
1900-1920	"Coastal view, Rush, Co. Dublin". Ref. EAS 1949	Photo	NLI
1920	copy of 1862 map, dated 10/3/09 showing Encroachment No.1722	Map	Military Archives
1920	plan shewing Extension to Encroachment No.1722 WD, land cultivated as Garden Land shown thus [blue colour].	Map	Military Archives
1926	"MARTELLO TOWER RUSH, Co. Dublin	Text	Irish Times

	The Commissioners of Public Works invite offers for a 60 years lease of this tower, to expend at least £100 on repairs". 17/4/1926 & 21/4/1926		Archive
1929	"RUSH, CO. DUBLIN, MARTELLO TOWER and site of 36 statue perches. The Commissioners of Public Works are prepared to receive offers for a Repairing Lease of these premises for any term up to 99 years".	Text	Irish Times Archive
1937-1938	"Martello Tower" showing boundary marker with roads to landward & seaward.	Map	OS
1993	Photo dated 29/4/1993 with 1 photo.	Report	ASI
Undated	Report accompanying RPS file states "After being decommissioned, the tower was again used for defensive purposes by the Irish Coastwatch during World War II. They built a square, flat-roofed, concrete-block structure in the grounds of the tower in order to watch for invading vessels".	Report	RPS
1999	Digital aerial image showing the tower, within an intact circular boundary walls, having a number of ancillary buildings within the curtilage and approached via the original walled road from the east.	Photo	National Coastline Survey

3.25 North 9 Drumanagh, Loughshinny

This tower is located on a promontory located between Rush and Skerries, near the village of Loughshinny. The promontory is an important archaeological site, and the Martello tower is a distinctive landmark on that promontory. The site is unusual as no drawings or plans record boundary or any ancilliary structures to the site. However, the original approach path, first recorded in 1830, survives in the 21st century as a recognizable earthwork feature to the promontory. The tower is in private ownership, and is currently unoccupied and in a derelict condition.

Year	Description	Type	Source
1804	"No.8 One gun Tower – Drumanagh point. N 8, Middle of the Point, about 150 yards from each side, and 50 yards back from the front, said to be the property of W. Palmer.". Dated 1 st September 1804. WO 55 831	Manuscript	Kew
1805	"No. 8 One gun Tower – Drumanagh point. N 8, Middle of the Point, about 150 yards from each side, and 50 yards back from the front, said to be the property of W. Palmer.	Manuscript	Kew
1805	Tower armed with one 24-pounder gun. Ref: PRO HO 100/132 1806 f.39-40	Manuscript	Kew
1806	22 nd March 1806 between Robert Palmer and Colonel Benjamin Fisher	Deed	Military Archives
1815	Position marked "Drummanagh 9"	Map	TCD MS 2182
1821	"Tower", no position marked	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1826	"The Tower is occupied by the Preventative Water Guard and is in good condition, a shelf is broken in the Magazine" WO 54 747	Manuscript	Kew
1829	"No. 9 Tower Drummanagh. A Round Tower Constructed for 16 Men, Bombproof, with a Store Room and Water Tank. Constructed for One 24 Pdrs for the defence of Rush Strand and River the pier and cover at Drummanagh Point. The Tower is occupied by the Preventative Water Guard, and is in a sound condition but kept in a very dirty state. The East side of the roof lets in Water a little – Flag Staff complete except for the lower end – a little decayed. Ordnance Mounted". WO 54 757	Manuscript	Kew
1830	In use by Revenue Coast Guard (Preventative Service Water Guard) to prevent smuggling. WO 55/2684	Manuscript	Kew
1830	Coloured manuscript of No. 9 Dumonagh Point showing outline of tower and topographical features. WO 55/2684	Plan	Kew
c.1837	Plan of Drumanagh promontory fort at scale of 12 inches to 1 mile showing position of "modern tower", reproduced in	Map	Ordnance Survey

	Herity (2001), P. 42		
1837	"Plan shewing the Boundaries (marked green) .." showing outline of tower, coast and land parcel owned by WO.	Plan	Military Archives
1837	Indicated as "Martello Tower"	Map	OS 1 st edition
1848	Tower under command of Ralph Allen Daniell, Fair-Street Barracks, Drogheda	Text	House of Commons
1848	Coloured outline of tower. WO MPH 1 662	Plan	Kew
1850	Hand-painted plan dated 7 th March 1850, noting 2 boundary stones but no building detail	Plan	Military Archives
c.1850s	Undated b&w map - of promontory showing additional 2 boundary stones denoting right of way @promontory ditch & a further 2 @ Rush to Balbriggan/Skerries road.	Plan	Military Archives
1852	"No. 9 Drumanagh" unlabelled plan showing approach from SW. MPH 1 662.	Plan	Kew
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnery 2006:119
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
c.1860s	Copy of OS 1 st edition, with data on rock types outcropping on foreshore inscribed in handwritten notes.	Map	GSI
1862	Map of Promontory showing "War Department Right of Way", piggery to ENE and 2 boundary stones denoting right of way at promontory ditch and a further 2 boundary stones to 'Palling'.	Map	Military Archives
1869	6 inch sheet revision: The tower has been erased for military security purposes.	Map	OS
1874	1874 return notes the tower as disarmed and in "Middling" condition. WO 53 40	Manuscript	Kew
1904	23-1-04 "Let to Sir. Roger Palmer" £2	Manuscript	BWDP
1905	2-11-05 "W.D.L.A. wishes to ask if this can be sold"	Manuscript	BWDP
1908	5 th October 1908 between War Department ... and General Sir Roger William Henry Palmer of Kennure Park, Rush in the County of Dublin, Baronet for £50.	Deed	Military Archives
1922	Sketch of Promontory Fort showing location of Martello tower by T.S. Westropp, JRSAI, Vol. 52, P.69	Plan	JRSAI
1937-1938	"Martello Tower" & 2 boundary stones marked.	Map	OS
1963	Oblique aerial photo of promontory and Martello tower, from St. Joseph/CUCAP AID 6. Dated 21 st August 1963.	Photo	CUCAP
1972	Aerial Photo of Promontory showing Martello tower. Copy of Fairey Survey of Ireland photo F21/0 (July 1972) held by ASI.	Photo	ASI
1992	Field Report on Promontory Fort also including description & 6 photos of the Martello Tower, 29/9/1992	Report	ASI
Undated	2 oblique aerial photo by Leo Swan of promontory and Martello tower.	Photo	ASI
1999	Two digital aerial images showing an	Photo	National

	irregular circular cropmark surrounding the tower, with an ancillary structure to the east, and vegetation to the parapet.		Coastline Survey
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3.26 North 10 Shenicks Island, Skerries

The tower is located on an island off the coast at Skerries. The 1852 Board of Ordnance drawing notes four boundary stones marking the approach path to the tower, which were not recorded on the earlier 1830 plan. These boundary stones appear to be still in position in later ordnance survey mapping of the island, but with additional boundary stones to the north of the tower. The tower is currently in private ownership, and is unoccupied and in a derelict condition. The tower was recently described in detail by Whearity (2006) who recorded a rendered random rubble structure, with a 1st floor landward entrance, having a machicolation supported by five corbels, two boundary stones (one fallen), a stone-lined well, and a detached roofless, gabled stone masonry ancillary structure.

Year	Description	Type	Source
1805	"9X One Gun Tower – Shenex Island. N. 9X Highest point on the island – said to be the property of Hans Hamilton Esq".	Manuscript	Kew
1805	Tower armed with one 24-pounder gun. Ref: PRO HO 100/132 1806 f.39-40	Manuscript	Kew
1815	Position marked "Shenic Island 10"	Map	TCD MS 2182
1821	"Tower", no position marked	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1825	"The Tower requires some repairs to the Cement Parapet to be white washed." WO 54 747	Manuscript	Kew
1826	"Right cheek of the traversing Platform requires repair, the Flag staff is rotten, and the truck off the Tower is in good condition" WO 54 747	Manuscript	Kew
1829	"No. 10 Tower Shenix Island. A Round Tower Constructed for 16 Men, Bombproof, with a Store Room and Water Tank. Constructed for One 24 Pdrs for the defence of the strand at Skerries. The Tower is in good condition. The Flag Staff is broken. Ordnance Mounted". WO 54 757	Manuscript	Kew
1830	Tower in charge of "Gunners of the Royal Artillery". WO 55/2684	Manuscript	Kew
1830	Coloured manuscript of No. 10 Sheneck's Island showing tower outline, land parcel and topographical features. WO 55/2684	Plan	Kew
1837	"Plan shewing the Boundaries (marked green) .." showing outline of tower, coast and land parcel owned by WO.	Plan	Military Archives
1837	Indicated as "Martello Tower"	Map	OS 1 st edition
1848	Tower under command of Ralph Allen Daniell, Fair-Street Barracks, Drogheda	Text	House of Commons
1848	Coloured outline of tower showing right of passage, and four boundary stones. WO MPH 1 662	Plan	Kew
1850	3 copies of hand-painted outline showing 8 boundary stones, dated 7/3/1850	Plan	Military Archives

1852	"No. 10 Shenick's Island" showing unlabelled plan and two boundary stones. MPHH 1 662.	Plan	Kew
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnery 2006:119
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
1859	Detail drawing of fence	Drawing	Military Archives
c.1860s	Copy of OS 1 st edition, with data on rock types outcropping on foreshore inscribed in handwritten notes.	Map	GSI
1869	6 inch sheet revision: The tower has been erased for military security purposes.	Map	OS
1874	1874 return notes the tower as disarmed and in "Middling" condition. WO 53 40	Manuscript	Kew
1904	23-1-04 "Let to Sir. Roger Palmer" £2	Manuscript	BWDP
1905	2-11-05 "W.D.L.A. wishes to ask if this can be sold"	Manuscript	BWDP
1908	Advertised for sale. Then let to tenant at £1 10s. od. per annum, 15/7/1908	Text	Irish Independent
1908	Tower advertised for sale "by directions of His Majesty's Principal Secretary For the War Department". 11/7/1908	Text	Irish Times Archive
1908	Sale 21 st July 1908 by public auction at sale rooms of Messrs. J.H. North & Company Auctioneers, 110 Grafton Street, Dublin. Indenture 31 st December 1908 between W.O. and Ralph H. Byrne, Esquire, Architect of 20 Suffolk Street, Dublin. £50. Notes "Described as "all that and those that part of lands of Skerries Island on which Martello Tower No.10 has been lately erected containing half an acre being the estate of said Hans Hamilton together with right of passage through the adjoining grounds of said Hans Hamilton by a road to be made in the shortest and most convenient distance from the high road to said Martello Tower of sufficient breadth for cars and carriages"	Deed	Military Archives
1912	"Preliminary Announcement MARTELLO TOWER Shenick Island, Sherries. Free of rent for ever. Sale at 1 o'clock, Arthur & Co., Auctioneers". 6/7/1912	Text	Irish Times
1912	Martello Tower No. 10 advertised for sale. "Held in Fee-simple. Let to a tenant at £1 10s 0d per annum". 15/7/1908	Text	Irish Independent
1914	"MARTELLO TOWER, Shenick Island. One one acre, Skerries strand, no rent for ever. Suit Holiday resort, camping ground". 11/4/1914	Text	Irish Times
1937-1938	"Martello Tower" & 3 boundary stones.	Map	OS
1971	Friday, September 3, 1971 Auction September 28 th "Red Island Holiday Centre, Skerries, Co. Dublin" to include "converted Martello tower.	Text	Irish Times
1974	"Townparks, Red Island, Skerries" 1 photos of Shennick's Island Martello tower taken	Photos	ASI

	from mainland.		
1992	Summary Field Report, 1992	Report	ASI
2006	Detailed description of the tower including photographic record, published in Dublin Historical Record.	Text	Whearity 2006

3.27 North 11 Red Island, Skerries

The tower is located on Red Island, at the end of Harbour Road in the town of Skerries. The drawing accompanying the 1830 return shows two small rectangular structures within the curtilage. The 1852 Board of Ordnance drawing notes four boundary stones marking the approach path to the sub-rectangular plot, itself marked by a further two boundary stones. The tower itself appears to be surrounded by a broad, possibly earthen wall, breached only by the entrance path. The tower shows a number of alterations, including blocking-up of the original first floor entrance, and the addition of a ground floor doorway on the landward side of the building. The tower is in local authority ownership, and is currently unoccupied and in a derelict condition, and has been secured to prevent access to the interior.

Year	Description	Type	Source
1804	"10X One Gun Tower – Skerries. N. 10X. In the centre of the Peninsula or field, called Red Island, said to the property of H. Hamilton Esq".	Manuscript	Kew
1805	Tower armed with one 24-pounder gun. Ref: PRO HO 100/132 1806 f.39-40	Manuscript	Kew
1810	1 st September 1810 transfer from RE to RA	Deed	Military Archives
1815	Position marked "Skerries 11"	Map	TCD MS 2182
1821	"Tower", no position marked	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1825	"This Tower is damp in parts from the Cement at top requiring repair but its Magazine and a tank are both in good order. The floor of the room above the tank is rotten and requires to be repaired. 4 pains of Glafs and 3 iron window rods are broken." WO 54 747	Manuscript	Kew
1826	"Three window rods remain broken". WO 54 747	Manuscript	Kew
1829	"No. 11 Tower Red Island Skerries. A Round Tower Constructed for 16 Men, Bombproof, with a Store Room and Water Tank. Constructed for One 24 Pdrs for the defence of the Strand at Skerries. Flag Staff is broken in two places. Three window rods remain broken and two squares of Glafs by the wind. The tank requires repairs. Ordnance Mounted .. Unservicable". WO 54 757	Manuscript	Kew
1830	Tower in charge of "Gunners of the Royal Artillery". WO 55/2684	Manuscript	Kew
c. 1830	Undated but similar to North 6 Balcarrick plan dated 1830 showing boundary stones & extent of site. Hand-coloured.	Plan	Military Archives
1831	Coloured manuscript of No. 11 Red Island Skerries showing tower outline, land parcel, topographical features, and two	Plan	Kew

	rectangular structures within curtilage to NW sector of site, with other buildings on the island indicated to NW. WO 55/2684		
1837	"Plan shewing the Boundaries (marked green) .." showing outline of tower, coast and land parcel owned by WO.	Plan	Military Archives
1837	Indicated as "Martello Tower" with a "Water Guards Station" to the NE corner of the island, connected to the mainland by a narrow isthmus.	Map	OS 1 st edition
1838	Dated 23 Nov 1838 showing site & boundaries.	Plan	Military Archives
1848	Coloured outline of tower showing right of passage, and six boundary stones. WO MPH 1 662	Plan	Kew
1848	Tower under command of Ralph Allen Daniell, Fair-Street Barracks, Drogheda	Text	House of Commons
1848-1974	"Off the port are four Skerry islands, Shenex or Shenicks, the largest contains 15 acres; on it there is a Martello Tower; that nearest Skerries is Red Island, on which is also a Martello Tower Reid, arch. Master gunner R.A.". Archibald Reid still named as mastergunner of Skerries in 1874, P.1735.	Text	Thoms Directory
1852	"No. 11 Skerries!" showing four boundary stones, approach to west. MPH 1 662.	Plan	Kew
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnery 2006:119
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
c.1860s	Copy of OS 1 st edition, with data on rock types outcropping on foreshore inscribed in handwritten notes.	Map	GSI
1869	6 inch sheet revision: The tower has been erased for military security purposes.	Map	OS
1874	1874 return notes the tower as disarmed and in "Good" condition. WO 53 40	Manuscript	Kew
1904	23-1-04 "Let to Sir. Roger Palmer" £2	Manuscript	BWDP
1905	2-11-05 "W.D.L.A. wishes to ask if this can be sold"	Manuscript	BWDP
1908	Tower advertised for sale "by directions of His Majesty's Principal Secretary For the War Department". 11/7/1908	Text	Irish Times Archive
1908	Advertised for sale. Then let to tenant at £1 10s. od. per annum, 15/7/1908	Text	Irish Independent
c.1909	Coloured plan showing piggeries, privy, circular clay fence encircling tower, "clay and stone fence" to W, clay fence to SE, & 6 boundary stones. Note states "This property Tower No.11 was sold to John McDowell of 3 Upper Sackville Street, Jeweller, Purchase Money £151, 4 th June 1909".	Plan	Military Archives
c.1909	Indenture: "all that and those that part of the lands of Skerries or Red Island on which Martello Tower No.11 now stands containing half an acre with a right of passage forever from High Road to said	Manuscript	Military Archives

	tower ...".		
1912	Martello Tower No. 11 advertised for sale. 15/7/1908	Text	Irish Independent
1919	"The Tower", Skerries, Possession to Purchaser. This attractive residential property comprises a Martello Tower, which has been modernised throughout and to which a large annexe has been built. Elevation situation, commanding full view of the sea. The entire has been lately done up, regardless of cost. Lease 140 years, unexpired". 28/4/1919	Text	Irish Times
1937-1938	"Martello Tower" and boundary stone within complex of buildings	Map	OS
1974	"Townparks, Red Island, Skerries" 3 photos of Red Island Martello tower.	Photos	ASI
1988	Summary description forming part of RPS file with photo dated 18.11.88.	Report	RPS
1999	Digital aerial image showing the tower set in a leveled grassy area, with sections of curved earthworks to possibly indicating the location of a former boundary wall, and dark areas suggesting damage to the parapet.	Photo	National Coastline Survey

3.28 North 12 Balbriggan

This tower is located on a section of beach known as King Strand, off Bath Road, Balbriggan. The 1830 Board of Ordnance drawing shows the pathway passing to the rear of the tower, and two boat harbours to the foreshore to the north-west. The 1852 drawing shows a more formal site layout, with four boundary stones in position. The 1862 War Department drawing shows no ancillary structures within the site, with the northern boundary 'undefined' and fencing along the approach road from the south. The boat harbours remain in position and a brick yard is in operation immediately to the west. The tower is in the poorest condition of all towers surviving in the Dublin series, having lost its parapet and with blocked-up openings. The tower is in local authority ownership, and is currently unoccupied and in a derelict condition.

Year	Description	Type	Source
1804	"11X One Gun Tower – Balbriggan. N.11X Projecting Point, to the N. of the harbour – part of an old Danish Fort, and part in a field, rented by Jn. Quinn said to be the property of Counsellor Hamilton".	Manuscript	Kew
1805	Tower armed with one 24-pounder gun. Ref: PRO HO 100/132 1806 f.39-40	Manuscript	Kew
1806	Copy of 1862 b&w plan marked "sold" with note: "Tower and Road of approach Deed dated 20 MAR 1806. There is no deed plan" MA/LLF.	Plan	Military Archive
1815	Position marked "Balbriggan 12"	Map	TCD MS 2182
1821	"Tower", no position marked	Map	Duncan
1823	"A Skeleton Map of Ireland shewing the Permanent and Temporary Barracks in each County, 1823". Position marked. WO 44/109	Map	Kew
1825	"This Tower is in charge of the Preventative Water Guard and is in good condition. One pain of Glafs Is broken." WO 54 747	Manuscript	Kew
1826	"This Tower is in charge of the Preventative Water Guard and is in good condition. The Flag staff is decayed at the top" WO 54 747	Manuscript	Kew
1829	"No. 12 Tower Balbriggan. A Round Tower Constructed for 16 Men, Bombproof, with a Store Room and Water Tank. Constructed for One 24 Pdrs for the defence of the Pier and Cove at Balbriggan. The Tower is in charge of the Water Guard and is in good repairs except that the roof and Water Pipe are leaking. The Flag Staff is decayed at the top, the top of the Tank broken and in a dirty condition. Ordnance Mounted". WO 54 757	Manuscript	Kew
1830	In use by Revenue Coast Guard (Preventative Service Water Guard) to prevent smuggling. WO 55/2684	Manuscript	Kew
1831	Coloured manuscript of No. 12 Balbriggan showing tower outline, land parcel, topographical features, two adjacent boat harbours and rectangular structure some	Plan	Kew

	distance away to NW. WO 55/2684		
1837	"Plan shewing the Boundaries (marked green) .." showing outline of tower, coast and land parcel owned by WO.	Plan	Military Archives
1837	"Balbriggan: The town is the head-quarters of the constabulary police force of the county; and near it is a martello tower with a coast-guard station, which is one of the nine stations within the district of Swords".	Text	Lewis
1839	Tower used for inquest of drowning victim. 8 th November 1839	Text	Freeman's Journal
1840	Indicated as "Martello Tower" within circular cartilage approached from a coastal path from the south, and showing no adjacent structures and a "brick yard" to the south-west.	Map	OS 1 st edition
1848	Coloured outline of tower showing right of passage, and four boundary stones. WO MPH 1 662	Plan	Kew
1848	Tower under command of Ralph Allen Daniell, Fair-Street Barracks, Drogheda	Text	House of Commons
1848-1906	"and at the Martello Tower on the strand there is a Coast Guard station"	Text	Thoms Directory
1850	Site plan showing five surviving boundary stones (Nos. 2-5,7), dated 7/3/1850	Plan	Military Archives
	"No. 12 Balbriggan" showing four boundary stones, and two boat berths to NW. MPH 1 662.	Plan	Kew
1855	Board of Ordnance dissolved after Crimean War, and all land functions, forts, ordnance, RA & RE officers transferred to War Office.	Secondary	McEnery 2006:119
1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland. PRO WO 10/2819	Manuscript	Kew
c.1860s	Copy of OS 1 st edition, with data on rock types outcropping on foreshore inscribed in handwritten notes.	Map	GSI
1862	Plan of tower showing chimney, shot furnace, winding stairs, machicolis, stairs and face denoting circular cartilage and approach path from east. 4 boundary stones indicated, with 2 boat harbours to west and "brick yard" to south. Map notes 16 NCOs and Privates, 1 st Story Tank, Kitchen and Master Gunners Store, 2 nd Soldiers Quarters.	Map	Military Archives
1869	6 inch sheet revision: The tower has been erased for military security purposes.	Map	OS
1873	Wreck of Sarah 4/2/1873 leads to provision of "Life-saving" rocket for Balbriggan Coast Guards, using Balbriggan tower for rocket exercises, 24/4/1873.	Text	Irish Times Archive
1874	1874 return notes the tower as disarmed and in "Good" condition. WO 53 40	Manuscript	Kew
1904	23-1-04 "Let to Sir. Roger Palmer" £2	Manuscript	BWDP
1905	2-11-05 "W.D.L.A. wishes to ask if this can be sold"	Manuscript	BWDP
1909	20 th July 1909, showing transfer from WO to William J. Cumisky of "all that and those that part of the lands of Balbriggan in the Barony of Balrothery East and the County	Deed	Military Archives

	of Dublin together with the Martello Tower No.12 now standing thereon and containing about quarter of an acre within the road leading thereto".		
1930-1950	"Harbour Entrance, Balbriggan" showing the Martello tower with machicolation, flagstaff & chimney in the background. Ref. VAL 59593	Photo	NLI
1930-1950	"the black rocks, Balbriggan" showing the Martello tower (with parapet, render, door & window openings, flagstaff & chimney) in the background, adjacent boat house and lime kiln. Ref. VAL 59598	Photo	NLI
1937	"Martello Tower" with baths to north.	Map	OS
1988-1992	Field Report, 18/10/1988 & 19/8/1992, with 1 photo	Report	ASI
1989	1989 Development Plan report dated 1/6/1989 "Missing parapet and overhanging machicolated gallery (alleged to have been used in construction of Nos 67 to 72 Drogheda Street, Balbriggan".	Report	RPS
1999	Digital aerial image showing the damaged gun platform of the tower, with the roof of the vault exposed and the parapet walls reduced in height. The tower stands on high sloping ground, with boat harbours visible to west.	Photo	National Coastline Survey

4. Primary Sources

4.1 Archaeological Survey of Ireland

The Archaeological Survey of Ireland (ASI) compile and maintain the Record of Monuments and Places (RMP) which is the official record of archaeological sites and monuments. The current holdings of the archive are listed below.

Tower	RMP No.	Description
1. Bray Head	WW 004-002	Field Report (3.10.90) 1840 & 1937 OS map extracts
2. Bray Point	WW 004-003	1840 & 1937 OS map extracts
3. Corke Abbey	DU 026-070	Field Report (2.7.93)
4. Magharagh Point	DU 026-055	Field report (30.6.93) R. Goodbody extract
5. Loughlinstown Battery	Not recorded	No file
6. Loughlinstown	DU 026-014	Cover sheet information only
7. Tara Hill	DU 026-011	File not located
8. Limekiln Battery	DU 026-012	File not located
9. Dalkey Island	DU 023-029	Field report (undated) copy of O.S. map Photos - tower (2) & fort (2)
10. Bullock	DU 023-022	Field Report (29.8.94) Photo (1)
11. Sandycove	DU 023-019 (tower) DU 023-062 (fort)	Battery – Reference Sheet & DeCourcy extract
12. Glathule	DU 023-017	Field Report (24.7.94)
13. Dun Leary	DU 023-052	Field Report (19.9.94)
14. Seapoint	DU 023-010	Field Report (23.7.94) Photos (2) Corlett article
15. Williamstown	DU 023-002	Field Report (23.7.94) Photos (3)
16. Sandymount	DU 019-018	Flynn & DeCourcy articles
1. Red Rock, Sutton	DU 019-005	Field Report (6.10.95)
2. Howth	DU 016-00202	Field Report (13.5.93) Beranger drawing Westropp & Morris articles Photos (3)
3. Ireland's Eye	DU 015-016	Field Report (16.8.96)
4. Carrick	DU 012-040	File not located
5. Robswall	DU 012-035	Field Report (3.4.93)
6. Balcarrick	DU 012-008	Field Report (2.4.93)
7. Portrane	DU 012-010	Field Report (28.4.93) Photo (1)
8. Rush	DU-008-015	1840 & 1937 OS map extracts photo (1)
9. Drumanagh	DU-008-00603	Field Report (29.9.1992) sketch map (from JRSAI Vol.52, P.69), Aerial photos A. CUCAP AID 6, 21.8.1963, B. Fairey Survey July 1972, & C. Leo Swan (2, undated). Photos: (5)
10. Shennicks Island	DU-005-033	1840 & 1937 OS map extracts photo (1)

11. Red Island, Skerries	DU-005-018	1840 & 1937 OS map extracts photos (2)
12. Balbriggan	DU-002-004	Field Report (18.10.1988) 1840 & 1937 OS map extracts photo (1)

NB - RMP files hold a cover sheet indicating RMP number, townland, parish, barony, county, map references, and printed sources.

4.2 British Library

BL Add.MS 33,118 ff.257-267	Earl of Carhamptons appraisal of the vulnerability of Dublin City, March 1795
BL. Add. MS 35, 775, ff.132-4	Recapitulation on intelligence of threatened invasion of east coast of Ireland by Colonel Beckwith. The original intelligence report dated 27 December 1803 by Colonel Beckwith no longer survives but was recorded in this acknowledgement returned to Cathcarts office on 29 December 1803.

4.3 Geological Survey of Ireland

The GSI hold digital copies of geological bedrock mapping from the 1860s, comprising hand-painted and annotated copies of the relevant Ordnance Survey six-inch sheets from 1837-1838. The GSI maps do not refer to the towers or any associated structures or land boundaries, but do note the underlying rock or drift cover and adjacent quarries which may be of interest in understanding the underlying bedrock foundation and the source of the building materials.

4.4 Historical Newspapers

4.4.1 The Freeman's Journal

1804	Dublin. September 29 1804 The Building the Martello towers for the protection of the coast from Bray to Dublin proceeds with unexampled difpatch; they are in general about forty feet in diameter, precifely circular, and built of hewn granite, clofely jointed:-Some are already thirty feet high, and exhibit proofs of the moft admirable mafonry: one has juft began at Williamstown near the Black Rock: thofe from Dalkey to Bray are nearly finifhed
1805	Dublin, June 13, 1805, Page 2 On Wednefday last, a duel was fought on Dalkey ifland, between Captain Farmer and Murray, of the 47 th foot: - after exchanging two fhots each ... was flightly wounded Captain Murray, the Lieutenant of the Martello Tower on the Ifland interferred, and the affair was amicably adjufted
1806	Wednesday, September 24, 1806, Page 4 INTERESTING MILITARY SPECTACLE At an early hour on Friday morning the troop of horfe artillery, and two car brigades of light artillery marched on the fands between the Pigeon-houfe fort and Sandymount ... a fhell was thrown from thje Pigeon-houfe fort as a fignal for the commencement of the novel and interefing fcene that was to follow: the the horfe artillery immediatly advanced from behind Sandymount, as did the light artillery from Ringfend and Irishtown (where they had been concealed), upon the fands, where targets were placed for their practice; during their advance, the Pigeon-houfe fort and the martello towers on that line of coast kept up a fteady fire of fhot and fhell.

1807	Thursday, October 8, 1807 On Sunday night, about 11 o'clock, a fire broke out in the hay-loft adjoining the house at the northern extremity of Seaford Parade, at Williamstown, upon the Black-rock road, which communicated with the dwelling house, and consumed almost the entire of the premises All the neighbours, as well as the men stationed in the adjacent Martello tower, lent their utmost exertions in extinguishing the flames ...
1839	Friday, November 8, 1839 On Tuesday, the 5 th instant, an inquest was held at the Martello Tower, Balbriggan before John Pasley Esq., senior coroner of the county of Dublin, on view of a person unknown [who washed up on Balbriggan strand]

4.4.2 The Irish Independent

1906	Wednesday, December 26, 1906 In the "Tower" Locked in a Martello - Peter McKenna, a motorman from the Tramway Company, heard cries for assistance issuing from the building. On investigation he found Denis Molloy, the aged caretaker, and his wife Mary imprisoned inside. They had mislaid the key on Saturday morning and were unable to regain egress ... Then the Earl of Pembroke's steward, Mr. Charles Holden, ... accompanied by seven of his men, went to the tower, but although the latter used crowbars, they failed to open the big door owing to its great strength, and the manner in which it was bolted. Finally, they got on the roof with the aid of a ladder, and got into the room in which Molloy and his wife were by means of a spiral staircase. They were able to force the lock of the door downstairs, and release the couple".
1908	Tuesday, June 2, 1908 Doom of the Coastguards: We live in piping times of peace and need no longer fear the armed invader. The martello towers that dot the coast are for sale, and it is proposed to abolish the coastguard service, which has existed for nearly a century The deprivations of the smuggling fraternity, Englishmen as well as Frenchmen and Dutchmen, were severely felt by the Revenue Authorities and a force called the Coast Brigade was organized and located in the martello towers. This was in turn succeeded by the Preventative Water Guard administered by the Customs authorities, though with naval officers in control of the local stations. Then in 1860 the coastguard was absorbed by the Navy, and at that date formed the only reserve for the British fleets. Now the Navy has other reserves, and the coastguard, according to the proposal of an inter-Departmental Committee, is to be gradually reduced to stopping all further entries, while the Board of Customs is to take over the revenue and other extraneous duties hitherto performed by the coastguardmen. The Admiralty will retain certain Naval coastguard stations, which, in Ireland will be restricted to the requirements of naval signal and wireless telegraphy stations.
	Wednesday, Jul 15, 1908 Martello Tower No. 10 - standing in about half an acre, Irish plantation measure equal to 3 roods, 25 perches statute ... with rights of passage from High Road. Held in Fee-simple. Let to a tenant at £1 10s 0d per annum. Tenancy terminable by three months notice prior to any quarter-day. Martello Tower No.11 - standing in about half an acre, Irish plantation measure equal to 3 roods, 25 perches statute ... with rights of passage from High Road. Held in Fee-simple.
1912	Saturday, Oct 12, 1912 War Department property on strand road, Sandymount. Martello Tower, Sandymount, City of Dublin to be sold by Public Auction on Tuesday the 15 th day of October 1912 ... The property for sale is held in Fee-simple ,, containing 33 perches statute measure or thereabouts, with the building thereon known as Martello Tower No.16 .. the property includes in addition to the Tower, and the offices adjoining it, part of the metalled carriageway and footpath of the Strand Road and the steps leading to the Seashore.
	Wednesday, Oct 16, 1912 Sandymount Martello Tower sold - considerable intent was evined yesterday at the sale by Mr. J.H. North of the Martello Tower at Sandymount which is let by temporary lease to the Earl of Penbroke and of which the Dublin Tramways Co. hold a small portion of the property as tenants at will ... Dublin Tramways Co, the tower was knocked down to the latter at £520

4.4.3 The Irish Times

The Irish Times Digital Archives is an online subscription service containing exact reproductions of all articles published by the Irish Times from 1859 onwards. It is possible to take out Yearly, Monthly, Weekly or 24 Hour subscriptions depending on the amount of research intended. Searching is either by Keyword (with options to refine by date range) or by browsing editions of the newspaper by date. The Irish Times is considered as Ireland's 'newspaper of record'. The paper is very useful for understanding discoveries of new sites and changes to existing sites over the past 150 years.

1859	Monday 25 th July 1859, Page 2: "It happens that the law does not allow the formation of Rifle clubs in Ireland, but the law is silent respecting volunteer Artillerists. There are twenty-two martello towers along the coast on either side of Dublin, recently mounted with very powerful ordnance. These martello towers can be conveniently reached, at all hours, by bus or train. Now we think that here have an opportunity for training a select body of young men, as Artillerists. All the material is ready, and the garrison of each tower might be profitably employed, more profitably indeed than they are at present, in instructing our volunteers in the manipulation of ordnance. We do not believe in this French invasion; still if war were to break out, on any or no pretence, it is just as well that should all be able to load, point and fire a gun".
	<p>Saturday 23rd July 1859 page 2 – letter from "An Englishman": "Perhaps you can let us know the use for which the portly and costly cut-stone battery erected at the end of Kingstown pier is intended, If it be to prevent ships of war or iron-plated steamers from approaching Dublin, may we ask if this is the best means of accomplishing that object? If it be to prevent troops from landing at Kingstown, could they not easily land at Dalkey? There surely can be no harm in letting us know in what way this battery is intended to protect us as well as the use of its Martello towers, some of which have been lately repaired..."</p> <p>Tuesday November 15, 1859:"Ireland, however, is to depend on her defences on the Militia and Constabulary. We mean no disrespect to either force when we say that they are not adequate to retain this island against a strong body of invaders, and a weak body will not be sent. The martello towers, for instance, along our coast, and the few forts recently erected round Kingstown, could offer no protracted resistance to any army..."</p>
1860	Monday August 20, 1860: "ARMSTRONG GUN – we now have precise information respecting the experiments conducted recently with an Armstrong gun against a Martello tower at Eastbourne. The guns employed were a 40-pounder of 31 cwt, and 80-pounder of 63 cwt, and a short 100-pounder weighing only 53 cwt. The distance was 1,032 yards, and the projectiles employed were partly solid shot and partly percussive shells. The tower was built of very strong brickwork, the thickness of the walls being 9 feet 3 inches on the land side, and 9 inches on the side next to the sea. The roof and platform consisted of a massive vault of great strength, supported by the walls and a solid pillar of brickwork occupying the centre of the tower, The 80-pounder shot was found to pass quite through the wall into the tower, piercing 7 feet 3 inches of brickwork; the others lodged in the wall at a depth of about 5 feet. Live shells were then fired, and with so much effect that after eight or ten rounds from each gun the interior of the tower became exposed to view. The centre pillar supporting the bomb-proof roof was speedily knocked away, but the structure was so compact that the vault continued to stand, and was only brought down by a succession of shells exploded in the brickwork. Nothing could exceed the precision with which these shells were thrown. The broken section of the vault was itself but a small object to hit, but this was done with unerring certainty that the very spot selected was invariably struck. The total number of shot and shell fired was 170, of which only a small proportion was from the 100-pounder. The 100-pounder gun used on this occasion throw shell, which weigh 100lb, and contain 8lb of powder, and yet the weight of the gun with which these tremendous projectiles are discharged is less than that of an ordinary 32-pounder, the weight of which is 56 cwt".
1862	Tuesday, August 5 th , 1862: "A great deal of satire was once lavished upon the Martello towers round the coast of Ireland; yet recent experiments have proved that they form an extremely valuable class of coast defences. At all events, we have them round our coast at the most vulnerable places, Government assents to their utility, for they are armed and in some sort manned. As long as they are kept up the least that can be required is that they are serviceable. Yet, the canon mounted on them are of an obsolete description. The guns have been exposed to air and weather for a great number of years until they have become rusty and honey-combed. The best description of artillery should be placed on these towers; the towers themselves ought to be kept neat and clean, and fit for the reception of their complement of men. All this should be seen to by a regular system of frequent inspection. It is not when war has actually broken out that the precautions are to be taken. If the guns on

	<p>these Martello Towers were in serviceable order they would serve admirably for the training of Artillery Volunteers, a class of Volunteers which it is legal to form in this country, and which it is the more desirable to form since Volunteers of the line are prohibited".</p> <p>Wednesday, September 17, 1862: "We have thirty-two round towers and small forts along the shore on either side of Dublin, It is the fashion to decry these Martello tower, but they are of immense strength, and all but impregnable if held by determined men, These towers are armed with one or two guns, each of antediluvian pattern, and utterly unserviceable by age". NB – it is not clear how the journalist arrived at a figure of 32, and may have included the fortifications at Dun Laoghaire and the Pigeon House, and have been counting the batteries at Bray, Loughlinstown, Dalkey Island and Sandycove as separate fortifications from the adjacent towers.</p> <p>Friday, October 10, 1862 "Kingstown Intelligence and Bray and Wicklow News. A correspondent suggests that two or three life buoys should be placed in charge of the coast guard at the Martello Tower, Sandycove. He mentions the case of a young man who slipped into the sea at the rocks, in front of the tower, and was with difficulty saved by a screw ferule fishing rod. There were no buoys or ropes at the guard house. We know the place to be dangerous, especially when a heavy sea is running. Indeed, one pool is ominously named "dead man's hole".</p>
1864	Saturday, June 18, 1864 "A pier or jetty, commencing at or near to the Martello Tower which is situated on Bray Strand, between the railway station at Bray and the point of Bray Head called Bray Point, and running nearly straight into the sea in a north-easterly direction, for a distance of three hundred yards of thereabouts from low water mark;"
1873	<p>Tuesday February 4, 1873 "Wreck and loss of ten lives at Balbriggan": ""the wreck, which had been carried high up on the rocks under the Martello Tower, a number of people gathering the wood and coal which was strewn on the beach, and the men working on all that remained of the Sarah, and bringing ashore any gear and other property of value"</p> <p>Tuesday 24 April 1873 "Exercise with Life-saving Rocket Apparatus": "At two o'clock this afternoon, the Balbriggan Coast Guards turned out for the rocket exercise, under the directions of the commanding officer, Captain Moriarity RN. The ground selected for the purpose was that between CG station, and the Martello Tower, a distance of about one hundred and thirty yards, the tower representing a ship in the distance. The second shot landed the "endless whip line" on the tower, without the slightest hitch or turn, where the hawser and breeches-buoy were instantly attached. A man got into the latter and was, as it were, hauled ashore with the most perfect ease and safety. The greater part of the apparatus is quite new (made so since the wreck of the Sarah) and owing, probably to this fact, the exercise proved a most gratifying success".</p>
1874	<p>Monday August 24, 1874: War Department Premises Martello Tower, Ireland's Eye, North Dublin Bay, TO BE LET. The District Controller Dublin District, hereby gives notice that proposals will be received for renting the buildings known as the Martello Tower No 3 situate on Ireland's Eye, North Dublin Bay, together with the grounds attached containing in all about 3 roods, 34 perches or thereabouts from one year from 20th September 1874 and subject to the terms and conditions of letting contained in form of tender (W O form 1551) which can be obtained at the Control Office Dublin Castle. The proposal to be sealed and transmitted to the Director of Contracts, War Office, Pall Mall London S W, so as to arrive in London on or before the 10th day of September 1874 and marked on the outside, Tender for Martello Tower, Ireland's Eye". H J Browning. Assistant Controller.</p>
1880	Tuesday March 16, 1880, P. 3: Three years license to be given by the commissioners for a gentleman's bathing place near or about martello tower No. 1 [Bray]
1886	Wednesday May 26, 1886 P.3: John Clifford, who is in Wicklow Jail, charged with having feloniously assaulted five young girls, applied that he be admitted to bail. The prisoner is a pensioner, over 70 years of age, and for many years he had been in charge of the Martello Tower at Bray"
1887	Tuesday July 26 1887: "MARTELLA TOWERS", "Sit Thomas Esmonde asked the Secretary of State for War who were the tenants of the Martello Towers at Monkstown and Blackrock, County Dublin; what were the condition of those tenancies were; and when they ceased? Mr Northcote said the towers were let to Mr T.W. Robinson of Dublin, at £7 each. They were held under a repairing agreement, which was terminable on three months notice on either side, but by the War Department the agreement might be terminated summarily subject to a small penalty"
1896	Thursday, May 14, 1896: "WAR DEPARTMENT PROPERTY Sandycove", "To be Let, Sandycove battery and the adjacent Martello Tower. Applications can be made to the Commanding Royal Engineer, Dublin District, R.E. Office, Lower Castle yard, Dublin up to Friday 22 nd May"
1898	Wednesday, November 9 th , 1898: "a gentleman had been washed ashore near the Martello Tower at Shanganagh, who had been identified as Captain Jones, of Bray"
1901	Wednesday, May 1 1901, P.10: "North's Auctions", "MARTELLA TOWER AND PLOT OF GROUND, SEAPOINT Containing about 24 perches statute, held in fee-simple"
	Saturday, November 30 th , 1901: "Sale by order of his majesty the King", "MARTELLA TOWER, WILLIAMSTOWN, CO. DUBLIN AND PLOT OF GROUND to be sold in fee-simple".

1907	Thursday, February 7 th , 1907: "WILLIAMSTOWN MARTELLO TOWER The council decided to try and buy the Martello Tower at Williamstown if sold in or about £300".
1908	Saturday, July 11, 1908, P. 12: "MARTELLO TOWERS AND PLOTS OF SKERRIES, CO. DUBLIN Sale by directions of His Majesty's Principal Secretary For the War Department Martello Tower No. 10 Martello Tower No. 11 Tuesday, November 10, 1908: "MARTELLO TOWER AND PLET OF GROUND, MALAHIDE, CO. DUBLIN TO BE SOLD BY PUBLIC AUCTION ON TUESDAY THE 17 TH DAY OF NOVEMBER 1908 The property consists of all that and those part of the lands of Robbswall on which the Martello Tower No. 5 has been erected, containing Thirty-Seven Perches, statute, measure or thereabouts situate in the Barony of Coolock and County of Dublin, and is held in Fee-simple under Indenture of Conveyance, dated 21 st March, 1806....The Vendor is His Majesty's Principal Secretary of State for the War Department".
1910	Saturday, March 1, 1910: "The battery at Sandycove offered for sale".
1912	Saturday, July 6, 1912 : "Preliminary Announcement MARTELLO TOWER Shenick Island, Sherries. Free of rent for ever. Sale at 1 o'clock, Arthur & Co., Auctioneers".
1914	Saturday, April 11, 1914: "MARTELLO TOWER, Shenick Island. One acre, Skerries strand, no rent for ever. Suit Holiday resort, camping ground".
1919	Monday April 28, 1919: "The Tower", Skerries, Possession to Purchaser. This attractive residential property comprises a Martello Tower, which has been modernised throughout and to which a large annexe has been built. Elevation situation, commanding full view of the sea. The entire has been lately done up, regardless of cost. Lease 140 years, unexpired
1923	Thursday, June 14, 1923: "Bray Tower No. 2 part of Sale of Nos 4 & 5 Royal marine Terrace"
1926	Saturday, April 17, 1926 & Wednesday, April 21, 1926: "MARTELLO TOWER RUSH, Co. Dublin The Commissioners of Public Works invite offers for a 60 years lease of this tower, to expend at least £100 on repairs".
1929	Tuesday, October 8, 1929: "RUSH, CO. DUBLIN, MARTELLO TOWER and site of 36 statue perches. The Commissioners of Public Works are prepared to receive offers for a Repairing Lease of these premises for any term up to 99 years".
1930	Wednesday, December 17, 1930: "The Martello Towers scattered along the sea-coast of Ireland have now become interesting objects of antiquity. It must be confessed, however, that in their construction grace and utility were not wedded, and the aesthetically-minded view them with disfavour.the owner of one of these Martello Towers – that at Bray – has successfully supplied the lacking sense of beauty into his structure by transforming it into a home for a high-bred family of white-tailed pigeons".
1935	Thursday, August 5, 1935: "DALKEY ISLAND CEREMONY CROWNING OF THOMAS THE FIRST", " Cheers were raised for Thomas the First upon landing and , to the music of pipes, he proceeded with his attending dignitaries, to the dais beside the Martello Tower..."
1937	Saturday July 24, 1937: "For Sale or Long Lease, MARTELLO TOWER, Velvet Strand, Portmarnock. Accommodation: Two reception rooms, 2 bedrooms and h. and c. basins, kitchen, garage, Tower and a portion of the land held in fee-simple, remainder on a 400 year lease; in all 3/8 acre approximate. Suitable as residence or tea house, petrol station and car park". Monday, August 2, 1937: "King Thomas the First of Dalkey solemnly abdicated yesterday in the presence of nearly two thousand of his liege subjects assembled in the capital of the historic kingdom – on the high ground near the Martello Tower ..."
1954	Sat 13 Nov 1954, Page 1: "Ulysses" tower up for sale, & photo showing tower and environs Thursday 2 December 1954: "Ulysses" tower sold for £4000 to Mr. Michael Scott, a Dublin Architect".
1959	Tuesday, January 13, 1959: "Better bathing at Seapoint – Dun Laoghaire Borough Corporation is to spend up to £2000 on improvement of bathing facilities at Seapoint. It is hoped that improvements will be completed before the summer. The Corporation has applied for permission to make the alterations under the foreshore act of 1933. The concrete platform near the Martello Tower is to be extended towards Dun Laoghaire, a shelter is to be built, and seats will be placed along the walls". Saturday, June 6, 1959: "For sale, Bartra, Dalkey, Co. Dublin includes martello tower within the sale". Tuesday, October 27, 1959: "According to Dublin City Councils records, the Dun Laoghaire Borough Corporation is the rated owner of Dalkey Island ... the 23 acres 7 perches of the island appeared on the County Council valuation lists and the Dun Laoghaire Borough Corporation was entered as liable for a rateable valuation of £4 on the Martello Tower".
1962	Friday, April 6, 1962 Page 1 – front cover photo of tower entitled "The Martello tower at Sandycove, Co. Dublin – popularly known as Joyce's tower because of its association with "Ulysses"-dominates its surroundings of more recent structures". Wednesday, June 6, 1962: "The Dublin Joyce Society, formed in 1954 to encourage the honouring of one of Ireland's greatest literary figures, has found funds to restore the tower" Saturday, June 16, 1962: "The Tower, Fact and Fiction", by Denis Johnson Reproduces text of "Tender for renting No. 11 Martello Tower, Sandycove –

	<p>To His majesty's Principal Secretary of State for the War Department. Sir, I, Oliver Gogarty of 5 Rutland Square, E., Dublin, am willing to become the tenant and occupy the message mentioned in the Schedule to this agreement as from the 24th day of June 1904, for one whole year, and so on from year to year, determinable as hereinafter mentioned, I will pay the yearly rent of eight pounds (£8) etc</p> <p>"Inventory of Fixtures in Martello Tower at Sandycove</p> <table border="1"> <thead> <tr> <th>Place</th> <th>Number</th> <th>articles</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>Entrance</td> <td>1</td> <td>Lock and key</td> <td></td> </tr> <tr> <td>Door</td> <td>2</td> <td>Bolts & hasps</td> <td></td> </tr> <tr> <td></td> <td>1</td> <td>Stepladder</td> <td></td> </tr> </tbody> </table> <p>Inventory also relates the glass in the windows was broken, and that the top of the tower had</p> <table border="1"> <tbody> <tr> <td>9</td> <td>Iron rings in wall</td> </tr> <tr> <td>2</td> <td>racers</td> </tr> <tr> <td>3</td> <td>pivot block</td> </tr> <tr> <td>4</td> <td>Shot furnaces</td> </tr> <tr> <td>2</td> <td>door</td> </tr> <tr> <td>2</td> <td>bolt</td> </tr> </tbody> </table> <p>kitchen, magazine, artillery store, latrine with one seat and one lock and key to door Tenancy agreement signed by C.E. Haynes Lt. Col. RE CRE DLD & Oliver Gogarty".</p> <p>Thursday November 22, 1962: "The martello tower at Sutton, Co. Dublin, which was sold yesterday for £1,900".</p>	Place	Number	articles	Remarks	Entrance	1	Lock and key		Door	2	Bolts & hasps			1	Stepladder		9	Iron rings in wall	2	racers	3	pivot block	4	Shot furnaces	2	door	2	bolt
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2	door																												
2	bolt																												
1965	Sat 12 June 1965: "For Sale - The Tower, Malahide - Commanding position facing Lambay Island, detached on 1 ¼ acres, includes as central feature, original Martello Tower, 3 reception rooms, 4 bedrooms, studio, 2 garages, greenhouse, outoffices, etc".																												
2006	Thursday, June 8, 2006. Property supplement. Four photos showing location, side elevation and interior of extension to Portrane tower, offering tower for sale c.€1.75 million to include cut-stone boathouse and guest cottage. "Tower House is being sold by bookseller Derek Hughes of Hughes & Hughes ... On one side of the property is an old-fashioned caravan park, on the other is a row of coast guards cottages awaiting renovation....Extensions in the 1930s and the 1960s added a series of rooms to make it function as a home and give views in all directions. While this may damage its integrity as a tower, they work quite well inside, adding a curved livingroom, a diningroom, entrance hall with cute porthole windows and bedrooms overhead. The centre of the tower has an interesting timber staircase rising to the first floor - like the mahogany doors leading to the diningroom, it is said to have been salvaged from Dublin's Theatre Royal".																												

Note: Post-1965, entries including the term "Martello towers" comprise mainly records or notices of sales, of commentary by writers without providing any new significant information.

4.4.4 The Times, London

1794	<p>Wednesday Mar 12, 1794; pg. 2; Issue 2934; col. B From the London Gazette, March 11, Whitehall, March 11</p> <p>"Whitehall, March 11. It appears by many difpatches which were received by the Right Honourable Henry Dundas, his Majefty's Principal Secretary of State for the Home Department, from Vice Admiral Lord Hood and Lieutenant-General David Dundas, dated St. Florenzo, in the ifland of Corfica, the 21ft and 22d of February, 1794, that the tower and garrison of Mortella furrendered on the 10th of that month; The lofs of the British confifts of 13 killed and 39 wounded, besides 6 failors of the Fortitude killed, and 56 wounded, from the fire of the fort of Mortella"</p>
	<p>Monday Mar 17, 1794; pg. 1; Issue 2938; col. D From the London Gazette, March 15, Whitehall, March 14</p> <p>"Victory, St. Fiorenzo, Feb 12, 1794 anchored in a bay to the westward of Mortella Point, with the feveral fhips and transports under his command. The troops were moftly landed that evening, and poffeffion taken of a height which overlooded the tower of Mortella. The next day the General [Dundas] and Commodore [Linzee] being of opinion that it was advifable to attack the tower from the bay, the Fortitude and Juno were ordered against it, without making the leaft impression by a continued cannonade of two hours and a half; and the former fhip being very much damaged by red-hot phot, both hauled off. The walls of the</p>

	<p>Tower were of a prodigious thicknefs, and the parapet, where there were two eighteen-pounders, was lined with bafs junk, five feet from the walls, and filled up withnsand; and although it was cannonaded from the Height for two days, within 150 yards, and appeared in a very fhattered ftate, the enemy still held out; but a few hot fhot fetting fire to the bafs, made them call for quarter. The number of men in the Tower were 33; only two were wounded, and thofe mortally.</p> <p>Monday, Mar 24, 1794; pg. 3; Issue 2944; col. A</p> <p>New from Paris France – a letter from the National Deputy, André DumontI this infant learn that two large fhips attacked Mortelia, and have been obliged to e towed off by 10 long-boats, to extinguish the fire of the red-hot fhot. I shall impart to you the iffue of this attack</p>
	<p>Wednesday, Sep 03, 1794; Pg. 2; Issue 940903; col A</p> <p>London Gazette, Aug 30, Admiralty Office, Sept 1</p> <p>"Victory, Martello Bay, Aug. 5, 1794 ... I detached Capt. Nelfon in the Agamemnon to Baftia, embarked on the 15th, and expreffing a wifh to proceed to the attack on Calvi ... I anchored in Martello Bay on the 19th; and fo foon as I had embarked the ordnance and other ftores the General had desired ..."</p>
1798	<p>Monday, Dec 24, 1798; pg. 3; Issue 4364; col C</p> <p>"Capture of the Island of Minorca"</p>
1803	<p>Tuesday, Dec 13, 1803; Pg. 2; Issue 5891; col A</p> <p>House of Commons, Monday December 12th He [Lord Hobart] spoke in terms of eulogy of the Martello Towers, which, he said, were far preferable to low batteries"</p>
1804	<p>Wednesday, Oct 03, 1804; pg. 3; Issue 6142; col. D</p> <p>The building the Martello Towers for the protection of the coast from Bray to Dublin, proceeds with unexampled difpatch; they are in general about forty feet in diameter, precisely circular, and built of hewn granite, closely joined: some are already thirty feet hgh, and exhibit proofs of the moft admirable masonry.</p>
1805	<p>Monday, Jun 10, 1805; pg. 3; Issue 6355; col. B</p> <p>The ifland of Dalkey in the bay of Dublin, is now fortified with a Martello Tower</p> <p>Thursday, Oct 3, 1805; Pg. 3; Issue 6541; col C</p> <p>Last Friday a number of fhells were thrown from mortars erected at the Williamstown Martello Tower, and the Lighthouse-wall-battery, near Dublin at a mark erected on the ftrand contiguous. The effect, which was really awful, was felt in different parts of the metropolis</p>
1829	<p>Tuesday, Aug 18, 1829; pg. 4; Issue 13995; col A</p> <p>MELANCHOLY SHIPWRECKS The wind did not at all abate, and at four o'clock yesterday morning, a Whitehaven brig, the Duke, laden with coals, was difcovered embayed amongst the rocks at Sandy Cove, between the East Pier at Kingftown and Dalkey, near the Martello Tower".</p>
1838	<p>Monday, Dec 10, 1838; pg. 2; Issue 16908; col 7</p> <p>THE IRISH MARTELLO TOWERS It is reported that the Martello towers on the coast will be converted into barrack ftations"</p>
1843	<p>Monday, Jul 17, 1843; pg. 6; Issue 18350; col. F</p> <p>ROYAL ARTILLERY IN IRELAND – Captain Darley's company embarked at the Royal Arsenal, Woolwich; and at the fame time a large detachment, confifting of 56 gunners and drivers, fteady and well-conducted men, who have feen 16 to 18 years' fervice at leaft, and are thoroughly acquainted with the duties of their profefion, embarked for the fame diftination [Ireland]. Thefe men will be ftationed at the Martello towers in Ireland, and the young men only will move with their companies when their quarters are changed".</p>
1852	<p>Saturday, Sep 25, 1852; pg. 4; Issue 21230; col. E</p> <p>THE COAST DEFENCES The Board of Ordnance have juft advertised for tenders for the repair of the towers and batteries (in all 25) erected on the northern and fouthern coafths of Dublin, and better known as the "Martello towers," which were firft built over half a century fince</p> <p>Friday, Dec 10, 1852; pg. 8; Issue 21295; col A</p> <p>" I know every inch of Ireland's Eye Landed Mr and Mrs Kirwan near the Martello tower, which is uninhabited ..."</p>
1858	<p>Wednesday, Oct 20, 1858; pg. 9; Issue 23129; col. D</p> <p>Military and naval Intelligence. ... A detachment of the Royal Artillery, affifted by a company</p>

	of the Royal Forfarshire Militia Artillery, detached for that service from the head-quarters at Bray, have been for some days past mounting 56 and 68 pounder guns in the Martello Towers, Dublin Bay, which completely command the entrance to the harbour.
1860	Thursday, Aug 09, 1860; pg. 9; Issue 23694; col G ARTILLERY EXPERIMENTS NEAR EASTBOURNE - Within half a mile of the redoubt of Eastbourne stands No. 71 Martello Tower, which, having become useless, was selected for the trial of Sir W. Armstrong's guns on Tuesday last

4.5 House of Commons Parliamentary Papers

1809	Account of Expense of building and repairing fortifications and Martello Towers Session 1810 Paper Series: House of Commons Papers; Accounts and Papers Paper No. 360 Vol. XIII.335 Return to an Order of the Honourable the House of Commons, June, 29 die Januarij 1810 An account of the Particulars of the Expense incurred, since the commencement of the present war, in building, repairing and making FORTIFICATIONS, MARTELLO TOWERS, and the Purchase of Lands connected with the aforefaid Matters, throughout the United Kingdom, to 5 th January 1809		
	£	s.	d.
North Britain	16,834	18	10 ½
Northern Diftrict	3,753	0	7 ½
Yorkshire Diftrict	9,406	10	6 ½
Eafern Diftrict	141,496	15	7
Thames Diftrict	5,232	1	0 ½
Medway Diftrict	716,965	13	1
Southern Diftrict	868,640	3	8 ½
Portfmouth Diftrict	150,998	1	10 ½
Plymouth Diftrict	42,756	12	10 ¼
Severn	3,865	4	8
Ireland	154,419	19	11 ¼
Guernfey	47,037	7	6 ¼
Jerfey	78,874	5	8
J. Hadden C.Ashley Cooper M. Singleton OFFICE of ORDNANCE 1 Return to an Order of the Honourable the House of Commons, June, 29 die Januarij 1810 3 th June 1810			

1811	The Thirty-Seventh Report of the Commissioners of Accounts of Ireland. 9 April 1811 Session 1810 Paper Series: House of Commons Papers; Reports of Commissioners Paper No. 109 Vol. V.233		
	£	s.	d.
A fum received by Alderman Howifon from Meffrs. Thomas and William Kemmis, for temporary use of land adjoining Martello Towers Nos. 10 and 11 &c, for defence of the Coaft, and not given credit for by him	7	6	5 ½

1811	15th Report of the Commissioners of Military Enquiry – 23 July 1811 "It is only within these three or four years past that the projects of Military Works in Ireland have been submitted to the consideration of the Inspector-General, and the communications which he now receives are carried on under the directions of the Ordnance. But it has been lately decided to put under the care of the same department the Round Towers which had been erected in the neighbourhood of Dublin under other orders and we learn that a		
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	<p>Committee of Engineers was appointed in the laft years to confide how far it might be advfable to keep these up". Session 1810-11 Paper Series: House of Commons Papers; Reports of Commissioners Paper No. 261 Vol. IV.305</p>
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1820	<p>Reports from Commodore Sir George Collier concerning the Settlements on The Gold and Windward Coasts of Africa 2 May 1820 Session 1820 Paper Series: House of Commons Papers; Accounts and Papers Paper No. 90 Vol. XII.317</p> <p>Sierra Leone "Here two Martello Towers might be established, and , well connected, would defencd the channel, and cover a battery, which might be advantageously placed near high-water mark. The Martello Towers would afford shelter to those serving in this battery; and would also in some measure be insulated by the intervening swamp"</p>
1823	<p>Fourth Report pf the Commissioners of Irish Fisheries of their proceedings for the year 1822. 26 May 1823 Session 1823 Paper Series: House of Commons Papers; Reports of Commissioners Paper No. 383 Vol. X.367</p> <p>"This harbour is clean, with a bottom of foft fand, so that vessels may run boldly for it when there is sufficient water, which within the pier-bend is about 14 feet at high-water springs, it is dry at low water recommend that a pier of breakwater should be formed on the north side of the harbour, from the point of the rock under the Martello Tower, to within about 10 perches of the present pier-head. This would cut off the current which now sweeps along that shore and out under the lee of the pier with all inshore winds, and by which vessels are so often carried adrift when entering this harbour, and would send the swell off to spend itself at the Martello Rocks."</p>
1843	<p>Correspondence and Papers relating to Affairs of Dublin and Kingstown Railway Company Session 1843 Paper Series: House of Commons Papers; Accounts and Papers Paper No. 62 Vol. L.197 23 February 1843</p> <p>"Sanction to the permanent Transfer of TRAMWAY, QUARRY or other property, by the Commissioners of Public Works (acting as Commissioners of <i>Kingstown</i> Harbour), to the Directors of the <i>Kingstown</i> Railway Company, for the Purpose of constructing a Railway from <i>Kingstown</i> to <i>Dalkey</i>: ...</p> <p>Sir Dublin, 11 January 1843 I have the honour to report, in reference to the Board's Minute of 9th December (-)3082) 1842, referred to the Commanding Royal Engineer, Ireland, by you, on the 12th December 1842, for any observations, as far as Ordnance interests are concerned, that the Ordnance property will be in no way affected by the contending interests of the Memorial and letter to the Master-General ad Board, dated 6th December 1842, and signed John Orpin, and the proposed Atmospheric Railway</p> <p>I have,, &c. Lieut-Colnel Brown (signed) G.G. Lewis, Colonel Royal Engineers and Coms. R Engineer</p> <p>Office of Ordnance, 17 February 1842 23 February 1843</p>
1847	<p>1847-48 Return of Sums received by Ordnance on Barrack Damages and Destruction of Barrack Stores in England, Ireland and Scotland Session 1847-48 Paper Series: House of Commons Papers; Accounts and Papers Paper No. 553 Vol. XLI.479</p>

	<p>Ralph Allen Daniell, Fair-Street Barracks, Drogheda "late an Ensign in the Army". Table shows "the Numbers and Names of Barracks in charge of each Barrack master, and their respective distances from his Residence"</p> <p>Martello Towers No. 9 19 miles No. 10 15 miles No. 11 14 miles No. 12 11 miles</p>
1848	<p>Report on the Navy Estimates from the Select Committee on Navy, Army and Ordnance Estimates 28 July 1848 Session 1847-48 Paper Series: House of Commons Papers; Reports of Committees Paper No. 555 Vol. XXI</p> <p>"For drilling the men belonging to the Coast Guard £15,000 This is a new charge, and it has been since proposed that the sum to be taken for this purpose should be 5,000/. It is intended that the whole force of the Coast Guard should be divided according to stations, and that each station should be in connexion with one of the Martello towers, or of the batteries along the coast. The Coast Guard while under drill receive a small addition to their pay, and it was proposed that to each coast-guard man two volunteers[fishermen, or people accustomed to the Sea Service on the coast] should be added, who should receive 2s. 6d. a day while under drill".</p>
1856	<p>Report of the Commissioners of Fisheries, Ireland for 1854 Session 1856 Paper Series: House of Commons Papers; Reports of Commissioners Paper No. 2021 Vol. XIX.31</p> <p>"we do declare the mouth of the Bray river to be at the entrance of the river into the sea, being in the parishes of Old Connaught and Bray, baronies of Rathdown, and counties of Dublin and Wicklow. And we have defined and determined, and by bthis present writing under our hands, db,f or all and any purposes of the said Acts, define and determine the mouth or entrance onto the sea, of the said Bray river, by a straight line drawn in a direction from the Martello Tower, on the coast north of the said Bray rover, in the townland of Cork Great, to the Martello Tower, on the coast south of the said Bray river, in the townland of Bray, as more particularly shown and described in the map or plan annexed, the said line being marked, A, B, on said map or plan."</p>
1857	<p>Return of Barracks and Encampments occupied by Troops, January 1857 Session 1857 Paper Series: House of Commons Papers; Accounts and Papers Paper No. 165 Vol. XXVIII.127</p> <p>Martello Towers Number of Rank and File No. 9 12 No. 10 12 No. 11 12 No. 12 12</p>
1860	<p>Royal Commission on State of Fortifications for Defence of United Kingdom, Report, Minutes of Evidence, Appendix Session 1860 Paper Series: Command Papers; Reports of Commissioners Paper No. 2682 Vol. XXIII.431</p> <p>"(Chairman.) There is a great variety of opinions, as you are aware, with respect to the value of Martello towers? – I have a bad opinion of them. Has there been any project sent into your office at any time for increasing or making them safer?-No, I believe not. At some of the towers there is a deep ditch, and there are tolerably secure, but there are other towers along the beach which are not so circumstanced? – I am not aware of any such project: I consider that, having them there, you should turn them to the best account you can, and make use of them as long as they exist; but I have so little idea of them that when the sea threatens hem very much, and great expense would be incurred in their preservation, I generally recommend that they should be abandoned" Respondent – Gen. Sir. J.F. Burgoyne, 12th November 1859</p>
1878	<p>Coms. Of Public Works (Ireland), Forty-Sixth Report, Appendices</p>

	Session 1878 Paper Series: Command Papers; Reports of Commissioners Paper No. 2092 Vol. XXIII.369 Page. 12 "At Howth, the old Martello tower has been fitted up as a telegraph cable store and office".
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4.6 Irish Architectural Archive, Merrion Square, Dublin 2

The Archive comprises the largest body of historic architectural records in Ireland, comprising 250,000 drawings, over 400,000 photographs and an extensive reference library. Martello towers however are not particularly well-represented in the collection, with records confined mainly to mid-20th century photographs and cuttings relating to the sale of individual towers in the late 20th century. The 1823 drawing of Tower No. 16 Sandymount is a unique and informative illustration of the tower in use.

Tower	Description
1. Bray Head	No information
2. Bray Point	No information
3. Corke Abbey	No information
4. Magharagh Point	No information
5. Loughlinstown Battery	No information
6. Loughlinstown	Photo Oct 1960: Ref. 0095/142 Vol.4, Pg.76. IAA Inv: 100/063
7. Tarrong Hill	No information
8. Limekiln Battery	No information
9. Dalkey Island	No information
10. Bullock	No information
11. Sandycove	Photo: 1959-1960. Ref 0095/142. Vol. 3, P.82.
12. Glasthule	No information
13. Dun Leary	No information
14. Seapoint	No information
15. Williamstown	No information
16. Sandymount	Drawing 1823. IAA Inv. 054/077
1. Red Rock, Sutton	Photo 1959-1960: Ref. 0095/142 Vol.3, Pg.14. IAA Inv: 082/092
2. Howth	No information
3. Ireland's Eye	No information
4. Carrick	Photo: 1959-1960. Ref 0095/142. Portmarnock Pamphlet: c.1973. "Proposal in relation to Architectural Heritage Year 1975, by Randall McDonell. 5pp."
5. Robswall	Malahide (Hick's) Photo: 1959-1960. Ref 0095/142. Vol. 4, P.203. IAA Inv. 115/020.
6. Balcarrick	No information
7. Portrane	No information

8.	Rush	No information
9.	Drumanagh	No information
10.	Shennicks Island	Photo: 1959-1960. Ref 0095/142. Vol. 5, P.143-144.
11.	Red Island, Skerries	No information
12.	Balbriggan	No information

NB – Photos taken 1958-1960 are part of a collection of 5 volumes of c.5000 b&w images taken by the Automobile Association, via the Royal Commission on Historical Monuments of England for the "AA Illustrated Road Book of Ireland". The images tend to be landscape shots, showing little detail and often only silhouettes of the towers.

4.7 Military Archives

The military archives have a number of manuscript and paper map sources, which were catalogued as below. The Military Archive has the most important public collection of documents relating to the Dublin Martello Towers in the Republic of Ireland, and form an invaluable resource. Much of the collection is currently in a fragile state, and it would be beneficial for all parties to explore the potential for conserving and storing the paper documents to current international standards for their preservation, and also preparing an electronic copy of all documents for both preservation of the original documents and better dissemination of the information.

The collection comprises a series of maps from 1862 with later annotations in hand for almost all sites, and a manuscript document entitled "British War Department Papers 1944-1965 2/86032" which comprises a record of the late 19th and early 20th century documentation of the towers during their military use. The 1862 maps are at a scale of "50 feet to an Inch", and noted as "Surveyed in 1859 under the direction of Lt.Col. Leach R.E.".

Item: "British War Department Papers" – Martello Towers 1944-1965 2/86032	
Description: Bound manuscript containing hand-written entries from mid-19 th century onwards. Notes below re-produced in order of their entry into the manuscript.	
No. 9 Dalkey Island and Tower	16/1/97 G.O.C. Dublin "intentionally omits from list for towers to be disposed of".
No. 10 Bullock	19/7/87 "Sale recommended Tower and Land. Rent of Let £6.00" 16/1/97 "Dublin includes for disposal. Letting No. 593. Rent of Let £6.00"
No. 11 Sandycove	16/1/97 "Dublin includes for disposal. Vacant" 28/7/00 "Rev. W. Bourke Wright [the present tenant] asks if for sale and what price". 3/8/00 WO informs him not proposed to sell either battery or tower. Note "on other hand might be necessary to resume for military purposes".
No. 14 Seapoint	19/7/87 Sale recommended: Tower and Land £10.0.0, Enclosure road of approach £1.0.0 16/1/97 G.O.C. Dublin includes in list for disposal. Tower (Letting No. 603) £3.0.0. Enclosure road of approach (Letting No. 147) £1.0.0. 14/5/1901 "Sold"
No. 15 Williamstown	19/7/87 Sale recommended tower and land. £10.0.0 16/1/97 G.O.C. Dublin includes in list for disposal. Letting No. 277. £3.0.0. 16/2/1902 "Sold"
No 16. Sandymount Bay	19/7 /87 Sale recommended. Rent £ 7.00
	16 /1/97 Dublin included in listing (Letting No. 278). Rent £ 7.00

No. 1 Sutton	16/1/97 Letting No. 804. Rent £8
	22/10/02 "Mr. Andrew Jameson the owner of the land surrounding. The tenant of the above letting wishes to purchase the Tower and the approach thereto"
	30/2/03 A. Jameson nullified accordingly
No. 2 Howth	16/1/97 "Might be disposed of". Occupied by Coast Guard and Signal Station.
No. 7 Portrane	16/1/97 "includes in list to be disposed of". Occupied by Coast Guard.
No. 8 Rush	16/1/97 "includes in list to be disposed of". Occupied by Coast Guard.
No. 9 Drumanagh	23/1/04 "Let to Sir Roger Palmer £2"
	2/11/05 "W.D.L.A. asks if this can be sold"
No. 11 Skerries.	16/1/97 "includes in list to be disposed of". Occupied by Coast Guard.

Table X: "British War Department Papers" – Martello Towers 1944-1965 2/86032 held in the Military Archives.

Item: Military Archives - Large Loose-leafed folder (MALLF)	
Description: Large Loose-leafed folder containing individual files, drawings and copies of legal documents added to over time.	
Item	Notes
Plan of all 12 North Dublin towers	Dated 1837 showing outline of towers, coast and land parcel in ownership of WO. "Plan shewing the Boundaries (marked green) of the"
Plan of 5 towers south of Dublin	Outline plan of five towers number 4,5,6,7,9 dated 4 th Sept 1837 showing distances to high water mark and site boundaries, with "Diameter of Boundary" and "Diameter of Tower". No. 6 corresponds with Tower No. 6 Loughlinstown. However, there is no tower 5 on the south side of Dublin City, and the plans need to be checked against the 1862 plans.
No. 6 Loughlinstown	3/4/1854 – "Dublin & Wicklow Railway Company & Principal Officers of His Majesty's Ordnance for construction of a bridge from Military or Ordnance Road at Killiney across the railway, and make a road twelve feet wide from the said bridge along the railway to No. 6 Tower" Plan – 1862 drawing. 3 copies (b&w) noting 12 NCOs, 30 powder barrels and capacity for 465 gallons of water. Undated Plan - showing site, adjacent landowners as Letting No. 314 "Traced by A.M. Sutton 18.4.10. Probably indicating late 19 th century letting agreements. Tenancy Details – Costs associated with tenancy by Mrs O'Connor, comprising Rent of £11 and Erection of Gates 22/3/1892; and stone steps accessing "parapet of tower" on 25 th March 1895. Deed of Conveyance – dated 26 th March 1909 showing transfer to Carrie M. O'Connor, Inisfail Island, Drumshambo, Leitrim & Philip F.S. Stokes, 4 Stone Buildings, Lincolns Inn, London WC for £500. The original sale between Lord Bishop of Dublin and Col. Benjamin Fisher is recorded on 5 th February 1807.
No. 7 Killiney (Tara) Hill (South Dublin Bay)	Plan – 1862 drawing, showing detail of battery, stone shed attached to SE quadrant, external stairs/ladder, coal store, piggery and privy to north wall of sub-rectangular boundary wall. 4 boundary stones, a coach building and Master-Gunners store & yard, and a tool house are found to the SW. Plan notes 12 NCOs and capacity for 490 gallons of water. "Letter to the Urban District Council under Agreement dated February 1897 (forming Letting No. 315) at a rent of £20 p.a. – terminated on a quarters notice. W.D. also received a rent of £5 p.a. from Mr. G.F. Stewart for a strip of land 6

	<p>feet wide along the northern boundary wall (forms Letting No. 904)".</p> <p>Sale was recommended by G.O.C. Dublin District in July 1887, and again in January 1897.</p> <p>"By letter 25th May 1887 (old File 1635) Mr. George Bower offered to purchase for £300. this offer the C.R.E. Dublin considered to be less than half the price that the tower would fetch if put up to Tender. Acceptance of the offer was not recommended. The Commissioner of Valuation on 11th August 1887 estimated the selling value at from £350 to £400"</p> <p>"By letter 10th February 1890 the Commissioners of Killiney offered £300. G.O.C. forces in Ireland in minute to W.O. 10.3.90 recommended that as an offer of £300 is less than the valuation of 3 years ago, the Tower be put up for sale by auction. The site is on most desirable building spot in what is at present a fashionable resort".</p> <p>"W.O. 27.3.90 informed G.O.C. that the offer of £300 by the Killiney Commissioners had been declined".</p> <p>Deed of Conveyance – between W.O. and George Francis Stewart of Summer Hill, Killiney, dated 26th March 1909. Notes original transfer on 5th February 1807 between "The Right Honourable and Right Reverend Father in God Charles Bishop of Kildare Dean of the Cathedral Church of the Holy and undivided Trinity, Dublin ... and Colonel Benjamin Fisher Commanding the Royal Engineers in Ireland".</p> <p>Deed accompanied by coloured 50 feet:1 Inch plan of tower and battery showing no detail.</p>
Tower & Battery No. 9 Dalkey Island	<p>Plan – undated (probably 1852-1858) entitled "Ordnance Towers South of Dublin Bay Nos. 9-16 inclusive" showing relative positions of tower and battery with no detail. Battery shows extension.</p> <p>Plan – 1862 drawing noting 12 NCOs and capacity for 870 gallons of water, showing tower in outline only indicating position of stairs. Battery shown as having two extensions to rear, with soldiers quarters at northernmost section, store with "porch"es to south face and coal store against internal face of south wall, having a drain outside the battery to the east.</p>
Tower No. 10 Bullock	<p>Drawing - Section drawing showing height of Martello tower at Bullock dated 20/8/1839 showing adjacent "house to be erected on the property of Edward Alderman Esq".</p> <p>Plan – undated (probably 1852-1858) entitled "Ordnance Towers South of Dublin Bay Nos. 9-16 inclusive" showing curtilage wall, 5 boundary stones, privy and well at existing [2007] stairwell.</p> <p>Plan – 1862 drawing. 2 copies (b&w and hand-coloured). Coloured copy shows encroachments (Letting No. 593), with the tenant named as Mrs. L. Broth. An ash pit is marked behind the well.</p>
Tower & Battery No. 11 Sandycove	<p>Plan, section and elevation – of Master-gunners store dated 1/5/1861</p> <p>Plan – 1862 drawing indicating quay and boat house at harbour to west (4 copies).</p> <p>Detailed Drawings – of Sandycove Battery, magazine and associated buildings. Plans & cross-sections indicating dimensions, materials (e.g. "brick and mortar wall"), dated 2nd may 1863 with note "as executed 1861".</p> <p>Plan – undated (probably 1852-1858) entitled "Ordnance Towers South of Dublin Bay Nos. 9-16 inclusive" showing 3 boundary stones to east, rocky outcrop to N,W, & S, extent of battery showing 2 guard houses to south of quadrangular enclosure, and 2 boundary stones, denoting plot S & E "marked on rock".</p>
Tower No. 14 Seapoint	<p>Plan –1862 drawing with comments to January 1883 noting privy to east, seawall extending from east to tower "Bridge to be kept in repair by railway company".</p> <p>Plan –copy of 1862 drawing noting "Sold to Blackrock Urban District Council 14th May 1901 for £300"</p> <p>Plan – undated (probably 1852-1858) entitled "Ordnance Towers South of Dublin Bay Nos. 9-16 inclusive" showing</p>

	boundary with railway.
Tower No. 15 Williamstown	<p>Plan – undated (probably 1852-1858) entitled “Ordnance Towers South of Dublin Bay Nos. 9-16 inclusive” showing twisting path through marshy land and five boundary stones.</p> <p>Plan – copy of 1862 drawing noting “Deed 1-1-1806. There is no deed plan”...“Sold to E.M. Johnson Roberts, 16-2-1902 £250”.</p> <p>Plan – 1862 drawing indicating people’s garden to east, mud fence to west, sub-rectangular “fort of batter” boundary, privy to SW, and spring well to E.</p>
Tower No. 16 Sandymount	<p>Plan – undated (probably 1852-1858) entitled “Ordnance Towers South of Dublin Bay Nos. 9-16 inclusive” showing stairs to north.</p> <p>Plan – 1862 drawing indicating metal stairs to east, rectangular office to N, privy, ash pit, coal store and basement tank to E; stable at SE; 3 boundary stones with a 4th to the west noted as “sunked”, and ‘sauna’ indicated to S outside the curtilage of the building.</p> <p>Plan – copy of 1862 drawing corrected to 1883 noting “this tower deed 2/5/1806. There is no deed plan” ... “Property sold to Dublin United Tramways £520 11 MARCH 1913”.</p>
Tower No. 1 Red Rock, Sutton	<p>Drawing – dated 22/7/68, noting Deed dating 14/4/1806. Shows undefined clay boundary fence and outline of tower with note “From land of Mrs. A. Jameson”.</p> <p>Plan – Outline of tower and adjacent land parcels showing 11 boundary stones, dated 31/12/1851</p> <p>Plan – 1862 drawing indicating tower and yellow-coloured right of way, showing wooden platform to north, privy to west, cross-section of defensive ditch/clay fence & boundary stones numbered as Nos. 5,7, 2,3, 5-7.</p> <p>Plan & Cross-section – of proposed retaining wall, showing outline of tower & coast. Dated 11/11/1863</p> <p>Plan – copy of 1862 plan showing tower letting (to Mr. A. Jameson). 2 roods, 28 perches, wall to north of tower noted “wall removed 1915”. Boundary stones 2,3,5-7 removed with new stones numbered BS 5,6,7 in place.</p>
Tower No. 2 Howth	<p>Plan – dated 7th March 1850 showing boundary, internal boundary walls, right of way & 12 boundary stones to south (2 copies)</p> <p>Plan – dated 23/12/1887 showing boundary, internal boundary walls, areas not cultivated, right of way & 10 boundary stones to south.</p> <p>Cross-section – undated cross-section & “sketch of the hill of which the tower of Howth is situated”.</p>
Tower No. 3 Ireland’s Eye	<p>Undated hand-painted plan showing no detail</p> <p>Plan – dated 7th March 1850 showing boundary & 11 boundary stones to south (4 copies)</p>
Tower No. 4 Carrick	<p>Plan – dated 7th March 1850 showing 5 boundary stones. 3 copies: damaged b&w & two handpainted copies.</p>
Tower No. 5 Robswall	<p>Deed of Conveyance – dated 25th March 1909, showing transfer to Frederick George Hick’s of 17 Wellington Place, Clyde Road for £175. Deed accompanied by plan drawing of tower showing site prior to conversion to Arts & Crafts building.</p>
Tower No. 6 Balcarrick	<p>Plan – dated 7th March 1850 showing tower with internal boundary walls, and 4 boundary stones. 3 copies.</p> <p>Undated hand-painted plan showing no detail</p> <p>1862 map – coloured copy noting “clay stone walls” as internal boundary walls, piggery, dung pit, privy, & tower detail (3 copies).</p>

	<p>Deed of Conveyance – dated 29th March 1909, showing transfer to John King, 38 Dawson Street, Master Carriage Builder. Notes original transfer on 21st January 1806 between Hamden Evans, Edward McMahon and John McMahon to Col. Fisher. The deeds further note transfer of ownership 1st September 1810 from Col. Benjamin Fisher RE to RA (Thomas Trotter, Henry Rogers, Robert Coleman and Abraham Mills). Note further states “three original deeds returned to W.O. on 24th July 1809. Accompanying map shows tower, piggery, privy, dung pit and four boundary stones.</p>
Tower No. 7 Portrane	<p>Drawing – hand-drawn painted outline of site and tower showing boundary stones, dated 23/12/1837. Accompanied by a copy dated 31/12/1851.</p> <p>Drawing – undated hand-painted drawing of site showing rocky coastline.</p> <p>Plan – undated showing detailed b&w plan with coloured additions. “clay and stone fence” shown running from NW-SE, privy @ SE, clay boundary fence running NW-E showing four boundary stones. Blue-coloured area shows circular area to NNE (marked as Encroachment No.2699), Rocket House to NW (Encroachment No.770) and boat slip and boat house to east (Encroachment No. 769 Boat House and Slip for Coast Guard). A second undated copy of this plan shows Encroachment No. 2699 Telegraph Pole; 772 Rocket House; 1730 Occupation of Tower as Coast Guard Station; 769 Boat House & Slip for Coast Guard.</p> <p>Plan – 1862 detail of tower and coastline showing b&w “Coast Guard Watch House” (noted as Rocket House on other plans) & “right of passage”. Plan notes 16 NCOs and artillery men & 1300 gallons of water</p> <p>Plan – copy of 1862 map showing coloured circular area around tower with note “this tower with land and right of way was sold to Mr. Lewis Cuthams for £150. Conveyance dated 23.12.1921 W.O.D.O. 3/1/364 dated 25.5.1921”.</p>
Tower No. 8 Rush	<p>Plan - dated 26/2/1852, showing hand-painted outline of tower, 7 boundary stones & rectangular structure (3 copies)</p> <p>Plan - dated 7/3/1856, showing hand-painted outline of tower</p> <p>Undated drawing – hand-painted, compass-marked drawing @ scale of 100’=1” showing tower & land parcels of adjoining properties.</p> <p>Drawing – 1853/4 “Plan, elevation, section and sketch of proposed fence” (2 copies & 1 pencil copy)</p> <p>Drawing – 1859 Detail drawing of fence “Extent of Fence proposed for No. 5 Tower, Robswall, No. 8 Tower Rush, No. 10 Tower Shennick’s Island to accompany Engineers estimate for 1858-9” (2 copies)</p> <p>1862 plan – Detailed drawing showing 7 [nb 8 shown on 1920 drawing] boundary stones, pig sty, ash pit, privy & “foot of palling”, path to High Water Mark(HWM), clay fence @ HWM, spring well to ENE, description of details of tower including 1st storey tank, kitchen & master gunners store, 2nd soldiers quarters, shot furnace, staff, chimney, winding stairs, stairs & machicolis (2 copies)</p> <p>Plan – copy of 1862 map, dated 10/3/09 showing Encroachment No.1722</p> <p>Plan – dated 11/2/1920 “plan shewing Extension to Encroachment No.1722 WD, land cultivated as Garden Land shown thus [blue colour]”, low stone wall erected to south. Cultivated along right of way to W & S of stone wall within boundary. 8 boundary stones noted marking circular land parcel and right of way. Signed “Lt. Colonel RE CRE Dublin District 11-2-1920”</p>
Tower No. 9 Drumanagh	<p>Deed of Conveyance 22/MAR/1806 – between Robert Palmer and Colonel Benjamin Fisher on the part and behalf of His Late Majesty King George the Third</p> <p>Hand-painted plan (2 copies) dated 7th March 1850, noting 2 boundary stones but no building detail.</p>

	<p>Undated b&w map – of promontory showing additional 2 boundary stones denoting right of way @promontory ditch & a further 2 @ Rush to Balbriggan/Skerries road.</p> <p>1862 map - showing "War Department Right of Way", piggery to ENE and 2 boundary stones denoting right of way at promontory ditch and a further 2 boundary stones to 'Palling'.</p> <p>Deed of Conveyance 5/OCT/1908 – between "His Majesty's Principal Secretary of State or the War Department ... and General Sir Roger William Henry Palmer of Kennure Park, Rush in the County of Dublin, Baronet. £50".</p>
Tower No. 10 Shennick's Island (North Dublin Bay)	<p>Deed of Conveyance – between W.O. and Ralph H. Byrne, Esquire, with Copy of 1862 map showing plan of tower and land, forming part of lease dated 31 December 1908. Map shows tower, "right of way", stairs, piggery and 6 boundary stones (2 of which are in the inter-tidal zone to the east of the tower).</p>
Tower No. 11 Red Island, Skerries	<p>Plans – Nine (9) plans dated (1838-1880) & undated are included, B&W & handpainted, some noted "No.11 Tower Red Island", some showing tower and boundary, some omitting boundary. Dated editions 23/11/1838, 7/3/1880.</p> <p>Plan – 3 copies of hand-painted outline showing 8 boundary stones, dated 7/3/1850</p> <p>Deed of Conveyance – dated 21st July 1908, showing transfer from WO to John McDowell for £15, accompanied by plan showing tower, staite/ladder access, piggeries and privy on a rectangular site showing 5 boundary stones, with a "clay fence" to the SE corner and a "right of passage" to the NW corner. The deed also notes last transfer on 1st September 1810 between Brigadier General Benjamin Fisher, Commanding Royal Engineers in Ireland and Brigadier General Thomas Trotter Commanding Royal Artillery.</p> <p>Plan – Coloured plan showing piggeries, privy, circular clay fence encircling tower, "clay and stone fence" to W, clay fence to SE, & 6 boundary stones. Note states "This property Tower No.11 was sold to John McDowell, Purchase Money £151, 4th June 1909".</p>
Tower No. 12 Balbriggan	<p>Deed of Conveyance – dated 20th July 1909, showing transfer from WO to William J. Cumisky</p> <p>Plan – 1862 b&w, coloured yellow and marked "sold" showing adjacent Dublin & Drogheda railway and brick yard, 2 boat harbours to the shore, five boundary stones and an undefined circular boundary. Note reads "Tower and Road of approach Deed dated 20 MAR 1806. There is no deed plan". 2 copies.</p> <p>Plan – undated tracing paper copy of undated plan showing seats (Encroachment) indicating gravelled surface, clay fence, extending to E & 3 seats to east. 'Boat House' & 'Baths' indicated to SW. 50'=1". A second copy is annotated "20th March 1806 = Deed"</p> <p>Plan – Site plan showing five surviving boundary stones (Nos. 2-5,7), dated 7/3/1850. A second copy (with a different colour scheme) also survives.</p>

Table X: Large Loose-leafed folder (MALLF) held in the Military Archives.

Item: Annotated 1862 edition maps of individual towers, & associated Drawings

Description: Series of 1862 edition maps of Martello towers indicating towers, associated structures, cartilage, extent of lettings and encroachments, and hand-written annotations added to the maps over time. Some of the maps are also accompanied by dated & undated plans, sketches and drawings mainly related to tenancy

Item	Notes
Tower No. 3 Ireland's Eye (North Dublin Bay)	<p>Tenure – Held in Fee Accommodation – 16 N.C.O.s and men, and capacity for 30 powder magazine barrels and 970 gallons of water Acreeable Extent – 3 r. 34 p. "The tower and land attached are let to the Earl of Howth (former Letting No. 139) at a rent of £5 p.a.). The letting was granted in the year 1876, and is terminable on three months notice on either side". "It's sale was recommended by G.O.C. Dublin District on 19th July 1887, and again 17th January 1897. G.O.C. 7th Division included it in list for disposal in Return dated 6th January 1904, and the Field Marshall C.F. in Ireland and 3rd A.C. included it, similarly, in return sent to W.O. 23.1.04"</p>
Tower No. 5 Robswall	<p>1830 plan showing boundary stones & extent of site. 1851 plan copy of hand-coloured 1830 plan dated 7th March 1851 showing boundary stones & extent of site. 1857 plan copy of hand-coloured 1830 plan dated 23rd December 1857 showing boundary stones & extent of site. 1862 plan indicates 4 boundary stones, pig sty, privy & cess pit. Clay and stone fence indicated to NE corner where coastal erosion has cut into circular boundary line (a second hand-coloured copy of this map is also held).</p>
Tower No. 6 Balcarrick	<p>Tenure – Held in Fee. (Deed dated 21st January 1806, purchase money £53.15.0 This sum included the site of No. 7 tower, Portrane). Accommodation – 16 N.C.O.s and men, and capacity for 30 powder magazine barrels and 760 gallons of water Acreeable Extent – 37 perches "The tower and land are let to Mr. John King. Agreement dated September 1881, at a rent of £2 p.a. (forms Letting No. 298)". "The sale of the tower was recommended by G.O.C. Dublin District on 19th July 1887, and again 16th January 1897. G.O.C. 7th Division included it in list for disposal in Return dated 6th January 1904, and the Field Marshall C.F. in Ireland and 3rd A.C. included it, similarly, in return sent to W.O. 23.1.04"</p>
Tower No. 9 Drumanagh	<p>Tenure – Held in Fee. (Deed dated 22nd March 1806, purchase money £132.13.9 This sum includes No. 8 Tower, Rush). Accommodation – 16 N.C.O.s and men, and capacity for 30 powder magazine barrels and 920 gallons of water Acreeable Extent – 37 perches "let to Sir Roger palmer, agreement dated 1894, at rent of £3 p.a. (Letting No. 431). Terminable on Quarters notice". "The sale of the tower was recommended by G.O.C. Dublin District on 19th July 1887, and again 16th January 1897". Deed of Conveyance 22/MAR/1806 – between Robert Palmer and Colonel Benjamin Fisher on the part and behalf of His Late Majesty King George the Third Deed of Conveyance 5/OCT/1908 – between "His Majesty's Principal Secretary of Statefor the War Department ... and General Sir Roger William Henry Palmer of Kennure Park, Rush in the County of Dublin, Baronet. £50."</p>
Tower No. 10 Shennick's Island (North Dublin Bay)	<p>Tenure – Held in Fee. (Deed dated ... 1806, purchase money £114 – but this included site of No. 11 Tower, Red Island). Accommodation – 16 N.C.O.s and men, and capacity for 30 powder magazine barrels and 820 gallons of water Acreeable Extent – 3 roods, 25 perches "Is let to Mrs. F. Mackey. Agreement dated 1902, at rent £1.0.0 per annum (former Letting No. 301) – terminable on a Quarters notice.</p>

Tower No. 12 Balbriggan	<p>"The sale of the tower was recommended by G.O.C. Dublin District on 19th July 1887, and again 16th January 1897".</p> <p>Tenure – Held in Fee. (Deed dated ... 1806, purchase money £114 – but this included site of No. 11 Tower, Red Island).</p> <p>Accommodation – 16 N.C.O.s and men, and capacity for 30 powder magazine barrels and 820 gallons of water</p> <p>Acreeable Extent – 3 roods, 25 perches</p> <p>"Is let to Mrs. F. Mackey. Agreement dated 1902, at rent £1.0.0 per annum (former Letting No. 301) – terminable on a Quarters notice.</p> <p>"The sale of the tower was recommended by G.O.C. Dublin District on 19th July 1887, and again 16th January 1897".</p> <p>"Messers. T & W Cumiskey 16th May 1902 offered £100 for the Tower. It is surrounded by their property. G.O.C. Dublin recommended that the Tower be retained pending issue of the new Defence Scheme".</p>
No. 7 Killiney (Tara) Hill (South Dublin Bay)	<p>Tenure – "Held in Fee. Deed 5th February 1807 included in purchase money of £943.17.6 for Loughlinstown (No. 6) and Killiney (No. 8) Tower".</p> <p>Accommodation – 12 N.C.O.s and men, and capacity for 150 powder magazine barrels and 490 gallons of water</p> <p>Acreeable Extent – Tower site - 3 roods. Road of Approach – 1a. 0r. 25p.</p>

Table x: Annotated 1862 edition maps of individual towers, & associated Drawings held in Military Archives.

4.8 National Archives of Ireland

Tower	Description
1. Bray Head	No information available in catalogues
2. Bray Point	No information available in catalogues
3. Corke Abbey	No information available in catalogues
4. Magharagh Point	No information available in catalogues
5. Loughlinstown Battery	No information available in catalogues
6. Loughlinstown	No information available in catalogues
7. Tarrong Hill	No information available in catalogues
8. Limekiln Battery	No information available in catalogues
9. Dalkey Island	File OPW 5 HC/4/593. Martello Tower No.9 Dalkey Island, 1862 Map.
10. Bullock	File OPW 5 HC/4/588. Martello Tower No.10 Bullock, 1862 Map
11. Sandycove	File OPW 5 HC/4/589. Martello Tower No.11 Sandycove Battery, 1862 Map.
12. Glasthule	No information available in catalogues
13. Dun Leary	No information available in catalogues
14. Seapoint	No information available in catalogues
15. Williamstown	File OPW 5 HC/4/586. Martello Tower No.15 Williamstown, 1862 Map.
16. Sandymount	No information available in catalogues
1. Red Rock, Sutton	No information available in catalogues
2. Howth	<ul style="list-style-type: none"> File OPW 5 HC/4/587. Martello Tower No.2 Howth, 1862 Map. File OPW8/HOW/22 "Extract from Inquisition taken at Howth on 15 October, 1805 of the value of the ground taken by the Board of Ordnance Survey on which the Martello Tower stood" 15/10/1805 File OPW8/HOW/365 "Copy letter from Robert Burrowes, solicitor to the Commissioners, to the Earl of Howth on the subject of the proposed road from the Martello Tower to the Kilrock" 28/7/1810 File OPW8/HOW/2965 "Report by the Solicitor on the claim of Charles McDowell to a piece of land near the Martello Tower at Howth". 15/1812/1819 File OPW8/HOW/2973 "Copy letter from the Secretary to John Aird directing him to mark out the boundary of the ground at Howth near the Martello Tower with squared stones with 'H.H' cut in them". 3/1/1820
3. Ireland's Eye	File OPW 5 HC/4/591. Martello Tower No.3 Ireland's Eye, 1862 Map.
4. Carrick	No information available in catalogues
5. Robswall	No information available in catalogues
6. Balcarrick	No information available in catalogues
7. Portrane	No information available in catalogues
8. Rush	File OPW 5 HC/4/590. Martello Tower No.8 Rush, 1862 Map.
9. Drumanagh	No information available in catalogues
10. Shennicks Island	No information available in catalogues
11. Red Island, Skerries	No information available in catalogues
12. Balbriggan	No information available in catalogues

4.9 National Archives of the United Kingdom, London

The National Archives, formed in 2003 by the amalgamation of the Public Record Office and the Historical Manuscripts Commission, comprises the records of central government and the courts of law from the 11th century to the present day. The records contain a wealth of primary documentation on the context, construction and use of the towers during the 19th and early 20th century, and have been well-researched by previous authors. A range of material is contained, including drawings and documents not found elsewhere, as well as copies of Ordnance Survey of Ireland maps and other documents found in other repositories.

No.	Item	Date	Description
1.	PRO Adm 51/535	1793	An account taken from the ships log "A Journal of the Proceedings of His Majesty's Ship Lowestoff, William Wolseley, Esq. Captain (1793)" of the attack on the Mortella Point Tower in Corsica
2.	PRO 1/297	1799	2 March 1799, Lieutenant-General Sir Charles Stuart orders the construction of martello towers on Minorca "calculated more for the temporary protection of different placescombined with a further plan for encountering the Enemy wherever they may effect a descent"
3.	PRO HO 100/67, ff.57-8	1796	Earl of Carhampton erects huts for six battalions at Loughlinstown to defend Dublin City.
4.	PRO HO 100/67, ff.45-56	1797	Earl of Carhampton recommends that temporary batteries be erected to defend Killiney Bay, the entrance to Dublin at Poolbeg and north of Howth
5.	PRO WO 55 901	1798	Letter from Stuart to Dundas regarding Martello towers in Minorca.
6.	PRO WO 54/717	1801	Appointment of Respective Officers in charge of all fortification in Ireland by the Board of Ordnance. 3 rd August 1801, Lord Lieutenant Lord Hardwicke ordered to transfer all assets of former Irish Board of Ordnance to the new Respective Officers.
7.	PRO WO 55.1549	1801-1803	Report by Colonel Alexander Hope on the defence of Ireland, November 1801 Responses by Hope and General Cornwallis to Colonel Twiss' 1803 report on the defence of Ireland.
8.	PRO WO 30/73	1803	Colonel Twiss's inspection of Irish fortifications and recommendations for the defence of Ireland.
9.	PRO WO 30/73	1803	Proposal to construct towers north and south of Dublin City
10.	PRO HO 100/120, f.13	1803	Rear Admiral Calder requests fortification of Bere Island, Co. Cork. December 1803
11.	PRO WO 55/831	1804	Lieutenant General Cathcart informs Major Sir Charles Holloway, resident commanding engineer for the Cork district, that works were to begin on fortifying Bere Island by Captain Birch without delay. 8 January 1804
12.	PRO HO 100/132, ff.19-29	1805	Report by Colonel Benjamin Fisher to the Lord Lieutenant dated 24 th December 1805 on works erected at the behest of the Irish Government
13.	PRO WO 1/784, ff. 399-421	1806	Report by Major Sir Charles Holloway dated 26 th February 1806 on works sanctioned by Board of Ordnance since start of the war.
14.	PRO WO 1/784, f.455	1806	Report by Colonel Benjamin Fisher dated 13 th April 1806 on works sanctioned by Board of Ordnance since start of the war.

15.	PRO WO 55/831	1804	Fisher to military secretary, dated 3 rd June 1804 on proposals for 14 towers and 10 batteries south of Dublin at an estimated cost of £40,395-6-3 (£1800 per tower and £1200 per battery, plus extras)
16.	PRO WO 55/831	1804	Fishers return, dated 1 st September 1804 planning 11 towers and 4 batteries north of Dublin.
17.	PRO WO 55/1446	1804	30 th October 1804. Several of towers south of Dublin reported as nearly ready for guns.
18.	PRO WO 55/831	1804-1806	29 May 1804 Commander of Forces authorised by Chief Secretary to secure coast between Drogheda and Wexford by landings from an enemy force. December 1806 Handover of constructed towers to the Board of Ordnance
19.	PRO WO 54/222	1805	23 rd February 1805. Felix Reid appointed Master-gunner for north of Dublin; Robert Lartham appointed Master-gunner for south of Dublin.
20.	PRO WO 55/1447	1805	Brigadier General Manley orders 24-pounder cannon for north of Dublin, April 1805
21.	PRO H 100/132, ff.19-29	1805	Fishers Report dated 24 th December 1805 stating all sites ready and several manned for some time, with expenditure of £64,082 (not including Robswall and Balcarrick).
22.	PRO HO 100/133 ff.233-236	1806	Fishers Report dated 12 th July 1806 giving total estimated expenditure as £90,522
23.	PRO WO 55/831,	1807	Pigeon House fortification Dublin Ballast Corporation Memorial, 7 th July 1807
24.	PRO WO 55/835	1810	Battery No. 5 discontinued.
25.	PRO WO 55/835	1812	30 th November 1812, agreement to demolish No. 5 Battery
26.	PRO WO 55/835	1812	Total expenditure including maintenance to date (7 years) £104,722-1-8 Return attached to letter dated 7 th April 1812
27.	PRO WO 55/836	1816	List of all fortification in Ireland (except Cork).
28.	PRO WO 44/109	1823	Return of Engineers District, May 1823 noting 6 Dublin Martello towers in use by Preventative Service Water Guard to prevent smuggling.
29.	PRO WO 54/747	1825	RA 1825 returns
30.	PRO WO 55/2684	1830	11 Dublin Martello towers in use by Preventative Service Water Guard to prevent smuggling – South Towers Nos. 2,6,11,12,13 & 15; North Towers Nos. 2,3,7,9 & 12.
31.	PRO WO 55/2684 & 55/2685	1830	Board of Ordnance 1830 returns
32.	PRO WO 44/119.	1836	Board of Ordnance agree to sell No. 13 Tower and Battery to Commissioners of Public Works to permit construction of Dublin to Kingstown Railway. Board of Ordnance order for sale dated 30 th December 1836.
33.	MPEE 1/248/29 AND 31 AND 33-35	1837-1838	Five sheets of the Ordnance Survey of Ireland six-inch First Edition: (29) County Dublin XXIII showing Dalkey to Booterstown; (31) and (34) two copies of County Dublin XIX showing Dublin Bay; (33) County Dublin XV showing Portmarnock; (35) County Dublin XXVI Dublin Bay and Rathmichael.
34.	MPEE 1/248	POST-1837	Ordnance Survey of Ireland six-inch First Edition: thirty-two sheets, with MS additions to show defence sites, and Crown foreshore reserves adjoining War Department properties. Also ten MS plans of martello towers and other fortifications. Detailed descriptions are given at item level.

35.	MPHH 1/662	1848- [c.1852]	Ireland: Dublin County. 'Martello Towers North of Dublin Bay 1848': plans on three sheets. (1) 'N o 6 Bellcarrick'; 'N o 7 Portrain'; 'N o 8 Rush'; 'N o 9 Drumanagh'. (2) 'N o 10 Shenick's Island'; 'N o 11 Skerries'; 'N o 12 Balbriggan'. (3) 'N o 1 Sutton'; 'N o 2 Howth'; 'N o 3 Irelands Eye'; 'N o 4 Carrick Hill'; 'N o 5 Robbs Wall'. Scales: 1 inch to 50 feet. Compass indicators. Dated, 1848. All with later MS pencil additions. Stamped: Commander Royal Engineer's Office, Dublin, N o s. 7.110/60, 61 and 62 respectively, therefore [1852 or later].
36.	PRO WO 44/119	1849	Legal transfer of No.12 Tower and Battery at Glasthule to Commissioners of Public Works, dated March 1849
37.	MFQ 1/520/30-33	1850	Ireland: County Dublin (Baile Atha Cliath). (30) 'Plan of Martello-Tower -at-Sandymount [Dumhach Thra]-at present': with dimensions. The scale bar shown does not match the dimensions marked on the plan. Drawn by F Darley, Architect. (31) 'Sketches of the Martello Tower at Sandymount, showing proposed improvements': sheet bearing plans, elevations and sections, with dimensions. Drawn by F Darley, Architect. (32) 'Sketch of Ground near Sandymount Tower shewing position of New Church': plan also showing proposed works at number 16 tower and a new road in progress. Scale: 1 inch to 80 feet [1:960]. Compass indicator. Drawn by Lieutenant A Leahy, Royal Engineers, 14 March 1850. (33) Sheet bearing 3 sketches: 'Enlarged Sketch of the "Iron Cantilever"'; 'Elevation'; 'Plan of the Cast Iron stairs'; with dimensions. Drawn by J A, Clerk of Works. Dimensions between 47 cm x 64 cm and 34.5 cm x 16 cm. Originally enclosed in a report from Lieutenant Colonel E Vicars, Royal Engineers, Commander of Dublin District, 15 March 1850.
38.	PRO WO 44/120	1853	No. 4 Tower & Batteries at Magheragh Point sold.
39.	PRO WO 55/851	1853	No. 8 Lime Kiln Battery sold, letter dated 10 th December 1853
40.	PRO WO 33/2A, paper 16	1856	Creation of RA militia to "arm and man coastal batteries, Martello towers and coastal forts"
41.	PRO WO 33/10, FF.761-837	1857	Review of coastal and coastal defences of Ireland.
42.	PRO WO 73/1	1859	1 st July 1859, 56 Invalid Gunners noted manning the east coast defences of Ireland.
43.	PRO WO 10/2819	1859	RA invalid gunners reclassified as Coast Brigade, Garrison Artillery with two divisions in Ireland.
44.	PRO WO 78/4732/16	1862	Sandycove Batty. Martello Tower, Co. Dublin. 50' to 1"
45.	PRO MPHH 1/654	1852- 1858	Ireland: County Dublin. 'Ordnance [Martello] Towers and Batterys South of Dublin': five plans on one sheet showing No 1 Bray Head; N o 2 Mount Park; N o 3 Cort [MS corrected to Corke] Abbey; N o 4 Maghera Point; and N o 6 Loughlinstown. Scale: 1 inch to 50 feet. Compass indicator. Dated 1852. Stamped: Commander Royal Engineer's Office, Dublin, N o. 7.110/59, therefore [1852 or later]. MS pencil additions, 1858.
46.	PRO WO 55/851	1853	Guns of remaining eight standard towers south of Dublin upgraded from 18-pounder to 24-pounder cannons. PRO 55/851, letter dated 10 th December 1852. Upgrades of No. 7 & 9 batteries to three long 32-pounders. Battery No. 11 listed as unarmed.

47.	WO/55/831	War Office, 1857-1964	Accounts of the treasurer and other accounting records, WO 48-WO 53, WO 55 Record comprises 3071 bundles and volumes from: Ordnance Office and War Office: Miscellaneous Entry Books and Papers
48.	PRO WO/783, pp.297-99	Not established	Consideration of usefulness of Martello towers: "should be used to provide a keep for a battery and were of the opinion that towers on their own and supported only by other batteries would provide no advantage over a battery other than a defence against infantry assault" (Clements 1999:15)
49.	WO 78/553	1869	Ireland: County Dublin: Howth (Binn adair). Two maps comprising sheets of the Ordnance Survey of Ireland 1:2,500 County Series: (1) sheets County Dublin XIX.4 and part of [XIX.8] joined, showing the south-western portion of the peninsula, including the Ben of Howth; (2) sheet [County Dublin XV.12] and parts of XV.8, [XV.16, XVI.1 and XVI.5] joined, together covering the north-eastern portion of the peninsula, including the town and harbour area, and the island of Ireland's Eye (Inis Mac Neasáin). Most of the marginalia, including sheet numbers, have been trimmed away; details of survey, printing, dates, etc, are not shown. Coloured MS additions to both items highlight War Department property surrounding martello towers. Both items signed by Colonel George Wynne, Commanding Royal Engineer, 20 December 1869.
50.	PRO WO 33/24, paper 677	1872	Nine brigades of RA militia in service.
51.	PRO WO 78/622	1872	Ordnance Survey of Ireland 1:2,500 map of County Dublin sheets XIX.9-10 and [XIX.13] joined to form a map of the coast at Sandymount (Dumhach Thra) and the quayside area around and to the east of Pigeon House Road. Details of survey, printing, dates, etc, are not shown. Coloured MS additions show details of Pigeon House Fort and martello tower number 16, with boundary stones and notes added in pencil. Signed by Colonel J S Hawkins, Commanding Royal Engineer, Ireland, 14 September 1872.
52.	PRO WO 78/620	1872	Ordnance Survey of Ireland 1:2,500 map of County Dublin sheets XXIII.1 and [XXIII.5] joined to form a map of part of the southern portion of Dublin Bay (Cuan Bhaile Átha Cliath), covering the environs of Blackrock (An Charraig Dubh), Merrion (Muirfin) and Williamstown (Baile Liam). Details of survey, printing, dates, etc, are not shown. Coloured MS additions show Martello Tower number 10. Signed by Colonel J S Hawkins, Commanding Royal Engineer, Ireland, 14 September 1872.
53.	PRO 35/34 & 35/40	1874	Returns of men and ordnance in Ireland noting all towers north of Tower 1 Red Rock as either occupied by the Coast Guard or let, with 2 towers empty. Towers 1,6,7,15,& 16 shown as let, with Tower 2 not mentioned.
54.	PRO WO 396/2-5	1885	Royal Artillery and Royal Engineers Works committee report.
55.	PRO WO 33/46	1886	Works Committee Return for 1886 noting men & armament.
56.	PRO WO 396/4, Report No. 96	1895	Return showing armament of Sandycove Battery standing at five rifled converted 64 lb guns.

4.10 National Library of Ireland

NLI MS 1,122	NLI MS 1,122 (Kilmainham Papers), P.334 List of towers ready to receive barrack furniture, list of officers and men assigned to each.
NLI MS 38,921	NLI MS 38,921 De Vesci Papers containing 2 letters c. 1805 regarding compulsory purchase of land for Martello towers by the Government.
Letter A: 17 th August 1805, from Stewart & Swan, 6 Leinster Street, Dublin to Lord de Vesci at Abbeyleix	
<p>We beg leave to inform your Lordship, that our Office was serv'd yesterday Evening with two several Notices, signed by Colonel Fisher of the Royal Engineers as a Commissioner appointed under the General Defence Act. The object of which Notices is, to apprise your Lordship, that Government require for the publick Service 3 Roods and 27 Perches of Land, being part of your Lordship's Estate at Dunleary and now partly in the possession of the Commissioners of the Revenue and partly in the possession of the Ballast Corporation and also other 2 Roods and 36 perches of Land, part also of your Lordship's Estate at Dunleary and now in the possession of Daniel Sexton [Tower & Battery No.12 Glasthule] for the former of which parcels of Land a sum of £50, and for the latter a sum of £30 is tender'd to your Lordship as the full Value and Consideration for your Lordship's Estate & Interest in the several parcels. Your Lordship will please to observe that Batteries and Martello Towers are already constructed upon these parcels of Land, and that the parcels described to be in the possession of the Commissioners of the Revenue and the Ballast Corporation us held under your Lordship by several Leases for Lives renewable for ever, and that the parcel described to be in the possession of Daniel Sexton is held under your Lordship By Lease for 21 Years from May 1804 at the annual acreable Rent of £3. The like sums are tendered to Lord Longford for his Estate & Interest in the before mentioned parcels by notices of exactly a similar Import with those served for your Lordship.</p>	
Letter B: 21 st August 1805, from Stewart & Swan, 6 Leinster Street, Dublin to Lord de Vesci at Abbeyleix	
<p>At the Time we had the Honour of last addressing your Lordship upon the subject of the Compensation tendered by the Government for the parcels of Land requir'd for the publick Service, we had not had any opportunity of conferring with those concern'd on the part of the Government; but deemed it our Duty to give your Lordship the earliest Intimation of the Service of the Notices upon us. We have since made it an Object of our particular Attention and Inquiry, and upon Investigation find, that Government have acted totally irregularly from the Beginning in having taken possession of the Ground before they were legally authoris'd to do so under the proceedings required by the Act of Parliament, and Government are now about to pursue the necessary Steps for that purpose. We have in Conference with those concern'd on the part of the Government reciev'd the strongest Assurances of their Intentions to treat with us on your Lordship's behalf upon Terms the most liberal, and in Answer to Objections made by us to the Compensation offer'd, upon the Grounds of its Insufficiency, we have been desir'd to consider the Sums already tender'd merely in the light of a nominal Compensation, and to be increas'd so as to give compleat satisfaction to your Lordship. Your Lordship will please to observe that the Sale of these parvcels of Land will not so operate as to create or occasion any Extinguishment of any part of the Rent at present payable thereout to your Lordship. The Commissioners of Revenue and Ballast Corporation, will receive from Government Compensation for their Loss of Interest in the Ground required for the publick Service, and will of consequence be left subject and liable to the payment of the whole of the present Rent – and as they hold under your Lordship by Leases <u>in perpetuity</u>, the Compensation to be paid to your Lordship in respect of these parcels will be in Consideration of the ultimate Estate in Fee which resides in your Lordship. But, inasmuch as Sexton's Ground is held under your Lordship by Lease for 21 years only, not only the ultimate Estate in Fee, but a valuable Reversion is in your Lordship, in regard to that parcel, and therefore a very different Rate of Compensation (not indeed attested to by those concern'd for Government) must take place in that particular. Your Lordship may rely upon our watchful Attention to your Lordship's Interests....</p>	

4.11 National Library of Scotland

Item	Description
NLS Ms 19,962	Plan of Tower & Batteries at Nos. 12 Glasthule & 13 Dun Leary. Reproduced in the Irish Sword XXIV (no.97), P. 426
NLS MS 19,826 f.210, f.212	Sequence of letters held in the National Library of Scotland beginning 29th May 1804 between John Rennie and General Cathcart on the construction of Martello towers in south Dublin, discussed by Horner.

4.12 Public Record Office of Northern Ireland

Item	Description
PRONI T.3465/168	General Lord Cathcart's tour of the Shannon defences.
PRONI T3465/170	Letter from Captain Birch advising Lord Cathcart to fortify Dublin as coast vulnerable to landings to the north and south of the capital.
PRONI T3465/170	Letter from Colonel Henry Clinton, Quartermaster-General in Ireland to Lord Sheffield, dated 20 th December 1804 "...the Engineer, Captain Birch [officer in the Royal Engineers who had previously served in Minorca], your protégée who is a great favourite of Lord Cathcart and every Lady I meet, but with whom I cannot agree in his scheme of fortification, he is bit by Martello towers or defensible guard houses"

4.13 Trinity College Dublin, Department of Early Printed Books

Item	Description
EPB 00.A.23.1	William Duncan's Map of Dublin, 1821

4.14 Trinity College Dublin, Manuscripts Department

Item	Description
MS 1225	"A Map of the Eastern District shewing the Permanent and Temporary Barracks with the Towers and Batteries N. and S. of Dublin Harbour. 1815".

4.15 Trinity College Dublin, Map Library

The Map Library has the largest collection of printed maps in Ireland, and is the centre for cartographic materials in Trinity College Library, holding more than 500,000 maps. The two maps below show specific detail of the Martello towers. However, it should be noted that the library also holds copies of Duncan's 1821 map, and all ordnance survey maps showing the towers

Item	Description
Alexander Taylor, 1816	Map of the Coast of Dublin indicating locations of Martello towers
John Rennie, 1820	Dun Laoghaire harbour design map by John Rennie (the Elder, 1761-1821) dated 10 th May 1820, showing locations of Sandycove, Glasthule and Dun Leary towers and supporting batteries.

4.16 Local Authority Records

Records of the refurbishment, restoration and conservation of a number of the Martello towers held in private ownership have been recorded as part of the planning process. Planning applications may include drawings, photographs, maps, conservation reports, archaeological reports, details of past and proposed alterations for the tower and site. Recent planning applications are available for inspection free of charge at the public counter of the planning section of each local authority. Each local authority offers online search capability for recent planning applications. However, requests for older files are generally not stored in the planning office, and a retrieval fee may be charged. Planning application documents are available for the following towers.

Tower	Name	Local Authority	Website
South No. 2	Bray Point	Wicklow	www.wicklow.ie
South No. 6	Killiney	Dun Laoghaire-Rathdown	www.dlrcoco.ie
South No. 7	Tara Hill		
South No. 10	Bartra		
South No. 14	Seapoint		
South No. 16	Sandymount	Dublin City	www.dublincity.ie
North No. 1	Red Rock, Sutton	Fingal	www.fingalcoco.ie
North No. 6	Balcarrick		

Fingal County Council also hold RPS files which contain information on all twelve towers from Sutton to Balbriggan to the north of Dublin. Each file may include a brief description, photographs c.1987-present, maps, dates of previous inspections (for those towers in Local Authority ownership), conservation or condition reports, photocopies and transcriptions from the records of the Military Archives, and relevant publication extracts.

Tower	Name	RPS No.
North No. 1	Red Rock, Sutton	579
North No. 2	Howth	570
North No. 3	Ireland's Eye	589
North No. 4	Carrick	476
North No. 5	Robswall	421
North No. 6	Balcarrick	543
North No. 7	Portrane	542
North No. 8	Rush	265

North No. 9	Drumanagh	253
North No. 10	Shennicks Island	774
North No. 11	Red Island, Skerries	189
North No. 12	Balbriggan (Tankardstown)	17

4.17 National Inventory of Architectural Heritage Surveys

The National Inventory of Architectural Heritage [NIAH] is a section within the Department of the Environment, Heritage and Local Government involved in identifying and recording a representative sample of the architectural heritage of Ireland, from approximately 1700 to the present day. The NIAH have published (NIAH 2002, 2004 and www.buildingsofireland.ie) a brief record with photographs, and coordinates for the following towers:

Tower	Name	NIAH Reference No.
South No. 2	Bray Point	16301084
North No. 1	Red Rock, Sutton	11366017
North No. 2	Howth	11359033
North No. 3	Ireland's Eye	11359042
North No. 4	Carrick	11345002
North No. 5	Robswall	11344040
North No. 6	Balcarrick	11337001
North No. 8	Rush	11324023
North No. 9	Drumanagh	11318004
North No. 10	Shennicks Island	11311040
North No. 11	Red Island, Skerries	11311005
North No. 12	Balbriggan	11305009

NB – All martello towers are included on both the RPS and RMP lists, but may not be included in the NIAH surveys. For example, Portane (North No. 7) was not included in the survey of Fingal, and the NIAH surveys for the Dun Laoghaire-Rathdown and Dublin City areas have not yet been completed.

4.18 National Coastline Survey & Google Earth

The National Coastline Survey was the first digital aerial photographic survey of the coast in Ireland commissioned by the Marine Institute, and published as a series of CD-ROMs. Colour infra-red aerial images for Dublin and Wicklow were captured in 1998 & 1999, and provide a record of the towers at the end of the 20th century. The low-level vertical photographic images provide good coverage of the coastline, but is not comprehensive. Certain sections of coastline have been omitted and appear as small gaps in the strip of photographs, hence the omission

of No. 7 Portrane Tower from the images. The amount of coastline appearing in the images also varies, with some photos showing only the beach area and relatively small area of land. Three towers not positioned immediately adjacent to the high water mark (No. 6 Loughlinstown, No. 7 Tara Hill No. 10 Bartra) were not included in the photograph of the relevant section of coastline.

The towers are also visible using Google Earth. However Google Earth images are undated and likely to be updated without warning. The images are useful in understanding the position of the towers, and how they appeared in the recent past, but their usefulness is significantly reduced as the date of the image is unknown.

Tower	National Coastline Survey	Google Earth
1. Bray Head	Tower lost.	
2. Bray Point	Shown	Shown
3. Corke Abbey	Tower lost.	
4. Magharagh Point	Tower & Battery lost.	
5. Loughlinstown Battery	Shown	Shown
6. Loughlinstown	Not shown	Shown
7. Tarrong Hill	Not shown	Shown
8. Limekiln Battery	Battery lost	
9. Dalkey Island	Shown	Shown
10. Bullock	Not shown	Shown
11. Sandycove	Shown	
12. Glasthule	Tower & Battery lost.	
13. Dun Leary	Tower & Battery lost.	
14. Seapoint	Shown	Shown
15. Williamstown	Shown	Shown
16. Sandymount	Shown	Shown
1. Red Rock, Sutton	Shown	Shown
2. Howth	Shown	Shown
3. Ireland's Eye	Shown	Shown
4. Carrick	Shown	Shown
5. Robswall	Shown	Shown
6. Balcarrick	Shown	Shown
7. Portrane	Not shown	Shown
8. Rush	Shown	Shown
9. Drumanagh	Shown	Shown
10. Shennicks Island	Shown	Shown
11. Red Island, Skerries	Shown	Shown
12. Balbriggan	Shown	Shown

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Endnotes

¹ Douglas (1859 edition) P. 200, footnote.

²² Original Quote: "in cotale mutatione il Senato volendo ad ogni alteratione, che fosse potuata seguire, prouedere, mandò quanto prima nuove genti, artiglierie, munizioni, ed altri apparecchi da guerra nella Bastia, in Sanfiorenzo, in Calui, in Aiazzo, in Bonifazio, ed in altri luoghi dell'Isola: diede ordine, che si fortificasse la cittadella, e la città di Aiazzo, che s'andasse appresso alla fabrica, che Francesi haueuano cominciato I Bonifazio, & che si edificasse vn forte alla Mortella per maggior sicurezze del golfo di Sanfiorenzo", reproduced by Viganò 2001, sourced from Michele Merello (1602) *Della guerra fatta da' Francesi E de' Tumulti susciati poi da Sampiero della Bastelica nella Corsica Libri Otto di Michele Merello con vna breue dichiarazione dell'Instituzione della Compera di S.Giorgio, e de'Principali della Corsica*, Genova MDCII, pp.377-378

³ Fratino was also known by other names. Viganò (2001) notes the Corsican historian Anton Pietro Filippini referred to him as "Giacopo Fratino da Morcò di Lombardia ingegnere" in 1594, while the Genoese historian Filippo Casoni notes him as "un eccellente Ingegniero, chiamato Jacopo Frattino" in 1562.

⁴ A drawing by Giovan Giacomo Paleari Fratino entitled "Planta del castille de Milano", c.1578, reproduced by Viganò 2004, survives in Spain in the Archivo General, Simancas, Ref. AGS, MPYD, VIII/28)

⁵ A drawing by the younger brother, Giorgio Paleari Fratino, c.1560, entitled "Alisandria parere di Giorgio Pagliaro frattino" , (reproduced by Viganò 2004), survives in Germany in the Bayerische Staatsbibliothek, München. Ref: BSM, codex iconographicus 141. Piante di Forte[zze] d'Italia, fol.12).

⁶ A drawing by Giovan Giacomo Paleari Fratino entitled "Planta de la fortificación de Pamplona", c.1571, reproduced by Viganò 2004, survives in Spain in the Archivo General, Simancas, Ref. AGS, MPYD, IX/69)

⁷ *Archivo di Stato*, Genova, *Archivio Segreto*; b.2.412, Lettere Ministri – Spagna 1558/1564. *Dispacio*, "Di Genoua a doi di Marzo MDLXIIJ" (Viganò 2001).

⁸ *Archivo di Stato*, Genova, *Corsica*, filza 503, *Litterarum Venentium ex Corsica e Capraia 1562/1563. Dal Cap[it]an.º fratino Ingegniero*, "Da San firenze alli X di febrar 1563". (Viganò 2001).

⁹ The drawing of the Mortell Point tower by Giovan Giacomo Paleari Fratino entitled "Copia di come ha da esser la Torre della mortella, sec[on]. Do il modello che ci ha lasciato il Cap[it]an.º frattino a 30 di dec[emb].re 1563 il cui originale si è m[anda].º al generale comiss[ari].º p. Che lo mandi al com[issari].º di S. Fir[enz].º, reproduced by Viganò (2004:141), survives in Genoa, in the *Archivio di Stato*, Genova, Ref. Cor, fil, 938. *Fogliazzo 1º della Fabbrica di S.Fiorenzo e Aiccio 1563/1565*.

¹⁰ *Archivo di Stato*, Genova, *Corsica*, filza 938, *Fogliazzo 1º della Fabbrica di S.Fiorenzo e Aiccio 1563/1565. Instrution Del Cap[it]an.º fratino, come s'ha da exequire La fortezza De S.firenze, e La Torre de mortella*, n.d. (Viganò 2004).

¹¹ 23rd February 1564, the Commissioner of San Fiorenzo notes construction of the tower. *Archivo di Stato*, Genova, *Corsica*, filza 504, *Litterarum Venetium ex Corsica e Capraia 1564. Dispaccio*, "Da fir[enz].º Adi XXIIJ 1564". (Viganò 2001).

¹² *Archivo di Stato*, Genova, *Corsica*, filza 504, *Litterarum Venetium ex Corsica e Capraia 1564. Instruttion data al poncello p. le fabriche di S.firenze*, "Di Gen[ou]. A a 17 di ott[obr].e 1565" (Viganò 2001).

¹³ The island of Malta and the especially the fortress city of Valetta was to later act as this Mediterranean stronghold for the Royal Navy in the 19th and 20th centuries, most notably during World War II.

¹⁴ An account taken from the ships log "A Journal of the Proceedings of His Majesty's Ship Lowestoff, William Wolseley, Esq. Captain (1793) PRO Adm 51/535" by Mead (1848).

¹⁵ Mead (1948:210) notes discrepancies among authors regarding the arnament of the Mortella Point tower, and refers to a letter dated 7 January 1794 from Captain Edward Cooke stating "the anchorage is commanded by a round tower on the point of Mortella many feet thick and, as General Paoli informed me mounted two 12 Ponders", corroborated by a letter dated 8 January 1794 by Captain Thomas Nepean, RE. Letters sourced from National Maritime Museum Minto Papers, N.M.M. Volume: Lord Hood-Admiral Hotham-Sir H.Parker.

¹⁶ Letters to Sir Gilbert Eliot re: destruction and Rear-Admiral William Young re: model of Mortella Point Tower (now in Woolwich Museum) sourced by Mead (1948) from National Maritime Museum Minto Papers, N.M.M. Volume: Sir J.Jervis.

¹⁷ A series of photographs of the standing ruins of the tower at Mortella Point were generously provided by Marek Prokop of corsica.forhikers.com

¹⁸ "Elevation and Plan of Martello Tower Corsica and a profile of th Eighteen Pounder mounted on its Carriage and Slide" Ref: PU1624

¹⁹ Grundy (1991) notes that when French forces built coastal fortifications to prevent British landings, they preferred extensive series of simple earthworks, each varying in plan to adapt to the local topography of vulnerable sections of the coast. These were cheap to undertake but required large numbers of troops to function effectively.

²⁰ WO 55/911 cited in Clements (1999) P.116 who notes the Sierra Leone Company reported to the Board of Ordnance in 1807 "A strong tower had been erected which was to be called "Union Tower" "

²¹ Clements (1999) Pp. 117-118.

²² McCall (1999) notes that the first Governor and Commander-in-Chief of the Crown Colony of Ceylon (as Sri Lanka was termed in this period) was Frederick North, who had just completed two years service in Corsica and would have been familiar with the Mortella Point engagement.

²³ Clements (1999:121) citing Vibart (1897) notes "the Delhi towers may appear to be detached circular bastions, but to a senior Royal Engineers officer present .. they were undoubtedly Martello towers".

²⁴ The *Dagha* is a mix of clay and lime. Noens (undated) notes "Clay was collected from the mountain slopes above what is now called Boulders Beach and transported to the site. The clay was then passed through a sieve to remove stones and other undesirable impurities, mixed with water, and used in its natural state".

²⁵ Noens, R. (undated) The Construction and Restoration of the Martello Tower. Unpublished report held in Simon's Town Museum, Cape Town, South Africa. Copy of report supplied courtesy of the Curator.

²⁶ Noens (undated) notes "The Timber, as were the other fitments, was requisitioned from the local Dutch warehouses in the town. This resulted in a variety of timber being used ...".

²⁷ An adze is similar to an axe, but with an arched blade having the cutting edge at right angles to the handle, and was typically.

²⁸ Clements (1999) notes sixteen Canadian towers in total: seven further towers were constructed 1810-1815 "and a further six almost thirty years later", P.95.

²⁹ Harris, Edward (1988) "The Martello Tower at Ferry Point, St. George's Island, Bermuda", *Mariner's Mirror*, Vol. 74, No. 2. The ashlar masonry of this tower is built of the local limestone, and is built to the south England ovoid model with the internal spaces offset to landward. The tower bears a date stone inscribed G_{IV}R An.iii L.- the 3rd year of the reign of George the IV.

³⁰ Donaldson, D.W. (2002) "Port Mahon, Minorca: the preferred naval base for the English fleet in the Mediterranean in the seventeenth century", *Mariner's Mirror*, Vol. 88, No. 4 (November 2002), Pp.423-436

³¹ WO 1 297

³² Craig (1982), P. 282.

³³ Lieutenant-General Sir Charles Stuart was commander of the expedition to capture Minorca and the islands first Governor, and had also been involved with the Corsican campaign.

³⁴ The Dublin towers however show refinement in layout, e.g. the provision of a shot furnace at gun platform level, and the provision of a spiral staircase rather than ladder access. The towers at Williamstown and Dalkey Island deviate from this standard plan, probably due to the nature of their situations (marshy promontory & island respectively).

³⁵ Kerrigan cites PRONI T.3465/168 detailing General Lord Cathcart's tour of the Shannon defences.

³⁶ Clements (1999:48ff) notes five surviving towers in the Canary Islands, including Castillo de San Cristobel c.1577, Torre de Gando c.1741 on Gran Canaria, Las Coloredas (Lanzarote), Caleta de Fustes (Fuerteventura) and Rocque (Fuerteventura).

³⁷ Pavia, S. & Bolton, J. (2001) *Stone Monuments Decay Study 2000* Kilkenny. The Heritage Council. Site 112. Pp. 218-220.

³⁸ Calendar of State Papers relating to Ireland. 1586-1588, pp.441 & 447.

³⁹ Gowan et al (2004) cite Simpson (1994:11) noting a petition of 1681 noting the city wall "so much decayed that there were of no use or safety to the city but endangered those who lived under it and also straightened and deformed the street so that coaches could hardly pass" which resulted in the beginning of the demolition of the city wall. Simpson, L. (1994) Excavations at Isolde's Tower. Dublin.

⁴⁰ A military appraisal of the defences of southern Ireland by General Roy in July 1799 noted Dublin city was "entirely open without either castle or fort", however no action was ever taken on foot of this report. PRO WO/55

⁴¹ This appraisal of the state of defences of Ireland was undertaken at the request of the British Government in the light of deteriorating political relations between the British Government, France and Spain.

⁴² Townshend recommended the fortification of Ringsend for this purpose. BL Add. MS 3,118 ff.1-22

⁴³ BL Add. MS 33,118 ff.257-267, after McEnery 2006:44

⁴⁴ PRO HO 100/67, ff.57-8

⁴⁵ PRO HO 100/67, ff.45-56

⁴⁶ McEnery (2006:48ff) notes correspondence by Camden in January 1797 noting intelligence of planned landings at Galway and Bantry Bay (PRO HO 100/67. ff/43-4, ff.35-40), and General Charles Vallency's critical report on the defences of Kinsale and Cork in August 1797 (PRO WO 30/63) noted "[They] will always land in the vicinity of Cork, Limerick and Waterford, our three victualling towns, unless our fleet manages to interfere".

⁴⁷ In memos dating to January & February 1797. PRO WO 30/64

⁴⁸ Lord Cornwallis acted as both Lord Lieutenant and Commander of the forces during this period.

⁴⁹ PRO WO 55/831, Dublin Ballast Corporation Memorial, 7th July 1807 (McEnery 2006:50).

⁵⁰ McEnery notes the Irish Board of Ordnance as containing a Master-General, Lieutenant-General, Surveyor-General. The board was responsible for the Royal Irish Artillery and the Corps of Irish Engineers (at that time consisting of General Vallency and 7 other officers).

⁵¹ The senior RE officer was Lieutenant-Coonel Benjamin Fisher who had been transferred to Ireland in June 1801 after constructed coastal towers in Jersey (Clements 1999).

⁵² In addition to the RA and the RE, the Inspector General of Fortifications also commanded the Royal Sappers and Miners.

⁵³ Clements further notes (p.15) that this figure was to double by 1815. However, at the time of the construction of the Martello towers around Dublin, there was a small pool of officers with experience in coastal fortifications, a significant number of whom had served in Corsica and/or Minorca and faced with a similar problem of defending a complex coastline with limited manpower and resources.

⁵⁴ PRO WO 55/1549, Report by Colonel Alexander Hope on the defence of Ireland, November 1801

⁵⁵ PRO WO 55/1549, Response to report by Colonel Alexander Hope (footnote above), (McEnery 2006:60)

⁵⁶ PRO WO 30/73 Report dated January 1803 by Colonel Twiss on the defences of Ireland.

⁵⁷ Mcenery (2006:63) notes that Colonel Alexander Hope considered that Dublin could not be fortified and that a landward attack must be met in the field, and that any fortification within the city was mainly for the protection of government records rather than defence.

⁵⁸ PRO WO 55/1549 memo by Cornwallis dated April 1803 noting that a permanent fortification in the Phoenix Park would not secure Dublin City from landward attack.

⁵⁹ (*Bere Island Heritage Conservation Plan reference*)

⁶⁰ PRO HO 100/120, f.13 Rear Admiral Calder requests fortification of Bere Island. December 1803

⁶¹ PRO WO 55/831 Lieutenant General Cathcart informs Major Sir Charles Holloway, resident commanding engineer for the Cork district, that works were to begin on fortifying Bere Island by Captain Birch without delay. 8 January 1804

⁶² The original intelligence report dated 27 December 1803 by Colonel Beckwith no longer survives but was recorded in an acknowledgement returned to Cathcart's office on 29 December 1803. BL. Add. MS 35, 775, ff.132-4 (McEnery 2006:67).

⁶³ PRO 55/831. Fisher to military secretary, dated 3rd June 1804 on proposals for 14 towers and 10 batteries south of Dublin at an estimated cost of £40,395-6-3 (£1800 per tower and £1200 per battery, plus extras)

⁶⁴ PRO 55/831 Fishers return, dated 1st September 1804 planning 11 towers and 4 batteries north of Dublin. This plan was modified during the course of construction to result in the 12 towers without batteries built.

⁶⁵ WO 55 831

⁶⁶ NLI MS 38,921 De Vesce Papers containing 2 letters c. 1805 regarding compulsory purchase of land for Martello towers by the Government.

⁶⁷ Horner notes a sequence of letters held in the National Library of Scotland (Ref. MS 19,826 f.210, f.212) beginning 29th May 1804 between Rennie and General Cathcart.

⁶⁸ Considered in detail by Horner's article in the Irish Sword "John Murray and the Building of the Dun Laoghaire Martello Towers".

⁶⁹ Anon (1809) Journal of a tour through several counties of Ireland during the Autumn, 1809, P.12-14, reproduced in Davies (2007, P.125).

⁷⁰ Kew WO 55 835 "Plan and Elevations of Platforms adapted to a Tower"

⁷¹ Details of the carriage mounted on the roof of a Martello tower by Lieutenant Colonel C.H Owens, RA (1873) in "The Principles and Practice of Modern Artillery" reproduced by Mead (1948) P.217.

⁷² Kew WO 55 835

⁷³ Given the rate of erosion (>1 metre per annum) of the glacial till cliffs in this area, it is possible that the battery was constructed too close to the edge and was being undermined – thus leading to the dismantling of its defences.

⁷⁴ WO 54/222 provides the 1805 return. The 1837 return (WO 54/717) notes John Tewson (south of Dublin Bay) and James Devine (north of) as Master-Gunners.

⁷⁵ Maurice-Jones 1959, P. 136 reproduces Lt-Gen Douglas' return of all master-gunners serving in the United Kingdom in 1824.

⁷⁶ Maurice-Jones (1959) P.135

⁷⁷ "Skelelton Map of Ireland shewing the permanent and temporary barrack in each County also the Engineers Districts" MDCCCXXXII. WO 44 109.

⁷⁸ Registers of Admiralty nominations of officers and ratings to the Coast Guard in Ireland 1820-1849 are found in the National Archives of the United Kingdom, Kew: files ADM 175/74, ADM 175/81, ADM 175/99 and ADM 175/100.

⁷⁹ WO 44/120

⁸⁰ Maurice-Jones (1959) P.160

⁸¹ Letter from Captain Fenwick to General Morse, dated 24th November 1809. WO 55/832

⁸² Mortars are often referred to as 'sacrificial materials' arising initially out of English Heritage studies which considered mortars (mainly renders and pointing mortars) as materials which should be replaced once found to be deteriorating in order to better protect the surfaces of carved and dressed stones. However, it can be difficult to correctly diagnose the 'soundness' of an original mortar, and 'softness' and surface appearance does not necessarily mean that it has in any way failed or has ceased to function effectively. In practice, entire elevations of sound pointing was removed and replaced from Dublin's Martello towers with initially OPC mortars, and later lime-based mortars without good reason.

⁸³ NB the construction of a martello on poor coastal foreshore foundations is not without precedent – with surviving (e.g. Aughinish Island, Co. Galway) and lost (e.g. Rosslare Fort, Co. Wexford) examples known.

⁸⁴ The ASI RMP sheet for the site (DU-026-053) contains an unpublished typescript by Rob Goodbody (8/2/1997) noting "At the southern end of this townland there is an 18th century house, also called Shanganagh Castle, though this is a fanciful name given to it by General Sir George Cockburn who had the building enlarged and castellated in the style that was popular at the beginning of the century. However, when works were done to the house in the 1950's a bottle was discovered sealed up in one of the turrets and this contained a letter written by General Cockburn in 1818.

⁸⁵ A stone marked "W ↑D No. 15" was recorded during the Coastal Architecture Survey undertaken by Jason Bolton in 2007 on behalf of Dun Laoghaire-Rathdown County Council.

⁸⁶ The Deed states: "Whereas his then Excellency the Lord Lieutenant of Ireland in pursuance of the Act 44 George III chapter 95 by warrant under his hand and seal bearing date the Twenty eighth day of September one thousand eight hundred and three duly authorised Benjamin Fisher to treat and agree for the absolute purchase of inter alia the premises herinafter particularly mentioned and described and intended to be conveyed for the public service with the owners thereof where by an Inquisition taken at Blackrock in the County of Dublin on the Seventh day of October One thousand eight hundred and five ... for the absolute purchase of all that and those that part of the lands of Glastool in the County of Dublin on which the Battery and Martello Tower Number Twelve had lately been erected with the road thereto containing two roods and thirtysix perches Statute measure ... By indenture dated as of the year One thousand eight hundred and ten made between Brigadier Benjamin Fisher commanding Royal Engineers in Ireland of the one part and Brigadier General Trotter commanding Royal Artillery in Ireland and the Respective Officers for conducting the business of the civil and Artillery Department of the Ordnance in Ireland of the other part ... that the said Benjamin Fisher became so seised of said premises not as one of the respective officers of Ordnance but as the person authorised by the then Lord

Lieutenant of Ireland to survey and make out the said lands and premises for the public service and reciting that it was deemed expedient to assign and convey said premises to the Ordnance Department together with works of defence and buildings thereon erected in trust for His then Majesty his heirs and successors.whereas by deed bearing the date the Eighteenth day of September One thousand eight hundred and fifty four the said principal officers of His then Majesty's Ordnance conveyed to the then commissioners of Kingstown Harbour the premiseswhereas the commissioners under the powers vested in them by the 39 and 40 Victoria chapter XCV(Local) with the consent of the commissioners of His Majesty's Treasury testified by an authority in writing dated the Third day of September One thousand nine hundred and three ... have agreed to sell to the said council a portion of the said premises ... at the price of five hundred pounds .. all that and those that part of the lands of Glastool (now Glasthule) in the county of Dublin containing Two Roods Statute measure or thereabouts be the same more or less any portion of which the Battery and Martello Tower are erected".

⁸⁷ Ronan (1932) further notes that the stones were used in other locations in the vicinity, and two early Christian ogham stones were also recovered: "Many of the stones were also thrown in the lane adjoining the Revenue Officers Houses. During the past two years the road already referred to was torn up for the purposes of concreting, and many large stones were taken out as unsuitable and dumped at the back of the West Pier. Recently some of these stones were carted to Marine Drive for the purpose of edging flower beds, by a series of tall and short stones. Our larger stone happened to be required as a smaller stone and was broken in two. It was then that the intelligent gardener noted the lines of the ogham inscription and informed me at once. The stone was caked with clay which hid the ornamentation, but when cleaned revealed what appeared to be a very important discovery The ogham inscription is over three-fourths of its length quite readable, and this portion reads C O I D O C M A Q I (The Stone) of Coidu or Coidoc the son of ..."

⁸⁸ Conservation report held in the archives of Dun Laoghaire-Rathdown County Council.

⁸⁹⁸⁹ As Ordnance survey mapping is held within the mapping resources of the local authorities, these maps were not catalogued as part of this project.