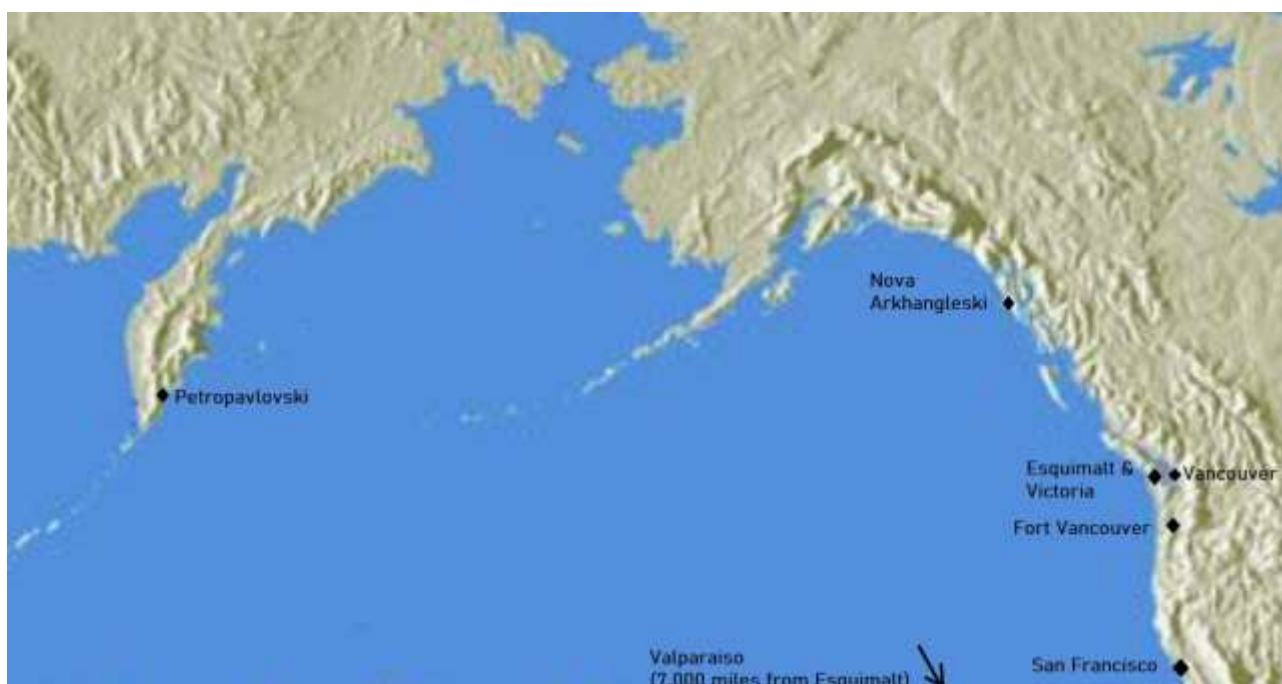


THE VICTORIAN FORTIFICATIONS OF ESQUIMALT

By Duncan Williams

Esquimalt¹ is located towards the southern end of Vancouver Island about three miles to the west of the centre of Victoria, the state capital of British Columbia in Canada. Today the town is part of the metropolitan city of Victoria and is still principally known as the Home Port of the Royal Canadian Navy's Pacific fleet, using the dockyard located in Esquimalt Harbour. The following article focuses on the development of the fortifications up until 1906, but to help set the scene key events that lead to the settlement of Victoria and the development of the dockyard at Esquimalt have been summarised.



Early History.

On 1st April 1791, Captain George Vancouver departed from England in two Royal Navy ships HMS *Discovery* and HMS *Chatham* with orders to explore the Pacific region. His route took him via Cape Town, Australia, New Zealand, Tahiti and Hawaii, before he arrived off the west coast of North America in 1792. At the same time there were also naval vessels from the Spanish and US Navy's surveying the same region. Over the next two years Vancouver's ships surveyed in detail the coast-lines of what is now known as Oregon, Washington, British Columbia and Alaska.

In 1813 the Royal Navy formed a Pacific Squadron to support British interests and trade along the eastern Pacific coast of both North and Central America. Initially the Squadron was based at Valparaiso in Chile, because around that time many of the South and Central American countries were in a state of rebellion attempting to gain independence from their Spanish masters. In 1837 the Pacific Squadron became known as the Pacific Station when the globe was divided up into a number of Royal Navy 'Stations'.

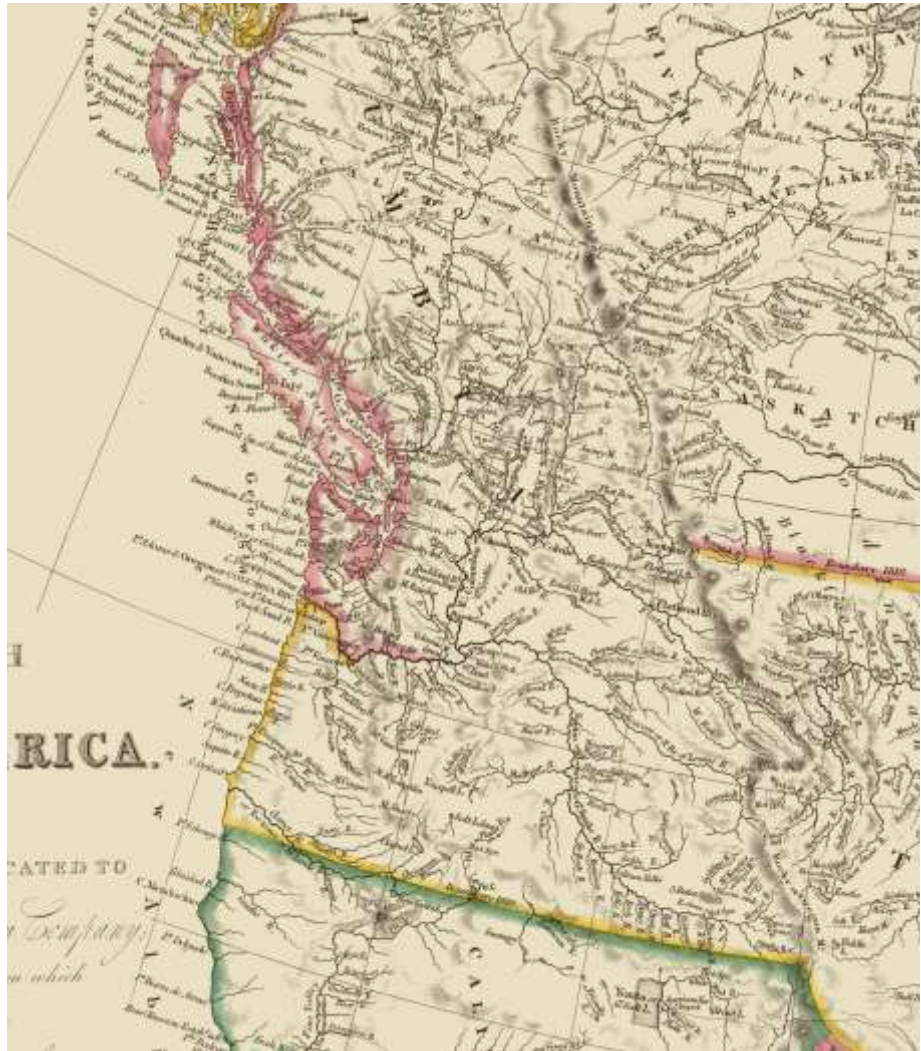
In 1825 The Hudson's Bay Company had extended its influence across the British North American territory to the Pacific seaboard with the building of the trading post of Fort Vancouver on the Columbia River, in what is now the state of Washington. The Hudson's Bay Company were

principally a trading company set up to trade furs from the indigenous peoples in north-western America.

Border Demarcation.

Following the Anglo-American war of 1812, the Anglo-American convention in London of 1818 finally resulted in an agreed treaty between both countries to set the border between the United States and British North America. For the most part, the border followed the 49° north line of latitude up to the Rocky Mountains. The lands in and beyond the Rocky Mountains up to the coast of the Pacific Ocean were still under exploration by both nations.

By the middle of the 1840s both countries were laying claim to what is now the states of Oregon, Washington and British Columbia. The British Hudson's Bay Company had set up a number of trading posts in the area north of the Columbia River to support the British claim to all the lands west of the Rockies north of the 42° north latitude (the Spanish Mexico border) up to Russian America (now known as Alaska) and referred to the area as Columbia. On the other hand the United States government were encouraging its citizens to take to the *Oregon Trail* to claim land in the new territory of Oregon. The United States laid claim to the land from the Mexican border up to 54° 40' north which lay just south of the existing border with Russian America. Tensions



1844 Map of the disputed territory

between the two nations came to a head in 1845 and 1846 when the Royal Navy sent ships to the region and plans were drawn up to land troops to secure the area to the north of the Columbia River should hostilities break out.

To resolve this dispute the Oregon Treaty was finally agreed and signed between Britain and America in 1846. The result of the treaty was to extend the border along the 49° north latitude through the Rocky Mountains until it reached the Pacific Ocean at the Strait of Georgia, the border then passed south mid-way down the straits around the bottom of Vancouver Island and down the middle of the Strait of Juan de Fuca until it reached the open ocean. In anticipation of this outcome the Hudson's Bay Company had moved its base from Fort Vancouver up to Fort Victoria, on Vancouver Island. The trading post of Fort Victoria was established in 1841 and became what is now the city of Victoria.

Royal Navy anchorage founded at Esquimalt.

In 1846 Lieutenant James Wood, from the Brig HMS *Pandora*, carried out a complete survey of Esquimalt harbour, his survey identified it to be a good sheltered harbour with an average depth of six fathoms. Whereas the neighbouring Victoria harbour was shallow with less than two fathoms. But it was not until 25th July 1848 that the first Royal Navy ship anchored in Esquimalt harbour when Captain George Courtenay took the fifty gun frigate HMS *Constance* into the harbour. The first visit from an admiral of the Pacific Station was not until 27th June 1851, when Rear Admiral Fairfax Moresby anchored his flag-ship HMS *Portland* in the harbour. Moresby reason for the voyage up from the fleet base at Valparaíso was as a show of force on behalf of the British colony to the fledgling US territory across the Straits. Thereafter Esquimalt had regular visits each year from visiting Royal Navy warships.

Crimea War in north-west America.

The war that commenced on the 27th March 1854 between the combined forces of Britain and France against the Russians has been mainly seen as a European affair, but the conflict also reached the northern waters of the Pacific Ocean.

Royal Navy warships of the Pacific Station, under Rear Admiral Price³, together with a few French warships left the Valparaíso base and arrived in Avacha Bay, Kamchatka at the end of August 1854 off the Russian port and trading depot of Petropavlovski. On the 4th September the combined squadron landed troops from small boats, after initial success in capturing some advanced works, they were repulsed by the superior Russian force that had time to prepare for the attackers. The Anglo-French force then withdrew.

In November 1854 Rear Admiral Bruce took over command of the Pacific Station. He lead the combined force in his 84 gun flag-ship HMS *Monarch* back to Kamchatka in June 1855. However the Admiral discovered that the Russians had abandoned the defences and had evacuated Petropavlovski. The combined fleet then set sail for Sitka Sound and Novo-Arkhangelsk, the administrative base for the Russians in Russian America⁴. The fleet arrived off Sitka Sound on the 29th June; on the 2nd July Admiral Bruce and his French counterpart sailed into Novo-Arkhangelsk aboard the Brig HMS *Brisk* and met with the Chief Director for the colony, they impressed upon the colonies need to remain neutral. The fleet then left for Esquimalt where they arrived on 28th August 1855.



1861 chart showing the anchorage and fledgling naval base

Earlier in 1855 Governor Douglas, following a request from Admiral Bruce, instigated the building of three wooden huts on a seven acre site on Duntze⁵ Head for £932. The huts were built as temporary hospital to house the sick and injured seamen from the war with Russia. In the end they were never needed for their designed purpose.

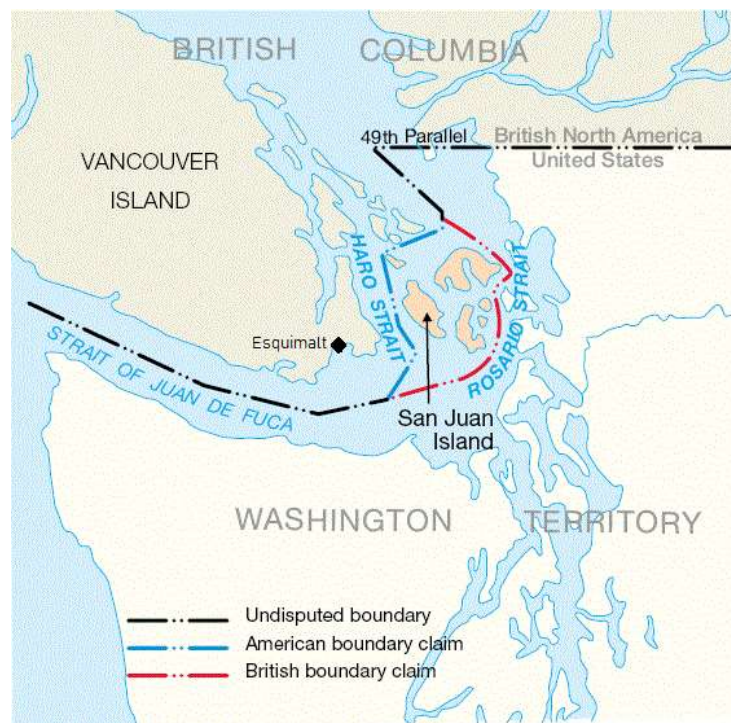
On the 21st August 1857 the three huts were handed over to Captain Prevost of the steam corvette HMS *Satellite*. He reallocated the huts, one as the hospital, the second a naval store and the third as an office for the Hydrographers as well as a residence for the Surgeon. A naval chart dated 1860 shows that the shore establishment at Duntze Head had been quickly expanded with a number of other store buildings as well as a water reservoir for fresh water. The 'Naval Store' and pier on Thetis Island was the Coaling Point for the base.

In 1858 the region was proclaimed as British Columbia⁶, with James Douglas as its first Governor. However the Pacific Station continued to oscillate its base between Valparaíso and Esquimalt dependent upon the local political situation. On 29th June 1865 the Royal Naval Establishment of Esquimalt was formerly created.

The 'Pig and Potato' War.

The 1846 Oregon Treaty did not clearly state the ownership of the San Juan group of Islands that exist in the strait between Vancouver Island and the mainland, consequently the largest and strategic San Juan Island was claimed by both sides. The Hudson's Bay Company had established a salmon curing station and sheep ranch on the island, both well-staffed. There were also between twenty and thirty US settlers that had recently arrived. Both the HBC employees and the US settlers got on reasonably well until the 15th June 1859.

On that date, a large black pig belonging to Charles Griffin, an Irish employee of the Hudson's Bay Company accidentally wandered onto the land of American farmer Lyman Cutlar. Discovering it rooting in his potato patch and gorging on the spuds the angry Cutlar shot and killed the offending pig. There is some indication that this was by no means the first time that Griffin had permitted his pigs to run loose. Despite this, Cutlar offered to pay Griffin \$10 for the loss of the pig, but this was refused and events soon escalated.



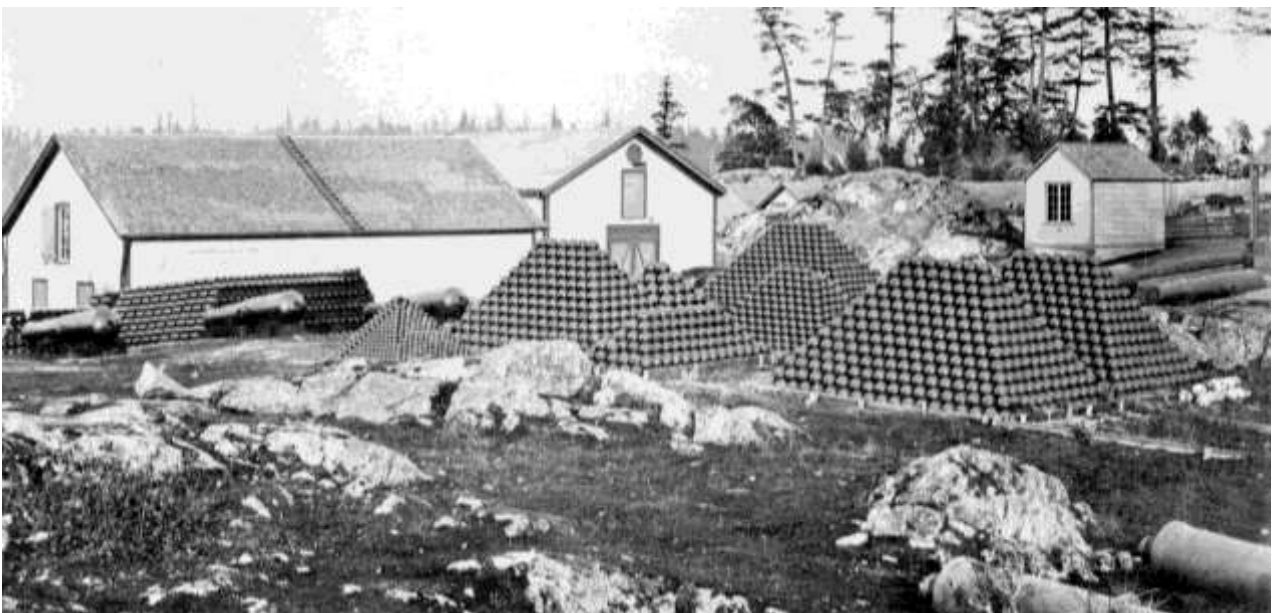
The British authorities threatened to arrest Cutlar which led the American settlers to appeal for military intervention from the main-land. The hot-headed anti-British US General and commander of Oregon William Harney immediately despatched a company of 67 troops to the Island; to counter this military threat the British despatched three Royal Navy warships under the command of Captain Geoffrey Hornby to anchor off the island. The American force began to build an earthwork fortification to defend the island. By the 10th August, the US force consisted of 461 men with 14 guns had occupied the fort; facing a Royal Naval force of five warships under the command of Rear Admiral Robert Baynes. The British warships had a total of seventy guns and 2,140 men. Governor Douglas ordered Baynes to land a Royal Marine force to evict the American's from their redoubt. However, Baynes refused to accept Douglas's order declaring that "*two great nations in a war over a squabble about a pig was foolish*".



Above: The Royal Navy's Detached Squadron visits Esquimalt, 5th May 1870, whilst on its world voyage



Centre & Below: The Esquimalt Dockyard Ordnance store - circa 1870



The stand-off between the two sides continued with neither willing to make the opening shot until September when diplomatic negotiations began. Initially it was agreed that each nation would station 100 troops on the island, the British to the north, Americans to the south, until a formal agreement could be reached. However the US Civil War intervened and no final conclusion occurred until 1872 when an international commission led by Kaiser William I of Germany awarded the entire group of islands to America resulting in the border being positioned between San Juan and Vancouver Islands.

Anglo Russian tensions 1877-78.

Tensions arose between Great Britain and Russia during the course of the Russo-Turkish War of 1877-78. Russia was gaining considerable influence in the Balkans, consequently Britain saw this action as a threat to her interests. The British government became particularly alarmed with Russian actions in the Eastern Mediterranean which might impede British connections with India (this worry became known as the "Eastern Question"). In a letter dated 6th May 1877, to Russia, the Earl of Derby⁷ reaffirmed the British stance on Constantinople and also the Dardanelles, and included a polite warning to Russia against any attempt to blockade the Suez Canal or occupying Constantinople. When Russian troops moved westward, the British ordered portions of the fleet to sail to Beşik Bay at the entrance to the Dardanelles where they arrived on 3rd July 1877.

The Russo-Turkish armistice, which had been signed on the 31st January 1878, exacerbated tensions between Britain and Russia. Again Prime Minister Disraeli ordered the Royal Navy to the Dardanelles; this action resulted in Derby resigning as Foreign Minister. The British Mediterranean fleet set sail on 8th February under the command of, the now, Admiral Geoffrey Hornby, for the Dardanelles. On the 13th February the fleet entered the Straits and passed through to the Sea of Marmara where the fleet anchored off the Princes' Islands some ten miles from Constantinople. Hostilities were avoided on 18th February 1878 when Russia agreed not to occupy Gallipoli and Britain agreed not to land troops on either side of the Dardanelles.

The signing of the Treaty of San Stefano on 3rd March 1878 opened the possibilities of settling the "Eastern Question" through further negotiations at the Congress of Berlin. Preparations for this Congress led to the second period of heightened diplomatic tensions between Russia and Great Britain. The new Foreign Minister Lord Salisbury resolved the situation on 1st April 1878, he distributed a circular which defended British policies and defined her position on the "Eastern Question". Britain and Russia reached agreement on 30th May. On 13th July 1878, a final agreement was signed at a Congress of Berlin, with Bismarck assuming the role of mediator.

However the possibility of hostilities in Europe between Russia and Britain sent fear across the globe to Britain's far flung colonies, in particular the Cape Colony, Mauritius, Australia, New Zealand, the Straits Settlements, Hong Kong and also in British Columbia. The Colonies felt that if Britain became entangled in a war with Russia, she would recall her army and naval forces back from the colonies leaving them undefended and open to attack from a Russian naval force.

On Vancouver Island this 'fear' was heightened by a report in the local newspaper, *The British Colonist*, on the 1st May 1877:

DEFENCELESS

In the event of Great Britain declaring war against Russia, we wish to again direct the attention of the authorities to the fact that the sea coast of this Province will be defenceless. The Russian war vessels now at San Francisco⁸ might batter down Victoria, shell the Dockyard and seize or destroy the great Collieries on the east coast of the island. Property of the value of many millions of dollars lies absolutely at the mercy of the invader. The local Government have time and time again drawn attention to our defenceless situation; we are not aware that any steps have been taken to materially increase the Naval forces on this station. It is said the Shah⁹ with the Admiral is expected in July; but one warship cannot watch and protect the long coast line of British Columbia and Vancouver Island. The

attention of the Imperial Government should be again directed to this remote but important quarter of Her Majesty's possessions.

On the 26th May 1877 the local paper reproduced a report from the *Pall Mall Gazette*:

Russian Fleet in the Pacific:

In addition to the three heavily armed steam corvettes, each manned by 200 or 250 men, there are three small but useful sloops, all together some thirty miles north of San Francisco. These Russian vessels have been in their present position for upwards of two months, and according to the officers, were awaiting the arrival of four more corvettes. It is added that the whole squadron is meant for an attack on Vancouver Island, as well as to prey on British shipping, in the event of an outbreak of war between England and Russia. Whether this is the case or not, it can scarcely be contended in this instance that the ships of war have been sent to San Francisco from the Amoor [? sic] to protect Russian interests or to avoid the overwhelming strength of the Turkish fleet in the Mediterranean and Black Sea. Our own force on this Pacific station is notoriously weak until the arrival of the Shah; and if Russia has all along counted upon England's hostility sooner or later to her settled plan of attack in Europe or Asia, it is at least a convenient coincidence for her that probably is no other part of the world could so much damage be done to British commerce in a short time by a few smart vessels as in the Pacific Ocean. But then there have been a good many convenient coincidences with respect to Russian policy of late.

All this would have heightened tensions in Victoria that it was about to be attacked. Despite the presence of three Royal Navy ships (*Opal, Daring and Rocket*) in Esquimalt harbour at that time. Anxiety of a Russian invasion continued throughout 1877, into 1878.

Emergency fortifications at Victoria and Esquimalt.

On the 13th May 1878 Inspector of Artillery Lieutenant-Colonel D.T. Irwin R.A. was despatched from Kingston, Ontario to survey Victoria and Esquimalt and recommend fixed coastal defence batteries. Within the naval base were a number of worn naval guns, that had been re-vented, which the Admiralty offer for use on the fixed defences, on the understanding that the Dominion would pay for the movement and mounting of these guns.

Irwin recommended that four temporary batteries were immediately built (from east to west) at:

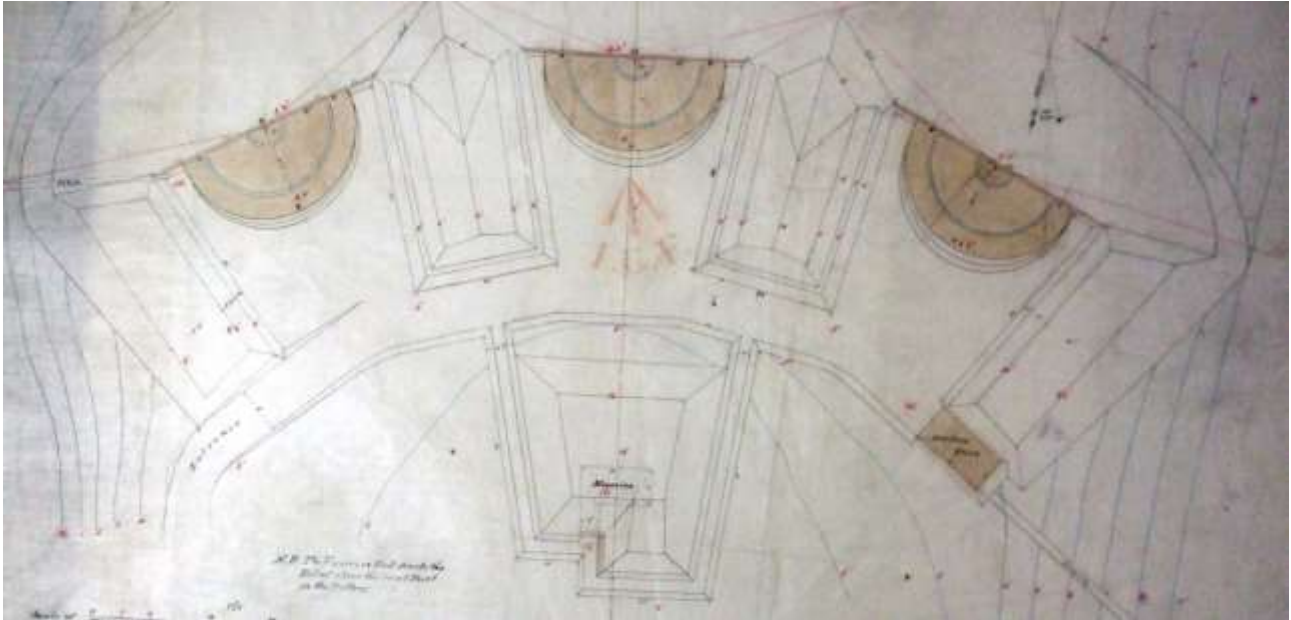
- Finlayson Point.
- Victoria Point.
- Macaulay Point.
- Brothers Island.

The four batteries were designed to give interlocking fields of fire to cover the entire coast-line including the entrances to Esquimalt and Victoria harbours. The batteries were built one-by-one using civilian labour. Colonel Irwin stayed on to direct and inspect the works. Work began on the 10th June 1878 and work continued daily until 30th August (with one day off on the 1st July), the civilians worked an eleven hour day, between 7am and 6pm. The number of workers employed varied between twelve and twenty-eight each day.

Findlayson Point Battery.

This earthwork was built near the cliff edge on Findlayson Point. It was built to mount two 64-pounder RML guns mounted on barbette naval traversing platform carriages; which, in turn were mounted on racers bolted down on to wooden ground platforms. Between the two gun emplacements was built a 12 foot high 32 foot wide earthen traverse, to the rear was built a wooden dug-out that housed the magazine, side-arms store and artillery store. The steep revetments were lined with rough timber planks. The rear of the battery was enclosed by a picket fence and gate.

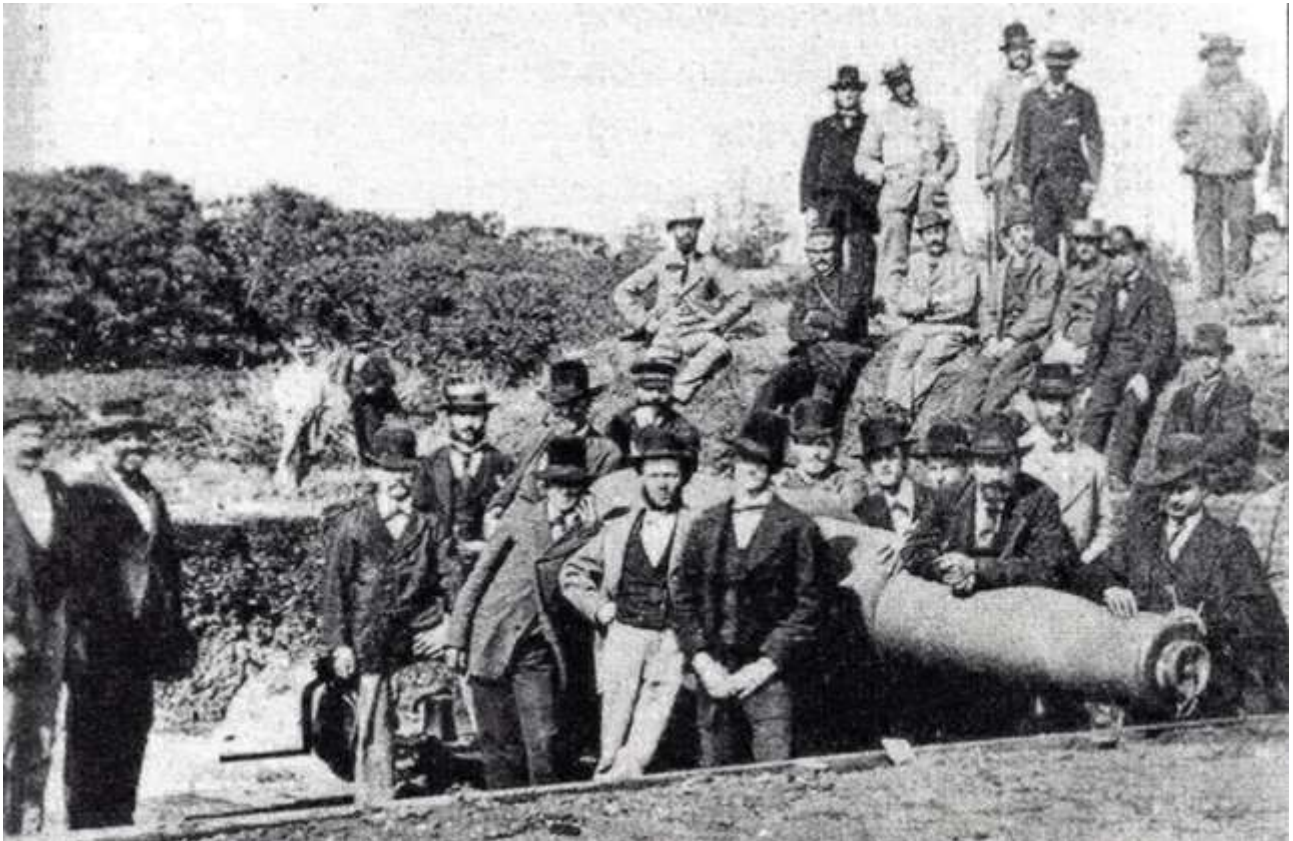
either side at the rear. In the rear western corner a wooden artillery store was built behind the parapet of the rampart. This battery's guns were the first to be mounted and test fired on 20th July 1878.



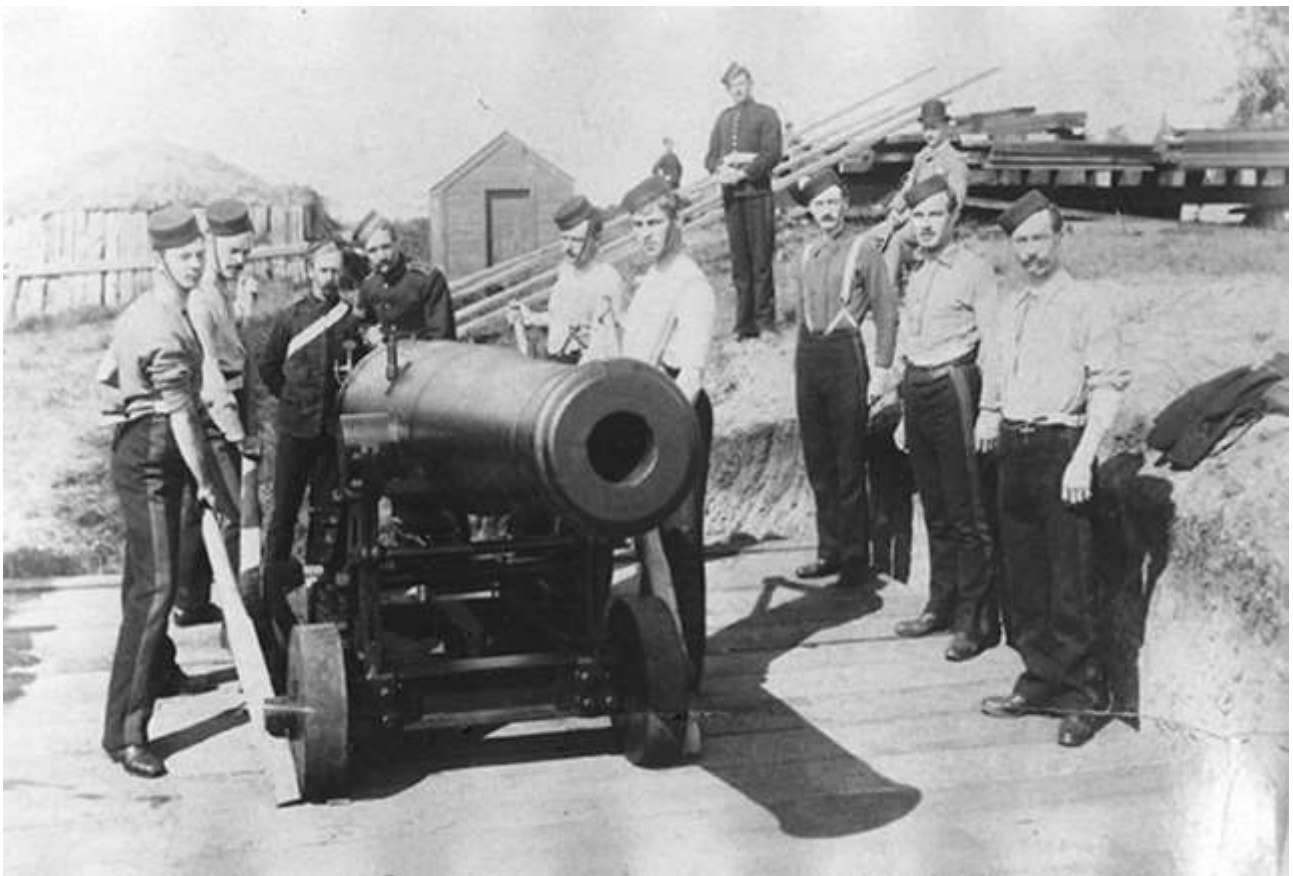
Brothers Island Battery.

Unlike the other emergency batteries this battery had two classes of ordnance, the main armament was an 8-inch RML of 9 tons barbette mounted on a naval slide and carriage to fire across the water approaching Esquimalt harbour. Additionally the battery also mounted two 64-pounder RML guns on wooden garrison carriages, one flanking the harbour entrance and the other covering the coast-line towards Macaulay Point. Behind the 8-inch emplacement was built an artillery store and in the hill-side on the northern side was built an underground magazine. Like the other batteries timber was the main structural material. The island was thickly wooded and had been used by the navy as a cemetery. To reach the battery a sloping wooden ramp was built to allow the guns to be brought into the battery from barges. Seamen from HMS *Opal* were used to move and mount the guns on Brothers Island, with the sailors pay for their time being met from the Dominions coffers.





The Militia "Victoria Battery of Garrison Artillery" at Macaulay Point Battery 1878 (OPCMH)



64-pounder 71 cwt at Victoria Point Battery circa 1890 (OPCMH)



“C” Battery next to a 7-inch RML 6½ ton at Macaulay Point Battery circa 1890 (OPCMH)

To man these guns a militia artillery unit “The Victoria Battery of Garrison Artillery” was raised from the local civilian population with most of the volunteers coming from retired Royal Marines under the command of Captain Dupont. This became officially recognised on the 19th July 1878. The Victoria Battery fired a thirteen gun salute from the Macaulay 7-inch guns on 29th July in recognition of the 3rd opening of the British Columbian Provincial Assembly in Victoria. They would have received initial gun drill training from Royal Navy personnel.

The emplaced armaments by the end of 1878 were:

Finlayson Point Battery	2 x 64-pounder RML Palliser conversions 71 cwt
Victoria Point Battery	2 x 64-pounder RML Palliser conversions 71 cwt
Macaulay Point Battery	3 x 7-inch RML of 6½ tons
Brothers Island Battery	1 x 8-inch RML of 8 tons
	2 x 64-pounder RML 64 cwt

The Need for Permanent Fortifications.

The following year it became apparent for the need to have a permanent artillery unit to care for the guns and fortifications and also to train the Militia. The commander of the Pacific Station suggested that 100 Royal Marine Artillery gunners be drafted to shore duty; however this was rejected by the Admiralty as being the responsibility of the Dominion. In December 1879 a proposal for permanent fortifications at Esquimalt and Victoria was submitted from the Royal Engineers office in Halifax. The proposal was for five new batteries to be built using concrete, masonry and earthworks and mounting a total of twenty-five RML guns; from west to east:

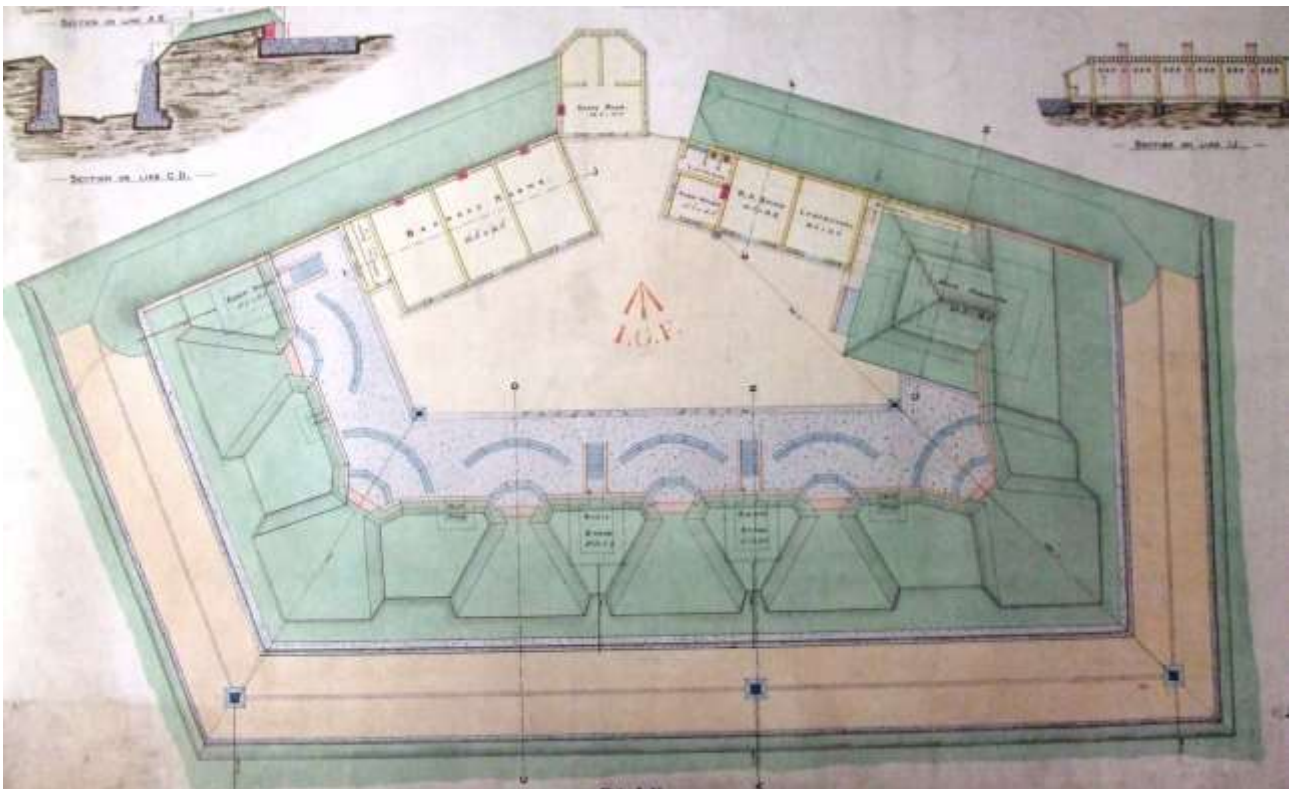
Sangster Hill Battery	Six RML guns
Rodd Hill Battery	Six RML guns
Signal Hill Battery	One 12-inch RML gun
Cape Saxe Battery	Six RML guns
Beacon Hill Battery	Six RML guns



1879 proposals for permanent fortifications

In addition to the permanent fortifications, the engineers also proposed prepared field positions for infantry and field guns covering the landward approaches to Victoria. Like the call for permanent artillerymen nothing became of these proposals for fortifications.

It was not until the Spring of 1883 that the call for regular artillerymen was answered, when Major J.G.Holmes was despatched from Kingston to take up the position of Deputy Adjutant General for British Columbia with a responsibility to train the Militia and report on the defences, he brought with him Staff Sergeant Kinsella. The two of them instigated the forming of an additional two Militia batteries in Victoria as well as one at New Westminster (near Vancouver).



Proposed Sangster Hill Battery

In June 1883 the Inspector-General Fortifications, Andrew Clarke, with a Royal Commission committee carried out a review the defences of all Coaling Stations. They regarded Esquimalt as a “coaling station of secondary importance”¹⁰, and his recommendation was quite damning:

I have given the case of Victoria and Esquimalt, our only coaling station in the Northern Pacific, my earnest attention, and have somewhat reluctantly come to the conclusion that until trade in that portion of Her Majesty's dominions is of much greater volume than at the present time, the reasons for incurring no further expenditure upon its defence are overwhelming. The word "reluctantly" is used by me advisedly, not because I am averse to being spared the necessity for additional defences, but because I would avoid the momentary feeling of disappointment which would doubtless be engendered in the Colony by the apparent abandonment of this the chief city and seat of government of the province.

It must not be lost sight of that the completion of the Canadian Pacific Railway¹¹ with its terminus at Port Moody in Burrard's Inlet, may, in a very few years, open up a trade in these seas, which would altogether change the aspect of affairs; and it may then be necessary to afford it some measure of protection, but until such trade has in some degree developed, no further Imperial expenditure should, in my opinion, be here incurred, unless the Government of the Dominion decide to construct their own works of defence, in which case I would advise that the necessary armament should be supplied from Imperial funds.

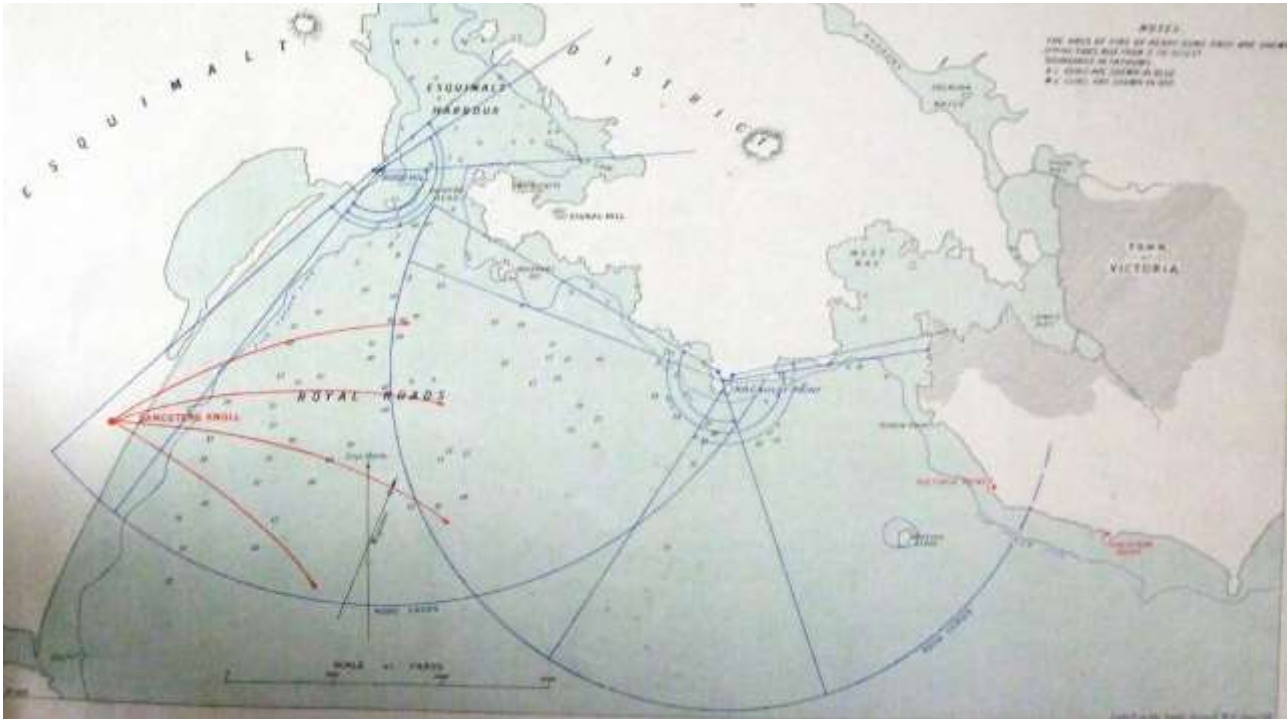
A proposition has been made by those who have given much consideration to the question, and have had practical opportunities of arriving at a judgment in the matter, that the naval station at Esquimalt should be altogether removed to Burrard's Inlet—and there is undoubted weight in the arguments adduced in support of this course—but its greater distance (70 to 90 miles) from the open sea, and the somewhat intricate navigation of the intervening straits, demand that the most mature and deliberate consideration should be given to this proposal before it be entertained. It would, however, be a prudent measure of prevision on the part of the Government of the Dominion, if steps were at once taken (provided they have not already done so) to reserve sites for coast defences at Burrard's Inlet as well as at Victoria and Esquimalt. That the day will arrive—will possibly be not long deferred—when circumstances will justify their prevision there can I think be no shadow of doubt.

Perhaps these views of the Inspector-General Fortifications together with the tardiness of the administration between Britain and the Dominion are why nothing was done to provide permanent fortifications? However, it seems that the Inspector-General had not understood the extent to which the naval base at Esquimalt was being developed as a new stone graving dock was under construction, at considerable expense to the Dominion. The *Government*¹² dry-dock was finally opened in July 1887.

In February 1887 the Commander Royal Engineers, Halifax, proposed the purchase of 18 acres of land on Signal Hill to mount two of the latest heavy guns - 9.2-inch BL. But this recommendation was ignored when in June 1887 the defences of all the Coaling Stations were again reviewed. A report was produced by the joint Royal Artillery and Royal Engineers Works Committee. The committee stated that the existing armaments were “*provided in view of the probability of war, at a time when better guns and mountings were not available*”, it also mentioned “*The works are stated to be in bad repair, and the wooden carriages are no longer serviceable.*” The committee made the following observations and recommendations:

On account of the proximity of the dockyard, deep water outside the harbour and the fact that the Government buildings can be seen over the low ground in their front, the provision of long-range guns is a necessity in order to prevent distant bombardment. The committee consider, however, that having regard to the class of vessel which are likely to be present in these waters, it is not essential to provide new type guns heavier than the 6-inch B.L.

They propose, therefore, to concentrate the long-range guns in two batteries, at Macaulay's Point and Rodd Hill. The occupation of these two positions, with the addition of a submarine mine defence for the mouth of the harbour, would suffice to deny the latter to an enemy's vessels and to render bombardment improbable.



1887 Defence proposal for Esquimalt

With a view to a further defence of the large area of deep water in front of these works, the Committee recommend that 9-inch R.M.L. guns, adapted for high-angle fire, should be mounted on the commanding site of Sangster's Knoll. These guns, worked by a depression position-finder, should effectually prevent an enemy from anchoring within bombarding distance of the other works and the dockyard.

The armaments proposed are :—

<i>Macaulay's Point</i>	<i>3 - 6-inch B.L. (disappearing)</i>
<i>Rodd Hill</i>	<i>3 - 6-inch B.L. (disappearing).</i>
<i>Sangster's Knoll</i>	<i>9 - 9-inch R.M.L. (adapted for high-angle fire).</i>

To defend the minefield the Committee recommend the provision of 2 - 6-pr. quick-firing guns, to be mounted to the south of Duntze Point, where good positions are stated to exist. For the general defence of the three batteries, 6 rifle-calibre machine guns should be provided. The Committee further recommend the provision of a battery of 16-prs. for general defence.

In the above scheme no direct defence has been provided for the town and harbour of Victoria. The Imperial interest in this station is, however, confined to the harbour and naval establishment of Esquimalt, and no military advantage would be gained by the bombardment of the town of Victoria, while the water in the harbour is too shallow for the entrance of vessels of war. Moreover, two of the 6-inch guns proposed for Macaulay's Point would fire across the mouth of Victoria Harbour and protect the coast line beyond. A boat attack could be met by the fire of the field guns, and by infantry defence.

The Committee recommend that the existing armaments at Brother's Island and Macaulay's Point be dismounted but retained at the station. The remaining works and armaments might

be retained for practice purposes and if more suitable mountings can subsequently be provided, the displaced guns might be remounted to aid in the defence.

As regards the execution of works the Committee desire to point out that if funds should not be available to complete the proposed work on Sangster's Knoll, the guns should nevertheless be mounted there, and the ammunition stores built, so that the work might be completed if an emergency arose, or should further funds be ultimately provided.

The report approved the following armaments:

Sangster Knoll Battery	4 x 9-inch RML on High Angle mountings
Rodd Hill Battery	3 x 6-inch BL on HP Disappearing mountings
Macaulay Point Battery	3 x 6-inch BL on HP Disappearing mountings
Victoria Point Battery	2 x 64-pr RML for drill and practice
Finlayson Point Battery	2 x 64-pr RML for drill and practice
Duntze Point Battery	2 x 6pr QF for defence of minefield
	<u>For General Defence</u>
	6 x 16pr RML field guns
	6 x machine guns

On the 11th November 1887 the long awaited permanent artillery company arrived in Victoria. "C" Battery were a third School of Artillery Unit¹³ created by the Dominion government, it consisted of up to 100 men under the command of Major James Peters.

The annual report given by "C" Battery of the Regiment of Canadian Artillery and Royal School of Artillery in November 1889 gave the following in-sight into the state of the defences:

- *These are now in want of certain small repairs, such as new platforms and partially new revetments.*
- *Caretaker's quarters at Macauley Point and artillery and shell store and magazine on Brother's Island are required.*
- *Magazine accommodation too small, and store and side arms incomplete.*
- *Many articles destroyed last year at Brother's Island not yet replaced¹⁴.*
- *A boat is much needed, to enable visits to be made to Brother's Island.*
- *The annual allowance of three rounds per gun was fired from 7 inch guns; results not satisfactory; 8 inch guns not fired owing to want of sights.*
- *Two carriages for 64 pdr guns are required. Naval slides for 7 inch and 8 inch guns should be replaced by traversing platforms.*

After all, the defences constructed out from earth and timber mounting second-hand naval guns were "emergency" batteries and were not designed to last the ten years that they had been in use.

Awaiting the decision for permanent fortifications.

Despite the joint RA & RE committee approving permanent fixed defences for Esquimalt and every military person stating that the emergency defences were inadequate. It still took several more years before a decision was taken to build. To try and understand what caused the delay, when other colonies had instigated the building of new coastal fortifications immediately following the second Russian scare in 1885¹⁵, we shall look into the proceedings of the politicians both in Ottawa and London for clues:

2nd June 1886 - Parliament in Ottawa votes for \$25,000 to be spent "towards *erecting and building military defences in British Columbia*". Following this vote, I can find no reference to defences at Esquimalt until the following debate in the Senate on the 28th February 1889 was initiated by Senator William John Macdonald the representative for Victoria inquired of the Government:

1st. How does the question of the defences of British Columbia stand at the present time between the Imperial and Dominion Governments?

2nd. *Whether it is intended to begin the erection of batteries this year on the localities approved in the neighborhood of Esquimalt?*

3rd. *Whether cannon or armaments for the proposed batteries are being prepared under the direction of the Imperial authority, and if so, when will such cannon be shipped to the Pacific?*

He said I hope I will not be considered an alarmist in bringing this matter before the House. I think it is well, in view of current events in Europe, to consider questions of this character, lest they should be lost sight of. The necessity for some means of defence on the Pacific shores of the Dominion has been fully acknowledged by the Imperial and Dominion authorities; and with a view to being accurately informed where batteries ought to be placed a party of Royal Engineers, detailed from Halifax, has been surveying in the vicinity of Esquimalt and Victoria for the last three years. I believe that certain points have been determined upon and approved for the location of batteries. We hear from time to time of the increasing strength of the Russian arsenal at Vladovistock [sic], opposite the shore of British Columbia; but as yet no steps have been taken by the Imperial or Dominion authorities in the direction indicated by my questions. We also find in leading English journals the note of warning sounded by the highest military authorities. The Under Secretary of State for War, at a recent banquet in London, while alluding to the arming and preparations for war by European powers, spoke of the war cloud hanging over Europe, and expressed the opinion that no one could tell when the peace of the great nations might be disturbed. At a public meeting held afterwards at Birmingham we find Wolseley speaking in the same strain, and using almost the same language as the Under Secretary, but with more emphasis. We also notice meetings held by Lord Brassey, the First Lord of the Admiralty, and a number of distinguished naval and military officers and eminent civilians, pointing out England's danger from being unprepared to meet other nations; and immediately on the heels of these warnings we see accounts of the great activity in English dockyards and arsenals, preparing for emergencies. Her Majesty's Speech at the opening of Parliament, a few days ago, alludes to the uncertainty of maintaining peace, and advises being prepared to face eventualities. Looking at all these surroundings it would not, therefore, be unwise on the part of the Dominion to gird up its loins, look to its weak spots and take steps to have them strengthened. I trust that the hon. gentleman who is to reply to me will tell us that the Government have not lost sight of the question, and that before long something will be done in the direction to which I have alluded.

The Leader of the Government in the Senate Sir John Abbot replied:

My hon. friend, I think, is quite right in saying that no apology was needed for putting those questions. They are on a subject of vital importance, not only to Canada but to the Empire. I have to inform him, in reply to his questions:

1st. A large number of Imperial despatches and Orders-in-Council in relation to this subject have been received in the Department of Militia and Defence, and the correspondence is still proceeding. These papers are, in the main, of a confidential character. Such of them as are not of a confidential nature can be produced at any time, should the House desire their production, but the papers which might be brought down at present, without prejudice to the public interest, would not suffice to place the position of the question fully before the House.

2nd. It has not been decided definitely whether the erection of batteries in the neighborhood of Esquimalt will be begun this year. The matter is still under consideration.

3rd. The negotiations between the Imperial and Canadian Governments respecting the preparation of armaments are of a confidential nature. They are proceeding satisfactorily, but the papers cannot properly be brought down at present.

Following this non-committal response from the Governments representative, Thomas McInnes the representative for Ashcroft, British Columbia - chipped in with the following:

I would like to draw the attention of the leader of the Government to the fact that there are other points, if the fortifying of the ports of British Columbia is to be taken into consideration that should not be overlooked. There are the termini of the Canadian Pacific Railway—New Westminster and Vancouver—which, of all places in the Province, ought to be protected,

inasmuch as the absence of defences there might interfere with the transportation of troops across the continent. There is also Nanaimo, the great coaling station of the Province. These are points that require as much protection, possibly, as Esquimalt itself. I think it is very desirable that the defences of these places should be put in the best possible shape at as early a date as possible.

To this Sir John Abbott replied: *“If my hon. friend will give notice of the question, on which I am not informed at present, I will ascertain, as far as possible, and give my hon. friend as answer on the subject”*. That brought an end to the debate, and nothing is recorded regarding the subject until the following year in the House of Commons debate of 27th February 1890 when Edward Blake asked whether there had been any correspondence between the Canadian government and the Imperial government about the defences in British Columbia. Sir Adolphe Caron responded that there had been correspondence, but it was of an official nature, negotiations were still in progress, and it would not be in the interests of ‘public service’ to have it brought down to the House.

Again, there is no further mention of defences for Esquimalt until a long debate in the House of Commons in London on 7th March 1892 when the defences of Esquimalt were specifically debated. Sir Stafford Northcote (MP for Exeter) opened the debate emphasising the need for defences at Esquimalt and the need for immediate action:

... It is an admitted fact that the Harbour of Esquimalt is to be defended. It is, unfortunately, equally incontrovertible that although communications have been taking place on the subject between Her Majesty's Government and the Government of the Dominion of Canada for the last eight years, no step has yet been taken towards the commencement of the fortifications of this harbour. In the next place, it is also a fact that we have there the only coaling station on the North Pacific; and it is also a fact that the Russian Government possess in the harbour of Vladivostock [sic] a most formidable arsenal; war vessels may safely lie at anchor there, and it supplies a fortified position in which they can concentrate as many troops as they require. It is a matter of pressing importance to us if we are to have the control of the North Pacific Ocean....

... I believe that many of the most important questions existing between the Home Government and the Government of the Dominion of Canada have been definitely settled. The armament has been decided upon, and provision made for submarine mining stores. I regret not to see in this year's Estimates any provision set down for carrying out the works in connection with this harbour; and I cannot but entertain some apprehension that the guns which have been already designated for the defence of Esquimalt, and which were described so fully by Lord Harris some years ago in another place, must have been devoted to the equipment of other ports....

Eventually Mr. Munro Ferguson (MP for Leith) contributed to the debate:

... I do not think Canada has shown any great readiness to bear her fair share of Imperial burdens at present, and until some greater readiness is shown by Canada I think there will be some hesitation in urging the Government to spend further sums of money for the defence of Esquimalt...

Also a contribution from General Sir W. Crossman¹⁶ (MP for Portsmouth) came back to the 1883 position of the IGF:

I heartily agree to a great extent with what has been said by the hon. Member for Exeter. I think, however, that there is great difficulty in the way of devising proper fortifications for Esquimalt, and I think the Government ought to consider whether it is worth while fortifying the harbour, or whether the works should be transferred to a more suitable point.

The Secretary of State for War (Mr E. Stanhope) then responded to what had been said so far:

I recognise the importance of the observation of the hon. Gentleman who has just sat down, and I may say, in reply, that I am not at all prepared to go back from the clear policy of the War Office in the matter of the defences of Esquimalt. My hon. Friend behind me (Sir Stafford Northcote) has pointed out with great force the importance of Esquimalt. He also explained that Esquimalt has grown in importance in consequence of the opening of the

Canadian Pacific Railway and the further development of traffic that has taken place in that direction. There is no doubt, not only from an Imperial point of view, but also from a colonial point of view, that the importance of Esquimalt has enormously increased during the last few years, and if there were reasons eight or nine years ago for defending it, those reasons have enormously increased since that time....

... But, Sir, that does not alter my general conclusion that Esquimalt ought to be defended, nor can I help expressing my great regret that the defences of Esquimalt have not yet been completed. I feel it all the more because the general defences of our coaling stations have almost reached, in all parts of the world, a successful conclusion. This is one of the stations, to my intense regret, that remains unfortified; and I cordially desire, whatever the reasons may be that have occurred to prevent the completion of the defences, that these may be removed, and that we may be enabled to see, in a short time, Esquimalt in a properly defended state....

... Generally speaking, what we have put before the Dominion is this: that we ought to provide the guns and even something more—namely, submarine mining stores, skilled superintendence, and the plant; but that Canada should provide the sites and construct the fortifications on which the guns are to be erected, and likewise maintain these fortifications....

... Halifax is one fortified place where the Imperial Government have provided everything—structure, fortifications, armaments, and a garrison. In the case of Esquimalt we think it, only reasonable that Canada should provide a garrison, and that we should train it to enable it to fill that place it ought to fill....

The debate continued, but the last speaker was the Financial Secretary to the War Office, Mr Brodrick, who closed the debate with the financial details:

... One other point requires attention. It is assumed that a few thousand pounds alone are needed to complete the defences, but there is a considerable sum involved in this matter. The amount Her Majesty's Government will have expended when the stores are sent out will be something like £50,000, and the amount that will fall on the Dominion Government to be expended on the works will be about £30,000¹⁷. Therefore there is considerable pecuniary responsibility upon us already—more than which we should be averse to undertake. We have no reason to suppose that there will be further difficulty, but every reason to hope that the matter will be shortly in process of settlement, and that the defences at our coaling stations will then be completed.

Proceedings were brought to a close with the passing of the following resolution:

“This house urges upon Her Majesty's Government the necessity that exists for taking immediate steps to secure the completion of the works required for the protection of the Harbour of Esquimalt.”

So the conclusion that can be drawn from this debate and what could also be gleaned from the records of the Ottawa government; is that it seems that the sticking factor in the building of permanent fortifications for Esquimalt was down to who was going to foot the bill and take responsibility for future costs - the Dominion or the Imperial governments.

Construction of the Permanent Fortifications.

Three weeks later on the 28th March 1893 the *Daily Colonist* reported notes from the Capital:

Esquimalt's Defences to be Made Among the Strongest in the World

For Esquimalt's defences the following amounts are proposed: Dominion contribution towards the capital expenditure for works and buildings, \$70,000; to pay detachment of Royal Engineers or Marine Artillery to replace “C” Battery, \$35,000.

The British Columbian members are in high spirits over the decided action regarding the Esquimalt defences. I learn tonight that Canada's expenditure will amount to a quarter of a million. The fort will be made one of the strongest in the world. The Imperial Government

will contribute as its share eighteen or twenty powerful guns of the latest pattern [sic]. Her total contribution will greatly exceed Canada's.

It is decided that "C" Battery will be withdrawn. The Minister of Militia says that at the earliest possible moment that arrangements can be made their barracks will be occupied by the Royal Marine Artillery or Engineers.

The British Columbia Garrison Artillery will be increased to a strength of 500 men, 100 each being at Westminster and Vancouver, the remainder at Victoria. Col. Prior sought to obtain the formation of a separate brigade for the Mainland, but the authorities would not permit it.

From what I can understand the Resolution passed in the Imperial House of Commons on the 7th March 1893 was the catalyst for a deal to be quickly made. Whereby the Imperial Government would supply the money for the armaments and the Ottawa Government would supply the money for the new fortifications. Additionally the cost of the British garrison used to build and man the batteries thereafter was split 50:50 between the two governments¹⁸.

The local paper reported later that year on the 18th July 1893:

ESQUIMALT FORTIFICATIONS

The Work is to be Commenced Very Soon and Pushed Rapidly to Completion

Those who have been looking forward with expectancy to the commencement of the work on the Esquimalt harbour fortifications will be pleased to know that assurances have been received that active operations will be commenced at an early date and will be pushed forward to completion with all possible dispatch.

This information is contained in a private letter received at Esquimalt a few days ago, and though nothing but the broad statement is made, it comes from a quarter which ensures reliability. It is further learned that there will be two detachments of regulars sent out to British Columbia in the near future. One detachment will be of Royal Artillery and the other of the Royal Engineers. Major General Herbert who, some months ago, was sent for to go to England to receive instructions and to consult with the Home Office in reference to the fortifications, is now back to Canada. He is expected to arrive in Ottawa next week and will doubtless then have definite information as to the plans.

There seems to be general misunderstanding as to the nature of the proposed fortifications. Many are of the opinion that they will be very extensive indeed, but the naval men and others in a position to know, do not agree with this idea. They think the main fortifications will be the placing of the big guns on advantageous locations with embankments thrown up in front for protection. There will have to be some quarters erected for the regulars who are to come out and a general improvement will be made at Esquimalt, but not of the same extensive character as some of the articles published by American newspapers would indicate.

The paper reported on the 19th August the arrival of the first detachment of Imperial troops:

The First Detachment Arrives Here From Portsmouth

Two Officers and Seventeen Men

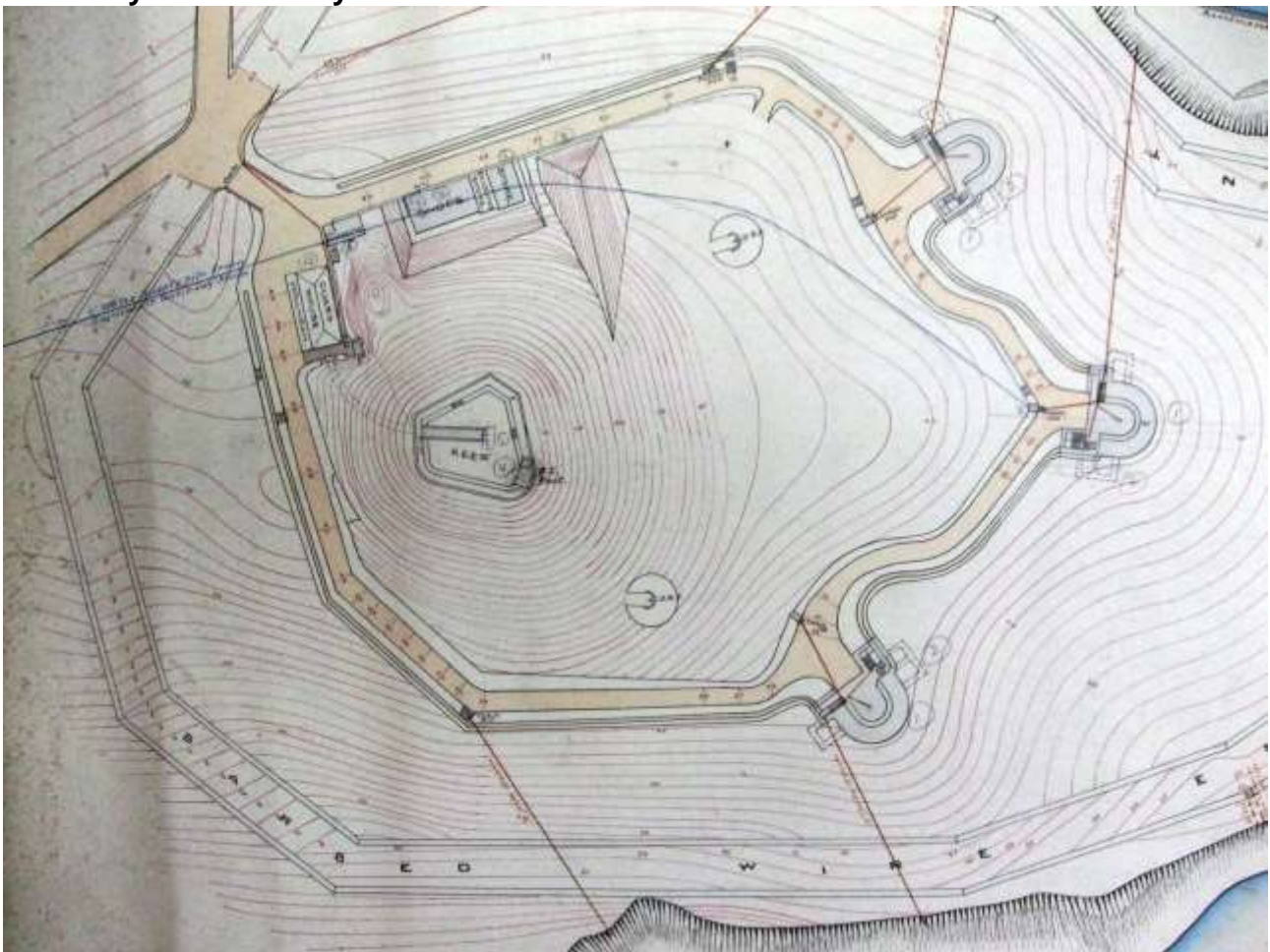
By the Premier last evening there arrived in Victoria the first detachment of the Royal Marine Artillery Company which is to be stationed here in place of "C" Battery. Lieutenants Temple and Barnes are in command, having three sergeants and fourteen men. As soon as the boat arrived the detachment marched out to Macaulay Point, where supper was waiting for them, and they were given a cordial welcome to their new home by those who are so soon to leave.

The men are a fine looking lot, all of great apparent physical power and of much intelligence. They are known as "Royal Marine Artillery Submarine Miners", and have all taken special courses in submarine work. The balance of the company will probably leave for here in about two or three months, and will consist of garrison men and more submarine miners. When the detachment which arrived last night left England it was not known when their comrades were coming.

Now that the Royal Artillery men are here a better idea is obtainable of the character of the fortifications than was given before. There will be a few large guns placed in advantageous positions on the banks of the harbor, but the main defences will be submarine, and will be of such a character that when completed Esquimalt harbor will be practically impregnable, and it will be possible for a handful of men on shore to keep any fleet in the world outside.

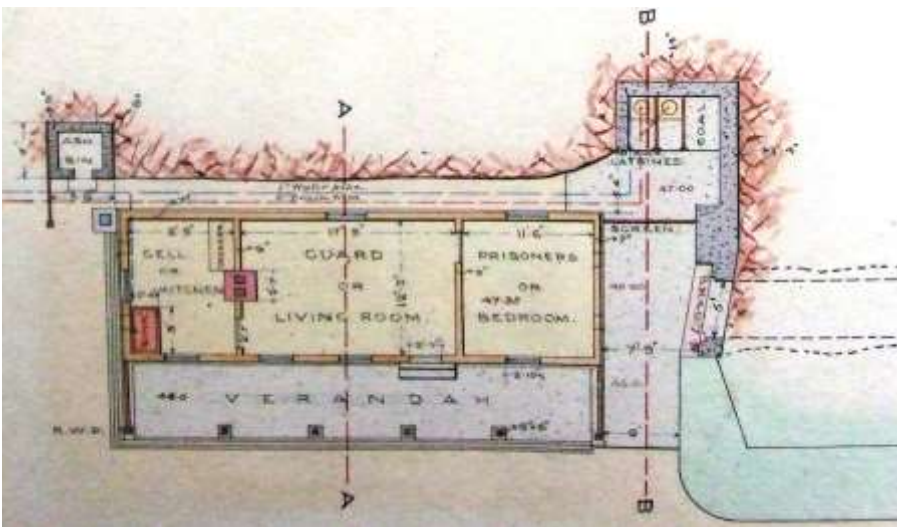
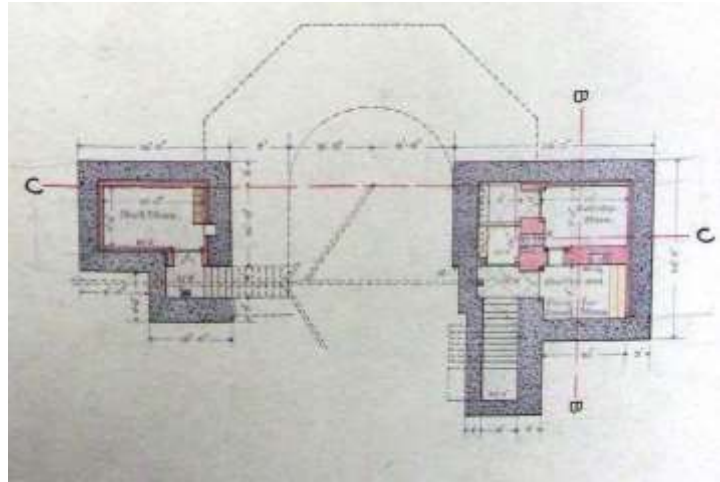
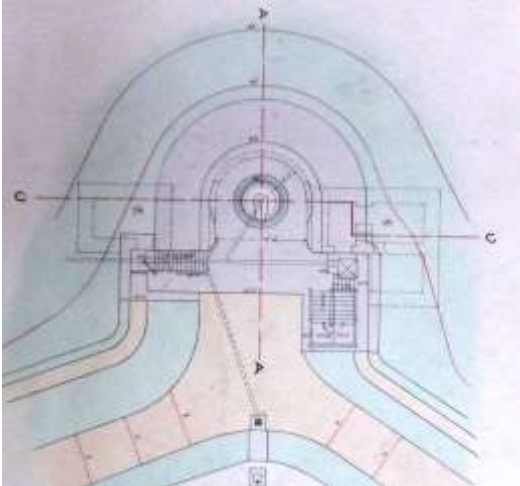
"C" Battery left Victoria on the 20th August for Quebec. Further detachments of RMA and Royal Engineers arrived over the coming months to assist with the building of the fortifications. Another report in the local paper mentions that Chinese labourers were used (because of their cheapness) in the construction of the concrete structures and earthworks. In August 1894 an armament review of the Coaling Stations shows that the plans for Esquimalt had little changed from those defined in 1887, the only significant change was the dropping of the 9-inch RML high angle battery at Sangsters Knoll, with a recommendation to instead site the heavy guns between Signal Hill and Cape Saxe.

Macaulay Point Battery.



The battery at Macaulay Point was the first site to be rebuilt. It was designed to mount three 6-inch BL mark VI guns on mark IV disappearing mountings. The work commenced on the 28th February 1894 with a budgeted cost of £11,154-0-0.

The new battery covered the hill at Macaulay Point, rather than just being located on the point, it consisted of an irregular trace that was roughly circular. The battery was surrounded by a shallow ditch approximately thirty feet wide that contained barbed wire entanglements, the battery was accessed from the rear through a gate. Within the battery a circular roadway gave access to the three gun pits located on the southern side about 180 feet apart. Off the roadway to the rear of the site were built an artillery store, smith's shop (containing a forge), fitter's shop and a small-arms

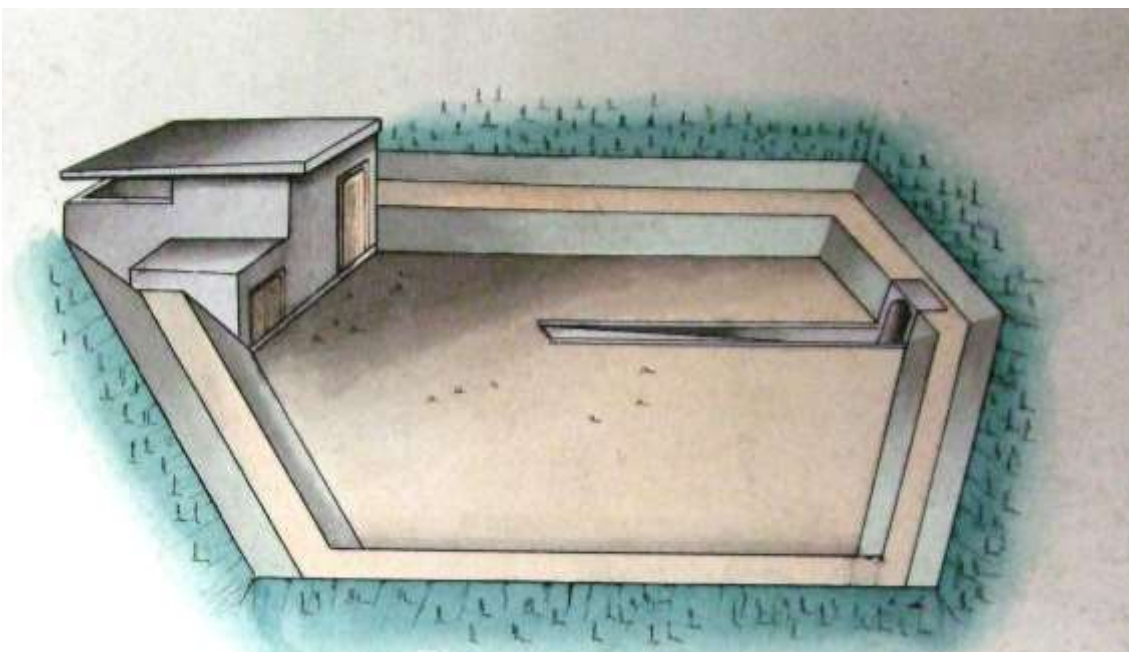


Top-left:
6-inch BL Disappearing
Gun Position.

Top-right:
Magazine.

Left:
Guard room.

Bottom:
Sketch of "The Keep" and
Battery Command Post.



magazine. Just inside the gateway was the guardroom that could also be used as a caretaker's one bedroom married quarter. To the side of the guard room was a sloping tunnel that gave access to the battery command post located at the top of the hill, within a defensive position called "The Keep". Half-way down the hill between the BCP and the gun positions were two additional depression range finding positions.

Each gun position was provided with its own series of underground rooms. Gun positions 2 and 3 had to the left-hand side of the gun emplacement a shell store. To the right-hand side was a shifting lobby, giving access to a cartridge store, and also a small crew shelter come store room. Gun position 1 had the same rooms but positioned as a mirror image.

The new Macaulay Point Battery was completed on 30th November 1897 and came in under budget at £8,944-0-0.

Rodd Hill Batteries

Rodd Hill on the western side of the harbour entrance was the site chosen to mount three more 6-inch BL mark VI guns on mark IV disappearing mountings. Unusually the site was occupied by two independent fortifications known as "Lower Battery" or "Two Gun Battery" and "Upper Battery" or "One Gun Battery". Both of these two 6-inch batteries were built concurrently, they commenced building on the 6th September 1895.

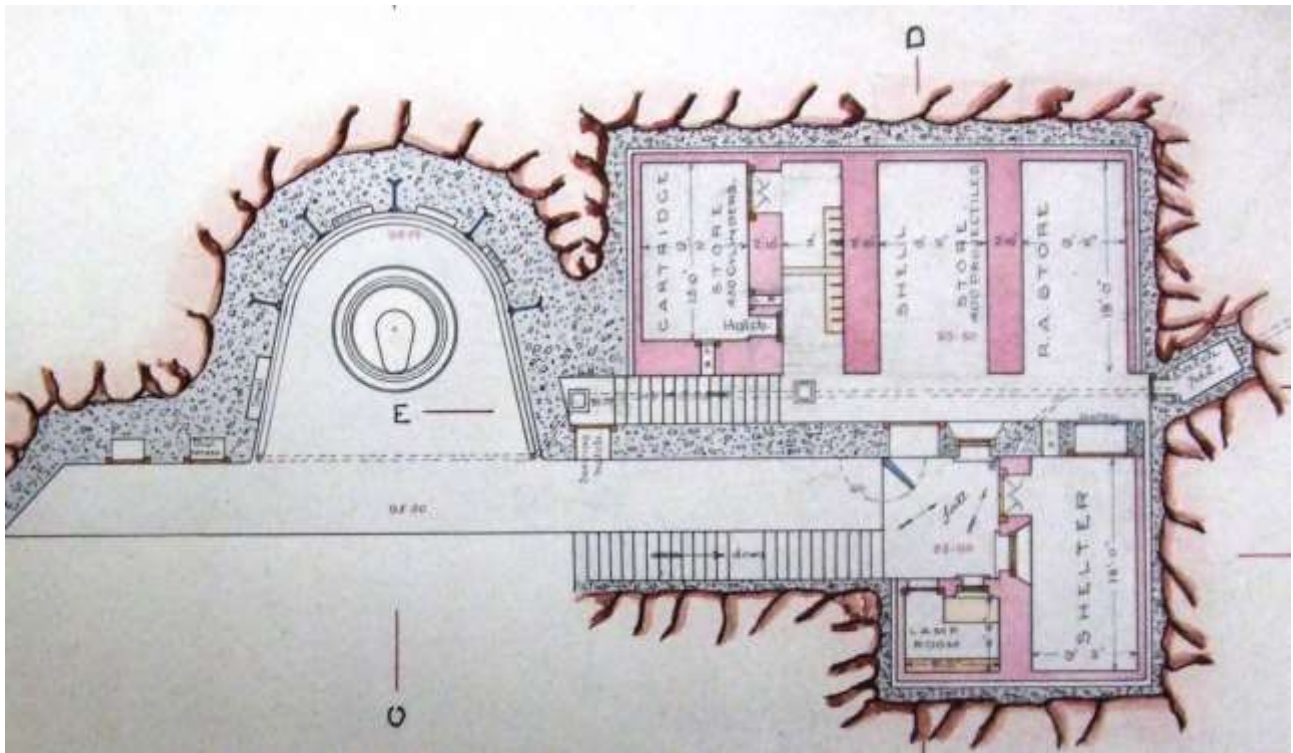


Rodd Hill Fortifications dated 1905

Rodd Hill - One Gun Battery.

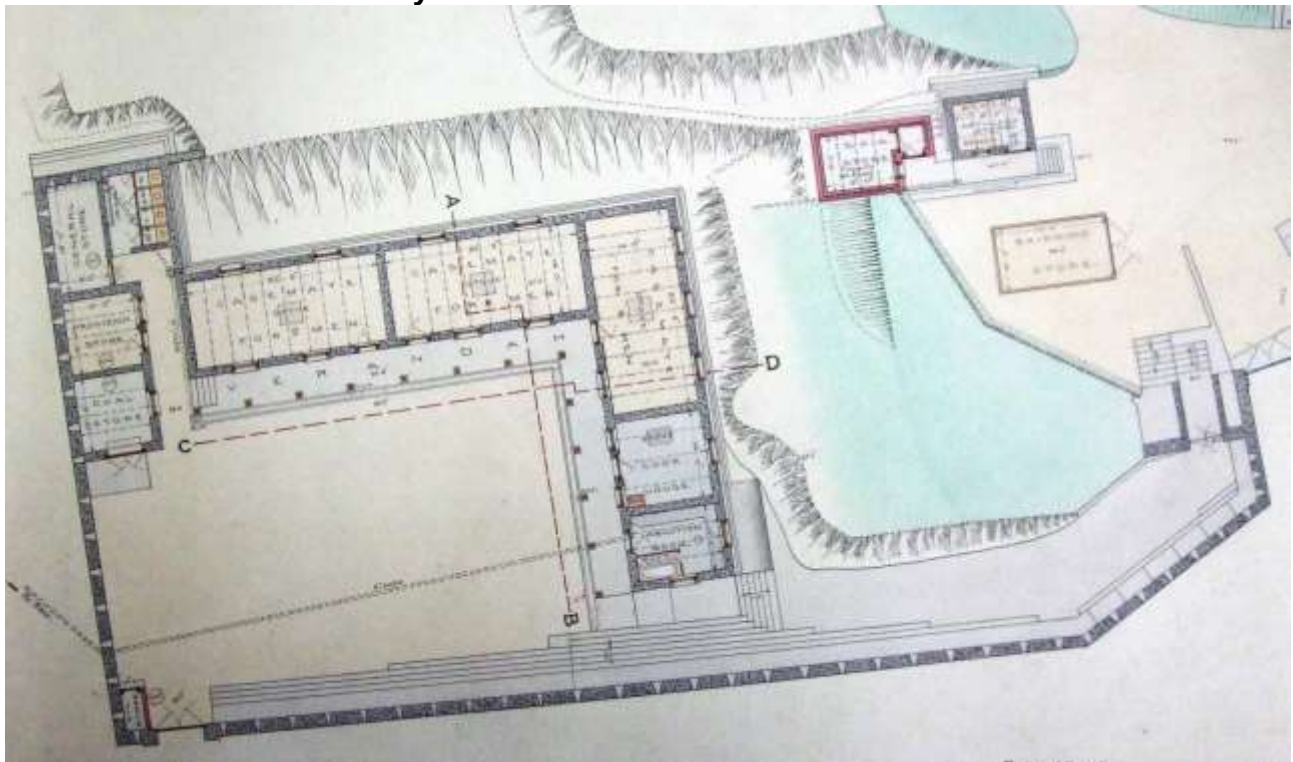
The Battery was built on top of a rocky knoll, one hundred and five feet above sea level. The 6-inch disappearing gun pit was built at the summit, to the west was a DRF position. Between the two, built underground, was a magazine. This contained a shell store, for 400 shells; a cartridge store for charges in 450 zinc cartridge cylinders, a shifting lobby, artillery store, lamp room and crew shelter. Behind the gun position, at the back of the hill, was located a combined guard room or one

bedroom caretaker's married quarter. This was positioned next to the armoured & loop-holed entrance gate. The gorge of the battery was surrounded by a concrete wall some twelve feet high, which was loop-holed for rifle defence. To the front of the battery a deep barbed-wire entanglement provided an additional obstacle to the rocky steep slope to protect the battery from frontal assault. The estimated cost was £3,508; but when completed on the 31st March 1898 it too came in under budget at £3,465.



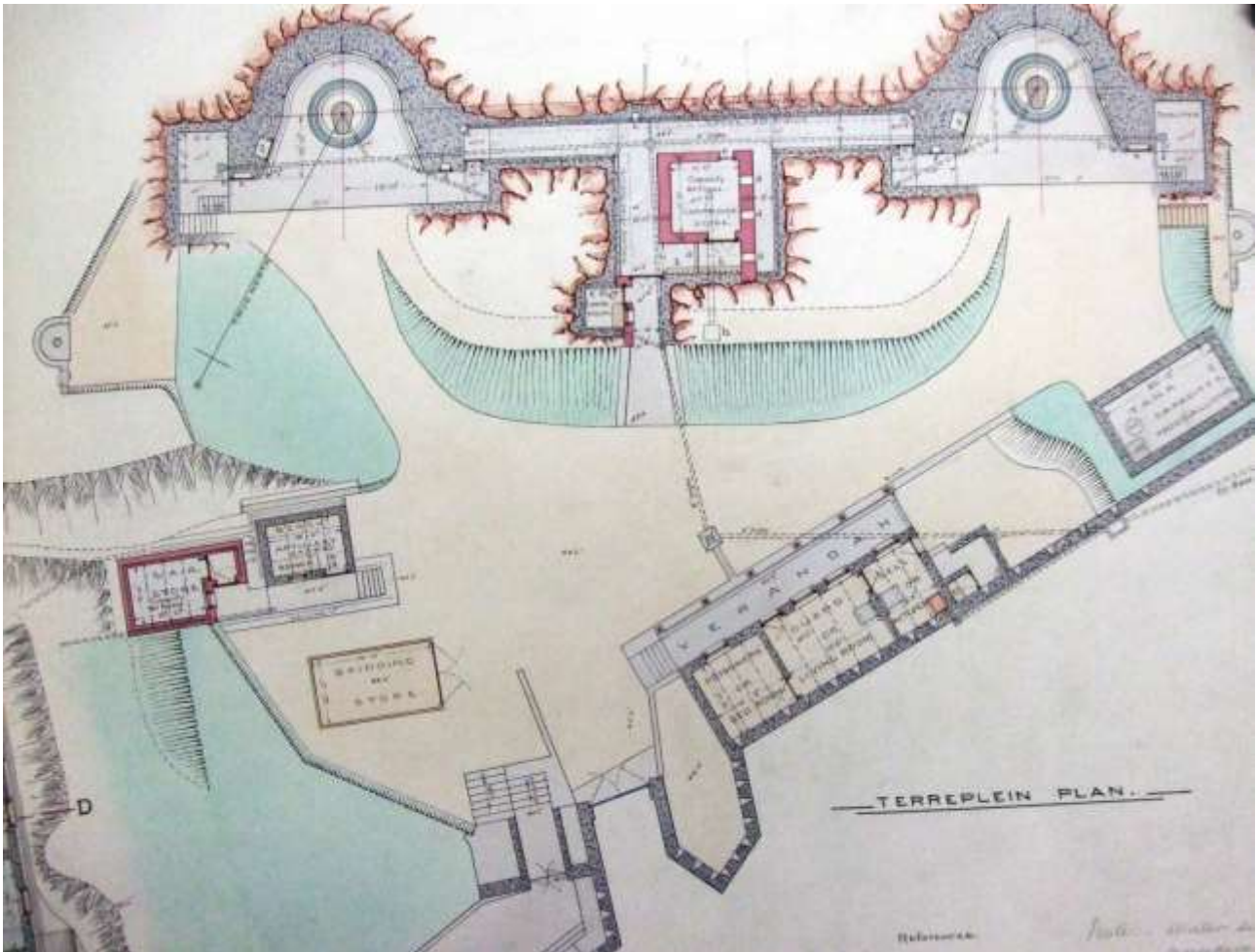
One Gun Battery - gun pit and magazine detail

Rodd Hill - Two Gun Battery.



Two Gun Battery - barrack accommodation plan

The Lower Battery was built nearer to the shoreline of the harbour entrance; it too was positioned on top of another rocky knoll, but at the lower height of sixty feet above sea level. The two gun battery was constructed in a similar fashion to the One Gun Battery, with an underground magazine complex, between the two gun positions and guard room that could double up as a caretaker's married quarter. The gorge was also enclosed by a high loop-holed concrete wall, with an entrance through a steel armoured gateway. Attached to the east of the Battery, within its *enceinte*, was built barrack accommodation for a peace-time capacity of twenty-four men, together with stores, cook-house and ablutions. In war-time the three barrack rooms could accommodate a total of fifty-six men using hammocks.



Like the One gun battery the Two Gun Battery was completed on the 31st March 1898 but came in over its estimated cost of £4,296 with a final actual cost of £4,419.

1896 Armament Review

Whilst the works were underway at Macaulay Point and Rodd Hill the joint Royal Artillery and Royal Engineers Committee reviewed the armaments at all thirteen Coaling Stations. For Esquimalt on the 4th June 1896 the report shows that one of the six 6-inch BL Disappearing guns had been mounted at Rodd Hill with the other five proposed, yet to be installed. The 9-inch RML High Angle Battery between Cape Saxe and Signal Hill had now been updated to be 10-inch RML guns of 18 tons on High Angle mountings. This report also still showed that the emergency battery guns were still described as 'mounted' although with the footnote that some were for training & practice whilst others were retained dismounted. The 6pr QF guns for minefield defence, that were originally destined for a new QF battery on Duntze Head had not yet been installed, despite being delivered to Esquimalt. The landward defence field guns had been upgraded from 16pr RML to the more modern 13pr RML guns.

The full detail of the armament table is as follows:

Name of Work	Mounted	Proposed	Additions	Reductions
Rodd Hill	1 - 6-inch BL	3 - 6-inch BL	2 - 6-inch BL	
New site between Cape Saxe and Signal Hill	*1 - 9-inch RML	4 - 10-inch RML High Angle	4 - 10-inch RML High Angle	1 - 9-inch RML
Brothers' Island	†1 - 8-inch RML †2 - 64pr RML	†1 - 8-inch RML †2 - 64pr RML		
Macaulay Point	†3 - 7-inch RML	3 - 6-inch BL †3 - 7-inch RML	3 - 6-inch BL	
Victoria Point	‡2 - 64pr RML	‡2 - 64pr RML		
Finlayson Point	‡2 - 64pr RML	‡2 - 64pr RML		
Defence of Minefield	§2 - 6pr QF	2 - 6pr QF		
General Defence	§6 - 13pr RML §6 - machine guns	6 - 13pr RML 12 - machine guns	6 machine guns	

Notes:

* - At Quebec.

† - To be retained at the station dismantled.

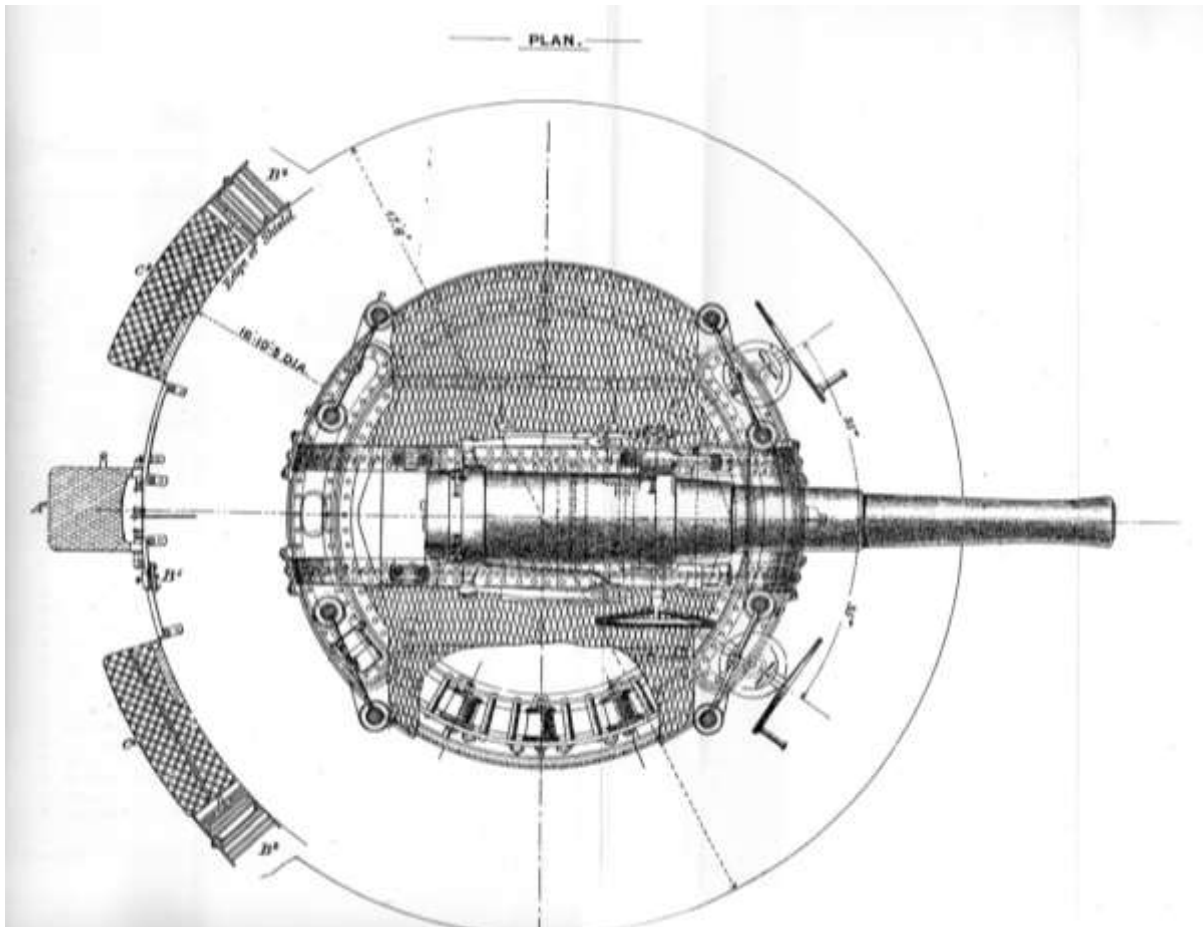
‡ - For drill and practice only.

§ - At station.

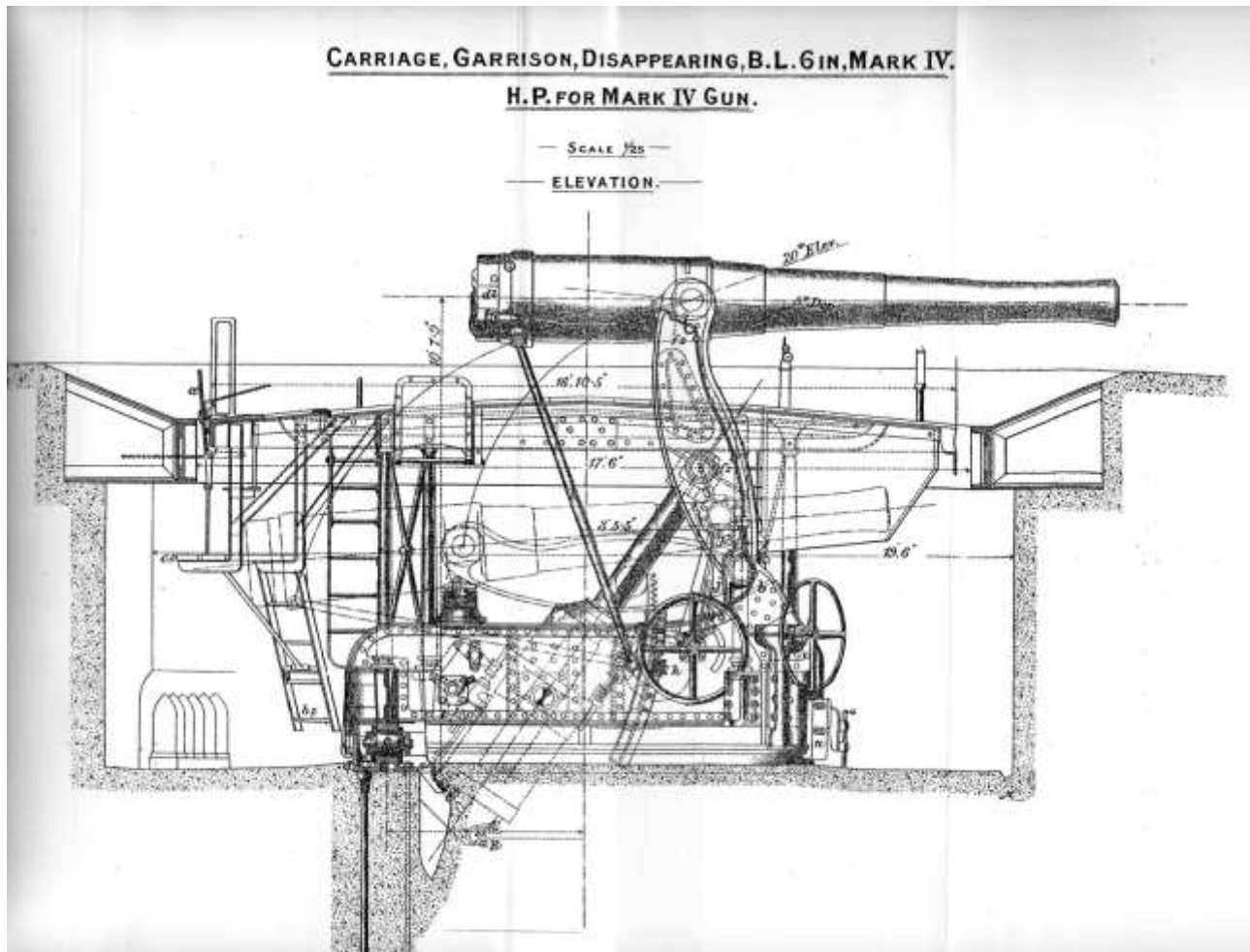
6-inch BL gun on Hydro-Pneumatic Disappearing Mounting

The main armament for Esquimalt were the two batteries of three 6-inch BL mark VI guns mounted on hydro-pneumatic disappearing mountings mark IV. The mark VI guns were approved for manufacture from 3rd January 1889, they differed from the mark IV in the method of manufacture of the chase hooping, the three hoops (1B, 1/2B & 2B) used in the mark IV were replaced with a single 'B' tube. All fittings were interchangeable between the two marks of gun.

The gun barrel, including the breech, weighed 5 tons. It was rifled with a 28 groove Elswick section polygroove rifling. It was 16 feet 3.3 inches long and fired a 100-pound shell a maximum range of over 10,000 yards using a full charge of 14lb 12oz Cordite. Although its effective range against armoured warships was much less.



The mark IV Hydro-pneumatic mounting weighed 13 tons 3 cwt, and could give a maximum elevation of 20°. The disappearing mechanism would raise the barrel to 10 feet 7.9 inches above the floor of the pit when in the firing position.



Although the gun could be fired using percussion tube, they were more likely to be fired remotely using an electrical tube initiated from the Depression Range Finding cell.

By 1913 all 6-inch BL mark VI guns were declared obsolete, although some did see service through the First World War. In the case of the six guns at Esquimalt some remained in service until 1938.

Further Defences at Esquimalt

As soon as the new fortifications at Rodd Hill and Macaulay Point were completed, approval was given for improved defences of the harbour entrance, to defend the harbour against the menace of fast moving motor torpedo boats and also to defend the minefield. Ultimately three batteries of two 12-pounder QF guns were approved together with associated Defence Electric Light (DEL) installations.

Duntze Head Battery

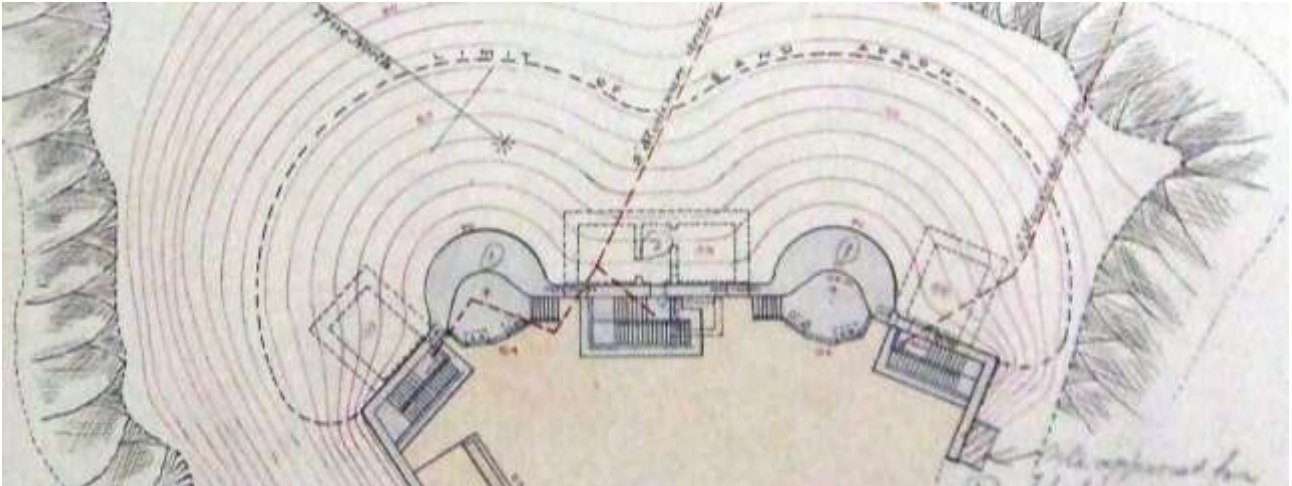
A two gun battery for 6-pounder QF guns was erected on Duntze Head to cover the minefield laid to defend the harbour approaches. However, these guns were regarded as too small to have effective hitting power against modern motor torpedo boats, and the battery was soon recommend to be upgraded to 12-pounder QF guns¹⁹.

A Defence Scheme for Esquimalt dated January 1902 shows the mounted defences to be: Rodd Hill - 3 x 6-inch BL, Macaulay Point - 3 x 6-inch BL, Duntze Head (Minefield defence) - 2 x 6pr QF.

Belmont Battery and Blackrock Battery

These two batteries were built either side of the harbour entrance. Belmont Battery was erected on a rocky outcrop near to the shore-line about 100 yards southwest of the Rodd Hill Two Gun Battery. Blackrock Battery was built on the eastern side of the entrance within the Naval Base near the shore-line over-looking Scrogg Rocks. Work commenced in October 1898. Each battery was of the standard design, with two concrete emplacements with an underground magazine between the two emplacements. Additionally an underground crew shelter and R.A. Store were also provided.

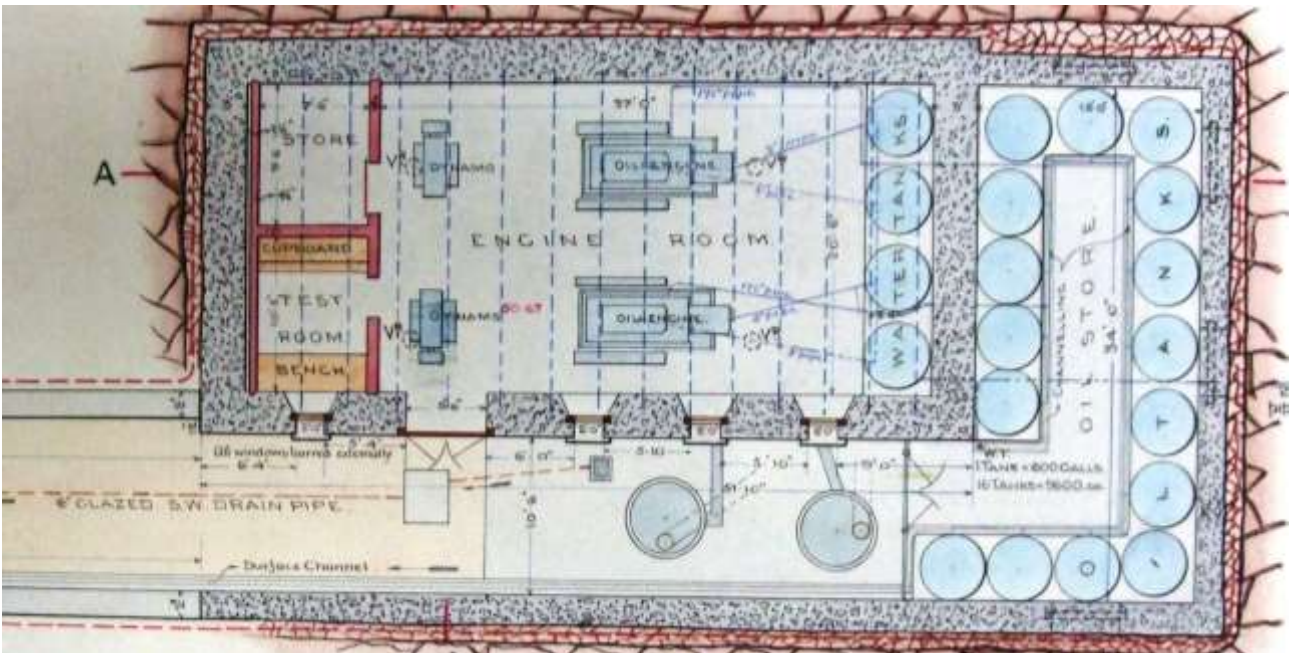
Both batteries were completed in 1900. Blackrock Battery came in at its estimated price of £2,400, the cost of Belmont Battery is not known, but it is likely to have been a similar cost.



Blackrock Battery

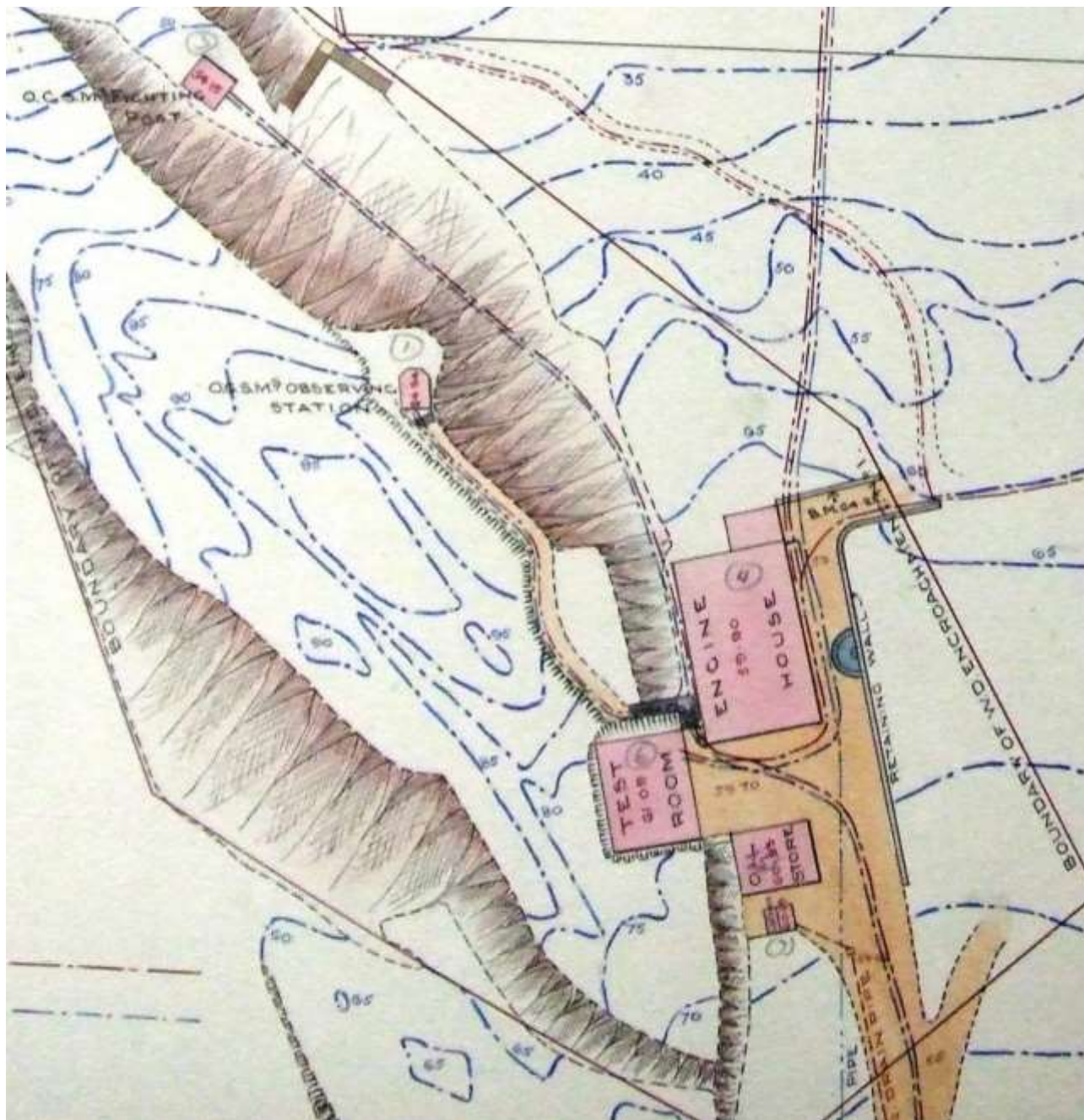
As well as the quick-firing gun batteries the harbour entrance was defended by electric search lights. Two installations were built either side of the harbour entrance at Rodd Hill and Duntze Head. Each installation consisted of two electric search lights, an engine/dynamo room and fuel store.

Searchlights 1 and 2 were on the Rodd Hill side. Position 1 was fitted with a traversing concentrated beam search-light with a maximum range of about 5,000 yards. Position 2 had a fixed 'sentry' beam covering the channel leading to the harbour entrance. Positions 3 (fixed) and 4 (traversing) were mounted on the Duntze Head side.



Rodd Hill DEL Engine Room and Fuel Store

Built into the rock, in a protected position on the Rodd Hill side, was the electrical power generation room. The room was provided with a pair of oil powered engines that each drove an electric dynamo. A similar arrangement also existed on the Duntze Head side.



Duntze Head Engine House. Note: the Submarine mine field control stations.

The total cost for the two DEL installations was £4,740 and both were completed by March 1901.

1899 Armament Review

In January 1899 a Conference on Armaments was held as a result of a joint request from the Secretary of State for War and the First Lord of the Admiralty to consider the BL & QF guns required to replace all obsolete RML guns. The committee considered the armaments at all naval bases and strategic harbours. For Esquimalt they reported:

The naval establishment lies in Esquimalt Harbour. Esquimalt Harbour is defended by batteries at Rodd Hill and Macaulay Point. The battery at Rodd Point [sic] mounts 3 - 6-inch

BL on slow mountings and the guns command the approaches and passage between Rodd Point and Duntze Head (channel 600 yards wide), from the full range of the guns to close range. This passage is also defended by a minefield and 4 - 12pr QF guns.²⁰

The battery at Macaulay Point mounts 3 - 6-inch BL guns on slow mountings. These all bear on the approaches, but not the passage itself.

It has been proposed (but not yet approved) to mount 2 - 9.2-inch BL guns of the latest type on a site near Signal Hill, and in this proposal we concur.

Signal Hill Battery

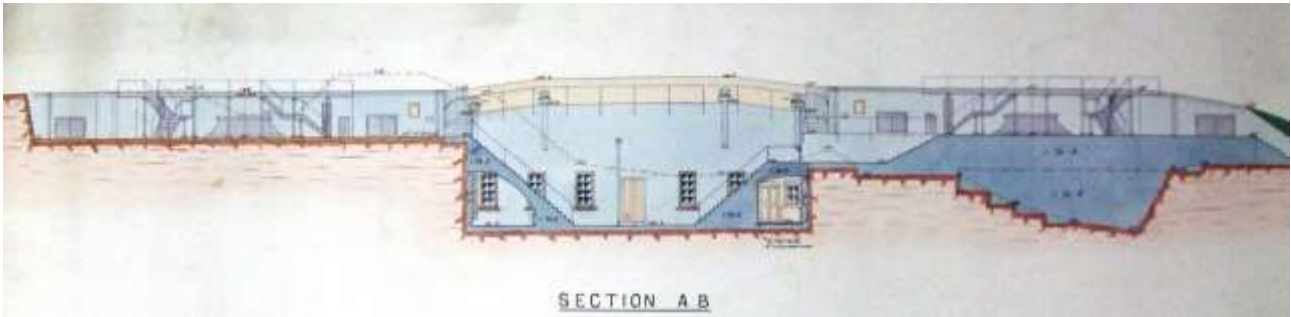
Between 1896 and 1903 approximately £30,000 had been spent by the Dominion on the construction of the new fortifications. But the naval base was lacking in any armament capable of engaging an enemy battleship. Various proposals to mount heavy armament on Signal Hill had been made since 1879; however, it was not until 1903 that construction for a new battery was finally begun. The battery was to mount two 9.2-inch BL mk X on barbette mountings mkV²¹.



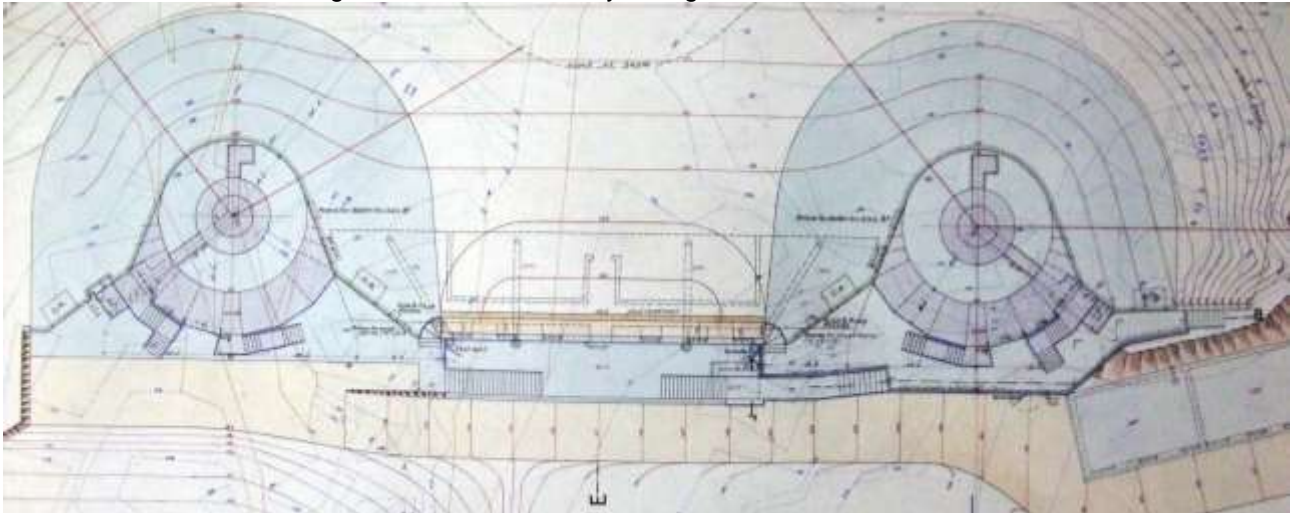
Esquimalt Defence Scheme - January 1905

The design drawings held at the National Archive show that an area near the summit of the hill (125 feet above sea level) was to be levelled and occupied by the two concrete gun pits 140 feet apart. Between the gun positions were built underground magazines to service the two guns. Also in a sheltered position to the rear were a R.A. store and a crew shelter. To the rear of the guns, at the summit, was located the position finding cell and the battery commanders post. To access the Battery a zig-zag road was built, and near the end of the road was a cook house, latrines, ablutions and the fortress commander's headquarters.

In May 1903 the *Daily Colonist* reported "The roadway around the northern face of the hill is approaching completion, and the sites for the big guns on the summit of the rock have been marked out in white paint. The new buildings at the foot of the hill are well advanced, and a week or so will see them completed". In September 1903 it was reported that the 9.2-inch guns and mountings had been delivered to Esquimalt. A year later in November 1904 the *Daily Colonist* reported that most of the rock had been blasted and cleared to be utilised in some 6,000 square feet of concrete for the construction of the battery.



Signal Hill 9.2-inch Battery- design dated December 1902



On 28th February 1905 it was announced that an agreement had been reached between Britain and the Dominion of Canada to hand over all responsibility for the defences of Halifax and Esquimalt to the Dominion. For Esquimalt it was agreed that the Canadian Royal Garrison Artillery was to replace the Imperial Garrison on 1st May 1906. The works at Signal Hill had been completed before the Royal Engineers left, but the guns and mountings remained at the bottom of the hill, in the Army Ordnance Yard awaiting installation.

In a similar way to the decision to build the permanent fortifications, it appears that lethargy effected the decision to complete the battery, as the guns remained at the bottom of the hill for over eight years. In December 1911 The *Daily Colonist* reported:

Mountings For 9.2 Guns To Be Placed On Signal Hill

The news that the two 9.2 guns which were brought here many years ago to be mounted on Signal Hill as part of the Esquimalt defences are to be placed in position by the Royal Canadian Engineers of the local garrison by order of the department of militia and defence was received with much satisfaction by the officers of the local forces. Lieut. Col. A.W. Currie, commanding the Fifth Regiment, C.G.A., said: "I am sure that with myself the officers of the Fifth Regiment will welcome this news and that we will be pleased to do all in our power to carry out whatever work may fall to our lot in connection with manning this additional battery."

26th March 1912:

Artillerymen Arrive

A detachment of 35 non-commissioned officers and men of No. 4 Company, C.G.A. under Captain W.B. Almon, have arrived at Work Point to augment the local garrison now for the work now under way of mounting the two 9.2 guns at Signal Hill. Major Mills, officer commanding the local artillery forces, has been engaged in this work for some time, and up to the present about ninety tons of material has been taken up the hill.

Although the guns were finally mounted in 1912, they were not ready to be test fired until 6pm on the 11th August 1914, a week after Britain and Canada entered the First World War!



9.2-inch BL gun barrel being moved up Signal Hill using a 30 ton Gun Drug
(Rodd Hill National Memorial archive)



'Parbuckling' a 28 ton 9.2-inch BL barrel into position at Signal Hill Battery using a winch,
note: the recoil accumulator is on a wooden sleigh in the foreground.
(Rodd Hill National Memorial archive)



Erecting a 9.2-inch gun platform at Signal Hill Battery (Rodd Hill National Memorial archive)



Signal Hill Battery - circa 1920 (Canadian War Museum)

The forts today

All of the emergency batteries built in 1879 (Finlayson Point, Victoria Point, Macaulay Point and Brothers Island) were dismantled in the 1890s, so nothing remains of these batteries. However, the sites of both Finlayson Point Battery and Victoria Point Battery are marked by small stone monuments. Regarding the later fortifications, they are all still extant, from east to west:

➤ Macaulay Point Battery.

This battery was upgraded in 1924 when two of the disappearing guns were removed and replaced with two 6-inch QF guns on naval mountings. In 1938 the third disappearing gun was removed together with the two 6-inch QF guns and the battery was rearmed with two 6-inch BL mk VII guns. The Battery today is an open park run by the Esquimalt township local authority. All of the underground magazines have been filled in, and the guard room demolished, otherwise it is in a fair condition and worth a visit.

➤ Signal Hill Battery.

This battery was disarmed in 1938, with the two 9.2-inch guns and equipment being relocated to a new battery to the southwest at Albert Head. Today the battery is within the security perimeter of the naval base - so is not easily accessible.

➤ Blackrock Battery.

Blackrock Battery is also within the security perimeter of the naval base - so is not easily accessible.

➤ Duntze Head Battery.

This battery had its 12-pounder QF guns removed in 1939 when it was upgraded to receive a twin 6-pounder AMTB unit, is also within the security perimeter of the naval base - so is not easily accessible.

➤ Rodd Hill Batteries.

Both One Gun Battery and Two Gun Battery's disappearing gun remained until around 1940. The two 12-pounder QF guns on Belmont Battery were replaced in 1944 by a twin 6-pounder AMTB unit. Today the whole site is run as a national monument by Parks Canada who acquired the site in 1956 at the end of coast artillery. The whole site has recently undergone a 2.4 million Canadian Dollar restoration project; the results of this effort have produced one of the best preserved fortifications of the British Victorian era in the world.



Esquimalt Naval Base with Victoria in the background. (Victoria Tourism)



Macaulay Point Battery - 6-inch gun position
originally a disappearing mounting with a 6-inch BL CP emplacement built within the pit



Macaulay Point Battery - Store, Smiths & Fitters Shops & Small Arms magazine



Rodd Hill - One Gun Battery - entrance and gorge wall



Rodd Hill - One Gun Battery - 6-inch BL mark VI barrel on modern mounting



Rodd Hill - Two Gun Battery. Note: Barracks on left-hand side



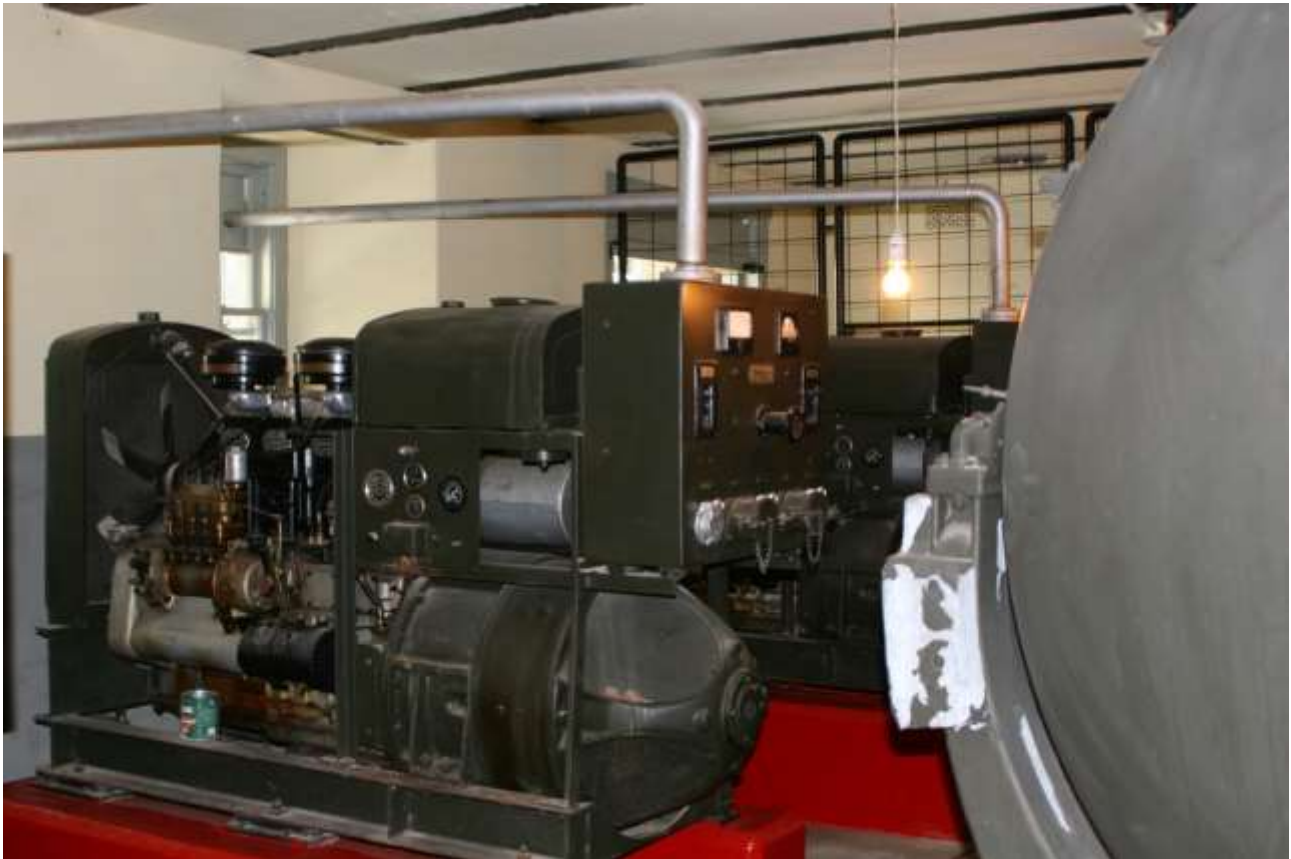
Rodd Hill - Two Gun Battery. 6-inch BL Disappearing Gun pit



Rodd Hill - Two Gun Battery barracks



Rodd Hill - Two Gun Battery gorge wall and firing steps



Rodd Hill - DEL engine room

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Footnotes

4. Esquimalt is pronounced *l'skwaymault*. Comes from the native name of "Ess-whoymalth," a phrase usually translated as "place of the shoaling waters."
5. The *Oregon Trail* was a 2,170 mile trail from the Missouri River across the Rocky Mountains to the Columbia River. The trail was initially laid by fur traders and trappers and only passable by foot or horseback. By 1836 it was being used by migrant wagon trains. Initially the immigrants were being offered land for free in parcels of 640 acres per married couple.
6. Rear Admiral David Price accidentally shot himself on the 31st August 1854, so the landing was postponed until the 4th September. His command was taken over by Captain Sir Frederick Nicolson.
7. On 18th October 1867 the Russians sold off Russian America to the United States at the rate of two cents an acre for a total of \$7.2 million. The Russians saw this as an opportunity to surround British Columbia by US territory. The Americans renamed it to Alaska.

8. Duntze Head was named after Captain John Duntze of HMS *Fisguard* which was on station between 1843 and 1847.
9. British Columbia became part of the Dominion of Canada in 1871.
10. The Earl of Derby, Edward Henry Stanley, became Foreign Minister in Disraeli's government in 1874.
11. The Russians used the Mare Island Anchorage at San Francisco for their Eastern Fleet in agreement with the U.S. government - it was only some 700 miles south of Vancouver Island. On the 12th May 1877 Rear Admiral Pausino had the following warships at Mare Island under his command: *Bayan* (flag ship), *Vsadnick*, *Vostock*, *Tunguz*, *Japonitz* and *Gomostai*. Although this seems a formidable force the reality was that the flag ship was a screw corvette of 1,998 tons armed with only four 6-inch muzzle loaders and the remaining five were mostly wooden vessels ranging between 706 and 400 tons and lightly armed with small guns.
12. HMS *Shah* was an unarmoured iron hulled steam frigate. Commissioned in 1876, she was 334 feet long, displaced 6,250 tons, max speed of 16kts and armed with 2 x 9-inch RML, 16 x 7-inch RML and 8 x 64-pounder RML guns.
13. "Coaling Stations of Secondary Importance" included Ascension Island, Trincomalee (Ceylon), Labaun (Malaya), Port Hamilton (Korea), Falkland Islands and Esquimalt. Coaling Stations of "Primary Importance" included Aden, Freetown (Sierra Leon), St. Helena, Cape Colony, Mauritius, Colombo, Singapore, Hong Kong, Jamaica, St. Lucia.
14. The Canadian Pacific Railway was completed on the 7th November 1885.
15. The *Government* graving dock was paid for and built by the government of the Dominion of Canada. It could dry dock ships up to 480 feet long, 65 feet wide and 26½ feet deep. Initial contracts for the docks construction were awarded in 1875, when completed as well as being delayed it was massively over budget.
16. "A" Battery were based at Kingston and "B" Battery at Quebec, both of these units were formed in 1871, but although "C" Battery was authorised in 1883, it was eventually formed from drafts from "A" and "B" Batteries.
17. Brothers Island suffered a fire in September 1888 thought to have started from the camp fires of picnicker's. The magazine and artillery store, both made of timber, were lost. Fortunately the poor condition of the magazine meant that no powder was stored there when the island caught fire.
18. The Panjdeh Incident 1885. Russia annexed part of Afghanistan following their successful empire expansion into Turkestan. With Britain seeing this as a threat to India, the two countries again came near to a declaration of war. However, the situation was solved by diplomacy. Following this second Russian scare the colony of New Zealand immediately began building permanent fortifications - see Redan 53 for details.
19. General Sir William Crossman was an officer in the Royal Engineers who served between 1858 and 1861 as a Captain on the staff of the Inspector General Fortifications.
20. £30,000 was the equivalent of \$146,000. The exchange rate being 4.87 Canadian dollars to the pound sterling.
21. A debate in the Ottawa House of Commons in July 1899 detailed the apportionment of costs of maintaining the British garrison at Esquimalt.
22. Duntze Head Battery was rebuilt between 26-8-1903 and 30-6-1904 to mount 12-pounder QF guns.
23. In January 1899, the minefield was only defended by the two 6-pr QF guns on Duntze Head, the batteries for the four 12-pounder QF guns mentioned were still under construction.
24. The 9.2-inch mark X weighed 28 tons and fired a 380lb shell to a maximum range of 21,000 yards using a 120lb cordite charge and the maximum 15° elevation. The mark V barbette mounting weighed 129 tons 15 cwt, including the shield.



Signal Hill Battery (Jack Bates)