

Hello. My name is Kathleen Finnerty. I have lived in Sturgeon Bay for more than twenty years, and I was part of the most recent comprehensive plan for the community. I have become even more familiar with the history of this site through my 2-and-a-half year involvement as a plaintiff for the Friends of the Sturgeon Bay Public Waterfront.

I am here to provide testimony that the Ordinary High Water Mark for Parcel 92, outlined here in red, should be located close to the present-day Maple Street.

We would like to show you a series of twenty maps from different sources from 1835 through 1963. All of these maps are readily available, most of them through online, public sources. All of the maps have graphical scales. All, except this first one, include the street grid which aids in making reasonable overlays. All maps after 1901 include the still-standing Teweles and Brandeis Granary as a reference.

Many of the maps were made by surveyors, including this map, and the U.S. Army Corps of Engineers Lake Survey maps, which included on-land, near-shore, and far-shore survey teams.



All of these maps are shown here at the same scale, and the same overlay, allowing me to also show you Parcel 92, outlined in red.

This first map is the 1835 U.S. Government Public Land Survey. The heavy line is the shore meander line. Laurel Hauser has testified about how the shore meander lines were surveyed here, as a zig-zag approximation of the shoreline.

In this map of the waterfront, the meander line segment is approximately 150 feet water-ward of the actual historical mapped shoreline. In other words, the historical shorelines are approximately 150 feet further back than this meander line segment, based on local shoreline surveys in plat maps of the 1870s and 1880s..

In 1864, the U.S. Government Department of War Engineers surveyed the shores of this part of Lake Michigan.

In 1864 there was no street grid on the west waterfront yet, but there was on the east side. That street grid, plus the map scale, and the combined shorelines of Sturgeon Bay, allow a reasonable map overlay.

This shoreline is very consistent with the 1873 shoreline from the Bay View plat shown in other presentations by Marianne Ewig and Claire Morkin. It also has **no** indications of marsh. That is in contrast to other areas on this same map along Sturgeon Bay where clear marsh symbology is used -- the same marsh symbology used in today's mapping -- horizontal lines with little plants.

But here, **no** marsh is indicated.

It is also very consistent with the 1885 shoreline in the City Assessor's map, on the next slide.

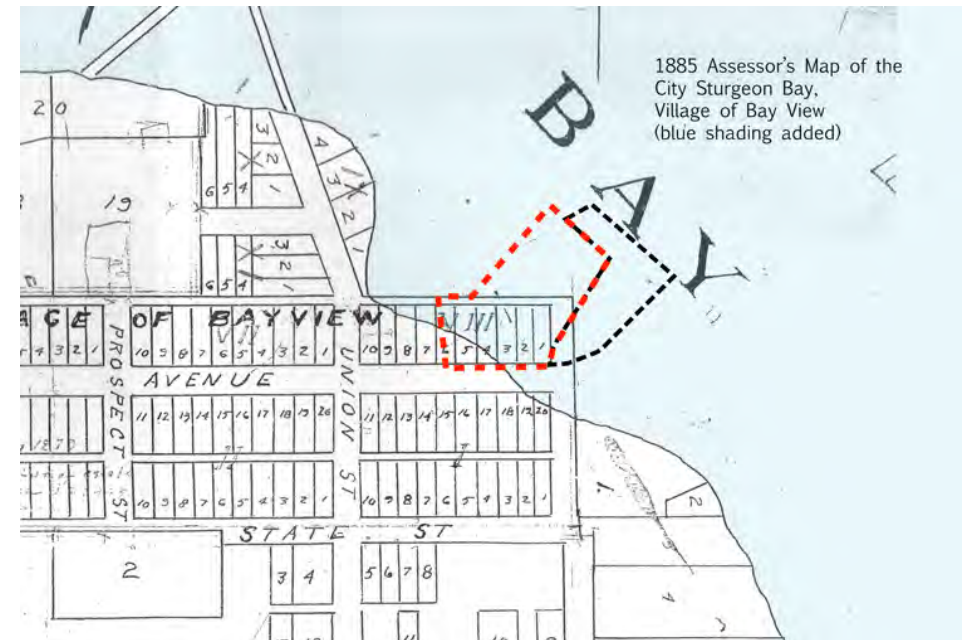


Early plat and assessor's maps were drawn in this area for the City of Sturgeon Bay in 1873, 1885, and 1888.

This is the 1885 Assessor's Map of the City of Sturgeon Bay. It comprises three large sheets in the County Land Records archives. A full size certified photocopy is shown on the easel (*point*).

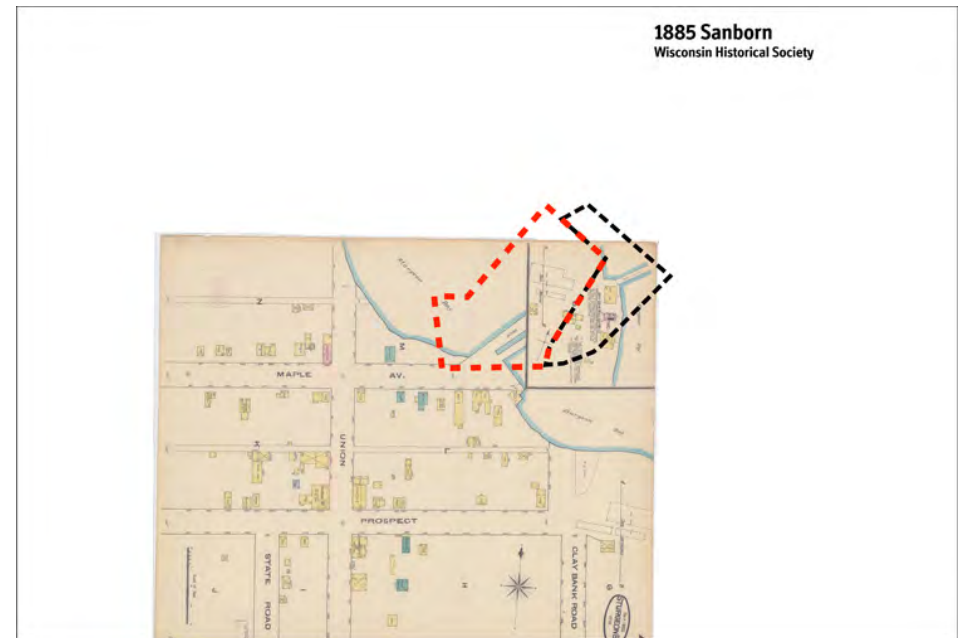
Although Mr. Harris squared off his Bay View subdivision plat with lots to complete the rectangle of the block, some of which were drawn in the water, the shoreline of the time is clearly mapped.

By 1885, the time of this map, Joseph Harris had also already begun building and filling his dock extending into the bay on top of those imaginary lots in the water.



1885 is the earliest Sanborn Fire Insurance map we have found. Although this particular Sanborn map obscures part of the Harris Dock with a map inset from another area, we can clearly see where the shoreline is, and was, and the Harris Dock extending into the waters of Sturgeon Bay.

The eventual future joining of Maple Street with Clay Banks -- Clay Banks became today's Neenah Street -- is completely under water (*point*). This under-water reference point persisted for decades in this series of maps.

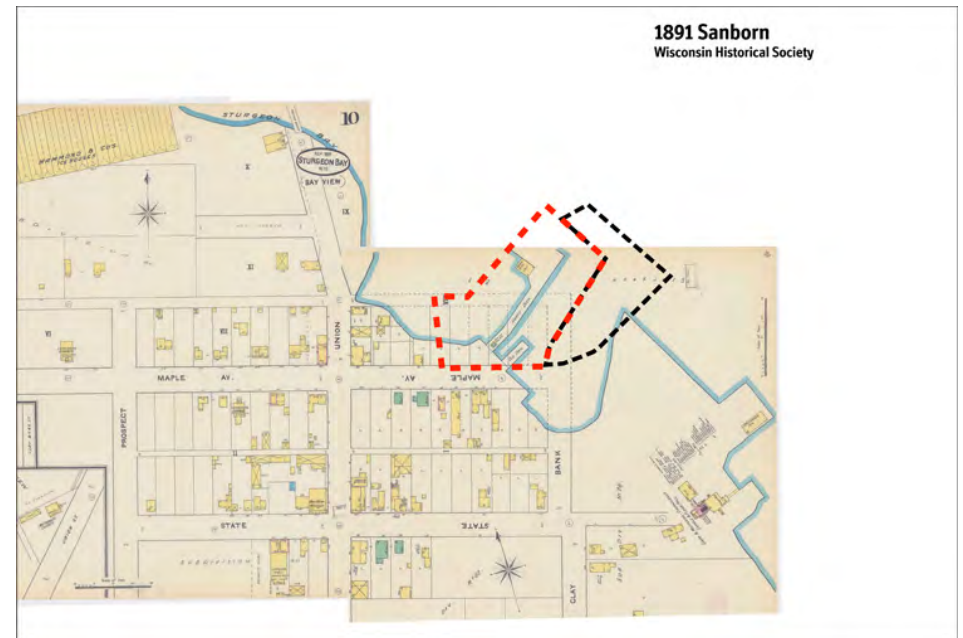


In this 1891 Sanborn map, the Harris Dock is labeled.

This map also shows, using dashed lines, those imaginary lots that are in the water, over which Harris' Dock is constructed.

In 1880, a newspaper article wrote that *“work on Mr. Harris' pier is progressing satisfactorily. The cribs built this year have been filled with stone, and the stringers are now being put on. This done the planks will be laid.... The owner intends adding an oblong structure 60 x 100 foot [for] wharfage...built of piles at the end of his dock”*.

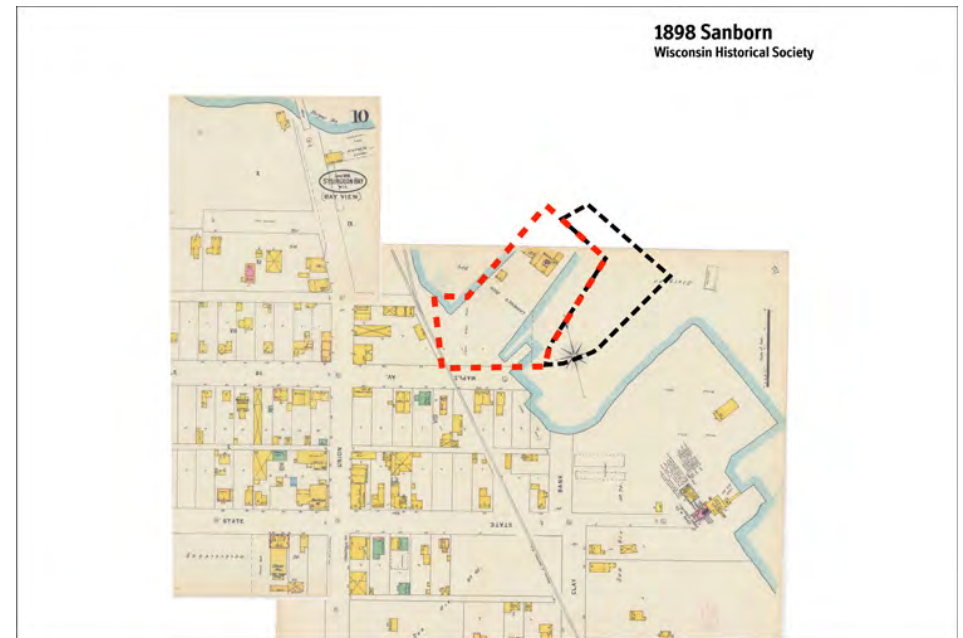
That 60 x 100 foot dock structure can be seen in this map. In 1881, an article noted that *“it took about one ton of iron for Harris' pier, besides a large quantity of spikes used in planking”*.



Beginning in 1891 the dock was owned by Charles Martin, and newspaper accounts of 1892 mention *“the dock is to be extended out into the bay 75 feet further, and the warehouse will be moved out nearly this far and placed on a solid foundation. The portion of the dock next to the shore is being torn up, it being the intention to fill in the whole property with refuse from the shingle mill, thus making the approach to the dock permanent”*.

And a bit later in 1892, the newspaper said, *“Charles Martin has made a wonderful change in the dock property... not only will the wharf be carried out into the bay another hundred feet or so, but extended to the shore the whole width. Piles have been driven on the side and plank so placed as to form a revetment. On the inside of this, refuse from the mill is being dumped, and when all the space shall have been filled in the top is to be covered with earth and gravel”*.

These substantial dock expansions can be seen in this 1898 Sanborn map.

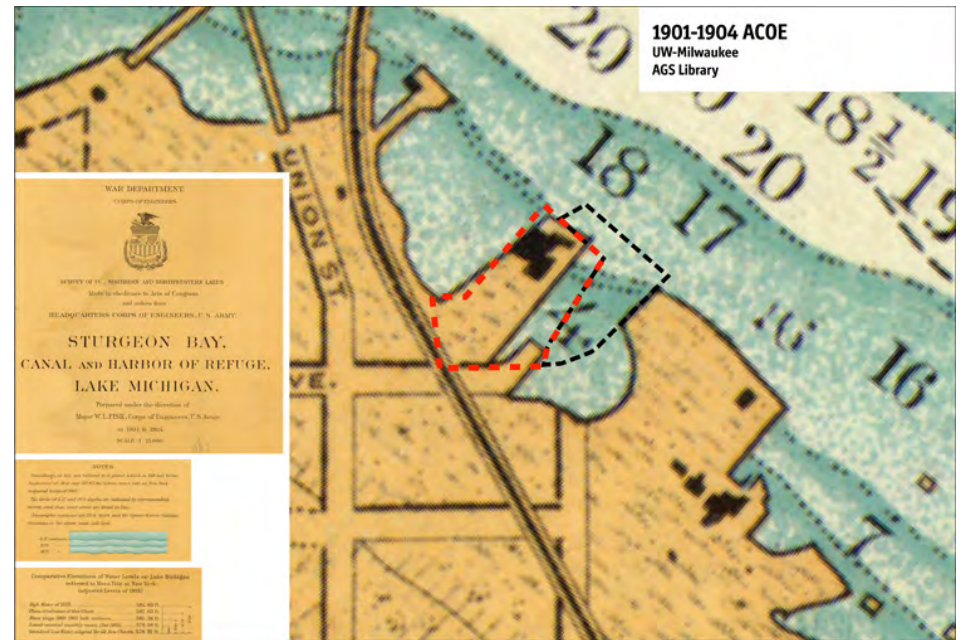


Martin died unexpectedly, and in 1897 A.W. Lawrence took ownership of the dock and buildings shown. The dock is labeled Lawrence's dock in this 1898 map.

This is one of the first modern Lake Surveys from the U.S. Army Corps of Engineers, 1901-1904. This long-running series of survey maps over many decades shows sounding depths, land elevations and shorelines, and included extensive surveyor fieldwork, involving on-land, near-shore, and far-shore survey teams. The field work and mapping methods and standards are well-described in the US Army Corps 1991 publication, “Charting the Inland Seas: A History of the US Lake Survey” by Woodford of the Army Corps Detroit District, available online.

Mr. Lawrence, as the new owner, also increased the dock. The newspaper in 1901 wrote, *“extending the dock about ten feet on the north [meaning the long north side], which is where the proposed elevator will be located. The dock will be run out into the bay about twenty feet”*.

Also at this time, February 1903, the newspaper says *“the City commenced work on the new fire dock at the foot of Maple Avenue” (point to the little fire dock)*. That little City fire dock will come up again in 1974.



In May 1903 Lawrence sold his dock property, with the new grain elevator, planing mill, and warehouse, to Teweles & Brandeis.

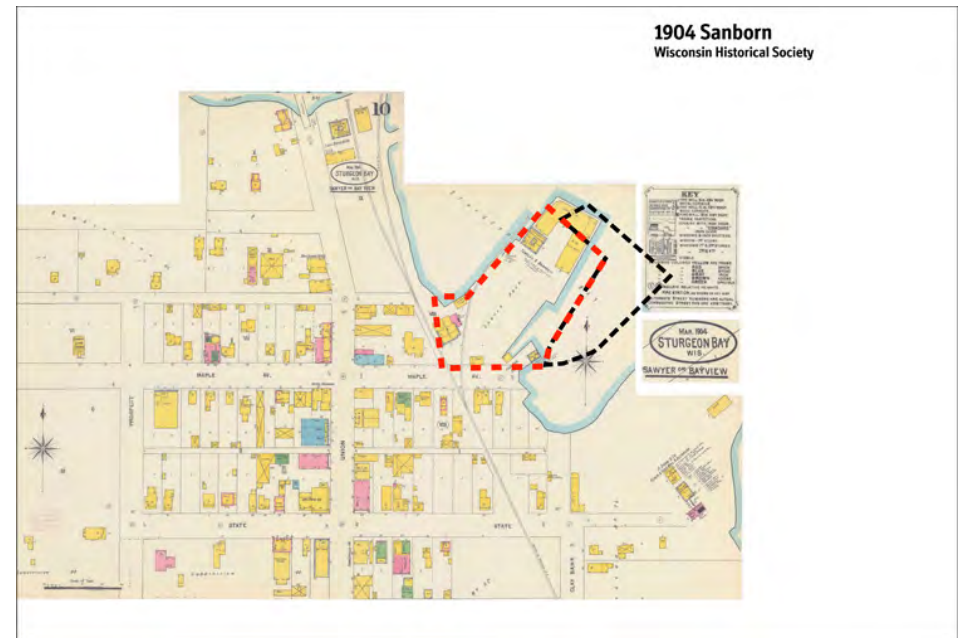
 The next speaker, Nancy Aten, will take up the history from this point. Thank you.

Hello, my name is Nancy Aten. I am a licensed landscape architect with experience in map overlays and finding and using map resources. I use historical maps in my professional work. I will continue the history of this dock from the acquisition of the dock and its structures by Teweles and Brandeis in 1903.

The 1904 Sanborn map describes the Teweles & Brandeis grain elevator in some detail, along with its new large group of warehouses. The grain elevator, still 40 ft by 50 ft, still stands today.

In 1904, the newspaper says about Teweles & Brandeis that, *“the dock will be extended on the south side, also an addition built to the warehouse. An addition is now being built to the ice house”*.

A lengthy article about the business appeared in the paper in October 1904. It says, *“The dock property owned by Teweles & Brandeis is situated at the foot of Maple Avenue... The dock has a frontage of 140 feet, and extends 150 feet out from the shore, the water being deep enough to accommodate the largest craft. Two large warehouses are built here, one at the end of the*



dock, 36 x 100 feet... and the other, 45x110 feet connecting it on the west, and running along the south side of the dock, and used principally for freight brought in here by the transportation companies.”

Let's look a little more closely at that.

The dimensions in the October 1904 article are not as clear as they could be and are easy to misinterpret, but thankfully we have abundant and consistent map and photo evidence to interpret. The “frontage”, along the warehouses on the long south side of the dock -- where the ships dock in every photo we have -- is about 140 feet. Continuing along that edge for 150 more feet towards shore, the water is “*deep enough to accommodate the largest craft*”. Thus, there is 290 feet of “deep-enough” water along the dock. From the tip of the dock back to the end of the newly-constructed little City fire dock actually measures around 360 feet on this scaled map. From the tip of the dock back to the water's edge where Maple Street terminates is about 460 feet. The waters along the long dock edge near Maple Street - beyond the 290-foot deep portion of that long dock edge - were too shallow for Great Lakes sailing vessels.



Again, from the October 1904 article, “*The dock property owned by Teweles & Brandeis is situated at the foot of Maple Avenue*”.

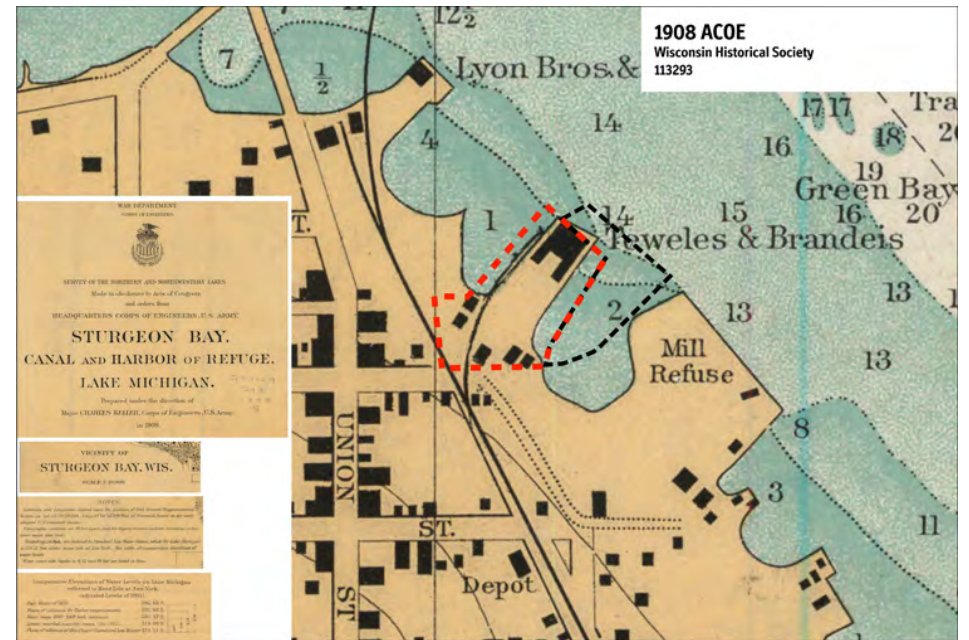
The dock continues to change over the decades through 1964.

The 1908 U.S. Army Corps of Engineers Lake Survey reflects the granary and warehouse shapes, and the fire station building.

I want to explain the numbers out in the water. These are sounding depths referenced to low water datum, as the map legend describes. In other words, where you see the “2” (*point*), it means that no matter how low in its natural cycle Lake Michigan is, you know there will always be at least 2 feet of water for your boat.

That low water datum reference point, of elevation 578.5, is three feet lower than the US Army Corps Ordinary High Water datum for Lake Michigan of elevation 581.5. Thus, when Lake Michigan is at a high level of its natural cycle, the water where the “2” is will be five feet deep.

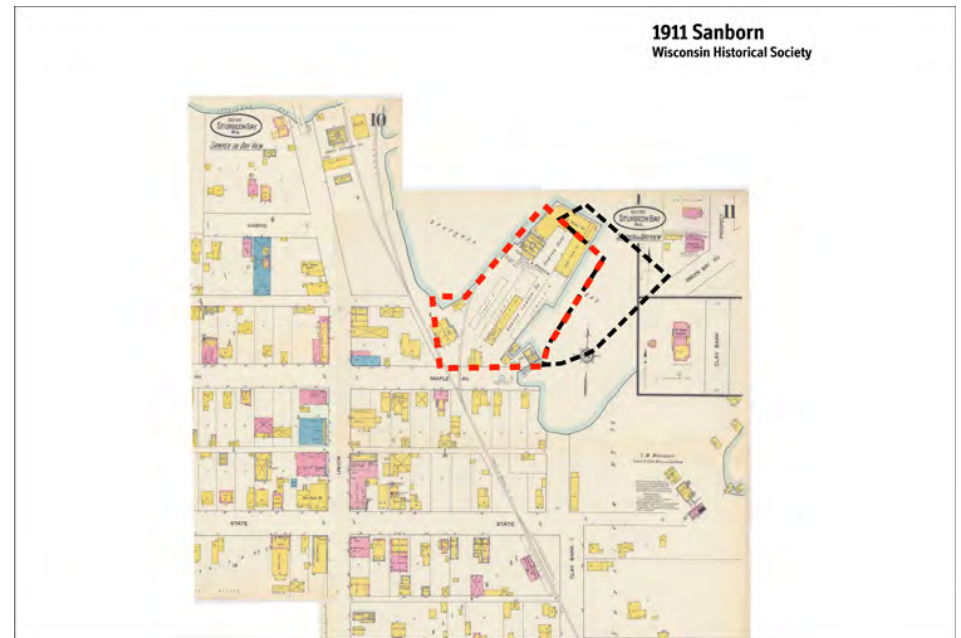
I bring this up to clarify that these are not shallow waters.



Teweles and Brandeis was an active dock. In 1905, the newspaper says, “*Teweles and Brandeis are engaged in filling around their dock property for the purpose of making a roadway along the railway tracks and to their pea warehouse*”.

In 1908, there is “*rebuilding about 100 feet of Teweles and Brandeis’ dock... The repairs are temporary as the owners of the property are planning on filling in under the structure with stone in the near future which will make a permanent job of it.*”

Also in 1908, “*The matter of extending the street at the foot of Maple avenue is something that should be done... As it is now, in order for the teams to get onto the Clay Banks Road from Maple avenue it is necessary to drive over private property (point)... By filling in at the foot of both these streets a connection could soon be made*”.



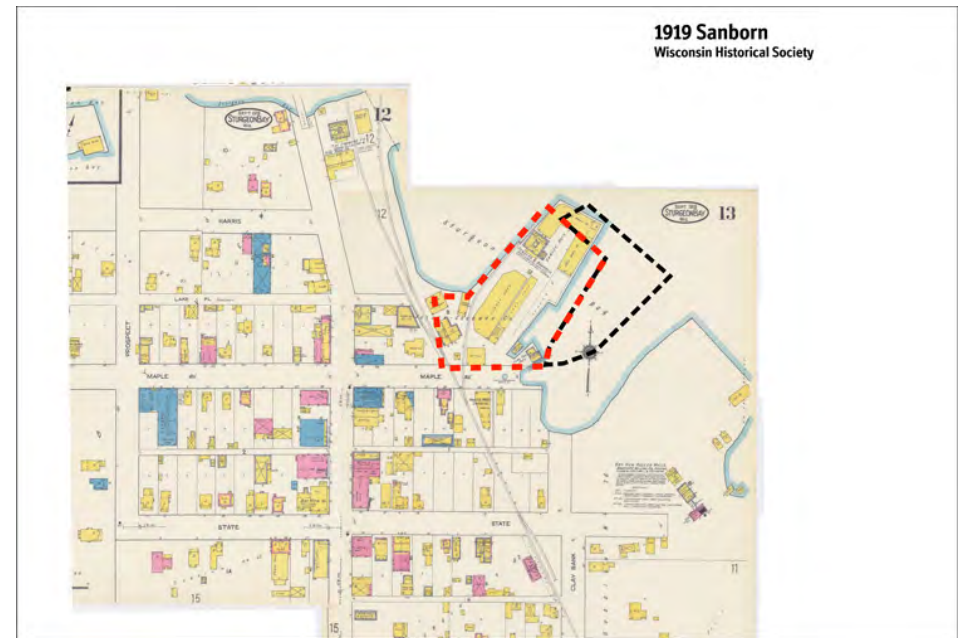
And regarding the little fire dock (*point*). In 1910, a newspaper article explained there was a question whether the little fire dock was part of Teweles & Brandeis’ property or part of the platted street which would be City property and concluding it was part of the street. That ultimately got transferred in 1974, which we will see later.

Here is the 1919 Sanborn map.

In 1912, “[At] the Teweles & Brandeis dock, here it is intended to build an addition to the south side of the wharf 60 feet long and 18 feet wide from the end of the warehouse [used by the lumber company] to the shore line.” This apparently fills in that notch in the dock next to the lumber warehouse.

In 1914, “Teweles & Brandeis will fill in their dock property on the southwest extending it to the street line. This will necessitate the removal of the boathouses at the foot of Maple Avenue [along the water].”

The boathouses are shown on the map in the tiny space between the little fire dock and the Teweles & Brandeis Dock. From the newspaper, “The firm owns the property on which the boathouses stand [but not the little fire dock, if you recall] and feels that it can make use of it by improving their property”.

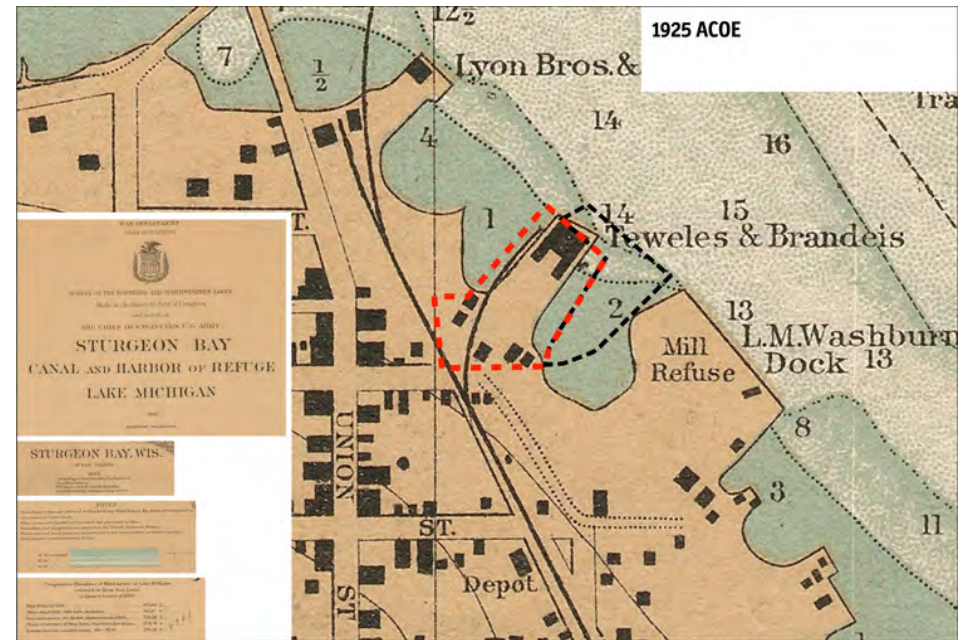


This results in Teweles & Brandeis filling in the water between their dock and the little fire dock.

The 1925 U.S. Army Corps Lake Survey map was referenced in the adjoining Parcel 100 DNR Letter of Concurrence. This map will be explained in more detail by another speaker, Dan Collins.

An enlarged version of the full map is shown on this big poster (*point*).

Note that in 1925, Maple Street does not yet meet Neenah Street, that area still being under the waters of Sturgeon Bay.

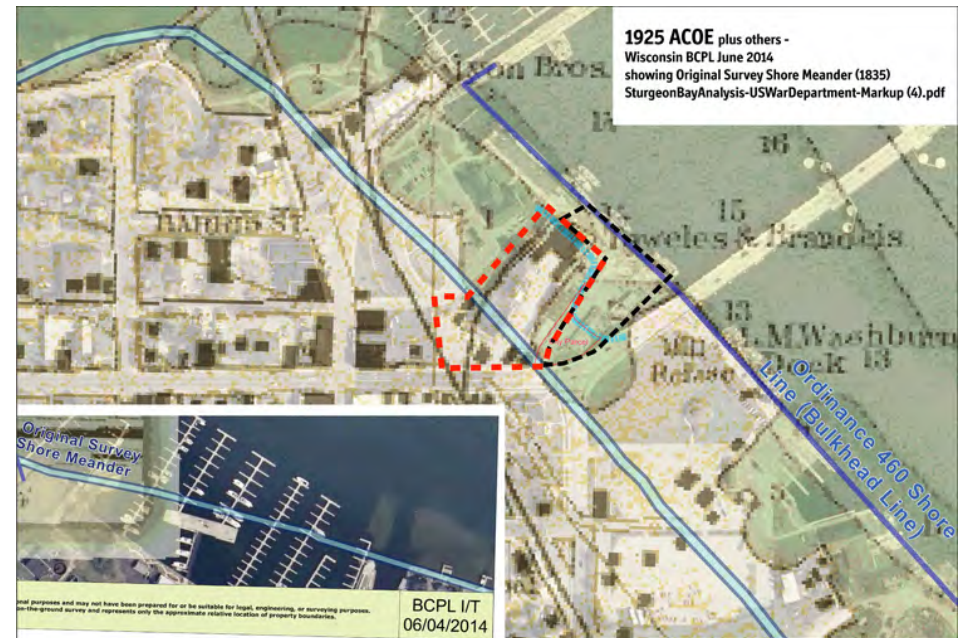


This is from a composite overlay created by the Board of Commissioners of Public Lands, and shared with the City of Sturgeon Bay in July 2014. It is an overlay of the 1925 U.S. Army Corps Lake Survey (seen on the previous image), the 1835 U.S. Government Land Survey Shore Meander Line (shown in light blue), and a contemporary aerial.

We have added the Parcel 92 boundary in red.

This overlap map is perfectly consistent with the other overlays being shown here.

The Board of Commissioners of Public Lands wrote to the City at the time saying, *“The Original Meander line of the bay noted by the original surveyor in 1835 appears to run through the current location of the intersection of Maple Street and Neenah Avenue. This meander line is marked in pale blue. Please note, the original plat map used in this composite was created in 1836.”*



The 1928 Sanborn map indicates filling of the intersection of Maple Street and Clay Banks or Bay, later called Neenah Avenue (and the north block of Neenah was later slightly realigned).

It clearly shows the Teweles and Brandeis Dock extending from Maple street still, into the waters of Sturgeon Bay.

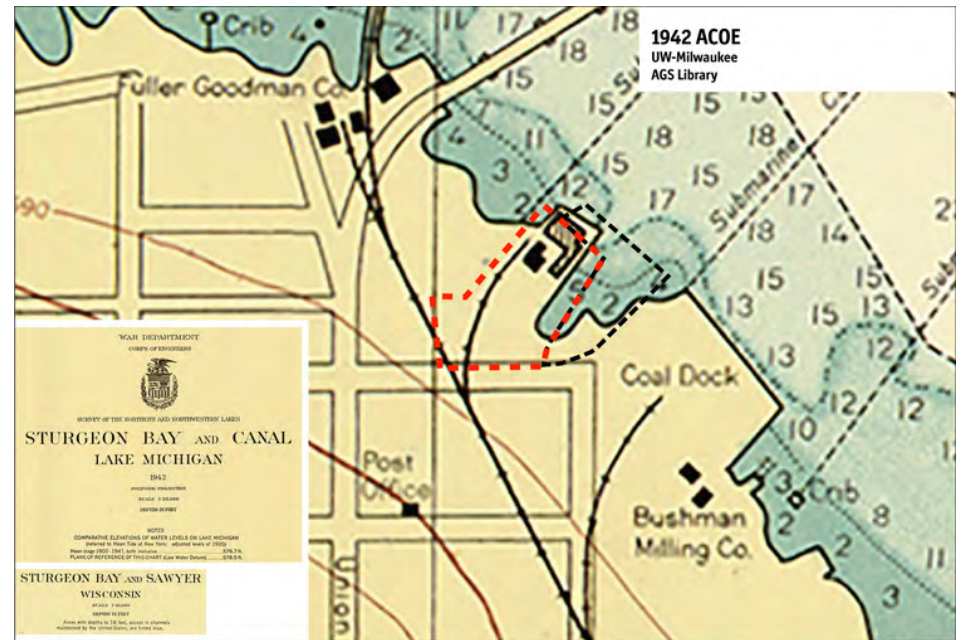
The original engine house on the city's little fire dock had become boathouses by the 1928 Sanborn map.

Then, in 1935, the newspaper reported, "*certain fishermen made a request to be permitted to erect a fish dock at the foot of Maple Avenue. They were asked that if they would so construct it, that it could be used by the City as a Fire Dock and they agreed to this*".



In about 1939, the City began establishing a coal dock on the dock to the south (formerly filled with mill refuse).

Another speaker, Christie Weber, will show you photographs from that time of this area.

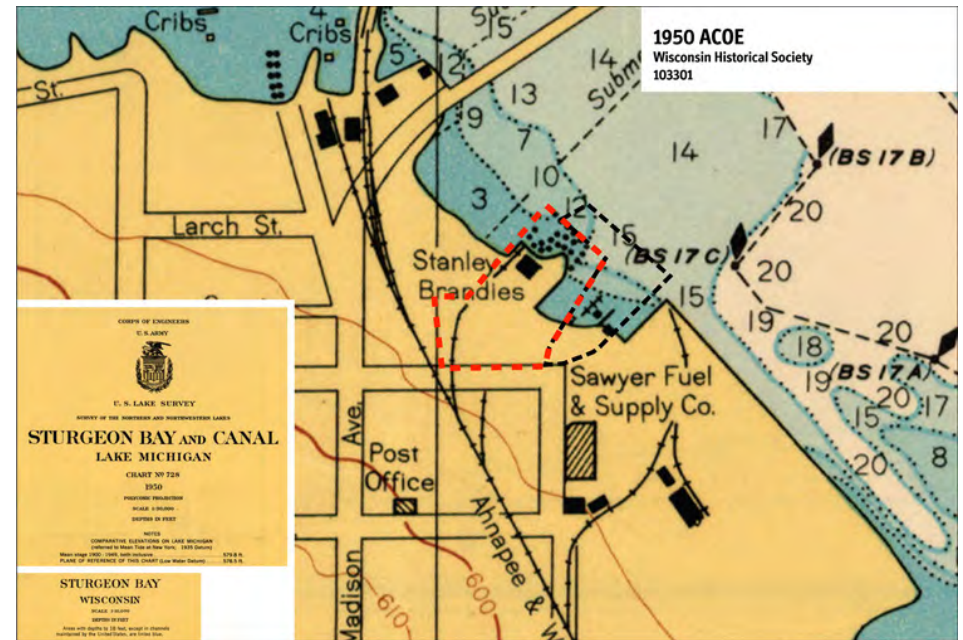


In February 1944 was a large warehouse fire on the Teweles & Brandeis Dock, that completely destroyed the warehouses at the end and south side of the Teweles and Brandeis Dock, and burned the dock surfacing as well. The ironwork and stone, the piers and cribs, would have remained at the end and along the side, and are indicated on this map showing the much shortened-dock.

The steel-clad grain elevator survived the fire.

In 1953 Teweles and Brandeis sold to Door County Co-op, as reported by the newspaper, *“all property and stock, with water frontage. Buildings include a large warehouse and grain elevator and two other smaller storage buildings.”*

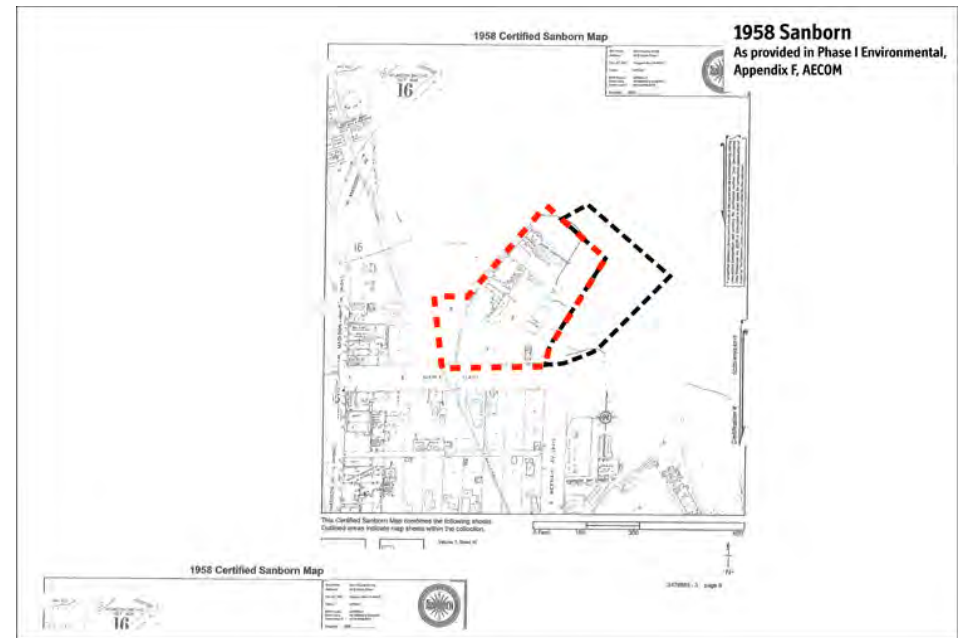
The Door County Co-op promptly announced in the newspaper a 45 x 85 foot addition to the Brandeis warehouse, and later a 60 x 90 foot addition, *“built on the southeast side of the building, near the water. To dig a grinding pit a coffer dam has been constructed to keep out what would be 10 feet of water”.*



In 1948, the City had intended to rebuild the engine house on the now “made land” of the little fire dock; a title question arose again. The newspaper stated, *“Plans for the construction and operation of a fire station on the west side were returned to the fire and police commission for further study when it was learned that there was some question about the title to the land on which the city had hoped to build the auxiliary station. The area is at the foot of Maple St and plans included building a 16x40 foot brick front structure.”*

The engine house structure was built in 1950, on the now-filled little fire dock, and is seen in this map.

By 1958, Door County Co-op had extended a portion to the side of their dock, filling beyond the “made land” of the former little fire dock, to accommodate a new warehouse structure. This is in part sitting on remains of their own dock damaged in the 1944 fire. In 1956 the City had



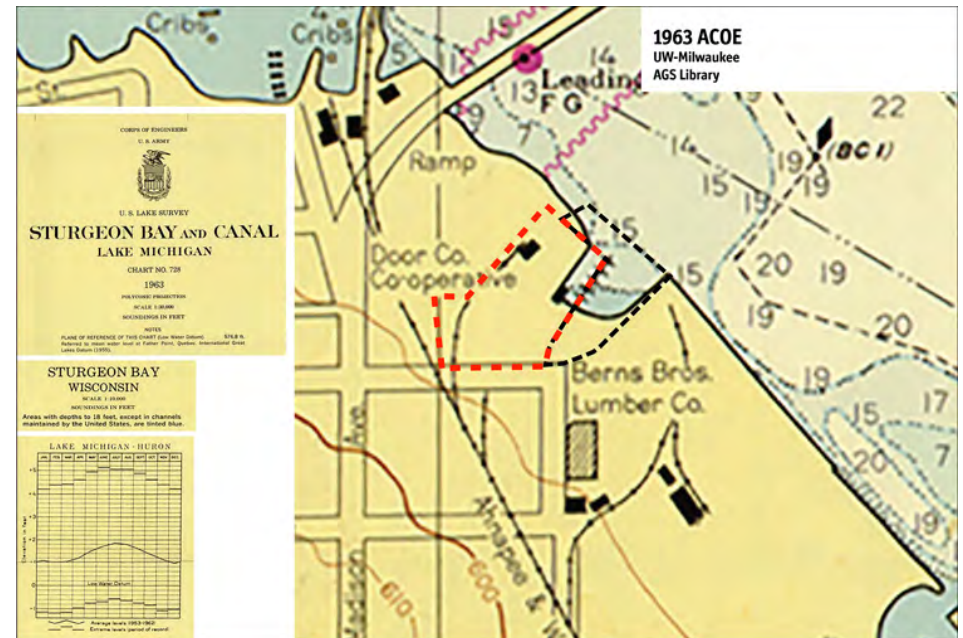
quit-claimed the warehouse’s rectangle to Door County Co-op.

In the 1950s the City began the process of new bulkhead approval. Although approval was finally obtained in 1955, the un-filled areas remained open for some time.

From 1957 until about 1963, the City constructed and maintained a small boat dock, a spine with fingers, in the water south of the Door County Co-op Dock. It can be seen on this 1963 map right along the red boundary of Parcel 92 (*point*).

Filling in the water next to the Door County Co-op Dock proceeded in earnest in September 1964 with the intention of completing filling behind the bulkhead later that fall.

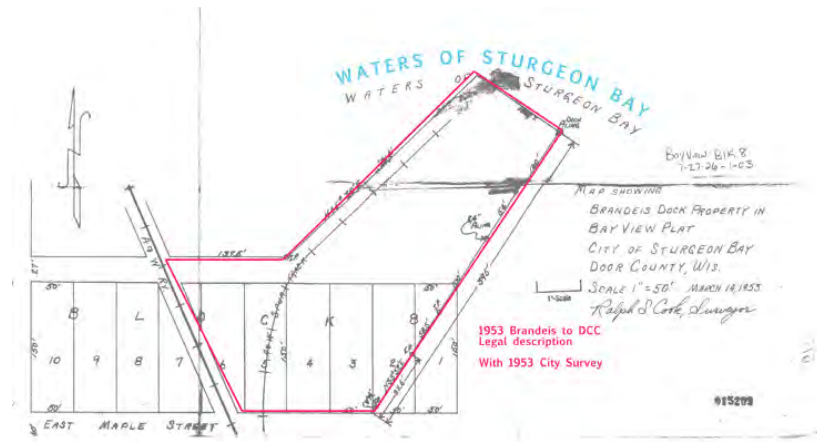
Newspaper articles submitted with my testimony provide further details. The area filled for the new bulkhead is sometimes referred to as the City Dock, or Big or New City Dock.



The dock has a history of numerous changes by its succession of riparian owners - new construction, expansion, filling underneath, loss of dock surface by fire, subsequent construction and expansion. But throughout it all, it is still a dock built into the waters of Sturgeon Bay and filled underneath. The historical shoreline remains back near Maple Street.

This final series of six maps are important to understand the full history of the dock. We will take a closer look at the dock in the 1950s and 1960s, up until the new bulkhead line -- which was far from the original shoreline -- was finally filled in late 1964. These six maps are also all themselves at a consistent scale and overlay.

First is the metes and bounds description (in pink) shown with the 1953 survey, at the time of transfer from Teweles and Brandeis to the Door County Co-op.



[The metes and bounds, distances and compass bearings, were drawn digitally by me using Adobe pro vector tools, Adobe Illustrator].

Once I had digitally drafted the outlines for these several legal descriptions, using the distances and compass bearings, I simply overlaid them without modification onto the other maps and survey drawings, at the same scale.

Note that this is the smaller Teweles & Brandeis dock following the 1944 fire. Also note the Waters of Sturgeon Bay label curving around the dock.

In 1956 the City quitclaimed a rectangular dock addition to the Door County Co-op, shown here in purple. Here the legal boundaries are overlaid on the 1958 Sanborn map.

Recall that the Co-op had filled between its dock and the former little fire dock, extending the “made land” out from Maple Street. The new engine house is seen on this map.

The new purple rectangle is the next piece northward. Door County Co-op extended this portion to the side of their dock, to accommodate a new warehouse structure. This is in part sitting on remains of their own dock damaged in the 1944 fire.

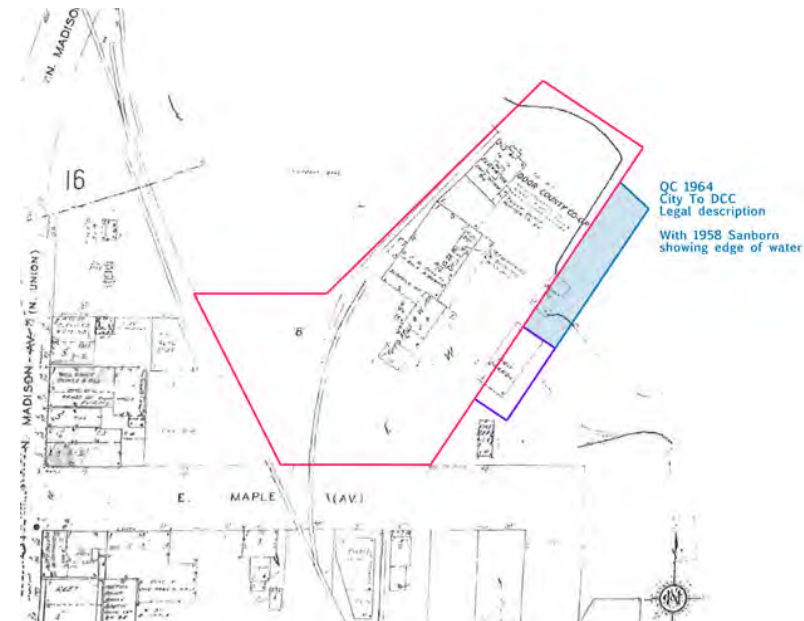
Here in 1958, the outermost half of the Teweles & Brandeis Dock’s length is still surrounded by water, and I call your attention in particular to the water beyond the new purple rectangle.



In February 1964 the City and Door County Co-op swapped parcels. Here, shaded blue, is the second rectangle that the City quitclaimed to Door County Co-op, where an additional Co-op warehouse was later constructed.

The bulkhead line, well beyond the end of the dock, was eventually completely filled by the end of 1964. The waters to the south of the Door County Co-op were the last to be filled, seen in 1962 and 1963 photos. A September 1964 newspaper photo shows the unfinished filling and Roen Salvage at work to complete it by the end of the year.

I can't be sure whether this particular February 1964 blue rectangle quitclaimed to the Door County Co-op was a constructed or repaired dock extension by the Co-op, or filled in 1964 by Roen Salvage for the Co-op, or a combination.

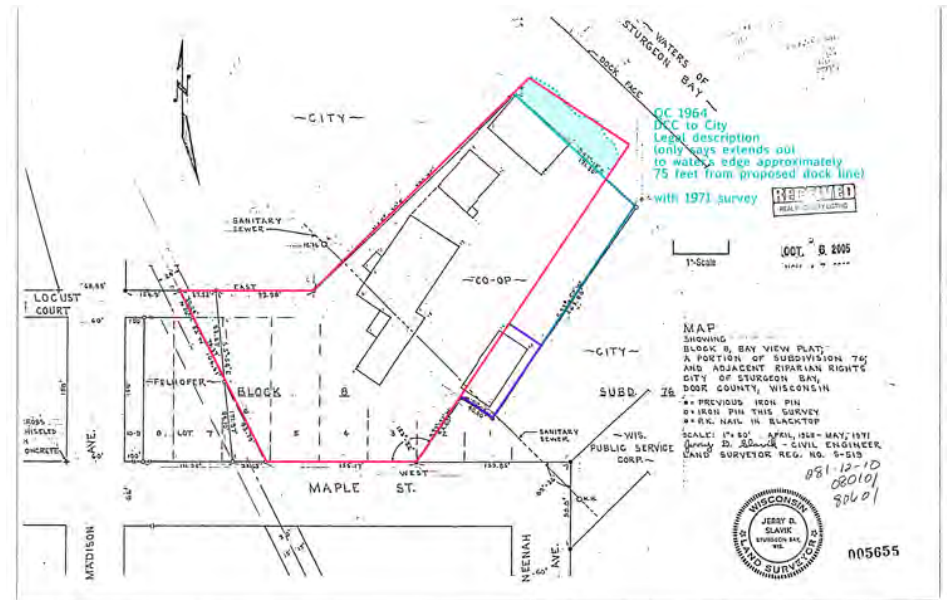


But, most importantly, I can see that based on the 1958 Sanborn map, it was water in 1958. And based on a 1963 aerial photo that another speaker will show, it was water in 1963. And based on the 1963 Army Corps map, it was water in 1963.

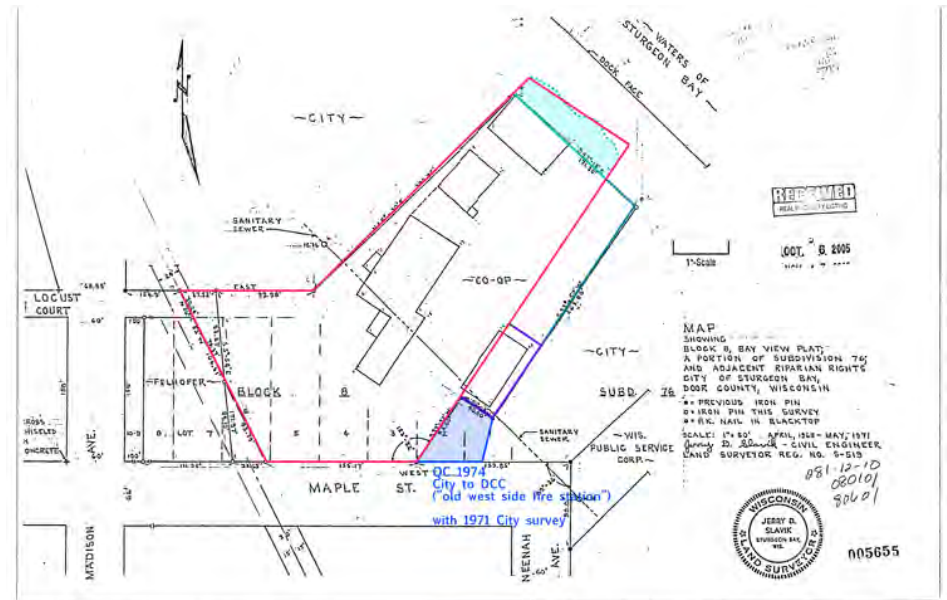
There is no possibility it naturally accreted.

At the same time in February 1964 the Door County Co-op quitclaimed the turquoise area at the end of the dock to the City for the Big City Dock. The proposed bulkhead line or dock line is shown on this survey map.

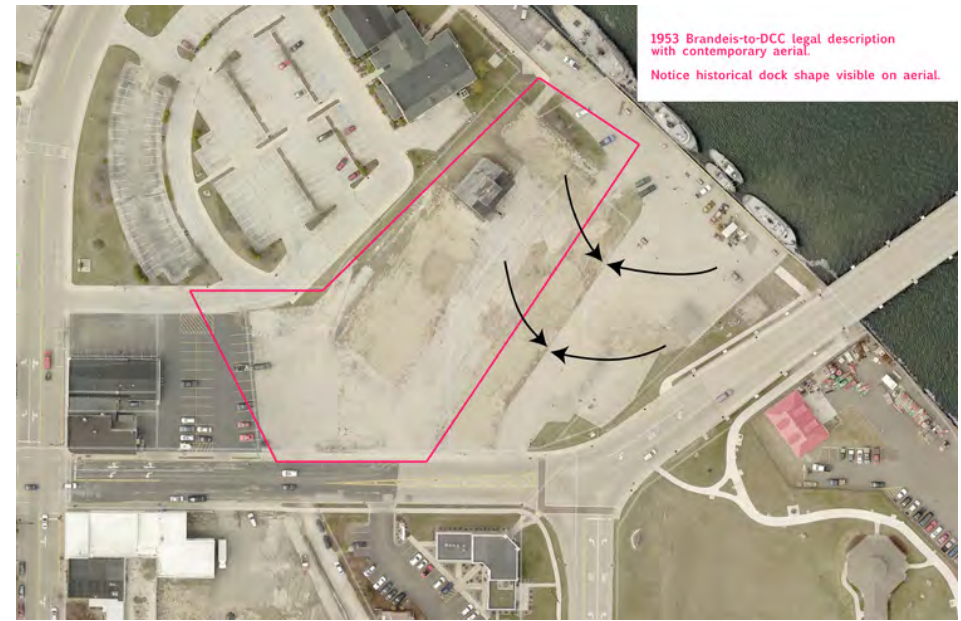
This metes and bounds description does not delineate the turquoise area precisely, but rather extends the two lines on the sides of the 1953 parcel outward into the waters of Sturgeon Bay, to a line approximately 75 feet landward of the proposed bulkhead line.



Finally, in 1974, the City quitclaimed the old little fire dock, in blue, originally built into the water at the foot of Maple Street, and now “made land”, to the Door County Co-op, along with the engine house, which remained standing for almost 40 more years.



Showing the 1953 metes and bounds on a contemporary aerial also highlights that the contemporary aerial still retains the mark of the edge of the extended dock area, the line shown by the black arrows here.



Finally, completing the composite overlay, we can see that the 1953 metes and bounds together with the quitclaims just discussed, along with later additional adjustments on the west edge, exactly creates the modern Parcel 92, in red.

The maps and evidence are clear that the quitclaimed rectangles were not filled by natural accretion. Evidence is clear that the little fire dock was a constructed dock into the water originally, and that the long quitclaimed rectangle was in the water in the year prior to the quitclaim.

All of the historical maps and surveys shown are altogether entirely consistent that most of Parcel 92 is constructed dock and extensions that were filled by the riparian owners, to the full width of today's Parcel 92, and extending from the former foot of Maple Street.

I used the historical shoreline mapping and map and survey overlays provided by surveyor Don Chaput. I created the 1953 and subsequent quitclaims' metes and bounds directly using their described distances and compass bearings. Using the graphical scales provided on maps, the persistent street grid, the persistent granary, the



persistent platted blocks, and the Door County Land Information Office GIS portal, I made additional overlays of historic maps in order to show 20 historical maps, three plats, and additional surveys at the same scale, same overlay, and including Parcel 92. I reviewed many historical newspaper articles, available online by text search, to confirm the historical process of dock building into the waters of Sturgeon Bay. Those newspaper articles are also included in my written submittal.

I ask you to find that the entire width of Parcel 92 is constructed and artificially filled dock, by a succession of riparian owners, extending into the waters of Sturgeon Bay, and that the historical shoreline, prior to dock building, is the best determination of the Ordinary High Water Mark across the entire Parcel 92. Thank you.