

(Re)Sinking History: Preserving Alexandria's Derelict Merchant Fleet

Tatiana Niculescu

Office of Historic Alexandria - Alexandria Archaeology

Finding the Fleet

In the 18th century, Alexandria's waterfront was literally and figuratively created by ships. Redevelopment paired with the City's unique Archaeological Protection Code revealed the remains of historic vessels, wharves and land making structures at the Hotel Indigo (44AX229) and Robinson Landing (44AX235) Sites. These important pieces of maritime heritage provide new opportunities for studying the past while simultaneously posing massive preservation challenges.



Map of historic shorelines and location of 4 ships

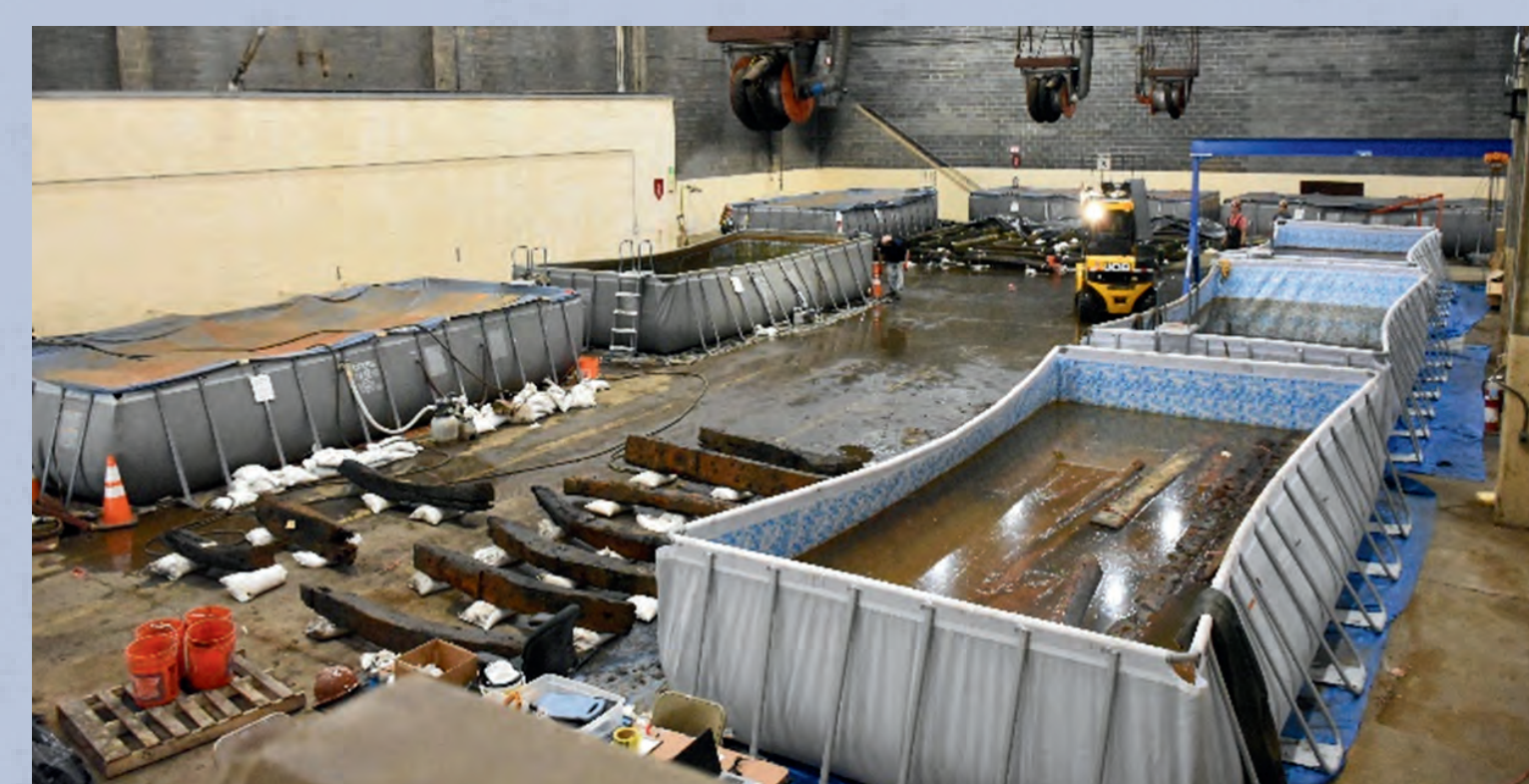
Between 2015 and 2018, Thunderbird Archeology excavated the remnants of four historic ships within two city blocks. Archaeologists found them terrestrially because early Alexandrians extended their waterfront lots to reach deeper water by making new land using a combination of soil, timber wharves, and occasionally derelict ships through a process locally called "banking out." These land-making projects were fundamental to the development of the city's port and created the modern shoreline.



Robinson Landing Site, F.155 - Ship 2

Initial Preservation

After excavation City staff placed the timbers in water, initially in metal bins with polymer liners, and later in above ground swimming pools. Archaeologists monitored the condition of the artifacts and changed the water regularly.



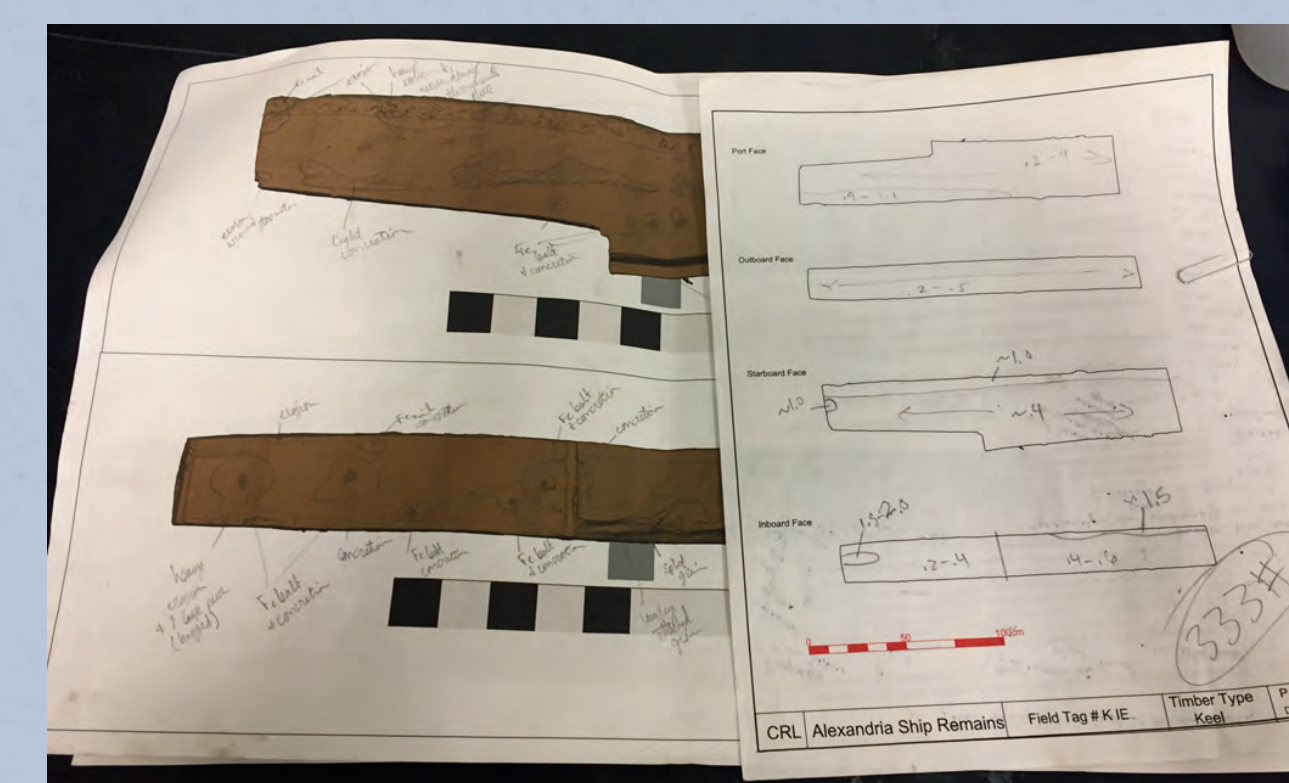
Above ground swimming pools storing ship timbers

Conserving the Hotel Indigo Site Ship



Ship timbers wrapped for transport to the CRL

This vessel remnant was shipped to Texas A&M University's Conservation Research Lab (CRL) in June 2017 for further documentation and conservation. It is expected to complete the process in a few years and then will return to Alexandria for interpretation and exhibition.



Documentation



Freeze dryer at the CRL

“To have just one of these ships is enough to make any community lucky - to have four is extraordinarily fortunate. They should be preserved and used to tell the story of our seaport town.”

2019 Historic Alexandria Survey Response

Ponding the Robinson Landing Site Ships

As soon as these ship timbers surfaced, City of Alexandria archaeologists began exploring alternative curation methods to protect them for future study and exhibit. Storing over 1,000 timbers in above ground swimming pools was a creative but short-term solution. A team of City archaeologists and other staff, nautical archaeologists, conservators, the Alexandria Archaeological Commission (AAC), and other residents and stakeholders considered a full range of preservation options, carefully assessing risks, opportunities, public sentiment, and financial constraints.

In May 2022, City staff, conservators from the Maryland Archaeological Conservation (MAC) Lab, and AECOM archaeologists and scientific divers implemented a creative storage solution for the ship remnants. The project team carefully wrapped, tagged, and submerged 1,185 timbers in Ben Brenman Pond. In November 2022, a selection of artifacts were sent to the MAC Lab for conservation.



Wrapping timbers



Loading timbers onto floating dock



Wrapped timbers at pond



Moving and submerging a timber



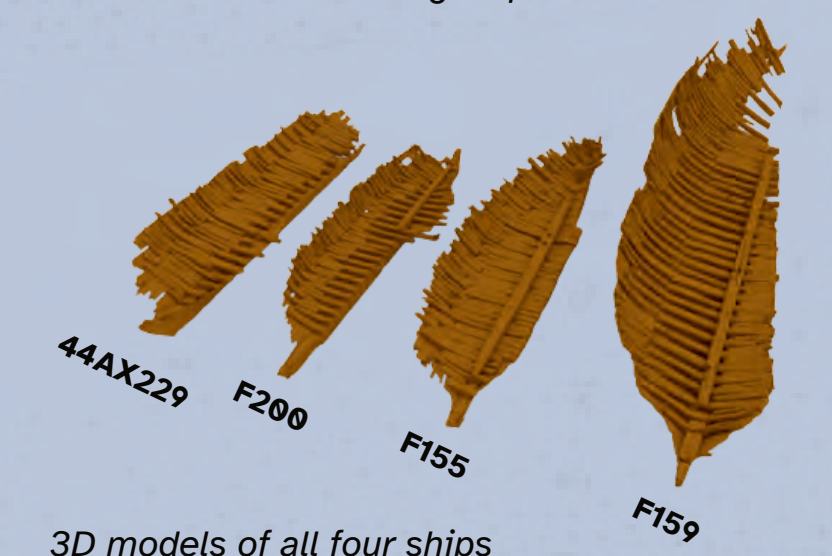
General locations of ships

Digital Preservation

City archaeologists and the CRL 3D laser scanned each timber before they underwent ponding or conservation. The CRL then stitched these scans together to help create virtual and physical models of all four ships which provide data for studying the vessels even when the artifacts themselves are difficult to access. One of these models was 3D printed and is on exhibit in the Alexandria Archaeology Museum.



Laser scanning ship timbers



3D models of all four ships

Diving to Monitor

On June 8, 2023, archaeologists and divers from AECOM, a MAC Lab conservator, and City archaeologists conducted the first inspection of the timbers. The curation solution appears to be working as intended. The City will conduct future condition assessments every five years and will reassess the approach and continued feasibility in 20-25 years.



Conservators and archaeologists assessing the condition of a ship timber

Mapping the Pond

In September 2023, the State Underwater Archaeologists conducted a side scan sonar survey of Ben Brenman Pond. In a few hours, he was able to kayak over the area where the timbers were submerged, gathering data to produce a map of the pond bottom and the submerged timbers.



Side scan sonar survey in progress

Acknowledgements

Thanks to Alexandria Archaeology and other City staff; Nichole Doub (MAC Lab); AECOM; Thunderbird Archaeology, a division of Wetland Studies; EYA, LLC; the CRL; VA DHR; and all our wonderful volunteers who make our program possible.

