

The Chicago shoreline originally consisted of a natural sand edge, with dunes and swales and marshy lowlands. Prior to the 1770s, the area was primarily inhabited by native American Indians. As the shipping industry grew and water-borne travel increased from the Great Lakes to the Mississippi River, via the Chicago, des Plaines, and Illinois Rivers, the importance of the area around the mouth of the Chicago River was quickly realized. To prevent the British and their Indian allies from recapturing this vital water transportation route, Fort Dearborn was built in 1803 on the south bank of the Chicago River.

By the 1830s, urban settlers began arriving. In 1835, piers to protect the harbor entrance and a lighthouse to guide shipping were built. As Chicago grew into a city, which was incorporated in 1833, lakefront shipping expanded. 1848 saw the completion of the Illinois-Michigan Canal. In 1860, the Illinois and Michigan Canal was dredged, and in 1889, the Metropolitan Sanitary District of Greater Chicago was formed to begin building the Sanitary and Ship Canal. In 1900, the Chicago Sanitary and Ship Canal was completed; as a result, transportation and waste-carrying capacity was greatly increased and the river's flow was reversed inland to the Calumet River.

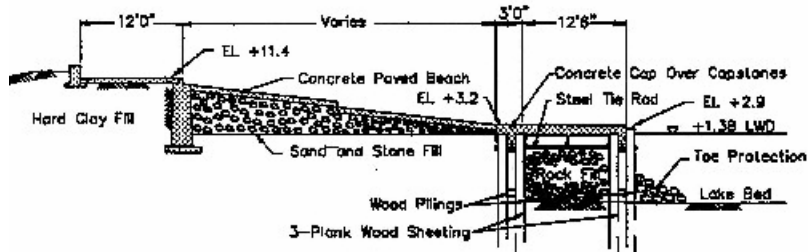
In a span of 75 years, Chicago, specifically along Lake Michigan, became the center of intense commercial, industrial, and transportation development. Some major historical events that helped to guide the lakefront to what it is today are highlighted.

- An 1836 surveyor's map by the Commissioners of the Illinois and Michigan Canal Company indicated that the area between Madison Street and 11th Place from Michigan Avenue to the Lake be "open ground – no building".
- On an 1839 subdivision plat of Fort Dearborn lands, lands fronting Lake Michigan between Randolph and Madison Streets were indicated to be public ground, open and clear of buildings.
- In 1869, the Illinois State Legislature established three independent park commissions – the south, the west, and the north.
- In 1871, the "Great" Chicago Fire occurred. Some of the debris from the Chicago Fire was used as landfill to construct Lakefront Park, which is now known as Grant Park.
- In 1890, Aaron Montgomery Ward started litigation that helped guide the development of Grant Park and other lake frontage land to what it is today.
- Burnham and Bennett, the architects of the 1909 Plan of Chicago, urged the development of the lakefront as park space to the greatest possible extent.
- In 1919, the Lakefront Ordinance was passed, which was an agreement among the City, the South Park Commission, and the Illinois Central Railroad restricting development on the lakefront and the Chicago River to 47th Street.
- South Lake Shore Drive was completed in 1930. The two northbound lanes were named after Leif Eriksen and the two southbound lanes after Christopher Columbus.
- In 1934, the South, West and North Park Commissions consolidated into the Chicago Park District.

The process of planning, development and construction of the lakefront took place over several decades. Shoreline expansion started in the 1890s in the areas that would become Grant Park and Streeterville. However, the major shoreline expansion took place between 1920 and 1940. The process of building out the land along the Lake Michigan shoreline involved driving an outer line of bulkheads away from the original shoreline and then filling behind it with material dredged from the Lake Michigan bottom, sand from the Indiana shoreline, general construction debris, alley waste and even debris from the Chicago Fire, in places up to a mile away from the original shoreline.

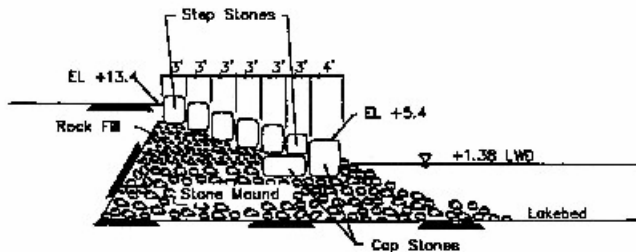
In 1910, the construction of the existing shoreline protection structures began. From 1910 to 1931, the shoreline protection structures were built along the lakefront from the north side of the city to the south.

The additional land created was developed to have a wide variety of uses (e.g., parkland, beaches, harbors, lagoons, golf courses, etc.). Most of the land along the lake is open to the public. The protection structures generally consisted of limestone blocks, wooden piles, tiebacks, and wakefield sheeting, but in some instances were paved beaches or perched sand beaches. In many areas, the limestone was grouted to help keep them in place. The following cross-sections show examples of some of the types of structures that were built as erosion control and shoreline protection measures.



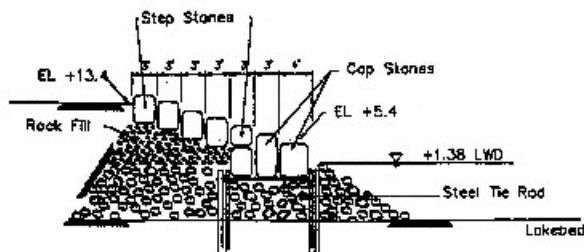
TYPE A

Example of the revetment between Diversey Parkway and Fullerton Parkway.



TYPE B

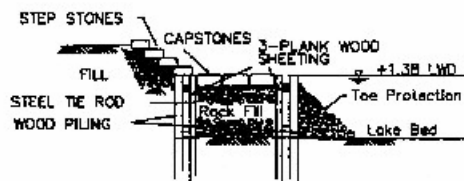
Example of the revetment between Belmont Avenue and Diversey Parkway.



TYPE-C

Example of the revetment between

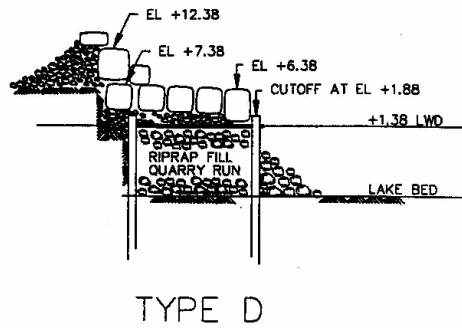
- Melrose Street and Belmont Avenue; and
- Montrose Avenue Peninsula.



TYPE D1

Example of the revetment between

- Belmont Avenue and Diversey Parkway;
- Buena Avenue to the Belmont Harbor; and
- Fullerton Avenue to North Avenue.



Example of the revetment between

- Outer perimeter of Northerly Island;
- Burnham Park Harbor to Pershing Road; and
- 39th Street to 56th Street.

The following photographs highlight the construction and infilling of the water to create the land along Lake Michigan.



Railroad sheds and rolling stock were familiar objects along the lakefront in 1892.



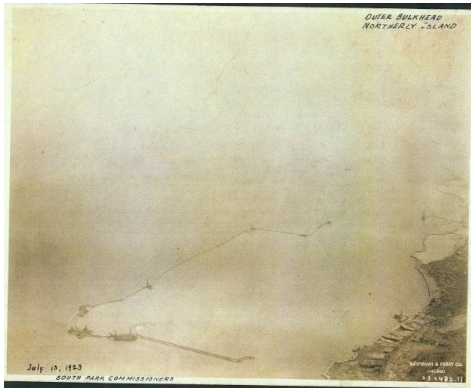
Installation of the bulkhead between Randolph Street and 12th Street, 1923. Cutting piles and sheeting.



Installation of the bulkhead between Randolph Street and 12th Street. Shows limestone blocks to be placed.



1922 Bulkhead extending the shoreline completed.



1923 aerial, showing the outer bulkhead of Northerly Island.



1925 aerial, showing filling operations.



1928 aerial, showing filling operations in what is now Burnham Park.



1929 aerial, showing construction of Adler planetarium, the filling operations at 12th Street Beach.



Shoreline early 2000s. From the south, looking north.



Shoreline early 2000s. From the northern end of the City, looking south.



Shoreline early 2000s. From Belmont Harbor, looking south.

References:

Chrastowski, Michael J., Department of Natural Resources, Illinois State Geological Survey, Geology of the Chicago Lakeshore: The Chicago River Mouth (poster), 1998.

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