US Army Corps of Engineers ®
Detroit District

HARBOR INFRASTRUCTURE INVENTORIES
Indiana Harbor, Indiana

Harbor Location: Indiana Harbor is located on the southwest shore of Lake Michigan in East Chicago, Lake County, Indiana; approximately eleven miles south of Chicago Harbor in Chicago, IL.

Authority: Rivers and Harbors Acts 1910, 1919, 1930, 1935, 1937 and 1960.

Project Description: Indiana Harbor is a deep draft commercial harbor. The harbor is protected by 3,085 linear feet of laid-up stone and concrete caisson breakwater structures. Longest fetch and direction: 300 miles, northeasterly. Maximum Recorded Wave Height: 20.3' (1965). Typical Storm Wave (2-yr offshore wave): 16.7'.

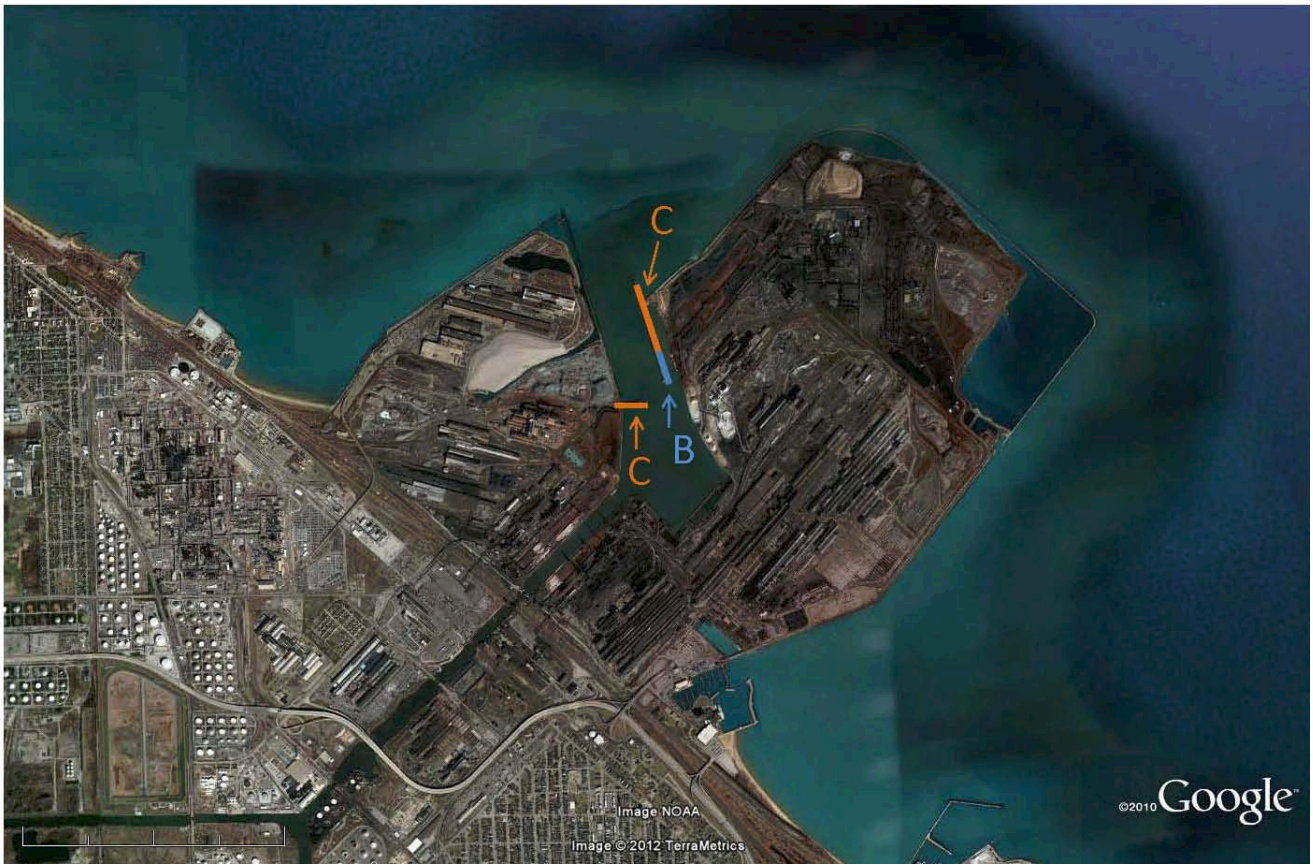
Traffic: 15,783,800 tons (5-Year average, 2004-2008)

Transportation Importance: ArelorMittal's Indiana Harbor facility is the largest steelmaking complex in North America. It is fully integrated, operating five blast furnaces, and has a total raw steelmaking capability of 10M tons annually. It produces hot-rolled, cold-rolled and hot-dipped galvanized sheet products. Markets served include automotive, appliance, agricultural, construction, line and pipe tube, electrical/motor lamination, converters and steel service centers. Commodities include iron ore, limestone, coke, gypsum, steel, cement and concrete, petroleum products, and miscellaneous bulk products. Bulk commodities that pass through Indiana Harbor generate nearly $894M annually in direct revenue which supports nearly 3,665 jobs.

Congressional Interest:

- Representative Peter J. Visclosky, D-IN-1
- Senator Richard Lugar, R-IN
- Senator Dan Coates, R-IN

Current Condition Assessment: C



Date of Site Visit: 23 August 2010

Summary of Impact: The immediate impact of a break or overtopping of the breakwaters would be upon the ArcelorMittal – Indiana Harbor Works. Significant wave activity within the harbor could damage any vessel moored at Indiana Harbor Works as well as vessels moored further up the Indiana Harbor Canal. Additionally, any breach in the breakwater could potentially increase the rate of shoaling within the federal and private channels, resulting in added transportation costs due to light loading. The shore structure with the greatest exposure is the ArcelorMittal – Indiana Harbor Works.

Examples of Protected Infrastructure:

1. ArcelorMittal – Indiana Harbor Works: Largest steel mill in North America. The Indiana Harbor Works is located on 3,100 acres along the southern shore of Lake Michigan, about 20 miles southeast of Chicago. The complex is divided into the East and West Works. The mill runs five blast furnaces (two on the west side and three on the east side), two sinster plants, a lime plant, three basic oxygen furnace shops and temper mills, one aluminizing lime plant, 80" and 84" hot strip mills, two cold rolling and finishing mills with pickling line, tandem mills, one aluminizing line, two galvanizing lines, batch & continuous annealing furnaces, and temper mills which produce products mostly for the car industry. Rebar is also produced in a bar mil. The Indiana Harbor Works employees over 10,000 workers and is capable of producing over ten million tons of steel annually. The Indiana Harbor Works Facility has recently been awarded $31.6 million in American Recovery and Reinvestment Act stimulus funding by the U.S. Department of Energy for the plant's No. 7 blast furnace gas flare capture project.

Potential Impact Area: The following graphic displays property parcels that could be impacted within various zones defined by different setbacks from the shoreline behind existing Federal coastal structures. Values are based on real property tax assessments from these parcels, and don't reflect any detailed coastal zone damage assessments. Figures simply reflect property values at various setbacks.