TENNESSEE COAL & IRON CO.,
ENSLEY WORKS
Birmingham Industrial District
Immediately W. of the Ensley Commercial
& Residential Districts
Birmingham vic.
Jefferson County
Alabama

HAER No. AL-52

PHOTOGRAPHS

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
Department of the Interior
P.O. Box 37127
Washington, DC 20013-7127

ADDENDUM TO
TENNESSEE COAL & IRON CO., ENSLEY WORKS
(U.S.X., Ensley Works)
(U.S. Steel, Ensley Works)
Birmingham Industrial District
W. of residential & commercial districts
Birmingham vicinity
Jefferson County
Alabama

HAER No. AL-52

HAER
ALA
37-BIRM
16-

WRITTEN HISTORICAL & DESCRIPTIVE DATA
BLACK & WHITE PHOTOGRAPHS

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HISTORIC AMERICAN ENGINEERING RECORD

TENNESSEE COAL & IRON CO., ENSLEY WORKS
(U.S.X., Ensley Works)
(U.S. Steel, Ensley Works)

ADDENDUM TO
Tennessee Coal & Iron Co., Ensley Works

HAER No. AL-52

Location: The U.S. Steel Ensley Works is bisected by AL 269, also known as Birmingport Road, Birmingham, Jefferson County, Alabama. The site is located immediately West of downtown Ensley, with Burlington Northern Railroad's tracks running length-wise adjacent to the site and the downtown Ensley area. The site is also bordered by Village Creek on the North end; by the Wylam community to the Southwest; and a combination of the Sherman Heights neighborhood and a mix of slag dumps, agriculture uses and undeveloped lands on the northwest side. Although access is currently restricted, Eastern access is available via the I-20/59 interchange at 20th Street, with 20th Street changing into AL 269. Western access is available via AL 269.

Present Owner: U.S.X Corporation

Period of Significance: 1888-1978

Builder/Architect/ Engineer: Multiple

Project Information: This report is based upon written documentation donated by the Birmingham Historical Society, reformatted to HABS/HAER guidelines.

Significance: The Ensley steel mill is historically significant for a variety of "firsts" which occurred there. The first duplex steel in the United States was made here in 1899. So named because it was first produced in a Bessemer convertor then transferred to open hearth furnaces, the duplex process was later adopted widely at many major steel mills including the Duquense plant of U.S. Steel. This steel was made into the first railroad rails produced from the open hearth process in the United States. The Ensley open hearths were also some of

the first tilting open hearths employed in the United States.

While these features make the site nationally significant, historically, the blast furnace plant is also important. These furnaces were the first blast furnaces in the District to produce basic iron on a large scale and the product was so competitive that it was sold to the Carnegie Steel Company for their steel furnaces in Pittsburgh. Since they were used to make basic pig iron from Red Mountain ore, in contrast to most other furnaces in the District which produced foundry iron, they developed a body of practice and design that was different from their local counterparts as well as the basic iron blast furnaces from other regions. While the differences were subtle, they were substantive and by the time the plant was acquired by U.S. Steel, it had become a basis of comparison with furnace design in other regions. Several technical reports issued by U.S. Steel show the designs of the Ensley furnaces alongside such notable blast furnaces as those at South Chicago, Edgar Thompson and Duquesne. When the thin-walled furnace design was introduced from Germany, U.S. Steel rebuilt one of the Ensley furnaces to these specifications making it an important prototype for the corporation.

DESCRIPTION

The majority of site buildings and railroad tracks once associated with the Ensley steel mill and blast furnace plant have been demolished and removed. Remaining structures include: 1) the remaining exhaust stack of the open hearth furnace and two metal ladle structures on the south side of the overpass; 2) two red mill buildings from which some salvage operation activity remains on the northwest side of the overpass; 3) three brick buildings on the south side of the overpass, which comprise the old electric power house and two former supply buildings; 4) the Don Drennen Overpass, on which AL 269 is situated as it crosses the site; 5) the old Sherman Heights Elementary School now used as a local community center; 6) other miscellaneous items, including retaining walls, foundations and portions of parking lots and railroad tracks.

Buildings/Structures: Demolition of structures is an ongoing activity on the site.

Roads: The primary access road leading into the site from the Don Drennen Overpass, has been blocked to traffic by placement of a raised concrete slab at the entrance off the Overpass. The majority of roads and railroad tracks have been removed.

Parking: Currently, the only accessible parking area in close proximity to the site occurs at the red old mill building, which is located on the northwest side of the Don Drennen Overpass, where salvage operation activity remains.

Topography: The site is characterized by a ridge upon which the old Sherman Heights School (now the local community center) sits. This ridge runs northeast-southwest and parallel with the site. The major operations of the site were situated in a gentle valley created by the ridge to the west and the City of Ensley, which is elevated above the site, to the east. This ridge diminishes to the northeast on its approach to Village Creek and also diminishes to the west and southwest of the site. Various retaining walls, terraces, and foundation are found on the site. Artificial influences on the site's natural topography are associated with the former iron and steel manufacturing operations. Most of these features were erected parallel to the ridge.

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