

MISSOURI, KANSAS & TEXAS RAILWAY,
BELLMEAD YARD, OXYGEN-ACETYLENE HOUSE
Union Pacific Milepost 842.40
Bellmead
McLennan County
Texas

HAER No. TX-74-C

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

REDUCED COPIES OF MEASURED DRAWINGS

FIELD RECORDS

HISTORIC AMERICAN ENGINEERING RECORD
Southwest System Support Office
National Park Service
P.O. Box 728
Santa Fe, New Mexico 87504

HISTORIC AMERICAN ENGINEERING RECORD

MISSOURI, KANSAS & TEXAS RAILWAY, BELLMEAD YARD,
OXYGEN-ACETYLENE HOUSE

HAER TX-74-C

Location: Union Pacific Milepost 842.40
Bellmead, McLennan County, Texas

USGS Bellmead, Texas Quadrangle,
Universal Transverse Mercator Coordinates
14.68063.349576

Date of Construction: 1923

Present Owner: Union Pacific Railroad

Present Use: Abandoned

Statement of

Significance:

The Oxygen-Acetylene House, constructed in a utilitarian manner, housed Oxygen Manifold, Carbide Storage, and Acetylene Generator Rooms. The building supplied two underground lines with oxygen and acetylene gases to risers in the north wall of the Tank and Blacksmith Shops. Both gases also were supplied to the old Bellmead Roundhouse and to a Blacksmith Supply House that was erected on the east side of the building.

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A.. General Statement:

1. History: The Oxygen-Acetylene House (HAER No. TX-74-C) was erected in 1923 and remained in continuous service until the 1950s. From the year of the Bellmead Locomotive Shops's opening in 1923, the building supplied two underground lines with oxygen and acetylene gases to risers in the north wall of the Tank and Blacksmith Shops. Oxygen, acetylene, and their respective vent lines were located overhead along the perimeter walls and were installed to run east-west, at the column lines, along the length of each bay. Oxweld outlets were located at every other column, and in concrete lined, open air pits that were built at the southwest corner of the Flue Shop and on the south side of the Oxygen-Acetylene House. Both gases were also supplied to the old Bellmead Roundhouse and to a Blacksmith Supply House that was erected on the east side of the building [1].

The facility was altered at an indeterminate date when the Acetylene Generator Room was added and later, in 1968 when the Warden Locomotive Shops were converted to a bomb-casing plant. Equipment associated with the building's operations are reputed to have been removed and sold as scrap in that year or shortly thereafter at an indeterminate date. All but one of the building's original doors were removed; one window and one entry were enclosed. The Oxygen-Acetylene House was vacant in 1997 and subject to occasional vandalism. The interior of the east wall of room 101 exhibited fire and smoke damage. The west wall of room 103 had water damage.

2. Architectural Character: The building is one bay in width, three bays in length, and one story in height (See photographic documentation HAER No. TX-74-C-01-06 and HAER drawings, sheets 1 through 5).

B. Description of the Exterior:

1. Overall Dimensions: The building measures 16'-0" in width, 57'-9" in length, and is 18'-4-1/2" in height.
2. Foundations: The foundation walls are board-formed concrete, are chamfered, and typically measure 8" in thickness. They are 3'-9-114" in height.
3. Wall Construction: The wall construction is "fireproof throughout and consists of masonry load-bearing walls which are 6-1/4" in thickness. Small "punched" openings have been provided for doors and windows and supported by both concrete and steel

lintels.

4. Structural System, Framing: The structural system is load-bearing masonry.
5. Chimneys, Flues, and Vent Stacks: There are vent stacks in the roof slabs of rooms 101 and 102, and wood sheathing in room 100.
6. Openings:
 - a. Doorways and Doors: Original exterior doors were of "tubular" steel construction and were glazed with four lights each. Only one example remains. It measures 4'-3-1/2" x 8'-2-1/2" and provides access to room 102. Replacement doors include wood board-and-batten at room 101 of similar dimension; one pair of sheet metal entry doors at room 100 and a single sheet metal door at the north wall of the same room. They measure 4'-4-1/4" x 8'-2- 1/4", 4'-3-1/2" x 8'-3-1/2", and 8'-4" x 8'-1-3/4", respectively.
 - b. Windows: Original windows include both operable steel and wood sash. Steel sash measures 3'-2-1/4" x 6'-2-1/2". Original wood sash measure 3'-9-112" x 3'-5-1/4". Two remain intact at the west facade, one has been damaged, and one has been removed.
7. Roof:
 - a. Shape, Covering: The roof of rooms 101 and 102 is a 4" thick concrete slab, which is sloped east-west. The roof of room 100 is tar and gravel over wood roof sheathing on 2" x 8" wood rafters spaced at 1'-9" centers. It is canted east-west. Both roofs are drained by scuppers in the building's parapet. Part of the roof of room 100 has failed and there is extensive water damage along the west wall.
 - b. Cornice: The building has a simple cornice, constructed of four courses of corbeled brick, and is trimmed with a recessed brick parapet and precast concrete coping.

C. Description of Interior:

1. Floor Plans:
 - a. First Floor. Entry to rooms 100, 101, and 102 is made from the east side of the building through three doors. Room 102 is entered through a cased opening in room 102 and room 102 is entered from a door in room 101. In addition, a single steel door provides access to room 100 on the north side of the building. Room 100 contained an Acetylene Generator; room 101, a Carbide Storage; and room 102, an Oxygen Manifold [2].

2. Flooring: The floors of rooms 100, 101, and 102 are concrete throughout; however, floor heights vary. The floors of rooms 101 and 102 are 3'-9-1/4" above finished grade. There was a loading dock with stairs on its south end that was located along the east wall of the building which has been removed. It facilitated the offloading of gas canisters from company trucks to supply rooms 101 and 102 [3]. The concrete floor of room 100 is at grade.
 3. Wall Finish: The wall finish is brick and has been painted.
 4. Doorways and Doors: A doorway is located between rooms 101 and 102 and is a simple cased opening trimmed with wood at the jambs and head. Another replacement door, located in the wall separating rooms 100 and 101 is of board-and-batten construction.
 5. Light Fixtures: Original light fixtures are incandescent and suspended either from stanchions or from metal conduit. All electrical outlets and conduits are surface-mounted.
 6. Heating. Mechanical: The building is not heated and all mechanical equipment associated with the operations of the Acetylene Generator (100), Carbide Storage (101), and Oxygen Manifold (102) has been removed.
 7. Hardware: Original hardware for the entry door at the Oxygen Manifold (103) remains intact; however, all other original door hardware has been removed. Original window hardware remains intact.
- D. Site:
- 1.. General Setting: The site is slightly overgrown at all facades because of a lack of general maintenance. There is a concrete-lined oxweld pit located 5'-0" from the north side of the building.
 2. Landscaping. Enclosures: The building is located perpendicular to the north side of the Warden Locomotive Shops in an area that is enclosed by a chain link fence.
- E. Endnotes
1. Drawing No. 31 of 51, "Bellmead Locomotive Shop[s], Oxweld and Lighting Plan," Office of the Chief Engineer, MK&T Railway of Texas. St. Louis, Missouri. Drawn 1923, revised 1924.
 2. Ibid.

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3. Drawing No. 14 of 51, "Bellmead Locomotive Shop[s], Plan." Office of the Chief Engineer, MK&T Railway of Texas. St. Louis, Missouri. Drawn 1922, revised 1923.