

ELLSWORTH AIR FORCE BASE,
RUSHMORE AIR FORCE STATION,
WELL HOUSE
(Water Supply Building No. 88625)
Menoher Road
Black Hawk Vicinity
Meade County
South Dakota

HABS No. SD-21-O

HABS
SD-21-O

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY

National Park Service
Great Plains Support Office
1709 Jackson Street
Omaha, Nebraska 68102-2571

Addendum
Follows

HISTORIC AMERICAN BUILDING SURVEY

ELLSWORTH AIR FORCE BASE
RUSHMORE AIR FORCE STATION
WELL HOUSE No. 5
(Water Supply Building No. 88625)

HABS No. SD-21-O

Location: Ellsworth Air Force Base, Menoher Road, Black Hawk, Meade County, South Dakota.

Significance: The Well House No. 5 (Water Supply Building No. 88625), was built in the Cold War Era in 1952 as part of the water distribution system for the newly constructed Rushmore Air Force Station, a federal storage and maintenance facility for nuclear weapons.

Description: Located southeast of Rushmore Air Station on Menoher Road, the Well House, 18' - 0" x 11' - 4", is a rectangular plan form, single floor, one room building with walls of concrete block. The foundation, floor, and flat roof are of reinforced concrete. The concrete roof is covered with tar and gravel. The roof is equipped with a 24" Breidert ventilator. Access to the roof is through a 8' - 0" x 3' - 4" opening in the roof above the east wall door. The roof opening is covered with 1" wood planks over which is placed a removable steel hatch cover. There is also a removable steel panel above the east wall door under the removable roof hatch. The building has a single metal door on the east wall, with two horizontal lights in the upper half. There is one metal sash window, projected type, on the west wall with three horizontal lights, two fixed, with the middle one hinged. An original pump mechanism exists inside the building.

The building is topped by a steel headframe, made of angle sections. There is a large pulley atop the headframe. A steel ladder runs up the west side of the headframe, leading to a catwalk surrounding the headframe at the top. A hatch in the building's roof allows machinery to be lowered into the building using the headframe pulley.

History: During World War II, development of infrastructure at Army Air Force bases was largely ignored in favor of the more pressing issues of runways, hangers, housing, etc., this was due to the anticipation of dramatically reduced needs and base

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Rushmore Air Force Station
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closures at the end of the war. This perspective changed with escalating nuclear arms development, and the onset of the Cold War and the Korean Conflict. The perception grew that military aviation improvements were necessary as part of developing an active defense and readiness posture. The resultant National Security Act of 1947 created the Department of Defense and subsequently the United States Air Force. With the Cold War pressures came funding to improve the infrastructure. Water systems, wells, pumphouses, storage facilities, and waste water facilities were funded as a result.

This evolution was evident at the Rapid City Army Air Base (RCAAB). In 1945, the purpose for which the base had been commissioned became obsolete as training programs were curtailed and B-17 aircraft retired. The base was inactivated in July of 1945 and reactivated eight days later. From 1945-46, RCAAB was used as a training site for short range, tactical flights and weather reconnaissance. In 1947 the base was permanently reactivated, and the Army Air Force's 28th Bombardment Group assigned to the base. As the 28th Bombardment Group (assigned to the Strategic Air Command) defined and developed its role, the base drew a number of other support and strategic groups. The creation of the Air Force and the decision to include very heavy bomber groups as a major element in the country's strategic defense system established the future of RCAAB; the Army Air Base name was also changed to Rapid City Air Force Base.

In 1949, the 28th Bombardment Group's B-29s were replaced with B-36 bombers which were the first aircraft designed to deliver nuclear bombs to overseas targets. When the B-36 failed to meet expectations they were converted in 1950 to RB-36s, a reconnaissance and aerial photography role in 1950. This revision changed the principle mission of the base to the surveillance related function of the RB-36. This role continued through 1955, by which time the base was renamed the Ellsworth Air Force Base, in memory of General Richard E. Ellsworth, the Commander of the 28th Wing. It was during this period that the base grew from 3,283 military and civilian

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personnel (1949) to 7,139 (1954).

The Rushmore Air Force Station (RAFS) was constructed in 1952, north of Ellsworth, as a key component in the American strategic defense build up. This facility was designed and constructed exclusively to store and maintain nuclear bombs and other weaponry for possible use by the heavy bombers stationed at Ellsworth. Because of the extremely sensitive nature of the RAFS mission, its administration and operation was largely independent from that of Ellsworth. The station maintained its own housing, warehouse, and shop facilities. This arrangement continued until 1962, when RAFS was formally merged with Ellsworth.

Growth and long range thinking elevated the importance of infrastructure elements at the base. These projects were uniformly in the architectural scope of military vernacular or utilitarian non-descript. The station's buildings and structures display design and engineering qualities specifically reflecting this national defense function.

Well House No. 5 was completed on 5 July , 1952, one of two small structures constructed that year as part of the water and sewage system for the newly constructed RAFS.

The water supply building was built for \$7,109.13 from plans by the Office of the Chief of Engineers, Department of the Army and Black and Veatch, Consulting Engineers of Kansas City, Missouri.

Sources: File of blueprints and construction drawings, maintained at the Ellsworth AFB Maintenance Engineering Office.

Hufstetler, Mark and McCormick, Mary, et al., draft, "Ellsworth Air Force Base, South Dakota: Statement of Historic Contexts", Renewable Technologies Inc., Butte Montana, November, 1996.

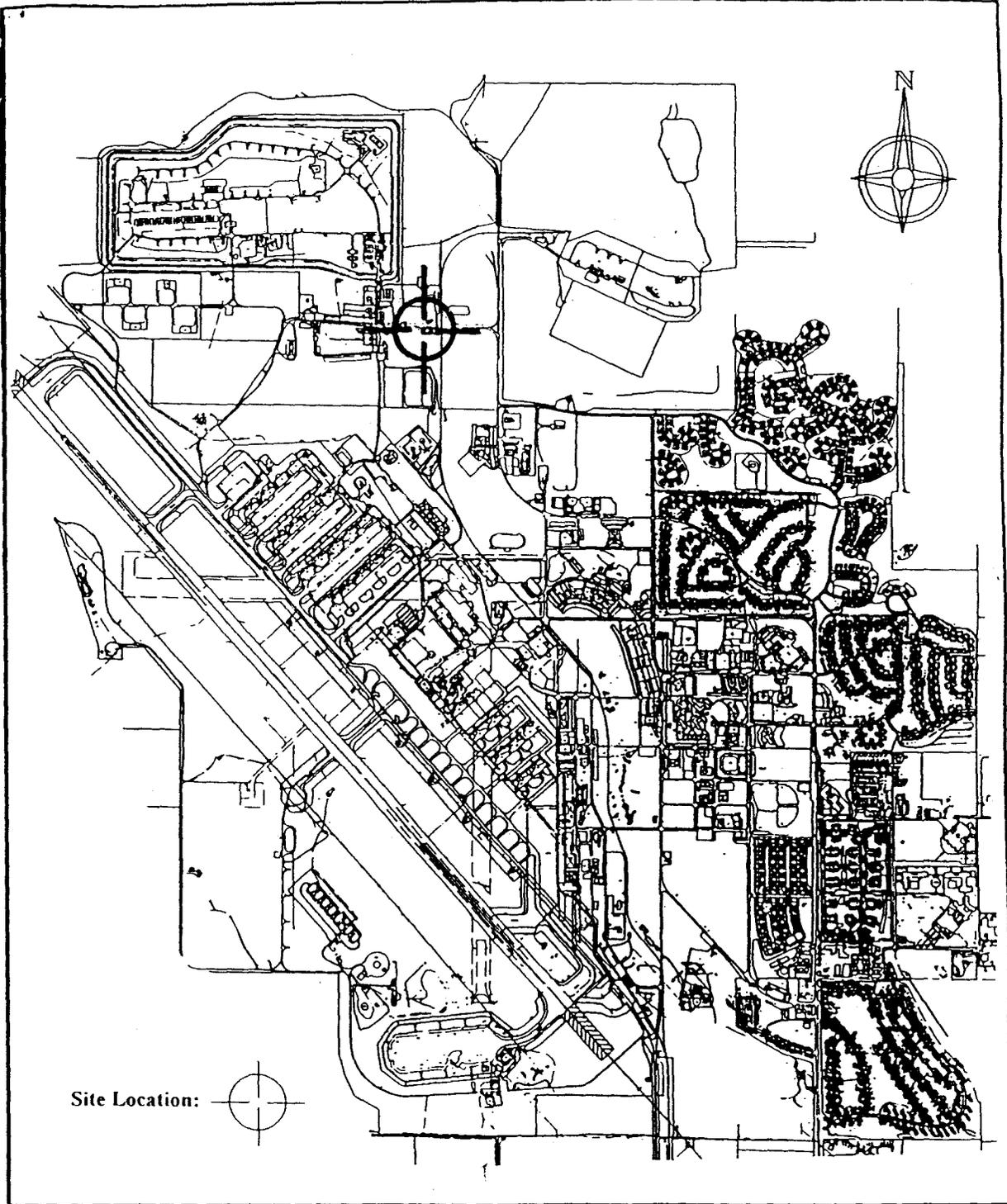
Johnson, Lon, "Ellsworth AFB History Sites Inventory", 1994.

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“Real Property Records-Building 88625, Ellsworth AFB, South Dakota”
Manuscript Records on file at the Real Property Office, Ellsworth AFB, South Dakota.

Historian: Wayne Rosby and Lee Geiger, Geiger Architecture, 1996

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ELLSWORTH AIR FORCE BASE, SOUTH DAKOTA

Site Number: MD-BX-EL-00087
Historic Name: Building Water Supply
USAF Facility Number: 88625
USAF Nomenclature: BLDG WTR SUP

ADDENDUM TO:
ELLSWORTH AIR FORCE BASE, RUSHMORE AIR FORCE
STATION, WELL HOUSE
(Water Supply Building No. 88625)
Menoher Road
Blackhawk vicinity
Meade County
South Dakota

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PHOTOGRAPHS

HISTORIC AMERICAN BUILDINGS SURVEY
National Park Service
U.S. Department of the Interior
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