

ELLSWORTH AIR FORCE BASE,  
WELL HOUSE NO. 3  
(Building No. 1120)  
Menohar Road  
Black Hawk Vicinity  
Meade County  
South Dakota

HABS No. SD-21-K

HABS  
SD-21-K

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY

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

## HISTORIC AMERICAN BUILDING SURVEY

### ELLSWORTH AIR FORCE BASE WELL HOUSE No. 3 (Building No. 1120)

HABS No. SD-21-K

Location: Ellsworth Air Force Base, Twining Street, Black Hawk Vicinity, Meade County, South Dakota.

Significance: The 1959 Well House No. 3 is replacement, constructed on the foundation of a small wood-frame well house building construction during World War II in 1943. The 1959 Well House was probably built in response to the base's population at the time. It represents Ellsworth's significant growth in both size and function during the Cold War era. Ellsworth, one of the Air Force's major bomber bases at that time, served as a repository of a large portion of the nation's nuclear weapons arsenal, and became host to nuclear missile wing.

Description: Located on Twining Street, northwest of its intersection with Bergstrom Drive, Well House No. 3 (Building No. 1120) is a 13' - 8" x 22' - 8" single room building with walls of concrete block. It has a reinforced concrete floor and flat roof. The concrete roof has a pitch and gravel built up roof on top of rigid insulation. There are louvered metal Truscon double outswing doors on the west side. The area above the door is a removable concrete panel, and projects higher than the rest of the roofline. The roof area around this higher portion is removable, creating an access hatch to the pump below. There is a large louvered vent located high on the south wall. The vent has a concrete sill. An original pump mechanism exists inside the building.

The building is topped by a headframe approximately 35' high, made of cylindrical pipe. The headframe's footings rest on concrete pads, which are extensions to the building's foundation on the east and west sides. A steel cable block-and-tackle system remains attached to the headframe. A steel ladder is on the north side.

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, hangars, housing, etc., this was due to the anticipation of dramatically reduced needs and base

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

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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.

Well House No. 3 was completed January 15, 1959. It was built on the foundation of an original World War II wood frame well house building constructed in 1943, when Ellsworth was known as Rapid City Army Air Base. During World War II, Rapid City Army Air Base was used to train pilots for the B-17 bomber.

The construction cost of the current Well House #3 was \$4,932.74. It was constructed from plans done by the Army Corps of Engineers, Omaha, Nebraska.

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

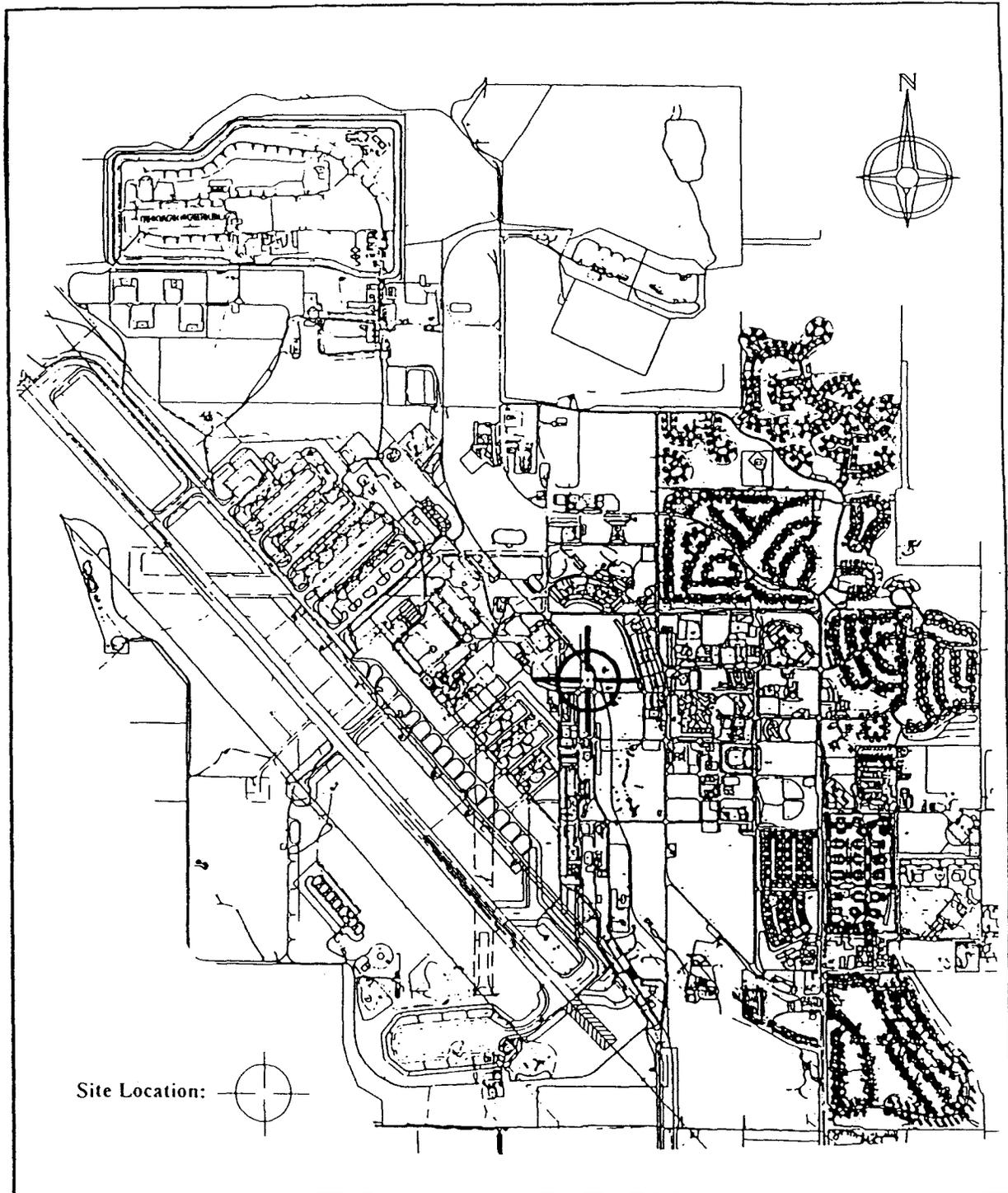
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Historian: Wayne Rosby and Lee Geiger, Geiger Architecture, 1996

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ELLSWORTH AIR FORCE BASE, SOUTH DAKOTA  
Site Number: MD-EL-EL-00015  
Historic Name: Well House No. 3  
USAF Facility Number: 1120  
USAF Nomenclature: BLDG WTR SUP

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