# **Home Ranch Complex**

[Existing conditions inventory maps and photographs are found at the end of this section]

#### Introduction

The Home Ranch Complex contains the most highly developed area within the Grant-Kohrs Ranch National Historic Site. Historically, this area served as the hub of ranch operations, providing such functions as housing, equipment and food storage, and health maintenance care for livestock. Approximately 36 acres in size, it was also the center of ranch management. Dominated by a variety of historic structures, the landscape is an integral part of the area, both in terms of the spatial relationships between buildings and the various landscape elements. <sup>1</sup>

### **Natural Systems and Features**

[see Map EC-1 at the end of this section]

The Grant-Kohrs Ranch complex sits along the edge of the bench overlooking the Clark Fork River. This bench is comprised of a deep, well-drained Beaverell Cobbly Loam, and contains the oldest structures on the Ranch, including the bunkhouse (HS-2), ice house (HS-5), draft horse barn (HS-7), and oxen barn (HS-10).

Below this bench to the west, land slopes gently down into the Johnson Creek floodplain at an approximate 4% grade. Most of the other structures in the home ranch complex reside in this area, which consists of a deep, poorly drained Tetonview Loam. Some standing water was evident in this area during the site visit, creating boggy conditions in the lower feedlots adjacent to the creek.

Johnson Creek was and continues to be the most culturally significant creek within the Grant-Kohrs Ranch, as the domestic and working buildings of the Ranch grew up around it (see Photo 3-1-1). Johnson Creek begins near a natural spring west of Interstate 90 and flows west along the northern boundary of Deer Lodge. It is fed by another natural spring located just inside the southeast boundary of the Ranch. Here it is contained by fences that allow riparian vegetation to flourish. The smaller north fork of Johnson Creek begins north of the fairgrounds and passes behind the Warren residence before joining its southern counterpart in Johnson Creek field, near the ranch home.

Two natural springs are also located within the Home Ranch complex. These are located in the Lower Yards, which lies to the northwest of the developed area. These springs contribute to the wet conditions found in this field

#### Vegetation

[see Map EC-1 at the end of this section]

Much of the natural vegetation that would be found along the banks of Johnson Creek has been removed within the area of the home ranch complex, as this area has been intensively grazed and actively developed for ranching operations (see the vegetation description in the Riparian Woodlands component landscape for what would be typical of this area).

<sup>&</sup>lt;sup>1</sup>Thomas G. Keohan, *Cultural Landscape Inventory and Analysis, Grant-Kohrs Ranch National Historic Site* (Denver: Division of Cultural Resources, Rocky Mountain Regional Office, National Park Service, 1991), 6.

The vegetation that does exist consists mostly of willows and cottonwoods (see Photo 3-1-2). This vegetation is primarily found within Johnson Creek field, to the south of the ranch house, and the Johnson Creek feedlot, south of the Stallion Barn (HS-30). Several large cottonwoods are also found along the southern edge of the demonstration field where Johnson Creek bends far to the east. Pasture grasses comprise the majority of vegetative cover within the Home Ranch complex corrals and feedlots, providing food for the livestock contained within. Because these areas have been so heavily impacted by livestock, the species composition is a mix of native and non-native grasses and forbs. A detailed breakdown of vegetation species is not available for this area.

# **Spatial Organization**

[see Map EC-2 at the end of this section]

As mentioned earlier, the home ranch, built for John Grant in 1862, was sited on the edge of the river terrace, or benchland, with its back overlooking the river and mountains beyond. Located on well-drained soils and close to Johnson Creek, the structure faced the historic transportation corridor that eventually became Business Loop 90, approximately 900 feet to the east.

The cluster of outbuildings that were built to support the domestic activities and ranch operations were sited to the north of the ranch house, along the bench, and were oriented essentially parallel, and/or perpendicular to the home. The spatial relationships among these outbuildings and the ranch home, as well as among the buildings themselves were derived from a combination of the topography (which slopes down to the northwest), the internal function of the structures, and the working relationship of shared open space between the structures. As is typical of 19<sup>th</sup> century landscapes in America, the domestic outbuildings that supported daily family life were generally closest to the house, while the structures that supported the activities of the working cattle ranch, such as the livestock barns and corrals), were further away.

The presence of Johnson Creek and its wet floodplain deterred growth of ranch structures to the south (at least initially). This land however, did provide fertile soils for cultivation, and with good southern exposure, became an ideal location for the domestic garden of the ranch home. Circulation patterns internal and external to the ranch also played a role in its physical evolution and organization.

The growth of Deer Lodge in the 1860s and the development of the Utah Northern Railroad circa 1879 initially deterred ranch expansion to the east. Buildings added to the ranch by Kohrs and Bielenberg after 1880 were generally constructed below the bench to the west and southwest of the ranch home, such as the thoroughbred barn (HS-15), stallion barns (HS-14, 16, 19, and 30), and the granary (HS-18). Several other non-extant structures (a cow shed, four feed racks, and two other structures whose use has not been identified) were once located near Johnson Creek. Although their date of construction is not known, they were torn down or removed in the early 1930s. Their location within the Johnson Creek floodplain likely made upkeep too difficult.

The size of the Grant-Kohrs Ranch complex grew substantially in the early 1930s after Con Warren took over operations. Initially expanding west, Warren developed additional corrals and feedlots containing several stock shelters and feed bunks on both the north and south sides of Johnson Creek. Several other buildings, such as the granary (HS-6) and dairy (HS-9), were added to the already existing cluster of outbuildings to the north of the ranch home, replacing older ones that had been removed.

All the fields contained within the Home Ranch complex are enclosed by fences and are generally framed by ranch structures on at least one side (see Photo 3-1-3). These structures define the use of the field, whether they be feed lots, corrals, and yards. Together these fences and structures, along with the natural features, constructed water features, circulation features, and vegetation, organize the spaces within the Home Ranch landscape.

The *Lower House Yards* are located directly to the south of the Grant-Kohrs Residence (HS-1). This one acre area is defined on the east side by the back of this structure and the bench along which it is located, as well as the Ice House (HS-5), and the Blacksmith Shop/Garage (HS-3). The northern boundary of this area is defined by the Buggy Shed (HS-17), Stallion Barn (HS-19), Chicken House (HS-22) and Brooder House (HS-21). Both the Brooder House and Chicken House are enclosed by a fence that separates this area from the larger yard. The southern and eastern boundaries are defined by Johnson Creek, a row of cottonwoods, Stallion Barn (HS-16), and the Thoroughbred Barn (HS-15). Together these structures, as well as a variety of fencing types (jack-leg, five rail stacked end fence, chicken wire fence, and vertical board fence), provide a sense of enclosure to the yards and the activities that take place there.

Johnson Creek Field is approximately 2.5 acres. It is located directly to the south of the Grant-Korhs Residence and contains the floodplain of the north fork of Johnson Creek. It is defined by the railroad corridor to the east, the Johnson Creek riparian woodland to the south, the lower garden of the Grant-Kohrs residence to the north, and Johnson Creek Road to the west. Jack-leg fencing surrounds this field on all sides. Wet soils dominate this field which houses one of the four stallion barns (HS-14).

The *Lower Yards* are located northwest of the Grant-Kohrs Residence. Approximately 12 acres in size, this wide open area is bounded by the railroad corridor on the east, the Kohrs-Manning Ditch and Kohrs-Manning Ditch Road along the west, and the Lower House Yards on the south. Seven smaller yards are contained within this area, each contained by fences (jack leg and 5-rail stacked end fence). The Draft Horse Barn (HS-7), Oxen Barn (HS-10), and Granary (HS-6) back up to the Lower Yards on the eastern side—taking advantage of the benchland's change in elevation.

The *Bunkhouse Yards* are located directly to the north of the bunkhouse (HS-2). These yards are comprised of smaller spaces, each defined by the surrounding buildings and fencing (vertical board fence, 5-rail stacked end fence, and stacked log fence).

The *L-Barn South* field is located directly to the north of the Lower Yards, and comprises the northern-most boundary of the Home Ranch Complex. Approximately seven acres in size, this field is defined by the railroad corridor and Warren Pumphouse Road on the east, the Kohrs-Manning Ditch Road on the south, and fencing on the northern and western sides. Jack-leg fencing surrounds the entire perimeter, while stacked-log fencing and 7-rail stacked end fencing contains the smaller yards near the L-Barn. The Kohrs-Manning Ditch runs directly through this field, just south of the bench. The NPS "boneyard," a collection of lumber and fencing materials, is located on the north side of the L-Barn and is contained by jack leg fencing on three sides.

The West Corrals are located south of the Lower Yards and Lower Yard Fields. This five acre area is defined by jack leg on the west side, whereas 5-rail stacked end fence and vertical board fence frame its northern and southern edges. The Clark Fork River Bridge Road also organizes the southern edge. Jack leg fencing dominates the eastern side. Johnson Creek dominates this area as it meanders south to join the Clark Fork River. Several smaller corrals are contained within this area—each generally organized around barns and feed bunks.

As its name suggests, the *West Feedlot* is located on the western edge of the Home Ranch Complex. Approximately 2.5 acres in size, it is bounded on the south by the Clark Fork River Bridge Road, and on the east by the Kohrs-Manning Ditch and Road. Jack leg fencing encloses its northern side along Johnson Creek, while 5-rail stacked end fence forms the eastern and western boundaries. Vertical board fence frames its southern side, along with the large feed bunk located there.

#### **Land Uses**

[see Map EC-3 at the end of this section]

The Home Ranch complex currently supports both working ranch operations as well as visitor interpretation. Generally, the stock shelters, feed bunks, and barns contained within the complex are used to support the livestock. All five of the horses maintained on the ranch are currently boarded within the Home Ranch Complex. During the time of the site visit, the West Corrals and the Lower Yards were being grazed by horses.

Several structures within the home ranch complex contain interpretive exhibits that are open to the public (see Photo 3-1-4). These include the ranch house (HS-1), bunkhouse (HS-2), thoroughbred barn (HS-15), blacksmith shop (HS-3), ice house (HS-5), privy (HS-20), buggy shed (HS-17), and draft horse barn (HS-7). The blacksmith shop also currently houses a photo exhibit room and visitor restrooms.

While other buildings within the complex do not necessarily contain interpretive exhibits, they provide context to the historic ranch operations and daily life. The chicken coop (HS-22), brooding house (HS-21), granaries (HS-6, 18, and 23), coal shed (HS-4), oxen barn (HS-10), and dairy (HS-9), provide visitors with an understanding of the activities that took place on the ranch, and the physical spaces within which they were carried out.

The small open field directly behind the ranch house (to the south of the buggy shed) is currently being used for demonstration and education (see Photo 3-1-5). It contains several pieces of old farm equipment, an informal log seating area, and chuck wagon.

The Lower Yard Garden, a small cultivated area that was used to grow plants for interpretation, is being removed and reseeded. One trailer house was located to the west of the thoroughbred barn (HS-15), and was used as a residence by park employees (see Photo 3-1-6). This trailer was also removed in 2003.

## **Constructed Water Features**

[see Map EC-1 at the end of this section]

There is one active constructed water feature that traverses through the Home Ranch complex. The Kohrs-Manning Ditch, which begins just south of the park boundary, is sourced by the Clark Fork River. This ditch is approximately ten feet wide, and provides irrigation to the lower fields to its eastern side (see Photo 3-1-7).

The Kohrs-Manning Ditch crosses Johnson Creek via a wooden flume (HS-50) that was constructed in 1974 to replace an earlier, non-extant flume (HS-51). The flume is essentially a long, wood-sided ditch covered with evenly-spaced, narrow, wooden, square posts set perpendicular to the plank siding. The flume is approximately ten feet wide and three feet in depth (see Photo 3-1-8).

#### Circulation

[see Map EC-2 at the end of this section]

There are several roads that traverse through the Home Ranch Complex. These include several roads that service the bunkhouse yards located north of the Grant-Kohrs Residence. The *Dairy Loop Road* is accessed by the Main Entry Road after crossing the railroad corridor (see Photo 3-1-9). It is an unpaved gravel road approximately 10 feet in width, and surrounds the Dairy (HS-9). It accesses this structure, as well as the Bielenberg Barn (HS-11), the Oxen Barn (HS-10), Draft Horse Barn (HS-7), Granary (HS-6), as well as the rear of the Bunkhouse, before turning south behind the Ice House and Coal Shed.

Bunkhouse Road is also accessed by the Main Entry Road after crossing the railroad corridor (see Photo 3-1-10). It too is an unpaved gravel road approximately 10 feet in width that passes inbetween the Bunkhouse (HS-2) and Grant-Kohrs Residence (HS-1). It continues past the front of the Ice House and Coals Shed before terminating at the rear of the residence, near the Blacksmith Shop/Garage (HS-3).

The *Lower House Yard Road* is a short gravel spur that provides access from Bunkhouse Road to the Lower House Yard. An undefined gravel parking area is also located in front of the Buggy Shed. Starting at the Blacksmith Shop, *Johnson Creek Road* picks up where Bunkhouse Road leaves off (see Photo 3-1-11). This road extends approximately 300 feet south, crossing Johnson Creek just south of the Stallion Barn (HS-14). Like the others, this road is also unpaved and is approximately 10 feet wide.

The *Clark Fork River Bridge Road* was constructed in the 1930s after Con Warren took over ranch operations. This road extends from Johnson Creek Road, over the Slough Bridge, Kohrs-Manning Ditch Bridge, and the Clark Fork River Bridge before extending further west (see Photo 3-1-12). It too is an approximately 10 foot wide gravel road.

As its name suggests, the *Kohrs-Manning Ditch Road* follows the Kohrs Manning Ditch through the Home Ranch Complex, crossing it twice via culverts. Constructed ca. 1973, it begins at the Clark Fork River Bridge Road and extends along the southern edges of the Johnson Creek Corrals and Lower Yards before turning north towards the Warren Pumphouse Road (see Photo 3-1-13).

The *Warren Pumphouse Road* is an approximately 10 foot wide gravel road that links the Dairy Loop Road with the Warren Pumphouse (HS-86) and North Fields (see Photo 3-1-14). Although the southern portion of this road dates to the Kohrs period, it was likely lengthened c. 1960 during construction of the pumphouse.

#### Views and Vistas

[see Map EC-5 at the end of this section]

Views within the Home Ranch Complex are defined by the buildings, structures, and fences within it, which provide textual contrast to the surrounding softness of pastures and riparian vegetation. These buildings and fences contain the views and vistas, making the spaces within the complex appear much more humanly scaled than the contrasting expansive landscape of pastures and hills beyond (see Photo 3-1-15). Likewise, the western hills and Flint Creek Mountain Range beyond, provide constant context to the longer vistas that dominate the viewshed beyond the developed area (see Photo 3-16).

The red and white paint covering all the structures in the Home Ranch complex also serves to unify the ranch, and create visual harmony within it. These colors also provide rich contrast to the greens, yellows, weathered grays and browns of the surrounding vegetation and wooden fences.

# **Buildings and Structures**

[see Map EC-3 and Map EC-4 at the end of this section]

The following buildings and structures information has been derived from the "National Register of Historic Places Registration Form," the "National Historic Landmark Nomination Form," the Grant-Kohrs Ranch NHS *Historic Structures Report*, and supplemented by field observations during the 2002 site visit (see bibliography for full citations).

**Bunkhouse Row** (HS-2), (see Photo 3-1-4) is located north of the Grant-Kohrs Ranch House which will be described in detail in the Grant-Kohrs Residence section. The buildings that comprise the Bunkhouse Row have whitewashed siding, both horizontal and vertical indirection. Window and door trim is painted red. It is oriented east-west. Presently, from east to west, the bunkhouse includes a buggy shed, chore-boy room, stable, ranch office, bunkroom, sitting room, dining room, kitchen, shower/washroom, and woodshed. Throughout the building, corrugated galvanized metal panels cover the roof. The buggy shed has a shed roof. Immediately west of the buggy shed is the gabled, one-and-a-half story stable. The remaining building sections have one story and gabled roofs. The entire building sits on a stone and mortar foundation. Two brick chimneys rise from the roof of the lower building section. Hand-hewn logs are part of Grant's original structure.

The *Ice House* (HS-5), (see Photo 3-1-17) was built circa 1880 and is located near the southwestern corner of Bunkhouse Row. The ice house is a one-story, square, log building with frame additions on the west and south sides. The original log building sits on a stone, full basement foundation. Walls are constructed with V-notched, white-washed logs and lime-mortar daubing. The gable roof runs east-west and is covered with wood shingles over tongue-and-groove sheathing. The east side of the log component contains two nine-light windows that flank a central wooden door.

The white-washed south shed addition has vertical board siding and wood-shingle roofing. One door is located on the east elevation and a window is located on the south elevation. The west elevation of the basement is above ground and has an attached addition covered with horizontal siding. The shed roof slopes to the west, is covered with wood shingles, and has exposed rafter ends on its west sides. One window is centered on both the west and south elevations and a wood door is centered on the north elevation. Windows are covered with bars to prevent theft of food products kept cold by the ice.

Built in 1915, the *Coal Shed* (HS-4), (see Photo 3-1-18) is located directly west of the ranch house.<sup>2</sup> The shed is a one-story, rectangular, wood-frame structure constructed on a concrete pad. Wood shingles cover the shed roof and white-painted horizontal siding covers the exterior walls. Door and window trim and corner boards are painted red. Features on the east elevation include a door opening to the south and an access hatch for coal delivery on the north side.

<sup>&</sup>lt;sup>2</sup> Ann Hubber, *National Register of Historic Places Registration Form, Grant-Kohrs Ranch/Warren Ranch* (Denver: National Park Service, Intermountain Support Office, January 4, 2002), Section No. 7, 3.

The *Blacksmith Shop/Garage* (HS-3), (see Photo 3-1-19) was built in 1935 and is located southwest of the ranch house. The building has been renovated twice by the NPS; in 1975 to add insulated and heated fire truck storage and in 1981 to add men's and women's restrooms. The wood-frame building rests on a concrete pad and concrete foundation wall. Horizontal, white-painted siding covers the exterior walls while red hexagonal shingles sheath the gabled roof. Two brick chimneys sit on the east slope of the roof. Three red-painted wooden, multi-panel, multi-light, overhead rolling doors are located on the north elevation of the building. A pair of red-painted wooden sliding doors are located on the west elevation. Three nine-light hopper windows are located on the south elevation. The fire truck bay and supply area were renovated in 1992 for use as an auditorium.

Built in 1935, the *Granary/Roller Mill* (HS-6), (see Photo 3-1-20) is located north of Bunkhouse Row and is part of a complex of agricultural buildings and structures. The building is a one-story, rectangular, wood-frame building with an offset gable roof. Built on a poured concrete foundation, the building is sided with horizontal siding. The west elevation contains an open shed-roofed loading dock with two support columns and wood-plank flooring. Red hexagonal asphalt shingles cover all roof surfaces and rafter ends are exposed. Large wooden sliding doors provide access to the granary from the loading deck on the west elevation. The south elevation has a Dutch door constructed of vertical boards. The granary/roller mill has three nine-light windows, two on the west elevation and one on the north side. Four evenly-spaced hatch openings are located on the east slope of the roof that provide truck access to the grain storage bins.

North of, and adjacent to, the Granary/Roller Mill lies the circa 1870 *Draft Horse Barn* (HS-7), (see Photo 3-1-21). Virtually unaltered since the 1870s, the two-story barn is rectangular in shape with a gabled roof with vertical wood planks filling the gable ends. A shed addition is attached to the northern elevation. Built on a stone foundation, the walls of the original building are V-notched logs. The addition is also constructed on a stone foundation. Board-and-batten siding covers the exterior walls. The east and west walls each have a board-and-batten double-leaf Dutch door. Four six-light windows are located about the barn. Both the shed addition and main gable roofs are covered with corrugated metal.

The *Privy* (HS-8), (see Photo 3-1-22) is one of two outhouses on the ranch and is located near the southeast corner of the Draft Horse Barn. Built in 1934 by the Works Progress Administration (WPA), the privy is a small, one-story, square building with a shed roof. Vertical siding covers the walls while cedar shingles cover the roof. The door is located on the east elevation.

Built in 1932, the *Dairy* (HS-9), (see Photo 3-1-23) is located east of the Draft Horse Barn. The building interior was modified in 1975 for use as an NPS park maintenance building. The dairy is a one-and-a-half story, rectangular, wood-frame building with gable roof. The barn sits on a concrete foundation with an interior concrete pad. The exterior walls are covered with horizontal wood siding. Red hexagonal asphalt shingles cover the roof. Two doors are located on the south elevation; a pedestrian door and sliding door. A four-light hopper window is centered on the south gable end. The east elevation has eight evenly spaced four-light hopper windows. On the north elevation, there is a wood double-leaf Dutch door and three four-light hopper windows. The west elevation has one wood double-leaf Dutch door. There are two hopper windows on the west elevation and one gable dormer with white horizontal siding and red asphalt shingles.

Built circa 1870, the *Oxen Barn* (HS-10), (see Photo 3-1-24) is located north of the Draft Horse Barn. It is a one-and-a-half story, rectangular log building with a gabled roof oriented north-south. The logs are joined with V-notching and are daubed with lime-based mortar. Vertical wood

siding fills the gable ends. A central, double-leaf Dutch door and multi-light window are located on the west elevation. On the east elevation, there is a half-door for access to the loft. The roof is covered with random-width wood sheathing and wood shingles.

The *Bielenberg Barn* (HS-11), (see Photo 3-1-25) was built circa 1880 and is located northeast of the Draft Horse Barn. The one-story rectangular barn has a west-sloping shed roof. The frame walls are sided with white-painted vertical board-and-batten siding with red-painted skirt board. On the east elevation, there are eight vertical board-and-batten stall doors. A fixed multi-light window is located above each stall door while an additional window is located at the northeast end of the building. The north elevation contains one window set off-center to the east.

The *Cattle Scale* (HS-35), (see Photo 3-1-26) was built in 1935 and is located north of Bunkhouse Row and between the Granary/Roller Mill and a feed rack. The cattle scale is a large wood-framed structure constructed on an 8-inch-deep concrete tub foundation. The north and south elevations feature milled lumber posts and spaced horizontal planks, creating fence-like walls that are bolted to the foundation. Gates form the east and west sides. The scale mechanism was removed in 1952 and moved to the scale house (HS-66).

Three *Feed Racks* (HS- 36, 37, and 38), (see Photo 3-1-27) are located to the east of the Bielenberg Barn and Dairy Barn and north of Bunkhouse Row. The feed racks are similar in construction, having angled wood posts supported by a wood frame. One of the smaller feed racks (HS- 36) has two rows of narrow wood posts angled in opposite directions to form a V-pattern. A wood plank is placed in the crux of the V to support the fodder. This rack is set into an open, rectangular wood frame with a wood base and surrounding posts and rails. A second smaller feed rack (HS-37) and large feed rack (HS-38) have only one set of posts set diagonally against a wood rail and resting on a wood base. The structures are attached to a fence, running parallel to the railroad tracks, to hold hay.

Located west of the Bielenberg Barn and north of the Oxen Barn, the *Manure Pit* (HS-39), (see Photo 3-1-28) was built in 1932 and consists of a 6-feet-deep, poured-in-place concrete pit.

A *Beef Hoist* (HS-40), (see Photo 3-1-29) is located along the access road between the Bielenberg Barn and the Machine Shed. It can be found near the northwest corner of the Bielenberg Barn. The hoist consists of two tall posts supporting a horizontal round post, like an inverted U shape. A pulley system is located on the north edge of the upper horizontal post that, along with a chain, was used to hoist slaughtered cattle.

Built circa 1890, the *Machine Shed* (HS-12), (see Photo 3-1-30) was moved approximately 90 feet west of its original location in 1907 or 1908 to make room for the railroad alignment. The one-story, pole-frame, rectangular machine shed has a gable roof covered with corrugated metal. Vertical board-and-batten siding stained red, covers the exterior walls. Five large, side-hinged, board-and-batten doors dominate the east elevation.

The circa 1890 *Cow Shed* (HS-13), (see Photo 3-1-31) is located north of the Machine Shed. The Cow Shed is an L-shaped, pole-frame building with vertical, red-stained, board-and-batten siding. Corrugated metal covers the intersecting gabled roof. The west and south elevations are partially open. Wooden poles define the bays in these open sections. A pair of swinging board-and-batten doors is located on the east end of the north elevation. Two windows are also located in the north elevation. Five windows are evenly spaced along the north half of the east elevation. An enclosed room on the south end with the door was used as a calving area.

West of the Cow Shed lies a *Squeeze Chute* (HS-41), (see Photo 3-1-32). Built in 1984, the chute is a reconstruction of squeeze chutes typical of the Grant-Kohrs ranch era. Painted red, the wood-frame squeeze chute consists of a narrow passageway, constructed of horizontal wood planks supported by round wood posts, which allowed ranch hands to move and treat one animal at a time. At the end of the passageway was a gated section that held one animal. A two-part estanchion, apparently missing on this chute, held the animal's head still. The estanchion also acted as a gate, being hinged on one side, to release the animal. The chute also features evenly-spaced wood boards covering the top of the chute.

To the southwest of the main ranch house lies a complex of buildings and structures that once support, and now interpret, the ranch's horse and thoroughbred breeding operations. The central building in this complex is the *Thoroughbred Barn* (HS-15), (see Photo 3-1-33). Built circa 1883, modified in 1941, and restored by the NPS in 1981, the barn is a long, one-story, rectangular post-and-beam/wood-stud building constructed on a concrete foundation faced with stones salvaged from the original stone wall foundation. Red-painted board-and-batten siding covers the exterior walls and gabled roof. A small wood plank leads to large, centered, wooden double doors on the north elevation; a pedestrian door is cut into the west door. The west elevation contains a pedestrian door and nine evenly spaced windows. Large wooden double-doors are centered on the south elevation. The right door is a Dutch door. Eight windows line the east elevation.

Four *Stallion Barns* (HS-14, 16, 19, and 30) are located west and southwest of the main ranch house. Stallion Barn HS-14, (see Photo 3-1-34) is located southeast of the Thoroughbred Barn. Stallion Barn HS-16 is located northwest of the Thoroughbred Barn. Both are one-and-a-half story, rectangular, log buildings. The logs are joined with V-notching and daubed with a lime-based mortar. Wood shingles cover the gabled roofs. Stallion Barn HS-14 has new sill logs on a concrete foundation with stone veneer.

Stallion Barn HS-16, (see Photo 3-1-35) has new sill logs but rests on a loose stone foundation. Vertical planks fill the gable ends of both buildings. Features include vertical plank doors, multilight wood windows, and hay doors accessing the loft spaces.

Stallion Barn HS-19, (see Photo 3-1-36) is located west of the main ranch house and is also a one-and-a-half story, rectangular, log building. The logs are joined with square notching, daubed with lime-based mortar, and chinked with split, quarter-round poles. Wood shingles cover the gable roof. Vertical planks fill the gable ends. A shed roof lean-to addition is attached to the north elevation. Two large, four-panel double doors are centered beneath the east gable. There are windows on the south, and also a door on the west elevation of the lean-to. Additional features include a four-panel pedestrian door on the addition's eastern elevation, hay doors, and multilight sliding-sash windows.

Stallion Barn HS-30, (see Photo 3-1-37) is located southwest of the Thoroughbred Barn. It is a two-story, rectangular, shed-roof building of post-and-beam construction. Red-painted vertical board-and-batten siding covers the exterior walls. The barn sits on a replacement concrete and stone foundation. Corrugated metal covers the roof. Features include two board-and-batten doors and fixed-sash, four-light wood-frame windows resulting from its later use as a garage.

*Feed Racks* (HS-42, 43, and 44), (see Photo 3-1-38) surround the Thoroughbred Barn, servicing various corrals. Feed racks HS-43 and 44 are located to the west of the barn while feed rack HS-42 is located east of the barn.

Two *Feed Bunks* (HS-s 45 and 46), (see Photo 3-1-39) are located southwest of the horse complex and were built in 1932. They are attached to the south fence of the western corrals. The bunks are long, rectangular bins for storing feed. One end contains a door; access for placing fodder. Corral fencing comprises the back and other end wall. The front wall consists of evenly-spaced metal pipes sitting on a low wood plank wall. Horse and cattle reach the feed from between these pipes. The total height of the front wall is between 4 and 4.5 feet.

A *Feed Storage House* (HS-31), (see Photo 3-1-40) is located between the two feed bunks and was built in 1932. The feed storage house is a one-story, wood-frame, rectangular building built on a concrete foundation wall. The tongue-and-groove sheathing of the gable roof is covered with cedar shingles. The roof has exposed rafter ends and a wood ridge cap. The exterior walls are covered with white-painted horizontal lapped siding and red-painted corner boards. Both the east and west elevations feature a Dutch door and one six-light, fixed sash, wood-frame window.

The *West Corrals Squeeze Chute* (HS-47), (see Photo 3-1-41) is located just north of the Feed Storage House (HS-31). The red-painted, wood-frame chute consists of a narrow passageway between two corrals through which one animal would be moved at a time. At the end of the passageway is a small holding pen large enough for one animal. One side of the pen appears to have been a wood-plank wall while the other had metal bars through which wranglers could reach the animal. The front of the pen consists of a two-part estanchion with which to secure the animal's head. The top half of the estanchion could be lowered, using a pulley mechanism, until the animal's head was secured. This structure was reconstructed in 1984.

A collection of agricultural buildings and structures lies directly to the west of the main ranch house. These features include poultry facilities, cattle feeding structures, and water conveying systems for Kohrs-Manning Ditch and Johnson Creek.

The *Buggy Shed* (HS-17), (see Photo 3-1-42) is located directly west of the main ranch house. It was moved from its original location as part of the bunkhouse when the railroad came through in 1907. The shed is a one-story, rectangular, post-and-beam building with a shed roof. Building poles are set directly into the grounds; there is no foundation. Whitewashed board-and-batten siding covers the exterior walls. Sheets of corrugated metal cover the roof and fascia boards cover the rafter ends on all sides. Five sets of Z-braced, board-and-batten double doors dominate the south elevation. The east, west, and north elevations have no features.

West of the Buggy Shed lies a circa 1890 *Privy* (HS-20), (see Photo 3-1-43). The small, square privy is a one-story, wood-frame structure with a cedar-shingled gable roof. The structure has a creosote railroad tie foundation covered with vertical half-logs. Horizontal, wood, dropped-cove siding covers the exterior walls. The east elevation contains a four-panel wood door placed off center. A small window opening, boarded-up from the interior, is found high up on the western elevation. The north and south elevations have no features. Cedar shingles cover the roof.

The *Granary* (HS-18), (see Photo 3-1-44) was built circa 1890 and is a one-story, rectangular, wood-frame and tie-rod building with a gable roof. External studs and smooth interior walls, typical with granary design, provided greater efficiency in grain storage. Designed to be moveable, six hewn sill logs stabilize the base of the building. Single, centered, 4-feet-wide plank doors offer access on the east and west elevations. The roof is covered with unpainted cedar shingles and rafter ends are exposed on all sides. Vertical board-and-batten siding fills the gable ends.

The *Brooding House* (HS-21), (see Photo 3-1-45) was built in1935 and originally used to incubate eggs for hatching. The house is a one-story, rectangular, wood-frame building with a gable roof. Built on a concrete foundation, the exterior walls are covered with horizontal siding. Red hexagonal asphalt shingles cover the roof. The west elevation contains a two-panel wood door accessed via a small concrete and wood stoop. Two nine-light, wood-frame hopper windows are located on the south elevation. Centered on the east elevation is one nine-light hopper window. A chicken hatch/opening is at ground-level on the east elevation.

Also built in 1935, the *Chicken Coop* (HS-22), (see Photo 3-1-46) is a white-painted, one-story, rectangular, wood-frame building with a concrete foundation. White horizontal siding covers the exterior walls. The saltbox roof is covered in red hexagonal shingles. Doors, trim, and corner boards are painted red. A six-panel door is located on the east elevation. An attached ramp, made of plywood and battens, provides access for fowl into the building. A group of six multi-light windows, with wooden louvered vents in the transom space, runs the length of the south elevation. A chicken hatch/opening is centered below the windows.

The *Metal Granary* (HS-23), (see Photo 3-1-47) was purchased and installed at the ranch around 1910. It is a round, pre-manufactured structure with a metal turret roof. The granary was designed to be assembled on-site by the buyer.

Within the western corrals, there are four *Stock Shelters* (HS 24, 25, 27, and 29), (see representative Photo 3-1-48), originally built between 1933 and 1934. Shelters HS-24, 27, and 29 are located north of Johnson Creek and south of feed bunk HS-48. Shelter HS-24 is of post-and-pole construction, painted red on the exterior walls. The shed roof is covered with board-and-batten roofing. The east side is open while the remaining sides are closed for shelter from inclement weather. Shelters HS-25, 27, and 29 are similar to Shelter HS-24 in construction, also being open on the east elevation yet varying in length.

The *West Corrals Stock Shelter* (HS-25), (see Photo 3-1-49), is located opposite of the other three shelters and south of Johnson Creek. Rebuilt in 2000, this shelter replaced an older structure. This shelter is a large, rectangular frame, open to the south, with a board-and-batten-covered gable roof. The roof has exposed rafter ends. The walls are constructed of vertical board-and-batten siding. A thick, round, post supports the roof on the south elevation. Wood on the entire shelter remains unpainted and unfinished.

The *West Corrals Storage Structure* (HS-26), (see Photo 3-1-50), is located in the same area as the historic Hay Roof Barn (HS-25). The Hay Roof Barn, originally constructed in 1933, was deteriorated and replaced by the new structure in 2000.

A *Feed Storage House* (HS-28), (see Photo 3-1-51) is located between two feed bunks north of Johnson Creek and east of Kohrs-Manning Ditch. The house is a one-and-a-half story, rectangular, wood frame structure with a gable roof. The house sits on a concrete foundation. The roof is covered with cedar shingles and has a wooden hatch low on the northern roof slope, a metal ridge cap, and exposed rafter ends. White-painted horizontal siding covers the exterior walls. Both the east and west sides features a cross-braced Dutch door and a four-light, woodframe, fixed-sash window centered in the gable end.

**Feed Bunks** (HS-48 and 49), (see Photo 3-1-52) are located on either side of the feed storage house and are similar in construction to other feed bunks within the CLR study boundary. The 4 to 4.5-feet high wood bunks are two-sided structures attached to a vertical board fence, which becomes the third and fourth walls. One end has a gate that provides access to unload fodder

while the other end abuts the fence. The top half of the front wall has evenly-spaced metal bars while the bottom half is constructed of horizontal wood planking. The bunks are painted red.

The *Kohrs-Manning Ditch Bridge* (HS-55), (see Photo 3-1-53) is located on the roadway that runs along the southern fenceline of the western corrals and western feed lots. The bridge allows the road to cross Kohrs-Manning Ditch. The bridge is approximately 15-feet wide and constructed of square, wood beams which are set perpendicular to the roadway on timber abutments set into the shorelines. It has a wood plank surface. This structure was built in 1982; it replaced an earlier structure that was built in the late 1930s. Jack leg fencing is located on the south side.

The *West Feedlot Stock Shelters* (HS-32 and 33), (see Photo 3-1-54) are located south of Johnson Creek and west of Kohrs-Manning Ditch. The shelters are one-story, rectangular, redpainted, pole structures with shed roofs. Each structure measures five bays wide by two bays deep. The board-and-batten roofs are supported by pole rafters and pole purlins. The east side of each shelter is open.

Built circa 1930, the *West Feedlot Storage Shed* (HS-34), (see Photo 3-1-55) is located south of the stock shelters and was constructed for use as a portable sheep wagon and tack room; the structure was loaded on the back of a flat-bed truck for tack and a cot by Warren when he was showing Belgains. The shed is a small, rectangular, one room structure with a gently-pitched barrel roof. The shed currently rests on treated wood skids, added in1991. White-painted, horizontal, tongue-and-groove siding covers the exterior walls while aluminum strips protect the corners and frames the entrance door. The barrel roof has 2-inch wood sheathing covered with galvanized metal. The door also has a ghost mark of "Conrad Kohrs Co."

The *West Feedlot Squeeze Chute* (HS-53), (see Photo 3-1-56) built in 1934, is structurally similar to all other chutes within the CLR study boundary. Painted red, the wood-frame squeeze chute consists of a narrow passageway, constructed of horizontal wood planks supported by round wood posts, that allowed ranch hands to move and treat one animal at a time. At the end of the passageway was a gated section that held one animal. A two-part estanchion, apparently missing on this chute, held the animal's head still. The estanchion also acted as a gate, being hinged on one side, to release the animal. The chute also features evenly-spaced wood boards covering the top of the chute.

The *West Feedlot Feed Bunk* (HS-52), (see Photo 3-1-57) was reconstructed in 1987 and is similar in construction to all other feed bunks within the CLR study boundary. The feed bunk is essentially a two-sided structure built against two fence walls; the back and one end being the fence. The long bunker is located between the Kohrs-Manning Ditch and Slough Bridge and south of the West Feedlots Storage Shed. The front wall of the bunker has two parts; the top half consists of evenly-spaced metal bars while the bottom half consists of horizontal wood planks supporting the bars.

A Feed House (S-29) is located in the West Corrals and dates to the Warren era. It was probably used as a creep feed for calves. The corresponding historic structure number is unknown.

# **Objects and Small-scale Features**

[see Map EC-6 at the end of this section]

The Home Ranch Complex has the greatest diversity of fences and gates of any component landscape within the CLR study boundary. This is likely due to the intensity of development and multiple uses interpreted on the home ranch. Fences and gates around the home ranch consist almost completely of wood members; chicken wire fence around the poultry facilities is the sole exception.

The most predominant fence type in the complex is **Jack-Leg fence** (see Photo 3-1-58). This fence encloses the larger corrals and many of the smaller, interior corrals. Two wood posts are crossed at the top to form an X-shape. One horizontal rail rests in the crux of the X while 3 more rails are attached to the exterior of one post to form an angled fence. A fifth rail is attached to the lower side of the opposite pole for added strength and security. All wood members of the fence are un-milled and unfinished. While most all of the fencing found within the Home Ranch Complex is in good condition, a few sections of jack-leg fencing were in need of repair during the time of the field visit. These sections were located in the West Corrals near the riparian corridor and near the Kohrs-Manning Ditch Bridge.

Several types of **Vertical Board fence**, (see Photo 3-1-59) are found throughout the complex. This fence type partially encloses the poultry buildings, and can be found east of the Bielenberg Barn as well as other locations. Although some variations occur, the typical vertical board fence consists of round, upright posts supporting horizontal boards. A flat, wooden cap board is attached to the top of the posts. The vertical boards are then nailed to this frame. Typically, the frame forms the back side of the fence while the vertical boards form the front. This type of fence was observed with white and red paint as well as unfinished. While most all of the fencing found within the Home Ranch Complex is in good condition, a small segment of vertical board fence near HS-24 was observed to be in need of repair. Although there the vertical board fence forms the back of feed bunks, these fences are actually part of the feed bunk and are treated as one structure.

Several variations of post and rail fence are also within the complex. The most common type is the **5-rail Stacked-end fence**, (see Photo 3-1-60). It is the second-most observed corral enclosure after Jack-Leg fence. Five round rails extend between log posts on one side of the fence while two more rails are placed on the lower half of the fence on the other side. At each post, the rails for one section are placed alternately with the rails for the next section, creating a stacked appearance. On these fences, the rail on the opposite side is known as a rub rail. This fence can also be found with 4 or 6 rails and varying rail and post size. Yet another version of this fence is located near the L-Shaped Cow Barn north of the main ranch house. This fence has seven unpeeled, un-milled log rails, stacked at the ends, attached to vertical milled posts. A small segment of fence type was observed to be missing in the West Feedlot during the field visit.

A similar fence type is the **Simple Post and Rail fence**, (see Photo 3-1-29) which consists of horizontal wood rails attached to upright round posts. The ends are stacked as with the 5-rail fences yet there are no additional rails on the opposite side of the fence. This fence was observed with 4, 5, and 7 rails. A red-painted version provides a small enclosure around the beef hoist. **Chicken Wire fence**, (see Photo 3-1-61) partially encloses the Chicken and Brooder Houses. This fence consists of thick, white-painted, wood posts supporting a flat, board cap and horizontal plank. The plank is located either half-way down or at the bottom of the post. Chicken wire mesh is stretched across this frame and attached to the cap and plank. Two **Chicken Wire gates** (see Photo 3-1-62), are located on the southern edge of the fence line. They consist of rectangular,

white-painted, wood frames with chicken wire mesh stretched across the interior of the frame. Each door is attached to a hinge-post and has a simple bolting device to latch the door.

Located near the L-shaped Cow Barn is a **Stacked log fence**, (see Photo 3-1-63). This fence consists of ten unpeeled, un-milled logs stacked atop each other between tall, vertical milled wood posts. Two posts are set opposite each other along each section of fence and stabilized with wire and metal hooks just above the log stack.

Around the Home Ranch Complex, gates are used to control access; mainly to keep animals separated and out of certain areas. Many variations of the **Overhead Gate**, (see Photo 3-1-64) exist. This gate is found in the single, double, and square form. Single overhead gates consist of two tall, vertical posts supporting a top-mounted horizontal crossbar. The double overhead gate has three posts supporting a single crossbar, creating two entrances. The square overhead gate has two single gates placed next to each other and connected by perpendicular crossbars, as well as the typical parallel crossbars, to form a square. Overhead gates usually support lower, swinging gates that are attached to the vertical posts.

The predominant type of gate found in the home ranch complex is the **Red Wood Gate**, (see Photo 3-1-65). This red-painted gate consists of five milled boards attached horizontally to support posts at either end. The gate is braced on each side with a central vertical board and two diagonal boards. This gate was also observed unpainted. Typically, the red wood gate is attached to a fence, using the last vertical posts as a hinge-post. Often, though, the gate can be found attached to an overhead gate. This type of gate are Warren-era resources.

Several **5-rail Braced Gates**, (see Photo 3-1-66) were observed during fieldwork. This gate has a hinge-post almost twice the height of the gate and has a long, diagonal brace leading from the top of the hinge-post to the opposite corner of the gate. This brace prevents and corrects sagging. These gates are also often found attached to an overhead gate.

Two types of **Vertical Board Gate**, (see Photo 3-1-67) are found within the complex. They consist of red-painted vertical wood boards supported by a frame and attached to a hinge-post. Although similar in construction, the two gates vary in width. The pedestrian gate is wide enough for a person to pass through and has a Z-brace frame. The second gate allows a vehicle to pass through and is located near the Bielenberg Barn.

Several **fire hydrants** and **fire boxes** are also found throughout the home ranch complex.

### Missing & Archeological Resources

[see Map EC-7 at the end of this section]

The Home Ranch complex contains old underground and surface irrigation and drainage systems that used to provide water to the home ranch. One **irrigation system** began near the North Fork of Johnson Creek, just south of the ranch house and west of the railroad tracks. Here a diversion dam would send water in a surface ditch to an open ditch that ran along the edge of the garden. This ditch turned where the garden edge turned north, and then turned quickly again in the vicinity of the Blacksmith Shop (HS-3), and went south toward the Thoroughbred Barn (HS-15)

and Stallion Barn (HS-16), and the buildings west of it. This water provided water for stock and for the garden.<sup>3</sup>

Other irrigation systems were constructed to provide the house with water, irrigate the front lawn of the ranch home and flush the privies. In the 1907 map, a **ditch** appears to the south of the residence, connecting with Johnson Creek to the south. This ditch is likely the drainage ditch that drained the house. These systems are described in more detail in the Grant-Kohrs Residence component landscape section of this chapter.

According to the *Historic Resource Study*, there were numerous attempts to drain off excess groundwater from the lower elevations of the ranch during the active years of its operations. Remnants of these attempts remain in the form of buried wooden pipes, or boxes, roughly square, with access points spaced along them. In addition, pipes fed water to various barns and to the ranch and bunkhouses.<sup>4</sup> The exact location of much of this system is unknown.

A sunken **hydraulic ram**, located near the spring west of the Machine Shed (HS 12), used to pump water from the Kohrs-Manning Ditch as well as the nearby spring. This hydraulic ram was used to provide water to the ranch home and landscape via a wooden underground pipe system. Once in the house, cast iron pipes carried the water to the attic of the west addition where it was stored in a rectangular, lead-lined wooden storage tank, and from there, delivered throughout the residence via water heaters and spigots.<sup>5</sup> An overflow pipe carried excess water to the basement and out to a drainage system out to Johnson Creek.<sup>6</sup> This system dates to the 1890 addition, and the drainage ditch appears to be represented on the 1907 map.

In addition to the complex irrigation system contained within the Home Ranch Complex, several structures that were once part of the landscape are no longer extant. Most missing structures were removed as new structures were built to replace them, or as their functions became outdated. Most of these features are documented within the 1974 Historic Resource Study as Non-Extant Structures (NES). Missing features are as follows:

- **Kohrs-Manning Flume** (HS-51): This flume was built in 1947 to carry the Kohrs-Manning Ditch over Johnson Creek. Located approximately eight feet west of the current flume, it was removed in 1974. The current flume is HS-50.
- **Bridge** (HS-54): This bridge carried a roadway connecting some of the lots in the Johnson Creek (West) Corrals over Johnson Creek. Constructed c. 1930, it consisted of wooden timbers and heavy wood planking. This bridge was removed sometime after 1987.
- **Machine Shed** (NES-B): This structure appears on the 1907 maps at an odd, diagonal angle, approximately 50 feet by 20 feet. It was removed around 1908.
- **Open Cow-Shed** (NES-C): This structure measured approximately 20 feet by 63 feet. It was located near NES-B, and was also removed by 1908.

<sup>5</sup> Albright, 193.

<sup>&</sup>lt;sup>3</sup> John Albright, *Historic Resources Study and Historic Structure Report Historical Data, Kohrs and Bielenberg Home Ranch, Grant-Kohrs Ranch National Historic Site, Montana* (Denver: Denver Service Center, National Park Service, 1977), 215-216.

<sup>&</sup>lt;sup>4</sup> Albright, 216.

<sup>&</sup>lt;sup>6</sup> Albright, 194, 216.

<sup>&</sup>lt;sup>7</sup> Albright, 209-211.

- Cow Stable (NES-D): This structure measured approximately 193 feet by 20 feet, and is believed to be the long shed shown in the 1884 Leeson drawing. Like NES A and C, it was likely torn down in 1908 to make way for the Milwaukee Railroad.
- **Cow Barn** (NES-E): This structure stood between today's HS-7 and HS-9. It shared a common wall with HS-7 and blew down in 1931.
- Chicken House (NES-F): Now covered by HS-6, this was the site of a log and frame Chicken House. It was likely torn down in 1933 or 1934.
- **Turkey House**: This structure was located directly to the west of the Chicken House. It too was likely torn down in 1933 or 1934.
- **Cow Shed** (NES-L): This was an open-sided shed to the south, with a thatched roof, measuring approximately 50 feet by 16 feet. It fell into disrepair by about 1930 and was torn down at that time.
- **Feed Racks** (NES-H, I, J, K): These four wooden feed racks, possibly twenty feet by four feet and standing in pairs, held feed for the cattle in the southern-most portion of the Johnson Creek (West) Corrals. They were removed in the early 1930s.
- **Wooden box or flume** (NES-M): While remnants of this structure, believed to be a wooden box siphon, were found in the early 1970s near the Kohrs-Manning Ditch, the original location of this structure is unknown. It is possible that this feature carried water over or under the Kohrs-Manning Ditch.
- **Foundations**, unknown (NES-N): The concrete foundation of this structure appears to relate to veterinary or grooming work on animals, although its actual function is unknown. This feature was destroyed around 1930.
- **Watering Trough** (NES-O): This wooden watering trough was connected to a water supply system west of HS-7. Its date of removal is unknown.
- Log Retaining Wall (NES-P): The L-shaped wall was once about four feet high, and was attached to HS-7. The date of its destruction is not known, but it had rotted away by 1935
- NPS Trailers: After the NPS took over management of the ranch, several trailers were added to the Lower House Yard in the 1970's for administrative and housing purposes. One was located near the Blacksmith Shop/Garage, another in the Lower House Yard, and another near the Buggy Shed (which was later moved to the side of the Thoroughbred Barn). All of these trailers have since been removed.
- **Slaughter House**: This small structure appears north of and adjacent to the Ice House (HS-5) in Gerhmann's drawing of the ca. 1904 home ranch complex, drawn from memory in 1974. This structure does not appear in the ca. 1900 photograph of the Lower Ranch Yard (GRKO 11400L), and may have post-dated the photo. It does not appear in the 1907 map of the Deer Lodge Townsite.

- **Unknown Structure**: This structure appears in ca. 1935 photos of Conrad Warren with a Belgian horse, and appears as a backdrop for the photo (GRKO 15884.12; GRKO 15884.14). It was located south of the Coal Shed (HS-4).



Photo 3-1-1: (T-10) Johnson Creek has been and continues to be the most culturally significant creek within the Grant-Kohrs Ranch.



Photo 3-1-2 : (W-01) Willows and cottonwooods can be found along the Johnson Creek riparian zone.



Photo 3-1-3: (X-13) Fences and structures, along with the natural features, constructed water features, circulation features, and vegetation, organize the spaces within the Home Ranch landscape.



Photo 3-1-4: (AC-07) Several structures within the home ranch complex, such as the bunkhouse, contain interpretive exhibits that are open to the public.



Photo 3-1-5: (Y-04) The Lower House Yard south of the buggy shed is currently being used for demonstration and education.



Photo 3-1-6: (X-18) A trailer located to the west of the thoroughbred barn (HS-15), was used as a residence by park employees. This structure was removed in 2003.



Photo 3-1-7: (AB-10) The Kohrs-Manning Ditch, which begins just south of the park boundary, is sourced by the Clark Fork River. This ditch is approximately ten feet wide, and provides irrigation to the lower fields to its eastern side.

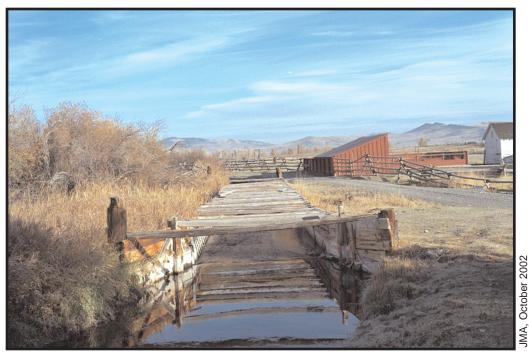


Photo 3-1-8 : (S-22) The Kohrs-Manning Ditch crosses Johnson Creek via a wooden flume (HS-50).



Photo 3-1-9: (AD-15) Dairy Loop Road.



Photo 3-1-10: (AC-8) Bunkhouse Road.



Photo 3-1-11: (AB-22) Johnson Creek Road.



Photo 3-1-12: (S-11) Clark Fork River Bridge Road.



Photo 3-1-13: (AA-25) Kohrs-Manning Ditch Road.



Photo 3-1-14: (G-20) Warren Pumphouse Road.



Photo 3-1-15: (U-16) Buildings and fences within the Home Ranch area contain views and vistas, making the spaces within the complex appear much more humanly scaled than the contrasting expansive landscape of pastures and hills beyond.



Photo 3-1-16: (V-19) Western foothills and the Flint Creek Mountain Range beyond provide constant context to the longer vistas that dominate the viewshed beyond the developed area.



Photo 3-1-17: (AC-01) Ice House/Tack Room (HS-5).



Photo 3-1-18: (AB-24) Coal shed (HS-4).



Photo 3-1-19: (AB-16) Blacksmith Shop/Garage (HS-3).



Photo 3-1-20: (AC-11) Granary/Roller Mill (HS-6).

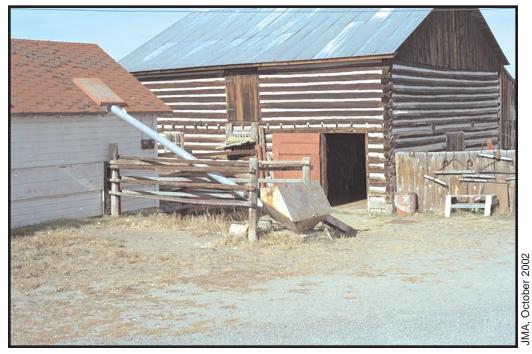


Photo 3-1-21 : (AC-13) Draft Horse Barn (HS-7). Granary/Roller Mill can be seen on the left with the grain auger.



Photo 3-1-22: (AC-20) Privy (HS-8).



Photo 3-1-23: (AD-10) Dairy (HS-9).

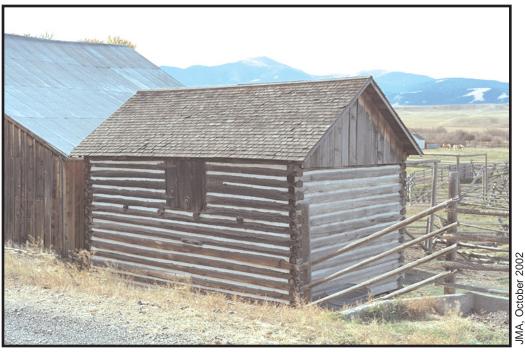


Photo 3-1-24: (AC-21) Oxen Barn (HS-10).



Photo 3-1-25: (AD-08) Bielenberg Barn (HS-11).



Photo 3-1-26: (AC-15) Cattle Scale (HS-35).



Photo 3-1-27: (AD-12) Feed Rack (HS-37).



Photo 3-1-28: (AC-22) Manure Pit (HS-39).



Photo 3-1-29: (AC-24) Beef Hoist (HS-40) and Simple Rail and Post Fence.



Photo 3-1-30: (AB-06) Machine Shed (HS-12).



Photo 3-1-31: (AA-22) Cow Shed in distance (HS-13).



Photo 3-1-32: (Z-19) Squeeze Chute (HS-41).



Photo 3-1-33: (X-16) Thoroughbred Barn (HS-15).



Photo 3-1-34: (X-14) Stallion Barn (HS-14).

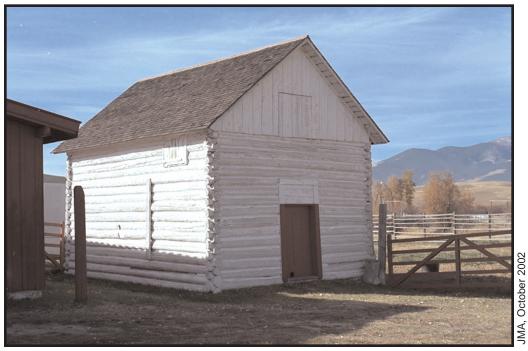


Photo 3-1-35: (X-22) Stallion Barn (HS-16).



Photo 3-1-36: (Y-09) Stallion Barn/Garage (HS-19).

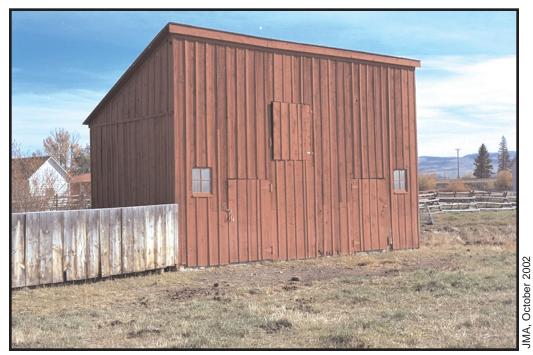


Photo 3-1-37: (X-02) Stallion Barn (HS-30).



Photo 3-1-38: (X-25) Feed Rack (HS-43).



Photo 3-1-39: (W-17) Feed Bunk (HS-46).



Photo 3-1-40: (W-13) Feed Storage House (HS-31).



Photo 3-1-41: (W-16) Squeeze Chute (HS-47).



Photo 3-1-42: (Y-12) Lower Buggy Shed (HS-17).



Photo 3-1-43: (U-22) Privy (HS-20).

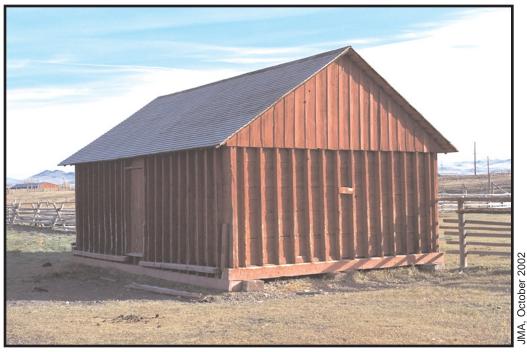


Photo 3-1-44: (U-06) Granary (HS-18).



Photo 3-1-45: (U-12) Brooding House (HS-21).



Photo 3-1-46: (U-14) Chicken Coop (HS-22).

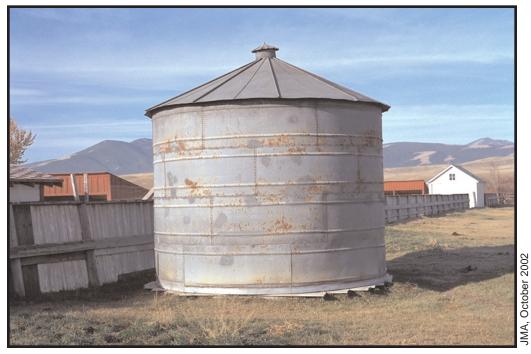


Photo 3-1-47: (U-05) Metal Granary (HS-23).



Photo 3-1-48: (T-16) Stock Shelter (HS-29).

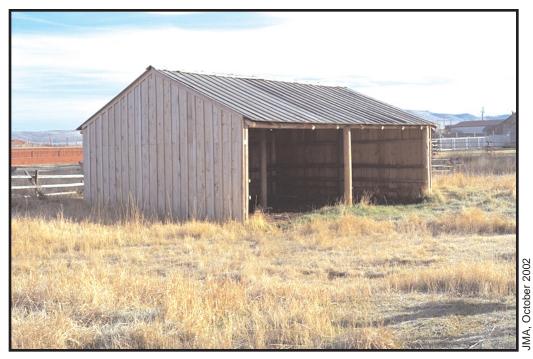


Photo 3-1-49: (T-12) West Corrals Stock Shelter (HS-25).

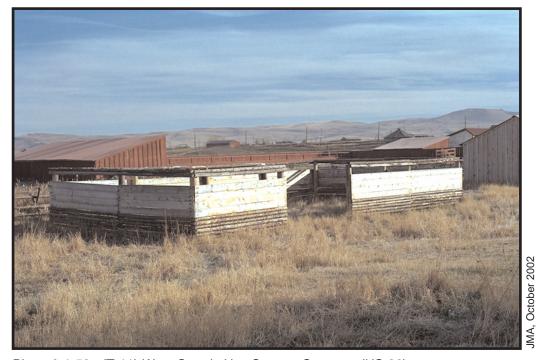


Photo 3-1-50: (T-11) West Corrals Hay Storage Structure (HS-26).



Photo 3-1-51: (T-18) Feed Storage House (HS-28).

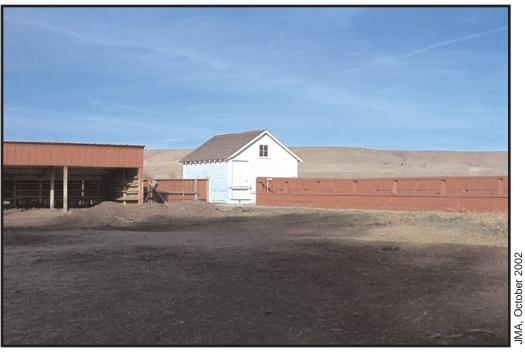


Photo 3-1-52: (U-25) Feed bunk (HS-48).



Photo 3-1-53: (S-14) Kohrs-Manning Ditch Bridge (HS-55).



Photo 3-1-54: (S-05) West Feedlot Stock Shelter (HS-32).

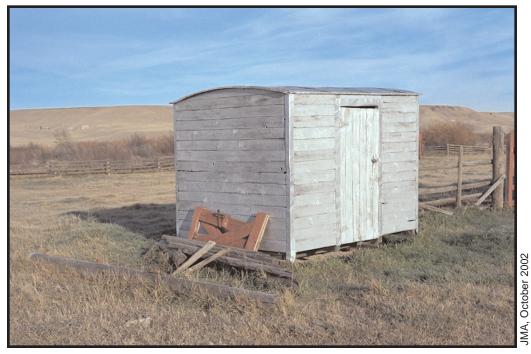


Photo 3-1-55: (S-03) West Feedlot Storage Shed (HS-34).



Photo 3-1-56: (S-04) West Feedlot Squeeze Chute (HS-53).



Photo 3-1-57: (S-10) West Feedlot Feed Bunk (HS-52).



Photo 3-1-58: (T-22) Jack-leg fence.



Photo 3-1-59: (W-14) Vertical Board Fence behind feed bunk.



Photo 3-1-60: (V-18) 5-rail stacked end fence.



Photo 3-1-61: (U-11) Chicken wire fence.



Photo 3-1-62: (U-10) Chicken wire gates.

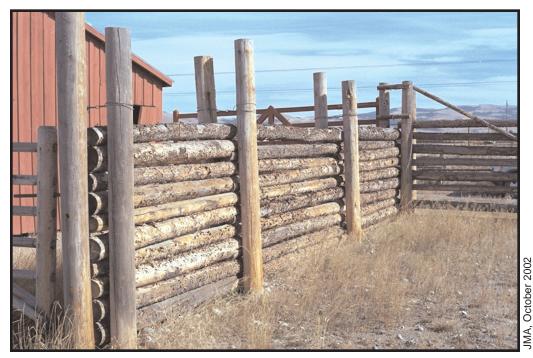


Photo 3-1-63: (Z-13) Stacked Log Fence.



Photo 3-1-64: (W-09) Typical Overhead Gate.



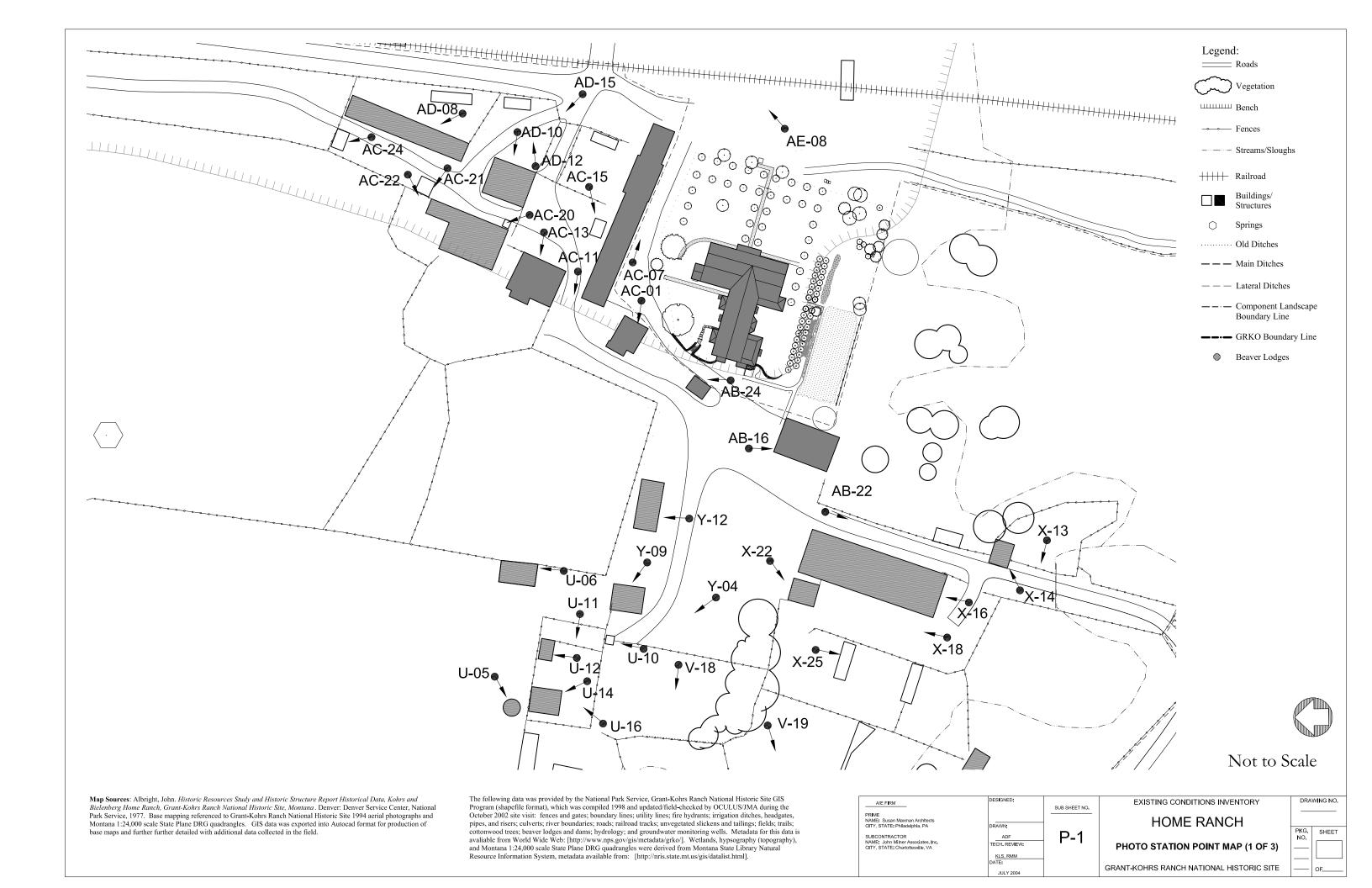
Photo 3-1-65: (Z-10) Typical Red Wood Gate.

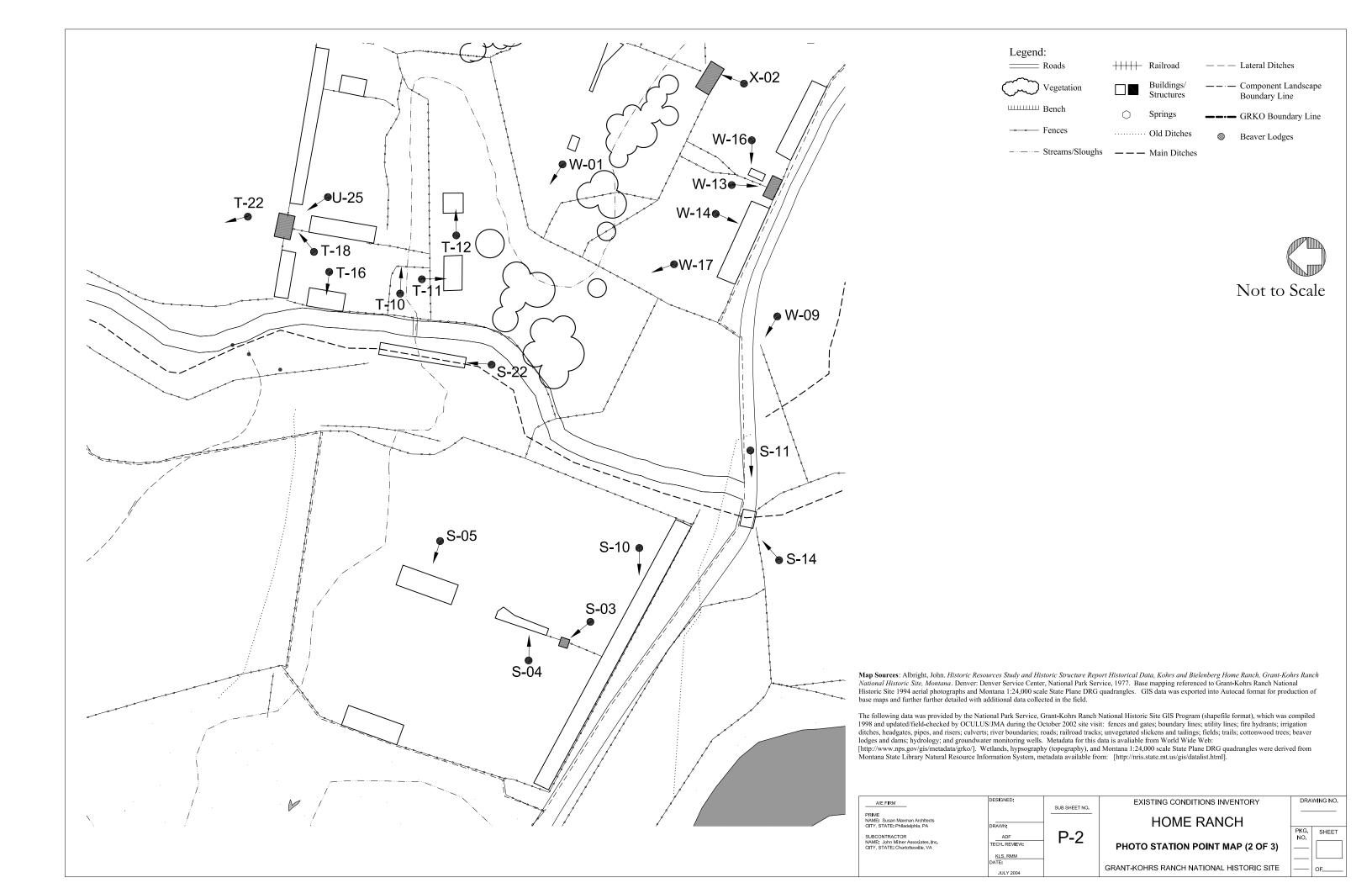


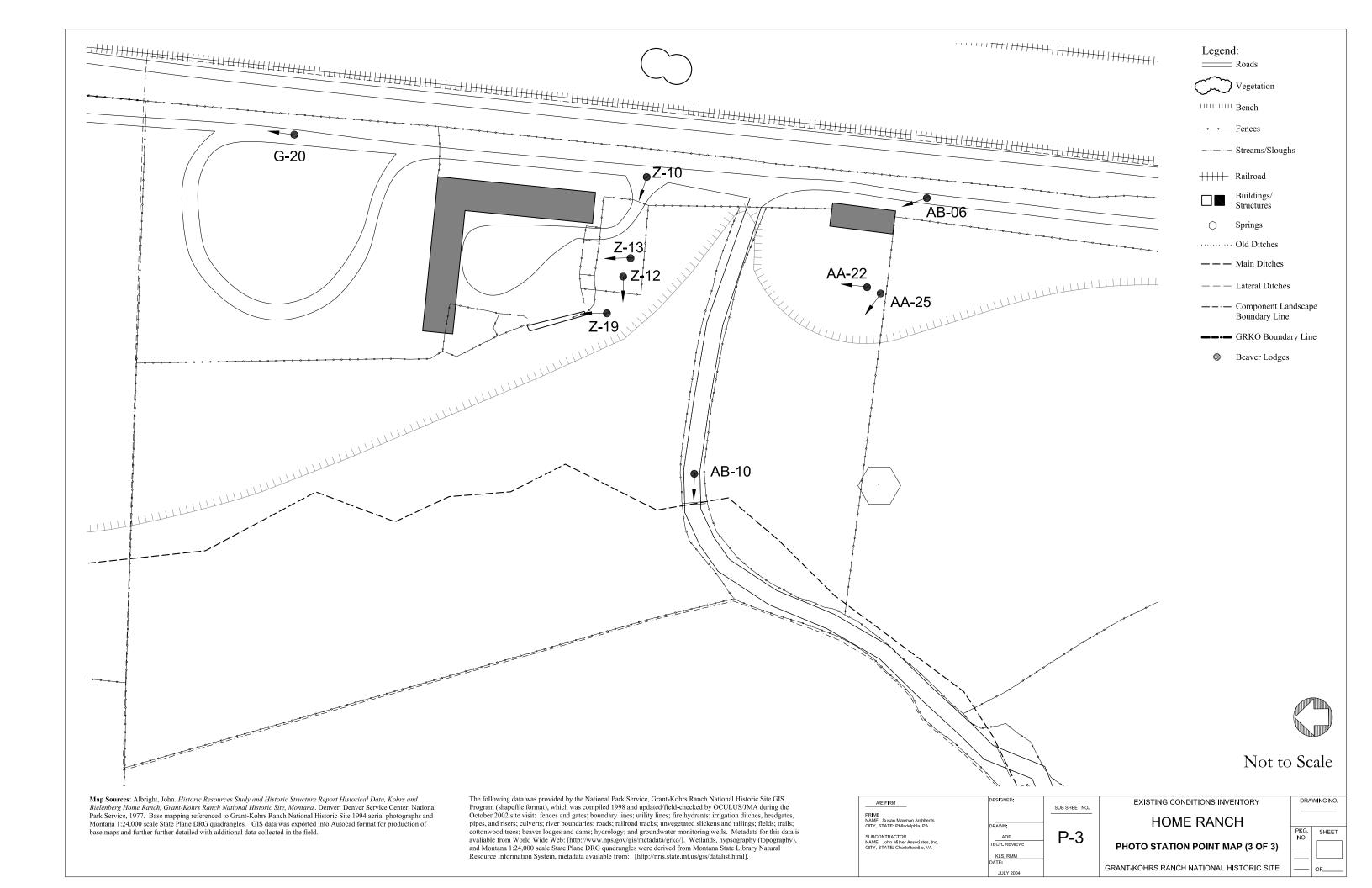
Photo 3-1-66: (Z-12) Typical 5-Rail Braced Gate.

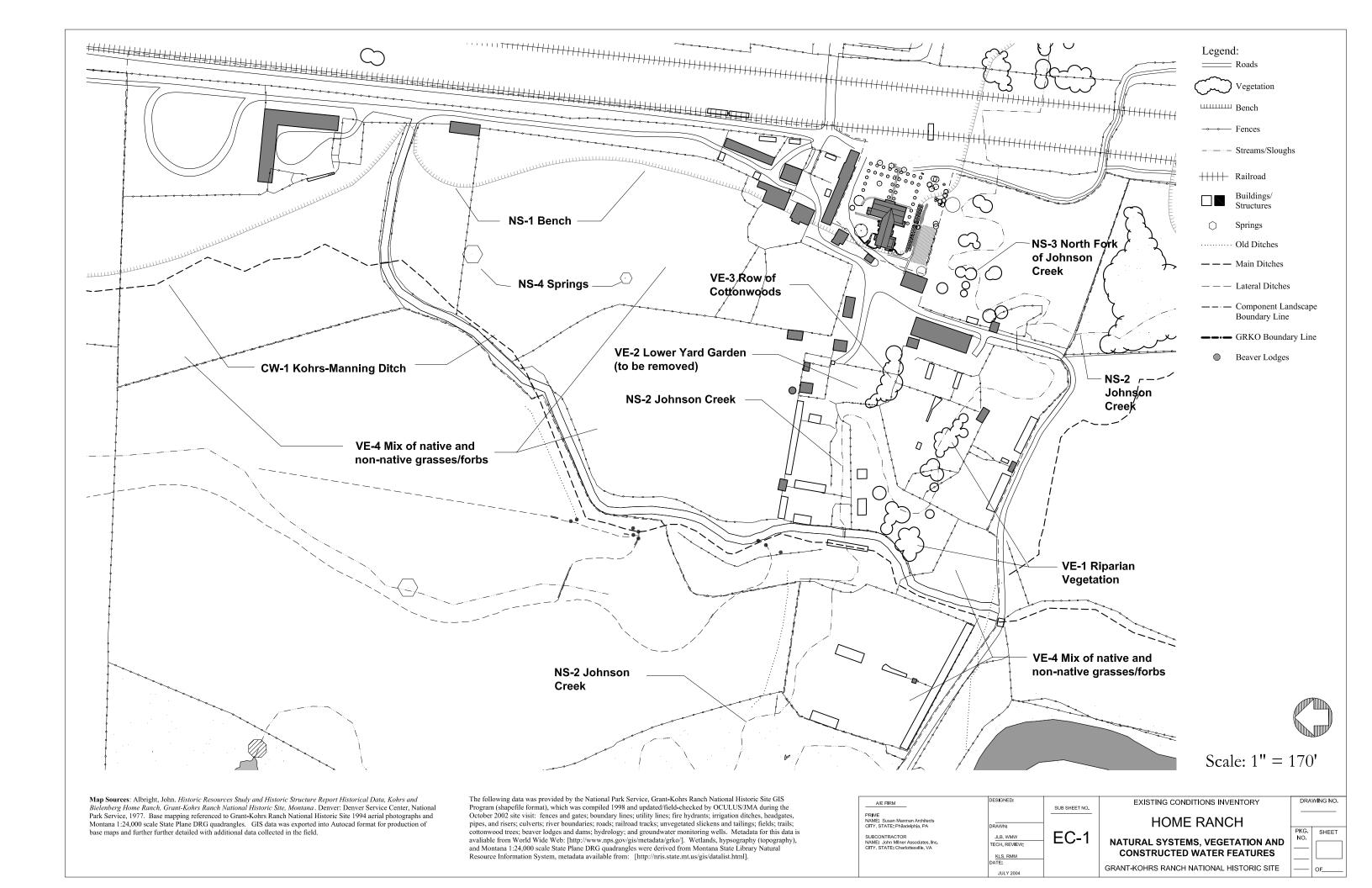


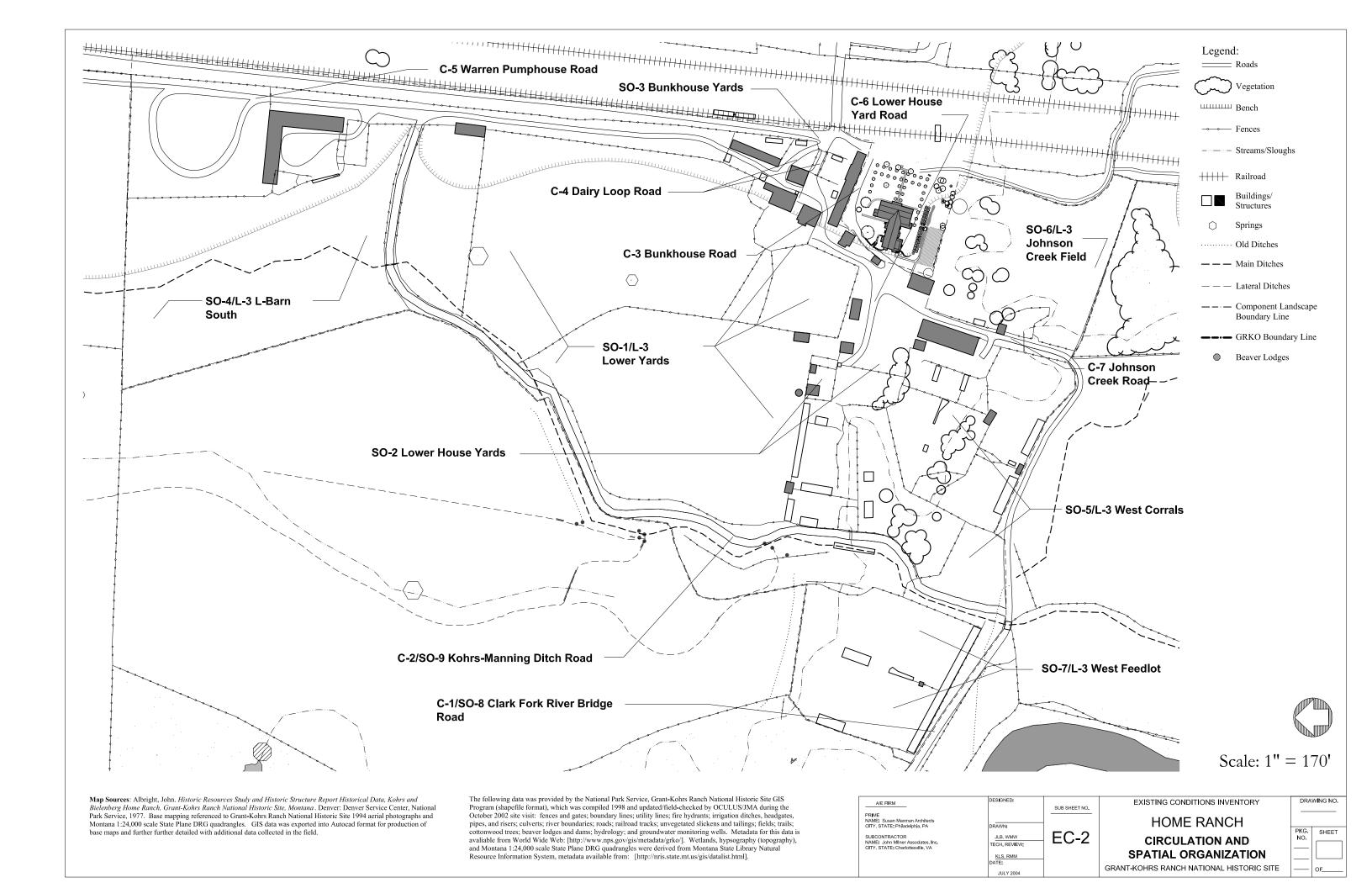
Photo 3-1-67 : (V-08) Vertical Board Gate (added by the NPS in the 1970s) with Jack-Leg Fence (right) and Vertical Board Fence (left).

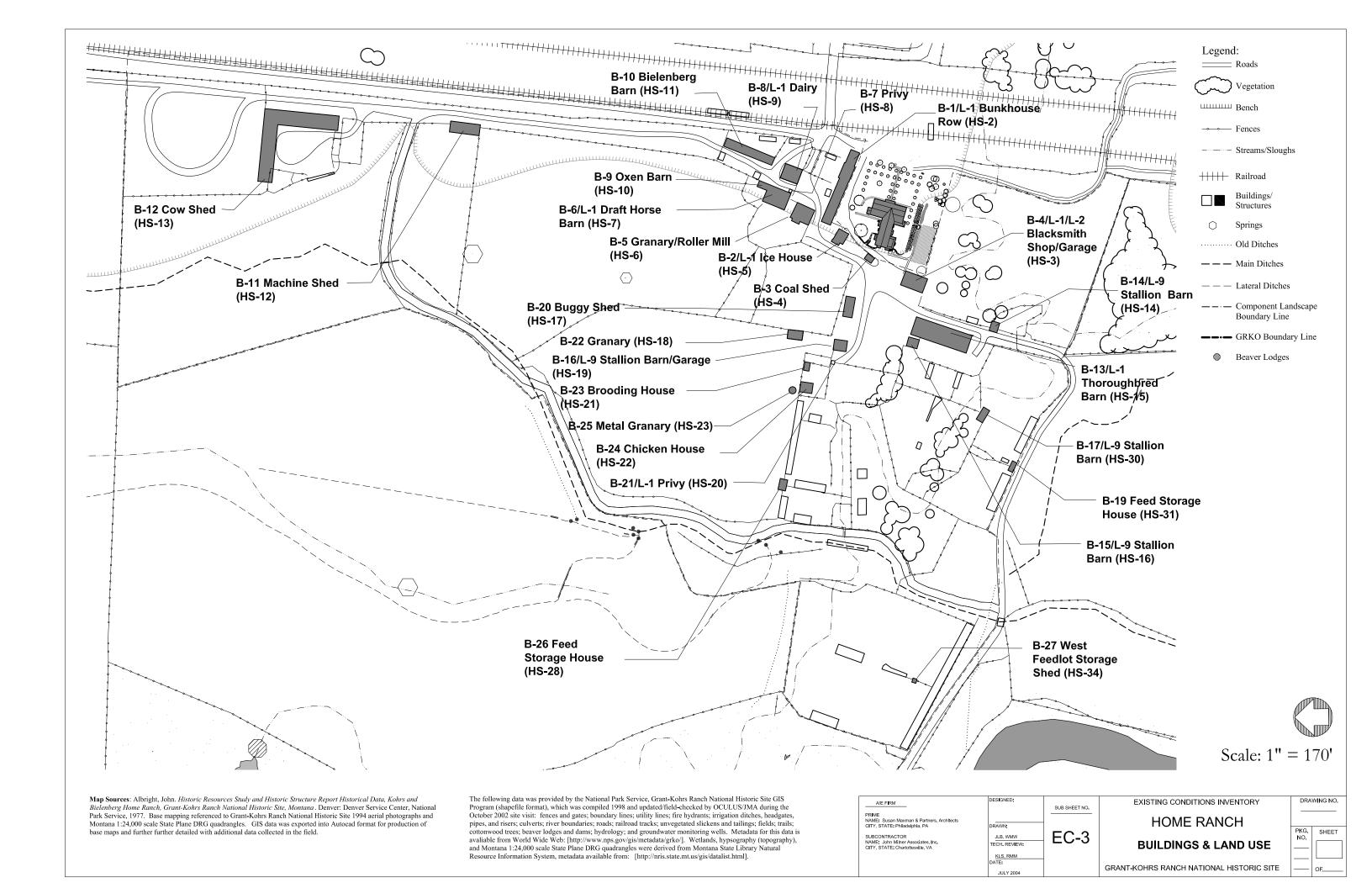


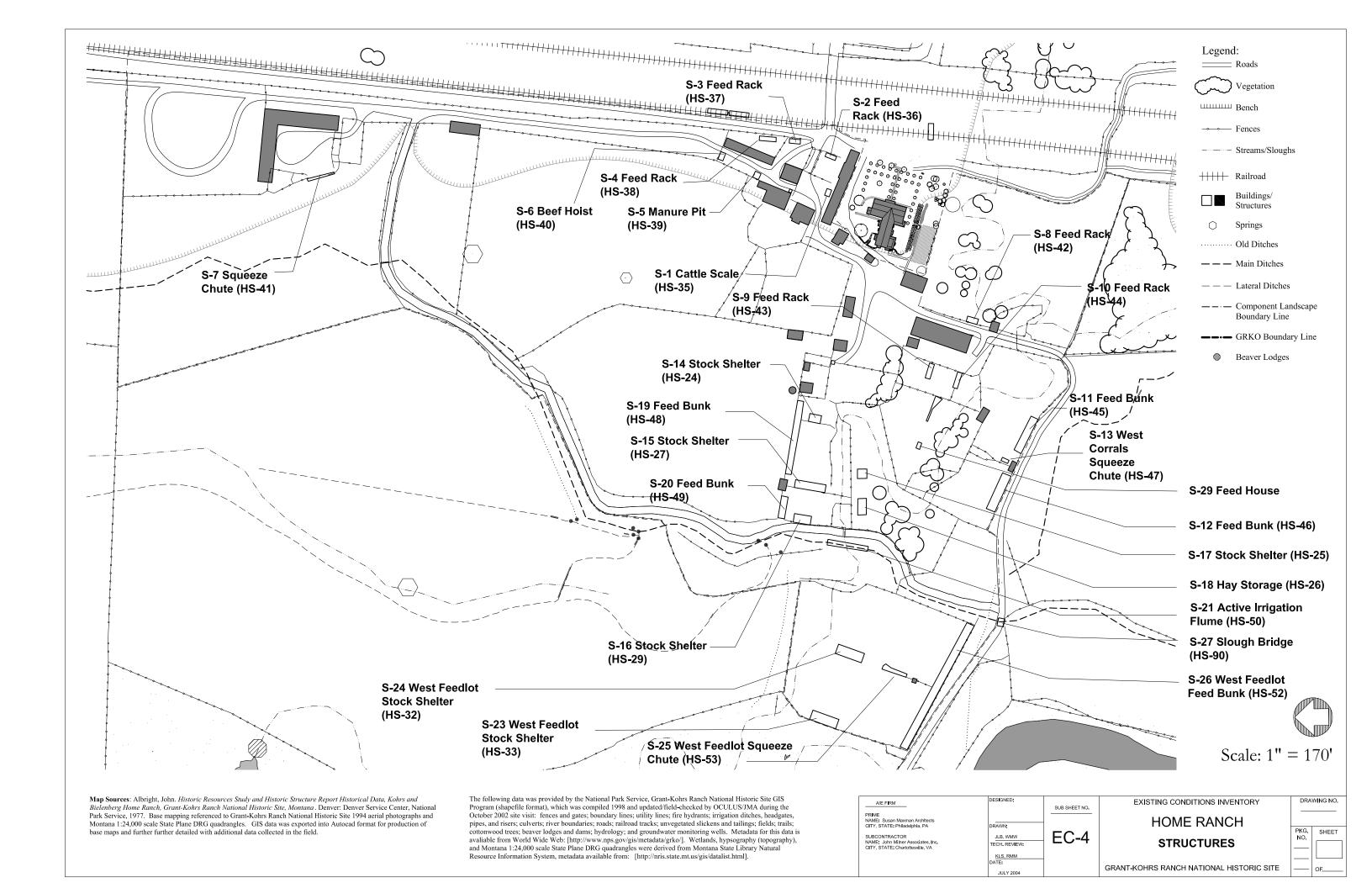


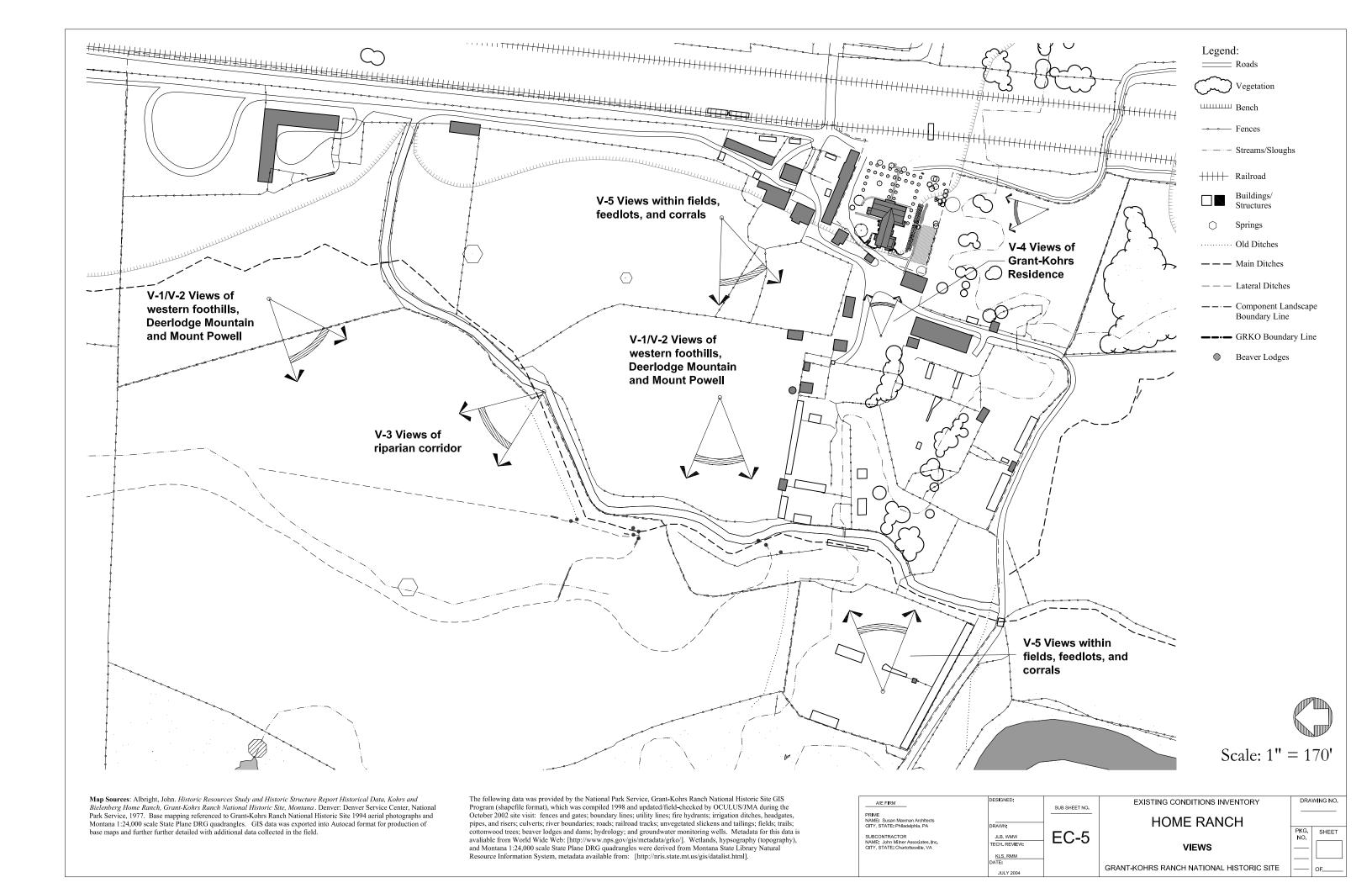


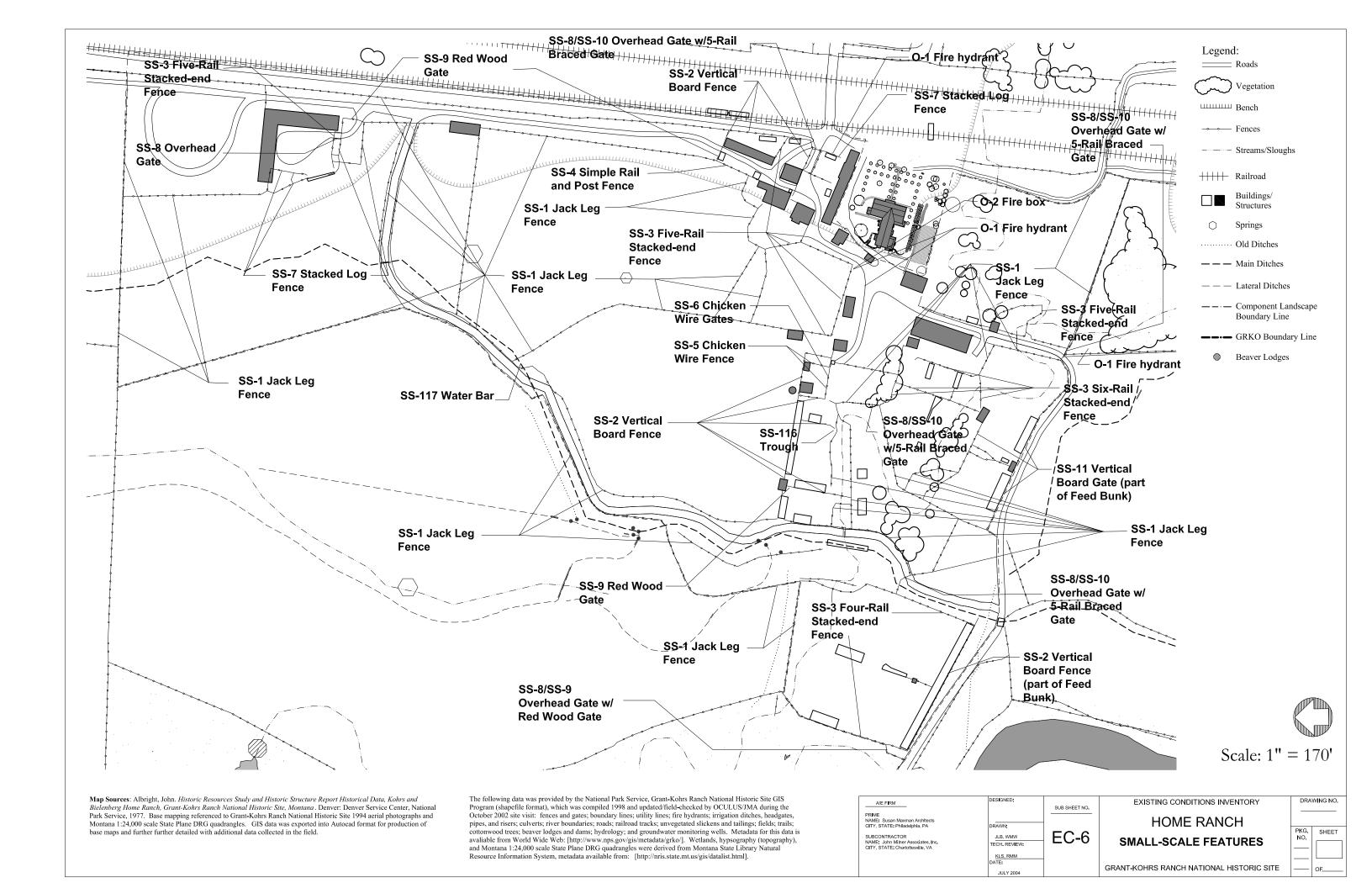


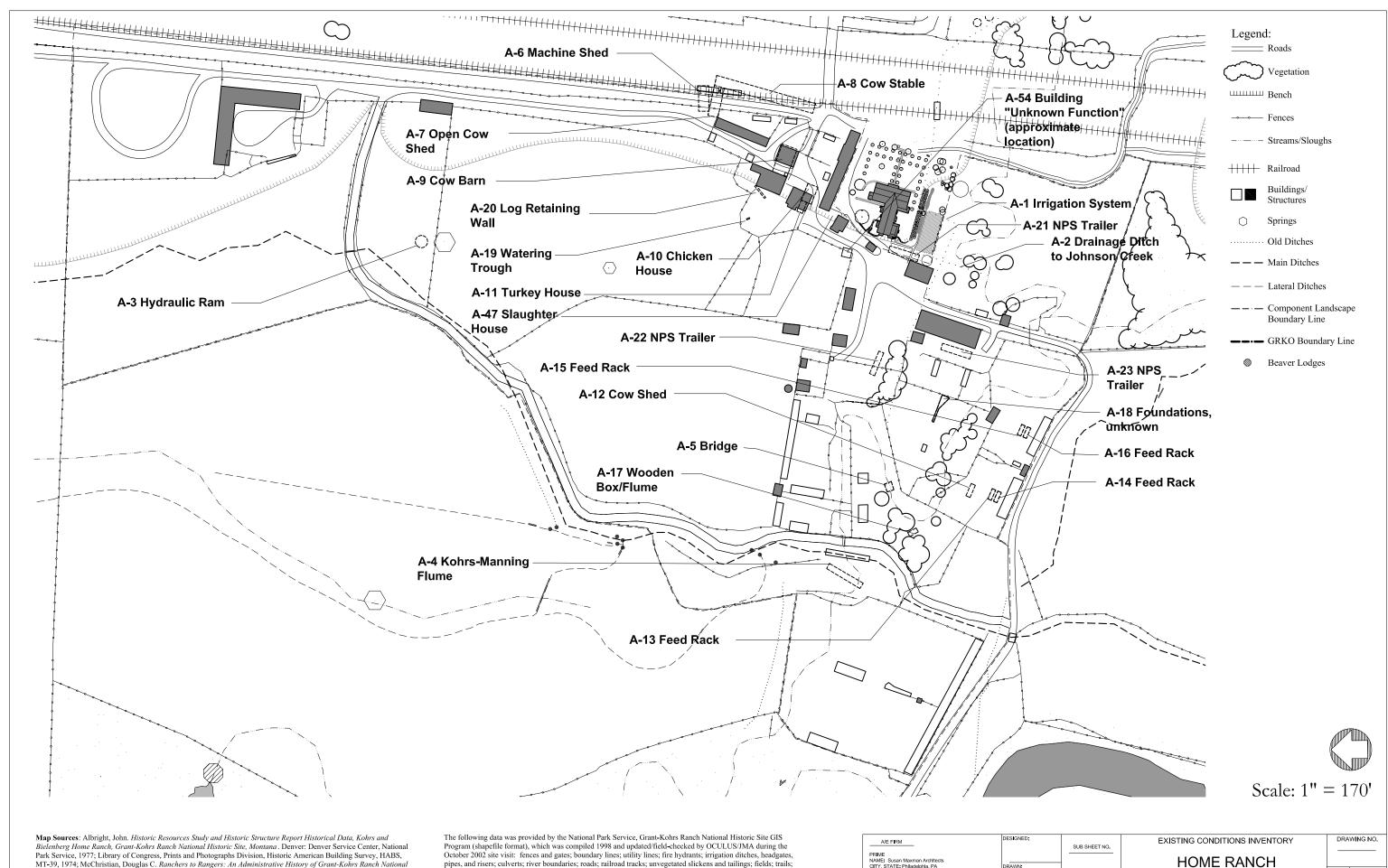












Park Service, 1977; Library of Congress, Prints and Photographs Division, Historic American Building Survey, HABS, MT-39, 1974; McChristian, Douglas C. Ranchers to Rangers: An Administrative History of Grant-Kohrs Ranch National Historic Site. National Park Service, Rocky Mountain Cluster, 1977; historic aerial photographs (various), on file at Grant-Kohrs Ranch National Historic Site archives. Base mapping referenced to Grant-Kohrs Ranch National Historic Site 1994 aerial photographs and Montana 1:24,000 scale State Plane DRG quadrangles. GIS data was exported into Autocad format for production of base maps and further further detailed with additional data collected in the field. Program (shapefile format), which was compiled 1998 and updated/field-checked by OCULUS/JMA during the October 2002 site visit: fences and gates; boundary lines; utility lines; fire hydrants; irrigation ditches, headgates, pipes, and risers; culverts; river boundaries; roads; railroad tracks; unvegetated slickens and tailings; fields; trails; cottonwood trees; beaver lodges and dams; hydrology; and groundwater monitoring wells. Metadata for this data is avaliable from World Wide Web: [http://www.nps.gov/gis/metadata/grko/]. Wetlands, hypsography (topography), and Montana 1:24,000 scale State Plane DRG quadrangles were derived from Montana State Library Natural Resource Information System, metadata available from: [http://nris.state.mt.us/gis/datalist.html].

A/E FIRM	DESIGNED:	
		SUB SHEET NO.
PRIME		
NAME: Susan Maxman Architects		
CITY, STATE: Philadelphia, PA	DRAWN:	
SUBCONTRACTOR	JLB, WMW	FC-7
NAME: John Milner Associates, Inc. CITY, STATE: Charlottesville, VA	TECH. REVIEW:	
	KI C DIMI	

**HOME RANCH** MISSING **FEATURES** 

GRANT-KOHRS RANCH NATIONAL HISTORIC SITE

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