RE. CLIVED

NATIONAL REGISTER OF HISTORIC PLACES MULTIPLE PROPERTY DOCUMENTATION FORM

MAR 1 5 1993

<u>X</u> 1	New Submission Amended Submission	NATIONAL REGISTER			
A. Name of Multiple Property Listing Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana B. Associated Historic Contexts					
			I.	Initial Settlement of Lower Willow Creek and the Development of Homesteads for Irrigated Farming and Stock Raising, 1864-1882	
			II.	The Era of Intensified and Diversified Agricultural Development, 1883-1940	
III.	II. Vernacular Ranch Buildings in the Willow Creek Area, 1864-1940				
C. Form Prepared By					
City or	& Number: Liberty Island Telephone: 212/943-1429 r Town: New York State: New York Zip: 10004 Certification				
As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this documentation form meets the National Register documentation standards and sets forth requirements for the listing of related properties consistent with the National Register criteria. This submission meets the procedural and professional requirements set forth in 36 CFR Part 60 and the Secretary of the Interior's Standards for Archaeology and Historic Preservation. (See continuation sheet for additional comments.)					
Sig	nature of certifying official MT SH PO Date	3-4-93			
	DNTANA STATE HISTORIC PRESERVATION OFFICE atte or Federal agency and bureau				
I, hereby, certify that this multiple property documentation form has been approved by the National Register as a basis for evaluating related properties for listing in the National Register. Listonic Of the National Register Listonic Of the National Register Date					

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number E

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 1

E. STATEMENT OF HISTORIC CONTEXTS

I. <u>Initial Settlement of lower Willow Creek and the development of homesteads for irrigated farming and stock raising</u>, 1864-1882¹

Summary. The initial settlement of the lower Willow Creek valley and the development of homesteads for irrigated farming and stock ranching was prompted by the need for agriculture to support regional mining operations. The presence of farmers in the Willow Creek area in the mid-1860s influenced the establishment in 1867 of an initial point of survey, on the hill at the western side of the valley, in an already inhabited area where further settlement would be likely to occur. The Willow Creek community of farms/ranches, with headquarters on homesteads in the valley, was developed mainly by two groups of friends and relatives who migrated together to Montana from Missouri and Utah. The early survey of the area facilitated the filing of preemption claims and homestead applications. The ability to establish uncontested property rights, coupled with the sense of community transplanted from previous locations, may have furthered the stability of the agricultural community which was thriving by 1870.

The Setting. The Willow Creek area is the extreme western edge of Gallatin County, and is southwest of the Three Forks area where the Jefferson and Madison Rivers converge with the east and west branches of the Gallatin River to form the Missouri River. As an irrigated agricultural area, it is a small extension of the broad, much larger Gallatin Valley. Willow Creek flows to the north out of bench land into the lower Willow Creek canyon or valley which is approximately three-quarters of a mile wide and two-and-one-half miles long, at the elevation of about 4200 feet. The valley opens out onto slightly lower land to the north which is crossed by marshy areas and sloughs along the east bank of the lower Jefferson River and further to the north are the lowlands south of the headwaters of the Missouri. Bench lands along the east and west, at the elevation of 4300 to 4400 feet, provided range and land for expansion to dry farming in the early twentieth century. The annual average rainfall near Three Forks (about five miles to the northeast) is twelve inches.

The Settlement of the Willow Creek Area and the Development of an Agricultural Community. The settlement and development of Willow Creek is related to that of the Gallatin Valley and Gallatin County. The need to establish a food supply for the mining communities of Alder Gulch, Virginia City, and others has long been considered the impetus of agricultural development in Montana in the many small valleys near the mining camps—the Bitter Root, Jefferson, Prickly Pear and Gallatin. Each of these areas had rich soil, water for irrigation, and were located at a sufficiently low altitude to allow crops to mature.

As the need for agricultural development became evident, and migrants to Montana Territory chose to pursue that field rather than mining, the lower Willow Creek valley was settled in 1863 or 1864. The Willow Creek area was slightly closer than the Gallatin Valley to Virginia City--only about sixty miles. The presence of settlers in the Gallatin City area, just a few miles to the north, in 1863 suggests that the advantageous setting of the Willow Creek valley was noticed at that

¹ In 1916 Milburn L. Wilson divided the history of agriculture in Montana into three distinct periods: the pioneer period; the pastoral period beginning in the late 1870s with the passing of the buffalo and the building of the Northern Pacific railway; and the then contemporary period of diversified and intensified agriculture, which began with the introduction of dry farming, the building of reclamation projects, the establishment of forest grazing reserves, and the passing of the remaining public land into private ownership. He noted that these periods were brought about by national forces in the development of agriculture to meet the needs of the country. "The Evolution of Montana Agriculture in its Early Period," <u>Proceedings of the Mississippi Valley Historical Association</u> 9 (1917-19), 429. The historic contexts proposed for the Willow Creek area at this time recognize Wilson's divisions, but combine his pioneering and pastoral period into one; the intensifying and diversifying era for Willow Creek ends at the time of the development of the modern reclamation project, the Willow Creek Dam which was completed in 1937.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number E

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 2

time; the settlement date for Willow Creek is sometimes given as 1863.² The wagon road between Sterling, to the southwest, and Helena passed through the Willow Creek area, making the area readily accessible to settlers and facilitating the delivery of hay and other products to the mining regions. What appears to be the major route from Helena to the south during the late nineteenth century went through the Gallatin City area and then south along the east bank of the Madison River, in the valley to the east. Thus Willow Creek³ was well-connected to larger communities to the north and south, perhaps more so, initially, than to Bozeman, at the eastern end of the Gallatin County; the route to Bozeman (some 40 miles distant), crossed several rivers, requiring the use of ferries, and, later, bridges. Additional roads were developed through the Willow Creek area during the 1870s.

In 1867 the Federal Land Survey of Montana Territory was directed to begin "nearest to those portions of the Territory now occupied and settled upon, as well as those best calculated to attract prospective immigration of agriculturalists"--believed to be found in the valleys of the Gallatin, Madison and Jefferson Rivers. . . ⁴ Solomon Meredith soon informed General Land Office Commissioner Joseph Wilson that the location for the initial point of survey was determined to be in "the Gallatin Valley one of the most valuable and thickly settled agricultural portions of Montana, where lands would undoubtedly be taken up at once were the surveys extended over them." In the summer of 1867 the initial point was established on the "limestone hill about 800 feet high which projects boldly northward into the valley of Jefferson Fork," a prominent landmark on the west side of the Willow Creek valley. The survey field notes of 1868 and map recorded five houses and fenced wheat fields in Lower Willow Creek area, and noted that "the best farming land in this township is in the valley of Willow Creek," and that the surrounding table land had good soil and abundant grass for pasturage.

The settlers in Willow Creek were initially squatters, since there was no means to record land claims. It does not appear that a "land-claim club," as was used in the Gallatin City area, was formed in Willow Creek. Settlers began filing preemption claims and applications for homesteads in 1869. Most of the homesteads in the Willow Creek township were acquired by the five-year patented homesteading process, provided for in the Homestead Act of 1862. Many of the earliest applications for homesteads at the Bozeman Land Office were for land in the Willow Creek area. George L. Gordon was issued FHE 1 for his homestead along the Jefferson River, northeast of the location of the Willow Creek townsite. Several settlers took advantage of the provision that enabled them to commute their claims and gain title after fourteen

² Elbert [Albert] Banta has the reputation of being in Willow Creek in 1863 and that date was used in the <u>Polk & Co. Bozeman City and Gallatin County Directory</u>, 1902-03, as the date of establishment of Willow Creek.

³ The community in the Willow Creek area appears to have been known as "Willow Creek" since the first years of settlement even though the townsite of Willow Creek was not established until the 1910s. The name Willow Creek is used here to refer to the community; references to the townsite will be identified with that term as well.

⁴ "Letters Sent to Surveyor General for Dakota," Joseph Wilson to Solomon Meredith, May 9, 1867, National Archives Record Group 49, quoted by Karsmizki and Brownell.

⁵ Letter, S. Meredith to J.S. Wilson, Jan. 6, 1968, National Archives Record Group 49, Box 78, quoted by Karsmizki and Brownell.

⁶ Letter from S. Meredith to J.S. Wilson, October, 1867; transcription provided by Earl R. Best, files of the Montana State Historic Preservation Office.

⁷ "Field Notes" for Township 1S, Range 1E of the Principal Meridian, p. 70.

⁸ Karsmizki and Brownell. Gordon filed in April, 1869 and patented his homestead in 1874.

NPS Form 10-900-a (8-86)

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number E

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 3

months of residence by paying \$1.25 an acre. After July 1, 1870 when the second modification of the Morrill Act allowed pre-emptors to purchase their claims with Agricultural College Script, a small number of Willow Creek residents used that means to acquire their 160 acres; their Mississippi script, like that of over 100 entrymen in Gallatin and Madison counties, was probably purchased from script and land paper dealers in Bozeman and Helena. The large portion of railroad lands in the township--over 40%--was withdrawn in April, 1872. Much of the prime land in the Willow Creek area, including that in two sections that were assigned to the railroad, had been claimed prior to that time, and thus remained in the hands of the early entrymen.

During the 1860s a farming community known as Willow Creek was established in the lower Willow Creek valley and in the bottom lands along both banks of the Jefferson River. In 1865 the voting precinct, Jefferson Precinct No. 2, comprised all of Gallatin County west of the joining of the Jefferson and Madison Rivers. In 1870 there were twenty-three families in the area, and a total population of 116. The sense of community had been furthered by the establishment of a public school in 1867; earlier, teachers had taught in the Green home and perhaps others. A larger facility was erected in 1870; in 1874 the State Superintendent of Schools reported that the school at Willow Creek was the best in the state. Reverend L.B. Stateler, associated with the Methodist Church South, arrived in the area in 1864 and held the first church service in Willow Creek at Christmas time of that year. Willow Creek was the site of several revival-type meetings; during the meeting of 1873 funds were pledged for the construction of a church building, known as the Stateler Chapel, which was subsequently built at the north end of the Willow Creek valley. In 1871 a chapter of the I.O.G.T. Lodge was chartered with eighteen members. Regular mail service began in 1872 from Sterling via Willow Creek to Gallatin City. In 1873 the Davis & Fredericks flour mill was constructed at the south end of the lower Willow Creek Canyon; the mill operated at least through 1880. Also in 1873 the first store, near the site of the Stateler Chapel, was opened by Mr. Jaynes from Helena.

The Willow Creek community was dominated by two major cultural groups: a number of disaffected Mormons from Utah and a group related by marriage and friendship that had migrated from western Missouri. The group of Mormons included James Green (from Provo in 1864), Clinton Williams (from Utah in 1866), Terry Burns (in Willow Creek by 1870), Louis Gaulter (from Utah via Idaho by 1870), William Hankinson (to Willow Creek in 1871 after fourteen years in Utah), Adolphus Woodward (from Ft. Green in 1878), and several others. While James Green and perhaps others continued to practice the Mormon religion, a Latter Day Saints congregation was not established in Willow Creek.

It has been recognized by agricultural historians that Mormon agriculture was the model for rest of the irrigated West. The group of settlers from Utah probably played an important role in transferring the technology and practice of gravity-fed irrigation ditches to the Gallatin County area.¹¹ In the mid-1860s irrigation was virtually unknown in North America outside of California and Utah, although the farmers from Missouri might have seen small-scale applications near the old

⁹ Robert A. Sauder and Rose M. Sauder, "The Morrill Act's Influence on Public Land Disposal After 1870," <u>Agricultural History</u> 61 (Spring, 1987), 38.

¹⁰ N.L. Woodward, "Pioneer History of Willow Creek," Merrill G. Burlingame Special Collections, Montana State University Libraries, Bozeman.

¹¹ In addition to the Mormons in the Willow Creek area, Latter Day Saints settled in the Springhill Township, in the eastern portion of Gallatin County, where they practiced irrigated farming. The author is unaware of any studies of the transfer of irrigation from Utah to the surrounding areas of the west and thus the role of Mormons out-migrating from Utah in the transfer of irrigation practice is conjectural; certainly irrigation was initiated in areas where there were no Mormon settlers.

NPS Form 10-900-a (8-86) OMB Approval No. 1024-0018

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number E

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 4

military posts along the Overland Trail in Wyoming.¹² Men like James Green, however, had spent many years in Utah, and were probably well-acquainted with irrigation practice there. Roadside ditches, such as those in Willow Creek, are characteristic of Mormon methods of irrigation. While the irrigation projects in Utah were Church organized, those in Willow Creek were probably neighborhood enterprises.

The group of Willow Creek residents from Missouri was dominated by the Tinsley kinship group: the brothers William and Joseph Tinsley; William Tinsley's wife's parents, Mr. and Mrs. Jacob [James] Nave; and Joseph Tinsley's wife's parents, Mr. and Mrs. Carey M. Tate. These families and Mr. and Mrs. James Hale, also from Missouri, initially occupied much of the southern portion of the lower Willow Creek valley. It is not known if Reverend Stateler, who had spent many of the early years of his ministry in Missouri, knew these settlers prior to serving as their pastor in Montana.

There is no evidence in local histories of any strong social division between these two groups. Indeed, there were many marriages between members of the two groups, including that of Quiteria P. Tinsley, daughter of William and Lucy Ann Nave Tinsley to Charles Green, son of James Green. The extent to which the practices of these cultural groups affected the physical development of homesteads in Willow Creek appears to be minimal; there are no obvious differences between the ranch complexes of the Missourians and Mormons. Although there are some cultural landscape characteristics in Willow Creek similar to those in Mormon country, there are also differences. The landscape is not dominated by the clustered houses of a typical Mormon village surrounded by open fields and most outbuildings are painted, in contrast to the Mormon practice of leaving such structures to weather. Neither the characteristic Lombardy poplar trees nor the "Mormon" paling fences are in evidence. It has not been determined to what extent the hay derrick, a piece of equipment commonly associated with Mormon settlement, was a commonly used in Willow Creek. The late nineteenth-century Willow Creek ranch houses have elements in common with, but not exclusively associated with, Mormon dwellings in Utah.¹³

The Development of Irrigated Agriculture in Lower Willow Creek. Willow Creek residents reproduced the pattern of self-sufficient agriculture that they had known in Missouri and Utah; with limited transportation to non-local markets, diversified crops were necessary. Wild hay, which nearly all farmers cut, was one of the first crops to be marketed to the mining communities. By 1870 most settlers had from 45 to 100 improved acres and all but four farmers in the area produced wheat. Most had small herds of stock, which ranged in the foothills and nonagricultural mountain valleys.

Water rights records indicate that irrigation ditches were established during the first years of settlement; allowing for some exaggeration of the initial date of water use, these ditches probably date from the mid-1860s. Many homestead application documents for the Willow Creek area include irrigation ditches in the list of improvements. The earliest ditches, which were known by the names of settlers, appear to have been both small structures dug by individuals, and larger projects, developed by a group of farmers; several of the ditches were enlarged during the first years of use. The system of irrigation ditches in Willow Creek are examples of "pioneer enterprises" in which the farmers themselves, chiefly

¹² John T. Ganoe, "The Beginnings of Irrigation in the United States," Mississippi Valley Historical Review 25 (June, 1938), 68.

¹³ These generalizations are based on Richard V. Francaviglia, "The Mormon Landscape: Definitions of an Image in the American West," Proceedings of the Association of American Geographers 2 (1970), 59-61.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number E

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 5

with their own labor and always with limited capital, dug the ditches to bring water onto the dry land.¹⁴ The ditches were probably dug in a manner similar to that described by Arthur J. Dickson in <u>Covered Wagon Days</u>:

A meeting was called ... for the purpose of constructing and maintaining a ditch ... at the intake a six or seven-foot cut was necessary and for nearly half a mile it was pretty hard digging, mostly pick and shovel work; then we used plows and a homemade scraper or "Stone-boat", a V-shaped affair of timbers constructed the width of the ditch and weighted. Several furrows were plowed and the stone-boat drawn by six or eight horses, followed and threw the dirt out at each side. ¹⁵

Although such small irrigation districts were soon overshadowed by larger public reclamation projects, the prosperity that resulted from these early, pioneer-era systems prompted the widespread interest in irrigation during the late nineteenth century.

According to Wilson,¹⁶ the farming methods used in the Gallatin Valley were patterned largely after those in use in Utah. Virgin sod was broken to a depth of about four inches and later plowed to the average depth of six inches. Stubble plowing was usually done in the fall. Crop rotation was not practiced; however, the soils, rich in nitrogen, showed no decline through continuous cropping. All crops were irrigated and grain was flooded three times, as was the customary practice of the Mormons. Harvesting and threshing machinery was freighted in, but harrows were home-made with teeth of buffalo-berry sticks pointed and hardened by charring. Seeding was done by hand and grain drills were not in common use. Practically all wheat was of a soft club type since the local mills were not equipped for grinding hard wheat and refused to purchase it. Oats were late white varieties and barley was two-rowed, chevalier malting varieties. The earlier potatoes were largely blue Meshamock; these soon gave way to white varieties like Early Rose. Scarcely any tame hay was produced, since the native grass produced such large and nutritious yields of hay.

During the first years of agricultural development, wheat was the dominant crop in the Gallatin Valley, with the production of the grain jumping from virtually none in 1864 to 20,000 bushels in 1865, and to 300,000 bushels in 1867. By 1868 two flour mills were in operation in the county and in 1873 another was established on Willow Creek.¹⁷ By 1870, 178 farms had been established in Gallatin County which led the Territory with the number of farms, and produced half of the total of wheat and oats produced in the Territory.¹⁸ With over twenty farms/ranches, about 13% of the farms in the county, Willow Creek contributed significantly to these statistics. The early dominance of wheat in the agriculture of the area waned during the 1870s. Although the price of wheat fluctuated between 1865 and 1871, from 1871 to 1875 it

¹⁴ John A. Widtsoe, "History and Problems of Irrigation Development in the West," American Society of Civil Engineers Transactions 90 (June, 1937), 681.

¹⁵ This passage is quoted by Robert G. Dunbar, "Agriculture," Chapter 12 in Burlingame and Toole, <u>History of Montana</u>, (New York: Lewis Historical Publishing Co., Inc., 1957), 282.

¹⁶ Wilson, 435-436.

¹⁷ Dunbar, "Agriculture," 291.

¹⁸ Robert George Raymer, Montana, The Land and the People. (Chicago and New York: The Lewis Publishing Company, 1930), 417.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number E

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 6

dropped from \$2 a bushel to \$.40, and at times there was practically no market.¹⁹ The agricultural depression corresponded to the depopulation of the mining industry after 1866, brought about by the increase in quartz mining which required a smaller labor force. By 1880 oats had superseded wheat as the dominant crop, due to the large number of horses and mules used by stage lines and military posts.

In general, farming remained at a standstill during the 1870s and early 1880s in the Gallatin Valley area, due to the lack of railroad transport to link the Gallatin Valley farms to markets and low wheat prices. Some settlers sold or abandoned their farms while others turned to breeding stock; during that time Gallatin Valley horses and cattle earned wide recognition. It appears that Willow Creek settlers turned to stock raising to get through the difficult period; when the Woodward family arrived in Willow Creek in 1878, they found the valley partially settled by "stockmen." During the 1870s, several homesteads in the Willow Creek area were sold; most remained as individual properties, although some appear to have been rented.

II. The Era of Intensified and Diversified Agricultural Development, 1883-1940

Summary. This period of agricultural development was initiated by the arrival of the Northern Pacific Railroad in Gallatin County in 1883; a branch line linked Willow Creek directly with the larger world in 1887. The railroad greatly reduced the isolation of the area since markets were expanded, enabling farm and ranch incomes to increase and the presence of the railroad coincided with an increase in settlers into the area. Early attempts at dry land farming during the 1890s and the dryland homestead boom years during the early twentieth century had a marked impact on development of Willow Creek, as more land was put into production by established farmers and newcomers. The arrival of a second railroad line--the Chicago, Milwaukee & St. Paul Railway--in 1908, the development of the town site of Willow Creek during the 1910s, as well as the "bust" of the dryland farming boom and the failure of the Willow Creek Bank during the early 1920s were major events. This era was brought to a close with the construction of the Willow Creek Dam in 1937 and the subsequent availability of more water for irrigation and increasing modernization of farming and ranching operations.

Improved Transportation. The arrival of the Northern Pacific Railroad in Gallatin County in 1883 ended nearly twenty years of relative isolation for the agricultural area and was an event of great economic importance. The Butte Branch line was constructed through Willow Creek in 1887. The future route of the railroad had already checkered the area since alternate sections—the odd-numbered ones, including 19 and 31 in the lower Willow Creek area—had been set aside for the line in 1872 although most of these sections had already been claimed. The specific effects on the established ranches in Willow Creek of this link to non-local markets and reduced freight rates are unknown. There seems, however, to have been an increase in farm and ranch income which is reflected in the improvement of homesteads in Willow Creek around the turn of the century with many new granaries and barns. The construction of larger dwellings between 1880 and 1910 probably had much to do with economic and social changes brought about by the arrival of the railroad, both the increased prosperity and greater ease in acquiring building materials, as well as with the more intangible sense of attachment with the greater world and perception that the pioneering era was drawing to a close. The strong traditions of the initial settlement period and economic constraints, however, tempered the rate and degree of change. For example, until around 1900 homesteaders in the area usually built log dwellings.

¹⁹ Wilson, 437.

²⁰ Nina Woodward, "Following Information Compiled," Merrill G. Burlingame Special Collections, Montana State University Libraries, Bozeman.

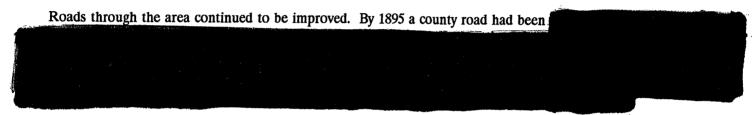
NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number E

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 7

By the turn of the century "the finest stock yard on Butte Branch" had been established at Willow Creek. The volume of cattle and horses shipped from Willow Creek indicated a need for public scales. Grain, potatoes, and even cabbage was shipped from Willow Creek to distant points. In 1908 a second line, the Chicago, Milwaukee & St. Paul Railway route to the west coast, was completed through Willow Creek. Real estate developers associated with that railroad were involved in the development of the townsite.



Intensified and Diversified Agriculture. The arrival of the railroad prompted an expansion of irrigated farming in the Gallatin Valley, where a number of large irrigation canals were constructed. However, in Willow Creek it seems that most of the ditches had been established by the early 1870s and that irrigation on Willow Creek had already reached the extent possible without water storage in a reservoir. In 1886 the "Lower Willow Creek Ditch Company" recorded water rights and shares with the County Recorder; its 3600 inches of water had initially been claimed in 1864. Several water rights claims were recorded during the 1880s, perhaps in response to the 1879 Montana statute concerning water rights, but they do not appear to indicate an increase in irrigation. In 1890 it was noted that although there were many ditches on Willow Creek there was no comprehensive system of irrigation and that there was a need for more water in the valley.²² In order to expand the 10,000 irrigated acres on Willow Creek (a figure that included land on Willow Creek above the lower creek valley) steps were taken around 1915 to form an irrigation district of 18,000 acres to be served by water stored on the creek; however, this project was not realized until the mid-1930s.²³ In 1910 Joseph Dickson assumed duties of water commissioner in Willow Creek, riding the ditches and distributing water; it is not known when this position was established.

Dry farming on the benches of the Bridger Range after 1890 greatly increased Gallatin Valley's production of wheat;²⁴ this increase was reflected in the appearance of elevators at Bozeman and Belgrade and a new flour mill in Bozeman. Barley and oats became important crops as well; the oats were sold to feed the horses in Yellowstone National

²¹ Polk & Co. Bozeman City and Gallatin County Directory, 1902-03.

²² Census Office. "Report on Agriculture by Irrigation in the Western Part of the United States at the Eleventh Census: 1890." by F.H. Newell. (Washington, D.C.: Department of the Interior, 1894), 168.

²³ S.T. Harding, "Irrigation Development in Montana," <u>Montana Agricultural College Experiment Station Bulletin</u>, No. 103. (Bozeman, 1915), 312.

²⁴ Hargreaves noted references to dry farming along the valley of the Yellowstone in 1879 and in the foothills along the Gallatin Valley in 1892. The closeness of Willow Creek to the Montana Agricultural Experimental Station in Bozeman suggests that Willow Creek farmers were aware of early attempts at dry farming although the extent to which they used those methods before the dry land farming "boom" years remains undetermined. Mary W.M. Hargreaves, "Dry Farming Alias Scientific Farming," Agricultural History 22 (January, 1948), 39, 41.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number E

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 8

Park and cavalry horses in the Philippines.²⁵ In Willow Creek, a number of homesteads were established on the more marginal land--at the edges of the bottom land and on bench lands--during 1889 and 1890 and from 1897 to 1899. However, the expansion to the bench land for dryland farming seems to have taken place primarily after 1900 as members of the second generation of families acquired homesteads in Willow Creek and non-resident investors purchased land on the bench land to the south and east. Most of the homesteads on the bench land surrounding Willow Creek were established between 1913 and 1919.²⁶ The sale in 1902 of a tract of 7,000 acres on the bench land, just to the south and east of the lower Willow Creek valley, to members of the Bell family of Milbank, South Dakota indicates the interest of outside investors in the area. Several others from Milbank, a town on the Chicago, Milwaukee and St. Paul Railway, bought dry land property in the area and eventually two businessmen from that town founded the Willow Creek bank.

During the early 1900s, the Willow Creek column in the Bozeman Avant Courier²⁷ recorded many of the familiar events in the yearly cycle of agriculture. In February large numbers of cattle were shipped. By the end of March, when ranchers were baling hay and planting potatoes it was also a good time to realize some profits on potatoes and hogs. By the third week in April all of the stock was out on the range and farmers had their grain in. During May virgin sod on the bench land was plowed, at times by steam and gasoline outfits working twenty-four hours a day. At the end of June it was time to irrigate, and haying continued "full blast." Most irrigation water was used between July 4 and 15. During July large hay crews continued to move from ranch to ranch. The threshing season began in early September and continued into October, and grain buyers were soon loading cars of wheat, most of which went to the Bozeman Milling Company, although some farmers loaded their wheat on the Milwaukee line, perhaps for points farther east. Potato digging assumed great importance in early October, the time when many acres of fall wheat were seeded. In mid-October, a "good many fat sows and calves" were shipped from Willow Creek.

It seems that ranching was more diversified in the Willow Creek area than in the Gallatin Valley, where agriculturalists were either dry land farmers, irrigated crop farmers, or stockmen. Many Willow Creek ranchers, like the Tinsleys, James Green, William Buttelman, and others had quite large acreages and combined stock raising and wheat farming. The Montana Experiment Station, established in 1893 at nearby Bozeman, had counseled the substitution of red clover for summer fallow which early wheat-growers had practiced. Willow Creek ranchers probably fed their larger crops of hay and pea vines (from the seed pea crops popular in the area during the 1910s) to their stock. On the other hand, homesteaders on dry land were usually limited to raising winter wheat and only the stock needed to do the farm work. The practice of alternating wheat and fallowing on dry land was carried out more fully in the Gallatin Valley (and presumably the Willow Creek area) than in most sections of the state.²⁸

During the last decades of the nineteenth century, farming in Montana changed from being incidental to livestock raising to the reverse, with cultivation taking precedence over the livestock industry; this turnaround was accompanied by a considerable increase in farm wealth. It is difficult to determine what changes in agricultural production took place in the Willow Creek area during that period, particularly since the amount of water available for irrigation was limited. However, as dryland farming gained in popularity, increases in agricultural production enjoyed throughout the state were also

²⁵Robert G. Dunbar, "The Economic Development of the Gallatin Valley," Pacific Northwest Quarterly 47 (Oct., 1956), 119.

²⁶ From data compiled by Karsmizki.

²⁷ There was often a regular column noting the news in Willow Creek in this newspaper. The following information was from many of the columns between Apr. 21, 1900 and Sept. 28, 1911. Beginning in 1910, the column was titled "Willow Creek Gleanings."

²⁸ Report of Geo. H. Cook, County Agent for Gallatin County, Montana, from September 1st, 1914 to December 31, 1914. Merrill G. Burlingame Collection, Montana State University Libraries, Bozeman.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number E

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 9

realized in Willow Creek. By 1912-1913 the production of grain in the Willow Creek area had greatly increased; the bench land in the area was considered prime agricultural land with the yield on an acre of winter wheat from 38 to 44 bushels, and the yield of oats as high as 88 bushels an acre. In 1912 the Farmers' Elevator was established by a group of Willow Creek farmers, led by John Walbert, Jr. (the elevator, on the Milwaukee tracks, burned in 1921). A second elevator was built in 1918. The Farmers' Elevator handled 56,000 bushels of wheat in 1912 and expected a nearly 100% increase in volume of wheat the following year, as well as 10,000 bushels of oats, and lesser amounts of barley and flax. The surrounding agricultural lands were rapidly being brought under the plow.²⁹

In 1915 the Three Forks area was publicized (with the help of the "Milwaukee Road") as "Where Farming Pays."³⁰ There were thousands of acres, good for both dry and irrigated farming, ready for the plow, and the crops raised--wheat, oats, barley, flax, other small grains and vegetables--averaged among the highest in the northwest. The practice of summer fallowing was explained in the promotional pamphlet as the result of the constant expansion to more land, and the need to begin working that land in May for fall planting of winter wheat, not as a means to conserve water in the soil.

The Development of the Town of Willow Creek. Prior to the establishment of the Willow Creek townsite in the 1910s, Willow Creek remained an agricultural area, whose residents were mainly ranch owners and their families. In 1880 there were two farm hands from Ohio, two laborers from Utah, and some millers living in Willow Creek in addition to the farmers and stockmen, and their families. By the early 1890s the small number of farm laborers (one of which was an immigrant from Norway), had been joined by a Swedish "renter" (presumably leasing a ranch), and several persons with commercial occupations, including a shoe-maker, a money lender, a blacksmith, and a merchant. The population of Willow Creek was similar a decade later, although Hans Peterson had settled in the community to build houses and wagons.

Around the time that the Chicago, Milwaukee & St. Paul Railway arrived in Willow Creek, a townsite was developed on land owned by Melissa Green, daughter of early settler James Green, and the Woodward family. Fifteen acres were acquired in 1909 by B.S. Adams, of Chicago, who filed the original plat for the townsite of Willow Creek in May 1910. An auction of town lots was held in July of that year; many were in attendance at the event and a "goodly number" of lots were

²⁹ Three Forks Herald, Sept. 25, 1913. A second elevator (get construction date from Sanborn map) on the Northern Pacific tracks, remains standing.

³⁰ "The Three Forks Country -- Where Farming Pays," pamphlet, Merrill G. Burlingame Collection, Montana State University Libraries, Bozeman.

³¹ Bozeman Chronicle, May 6, 1891.

³² "In Gallatin Valley," <u>Rocky Mountain Husbandman</u>, Dec. 6, 1894, p. 2. There is a similar description of the town quoted in <u>Headwaters Heritage History</u>, 594.

NPS Form 10-900-a (8-86)

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number E

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 10

sold, which gave the new town a good start.³³ Several civic improvements soon followed. The Willow Creek telephone company ordered a new switchboard that year, apparently anticipating an increase in service. By 1911 Willow Creek had a Northern Pacific depot and telegraph service. Electrical service was established in 1918; the local service was sold to the Electric Power Company in 1920. A larger school building was begun in 1910 near the southern end of the townsite. A new Methodist Church, completed in 1915, replaced the Stateler Chapel, which had been the community church since 1873.

The town of Willow Creek served the influx of residents in the area involved with agriculture, the railroads, and cement plant in nearby Trident. Later, ranchers retired to homes in town. Willow Creek developed commercially as well. Owners of existing stores not already at the new townsite, like T. J. Williams, moved their buildings to town. In 1914, Eugene Thorndike and F. Nelson, both from the town of Milbank, South Dakota (whose residents had been investing in bench land around Willow Creek since 1902), established a bank in Willow Creek. A cheese factory opened in 1915, but operated only for a few years. The town soon had a full complement of hotels, stores, restaurants, barber shops, saloons, and even a theater, as well as a feed and livery barn, a lumber yard, a blacksmith, and a garage. In 1914 Dr. Bradbury established a practice in town.

Decline and Status Quo. Willow Creek, like the rest of the arid west, went through the optimistic early years of dry farming, and disappointment and decline during the late 1910s and 1920s. The effects of the drought that began in 1917 and persisted through 1921, and low farm prices during the early 1920s, and the financial over-extension of many dryland farmers are symbolized in the failure of the Willow Creek Bank in 1923. Some dryland homesteaders moved into town and worked for the railroads or nearby industries, such as the Trident cement plant, and others moved on. Highway 10 through Jefferson Canyon on the north side of the river, constructed in the early 1930s, bypassed the town and relegated the roads through the area to secondary routes.

The agricultural land use in the lower Willow Creek valley remained relatively unchanged until the construction of the Willow Creek dam in 1937. Aerial photographs of the area from that year indicate that small, irregularly-shaped flood-irrigated fields and pasture land still covered much of the valley floor. Most ranches continued to be owned by the families that had developed them during better times, although consolidation of land into larger ranches was underway. The Montana Extension Service suggested strategies to adapt agriculture to the region; these suggestions are apparent in the several chicken houses from the 1920s and the later planting of shelter belts when water was available. Better tractors, combines, and trucks, brought increasing mechanization to the farming operations, and enabled landowners to work the larger spreads; the number of these machines began to increase in the state during the late 1920s, and probably became more widely used in the Willow Creek area at that time as well.

The Willow Creek dam and reservoir project included the construction of the Upper Willow Creek/Highland/Rocky irrigation ditch along the east side of the valley. One obvious result of the larger supply of water was the establishment of shelter belts of trees on ranch complexes and elsewhere. The current period of agriculture, with strip farming on dry land, the use of pressurized irrigation systems (beginning around 1970), and large farming implements began in the post World War II years.

³³ Bozeman Avant Courier, July 10, 1910.

NPS Form 10-900-a

OMB Approval No. 1024-0018

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number E

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 11

III. Vernacular Ranch Buildings in the Willow Creek Area, 1864-1940

The vernacular buildings on the ranches in the Willow Creek area are characterized by the utilization of available materials, traditional designs for buildings based more on function than on concern for appearance, and a frugal approach to building and ranch development, as seen in the reuse of building materials, as well as the relocation and continued use of entire buildings. While the date of construction of some of these buildings remains undetermined, many others have been dated through the Gallatin County Appraiser's records.³⁴

These vernacular buildings embody characteristics of local building traditions and are the work of local carpenters. With the exception of the Walbert dairy barn that appears to have been constructed from plans, and the attributes of the bungalow style evident in the Haasakker and Noble houses, there is little evidence of style in the appearance of the buildings which exhibit good proportion, quality materials, and accomplished workmanship. The use of the building--as a granary, chicken house, or shed--governed its placement, size, materials, and method of construction. Although not significantly different from other vernacular ranch buildings in Montana of similar age, the ones in the district, as a body demonstrate local building practices. For instance, concrete foundations are common; comparison with buildings in other locales will help determine to what extent the presence of the cement plant in nearby Trident accounted for the widespread use of the material. The frugal and practical approach to building is evident in the reuse of siding materials and door and window units, the placement of double-hung windows on their sides to provide a horizontally-oriented sash, and the application of corrugated sheet-metal over other materials on roofs and walls. Later, probably in the early twentieth century, the reuse of bridge timbers and railroad ties, the increased use of corrugated sheet metal for sheathing, and the turning to pole construction for loafing sheds indicate a willingness to utilize available materials and experiment with new methods of construction. The presence of many balloon-framed granaries with exterior studs, and the stacked plank (crib) granary also indicate an awareness of "modern" approaches to farm building construction.

The wide-spread use of wood-framed construction in this area appears to date from after the arrival of the railroad in the Gallatin Valley 1883 and in Willow Creek in 1887, due both to the prosperity enjoyed in the area after the arrival of the Northern Pacific line, and also the greater availability of building materials. During the period between 1900 and 1920, many buildings were built on the homesteads in the valley, including dwellings, barns, granaries, and other outbuildings. The similarity of these structures, sheathed with weatherboard siding, trimmed with corner boards, and painted, suggests a local standard for well-appointed buildings.

The buildings existing today on the ranches are small, wood-framed structures which were built by local carpenters. The presence in the community during this period of Hans Peterson and his sons, Andrew and Pete, who continued their father's carpentry business, Ed West, Tom Walbert, and others suggest that the task of building ranch structures had, to some extent, passed from the rancher himself to local craftsmen.

³⁴ These dates are considered accurate or slightly after the fact, reflecting the periodic updating of the Appraiser's records. However, there are few buildings dated in these records prior to 1900, a fact that suggests either widespread updating or expansion of records, or boom in ranch improvements, at that time.

NPS Form 10-900-a (8-86)

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number F

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 1

F. ASSOCIATED PROPERTY TYPES

I. Rural Historic Landscape District

A district of this type in the Willow Creek area is defined by historic land use patterns and a continuum of agricultural use, the extent of the historic irrigation system, and rural qualities and features; it is composed of a group of contiguous ranches or farmsteads and is a "landscape of work," with virtually all elements generated by and related to the operation of the ranches. The district has a strong relationship to the three primary historic contexts: the initial period of settlement and irrigation-based agricultural development--during which most of the homesteads as well as the irrigation and road systems were established--and the phase of intensified and diversified agriculture, during which most of the vernacular dwellings and other buildings on the ranches (the third historic context) were constructed and additional dryland farms were established. The ranch complexes in the district, each with its own unique presence due to architecture and setting, are physical and social landmarks.

In order to be eligible under Criteria A and C the district must reflect historic agricultural land use patterns and related rural qualities and features and have a significant amount of historic design features in tact. In fact, the high degree of integrity of this rural historic landscape district and the natural boundaries of the valley edges combine to establish obvious registration requirements and district boundaries. The core of this district is the group of homesteads established during the first period of settlement, during which the irrigation system was established and the historic land use patterns were initiated. On these homesteads most of the land which historically was pasture and irrigated cropland, primarily for the raising of wheat and hay, remains in that use. The district boundaries suggested by the natural topography--the narrow valley enclosed on three sides by bench land--also include portions of homestead/ranches established during the second period of agricultural development. These ranches are among the few remaining examples of homesteads established during that era on which buildings stand, since most dryland farms in the Willow Creek area were on the now nearby uninhabited bench land. The homestead/ranches from both periods must have at least one building or structure from the periods of significance (1863-1940) to be included in the district; most have a number of vernacular ranch buildings and a minimum of modern intrusions. Historic agricultural land use patterns were used to establish the northern boundary of the district, which was drawn to exclude a distinctly modern ranch complex and small "acreages" established during the 1910s on the outskirts of the townsite of Willow Creek.

The non-agricultural sites in the historic district are integrally related to the historic contexts. The point of initial survey in Montana, at the western edge of the district, was established at this location due to its topography and the existing farms in the area. The grave site of the Rev. L.B. Stateler, one of the pioneering Methodist ministers in Montana, who was active in this area from its earliest days of settlement, is associated with the development of a community in Willow Creek. The site of a flour mill, at the mouth of the lower Willow Creek canyon, reflects the extent and success of agriculture in the western portion of Gallatin County during the 1870s.

II. Homesteads Established During the Initial Period of Settlement and Irrigation-based Agricultural Development, 1863-1882

These ranches, each initially 160 acres in size, were located, to the extent possible, on land that could be irrigated by lower Willow Creek and the Jefferson River. They all have ranch complex sites established during the first years of settlement, and are crossed by the extensive system of irrigation ditches constructed in the valley. However, the buildings in these complexes are primarily from the following period of agricultural development; many of the improvements date from the first decades of the twentieth century. Consequently, these sites are related to all of the historic contexts.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number F

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 2

Many of the homesteads consist of

Historically, adjacent to these ditches, on the broad terraces above the bottom land, were irregularly-shaped fields (ten to twenty acres) of irrigated crops. These areas still have irrigated fields, some of which conform to the irregular shapes governed by topography and bordered by fencelines and irrigation and water collection ditches. In other areas of the ranches, particularly along the eastern side of the valley, pressure sprinkler irrigation systems are in use and field size has been increased and the shape regularized. (Noticeably absent from these fields are strip farming and rotary irrigation systems.) The outdoor storage of hay has always been an element of the valley landscape; presently round bales are stored along fencelines and in corners of fields.

In this area James Green established a ranch in 1864.

caught the eye of Bland Rishton who established what became the Gerdes/Buttelman ranch.

Each homestead/ranch in the Willow Creek area has a complex of buildings and structures established during the first years of settlement. The location of the complex site, influenced by practical considerations, is typically on the first terrace above the Creek, near the center of the homestead; some complexes are adjacent to roads, others are more remote and accessed by lanes. The ranch complexes vary considerably in plan, orientation, and size, but most are fairly compact in plan. All have distinctly separate residential and agricultural components separated by the access lane, which widens into a vehicle and equipment parking/storage area. When viewed in plan, the spatial organization of each ranch complex becomes evident; the orientation of buildings to the cardinal points, the aligning of buildings along fence lines, grouping livestock buildings in a small complex, and other simple schemes governed the arrangement of the complexes.

The buildings in the existing ranch complexes, however, date primarily from later periods. The ranch dwellings, along with gardens and small outbuildings, are set off in a fenced house yard. Characteristic domestic landscape plantings-mature cottonwood trees planted near the house and at the perimeter of the yards, lilac bushes, and perhaps choke cherry bushes--establish an intimate and welcoming setting. The orchard was sometimes located between the domestic and agricultural components, and thus serve as a buffer between the two. The agricultural component of the complex used for livestock management and the storage of grain and equipment consists of a number of small buildings. The vernacular buildings in the ranch complexes, built mostly between 1900 and 1930, have a great similarity in their design, materials, and workmanship. Often there are buildings in the complex that have been moved from abandoned homesteads on the bench land and other locations; to some extent buildings from the larger area have been regrouped on the remaining homesteads. The complexes are served by power lines, established around 1920.

In order to be eligible for separate listing under Criteria A and C, the homesteads must have a high degree of integrity in historic agricultural land use and landscape components; the ranch complex must retain a considerable number of important design elements, including several architecturally significant buildings and a number of contributing buildings in which original workmanship and materials are in evidence. There must be a minimum of modern improvements--in the landscape elements and in buildings and structures. The sites must have integrity in setting and feeling as a first period homestead. In order to be eligible for inclusion in an historic rural landscape district, the homesteads must have a high degree of integrity in agricultural landscape elements, and have at least some contributing buildings in the ranch complex.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number F

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 3

III. Farms and Ranches established during the period of intensified and diversified agricultural Development, 1883-1940

These ranches were established after the initial period of settlement;

crop rotation--were employed on the higher land.

-summer fallowing and

In the greater Willow Creek area, most of the homesteads established during this era have been entirely dismantled, abandoned, or left in benign neglect on the uninhabited bench land and identifiable sites have only a few remaining buildings.

Some remain in continuous use as ranch complexes; on one homestead, a modern complex has been established at a different location, and the older complex (no longer in use) has been allowed to stand, although recently two buildings at the site have been demolished. On others, only some of the buildings remain standing. Therefore, any remaining evidence of the homesteads of this era have significance, and standards of integrity must be different than for other property types.

There is a greater variance in the existing components of the complexes established during this period, and due to the small number of intact sites, generalizations are not well-grounded. Many of the complexes are characterized by more limited vegetation than is found on better watered areas of the valley. The buildings remaining on these sites include dwellings, barns, log structures, granaries, and other outbuildings, some of which have been relocated; they have a great similarity in their vernacular design, materials, and workmanship to the structures on the other ranches in the area. There are, however, several buildings constructed of railroad ties and reused lumber on these sites.

In order to be eligible for inclusion in a rural historic landscape district under Criteria A and C, the second-era homesteads must have a high degree of integrity in historic land use and landscape components; the ranch complex must retain at least one building or structure in which original workmanship and materials are in evidence. There must be a minimum of modern improvements in the landscape elements and in buildings and structures. The sites must have integrity in setting and feeling as a second period homestead.

IV. Vernacular Buildings on Willow Creek Ranches, 1863-1940: The Expression of Tradition, Utility, and Thrift

The vernacular buildings on the ranches in the Willow Creek area are characterized by traditional designs for buildings based more on function than on concern for appearance, the use of available materials, and a frugal approach to building and ranch development, as seen in the reuse of building materials, as well as the relocation and continued use of entire buildings. The large number of surviving historic buildings--over 100 documented at this time--constitute a body of work from which information about building practice and ranch operations can be determined.¹

In order to be eligible under criteria A and C, and to be considered contributing, a building must date from the periods of significance and exhibit original design, workmanship, and materials. These buildings may be somewhat altered

¹ While the date of construction of some of these buildings remains undetermined, many others have been dated through the Gallatin County Appraiser's records. These dates are considered accurate or slightly after the fact, reflecting the periodic updating of the Appraiser's records. However, there are few buildings dated in these records prior to 1900, suggesting that at that time there was either widespread updating or expansion of records or a boom in ranch improvements.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number F

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 4

and have later siding and roofing materials; some buildings have been enlarged. Most of the contributing buildings are outbuildings--both domestic and agricultural. Buildings considered to be significant have a high degree of integrity and include virtually all examples of dwellings, barns, granaries, and log structures. Some contributing and significant buildings have been moved to their present location; since it took place during the periods of significance, relocation by itself does not significantly reduce the integrity of a building.

The more important types of buildings include:

Homestead/Ranch Dwellings

All examples of dwellings not significantly altered are considered significant buildings. Buildings with large additions and other alterations are considered contributing.

First houses. Based on available archival data,² a characteristic type of initial homestead-era dwelling in the Willow Creek area emerges: a rectangular log dwelling, perhaps covered by a sod roof, with short dimensions ranging from 14 to 20 feet, and long dimensions of 18 to 40 feet. The relative size of the log structures did not change over time, due to the limitations of log construction, but varied considerably within any period. Descriptions of four dwellings indicate that they consisted of more than one structure; for example, on the Burns homestead, there were two buildings "near together." Some descriptions of homestead improvements list a cookhouse or kitchen, implying that this use was segregated in a separate building. Six of the log dwellings in the area were enlarged with additions which usually virtually doubled the size of the house. One such dwelling was sketched by Bazil Tinsley (who lived in the house as a boy), as a double pen structure. Log dwellings were erected as initial dwellings on homesteads in Willow Creek throughout the nineteenth century; as late as 1906, a log dwelling (replaced by a frame house in 1910) was erected on the Mongold homestead. Until recently the one-and-one-half-story log dwelling on the Roberts homestead (1883) remained standing; it seems likely that some of the other log dwellings were of this type.³

It is possible that some of these first log dwellings survive since several of the log structures on the ranches now used for storage or shops appear to have been used as dwellings originally. Unfortunately, this group of buildings is not well-documented and the County Appraiser records do not provide dates for them; many of them have been moved from their original locations, and have been used for various purposes.

The Willow Creek Ranch House. The initial homestead houses were usually replaced by more substantial dwellings rather than incorporated into them (although there is one known exception to this pattern). Marshal Coursien has the reputation of being the first to erect a frame house (no longer standing) in 1880; the lumber for the house, constructed by Hans Peterson, was acquired from Helena. The Coursien house, painted pink in later years, stood until recently on a ranch northeast of the town of Willow Creek. The house⁴, which apparently established important norms for local house design, had many elements associated with patternbook designs or ready-cut houses supplied by lumber

² Data compiled by Karsmizki and Brownell in conjunction with their 1983 Homestead Survey, augmented by data from additional homestead case files for the Willow Creek area.

³ See Karsmizki and Brownell for documentation of this building. The presence of a number of dwellings of this type in Springhill Township of Gallatin County in their 1983 survey supports this assertion.

⁴ This house is documented in a photograph available at the Merrill G. Burlingame Special Collections, Montana State University Libraries, Bozeman.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number F

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 5

companies: a complex plan, varied elevations, and special milled elements--bulls-eye windows in the apexes of the gable faces, sawnwork brackets at porch posts, sawnwork screen doors, a sawnwork balustrade at the porch balcony, and two-over-two double-hung sash with arched heads on the upper sash. Local interpretation of the plans and materials, which were probably acquired as a set, may be evident in placement of the arched sash in square-headed window frames, and the use of only sawn-work brackets, rather than posts, to support the facade side of the porch roof balcony.

During the next twenty years, other area residents built larger ranch houses as their means allowed. James Green built a frame house, probably in the 1880s. William Tinsley built a substantial log house (now at the Museum of the Rockies) around 1889 and Joseph Tinsley built a frame dwelling (no longer standing), probably in the mid-1890s. Hans Peterson, the local builder, built a log and wood-framed house in the 1890s. The William Buttelman house was built in 1900 by Peterson. The James Smart house (no longer standing) had been built by 1900.⁵ George Cook altered or built a house on the Hale homestead in 1902. One of the larger ranch dwellings was the Walbert house on the Tate homestead, built in 1909. Local tradition asserts that the materials for the Walbert house arrived in Willow Creek on the train; since Hans Peterson had died by then, perhaps Ed West, Tom Walbert, or Andrew and Pete Peterson built the house.

Most of these larger homes, built during a thirty year period, were similar not only in size and presence, but also in the incorporation of several characteristic elements, all of which were found in the design of the Coursien house. The typical Willow Creek Ranch house, sheathed with beveled weatherboard siding, consists of a side-gabled main block of one-and-one-half stories; there is often a large, central intersecting gable and/or smaller wall dormers on the main facade. This facade features a full or partial porch which has a roof balcony; this balcony is accessed by a door in a central wall dormer or intersecting gable. To the rear extends a centered, one-room-wide wing; side porches on this wing are both open and enclosed. The roofline of the rear wing is interrupted by a pair of gabled wall dormers. Many of the houses have a bay window on the south side. Simple door and window frames of unmolded planks are topped with a crown drip molding. The eaves of the main roof and dormers are edged with a molded fascia. The same form and elements appear in the William Tinsley home, the only one of these dwellings known to be built of logs, reinforcing the argument that log construction is a method of building, not a means of architectural expression. The plan of these houses varies. As the twin chimneys suggest, the William Tinsley house has a central hall; in the Buttelman and Walbert houses, the stairs are located in that position but there is no first-floor hall.

There are some variants to this standard type. The George Cook house, a full two-story I-house core with several additions, differs most from the rest of the group; it does, however, have a two-story porch and a bay window. The William Buttelman house is a large, nearly square block on a stone basement, which on the exposed north side suggests a three-story house. This house had a porch with balcony on the south side (now removed) and wall dormers interrupt the eaves of the hipped roof. The house of the local builder, Hans Peterson, the only one to combine a log cabin with a framed addition, has the characteristic wall dormers and trim elements on the frame portion and a bay window extending from the log portion.

The difference between these houses and others in Gallatin Valley (recorded in the 1883 survey) and the houses observed in Bozeman suggest that a strong local tradition for house design persisted in Willow Creek. In fact, the similarity of the early Coursien house (1880), which appears to have been the largest and most carefully detailed of the houses, and the later Walbert House (1909) suggests that local building traditions far out-weighed the influence of changing architectural styles and the encouragement by patternbook designers for homeowners to select their own,

⁵ There is a historic photograph of the Joseph Tinsley house. The Smart house, pictured in <u>Headwaters Heritage History</u>, 616 as the Cooper House is mentioned in "Willow Creek News," <u>Bozeman Avant Courier</u>, April 21, 1900.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number F

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 6

individual design. The houses have great similarity to two-story I-houses, which had long been one of the symbols of agricultural success in the Midwest and Utah, areas with which the Willow Creek residents were familiar. The long-term residency of many home-owners in Willow Creek--twenty years or more--suggests that local traditions outweighed remembrances of building practices in former places of residence. Most of the Willow Creek ranch houses were built during the period when Hans Peterson was active in the area and he could have been responsible for constructing most of them. However, Peterson's work includes two variants from the characteristic Willow Creek ranch house--his own home and the Buttelman residence--that suggest that the builder erected rather than designed these houses. It seems likely that he interpreted instructions of the home owner to basically replicate the Coursien house.

The distinctive external elements of the Willow Creek ranch house--the porch with balcony and wall dormers--warrant further interpretation. A porch with a balcony above was a popular feature on houses built on the western frontier, and it appeared throughout the Midwest and West. Many houses built by the Mormons in Utah have porches of this type as well. Perhaps the porch balcony was the owner's declaration of "architecture" or his way of expressing a comfortable financial situation after years of making do with an older home. Or perhaps the balcony was prompted by housekeeping concerns or the facility of egress in case of fire. Rooflines enlivened by wall dormers are seen in the picturesque and Gothic-revival house designs of the mid-century, although any such association seems tenuous in these vernacular designs. Peterson and his contemporaries must have found the dormers to be easy to frame, and the homeowners were apparently satisfied with the additional light and head room they provided under the relatively steep roofs. The form of the one-and-one-half dwellings with wall dormers may simply have been prompted by the form of the Coursien house.

Other Dwellings. The initial homestead houses of the dryland farming era were usually frame buildings, or shacks, as small as 14 by 16 feet, and as large as 18 by 30 feet. Several of these small dwellings had additions by the time the homesteads were patented. None of these buildings remain in situ, although a few appear to have been reused, such as the frame homestead shack incorporated into a shed at the East Cook complex.

There are a few examples of early twentieth century one-story dwellings which are nearly square in plan and have pyramidal roofs in the area. Houses of this type were built on the Joseph Tinsley ranch in 1904 and in the second residential complex on the Buttelman ranch by 1920.

The pattern of replacing the original homestead house with a larger dwelling is reflected in the dryland farming era homesteads as well. John Noble replaced the Walbert homestead dwelling in 1917, just a few years after the ranch was established. It seems likely that the house on the Haasakker ranch, built in 1918 or 1922, replaced an earlier structure. These two houses are vernacular interpretations of the bungalow style, with extended eaves, exposed rafters, and a bungalow-style front door. Though one is side-gabled and the other is front-gabled, the Noble house and the Haasakker house are very similar; local residents recall that they were built by the same as yet unidentified builder (who is thought not to have been a member of the Peterson family).

Barns

The barns in any agricultural area indicate the type and scale of local operations. The remaining barns in Willow Creek (for it is known that several have been demolished) are not especially large or conspicuous buildings; most are small,

⁶ Ten case files for homesteads in the Willow Creek area from the dryland era of homesteading were reviewed.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number F

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 7

general purpose barns. All examples of this type of important agricultural building, which are not significantly altered, meet the registration requirements for this type of significant structure.

Buildings erected to shelter animals during the first years of settlement in the Willow Creek area were invariably built of logs. The terms "barn" and "stable" were both used in homestead case records to name these buildings. As Karsmizki & Brownell have pointed out, it is not known how precisely these terms were used to mean different types of buildings which were used primarily to shelter horses and dairy cattle, since hay was stored out-of-doors and there were granaries at most farmsteads. There are several log barns surviving in the valley, which range in date from 1870 to 1920. Some are relatively free-standing buildings, with perhaps a shed-roofed addition on one side; others have become the central portions of expanded structures. The wood-framed barns, presumed to be built in the 1910s, in the area range from simple structures—the most common type—to designed, special purpose barns, like the dairy barn (1915) at the Tate/Walbert/Miller ranch. Some of the barns are built on banks and one has a false, stepped front.

Granaries

The farmer's granary was, in a sense, his bank; filled with grain, it provided a source of income to be drawn upon as required. Ideally, the granary provided relatively dry, ventilated, vermin-proof storage for grains. Most of the granaries in the Willow Creek area appear to date from the dryland wheat boom of the 1910s. Several of the structures have been moved from the surrounding bench land to the valley ranches. Because of their importance in the agricultural development of the area, all granaries not extensively altered meet the registration requirements for significant structures.

The first granaries in the Willow Creek area were built of log. Although many of the homestead patenting forms include granaries among the improvements made, few were described. There are two variations of balloon-framed granaries based on the location of the sheathing; the studs of such structures were often sheathed on the exterior or the interior, and sometimes on both sides (although the area between the sheathing could harbor vermin). Interior sheathing facilited the handling of grain by creating smooth-sided bins. The small openings in the upper walls of the granaries allowed the hand scooping of grain from a wagon or truck into the storage bins. Openings in the roofs were fed by portable elevators. Some of the smallest granaries appear to have been considered portable, and have minimal foundations where they are now located.

The log structure (20' x 27') on the Green Ranch, said to have been a granary, is one of the only remaining examples of that type of building. Several small granaries in the area are built with exposed studs and interior sheathing; these structures are often braced on the exterior for additional strength. Most of the larger granaries in the area have exterior beveled weatherboard sheathing. There is one example of crib, or stacked plank, granary construction, located on the William Tinsley/Chan Cooper ranch, built in 1913 on the site of the Harrison lake and moved to its present location around 1935.

Log Structures

Few remain of the log structures that once dominated the farm complexes. Therefore, all of the extant log structures, although their original use and location may not have been determined, are significant reminders of these early buildings and eligible under criteria C. The important aspects of log construction--shape of the logs, notching type, use of chinking and daubing--are documented in these buildings.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number F

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 8

Outbuildings

There are a number of domestic and agricultural buildings on the ranch complexes that document farming activities and contribute to the rural quality of the area. Many of these buildings have been altered during their long periods of use and the addition of corrugated sheet metal to roofs and walls is not uncommon. The outbuildings erected during the periods of significance, unless severely altered in other ways, meet the registration requirements for contributing buildings.

In several of the domestic portions of the ranch complex there are milk or spring houses; these buildings usually reflect the building materials of the house. Most of the outhouses in the area are now located in the agricultural portion of the complexes. Root houses, dug in banks or created with mounds of earth, were built with timber internal supports; later structures have poured concrete supports.

There are a number of shed buildings in the ranch complexes. While some of these buildings may have been built for specific uses, such as a coal shed, or may have been granaries, others appear to have been multi-purpose storage sheds. Most of these buildings, with gable roofs, are sheathed with beveled weatherboard siding.

The chicken coops on the ranches appear to have been built mostly during the 1920s. The characteristic form of chicken coops--narrow structures with opposing shed roofs and many large window openings that allow the sun to reach the rear walls--appear in several variations. The steeply-pitched roofs and low rear walls provided appealing spaces for roosts.

A number of later outbuildings are associated with livestock management. Scale houses, built to shelter a platform scale, are found on two of the ranches. The pole barn on the Joseph Tinsley ranch, built in 1925, appears to be one of the early examples of what became a common type of structure in the area. The blacksmith shop on the Buttelman ranch and the workshop built on the Tate/Walbert/Miller ranch (1915) served the functions later met by machine shops.

V. Historic Sites

An historic site in the Willow Creek area marks the location of a feature or site related to the settlement of the area, the agricultural development during the two periods of significance, or to the development of a community in Willow Creek. The sites identified to date--the point of initial survey; the site of the Davis & Fredericks Mill, a flour mill which operated from 1873 to around 1880; and the Stateler Monument, a family cemetery--have strong relationships to the historic contexts. They vary considerably in extant elements, from the foundation ruins of the mill to the initial point with a replacement marker and to the Stateler Monument which has all important design elements intact.

In order to be eligible under Criterion A the historic sites must be accurately identified, have a high degree of integrity in setting, and have a minimum of modern intrusions. In order to be eligible under Criterion C the historic sites must have major design components present, and must display original materials and workmanship.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number G

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 1

G. GEOGRAPHICAL DATA

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number H

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 1

H. SUMMARY OF IDENTIFICATION AND EVALUATION METHODS

The multiple property listing of Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County is based upon two surveys. The first is Kenneth W. Karsmizki's and Joan Louise Brownell's <u>Gallatin Valley Homestead Survey</u> (Bozeman, Museum of the Rockies, Montana State University, 1983), which was an intensive survey of 187 patented homestead sites in the Gallatin Valley area. The survey focused on patented homestead sites in T1N R1E (as well as other townships in Gallatin County).

During 1991 a rural historic landscape survey of the Willow Creek area was conducted under the auspices of the Montana State Historic Preservation Office, with the Museum of the Rockies serving as the local sponsor of the project. The 1991 survey also centered on T1N R1E, in which the townsite of Willow Creek is located, and adjacent agricultural land to the south and west. Extensive windshield surveying of the area from public roads during August 1991, supplemented by archival research, led to the identification of a cohesive rural historic landscape district in the lower Willow Creek Valley, which was settled during the mid-1860s, the first years of agricultural development in Montana. This initial survey work also identified two other early homesteads in the area which met the registration requirements for the area of the district, but were located north of the town site, and the residence of local carpenters, Hans, Andrew, and Pete Peterson, who were said to have erected many of the buildings in the area. A review of these survey findings with the Montana State Historic Preservation Office resulted in the decision to focus the work in the area on the rural historic landscape district and the three other significant sites. It was decided not to record at that time the townsite of Willow Creek and the small "acreages" south of town; these resources, which relate to the period of intensified and diversified agricultural development in the area, warrant further consideration in the future.

Intensive field work was conducted during September, 1991 by Betsy Bradley and Joan Brownell; each homestead was recorded with mapping, photography, and field notes. Field work was augmented by archival studies in the Gallatin County Appraiser's office, the Gallatin County Recorder's office, and the libraries of the University of Montana, Bozeman and the Museum of the Rockies; the results of this work documented the history of the sites and informed the development of historic contexts.

The periods of significance for the homesteads/ranches in the Willow Creek area were found to span two lengthy periods: the initial period of settlement and development of irrigation-based agriculture, from 1863 to 1882, and the period of intensified and diversified agricultural development, from 1883 to around 1940. Much of the rural landscape was established during the first period, while the buildings in the ranch complexes date almost entirely from the second period; there are a small number of homestead sites in the valley which were established during the second period. Consequently, separate registration requirements and integrity standards have been applied to the agricultural lands of homesteads and the complex of buildings and structures on each property.

The boundaries for the rural historic landscape district are based on both the ridges enclosing the valley on the east, south, and west sides, and land use at the northern end. There are three historic sites in the historic district that are related to the development of the agricultural community: the point of initial survey in Montana; and the grave site of Rev. L.B. Stateler, one of the pioneering Methodist ministers in Montana, who was active in this area from its earliest days of settlement; and the site of a flour mill, at the mouth of the lower Willow Creek canyon, which documents the extent and success of agriculture in the western portion of Gallatin County during the second decade of settlement. These sites happen to be located along the perimeters of the district.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number I

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 1

I. MAJOR BIBLIOGRAPHICAL REFERENCES

Primary Sources

Aerial Photographs. 1937, 1979.

Federal Population Census Records. 1870, 1880.

Gallatin County Appraiser's Records.

Gallatin County Recorder's Office. Conveyances, Road Books, Water Rights Books, <u>Judgements</u>. Book 7, June 23, 1899, 153-202. [testimony in water-rights case]

Homestead Case File Records. National Archives.

Sanborn Map of Willow Creek, 1927.

"Schedule 3 -- Productions in Agriculture in Montana Territory in the County of Gallatin," Territory of Montana (Agricultural Census Manuscript Sheets), 1870.

"Special Schedules of Manufactures -- Nos. 7 and 8, Flour and Grist Mills -- Cheese, Butter, and Condensed Milk Factories, Products of Industry in the County of Gallatin, Territory of Montana, 1880.

The Gallatin Valley and Montana

Bates, Grace Gallatin County, Places and Things Present and Past. Bozeman: Gallatin County Historical Society, 1985.

Bozeman Avant Courier. 1900, 1902-03, 1906-08, 1910-11.

Bozeman Chronicle. 1891-1894.

Burlingame, Merrill and Toole. A History of Montana. New York: Lewis Historical Publishing Co., Inc., 1957.

Buttelman, Virginia Topscott. "Early Days in Willow Creek and Neighboring Towns." Typescript. 1950. Merrill G. Burlingame Special Collections, Montana State University Libraries, Bozeman.

Cook, George H. "Report of Geo. H. Cook, County Agent for Gallatin County, Montana, from September 1, 1914 to December 31, 1914." Typescript. Merrill G. Burlingame Special Collections, Montana State University Libraries, Bozeman.

Cooper, Ree. "History of Willow Creek, Montana." 1953. Typescript. Merrill G. Burlingame Special Collections, Montana State University Libraries, Bozeman.

Deeg, Patricia. "Willow Creek, Montana." Research Paper, n.d.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number I

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 2

- Dunbar, Robert G. "Agriculture." Chapter 12 in Burlingame and Toole, A History of Montana. New York: Lewis Historical Publishing Co., Inc., 1957.
 ______. "The Economic Development of the Gallatin Valley." Pacific Northwest Quarterly 47 (Oct., 1956), 117-123.
 Flaherty, Marie. "Mrs. Marie Flaherty Tells the MIA History Group about her Pioneer Forbears [sic] in the Jefferson and Gallatin Valleys." Typescript. Merrill G. Burlingame Special Collections, Montana State University Libraries, Bozeman.
 ______. Interview, November, 1966. Typescript. Merrill G. Burlingame Special Collections, Montana State University Libraries, Bozeman.
- Department of Agriculture, Office of Experiment Stations. "Duty of Water in the Gallatin Valley." in <u>Bulletin 86, The Use of Water in Irrigation</u>. by Samuel Fortier. Washington, D.C., c.1900.
- Gallatin Valley Gazetteer. 1892-93.
- General Land Office, National Archives Record Group 49. Letter, S. Meredith to J.S. Wilson, Jan. 6, 1868, Box 78; Letter from S. Meredith to J.S. Wilson, October, 1867; field notes.
- Graham, Teria Green. "James Green Family." Typescript. Merrill G. Burlingame Special Collections, Montana State University Libraries, Bozeman.
- Harmon, Nolan B., ed. <u>The Encyclopedia of World Methodism</u>. United Methodist Publishing House, 1974. S.v. "Learner Blackman Stateler," by Leland D. Case and Roberta Baur West.
- "History of the Willow Creek Methodist Church, 1864-1964." Pamphlet. Merrill G. Burlingame Special Collections, Montana State University Libraries, Bozeman.
- "In Gallatin Valley." Rocky Mountain Husbandsman. Dec. 6, 1894, p. 2.
- Karsmizki, Kenneth W. and Joan Louise Brownell. <u>Gallatin Valley Homestead Survey</u>. Bozeman: Museum of the Rockies, Montana State University, 1983.
- Lesson, Michael A. The History of Montana, 1885. Chicago: Warner, Beers and Co., 1885.
- Lile, Thomas. "William H. Buttelman." Typescript. WPA Files. Merrill G. Burlingame Special Collections, Montana State University Libraries, Bozeman.
- Polk & Co. Bozeman City and Gallatin County Directory. 1902-03, 1910-11, 1927.
- Progressive Men of the State of Montana. Chicago: A.W. Bowen.
- Quivick, Fredric L. <u>Historic Bridges in Montana</u>, U.S. Department of the Interior, National Park Service, Historic American Engineering Record, 1982.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number I

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 3

- Raymer, Robert George. Montana -- the Land and the People. Chicago and New York: The Lewis Publishing Co., 1930.
- Stanley, E.J. <u>Life of Rev. L.B. Stateler or Sixty-Five Years on the Frontier</u>. Nashville, TN: Publishing House of Methodist Episcopal Church South, 1907.
- Stout, Tom. Montana, Its Story and Biography. Chicago and New York: The American Historical Society, 1921.
- "The Three Forks Country -- Where Farming Pays." Pamphlet. c.1915. Merrill G. Burlingame Special Collections, Montana State University Libraries, Bozeman.
- <u>Three Forks Herald</u>. Sept. 18, 1958. Three Forks File, Merrill G. Burlingame Special Collections, Montana State University Libraries, Bozeman.
- Three Forks Area Historical Society. Headwaters Heritage History. Butte: Artcraft Printers, 1983.
- Tinsley, Bazil. "Pioneer History of Willow Creek." Typescript. Merrill G. Burlingame Special Collections, Montana State University Libraries, Bozeman.
- Water Resources Survey, Gallatin County, Montana. Helena: State Engineer's Office, 1953,
- Waldron, Ellis. Montana Legislators 1864-1979. Bureau of Government Research, University of Montana, Missoula, 1980.
- Wilson, Milburn L. "The Evolution of Montana Agriculture in its Early Period." in <u>Proceedings of the Mississippi Valley Historical Association</u> 9 (1917-18), 429-440.
- Woodward, N.L. "Pioneer History of Willow Creek." Typescript. Merrill G. Burlingame Special Collections, Montana State University Libraries, Bozeman.
- Woodward, Nancy Lee. "Early History of Willow Creek." Typescript. Merrill G. Burlingame Special Collections, Montana State University Libraries, Bozeman.
- Woodward, Nina. "Following Information Compiled...". Typescript. Merrill G. Burlingame Special Collections, Montana State University Libraries, Bozeman.

Maps

Montana Plat Maps original

- DeLacy, W.W. "Map of the Territory of Montana with portions of adjoining Territories." 1865.
- "Map of the Territory of Montana to accompany the report of the Surveyor General." 1871.
- "Map of a Reconnaissance from Carroll Montana Territory to Yellowstone National Park and Return." by Captain William Ludlow, 1875.

NPS Form 10-900-a (8-86)

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number I

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 4

Road Map of the state of Montana. J.H. Hibbard, Montana Highway Commission, 1914.

Agriculture and Irrigation

- Census Office. "Agriculture, Part II, Crops and Irrigation." in <u>Census Reports</u>, Volume VI, Twelfth Census of the United States, Taken in the year 1900. Washington, D.C.: United States Census Office, 1902.
- Census Office. "Report on Agriculture by Irrigation in the Western Part of the United States at the Eleventh Census: 1890." by F.H. Newell. Washington, D.C.: Government Printing Office, 1894.
- Ganoe, John T. "The Beginnings of Irrigation in the United States." <u>Mississippi Valley Historical Review</u> 25 (June 1938), 59-78.
- Hakola, John W. <u>The Development of a Policy Towards Irrigation in Montana to 1908</u>. Master's Thesis. Bozeman: MSU, 1951.
- Harding, S.T. "Irrigation Development in Montana." <u>Montana Agricultural College Experiment Station Bulletin</u>, No. 103. Bozeman: 1915.
- Hargreaves, Mary W.M. "Dry Farming Alias Scientific Farming." Agricultural History 22 (Jan., 1948), 39-56.
- Department of Agriculture. "Irrigation of Grain." in <u>Farmers' Bulletin</u> 863, by Walter W. McLaughlin. Washington, D.C.: 1910, rev. 1917.
- Roet, Jeffrey B. <u>Agricultural Settlement on the Dry Farming Frontier, 1900-1920</u>. PhD. Dissertation. Evanston IL: Northwestern University, 1982.
- Sauder, Robert A and Rose M. Sauder. "The Morrill Act's Influence on Public Land Disposal After 1870." <u>Agricultural</u> History 61 (Spring, 1987), 34-49.
- Schlebecker, John T. Whereby We Thrive, A History of American Farming, 1607-1972. Ames: Iowa State University Press, 1975.
- Vichorek, Daniel N. Montana's Homestead Era. Helena: Montana Magazine, 1987.
- Widtsoe, John A. "History and Problems of Irrigation Development in the West." <u>American Society of Civil Engineers</u> Transactions 90 (June, 1937), 681.

Mormon Architecture and Settlement

- Carter, Thomas and Peter Goss. Utah Architecture: A Guide to Identifying the Styles and Types.
- Fife, Austin E. "Stone Houses of Northern Utah." <u>Utah Historical Quarterly</u> 40 (Winter, 1972), 6-23.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number I

Rural Historic, Architectural, and Landscape Resources in the Willow Creek Area, Gallatin County, Montana

Page 5

- Francaviglia, Richard V. "Mormon Central-Hall Houses in the American West." <u>Annals of the Association of American Geographers Annals</u> 61 (Mar., 1971), 65-71.
- . "The Mormon Landscape, Definitions of an Image of the American West."
- Meinig, D.W. "The Mormon Culture Region: Strategies and Patterns in the Geography of the American West, 1847-1964."

 <u>Annals of the Association of American Geographers</u> 55 (June, 1965), 191-220.

Poulsen, Richard C. "Stone Buildings of Beaver City," Utah Historical Quarterly 43 (Summer, 1975), 278-285.

Architecture

- Kniffen, Fred, "Folk Housing: Key to Diffusion." <u>Annals of the Association of American Geographers</u> 55 (Dec., 1965), 549-577.
- Noble, Allen G. Wood, Brick and Stone, the North American Settlement Landscape. Vol. 2, Barns and Farm Structures. Amherst: University of Massachusetts Press, 1984.
- Peterson, Fred W. "Vernacular Building and Victorian Architecture: Midwestern American Farm Homes." <u>Journal of Interdisciplinary History</u> 12 (Winter, 1982), 409-427.
- Sanders, J.H. Practical Hints about Barn Building. Chicago: J.H. Sanders Pub. Co., 1893.
- Dole, Philip. "The Rural Landscape." in <u>Space, Style and Structure: Building in Northwest America</u> 2 vols. edited by Thomas Vaughn & Virginia Guest Ferriday. Portland, Oregon: Oregon Historical Society, 1974.