

NOV 09 1992

United States Department of the Interior
National Park Service

NATIONAL
REGISTER

National Register of Historic Places
Multiple Property Documentation Form

This form is used for documenting multiple property groups relating to one or several historic contexts. See instructions in How to Complete the Multiple Property Documentation Form (National Register Bulletin 16B). Complete each item by entering the requested information. For additional space, use continuation sheets (Form 10-900-a). Use a typewriter, word processor, or computer to complete all items.

XX New Submission Amended Submission

=====

A. Name of Multiple Property Listing

=====

Denver International Airport Historic Resources

=====

B. Associated Historic Contexts

=====

(Name each associated historic context, identifying theme, geographical area, and chronological period for each.)

Early Transportation in the Denver International Airport Area, 1859-1900

Early Agricultural and Ranching Development in the Denver International Airport Area, 1859-1890

Agriculture in the Denver International Airport Area After 1890

=====

C. Form Prepared by

=====

name/title Steven F. Mehls, Principal Investigator

street & number 1225 Atlantis Ave. telephone (303)-666-6208

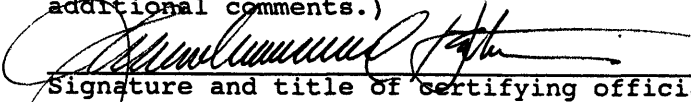
city or town Lafayette State CO zip code 80026

=====

D. 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 and Guidelines for Archeology and Historic Preservation. (See continuation sheet for additional comments.)



Signature and title of certifying official

Date November 4, 1992

 State Historic Preservation Officer
State 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.

for Autumn J. Lee
Signature of the Keeper

12/23/92
Date

=====
Table of Contents for Written Narrative
=====

Provide the following information on continuation sheets. Cite the letter and the title before each section of the narrative. Assign page numbers according to the instructions for continuation sheets in How to Complete the Multiple Property Documentation Form (National Register Bulletin 16B). Fill in page numbers for each section in the space below.

	Page Numbers
E. Statement of Historic Contexts (If more than one historic context is documented, present them in sequential order.)	3-22
F. Associated Property Types (Provide description, significance, and registration requirements.)	23-32
G. Geographical Data	33-35
H. Summary of Identification and Evaluation Methods (Discuss the methods used in developing the multiple property listing.)	36
I. Major Bibliographical References (List major written works and primary location of additional documentation: State Historic Preservation Office, other State agency, Federal agency, local government, university, or other, specifying repository.)	43-47

=====
Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).
Estimated Burden Statement: Public reporting burden for this form is estimated to average 120 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

PART E. STATEMENT OF HISTORIC CONTEXTS

Introduction

The area that soon will service tens of thousands of air travellers on their way to and from Denver already has experienced an eventful, if not colorful, past. Studies of the historic period, both those concerned with cultural resources and other histories of the area, offer information regarding a number of themes. Those themes act to link the experiences of many individuals to the Denver International Airport study area and to larger regions such as the plains of northeastern Colorado. The themes then exemplify and explain the area's history. As would be expected, some of the themes, such as early exploration and the fur trade, are not represented by resources identified during pedestrian cultural resource surveys. Other themes are well represented by cultural remains. Three themes typified by significant, intact historic resources are: 1) Early Transportation, 1859-1900; 2) Early Agricultural and Ranching Development, 1859-1890 and; 3) Agriculture After 1890. Sub-themes, such as wagon transportation and railroad expansion, can be identified as integral parts of the broader themes. Additionally, these significant Denver International Airport themes have clear relationships to larger regions and broader patterns of Colorado plains history and the state in general as identified in regional contexts such as the [Colorado] Plains Historic Context.¹

Natural and Political Setting

The approximately 55 square miles that comprise the airport site are flat, gently rolling prairie. The South Platte River flows in a north-northeasterly direction a few miles west of the site and is the area's major watercourse. Tributaries to the South Platte crossing parts of the present Denver International Airport include, from east to west, Box Elder, Third, Second and First Creeks. Box Elder Creek also was referred to as Terrapin or Running Creek during the late nineteenth century. East of the airport site other watercourses of consequence to the region's history include Kiowa, Bijou and Badger Creeks. The elevation and climatic conditions of the airport site are characteristic of the Colorado Piedmont. The altitude reflects the levelness of the terrain, ranging from 5,250 to 5,400 feet above sea level. Especially important to the Euroamerican history of the area, the average annual precipitation is typical of a semi-arid environment with approximately 14 inches of moisture falling each year, concentrated between April and October. The summers are warm to hot while winters generally are moderate, with only occasional sub-zero temperatures. This gives rise to a variety of native plants, but bunch grasses dominate the vegetation communities (see project area map).²

The prairie soil proved suitable for certain types of agricultural pursuits. Along the various waterways are belts of Laurel sandy loam soil. This type of soil is rich and retains what little precipitation falls in the semi-arid environment. Laurel sandy loam is an excellent soil for growing onions, cabbage and sugar beets. Farther from the waterways the soil types are suitable for beans, alfalfa, wheat, oats, corn and potatoes, providing that irrigation exists. These crops require a steady water supply available only from irrigation. On the non-irrigated lands crops such as milo maize and kafir (another type of maize), and drought-resistant varieties of wheat and corn have been raised successfully. In addition, the plains provide adequate forage for cattle, sheep and horses.³

Adams County, Colorado, the historical parent of the Denver International Airport, is irregular in shape, but generally a rectangle. With an area of 807,680 acres, it is slightly larger than the state of Rhode Island. Colorado voters established Adams County in 1902, the same year they approved

organization of the City and County of Denver. Both Denver and Adams County came from sections of Arapahoe County. Originally Adams County stretched east to the Kansas border, but a few years later County voters opted to decrease the County's size. Washington and Yuma County voters then approved annexation of the eastern extremes of Adams County (see maps of Colorado county evolution). Because of its large land mass and good soil, Adams County has been primarily an agricultural county. Towns exist, but most of Adams County, is not considered an urban area. While many of the towns have traditional ties to county agricultural fortunes, today most town dwellers in the County are suburbanites with their livelihoods' linked to Denver. The study area was incorporated into the City and County of Denver in 1988 as the result of an election in May of that year and subsequent annexation. Since that date the City has acquired the properties within the study area for airport construction.

Background to Settlement

Spain, the original European claimant of the airport site, and indeed all of Colorado, held tenuous control of the region throughout the sixteenth, seventeenth and eighteenth centuries by virtue of Coronado's wanderings of 1540-41. From that point until time until the early 1800s, Spanish explorers, military parties and traders ventured north out of Mexico, eventually settled New Mexico, and continued to adventure farther north into Colorado. They travelled both east and west of Colorado's mountains. Spanish authorities hoped to use their occasional expeditions to thwart French traders moving into the Platte-South Platte Valley.⁴ The plan failed and an intense rivalry of words between the Spanish and French followed. Finally, in 1763, France formally relinquished all claims to the area. After removal of the French threat in 1763, Spain showed little interest in the lands north of the Arkansas River until 1793. From then until 1819 and ratification of the Adams-Onis Treaty, the Spanish army sent a number of patrols into the South Platte area (see map of Spanish control).⁵

The Adams-Onis Treaty led to official Spanish recognition of the United States' claims that dated to the Louisiana Purchase of 1803. The purchase gave the new American government control of the central and northern Great Plains as far west as the Continental Divide. As a result of the agreement with Spain, the United States sent out a number of expeditions to the Colorado area. The most famous federal exploration of northeastern Colorado came in 1820. That year Major Stephen Long led a party of soldiers and scientists along the South Platte River to the Front Range and then south to the Arkansas River before returning to the Mississippi Valley. While it is almost certain that Long did not cross the modern airport site, his reports did have a lasting impact on the settlement and usage of the area. Long, in his official descriptions, labelled the lands from central Nebraska to the front of the Rockies as the Great American Desert, proclaiming the land to be fit only for grazing and homelands for nomadic Indians. The image of the desert stayed in the American mind and influenced the way later settlers looked at the lands for more than 60 years. After Long's trip, dozens of mountain men used the South Platte and other area streams as routes to and from the mountains to trap and trade beaver pelts.⁶

The era of exploration and the fur trade created a growing body of geographical, ecological and scientific knowledge about the American West and Colorado by the late 1850s. The contribution important toward development of the area's history came from the government explorers and mountain men, who discovered and mapped travel routes, including the South Platte Trail, Smoky Hill Trail and Santa Fe Trail. When William G. Russell's party of Georgians discovered gold in 1858 Americans already knew how to get to the Cherry Creek gold fields.⁷

CONTEXT I: Early Transportation, 1859-1900

The history of Colorado during the nineteenth century is in large part the history of transportation and access to the territory and state. By the time of the 1859 gold rush a branch of the Oregon/Overland Trail known as the Trappers' or South Platte Trail had been in use for nearly forty years. The Santa Fe Trail through southeastern Colorado with its own branch, the Old Cherokee Trail, north from the Arkansas Valley to the South Platte River, also had operated for nearly forty years by 1859. During the late 1850s the Army established a supply road along the Smoky Hill River as far west as Ft. Lyon that prospectors extended to the Cherry Creek gold fields after the rush started. Of these, only the South Platte Trail and the northern most branch of the Smoky Hill Trail came close to the airport site. Settlers developed a number of cut-offs and branches that connected to those two routes as short-cuts. Two such routes, the Second Creek Road and Box Elder Road, crossed the modern airport. Collectively, these trails served to connect Colorado's infant settlements with each other and to the rest of the United States. The territory's transportation picture remained constant for over a decade, but it proved to be less than satisfactory (see trails maps).⁸

Historians feel that as many as 100,000 people rushed to Colorado because of the well publicized gold discoveries of 1858. The routes used by the Fifty-niners served as the first commercial links between Colorado and the rest of the nation.⁹ The Smoky Hill and South Platte Trails, mentioned above, quickly developed as heavily used routes for both freighters and stage coaches. This happened for two reasons. First, accustomed usage of the routes meant that they were well established by 1859 with some stopover points already in business. Secondly, these paths tended to follow natural routes where water and forage could be found.¹⁰ Margaret Long, one of Colorado's foremost authorities on pioneer trails during the 1930s, summarized the origins and engineering considerations of the early routes, writing:

Today automobiles and railroad trains speed over the routes of the forgotten trails of more than half a century ago. The trail was often 10 miles wide, depending on the widely varying local circumstances. It followed the contours of the country, avoiding hills whenever possible, but taking to the higher ground in wet weather, or perhaps swinging around some sandy spot. Grass for the stock, or even the highly essential "buffalo chip" for fuel, would often change the location of a trail for several miles.¹¹

The Territory's dependence on wagon roads and the work by Coloradans to secure railroads marks the period 1858-1870 in Colorado history. This corresponds to a national period when railroads dominated American transportation planning. Generally, wagon road construction methods tended to be nothing more than widening horse paths and cutting tree stumps as close to the ground as possible, where necessary. By the 1860s road building had changed little and as attention focussed more and more on railroads, governments expended only minimal effort on roads. The road tax system, a practice accepted across the United States, allowed citizens to pay their taxes through three days of road work, which generally became festive community parties rather than serious work projects. Not until 1879 did the pattern begin to change as the public, nation-wide, started demanding better roads.¹² This coincided with the beginnings of a regularized county road system in and around the airport study area.

Early travellers made most of their trips by wagon or stagecoach. The first recorded stage trip into the region occurred in the fall of 1858 when a Ft. Laramie, Wyoming, driver took newcomers from the Overland Trail southward to the Colorado gold fields. The excitement caused by mineral discoveries led others to consider the possibilities of operating a coach

service to Colorado from the Missouri River. Foremost among such companies was the firm of Russell, Majors and Waddell, a long-time western transportation company. During the winter of 1858-1859 preparations were made to commence service with the coming of spring. They chartered the Leavenworth and Pike's Peak Express Company (L&PPEC). This line followed a route near the Smoky Hill Trail until it reached northeast Colorado. Once in the region it proceeded west along the Republican River and then overland to the South Platte Trail and on into Denver.¹³

The stage line rapidly encountered financial problems and operating difficulties. Reorganization resulted and a new corporation, the Central Overland California and Pike's Peak Express (COC&PP), emerged. The COC&PP used a new route along the Overland Trail across Nebraska from Nebraska City, the home of Russell, Majors and Waddell's freight operations. Once in northeastern Colorado, this new line followed the South Platte Trail to Latham, a stage stop near present day Greeley. Here coaches either continued south along the South Platte River into Denver or moved west to Camp Collins (now Fort Collins) and Virginia Dale before rejoining the Overland Trail in Wyoming. The revised route worked better. Stage stations developed at Brighton and Henderson's Ranch a few miles a west of the airport site at this time. The Henderson's Ranch station location encouraged pioneers to build the Second Creek Road that crossed the airport site from southeast to northwest. However, high costs of outfitting the stages, stations and other facilities along with smaller than expected revenues forced the company into receivership. Further financial troubles beset Russell, Majors and Waddell and eventually forced them out of business.

Ben Holladay bought the bankrupt operation and continued staging and freighting throughout much of the West. One of the most important improvements made by the flamboyant Holladay involved using the cut-off from Fort Morgan south and southwest to Living Springs and from there to Box Elder Station southwest of modern Watkins, Colorado, only a few miles from current airport site. From Box Elder Station the stages followed the Smoky Hill North Trail into Denver. Despite Holladay's efforts to improve service he found his company beset by competition. In 1865 John A. Butterfield opened a stage line, the Overland Dispatch, on the Smoky Hill South Trail.¹⁴ Within a year Holladay purchased the Dispatch and rerouted it to the Smoky Hill North Trail. This rerouting caused Holladay to upgrade Box Elder Station to a home station complete with meal service for the passengers. Admittedly, the few accounts of meals there, indicate its operators did not do better than many others in providing appetizing entrees.¹⁶ In 1866 the last few miles into Denver on the new route, just south of the airport site, were described:

At Reed's Springs we obtains [sic] our last 'square meal' [breakfast], with the inevitable bacon, for a dollar and a half. Thenceforth our road led over the high divides between Beaver [E. Bijou] Bijou [W. Bijou], and Kiowa Creeks, all of which flow northward to the Platte . . .

Midday was intensely sultry . . . We took a hasty dinner at Running Creek [now known as Box Elder Creek, this location was Box Elder Station], and then made our slow way, with poor horses across the ridges to Cherry Creek, which we struck about fifteen miles above Denver. Up to this point we had found no settlement, except two or three grazing ranches . . .¹⁶

Travel by stagecoach to Colorado in 1860 was primitive even by that era's standards. A journey from the Missouri River to Denver took ten to twelve days. Occasional overnight stops were made at home stations, but generally the passengers spent the time packed into the Concord coaches. Passengers

faced days of travel with little protection from the elements other than the roof over their heads. The dry soils of the plains turned to dust clouds under horses' hooves and the fine particles found their way into most tightly sealed luggage. The suspension, leather-straps that allowed the coach body some insulation from the bumps of the road, depended on the load of the coach and skill of the driver to be effective. Riders generally faced a vicious pounding along the way. Rest and meal stops served to punctuate the trip. The stories of horrendous meals served to travellers at stage stations are legion, with the table frequently filled with salt pork, beans and stale bread or crackers. Occasionally, fresh bread and pies could be had, but those stops tended to be few and very far between. Other stops offered travellers delicacies such as buffalo or antelope roast if the station operator had experienced a successful hunt. As if to compound the abuse, stage fares from the Missouri River to Denver generally ran between \$100 to \$150 each way.¹⁷

Despite such ticket prices, stage companies usually faced a financial struggle to survive. By the late 1860s Holladay lost control of his company after Wells, Fargo and Company bought most of its stock. Wells Fargo enjoyed a virtual monopoly over long distance western transportation at that point.¹⁸ However, most individuals could not afford a ticket and had to make their own way across the plains.

The Fifty-niners (and Guidebook authors) mostly ignored the extensive information available on high plains travel. This situation came about from the excitement of the moment and from the optimism of many immigrants. However, once on the trail, potential miners found themselves ill-prepared. Often supplies necessary for survival were left behind so that mining equipment could be taken. All forms of overland transportation were used; wagons, carts, buggies, horses, mules and by foot. More often than not a small band assembled at a supply town and embarked on the journey without hiring a guide or forming a wagon train.¹⁹ Many travellers took supplies only for the first few days of the journey hoping to live off the land for the rest of the trip.²⁰

Travellers and settlers also depended on the trails, some of which became county roads, as the method of local transportation. Not surprisingly branches and feeders to the major trails such as the Smoky Hill North or South Platte developed to meet local needs. Two such trails once crossed the lands of the modern airport.

One of the secondary trails, the Second Creek Road, appears to have originated in the early 1860s, possibly 1860 or 1861. The Second Creek Road's exact origins remain somewhat clouded, but its route from the South Platte River to the North Fork of the Smoky Hill Trail (AKA Smoky Hill North Trail) indicates that the Second Creek Road served as a connector and feeder between two of the major routes to Denver at the time. More specifically, the Second Creek Road linked two important points on the plains east and north of Denver by 1860 and for many years thereafter. Box Elder Station, mentioned above, served as the likely southeastern terminus of the Second Creek route while Henderson's Ranch, also mentioned above, was located near the western end of the trail. The Second Creek Road served as a segment of the area's transportation system until the 1880s when the county government began a road designation program that tended toward roads on section lines rather than drainages.²¹

Settlers developed other trails to meet specific needs. A number of routes came about because of open range cattle ranching. Even though by the late 1860s ranchers used railroads to ship their animals to eastern markets, they depended on trails to move the herds to their ranches and to the railroads. For cattle trails certain constraints; topography, available

water and ease of travel, influenced the routings of the trails. As a result, many of the trails followed the courses of creeks or rivers. For example, one such trail in the airport site paralleled Box Elder Creek.²²

Box Elder Creek offered certain advantages, especially for people moving large herds of livestock, that other routes could not. First, the Creek traversed gently rolling terrain from the Monument Divide area (its headwaters north) to its mouth at the South Platte River. Secondly, the route offered water and forage for the herds. Finally, the route split the distance between Denver and Bijou Creek, providing an alternative to the heavily travelled Bijou Creek route. More importantly, the Box Elder Creek route gave direct access from the south to John W. Iliff's Crow Creek Ranch and its predecessor Elbridge Gerry's 1860 ranch at the mouth of Crow Creek. Crow Creek lies almost directly opposite the mouth of Box Elder Creek.²³ Box Elder Road then began its useful life as a feeder to the four major cattle trails that reached northeastern Colorado during the 1860s and then served as a county road for almost 60 years between the 1880s and 1940s.²⁴

Primary and secondary trails, while an important part of Colorado's early history, proved to be less than dependable. Dissatisfaction developed in Denver, Boulder and other early communities. Railroads held the promise of reliability and comfort sought by pioneer Coloradans. In 1862, without Southern opposition, President Abraham Lincoln convinced Congress to pass the first Pacific Railroad Act. That law, which chartered the Union Pacific Railroad, and recognized California's Central Pacific, authorized those companies to build the transcontinental route. Also, the law authorized substantial grants of public land to each of these companies to offset the construction costs associated with building a rail line from the Missouri River to the Pacific coast through generally unsettled land. Two years later Congress passed a second Pacific Railroad Act. The new law increased federal monetary and land subsidies to the two companies.

Coloradans saw these laws as the answer to their prayers. If the Union Pacific could be lured to build through Denver the city would be on the first Transcontinental railroad and its future would be assured. This did not happen, leading disappointed Denverites to form their own railroad, the Denver Pacific (DP), in 1867. Its route, a few miles west of the airport site, formed a connection with the Union Pacific in Cheyenne. Denver boosters also convinced the Kansas Pacific (KP) to build as far west as Denver before fulfilling its federal land grant obligation to connect with the Union Pacific. Congress extended the KP's land grants west with the rail line and as a result the grant included tracts within the airport site. Between 1867 and 1870 the KP and DP, by 1868 a subsidiary of the KP, struggled to finish their lines.

Little over a decade after the first locomotives reached Denver in 1870, a new round of rail building began extending service to more of Adams County, including the airport area. The Burlington and Missouri River Railway, a subsidiary of the Chicago, Burlington and Quincy, identified Denver as a potentially rich market and began to extend their line west from McCook, Nebraska. The Burlington opened its Denver service during the early 1880s. Presence of the Burlington led to the founding of the towns of Irondale and Derby, a few miles west of the airport, by the end of the decade. The Union Pacific, by then the owner of the Denver Pacific, improved service on both the DP and KP lines as a result of the presence of the rival Burlington. These routes, complemented by the wagon road system, acted to tie the area, including the airport area, together as a geographical and economic unit well before many other places in Colorado. More than that, the railroads offered transportation to most of what became Adams County from the East and through their emigration and/or land departments, the

companies encouraged many farmers to relocate to the area before and after the turn of the century.²⁵

Another railroad, the Colorado Eastern, crossed the southern edge of the modern airport. Built in 1886, its owners hoped to haul coal from the Scranton coal mine, southeast of the study area, to the Omaha and Grant Smelter on the then northwest edge of Denver. Built as a narrow (3') gauge line, it only hauled coal for about two years before the mines at Scranton closed. From 1889 to 1915 the narrow gauge stayed in operation but lost money each year. Finally, in 1915 its backers recognized the railroad's futility and ceased operations. In August of that year the locomotive and remaining passenger car had been shipped to Leadville.²⁶ The Colorado Eastern's demise came during a time when the entire region experienced a number of changes, including significant changes in local transportation and agricultural practices when compared to those of the late nineteenth century.

One transportation innovation led to important lifestyle changes for the area's residents and closed the pioneer period more than any other - the automobile. From 1890 to 1910 Adams County and the rest of Colorado reacted to the Good Roads Movement. Originally begun by bicyclists to pressure state legislatures for better and improved roads the Good Roads Movement soon picked up the support of automobile users. In Adams County residents lobbied the Colorado General Assembly and the county government for improved roads. In 1916 the federal government authorized construction of a coast to coast highway. Work began three years later. This road, U.S. Highway 40, crossed the eastern plains and passed immediately south of the airport site on the way to Denver. Within a few years other highways would cross Adams County. The automobile afforded area residents the opportunity to change trade, recreation and employment patterns. As the speed of automobiles increased it was possible to travel longer distances in less time to purchase goods, have fun or work. These changes all began in the years before 1920 and only evolved fully in the years after World War II.²⁷ The auto proved to be only one symbol of the change overtaking the area by 1900. Agriculture, the basic pattern of economic life in the area, also changed after 1890. From 1859 to 1890 the area experienced a pioneer type of agriculture. But pioneer agriculture on the Colorado plains proved to be quite different from that of Illinois or Iowa a generation or two earlier.

CONTEXT II: Early Agricultural and Ranching Development, 1859-1890

The Colorado gold rush of 1859 spurred interest in the Rocky Mountains. The plains region, originally viewed as another barrier to be crossed to reach the mines in the mountains, soon became a source of wealth in its own right. The rapid influx of people to Colorado spurred efforts to establish a territorial government. But Congress hesitated until 1861 before organizing Colorado Territory. In addition to the political needs of the region, other pioneers recognized the necessity for produce, goods and services. That recognition led entrepreneurs to start a series of businesses to support the miners. Farming and trading were actively promoted and efforts to encourage immigration to Colorado Territory began. For example, William Byers, editor of the Rocky Mountain News, and a major booster of the region, penned many articles and pamphlets encouraging farmers and ranchers to immigrate to Colorado.

Federal legislation aided these booster movements by making land available at low prices. The 1842 Preemption Act allowed for the purchase of 160 acres of land at \$1.25 per acre. Not satisfied, westerners continued to campaign for free government land. Finally, in 1862 Congress responded with the Homestead Act. The 1862 legislation made available 160 acres of public land, under certain conditions, to each adult, head of a family, for \$10.00 in fees. The settler had to prove five years of continuous residence and cultivation to gain patent to the land. This legislation proved popular although fraud was common.²⁸

Fraud continued to flourish under the new land legislation of the 1870s and 1880s. The Timber Culture Act of 1873 granted 160 acres to a settler who planted 40 acres in trees. In 1878 only 10 acres of trees were required. The Desert Land Act of 1877 provided 640 acres at \$1.25 acre if the land was irrigated. Recognition of the difficulties of settlement in arid regions received legislative aid but the provisions were seldom met and illegal entries constituted a public scandal. In 1891 Congress repealed the Timber Culture and Preemption Acts and modified the Desert Land Act. Passed three years later, the Carey Act provided for the proceeds from sales of selected lands to go to states to be used for irrigation project construction. All of these laws benefitted speculators and provided minimal revenues to the states and Federal government. The results were negligible, both in terms of the impacts on irrigation and on settlement of the airport area. Part of that can be traced to the railroad land grants and activities of their associates such as the Platte Land Company that Paul Friedman, who conducted the intensive survey of the airport, feels delayed intense settlement of the area until the early twentieth century.²⁹ Unfortunately, Union Pacific land records are all but unavailable and what evidence is extant is not clear about railroad leasing or credit sale activities in the region that might have aided the local ranchers or farmers.³⁰ Whatever the source, ranchers and farmers took advantage of the huge tracts of unfenced lands as cheap or free grazing areas until the 1890s.

Despite transportation and the vast quantities of land available, settlers faced several problems besides the railroad land grants. First, the United States, involved in the Civil War 1861-65, caused the flow of settlers to the western regions to slow to a trickle. The limited number of settlers resulted in numerous problems and risks associated with isolation. The continued threat of Indian attack plagued pioneers in the airport area and throughout Colorado. Wars with the native population after the Civil War significantly reduced this threat by the end of the 1860s.³¹

In spite of the obstacles, by 1860 the roots of permanent settlement north and east of the fledgling town of Denver began to appear as farmers and stock raisers turned prospectors returned to farming, establishing farms and running

cattle herds along the South Platte. In 1860 Thomas Donelson, formerly of Illinois and Wisconsin, located on an 80 acre farm near modern Brighton and by 1861 Colonel John D. Henderson, the owner of Henderson's Ranch mentioned in conjunction with Second Creek Road, established a ranch with 2,000 head of cattle near modern Henderson, Colorado, on the South Platte.³² Farther east on Box Elder Creek, then soon to become famous cattleman John W. Iliff ran a herd of cattle to fatten for sale in his Denver grocery store.³³

Iliff, known by the 1870s as Colorado's leading cattleman, was one of the first in the territory to bring in a Texas herd for fattening and sale. He came to Colorado to make his fortune from mining. Finding little opportunity in mining, he soon turned to shopkeeping as a way to make a living. Iliff felt, quite correctly, that supplying miners could be as profitable as being one of them. From his Denver store he sold goods and bought a freight wagon outfit to supply the store. He also began raising cattle to butcher for sale in his shop. It was from this part of his business then that he got his start in ranching. Iliff bought herds from Texas or Missouri, when available, and fattened them for resale in his and other Colorado butcher shops. This proved to be so profitable that he gave up his other pursuits. His ranch used Box Elder Road as an access route and as a result had an intimate connection to the early history of the Road.³⁴ By the mid-1870s Iliff's range land extended north to the Wyoming-Colorado border and from Box Elder Creek east to the edge of Colorado. Other ranchers followed Iliff's example.

In competition with the large ranchers for the land were the incoming farmers and smaller ranchers who wanted to take advantage of cheap land prices and ready markets. By 1880 cattlemen, mostly smaller ranchers, dominated the region's land use.³⁵

For example, the Wellenkotter family established a farmstead in the late 1870s along Box Elder Road. Friedman speculates that this ranch, situated about half way between Box Elder Station and Hudson, may have been a road house on the Box Elder Trail as well as a working cattle ranch. German immigrants, the Wellenkotters moved to the United States in 1875 and to the Box Elder Creek area shortly thereafter. Family members owned the site until the 1910s, although they may not have occupied it for all of that period.³⁶

From these 1860s roots the area began to evolve into one of Denver's agricultural hinterlands, supplying the town and its merchants with food. Despite the ranchers' successes, area farmers soon discovered that Long's description of the area as a desert to be at least partially accurate. Samuel Branter and other farmers found natural precipitation was not enough to grow crops and in 1860, under Branter's lead, nine individuals built the Branter Ditch. During June of that year work began on the Burlington Ditch followed in 1865 by the Fulton Ditch farther south. These efforts proved to be only the beginning of irrigation along the South Platte as future generations built ever larger and more elaborate systems to bring water to the fields, including Barr Lake, the Lone Tree Ditch and finally the Highline Extension Canal.

The search for a continuous and reliable water supply in the arid West, Colorado and the study area was complicated because water availability constantly changed due to the unpredictability of natural supplies. Division and distribution of the resource were not the only issues, as access to and usage of water profoundly affected land utilization and subsequent social relations.³⁷

The issue of water and water rights became increasingly important as more

settlers came to arid Colorado and sought water for mining, farming, ranching and domestic use. The dry years of 1873-74 only added to the growing confusion over water rights and usage. The Panic of 1873 resulted in a depression for agricultural markets. Settlement and further irrigation promotion activity declined markedly. The Panic was short lived and within three years settlers once again were moving into the future Adams County. These immigrants, primarily farmers and ranchers, wanted land and water. For some, alfalfa became a popular crop, especially for those involved in dairying.

The issue of water rights had been officially raised at the Colorado Constitutional Convention in 1876. After much debate and discussion a new system of water rights emerged. The Convention adopted a policy of prior appropriation or "first in time, first in right" for the new State of Colorado. This did not resolve all water related issues but did go a long way toward providing general guidelines. Furthermore, it became the keystone of a policy adopted by many arid western states in dealing with water issues.³⁸

Problems were not long in appearing in Colorado as the number of irrigators rose through the latter years of the 1870s. By 1879 the vagaries of the constitution regarding riparian and diversionist rights led to a conflict between water users on St. Vrain Creek. Three years later, litigants placed the dispute before the State Supreme Court. The jurists finally settled in favor of appropriation over riparian rights. The court's opinion succinctly stated not only the salient points of the case but the larger problem of English common law as it applied to the environmental conditions of the arid West. It said:

The common law doctrine giving the riparian owner a right to the flow of water in its natural channel upon and over his lands, even though he makes no beneficial use thereof is inapplicable to Colorado. Imperative necessity, . . . , compels the recognition of another doctrine in conflict therewith. We hold that . . . the first appropriator of water from a natural stream for a beneficial purpose has . . . a prior right thereto to the extent of such appropriation.³⁹

The 1882 Coffin v. Left Hand Ditch Company case, quoted above, firmly established the doctrine of prior appropriation and beneficial use while rejecting all parts of the riparian doctrine for surface waters in the state. These policies became known popularly as the Colorado Doctrine and were copied by many other western territories and states during the late nineteenth and early twentieth centuries.

In Colorado the irrigators moved ahead to tackle new issues throughout the 1880s and 1890s. The first problem they approached through legislation was that of royalties imposed on users by water companies. Corporate ventures into irrigation began in Colorado during the late 1870s and continue to the present. These organizations were founded to meet an apparent need and to gain an expected profit by providing larger amounts of capital than the irrigators could raise independently. Easterners as well as Europeans, particularly the British, invested heavily in water projects, following a long tradition of investment in Colorado. The Travelers Insurance Company undertook many of the more successful of these efforts. The Company lent money and technical expertise to many construction projects throughout the plains and the Grand (Colorado) River Valley. Often employees of the water company or land developers promoted these undertakings as the salvation of an area through assuring adequate water for future needs. Water company investments attracted capitalists with a system of perpetual royalties charged to users that became standard during the 1880s.⁴⁰

The question of perpetual payments to the water companies to secure water rights became a source of irritation between the users and their benefactors. Irrigators felt that water rights were theirs without the royalties and the only payments they should be forced to make were the annual user fees and rentals for the water. One of the projects that led to many irrigator outcries was the original Highline Canal. Later it, and its associated Extension, would play a key role in the development of the study area. During the early 1880s when South Platte Valley farmers began to protest the royalties through nonpayment, they found that the companies replied by turning off the water supplies. As the cultivators watched their crops wither in the fields they looked to the state legislature for help. This political activity continued until 1887 when the State Grange convinced Colorado's lawmakers to consider creation of a State Board of Water Commissioners and enact an anti-royalty law. Such provisions were later adopted by other western states.⁴¹

The anti-royalty conflicts pointed to the need for a more comprehensive state program of legislation to deal with problems before the state's courts drowned in water cases. During the 1890s the state developed water boards, charging the State Engineer with overall administration of allocations, diversions and enforcement of the laws. While the state's irrigators suffered throughout the Panic of 1893 and depression they realized that the state could do very little to help them. Instead, the irrigators turned their attentions to Congress and undertook a campaign to interest federal officials in supporting new and more extensive water diversion and reservoir projects. By the nineties the early corporate efforts had proven inadequate to both funding and capabilities to build large reservoirs and diversion tunnels. The financial problems were further accentuated by the depression of the 1890s as canal companies either declared bankruptcy or left projects only partially completed. Those who had settled on lands with the promise of water provided by private sources suffered the most, but all users found themselves faced with inadequate water supplies and exorbitant expenses to finish the ditches or keep them in good repair. These experiences led to ever-increasing calls for federal intervention. The Centennial State irrigators were joined in their calls by others throughout the Western states.⁴² The planned development of new irrigation projects proved to be only one of the changes taking place during the closing years of the nineteenth century.

A series of circumstances came together to make the later 1880s profitable years for the pioneer farmers of the area. Much of the range had been over grazed and abandoned by ranchers. Farmers then occupied these lands. Precipitation fell at heavier than usual rates guaranteeing adequate water. This included the blizzards of 1887 and 1888 that significantly added to the problems for many of the open range bonanza ranches. New advances in farm machinery including the use of steam powered tractors allowed individuals to plant and harvest a larger acreage. The increases in plowed acreage coincided with a decline in live stock prices and numbers. The ranchers that remained began to look at alternative methods, such as winter feeding, as a way to reduce their dependency on nature. Farmers and speculators claimed more and more former ranch land for cultivation or to hold for future sale at higher prices. Much of the land being taken up came from the Union Pacific that offered ten year credit terms. The six years bracketing 1900 were the most active for railroad patent issuing, further reinforcing the interpretation that speculators and farmers viewed the area as open for development.⁴³

George Rittmayer, for example, set up a dairy farm before the turn of the century. Located near his father's homestead on present day 64th Avenue, Rittmayer, his wife Ada and his two children worked the farm. Rittmayer died in 1905 and Ada quickly remarried George Hohlecamp and continued operation of the farm. It remained in the family until 1989.⁴⁴ The Rittmayer's offer an

example typical of the families that settled the region in the after 1890. The 1900 census indicates that over 80% of the inhabitants were members of family units. This was consistent with the pattern exhibited in 1880, as was the preponderance of the population being native born. In both cases (1880, 1900) Germany provided most of the area's foreign born population. Boarders formed an integral part of these units for almost one-third of the families. These boarders provided an additional source of funds and also, generally provided the laborers for working the farms, the dominate occupation.⁴⁶

CONTEXT III: Agriculture After 1890

Changes in land use patterns proved to be the hallmark of Colorado agriculture during the 1890s. The period witnessed many changes, including the advent of widespread sheep raising along the Colorado front range and plains. Cattle remained important, but no longer were they the sole heirs of the range. Sheep, historically the enemy of cattlemen because cattle growers believed that sheep chewed the plants down below the root level, making the grasses unable to regrow. In addition, some ranchers believed that cattle would not graze on lands occupied by sheep. The introduction of sheep was not without acrimonious exchange, but by World War I over 3,500 sheep were being fed in the Adams County area. At that time Colorado ranked tenth nationally in lamb production.⁴⁶ This rapid increase is explained because while cattle prices dropped, sheep prices rose or remained steady. The sheep market did not undergo the fluctuations of cattle market. In addition, sheep provided more than one marketable crop - they provided wool and meat.⁴⁷ Similarly, dairying became more popular in parts of Adams County and the airport area between 1890 and World War I because that activity supplied a more constant cash flow.⁴⁸

Interest in the necessity of irrigation continued. Farmers and ranchers utilized other sources to provide a water supply. Deep wells were dug and pumps used to raise the water to ground level. These irrigation systems and water supplies became especially important when in 1890 a drought cycle began. The next three years continued dry. To compound the problem by 1893 the United States once again found itself involved in a financial panic.⁴⁹

The combination of drought and economic downturn ended the first boom period of agricultural expansion in Adams County. The previous thirty years had brought what appeared to be a stable population to the area and thousands of acres of land were put into production. However, the depression years of the nineties were characterized by demands for social and economic change. The springboard for these reforms was the Populist movement. The rapid expansion of tilled lands during the 1880s resulted in an over production of crops. This oversupply of crops and livestock led to declining prices. The drought years of 1891-93 hurt farmers and ranchers who could not find enough grazing land for their herds. In 1893 President Grover Cleveland responded to falling world silver prices by suspending federal silver purchases. The resulting confusion ended in bank failures and severe economic dislocation as bankers called in loans, attempting to achieve solvency. Farmers and ranchers had to pay up, sell out or just leave. In many instances farmers and ranchers did not own their lands as they had not occupied the acreage for the five years required for a patent, or if they had been buying land on credit from the Union Pacific they may have been forced from that land as well. Before the decade closed the Union Pacific itself would be sold at auction to satisfy debts. Some farmers and ranchers left the region.⁵⁰ Despite those that moved out the local population remained fairly stable in the face of all these problems. As some pioneers later remembered they were too poor to leave.⁵¹ The 1900 census for the area indicates that approximately 310 individuals composed 78 households. Eighty two percent were family units with 36% of the population under the age of 16.⁵²

The early years of the twentieth century witnessed continuing evolutionary changes for the study area. New ideas, crops and visions accompanied the new century. Cattle raising witnessed the most dramatic change during the period. Aside from the growing number of sheep, the uses of rangeland also underwent a metamorphosis. During the depression of the previous ten years large acreage had been abandoned. Slowly the lands returned to their original state and as a result improved their animal carrying capacities. This greatly aided the

cattle and sheep industries by increasing the quality of available pastures.⁵³

In addition to the impact of the above changes, Adams County farming experienced another major transformation related to sugar beet cultivation and processing. Sugar beets had gained popularity in central Europe during the Napoleonic Wars as a source of domestic sugar. The crop slowly spread to the United States and by the Civil War beet sugar was viewed as an alternative to cane sugar. The Rocky Mountain News ran an editorial on November 3, 1866 exhorting farmers to embrace sugar beets as a viable cash crop and investment opportunity. From then until the early twentieth century many people experimented with sugar beets. In 1899, the first beet sugar factory in Colorado opened in Grand Junction and beet mania spread. Farmers in parts of Adams County and throughout the South Platte Valley responded. Sugar factories sprang up from Brighton to Julesburg.⁵⁴ Hand in hand, Denver newspapers and other Colorado boosters promoted immigration to the state. For example, the Denver Republican boosted both immigration and new irrigation projects.⁵⁵

For areas such as the airport site, the beet mania combined with talk of an irrigation project to be built by private funds, caused something of a land rush. The Union Pacific renewed its efforts to sell its land grant in the area. The dream of irrigating the area started in 1891 with the Lone Tree Ditch.⁵⁶ Built between 1891 and 1907 the Lone Tree was designed to divert water from Box Elder Creek to nearby lands. The low cost, approximately \$10,000, resulted from construction by hand labor and horse drawn scappers. In addition to the Lone Tree Ditch, settlers and boosters of the 1900s prophesied that the proposed Highline Extension Canal System would provide water for at least 60,000 acres of the region.

Many people felt that the key to expanding farming, both locally and across the state, lay in the availability of water for irrigation. This in turn led Denver and Colorado boosters to look for ways to finance and build new water projects. One source of funding, the federal government, heard the calls from Colorado and other Western states. In 1894 Congress passed the Carey Act, which provided for the proceeds from land sales to go to states to be used for irrigation. The results proved negligible.⁵⁷ By 1900 new calls were coming from the West for government action. Through the Newlands Act of 1902 Congress established the Reclamation Service (modern Bureau of Reclamation). The United States government was now taking an active leadership role in providing financing and expertise for irrigation projects in the arid states. Irrigation projects were financed by the proceeds from the sale of public lands in the arid states. The revolving fund that was created provided monies for a popular project in the West -- irrigation. The connection between public land dispersal and the need to provide water supplies was now established. The Newlands Act provided for the Reclamation Service to aid the homesteader by limiting farms to 160 acres. This acreage limitation has been much debated but was designed to force sale of speculative lands into 160 acre sections in order for the land owners to receive water allotments. The new Reclamation Service was placed under the Department of Interior.⁵⁸

Later legislation provided for the practice of additional dollars from general funds appropriated for reclamation projects. The Reclamation Service's mission of building dams and other irrigation projects enabled the West to enter a new economic era. Arid lands were reclaimed for a variety of purposes including domestic and industrial use, lands for crops and grazing, and eventually for the generation of hydroelectric power. These uses allowed for the arid states to provide increased livelihood for a growing population and to provide goods and services for the rest of the nation. The passage of the

Newlands Act and rapid development of water projects during the early 1900s underscores the reclamation consciousness of the West during the early twentieth century.

For areas not included in the early rounds of Reclamation Service projects, boosters tried alternatives, including cajoling the Service to evaluate projects, encouragement of state funding, or private schemes such as the Highline Canal Extension bonds. The sugar beet boom brought thousands of acres of irrigated land in Adams County into production and led others to hope that thousands more acres also could be planted in beets.

Friedman indicates that irrigation was not critical to settlement because well drilling techniques could be utilized. This conclusion appears somewhat strained, given that most of the farmsteads were within irrigating distance of either the existing or proposed diversion projects. While a number of factors, including well drilling technology, realignment of county roads and the sale of the UP land grant all affected settlement patterns, even evidence Friedman presents tends to indicate that the lure of the Highline Extension laterals attracted settlers to certain portions of the airport area in deference to others.⁵⁹

While local farmers waited for water sources to be developed they grew new types of wheat and frequently settlers combined cattle and sheep raising with farming. They were aided by the passage in 1909 of the Enlarged Homestead Act. This was a recognition of the difficulty of grazing a large herd of cattle on 160 acres. Therefore the new act provided for 320 acre homestead in arid regions. The Borah Act passed three years later reduced the residency requirements to seven months of each prove up year. In 1916 Congress passed the Stock Raising Homestead Act allowing up to 640 acres in arid climates for stock raisers. Another aid to farmers and ranchers was the unusually wet weather during the 1910s.

The wet weather, Congressional generosity with the public domain and hope that the Highline Extension would succeed helped spur dramatic increases in the number of farmers in the area as they sought to tame the lands that traditionally had been home to cattle and sheep. These twentieth century boomers, honyockers or sod busters, whatever label is applied, temporarily succeeded where earlier drylanders had failed.

The new generation felt more confident because in the aftermath of the late nineteenth century dryland failures a number of agronomists addressed the problem of farming the high plains. Leadership in this effort came from Professor Hardy W. Campbell of the University of Nebraska in Lincoln. Simplified, Campbell's theories held that cyclic field use followed by fallow periods as well as deep tilling could increase the water retaining ability of the soils given a year or two between crop plantings. Adequate moisture would accumulate for successful crop planting during the fallow years. Beyond Campbell's work, others, including the State Agricultural College (now Colorado State University), experimented with new drought resistant crops. Agronomists published their work, making much new information available to farmers and would be farmers. Additionally, state schools and private companies introduced dozens of new machines to help farmers in their toil. All these aforementioned factors combined to lead to dramatic growth in Adams County agricultural output during the first two decades of the twentieth century.⁶⁰ The changes, especially in labor saving machinery meant that fewer people could cultivate more land effectively.

The boom caused in Adams County by those changes are evident in the population figures. In 1900 the population of the County, estimated at 4,500, showed,

however, that by 1910 that number of people in Adams County had grown to 8,892. Approximately one-quarter of those were foreign born. That growth trend continued during the next decade. Clearly the agricultural boom of the early 1900s had a direct impact on the number of residents of some parts of Adams County.⁶¹ For the airport area, the impacts of the new labor saving machinery and continued financial problems may have led to a decrease in the local population.

The census for 1910 indicates that 73 households made up of 252 people, resided in the study area, down from 310 in 1900. The average age was 38, few were boarders but there were 16 children. This was an increase in the number of children from 1900. The number of adult women was also up, but the number of adult men declined. Over sixty percent of the population was native born with few ethnic minorities.⁶²

Much of the credit for struggling through the difficult times of early settlement belongs to the women who risked much to settle this area. Within the community the role of women cannot be underestimated. Women were not atypical, but their presence is often under-recorded in the written record. Recent histories have found two conflicting interpretations of women's settlement experience. Historian Julie Roy Jeffrey found many ties between the Victorian ideas common at the time and the experience of western women on the pre-1900 frontier. Sandra Myres concluded somewhat the opposite, that most western women were adventurous and nonconformist, rejecting the concept of "women's roles." Other studies indicate that women on the Colorado plains certainly benefitted from the cosmopolitan nature of Denver and the various mining rushes. Moreover, they were part and parcel of the farming and ranching experience that allowed them to be partners and civilizers as well as entrepreneurs.⁶³

At least one of the farms in the study area can be associated with the history of women on the farms and ranches on the Colorado plains. From the sketchy evidence available Anna Altman, who owned the Altman farm for nearly 30 years, appears to fit most comfortably into the partner and entrepreneur role, working closely with her husband and later other family members to meet the challenges of livestock raising on the Colorado plains of the late nineteenth and early twentieth centuries.

The historic record indicates that the Altmans enjoyed a degree of success in their farming and ranching activities. They had farms and ranches in Adams and Weld Counties, Colorado, including the Altman Farm within the airport site. They lived at a farm near Derby, Colorado, west of the airport site, during the first decades of the twentieth century and acted as absentee landlords for their other properties. They may have lived at the Altman Farm under discussion as well, but no evidence has been found to either refute or support a residency there.⁶⁴ By the time the property was acquired the family had responded to changes in beef cattle production and used the farm as a feedlot to finish cattle for sale in Denver. They were not alone in raising feeder cattle. During the period from 1910 through 1930 the number of feeder cattle in Adams County grew from just over 8,000 head in the earlier year to over 11,000 by 1930. The annual number of cattle sold for slaughter grew even more dramatically during those years.⁶⁵ Alternative types of operations, such as feedlots, became popular during the 1920s and 1930s.

Widowed in the 1910s, Anna, spent the 1920s in Denver with her family. She devoted less and less time to farm management, leaving it instead to her children. Anna's daughter Eva married a cattleman who apparently helped manage the family businesses. Scanty evidence indicates that Henry Hendler, Eva's husband, owned and operated a feedlot on Federal Boulevard in Denver

during the 1910s and 1920s. What is unknown is how closely this feedlot may have been tied to the Altman Farm under discussion. Hendler did encourage his mother-in-law to add the grain elevator, truck shed and a silo to the barn in 1934. By then Anna was living with the Hendlers in Denver.⁶⁶ On June 2, 1937 she sold the land containing the original farmstead to Hendler and remained at his address in Denver until her death in 1943.⁶⁷

Unfortunately, the role of children in the West has yet to come under intense scholarly examination except from Elliot West and therefore little comparative opinion exists about the role of children. Children experienced many of the same hardships that adults did, but they did so through the eyes of a child. The children felt the overcrowding in the dwelling and looked forward to building a bigger house. They learned about nature, such as rattlesnakes, first hand. Most importantly, they were part of the economic unit -- the family. West has found that on farms and family ranches children participated in all phases of the work from farm building (clearing fields, building fences, etc.) to the cyclical work of plowing, planting, harvesting and animal tending. As machinery changed, especially after 1900, the children did not do less or become less valuable. They simply took on new tasks or learned to operate the new machinery. The result was that the age and gender distinctions, well developed elsewhere in American society, tended to erode on the farms of Colorado and the West.⁶⁸

While authors such as Elliot West offer comparative insights and the 1910 census provides data on individuals, the land ownership patterns that dominated the twentieth century, divided into three categories by Friedman, were already in place by 1910, only the names would change. Corporate owners accounted for one group and were composed of the Platte Land Company or later the District Landowners' Trust and finally the Fulewiders and Monaghans. Small, independent owners comprising the second group included families such as the Kochs and Egans. Tenant farmers were the third group. In 1910, 58% were farm owners, 39% were farm laborers and 3% were farm managers. These percentages should not be considered indicative of the land tracts. Clearly more than 3% of the land was owned and managed by farm managers.⁶⁹ Their activities and the work of other farmers during the 1910s found an ally in the battlefields of distant Europe.

World War I aided the early twentieth century dryland boom. The wartime needs encouraged continued increases in crop output. Existing farms could not meet the demands and new immigrants came into the region to take advantage of land opportunities. In addition, marginal lands were placed into production in order to take advantage of high crop prices. By World War I more than 80% of the County's lands had been patented and dryland farming was the fastest growing segment of county agriculture. In 1918 the Colorado Board of Trade estimated that 86,594 acres were irrigated, 428,084 acres were farmed without irrigation and, 152,036 acres were utilized for grazing and hay production. That body further estimated that the value of irrigated land averaged \$112 in Adams County while non-irrigated land was worth \$20 per acre. This boom in population and land values proved short lived.⁷⁰

The end of World War I represented a beginning of hard times for much of Adams County, but the study area somewhat bucked that trend. As wartime demand diminished so did the optimistic hopes of the region's farmers and ranchers. The Panic of 1921 hit farmers especially hard and to compound the problem European agriculture, disrupted by the war, recovered quickly. But many local farmers never recovered from the dropping commodity prices. In order to survive, many Adams County farmers continued to put marginal lands into production in order to increase their crop yields. Also, farmers from elsewhere migrated to the County, putting more pressure on the land base,

including the study area. Unfortunately these higher production volumes only tended to depress prices even farther. Some switched from farming to cattle as cattle prices remained high. Also, dairying, a long-time occupation for some in the area, became a more significant part of the local farm economy. Gradually during the middle 1920s crop prices began to stabilize and then rise. In Adams County this delayed what proved to be the inevitable.

Part of the reason for the land availability in the study area during the 1920s stemmed from the land speculation attendant to the construction of the Highline Extension Canal. In 1913, as the Canal neared completion, one of the backers, Horace G. Clark, decided to sell the Antero Reservoir, the Canal's water source, to the City of Denver. To further delay the project Clark and others brought suit against Henry L. Doherty who had financed the Canal construction. Clark's actions led to a number of suits and a five year period of litigation ensued. The case of Doherty versus the Antero Company eventually went to the Colorado Supreme Court, which ruled in favor of the reservoir company in November 1920. That decision cleared the way for the City of Denver to acquire the Highline Canal and Antero Reservoir. The City took possession of the property in 1924.⁷¹

During the litigation, no irrigation water ran through the Highline Extension Canal system. The Rocky Mountain News aptly summarized the state of affairs in 1922, saying the Extension Canal would need to be "dusted out" and that for its East Denver Municipal Irrigation District, "water has never been supplied to these 60,000 acres."⁷² After the City of Denver acquired the Highline Canal and Antero Reservoir, the Denver Utility Commission decided that urban domestic water needs had a higher priority than downstream farmers. The East Denver District farmers complained, even taking their case to court, but they found no relief.⁷³ In 1924 Doherty, the builder, conveyed ownership of the Highline Extension Canal system to the District Landowners Trust, then managed by Denver attorney, I.B. Melville. The Landowners Trust realized that the City was unlikely to supply water to the system on a regular basis and proceeded with construction of the Terminal Reservoir after they had ownership of the system. By the late 1930s other smaller reservoirs, such as one on Third Creek, also had been constructed. Unfortunately, by then it was too late for many farmers. The situation for the farmers deteriorated through the 1920s. Many property owners had mortgaged their properties to raise the \$3 million construction bond issue. To aid the landowners, the District Landowners Trust loaned them money. After 1924, when Denver provided no water for irrigation, many of the farmers went bankrupt, leaving the Trust in possession of an ever-growing land area that by the 1930s proved too costly for the Trust.

In addition to the problems of the Highline Extension, local farmers found themselves part of a nationwide effort lobbying Congress for relief. Using techniques begun by the Populists, farmers requested a variety of aid. The most notable, or at least noisy, the McNary-Haugen movement sought federal purchases of agricultural surpluses to stabilize prices at the 1910 level. In other words, a parity program for farmers. Debate over the McNary-Haugen proposals continued throughout the decade. In 1929 the Smoot-Hawley Tariff was enacted which raised the import tax on certain products to record levels. Sugar was a heavily taxed commodity and Adams County growers were pleased to receive the market protection the tariff provided. Prices rose but hopes for a new prosperity were dashed on October 23, 1929 when the New York Stock Market crashed and the Great Depression began. Despite these years of adverse conditions the population in Adams County continued to grow albeit at a much slower rate. Previous analysis of the airport area by Friedman indicates that while the number of farmers in the County as a whole grew slowly, the 1920s proved to be a time of rapid farm development for the area as farmers rapidly

in-filled the unsettled lands that had been held by the railroad and other land companies awaiting completion of the Highline Extension. Adams County's population increased by 5,815 people during the decade.⁷⁴

Adverse weather conditions further affected agricultural markets already weakened by the stock market crash. After several wet years, the early 1930s saw below average rainfall. The natural aridity of the region combined with increased tillage of marginal lands resulted in once rich fields blowing away in wind storms. The winds of 1932-33 caused so called dust blizzards or "Dusters." These storms were regularly reported on daily radio and newspapers with the weather forecast. Northeastern Colorado, including Adams County, was not officially part of the designated "Dust Bowl" used to describe the blowing conditions. The federal government geographically defined the "Dust Bowl" and southern Colorado was officially included but northeastern Colorado was not. Nonetheless, conditions in Adams County resulted in area farmers and ranchers suffering like their counterparts in the southern portion of the state. Many who could afford to left Adams County and the state looking for better opportunities elsewhere, frequently in California. For others tenant farmer status remained as an alternative.

During the 1930s considerable land acquisition and ownership consolidation activity took place in the study area. For example, L. C. (Cal) Fulenwider, who had moved to Colorado in 1904 for health reasons, purchased approximately 40,000 acres. With financial backing from the Van Schaack real estate company, Fulenwider paid back taxes and created the Box Elder Farms. A court battle ensued over the legality of these purchases but Fulenwider was awarded title by the courts in 1939. The Fulenwiders leased the land to a series of tenant farmers using the standard formula of owners providing land and housing, tenants providing equipment and labor. Fulenwider was not alone in being an absentee landlord. Land ownership maps indicate that by the late 1930s absentee ownership and tenant farming dominated local land use.⁷⁵

For example, Ray Beierle began working as a tenant farmer on land owned by I. B. Melville and the District Landowners Trust during the 1920s. He also worked for other landlords. He married in 1929 and soon thereafter moved to the "Beierle Farm." His descendants believe the newlyweds moved to the farm in 1929 and were the tenants at the time of the farm sale by it previous owner, Clara Grossman, to the District Landowners Trust. Beierle resided at the Beierle Farm until 1938 or shortly after Fulenwider, through Box Elder Farms, acquired the property. In 1938, Ray Beierle moved his family to another farm near Erie, Colorado, about 30 miles north and west of the airport site. The Beierle family lived in Erie for a short period and then farmed near Hudson, Colorado, before moving to other Box Elder Farms properties. In 1945, the family returned to the Beierle Farm and remained there until 1990.⁷⁶

Full scale economic recovery began with the advent of World War II. Wartime demand resulted in new markets for agricultural products. When the war ended in 1945 many County residents feared a return to the depression. The need for a stable cash crop was of foremost importance. Sugar beets continued as an important crop, but corn sweeteners threatened demand. As a reflection of this trend Great Western Sugar cut back operations. Wheat, corn, potatoes, barley, dry beans and oats all became important cash crops in the 1950s, 1960s and 1970s. Farmers in the airport area did not face such drastic adjustments. Winter wheat continued to dominate crop production in the region as it had before the War. County-wide cattle production grew in the thirty years after the War also. Changes in cattle raising to insure fatter, highly marbled qualities in the meat resulted in feedlots and less range feeding of cattle. This reflected the ability of the producers to manipulate the animals to meet

market demands. The years after World War II have been subjected to fluctuations in market demand and weather conditions but generally agriculture has been healthy for the past forty five to fifty years.⁷⁷

PART F. ASSOCIATED PROPERTY TYPES

Introduction

The property types defined in the following pages are based on their associative characteristics with the three contexts discussed in Part E. The wide variety of resources representative of each context share functional, and at the general level, physical similarities that were used to define the property types. This organizational scheme allows the wide range of and minor variations in the resources associated with each of the contexts to be adequately and effectively evaluated. The built environment of rural Adams County, including the airport site, reflects the various stages of economic development in the region as do the associated property types defined here. The descriptions that follow have been gleaned from photograph collections, Civil Works Administration interviews, promotional pamphlets, a sample of patent applications and appraisal records, as well as summaries of Friedman's field survey results. Other studies of architectural and economic development on the Colorado plains offer comparative information and models that Friedman found useable for his work at the airport site.⁷⁸ Research has found that the extant architecture and historical archaeological remains exhibit a high correlation between the historic development patterns discussed in Part E and the marked changes in the local built environment. As a result, three categories of property types were developed for the historic period resources of the airport site.

One set of property types has been developed that represent and are associated with the Transportation context. The property types include roads, trails and railroads. This was done to include the variety of resources present, or once present, within the airport site associated with the different modes of transportation and changes in transportation through time.

Farm and ranch associated resources are somewhat more complex than the transportation resources, but based on previous work, are able to be categorized in a scheme closely associated with the two agricultural contexts discussed in Part E. Friedman identified four developmental periods for the farms and ranches of the airport site, including the Frontier, Pioneer, Irrigation District and Corporate Framing stages. Each stage exhibited different characteristics. The frontier stage is associated with the Early Agriculture and Ranching context. The other three stages are linked to the Agriculture After 1890 context. These subdivisions have been adapted to the definition of property types for the two agriculturally-related contexts.

PROPERTY TYPE I: Roads, Trails and Railroads, 1859-1945

Description: Four site types have been identified as associated with the Denver International Airport study area transportation context property type - 1) roads; 2) trails; 3) railroads; and 4) bridges. All of these share certain characteristics that lend to a group discussion. They are engineered structures and at least at the Denver International Airport site, all bridges, are found as part of road or trail systems. No bridges were found isolated from either roads or trails. All these resources are considered to be potentially significant under either Criterion A or Criterion C with their areas of significance being transportation or engineering. Except for the bridges, the resources were linear features and as such it was determined that to be considered eligible the road, trail or railroad had to exhibit some type of architectural or engineering features clearly associated with engineering and construction techniques that were in general use at the time of their construction.

The roads, trails and railroads recorded and observed had materials that included asphalt (black top), dirt and gravel, and very limited use of concrete. Bridges on the roads were concrete and steel, or milled, treated timbers. Generally the decks were either surfaced with cold laid asphalt, concrete or left bare. The trails observed were made of either rock or soil with wood, rock, or cement used to help stabilize places subject to washouts and heavy traffic. The trail bridges were either wood or steel culverts or simple low-water fords. The routes of the roads tended to be determined either by the presence of creeks and drainages or adaptations of the section line road route practice common in the Midwest.

Even though less than complete, a description of the built roads, trails and ancillary features can be found in the historic record at various archives or the Adams County courthouse. The plans for the roads, trails, and features such as culverts and retaining walls came from several sources. This includes vernacular usage roads and trails designed and built before the formal roads were established, those built by residents without an engineering survey, or county roads. Generally, under County administration, historically roads were not surfaced or surfaced with gravel, one or two lanes wide without extensive signage for safety. Ancillary features were limited to retaining walls, culvert faces or bridges. Features were relatively small with retaining walls and bridges being between ten and one hundred feet long and between two and approximately twenty feet high. Culverts were often steel pipes with or without faces. These roads, trails and railroads existed to move people, vehicles or livestock through the area in an efficient manner.

Significance: The significance of the roads, trails and railroads at the Denver International Airport is at the local level under the areas of transportation or engineering. The resources may be significant under either Criterion A or Criterion C. The scope of the significance includes transportation routes that either were important earlier routes adapted to county purposes or those that were built solely to enhance the County's transportation network. Thus, significance of the roads and trails could be addressed in relation to the area's ranching and farming history because the most directly associated user groups were local farmers and ranchers.

The Criterion C consideration for these resources is that they may be representative of a type, period and method of construction. As discussed earlier the resources were not uniquely engineered for the study area. Therefore, they fail to meet that portion of Criterion C that speaks to the work of specific architects or engineers.

As this property type includes only inactive roads with ancillary features, but it does not constitute a historical archaeological property type and therefore no effort has been made to define applicable values under Criterion D.

Registration Requirements: To be considered significant under this context and property type resources must meet the conditions (registration requirements) that follow. First, the resources must have dates of construction between 1860 and 1942, making them fifty years old. Secondly, they must have integrity of general location, and enough integrity of feeling, design, setting and workmanship to convey their function and historic fabric. However, location was somewhat variable in that the earliest roads and trails primarily are routed along ridges or near streams. Precise location will likely have varied over time, but if the road or trail stayed in the general area, along the stream or ridge then location integrity will be considered extant. In all cases, rerouting such as from drainage bottom to on the section line or from the top of the ridge to lower down, then integrity of location will have been lost. Closely associated with location is the element of setting. Minor rerouting, such as a trail at drainage bottom that moves from one side of a drainage to the other shall be considered to have integrity of setting. Those, for example, that have been removed from the drainage side to a different locale shall have lost setting integrity. Association of the road or trail to its immediate natural surroundings will be the measure of integrity of location and setting. There are no National Register exceptions.

Later changes must not impair the historic fabric to the point that the function or fabric is no longer apparent. The measure of this requirement shall be passage. Routes that remain passable by the same method of transportation for which they were originally built shall be considered to have maintained their design and workmanship integrity elements. Otherwise, they should be considered for their archaeological potential. The resources must have made a documentable contribution to the development of the agricultural development of the study area and its surroundings. The resources may be eligible individually or as part of a district.

As these resources did not manipulate the local environment, but only took advantage of it for transportation uses, they do not meet the requirements for a cultural landscape.

Property Type II: Early Farming and Ranching Related, 1859-1890

Description:

The frontier stage of development proved short lived, but repetitive. Some building techniques, such as sod construction, were well adapted to the pioneering periods, whether it was during the early 1860s or the late 1880s. Other building techniques typical of the period also depended on readily available building materials, such as stone or log. Buildings associated with this property type may exhibit additions and use of more modern materials, such as asphalt shingle roofing, for maintenance or concrete for replacement of deteriorated foundations. With the exception of the barns in ranch or farm districts, the buildings are typically one or one and one-half stories tall. Stylistically the Frontier stage buildings could be categorized as folk or vernacular in the truest sense. Outbuildings on these pioneer homesteads were few and tended to be multi-functional of sod, pole and mud, mud and stone, or dugout construction. Construction dates for this property type range between 1859 and 1890. Only one of these earliest structures remains in the study area, the Wellenkotter Ranch house. Five other recorded sites from this period have already become archaeological resources.

Significance:

The significance of the early farms and ranches in the Denver International Airport area is rooted in the association of these properties with the early settlement of Colorado's plains and the attempts of Euroamericans to find uses for the vast, arid expanses of land between 1859 and 1890. The popularity of the area as a cattle range and as a farming area is directly tied to the availability of markets in Denver and the comparatively easy access to transportation that the area enjoyed after 1870 and the arrival of railroads in Colorado. The end of the period of significance is marked by rapid and dramatic changes in land use patterns brought on by factors such as weather changes, range depletion and land promotion campaigns to attract more settlers to the area. Properties in this category are associated either with National Register Criteria A, C or D under the area of significance of agriculture at the local level, or representative of discernable type and methods of construction associated with the frontier stage architecture discussed above (for Criterion C eligibility). To be considered significant under Criterion D the resource must have the ability to offer significant information pertinent to one or more of the research topics discussed below.

These Criterion D research concerns are based on research topics which are found in the Colorado Historical Society's RP3 Colorado Historical Archaeology Context by Buckles and Buckles.⁷⁸

The research concerns identified are:

Can technological or stylistic changes be found that can be used to explain changes in farming or ranching techniques and practices that the local residents made in their efforts to adapt to the local aridity, soils and changing market conditions?

Are there identifiable differences in the consumption habits, building techniques, or the spatial patterning of activities that can be found to reflect the various nationalities represented in the study area's population during period from 1859 to 1890? Can changes in those patterns be traced through time that would reflect and explain the rates of acculturation or assimilation of the non-native born farmers and ranchers in the area?

Can the consumptive patterns of the local farms and ranches be correlated to the spread of "Victorian" society in the United States during the late nineteenth century? If the patterns are discernable they may help explain a commercial hierarchy from "crossroads store" to neighboring town to regional trade center that reflect the spread of shared social values and customs?

Are the commonly accepted representations of behavior found in written records accurate reflections of life on the area's farms and ranches or are the accounts tainted by a desire for connections with the movie "wild west" by those remembering their history?

Can the various roles and functions of women and children, currently under-represented in the written record, be clarified from archaeological remains?

Registration Requirements: Resources associated with this context must meet the requirements outlined below to be considered as eligible for inclusion in the National Register of Historic Places. Properties associated with this context may be evaluated under Criteria A, C, and/or D. The first registration requirement is that the property had to have operated as a farm or ranch at some time between 1859 and 1890. Beyond that, there must be evidence that the property was a farm or ranch during the period of significance, specifically that the property was actively operated as a farm or ranch, not merely held for fraudulent or speculative purposes vis a vis land claiming or sale. The second requirement is that the physical characteristics of a farm or ranch must be present, specifically that the buildings be vernacular in style. The individual buildings and structures must represent their condition, configuration and fabric as they did when built to allow interpretation of its construction techniques. Additions or modifications must not impair the quality of the historic fabric (design, materials, and workmanship) of the individual buildings, contributing buildings within a district or the overall district. For the buildings to be considered significant under Criterion C their materials and methods of construction must be consistent with the description given above.

For a district to be eligible the key components of a farm or ranch must be present. Specifically there must be a main house, there must be associated animal care structures such as a barn or corrals, or agricultural structures such as corn cribs or granaries. Finally, the district and/or contributing resources must be at least fifty years old and for those structures and buildings not dating to the period of significance, they must help interpret the evolutionary changes in methods or techniques in farming or ranching that took place at the farm or ranch. No National Register exceptions apply to this property type. The individual buildings and the district must be in their original location or their location during the period of significance and the setting must be present to convey their historic feeling. If the individual buildings have lost their ability to convey either their design, materials, workmanship, or character/function within the district through natural deterioration or the activities of man during or after the period of significance, then those specific buildings shall be considered non-contributing. Resources will be considered significant under Criterion D if they can offer important information pertinent to one of the research topics discussed above and maintain their archaeological integrity vis a vis their focus as defined in National Register Bulletin 36.

Property Type III: Properties Related to Agriculture After 1890

Description:

Three patterns in the rural built environment have been identified in and around the study area associated with the theme of agriculture after 1890. These are based on a scheme proposed by Friedman and confirmed by field observation. They are discussed below.

Pioneer Stage, 1890-1910

After 1890 local builders had available, and used milled lumber, premanufactured parts and millwork and non-native stone. Because of that, the pioneer lean-tos, sod houses and occasional log cabins along timbered drainages either disappeared from the landscape or took on a different function as those who prospered quickly replaced their first houses and buildings. The railroads also made possible use of coal for fuel. Coal for heat resulted in changes to the interior layout and furnishings of the houses.

The architecture of the pioneer stage took on the look and general style of late nineteenth century and early twentieth century rural America. Assigning temporal associations for each of the various types of architectural styles is difficult because some areas, such as the farms around Brighton or Watkins, matured and developed a more sophisticated built environment at the same time that residents in other parts of the County, such as much of the airport site were just beginning the settlement process described above.

Building depended largely on wood with only limited use of stone or other materials. The development of Colorado cement supplies made concrete one of the most popular materials for foundations and basements by the end of the nineteenth century. The use of brick tended to be for decorative purposes or in specific applications such as chimneys or foundations/basements. This no doubt reflected the high cost of transportation of bricks to the building sites located in areas generally some distance from railroads or brick yards.

The popular styles of the day were reflected around Adams County, most notably in the farm houses and in cases of the more prosperous, the carriage houses and workers' quarters. Of the stylistic influences of the late nineteenth century, two appear to have been in the majority in Adams County - Italianate and Gothic Revival-both vernacular, not the work of architects. Probably most were adapted by local builders from pattern books or the popular press. Other styles that may have been present include Queen Anne and its variants. However, none of these styles were recorded during the pedestrian survey of the airport site.

In addition to those houses that could be clearly identified as having some stylistic influences the utilitarian vernacular houses transplanted from the Midwest also dotted Adams County during the late nineteenth century. The most popular of these and possibly of all houses in rural Adams County was the "Gabled Ell" as defined in draft National Register of Historic Places Bulletin 31. Though that publication refers to midwestern architecture, the Gabled Ell and its dozens of mutations appears to have been the most popular in Adams County during the late nineteenth century. Also, hipped roof cottages, similar to widely used designs in Colorado coal mining towns appeared. Other vernacular styles such as the double pile and shotgun house also could be found in Adams County by 1910.

Irrigation District Stage, 1910-1940

After 1910 the architectural preferences of Adams County farmers diversified and broadened, reflective of the general prosperity in the County during the first two decades of the new century. Some stylistic movements of the period caught the eye of prospective house builders. However, others did not. Even some of the more urban oriented, generally smaller house styles appeared on Adams County farms. Three styles that proved popular with rural Adams County residents were the bungalow and its variations, recorded at Ziegler Farm within the airport area, the four square or prairie cube and its variations, including one story, hipped roof cottages for workers' quarters. The variations on the four square primarily are found in porch treatments, rear additions, window arrangements and dormer/no dormer roof lines, not in the basic volume, massing and feel of the houses. Finally, a limited amount of colonial revival influence could be seen at one time. Again, it appears as if pattern books and other popular media had great impacts on Adams County. Beyond that the availability of mail order and rural free delivery made parts, millwork, decorative items and even whole houses available to Adams County farmers. These tools of mass marketing acted to increase the diversity of the County's built environment, but at the same time made much of the area look like farms from Ohio to the Rockies.

Outbuildings that appear to have been fairly common were pump houses for domestic and/or agricultural water supply, animal sheds either attached to the barn or separate, chicken coops and granaries. The one common denominator, the barn, originally served three basic functions, storage of hay, an area for intensive livestock husbandry such as milking or draft animal care, and storage for some machinery. Beyond those fairly common buildings the diversity grew. Dairy operators built special milking houses, with attached or separate storage rooms for the milk, more feed storage areas, and loafing sheds or hay derricks. Others, specializing in animal feeding, converted barns to pseudo-grain mills and to mix grains for feedlot use. At approximately the same time the automobile caused farmers to construct garages or convert carriage houses. The garages generally were separate from the house, sometimes connected by a breezeway.

Corporate Farming, 1940-1990

By this stage farming had matured in the area and much of Adams County. Characteristics that set the mature farms, especially the ones operated by corporations, apart from the pioneer and irrigation district phases and also the ranches of the County was the number and diversity of outbuildings at the farmsteads. Specialization of buildings by function became prevalent, often reflecting the type of farming taking place. By this later period each of the activities, once assigned to barns, tended to have their own space requirements and separate buildings, if they were present on the farm at all. Large wheat and grain farms constructed large granaries, their own elevators or converted barns for that purpose. The increase in the size and complexity of machinery after the Great Depression led to most farmers putting up machine sheds separate from their other buildings. Friedman found that the United States Army also contributed to the built environment of the study area during this period. Three cases were found where buildings formerly located on Rocky Mountain Arsenal were sold and moved to local farms. In three other cases he found quonset huts that farmers had acquired as Army surplus after World War II.⁵⁰ During this period many new buildings were added to farms, others moved or remodelled. The newer buildings tended to reflect popular architectural trends of the post-World War II United States. Building materials, such as masonite siding, plywood or fiberglass, all were used in the new or remodelled structures. The farmstead of the airport site and Adams County by

1960 tended to resemble a small industrial plant much more than it did a subsistence farm of a few decades earlier.

Other Trends in the Agricultural Built Environment After 1890

From the 1920s to the 1980s one agricultural structure experience more change than any other - the grain bin. Late nineteenth century farmers depended on , slat side corn cribs and enclosed buildings similar to cottages to store their grain. This system was practical for the smaller farms and lower yields of the period, but as agronomists found new and more productive techniques and land holding grew these structures proved inadequate. In their place rural designers began working on plans for bins -- small, easily constructed buildings that could store any type of grain. The first ones appeared in the early twentieth century and by World War I the octagonal wood frame wood sided bin appears to have been fairly common on the grain farms of Adams County as it was elsewhere on the Colorado plains.⁸¹

During the Great Depression when Secretary of Agriculture Henry Wallace announced his concept of the ever normal granary, bin construction got a boost in the form of federal construction aid. The need for massive numbers of storage bins led to development of the prefabricated metal bin. Easy to assemble on any site, all a farmer with a set of wrenches needed was an extra helper. The utility of these bins quickly became obvious and over time they have become one of the most common of all farm structures.⁸²

One linear feature, critical to the history of the airport area agriculture after 1890 is the irrigation ditch, canal or system. When first built, these ditches tended to be unlined with concrete, metal and wood used only for headgates and other flow control features. Due to the financial problems each irrigation company experienced, the canals remained unlined.

The landscaping typically associated with Adams County farms and ranches after 1890, besides plowed fields and pastures, is defined by a concentration of outbuildings around the main structures. A windbreak/shade belt of trees surrounding this complex or the main house is quite common. A kitchen garden was frequently located near the main structure. Decorative landscaping was minimal, however, there were instances of flowerbeds and shrubbery around or on the front side of the main residential structure.

Significance:

The significance of the post-1890s farms and ranches in the Denver International Airport area is rooted in the association of these properties with the rapid settlement of Colorado's plains at the close of the nineteenth century followed by attempts of the residents to find economically viable uses for their farms. The popularity of the area as a place to settle and farm is directly tied to the spread of new techniques in dryland farming and the hoped for Highline Extension Canal system. The failure of the Canal led to area farmers continuing to try various types of operations, such as dairies, to find a viable livelihood. The end of the period of significance is marked by the acquisition of the lands by the City and County of Denver and the beginning of airport construction. Properties in this category are associated either with National Register Criteria A, C or D under the area of significance of agriculture at the local level, or representative of discernable types and methods of construction associated with the three stages of architectural development discussed above (for Criterion C eligibility). To be considered significant under Criterion D the resource must have the ability to offer significant information pertinent to one or more of the research topics discussed below.

These Criterion D research concerns are based on research topics which are found in the Colorado Historical Society's RP3 Colorado Historical Archaeology Context by Buckles and Buckles.⁸³

The research concerns identified are:

Can technological or stylistic changes be found that can be used to explain changes in farming or ranching techniques and practices that the local residents made in their efforts to adapt to the local aridity, soils and changing market conditions?

Are there identifiable differences in the consumption habits, building techniques, or the spatial patterning of activities that can be found to reflect the cyclic nature of prosperity experienced by farmers and ranchers in the area between 1890 and 1990? Can changes in those patterns be traced through time that would reflect and explain the variations in the rates of self-sufficiency versus market dependent consumption?

Can the consumptive patterns of the local farms and ranches be correlated to the spread of the automobile and the general realignment of trade patterns to larger and larger marketplaces because of the speed that the automobile gave rural residents, or the spread of mass consumptive habits advertised in the mass media (printed and broadcast) that grew pervasive in American society during the period?

Can changes in the roles and functions of women and children, currently under-represented in the written record, be clarified from archaeological remains? If they can, can comparisons over time be made to document and explain the changes in those roles?

Registration Requirements: Resources associated with this context must meet the requirements outlined below to be considered as eligible for inclusion in the National Register of Historic Places. Properties associated with this context may be evaluated under Criteria A, C, and/or D. The first registration requirement is that the property had to have operated as a farm or ranch at some time between 1890 and 1945. Beyond that, there must be evidence that the property was a farm or ranch during the period of significance, specifically that the property was actively operated as a farm or ranch, either by an owner-operator or a tenant farmer. The second requirement is that the physical characteristics of a farm or ranch must be present, specifically that the buildings be vernacular in style. The individual buildings and structures must represent their condition, configuration and fabric as they did when built to allow interpretation of its construction techniques. Additions or modifications must not impair the quality of the historic fabric (design, materials, and workmanship) of the individual buildings, contributing buildings within a district or the overall district. For the buildings to be considered significant under Criterion C their materials and methods of construction must be consistent with the descriptions given above.

For a district to be eligible the key components of a farm or ranch must be present. Specifically there must be a main house, there must be associated animal care structures such as a barn or corrals, or agricultural structures such as grain bins or machine sheds reflective of the type of agriculture practiced at the farm or ranch. Finally, the district and/or contributing resources must be at least fifty years old and for those structures and buildings not dating to the period of significance, they must help interpret the evolutionary changes in methods or techniques in farming or ranching that took place at the farm or ranch. No National Register exceptions apply to

this property type. The individual buildings and the district must be in their original location or their location during the period of significance and the setting must be present to convey their historic feeling. If the individual buildings have lost their ability to convey either their design, materials, workmanship, or character/function within the district through natural deterioration or the activities of man during or after the period of significance, then those specific buildings shall be considered non-contributing. Resources will be considered significant under Criterion D if they can offer important information pertinent to one of the research topics discussed above and maintain their archaeological integrity vis a vis their focus as defined in National Register Bulletin 36.

PART G. GEOGRAPHICAL DATA

The geographical area encompasses the annexations to the City and County of Denver made after the special annexation election in 1988 for construction of the Denver International Airport. The UTM coordinates and a map of the study area UTM points can be found in Table G-1 and on Map G-1.

TABLE G-1. UTM COORDINATES -- DENVER INTERNATIONAL AIRPORT
UTM COORDINATES:

A: 13: 517680, 4401760
B: 13: 517680, 4403720
C: 13: 518000, 4405200
D: 13: 518000, 4410000
E: 13: 521200, 4410000
F: 13: 521200, 4410680
G: 13: 522800, 4410680
H: 13: 522800, 4418080
I: 13: 525120, 4418080
J: 13: 525120, 4419080
K: 13: 525920, 4419080
L: 13: 252920, 4420000
M: 13: 527320, 4420000
N: 13: 527320, 4417280
O: 13: 531560, 4417280
P: 13: 531560, 4416480
Q: 13: 535600, 4416480
R: 13: 535600, 4416600
S: 13: 536000, 4416600
T: 13: 536000, 4414440
U: 13: 535600, 4414440
V: 13: 535600, 4414240
W: 13: 532760, 4414240
X: 13: 532760, 4406000
Y: 13: 529600, 4406000
Z: 13: 529600, 4405200
AA: 13: 528400, 4405200
BB: 13: 528400, 4407680
CC: 13: 521200, 4407680
DD: 13: 519360, 4408440
EE: 13: 519360, 4408440
FF: 13: 518560, 4407400
GG: 13: 518560, 4406400
HH: 13: 518760, 4406400
II: 13: 518760, 4405200
JJ: 13: 518560, 4405200
KK: 13: 518240, 4403720
LL: 13: 518240, 4401480

U.S.G.S. Quadrangle Maps

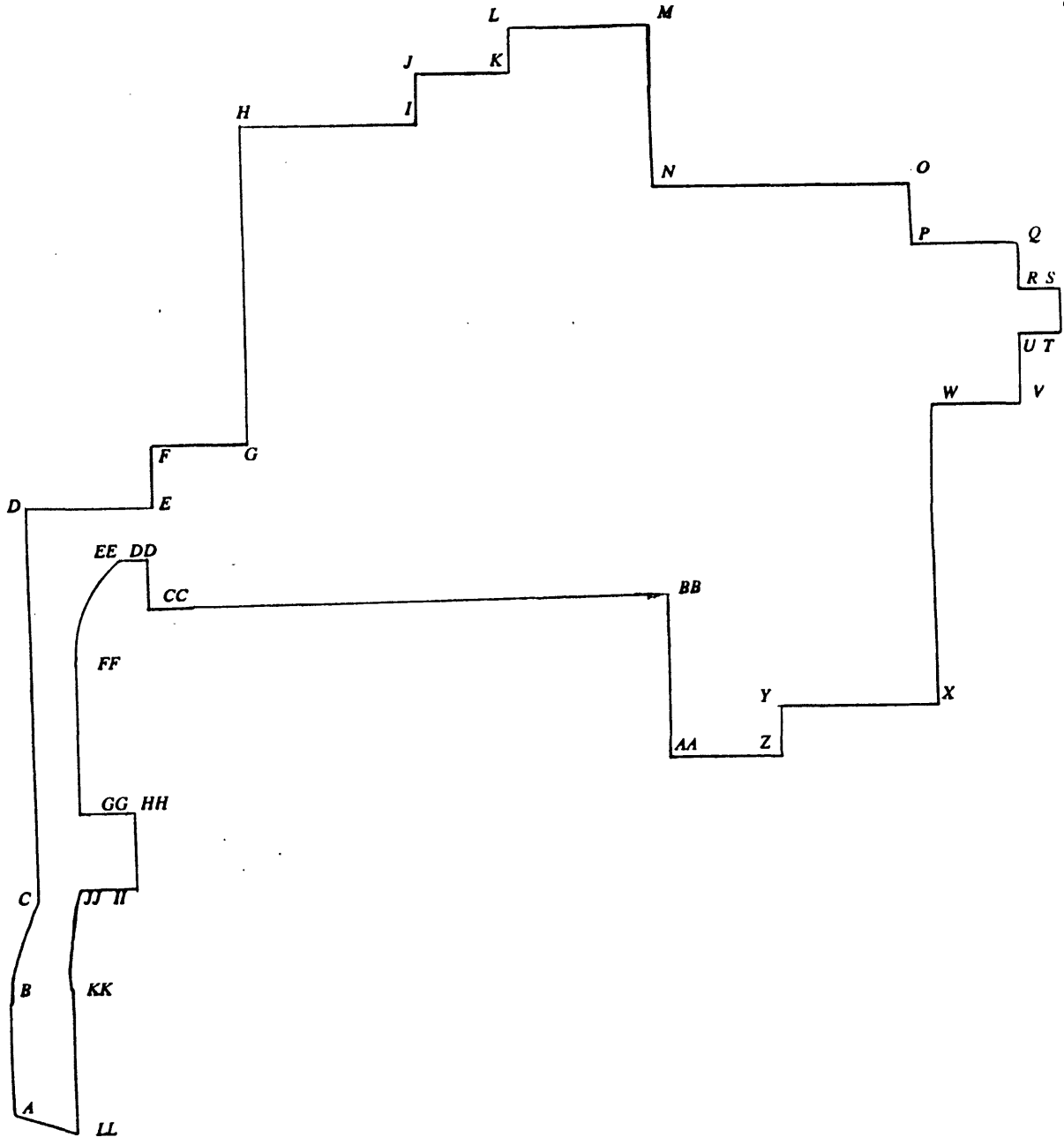
All are 7.5' maps

Horse Creek, Colorado
Brighton, Colorado
Manila, Colorado,
Sable, Colorado

Mile High Lakes, Colorado
Eastlake, Colorado
Box Elder School, Colorado
Commerce City, Colorado

MAP G-1.

UTM POINT SKETCH MAP



NEW DENVER INTERNATIONAL AIRPORT OUTLINE MAP SHOWING UTM POINTS
(no scale)

PART H. SUMMARY OF IDENTIFICATION AND EVALUATION METHODS

Research and Data Gathering

The goal of the research phase of the project was to find and review both general and specific sources that contain evidence about transportation developments, irrigation systems and historic farming and ranching activities, at and around the project area. The historic research centered on data gathering in the broadest sense. It included field visits as well as archival and library research. The historic research amplified and elucidated the role of the significant resources in the history of the project area and included all the pertinent details of the history of each of the individual resources. Thus, the project historian elaborated on how the individual resources relate to and represent the historic patterns identified in this and previous studies. The Burney and Mehls work done for the Denver International Airport environmental assessment process and later works by Friedman related to airport development survey were consulted to obtain background data. The Mehls and Burney effort included reconnaissance level surveys of over 100 square miles in and around the project area. The Friedman reports were of intensive level surveys of the airport area. Both those efforts met or exceeded Secretary of the Interior standards for cultural resource surveys. The National Register documentation project also incorporated pertinent portions of documents such as the Colorado Historical Society's (CHS) Colorado Plains Historic Context's post-1900 agricultural development theme.

After the project historian assimilated the baseline information, he centered his efforts on previously unused or under-used sources including government records and manuscript collections. These sources included County files, Colorado state files, federal reports, United States Bureau of Land Management records (including those housed in the National Archives), Colorado yearbooks and manuscript collections at repositories such the Colorado Historical Society and the University of Colorado.

The historic context, as defined by the Register, key to the multiple property approach, was developed with regard to the three National Register of Historic Places elements of theme, place and time. Theme identified the basic socio-economic activities represented by the area under discussion, such as the development of post-1890 agriculture. Place, the specific geographic area at which activities associated with the theme took place, was defined as the airport site. However, comparative data for the larger Adams County area and the plains of northeastern Colorado, also was used. Finally, the time element was determined to be 1859 to 1945. From the investigations undertaken to identify and develop the historic context statements related property types were developed.

ENDNOTES

1. Steven F. Mehls, Plains Historic Context, (Denver: Colorado Historical Society, 1984), and Paul D. Friedman, "Historic Properties Preservation Plan For the New Denver International Airport, Denver County, Colorado," September 14, 1990, New Denver Airport Office, Stapleton International Airport, Denver, CO, p. 72.

2. Friedman, "Historic Properties," pp. 6, 8.

3. Ibid., pp. 189-191, and Colorado State Planning Commission, Colorado Yearbook, 1962-1964, (Denver: State of Colorado, 1964), pp. 874-888, and Frederick L. Paxson, "The County Boundaries of Colorado," in The University of Colorado Studies, vol. 3, 1906.

4. Margaret Long, The Smoky Hill Trail, (Denver: W.H. Kistler Stationery Co., 1943), pp. 117-118.

5. Steven F. Mehls, The New Empire of the Rockies, A History of Northeastern Colorado, Cultural Resources Series, vol. 16., (Denver: Bureau of Land Management, 1984), pp. 19-20.

6. William H. Goetzmann, Exploration and Empire, The Explorer and Scientist in the Winning of the American West, (New York: Alfred A. Knopf, 1966), pp. 40-64.

7. Carla Elizabeth Neuhaus, "Transportation to Colorado, 1858-1869," (M.A. Thesis, University of Colorado, 1928), pp. 6-21.

8. Ibid., and U.S.D.I., Bureau of Land Management, "Survey Plats for Townships 1 through 5 south, Ranges 64-67 west," 1867, microfiche on file at Bureau of Land Management, Colorado State Office, Lakewood, CO.

9. Robert G. Athearn, The Coloradans, (Albuquerque: University of New Mexico Press, 1976), pp. 25-31, and William Alexander Lawson Interview, Civil Works Administration, vol. 355, typescript on file Colorado Historical Society, Denver, CO., and George W. Lechner Interview, Civil Works Administration, vol. 358, typescript on file Colorado Historical Society, Denver, CO.

10. Long, Smoky, pp. 60-62.

11. Margaret Long, "The Smoky Hill Trail," The Colorado Magazine 9 (November 1932):220.

12. Albert C. Rose, "The Highway From the Railroad to the Automobile," in Jean Labatut and Wheaton J. Lane, eds., Highways in Our National Life, A Symposium, (New York: Arno Press, 1972), pp. 81-85.

13. Neuhaus, "Early Transportation," pp. 39-44.

14. Long, Smoky, pp. 41-44., and W. Turrentine Jackson, Wells Fargo in Colorado Territory, Monograph Series, #1, (Denver: Colorado Historical Society, 1982), pp. 12-13, 16-20.

15. Margaret Long Collection, box 21, ff 4, Western History Collections, Norlin Library, University of Colorado, Boulder, CO.

16. Margaret Long, "The Smoky Hill Trails in Colorado," The Colorado Magazine 11 (March 1934): 74-75.

17. For some of the stage coach stories please see: George W. Lechner, "Diary," and Hattie L. Hedges Trout Interview, Civil Works Administration, vol. 345, typescript on file Colorado Historical Society, Denver, CO. There are dozens of others as well.

18. Ibid., and Long, Smoky, pp. 41-44., and Jackson, Wells Fargo, pp. 12-13, 16-20.

19. Long, Smoky, p. 21 and Frank A. Root, "Early Days in Weld County," The Trail 6 (December, 1913): 10.

20. Neuhaus, "Early Transportation," pp. 20-21.

21. Bureau of Land Management, "Survey Plats."

22. Mehls, New Empire, pp. 51-53.

23. Bureau of Land Management, "Survey Plats."

24. David Allen Henderson, "The Beef Cattle Industry in Colorado," (M.A. Thesis, University of Colorado, 1951), p. 10.

25. Thomas J. Noel, "All Hail the Denver Pacific: Denver's First Railroad," The Colorado Magazine 50 (Spring 1973): 91-116; and Robert G. Athearn, Union Pacific County, (Chicago: Rand McNally, 1971), pp. 133-34, 224; and Richard C. Overton, Burlington Route: A History of the Burlington Lines, (New York: Alfred A. Knopf, 1965), pp. 163-173.

26. See: John C. Newell and P.R. Griswold, Narrow Gauge East From Denver: The Colorado and Eastern Railroad, (Boulder: Pruett Publishing Co., 1983).

27. Lyle W. Dorsett, The Queen City A History of Denver, (Boulder: Pruett Publishing Co., 1977), pp. 126-130, Athearn, Coloradans, pp. 259-65, and Nell Brown Propst, Forgotten People: A History of the South Platte Trail, (Boulder: Pruett Publishing Co., 1979), pp. 190-195.

28. Much work has been done on the intentions, provisions and results of land legislation. Roy M. Robbins volume, Our Landed Heritage, provides a general study of land legislation, Paul W. Gates, in a variety of works, most notably History of Public Land Law Development (Washington: Government Printing Office, 1968) and ed., Public Land Policies: Management and Disposal (New York: Arno Press, 1979) has studied the speculator and corporate role in the public domain. His article, "The Homestead Law an Incongruous Land System," American Historical Review, 42 (July 1936): 652-81 destroyed the myths surrounding the Homestead Act and illustrated its continuity with past land legislation. Other important works include Paul S. Taylor, Essays on Land, Water and the Law in California (New York: Arno Press, 1979) which explores the 160 acre limitation of the Newlands Act. Vernon Carstensen, ed. The Public Lands, Studies in the History of the Public Domain (Madison: University of Wisconsin Press, 1963) contains a number of good essays on the development of the idea of public domain as does Everett N. Dick, The Lure of the Land: A Social History of the Public Lands from the Articles of Confederation to the New Deal

(Lincoln: University of Nebraska Press, 1970), and Harold H. Durhan, Government Handout: A Study in the Administration of the Public Lands, 1875-1891 (New York: DaCapo Publishers, 1970).

29. Robbins, Landed Heritage, pp. 104-153, and Friedman, "Historic Properties," p. 75.

30. Annual Reports, 1880-1891, Union Pacific Collection, Colorado Historical Society, Denver, CO.

31. James F. Willard, "The Gold Rush," in A Colorado Reader, ed. by Carl Ubbelohde, (Boulder: Pruett Publishing Co., 1962), pp. 83-85, and James H. Pierce, "The First Prospecting in Colorado," The Trail 7 (October 1914):5-9, and Athearn, Coloradans, pp. 7-20; and Dorsett, Queen City, pp. 2-10; and Robbins, Landed Heritage, pp. 211-235.

32. Richard Marcy and William O'Connor, eds., Forgotten Past of Adams County, (Thornton: Thornton High School, 1976-1979), pp. II:56-58, and Albin Wagner, Adams County, Crossroads of the West, 2 vols. (Brighton: Adams County Commissioners, 1977), pp. I:22-23.

33. Wagner, Adams County, pp. I:22-23.

34. Eugene Williams interview, Civil Works Administration, vol. 341, typescript on file Colorado Historical Society, Denver, CO., and Agnes Wright Spring, "John W. Iliff-Cattleman," in A Colorado Reader, edited by Carl Ubbelohde, (Boulder: Pruett Press, 1962), pp. 194-207.

35. Richard Goff and Robert H. McCaffree, Century in the Saddle, (Denver: Colorado Cattlemen's Centennial Commission, 1967), pp. 9-37, 69-120, and Ora B. Peake, The Colorado Range Cattle Industry, (Glendale, CA: The Arthur N. Clark Co., 1937), see entire volume, and W. H. Delbert, Civil Works Administration Interviews, volume 343, typescript on file Colorado Historical Society, Denver, CO., and Board of Trade, Farming in Colorado, (Greeley: Sun Publishing, 1887), v.p.

36. Friedman, "Historic Properties," pp. 102-104.

37. Arthur Maass and Raymond L. Anderson, ... and the Desert Shall Rejoice: Conflict, Growth and Justice in Arid Environments (Cambridge: MIT Press, 1978), pp. 364-366.

38. Robert A. Dunbar, "The Origins of the Colorado System of Water Right Control," The Colorado Magazine, 27 (October 1944):241-262, and Robert A. Dunbar, "Water Conflicts and Controls in Colorado," Agricultural History, 22 (July 1948):180-86, and May L. Geffs, Under Ten Flags, A History of Weld County, Colorado, (Greeley: McVey Printery, 1938), pp. 138-144; and no author, Facts About Farm Lands of the Homeseekers Land and Water Company in the Greeley District, Colorado, (Denver: Colonial Securities and Trust Co., n.d.[1910]), entire pamphlet.

39. Coffin v. Left Hand Ditch Co., 6 Colo. 443 (1882).

40. For an outline of early water development in the state see: C. W. Beach and P. J. Preston, Irrigation in Colorado (Washington, D.C.: Government Printing Office, 1910). Examples of the boomer literature can be found in The Earth, vols. 3, 4, 5, and 6, published by the Santa Fe Railway.

41. Leonard P. Fox, "State Regulation of the Canal Corporation in Colorado," Michigan Law Review 16 (1917-1918):165-168.

42. Ibid., and Robert G. Dunbar, Forging New Rights in Western Waters, (Lincoln: University of Nebraska Press, 1983), pp. 18-35, 37-39.

43. U.S.D.I., Bureau of Land Management, "Historical Indices and Patent Records for Townships 1 through 5 south, Ranges 64-67 west," various dates, microfiche on file at Bureau of Land Management, Colorado State Office, Lakewood, CO.

44. Friedman, "Historic Properties," p. 27.

45. Manuscript census pages for precinct labeled "east of Denver, east of Range 66[W], 1880 and First Creek and Box Elder Creek precincts, 1900, microfilms available Denver Branch, National Archives.

46. Colorado Board of Immigration, Colorado Yearbook, 1918, (Denver: State of Colorado, 1918), pp. 38-40.

47. The Greeley Tribune, 10 March 1888 and 12 October 1905.

48. Friedman, "Historic Properties," p. 84.

49. Ibid., pp. 138-144; and 1918 Yearbook, pp. 190.

50. Dorsett, Queen City, pp. 50-65, Propst, Forgotten, pp. 150-55, and Anna Homm Interview, Civil Works Administration, vol. 350, typescript on file Colorado Historical Society, Denver, CO.

51. Hattie L. Hedges Trout Interview, CWA.

52. Manuscript Census, 1900.

53. Mehls, New Empire, pp. 138-142.

54. William J. May, "The Great Western Sugarlands: History of the Great Western Sugar Company," University of Colorado, Ph.D. dissertation, 1982, entire volume, and no author, "The Growth of the Sugar Beet Industry in Colorado," The Trail, 7(December 1914):11-16, and Alvin T. Steinel, History of Agriculture in Colorado, (Denver: State Board of Agriculture, 1926). pp. 281-310.

55. For example see: Denver Republican, 21 August 1907, p. 12.

56. Friedman, "Historic Properties," pp. 80-81.

57. Paul S. Taylor, Essays on Land, Water and the Law in California (New York: Arno Press, 1979) explores the 160 acre limitation of the Newlands Act. Vernon Carstensen, ed., The Public Lands, Studies in the History of the Public Domain (Madison: University of Wisconsin Press, 1963), contains a number of good essays on the development of the idea of public domain as does Everett N. Dick, The Lure of the Land: A Social History of the Public Lands from the Articles of Confederation to the New Deal (Lincoln: University of Nebraska Press, 1970) and Harold H. Durhan, Government Handout: A Study in the Administration of the Public Lands, 1875-1891 (New York: DaCapo Publishers, 1970).

58. The official Bureau of Reclamation policy is explained in William E. Warne, The Bureau of Reclamation (New York: Praeger, 1973), Chapters 1 and 2. The author considers himself one of the "men" of reclamation but this is the best general work on the policies of the bureau, including the 160 acre limitation. Lawrence B. Lee's historiographical essay on reclamation in Reclaiming the American West: An Historiography and Guide (Santa Barbara: American Bibliographical Center-Clio Press, 1980) is an excellent overview of these stages of reclamation and scholarly works available. Also useful is George W. James, Reclaiming the Arid West (New York: Dodd, Mead and Co., 1917). For a different view see Raymond Moley, "What Price Federal Reclamation?" National Economic Problems. 455 (New York: American Enterprise Association, 1955).

59. Ibid., p. 77.

60. Steinel, Agriculture, pp. 283-310. For a discussion of Campbell and well irrigation on the high plains after 1900 see: Donald E. Green, Land of Underground Rain, (Austin: University of Texas Press, 1973).

61. Manuscript Census, 1910, and 1918 Yearbook, p. 200.

62. Manuscript Census, 1910.

63. Julie Roy Jeffrey, Frontier Women, The Trans-Mississippi West, 1840-1880, (New York: Oxford University Press, 1979), and Sandra L. Myres, Westering Women and the Frontier Experience, 1880-1915, (Albuquerque: University of New Mexico Press, 1982), and Nell Brown Propst, Those Strenuous Dames of the Colorado Prairie, (Boulder: Pruett Publishing Co., 1982), and Katherine L. H. Harris, "Women and Families on Northeastern Colorado Homesteads, 1873-1920." Ph.D. dissertation, University of Colorado, Boulder, 1983.

64. Manuscript census pages for Derby precinct, 1910, microfilm available Denver Branch, National Archives; Denver Post, 9 May 1943.

65. U.S. Department of Commerce, Bureau of the Census, Thirteenth Census of the United States Taken in the Year 1910, Agriculture, (Washington, D.C.: Government Printing Office, 1912), p. 200; and U.S. Department of Commerce, Bureau of the Census, Fourteenth Census of the United States Taken in the Year 1920, Agriculture, (Washington, D.C.: Government Printing Office, 1921), p. 184; and U.S. Department of Commerce, Bureau of the Census, Fifteenth Census of the United States Taken in the Year 1930, Agriculture, (Washington, D.C.: Government Printing Office, 1932), pp. 262.

66. Appraisal Card, Adams County Assessor's Office, and No Author, Denver City Directory, (Denver: Gazetteer Publishing & Printing Co., 1922-1939), Altman and Hendler entries, pages vary by year.

67. Grantee Records, Adams County Clerk and Recorder's Office; No Author, Denver City Directory, (Denver: Gazetteer Publishing & Printing Co., 1932-1942) and; Denver Post, 9 May 1943.

68. Elliot West, Growing Up With the Country; Childhood on the Far Western Frontier, (Albuquerque: University of New Mexico Press, 1989), pp. xviii, 55-56, 74-79.

69. Friedman, "Historic Properties," p. 78.

70. 1918 Yearbook, pp. 66-67.

71. Case 9360, Colorado Supreme Court, Folio vol. I, pp. 10-11, 97-101, 219-221 and vol. II, pp. 850-853, and Plaintiff's Exhibit A-34, Map of East Denver Municipal Irrigation District Showing System as Constructed by Fred L. Lucas, Record Group A-84, Colorado State Archives, Denver, CO., and Earl L. Mosley, "History of the Denver Water System," undated manuscript, Denver Water Department Engineering Records Office, pp. 60-61.

72. Rocky Mountain News, 24 January 1922, p. 4.

73. Ibid., 20 January 1922, p. 12.

74. Colorado State Planning Commission, Colorado Yearbook, 1937-1938, (Denver: State of Colorado, 1938), p. 22, and Friedman, "Historic Properties," p. 81.

75. Ibid., pp. 30-31, and Don C. Smith and Edmund Smith, A Smith Atlas, Adams County, Colorado. Flagler, CO: The Smith Map Co., Sept. 1, 1937.

76. Beierle, personal communication.

77. Dorsett, Queen City, pp. 220-225, and Athearn, Coloradans, pp. 296-300, and Mehls, Northeast, pp. 173-182, and Henderson, "Beef Cattle," pp. 160-175, and 1962-1964 Yearbook, pp. 874-887.

78. Friedman, "Historic Properties," p. 84, and Steven F. Mehls and Carol D. Mehls, Survey Report, Weld County, Colorado Farm and Ranch Inventory, (Denver: Colorado Historical Society, 1989), pp. 30-44.

79. William G. Buckles and Nancy Buckles, Colorado Historical Archaeology Context, Denver: Colorado Historical Society, 1984, p. 8.

80. Friedman, "Historic Properties," p. 84.

81. Mehls and Mehls, Weld County, pp. 36-37.

82. Ibid., pp. 37-38.

83. William G. Buckles and Nancy Buckles, Colorado Historical Archaeology Context, Denver: Colorado Historical Society, 1984, p. 8.

PART I. MAJOR BIBLIOGRAPHIC REFERENCES

A. UNPUBLISHED SOURCES

Coffin v. Left Hand Ditch Co., 6 Colo. 443 (1882).

Denver, CO. Colorado State Archives. Colorado Supreme Court.
Record Group A-84. Case 9360.

Denver, CO. Colorado Historical Society. W. H. Delbert
Interview, Civil Works Administration, vol. 343,
typescript on file.

Friedman, Paul D. "Historic Properties Preservation Plan for the
New Denver International Airport, Denver, County, Colorado."
New Denver Airport Office, Stapleton International
Airport, Denver, Co., September 14, 1990.

Harris, Katherine L. H. "Women and Families on Northeastern
Colorado Homesteads, 1873-1920." Ph.D. dissertation,
University of Colorado, Boulder, 1983.

Henderson, David A. "The Beef Cattle Industry of Colorado,"
M.A. Thesis, University of Colorado, 1981.

Denver, CO. Colorado Historical Society. Anna Homm
Interview, Civil Works Administration, vol. 345,
typescript on file.

Denver, CO. Colorado Historical Society. William Alexander
Lawson Interview, Civil Works Administration, vol. 355,
typescript on file.

Denver, CO. Colorado Historical Society. George W. Lechner
Interview, Civil Works Administration, vol. 358,
typescript on file.

Boulder, CO. Norlin Library. Western History Collections.
Margaret Long Collection.

May, William J. "The Great Western Sugarlands: History of the
Great Western Sugar Company," Ph.D. dissertation,
University of Colorado, Boulder, 1982.

Denver, CO. Denver Water Department. Engineering Records Office.
Earl L. Mosley, "History of the Denver Water System,"
undated manuscript.

Neuhaus, Carla E. "Transportation to Colorado, 1858-1869,"
M.A. Thesis, University of Colorado, Boulder, 1928.

Denver, CO. Colorado Historical Society. Hattie L. Hedges
Trout Interview, Civil Works Administration, vol. 345,
typescript on file.

Denver, CO. Colorado Historical Society. Union Pacific
Collection.

U. S. Bureau of Land Management, Colorado State Office. Master Title Plats, Historical Indices, Serial Pages and Patents, v.d. Microfiche on file at Bureau of Land Management, Colorado State Office, Lakewood, CO.

U.S. Bureau of Land Management, Colorado State Office. Survey Plats for Townships 1 through 5 south, Ranges 64-67 west, 1867. Microfiche on file at Bureau of Land Management, Colorado State Office, Lakewood, CO.

Manuscript Census pages for precinct labeled, "East of Denver east of Range 66 [W], 1880 and First Creek and Box Elder Creek precincts, 1900, 1910. Denver Branch, National Archives.

Denver, CO. Colorado Historical Society. Eugene Williams Interview, Civil Works Administration, vol. 341, typescript on file.

B. PUBLISHED SOURCES

No author. A Detailed Map of Railroads in the State of Colorado. Golden: Colorado Railroad Museum, n.d. [1973].

No author. Facts About Farm Lands of the Homeseekers Land and Water Company in the Greeley District, Colorado. Denver: Colonial Securities and Trust Co., n.d. ([1910]).

No Author. "The Growth of the Sugar Beet Industry in Colorado." The Trail, 7 (December 1914):11-16.

Athearn, Robert G. The Coloradans. Albuquerque: University of New Mexico Press, 1976.

_____. Union Pacific Country. Chicago: Rand McNally, 1971.

Beach, C.W. and P. J. Preston. Irrigation in Colorado. Washington, D.C.: Government Printing Office, 1910.

Board of Trade, Farming in Colorado. Greeley: Sun Publishing 1887).

Carstensen, Vernon, ed. The Public Lands, Studies in the History of the Public Domain. Madison: University of Wisconsin Press, 1963.

Colorado Board of Immigration. Yearbook of the State of Colorado, 1918. Denver: Brock Haffner Press, 1918.

Colorado State Planning Commission. Yearbook of the State of Colorado, 1937-1938. Denver: Bradford Robinson, 1938.

Colorado State Planning Commission. Colorado Yearbook, 1962-1964. Denver: State of Colorado, 1964.

Denver Republican. various dates.

Dick, Everett N. The Lure of the Land: A Social History of the Public Lands from the Articles of Confederation to the New Deal. Lincoln: University of Nebraska Press, 1970.

Durhan, Harold H. Government Handout: A Study in the Administration of Public Lands, 1875-1891. New York: DeCapo Publishers, 1970.

Dorsett, Lyle W. The Queen City, A History of Denver. Boulder: Pruett Publishing Co., 1977.

Dunbar, Robert. "The Origins of the Colorado System of Water Right Control." The Colorado Magazine, 27 (October 1944):241-262.

_____. "Water Conflicts and Controls in Colorado." Agricultural History, 22 (July 1948): 180-86.

_____. Forging New Rights in Western Waters. Lincoln: University of Nebraska Press, 1983.

The Earth. various dates. Santa Fe Railway.

Fox, Leonard P. "State Regulation of the Canal Corporation in Colorado." Michigan Law Review 16 (1917-1918):165-168.

Gates, Paul W. History of Public Land Law Development. Washington: Government Printing Office, 1968.

_____. Public Land Policies: Management and Disposal. New York: Arno Press, 1979.

_____. "The Homestead Law, an Incongruous Land System," American Historical Review 42(July 1936):652-81.

Geffs, May L. Under Ten Flags, A History of Weld County, Colorado. Greeley: McVey Printery, 1938.

Goetzmann, William H. Exploration and Empire: The Explorer and Scientist in Winning of the American West. New York: Knopf, 1966.

Goff, Richard and Robert McCaffree. Century in the Saddle. Denver: Colorado Cattlemen's Centennial Commission, 1967.

Greeley Tribune. various dates.

Green, Donald E. Land of the Underground Rain. Austin: University of Texas Press, 1973.

Jackson, W. Turrentine. Wells Fargo in Colorado Territory. Denver: Colorado Historical Society, 1982.

James, George W. Reclaiming the Arid West. New York: Dodd, Mead and Co., 1917.

Jeffrey, Julie Roy. Frontier Women, The Trans-Mississippi West, 1840-1880. New York: Oxford University Press, 1979.

- Lee, Lawrence B. Reclaiming the American West: An Historiography and Guide. Santa Barbara: American Bibliographical Center Clio Press, 1980.
- Long, Margaret. The Smoky Hill Trail. Denver: W. H. Kistler Stationery Co, 1943.
- _____. "The Smoky Hill Trail," The Colorado Magazine 9(November 1932):220-231.
- _____. "The Smoky Hill Trails in Colorado," The Colorado Magazine 11(March 1934):74-75.
- Marcy, Richard and William O'Conner, eds. Forgotten Past of Adams County. Thornton: Thornton High School, 1976-1979.
- Maass, Arthur and Raymond L. Anderson. . . . and the Desert Shall Rejoice: Conflict, Growth and Justice in Arid Environments. Cambridge: MIT Press, 1978.
- Mehls, Steven F. The New Empire of the Rockies: A History of Northeast Colorado. Denver: Bureau of Land Management, 1984.
- _____. Colorado Plains Historic Context. Denver: Colorado Historical Society, 1984.
- _____ and Carol D. Mehls. Survey Report, Weld County, Colorado, Farm and Ranch Inventory. Denver: Colorado Historical Society, 1989.
- Moley, Raymond. "What Price Federal Reclamation?" National Economic Problems. New York: American Enterprise Association, 1955.
- Myres, Sandra L. Westering Women and the Frontier Experience, 1880-1915. Albuquerque: University of New Mexico Press, 1982.
- Newell, John C. and P. R. Griswold. Narrow Gauge East From Denver; The Colorado Eastern Railroad. Boulder: Pruett Publishing Co., 1983.
- Noel, Thomas J. "All Hail the Denver Pacific: Denver's First Railroad." The Colorado Magazine, 50 (Spring 1973):91-116.
- Overton, Richard C. Burlington Route: A History of the Burlington Lines. New York: Alfred A. Knopf, 1965.
- Paxson, Frederick L. "The County Boundaries of Colorado." University of Colorado Studies, 3 (1906).
- Peake, Ora B. The Colorado Range Cattle Industry. Glendale, CA: Arthur H. Clark Co., 1937.
- Pierce, James H. "The First Prospecting in Colorado." The Trail 7(October 1914):5-9.
- Propst, Nell Brown. Forgotten People: A History of the South Platte Trail. Boulder: Pruett Publishing Co., 1979.

- _____. Those Strenuous Dames of the Colorado Prairie.
Boulder: Pruett Publishing Co., 1982.
- Robbins, Roy. Our Landed Heritage. Lincoln: University
of Nebraska Press, 1976.
- Rose, Albert C. "The Highway From the Railroad to the Automobile," in Jean
Labatut and Wheaton J. Lane, eds., Highways in Our National Life, A
Symposium. New York: Arno Press, 1972.
- Rocky Mountain News, various dates.
- Root, Frank A. "Early Days in Weld County." The Trail
6(December 1913):10.
- Smith, Don C. and Edmund Smith. A Smith Atlas, Adams County, Colorado. Flagler,
CO: The Smith Map Co., September, 1937.
- Spring, Agnes Wright. "John W. Iliff-Cattleman," in Carl
Ubbelohde, ed al eds., Colorado Reader, Boulder: Pruett
Press, 1962.
- Steinel, Alvin T. History of Agriculture in Colorado.
Denver: State Board of Agriculture, 1926.
- Taylor, Paul S. Essays on Land, Water and Law in California.
New York: Arno Press, 1979.
- Ubbelohde, Carl, Maxine Benson and Duane A. Smith.
A Colorado History. Boulder: Pruett Publishing Company,
1982.
- Wagner, Albin. Adams County: Crossroads of the West. Brighton:
Adams County Commissioners, 1977.
- Warne, William E. The Bureau of Reclamation. New York: Praeger,
1973.
- West, Elliot. Growing Up With the County; Childhood on the Far
Western Frontier. Albuquerque: University of New Mexico
Press, 1989).
- Willard, James F. "The Gold Rush," in A Colorado Reader, ed. by
Carl Ubbelohde. Boulder: Pruett Publishing Co., 1962.