

56th Avenue, Quebec Street to Havana Street Environmental Assessment

HISTORIC RESOURCES INVENTORY

Prepared for:



City and County of Denver

in partnership with

US Department of Transportation
Federal Highway Administration

Colorado Department of Transportation

Prepared by:



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Denver, Colorado

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EXECUTIVE SUMMARY

On behalf of the City and County of Denver, URS performed a historic resources survey along 56th Avenue between Quebec and Havana Streets. The 600-foot-wide survey corridor extended 300 feet on each side of the existing centerline of 56th Avenue. The inventory did not discover or record any historic sites.

Four features that are not yet 50 years old were noted but not recorded. These include a guard shack at the Havana Street entrance to the Rocky Mountain Arsenal National Wildlife Refuge, a concrete-lined ditch, an abandoned roadway bridge, and a pair of riprap bridge abutments. Based on these results, it appears that the project will have no effect upon any historic resources.

Colorado Cultural Resource Survey

Cultural Resource Survey Management Information Form

Please complete this form and attach a copy behind the Table of Contents of each standard survey report.

I. PROJECT SIZE

Total federal acres in project:	_____	Acres surveyed:	_____
Total state acres in project:	_____	Acres surveyed:	_____
Total private acres of project:	145	Acres surveyed:	145
Other _____ :	_____	Acres surveyed:	_____
Total acres surveyed:			145

II. PROJECT LOCATION

County:	Adams, Denver	Principal Meridian:	6th
USGS Quad map name(s) and date(s):	Commerce City (1965, 1994); Montbello (1965, 1994)		

NOTE: The legal location information below is meant to summarize the location of the survey and does not need to be precise.

Township:	3S	Range:	67W	Sec:	9	1/4s	S	S
Township:	3S	Range:	67W	Sec:	10	1/4s	S	S
Township:	3S	Range:	67W	Sec:	15	1/4s	N	N
Township:	3S	Range:	67W	Sec:	16	1/4s	N	N

III. SITES

Smithsonian Number	Resource Type				Eligibility				Management Recommendations						
	Prehistoric	Historical	Paleontological	Unknown	Eligible	Not Eligible	Need Data	Contributes to National Register District	No Further Work	Preserve/Avoid	Monitor	Test	Excavate	Archival Research	Other
None															

IV. ISOLATED FINDS

Please note that by definition IFs are not eligible to the National Register and require no further work.

Smithsonian Number	Resource Type			
	Prehistoric	Historical	Paleontological	Unknown
None				

Smithsonian Number	Resource Type			
	Prehistoric	Historical	Paleontological	Unknown



1.0 INTRODUCTION

URS Corporation (URS) entered into contract with the City and County of Denver (City or CCD) to complete a historic resources survey related to the improvement of 56th Avenue. The survey took place along the corridor of 56th Avenue between Quebec Street and Havana Street. URS conducted a literature and records search for previously recorded historic resources in the project corridor at the Colorado Historical Society, Office of Archaeology and Historic Preservation (CHS-OAHP). A pedestrian survey of the project corridor was conducted to identify potential historic resources. This report presents a summary of the findings of the literature review and survey. A separate survey for archaeological resources within the project corridor has already been completed (Hand 2007).

This project is partially funded through the U.S. Department of Transportation, Federal Highway Administration (FHWA). The FHWA, in cooperation with the City and the Colorado Department of Transportation (CDOT), must consider the effects of this project upon the natural and cultural environment, as required by the National Environmental Policy Act (NEPA) of 1969. In compliance with NEPA, an environmental assessment (EA) for the project will be completed. The City tasked URS to prepare the EA.

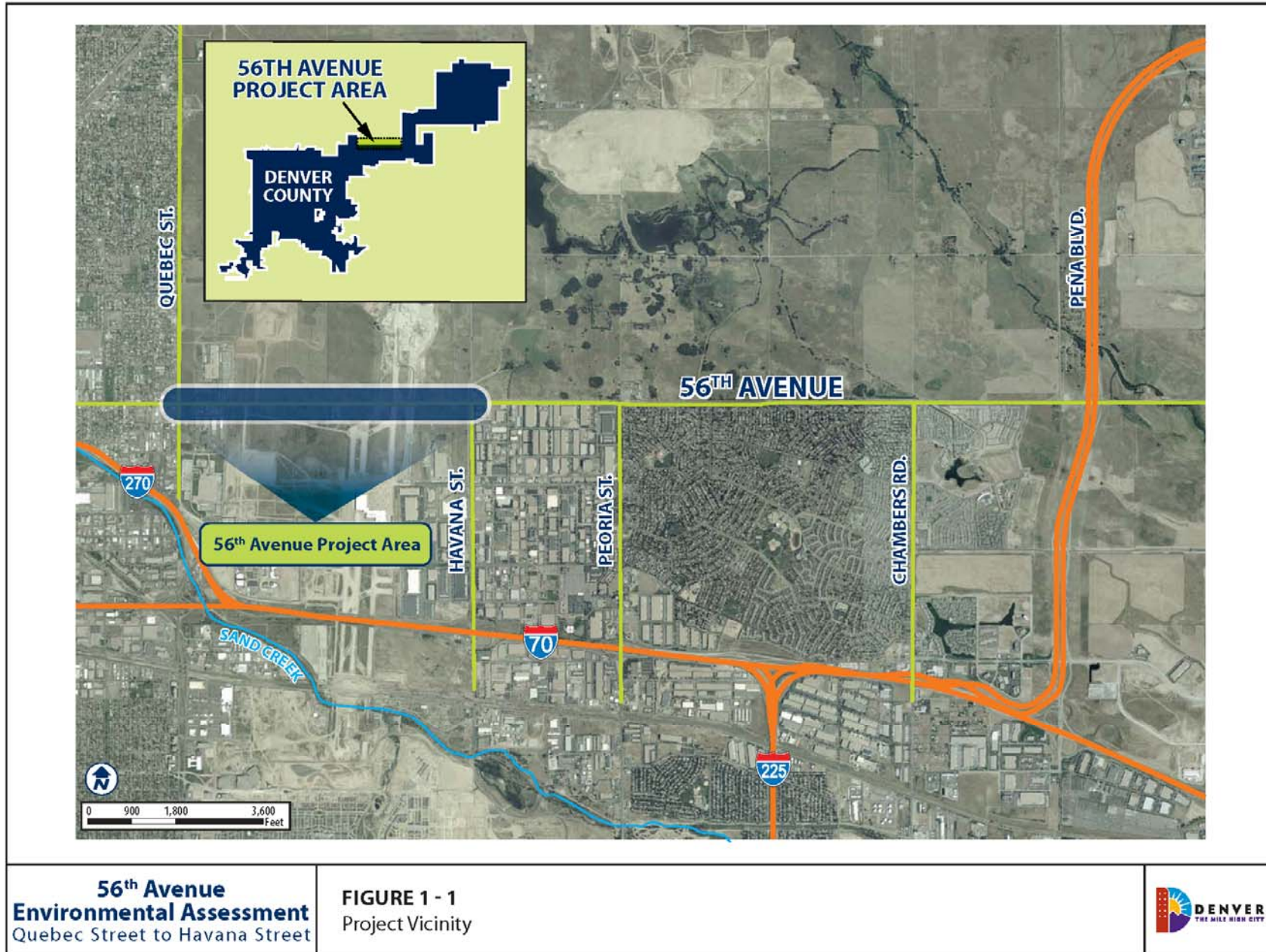
The FHWA is also required, under Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended) and implementing regulations (36 CFR 800), to determine if this activity has the potential to impact historic properties within the area of potential effects (APE). As set forth at Section 101(b)(c) of the NHPA, the FHWA must consult with the Colorado State Historic Preservation Officer (SHPO), local governments, organizations, and individuals to ensure that historic properties are taken into consideration at all levels of planning and development.

The APE, or project area, is herein defined as a corridor 600 feet (ft) wide, or 300 ft on either side of the existing centerline of 56th Avenue, between Quebec Street on the west and 1,000 feet east of Havana Street on the east (Figure 1-1), a distance of about two miles (mi). The project area thus encompasses approximately 145 acres, now occupied by industrial establishments, portions of the former airport, and vacant lands.

On March 15 and November 1, 2007, URS performed a search of COMPASS, the on-line Cultural Resource Database maintained by the CHS-OAHP. Field investigations were conducted in April 2007.

The Principal Investigator for the project is Robert J. Mutaw. Dr. Mutaw directed the field investigations, assisted by Elizabeth B. Roberts. Dr. Mutaw and Ms. Roberts collaborated on writing the summary report, which was reviewed by Dr. Gordon C. Tucker Jr. Ms. Jeanne DeFauw prepared the illustrations used in the report. These investigations were conducted in accordance with the conditions of State of Colorado Archaeological Permit No. 2007-47 (rev. #1), issued to URS.

This report summarizes the background, methods, and results of an intensive cultural resources inventory of the project area. It concludes with an evaluation of the results and makes appropriate recommendations. The report complies in form and content with the guidelines issued by the CHS-OAHP (2007).





2.0 ENVIRONMENTAL AND CULTURAL CONTEXTS

Human use of an area, today and in the past, is conditioned to a large extent by environmental parameters. The environment does not determine how and to what extent human groups will respond; rather, it provides opportunities for, and imposes constraints upon, human behavior, ameliorated to a greater or lesser extent by culture. To understand how human groups in an area adapted to the local situation, we must first understand the regional environmental milieu. A description of the present environment is followed by a discussion of past environmental conditions, necessary because the regional and local environmental conditions have changed significantly during the 12,000+ years that humans have inhabited eastern Colorado.

2.1 Present Environment

The project area is located in the Denver Basin area of the Great Plains physiographic province near the transition with the Southern Rocky Mountain province (Fenneman 1931). It is found locally near Sand Creek, a major tributary of the South Platte River, in gentle terrain approximately 5 mi northeast of downtown Denver. The topography of the area is level to very gently rolling, incised by shallow north and northwest-flowing drainages. From west to east, elevations range from 5250 to 5350 ft above mean sea level over a distance of 3 mi.

Late Pleistocene to early Holocene, eolian (wind-deposited) silt and sand directly underlie the project area (Chase and McConaghy 1972; Hunt 1954). Nearby Sand Creek is filled with Holocene-age Piney Creek alluvium (highly calcareous, well-stratified clay, silt, and sand, containing thin lenses of gravel) and Post-Piney Creek alluvium (mostly reworked gravel) (Hunt 1954). These surficial deposits are underlain at depth by the Upper Cretaceous and Paleocene-age Denver formation, which is composed of conglomerate, sandstone, siltstone, and compact clay (Hunt 1954: 94). Aboriginal inhabitants of the region may have exploited the gravel deposits for stone tools, while historic and recent groups mined sand and gravel from the alluvium.

The climate of Colorado's eastern plains is generally characterized by low relative humidity, abundant sunshine, light rainfall, moderate to high wind movement, and a large daily range in temperature (Berry 1968: 596). As recorded at the former Stapleton International Airport from 1931 to 1960, the average annual temperature is 47°F, with average high and low temperatures of 28°F and 73°F occurring in January and July, respectively (Berry 1968: 604). The average annual precipitation is about 15 inches, the majority of which falls in the spring and summer months, April through September. The total annual snowfall averages nearly 5 ft (Berry 1968: 606). The growing season (number of days between the last freezing temperature in the spring and first freezing temperature in the fall at a threshold temperature of 32°F) is 160 days (Berry 1968: 600). Prevailing winds are from the south at an average monthly speed of about 9 miles-per-hour (Berry 1968: 606).

Truckton sandy loam is the characteristic soil in the project area. It is a well-drained to somewhat excessively drained, nearly level to moderately sloping soil that formed in wind-worked sandy material (Sampson and Baber 1974: 24). This soil supports a Plains grasslands biome, which is characterized by blue grama, side-oats grama, needle-and-thread, little



bluestem, and prairie sandreed (Sampson and Baber 1974: 42). Dominant shrubs include sand sagebrush and yucca.

2.2 Paleoenvironment

The climate of eastern Colorado has undergone dramatic climate changes over the last 10,000 years since the end of the Pleistocene epoch. These changes affected the distribution of plants and animals on the landscape and the human populations that exploited them. Table 2-1 summarizes paleoenvironmental conditions in the Platte River Basin for the last 18,000 years (Tate and Gilmore 1999).

A general pattern of warming and drying followed the end of full glacial conditions with episodes of cooling during the Late Pleistocene/Early Holocene between 12,000 and 8000 years before present (B.P.) (Tate and Gilmore 1999:31). Although climatic conditions were warmer and drier than those of the previous glacial episode, they were cooler and wetter than modern conditions. Pine-spruce woodlands retreated to be replaced by tall grass/short grass prairies during the period from ca. 11,000 to 10,000 B.P. (Tate and Gilmore 1999:32). As the pattern of warming and drying continued, short grass and sagebrush/yucca prairies replaced the tall grass prairies from 10,000-7500 B.P. (Tate and Gilmore 1999: 33). A period of very dry, arid conditions, generally referred to as the Altithermal, occurred between 7500 and 5000 B.P. Benedict (1979) has suggested that rather than one long period of arid conditions, two short periods of drought were separated by a period of increased precipitation. Following the Altithermal, post-5000 B.P., climatic conditions gradually approached modern levels except for brief episodes of cooler and wetter conditions (Tate and Gilmore 1999: 35).

2.3 Environmental Constraints

Located on the periphery of an expanding municipality, the project area has been subjected to many human disturbances, ranging from highways and railroads to industrial development. It also crosses a portion of the former Stapleton International Airport. Stapleton opened in 1929 on 640 acres of sandy prairie as Denver Municipal Airport, and expanded over the next 65 years to encompass approximately 4,700 acres (Miller 1983). Much of the Stapleton grounds were eventually covered with terminal, hangars, concourses, and runways. Other portions of the grounds were never developed, however, and thus were reasonably protected over the years from modern encroachments. For example, an area of about 200 acres bordered on the north by I-70, on the south by the Union Pacific railroad tracks, to the west by the major north-south airport runway, and to the east by Havana Street was graded and used for borrow materials during the construction of the north-south runway in the early 1960s.



Table 2.3-1
Interpreted Paleoenvironmental
Conditions in the Platte River Basin

Cultural Episode		Age Range (B.P.)	Paleoenvironment
Stage	Period		
PROTOHISTORIC		400-100	Cooler and wetter conditions with expansion of mountain glaciers
LATE PREHISTORIC	Middle Ceramic	800-400	Xeric conditions initially, followed by slightly cooler and wetter conditions
	Early Ceramic	1800-800	Initial period of warmer and drier conditions followed by conditions slightly wetter and cooler than present
ARCHAIC	Late Archaic	3000-1800	Warmer and drier conditions, possibly changing to periods of increased precipitation and cooler temperatures
	Middle Archaic	5000-3000	Increased effective moisture, punctuated by discontinuous periods of aridity
	Early Archaic	7500-5000	Once thought to be a period of universal aridity throughout the West and Southwest (Altitheal), now considered to have included two drought periods separated by a period of increased effective moisture
PALEOINDIAN	Plano	10,000-7500	Continued drying and warming with increasing aridity towards the latter part of the Plano period
	Folsom	11,000-10,000	Continued warming and drying, shrinking of pine-spruce woodlands in foothills, and expansion of mixed tall grass/short grass prairie
	Clovis	12,000-11,000	Warming trend, with possible drought during the late Clovis period (11,300-10,800 B.P.)
	Pre-Clovis	18,000-12,000	Full glacial conditions at the outset, with gradually ameliorating climatic conditions

Data source: Tate and Gilmore (1999)

2.4 Cultural History

Humans have inhabited eastern Colorado for at least 12,000 years, and perhaps longer. This lengthy period of occupation is divided into chronologically ordered stages: Paleoindian, Archaic, Late Prehistoric, and Protohistoric. Each stage encompasses one or more periods, which are generally distinguished by technological attributes and subsistence strategies (Chenault 1999a: 1).

The Paleoindian Stage (ca. 12,000-7500 B.P.) is a specialized adaptation to late Pleistocene/early Holocene environments and characterized by the hunting of now-extinct species of large game such as mammoth, camels, and bison (Chenault 1999b: 51). Paleoindian components are recognized by the presence of large, well-made, flaked stone tools that distinguish three cultural periods: large, fluted lanceolate points for the Clovis



period; smaller, finely pressure-flaked and fluted lanceolate dart points for the Folsom period; and lanceolate and stemmed dart points for the Plano period. Most Paleoindian sites are camps, animal kill sites, animal processing sites, or a combination of those types.

The succeeding Archaic Stage (ca. 7500-1800 B.P.) was a time of changing environmental conditions that required modifications of the Paleoindian lifestyle. Archaic people broadened their resource base by hunting both large and small game animals, as well as increasing their emphasis upon plant resources (Tate 1999: 91). Archaic components are recognized by a diversified tool kit, groundstone artifacts, smaller stemmed and notched projectile points, firepits, storage cists, and architectural features. The Archaic stage includes three periods, distinguished primarily by distinctive artifacts: large, side- and corner-notched dart points during the Early Archaic period; stemmed, indented-base projectile points; as well as several large side-notched, corner-notched, and stemmed points during the Middle Archaic period; and large, corner-notched and side-notched dart points during the Late Archaic period (Tate 1999: 95).

The Late Prehistoric Stage (ca. 1800-400 B.P.) represents a continuation of an Archaic lifestyle, with several important technological innovations: introduction of the bow and arrow, ceramics, and limited horticulture (Gilmore 1999: 175). The stage is divided into two periods based upon the presence of distinctive artifacts: the Early Ceramic period, characterized by small, corner-notched arrow points and cord-marked pottery; and the Middle Ceramic period, characterized by small, side-notched arrow points and shouldered, globular pottery vessels with partially to completely obliterated cord marks (Gilmore 1999: 177-180). Early Ceramic period campsites appear to have been occupied for longer periods of time and/or with greater regularity than the preceding Late Archaic period, and this pattern continues into Middle Ceramic period.

The concluding Protohistoric Stage (ca. 400-100 B.P.) begins with European contact and ends with the period of permanent settlement by non-aboriginal groups (Clark 1999: 309). The introduction of the horse and guns resulted in dramatic cultural and territorial changes throughout the High Plains, resulting in a period of cultural dynamism. Protohistoric components are often identified through diagnostic artifacts, especially those of European and/or American manufacture, unique features (e.g., peeled trees, wikiups, and tipi rings), or ethnographic analogy (Clark 1999: 310).

It is generally accepted that except for occasional hunting forays onto the plains by the Utes, Apaches dominated the eastern plains of Colorado from the 1500s to the 1700s (Clark 1999). Starting in the early 1700s, the Apache were beginning to have conflicts with the Commanche, who had recently acquired the horse. The Commanche, with assistance from the Utes, were able to force the Apache into New Mexico by 1730. In the early 1700s, a splinter group of Apaches began living among the Kiowas. These Kiowa-Apaches maintained their linguistic identity, but lived as Kiowas. Ethnohistoric records and oral history indicate that the Arapahos, who were quickly followed by the Cheyenne, occupied the Platte River Basin after the Comanche. Although they formerly lived near the Black Hills, by the early 1800s, the Cheyenne had begun to winter along the South Platte and Arkansas rivers. Ethnohistoric sources also reveal that seasonal hunting parties of various groups of Lakota Sioux entered northeastern Colorado.

Europeans visited this area as early as the 1500s, but active exploration and settlement did not occur until the 1800s. American exploration in the area began in 1806 with Zebulon Pike,



continued with the 1819-1820 expedition of Major Stephen Long, the travels of Major John Charles Frémont from 1842 to 1844, the 1845 expedition of Colonel Stephen Watts Kearny, and concluded with the trip of Francis Parkman in 1846 (Mehls 1984). Throughout the early nineteenth century, until about 1845, several Europeans and Americans trapped and traded throughout the region, built trading posts, and occasionally settled down, thereby establishing a “very thin line of Euro-American settlement” on the plains of Colorado (Mehls 1984: 3-2).

The frequency of visits by non-indigenous peoples changed dramatically in 1859 when gold was discovered in Colorado and the region witnessed a huge influx of settlers and prospectors. Auraria and Denver City were established that year at the confluence of Cherry Creek and the South Platte River. The two towns merged in 1860 under the name of Denver. Congress established the Territory of Colorado in 1861. In 1876, Colorado became the 38th state in the Union. From a population of fewer than 5,000 in 1860 (Carrillo and Jepsen 1995: 34), Denver’s population grew steadily over the next century, reaching a high of over 514,000 in 1970 but declining slightly thereafter (Bureau of the Census 1995). Denver’s growth was modest during the last century, however, when compared to the State of Colorado, which has witnessed explosive growth in the twentieth century, especially after 1950.

From the beginning, transportation has been the key to growth and development in Denver and the surrounding region (Carrillo and Jepsen 1995: 35). After the discovery of gold in 1859, several new trails from the east converged in Denver. As described by Glenn Scott (1999: 1),

These trails included (1) the Overland Trail (a branch from the Oregon Trail), which ran southward along the southeast side of the South Platte River from Julesburg and Greeley to Denver, and (2) the southern part of the Fort Morgan Cutoff, which as a bypass of the Overland Trail went essentially straight southwestward from Fort Morgan to Denver, thus saving nearly 40 miles of travel. Coming in from Kansas across the dry plains of eastern Colorado were the...Smoky Hill North, Smoky Hill Middle (Starvation Trail), and the Smoky Hill South Trails.

Eventually, stage lines and stations were established on these trails. “The first stage line opened for business in 1859, and by 1860 three competing lines linked Denver with the rest of the country” (Carrillo and Jepsen 1995:35). Traces of historic trails were recorded on portions of the Rocky Mountain Arsenal (RMA) according to early maps and aerial photographs (Scott 1976), however these trails are not currently visible (Remediation Venture Office 2007).

When the transcontinental railroad was completed in 1869, it initially bypassed Denver, crossing instead through southern Wyoming. Not content with this outcome, Denver Pacific Railway completed an extension line from the main track of the Union Pacific railroad in Cheyenne to Denver by June 1870 (Wilkins 1974: 3). By the end of that same year, the Kansas Pacific Railway Company (formerly the Union Pacific Railway Company, Eastern Division) completed construction of tracks from Denver to the Colorado-Kansas border, inaugurated service from Denver to Kansas City, Missouri (Wilkins 1974: 4), and connected Colorado to the eastern U.S. In 1880-1881, a line was constructed along what is now the western boundary of the RMA. Stations along this line included Irondale and Derby, which eventually became communities that were partly incorporated into the RMA (Remediation Venture Office 2007).



Homesteading in the area began in 1871 and by 1942, there were over 400 individual properties (including schools) in the area (Clark 1996). Most of these occupied 5 acres or less. Development of the RMA led to the demolition or removal of most of the structures associated with this early settlement. Foundations and associated debris from many of these former farmsteads have been recorded in various parts of the RMA (Remediation Venture Office 2007).

At the beginning of the twentieth century, the increasing popularity of the automobile precipitated a movement to improve the roads that already existed or build new ones. The Colorado Highway Commission was established by the legislature in 1910, but initial funding for road building was meager (Salek 2001). After the Federal-Aid Road Act was passed in 1916, funding for road building throughout the country improved dramatically. By 1923, a state highway numbering system was developed. The U.S. Highway system was fully implemented in 1927.

In Colorado, many of the federal highways were run concurrently over existing state-numbered roads, an arrangement that remained until at least 1955. Road building in this country changed dramatically when President Eisenhower signed the Federal-Aid Highway Act and Highway Revenue Act in 1956, thus creating the Highway Trust Fund and providing a mechanism for financing today's Interstate System (National Archives and Records Administration 1996; Weingroff 1996).

Eisenhower's commitment to the establishment of a national highway system was founded upon his experiences with a motorized Army convoy across the country in 1919 and his observations on the efficiency of the German autobahn during World War II. He was able to convince the American people that this was a national, not state, issue. The Pennsylvania Turnpike, Interstates 44 and 70 in Missouri, and Interstate 70 in Kansas have all laid claim to the distinction of being the first Interstate. By the end of the twentieth century, nearly 43,000 miles of Interstates have been built. As originally conceived in 1956, I-70 ended in Denver (Salek 2001). Twenty-five years later, all of I-70 was completed east of Denver across the plains and west over the continental divide through the Eisenhower Tunnel.

According to topographic maps and aerial photographs of the project area dating from 1937 through 1994, 56th Avenue is shown in its current location. However, on the Montbello USGS topographic quadrangle map of 1965 (photorevised 1994), 56th Avenue ends less than a ¼-mile west of the lines separating sections 10/11 and 14/15. By this time, the RMA had acquired the land and closed the road. The road continued to be closed in this area after the surrounding land had been transferred to Stapleton in the 1980s for use as runways. After Stapleton was closed in 2005, 56th Avenue was rebuilt from Quebec Street to Havana Street.

As early as 1923, Benjamin F. Stapleton, Denver mayor from 1923 to 1931 and 1935 to 1947, envisioned a municipal airport as a way of ensuring Denver's future growth and prosperity (Miller 1983: 14). On March 19, 1928, the Denver City Council approved the purchase of the Sand Creek site, located six miles from downtown Denver at approximately East 32nd Avenue and Wabash Street, for a municipal airport. One week later, on March 25, 1928, the city council appropriated \$175,000 for the acquisition of the 640 acres at the Sand Creek site (Miller 1983: 18). After all parcels of the site were purchased, the total bill for land acquisition was \$143,013.37 (Miller 1983: 18). By the summer of 1929, an administration building, hangar, central heating plant, fire-fighting building, and two major runways had been constructed for a total cost of slightly more than \$286,000 (Miller 1983: 18).



Dedication of the new airport took place over a four-day period, October 17-20, 1929, with dozens of civil and military dignitaries and tens of thousands of citizens in attendance (Miller 1983: 20). In 1944, the city recognized the efforts of its mayor in establishing and maintaining the airport by renaming it Stapleton Airfield (Miller 1983: 59). The name was changed again in 1964 to Stapleton International Airport, ostensibly to attract international recognition and direct international flights (Miller 1983: 101).

By the 1980s, the airport had grown to include a large terminal, four concourses, and numerous maintenance hangars, covering 4,700 acres. Due to opposition by Adams County to the expansion of runway onto the RMA and neighborhood protests over noise, a search for an alternative airport site was begun in the 1980s. A new site was finally found on open prairie in Adams County northeast of Stapleton and Denver voters approved an annexation plan in 1989. Denver International Airport (DIA), opened for business on February 28, 1995, and Stapleton was decommissioned.

Between 1952 and 1962, Perl-Mack Enterprises built approximately 5,000 homes in the Denver Metro area (CHS-OAHP 2006). With the success of Front Range communities such as Northglenn, Perl-Mack created the community of Montbello in 1965. Montbello is a converted cattle ranch designed to incorporate residential, commercial, and industrial zones and was the first community in the Denver Metro area planned from the beginning to blur economic, social, and racial boundaries. The land purchased for the community had been owned by the Joe Miller family, who were long time cattle ranchers and pioneers who came west in 1892.

According to Denver Post Archives, two years were devoted to planning 12,000 dwelling units and a 200-plus acre industrial park in the 2,932-acre bloc adjoining Denver northeast of Stapleton, south of the RMA, and next to I-70. KLC Venture, Ltd., a Chicago-based developer, was hired to construct the industrial sections of Montbello, while Perl-Mack was hired to construct the residential areas. Perl-Mack once again teamed with the planning firm Harman, O'Donnel, Henninger and Associates, with whom they had teamed on the Northglenn project. Forward Metro Denver, a privately financed company, helped initiate the project in an attempt to lure industry to the metro area.

Perl-Mack announced that the first single family home would be open to the public in 1966. The industrial sector was open before the residential community was completed. In 1963, the Denver Post reported that the community of Montbello would contain 7,000 single family homes, 5,000 multi-family units, seven elementary schools, seven churches, multiple parks, and one centrally located secondary school. In 1966, the Denver Post reported the community would employ 8,000 and have housing available for 7,000 families.

Perl-Mack “attempted to offer the highest value at the lowest cost, design better house, professionally plan and layout their communities, tap into the broadest possible market with a variety of house sizes and style, offer houses with extras at no additional charge and to provide patios and landscaped backyards” (Noel 1989). Using this business model, the developing company was an integral part of the post-World War II Denver Metro housing boom.

Between 1989 and 1995, while DIA was being constructed, a community vision evolved for the next use of the Stapleton site, this process resulting in the publication of the Stapleton Development Plan (Forest City 2002). In 1999, Forest City Development Corporation was selected to be Denver's private development partner. Stapleton's 4,700 acres was the



nation's largest urban in-fill development with a mixture of residential, industrial, open space, parks, and civic uses. Construction began in April 2001.

Immediately north of Stapleton is the RMA, which was established and developed in response to international events. On May 2, 1942, nearly six months after the United States joined other combatants in World War II, the War Board selected 19,883 acres of prairie and farmland east of Denver for the site of a chemical weapons manufacturing center (RMA 2001: 4).

Construction of the RMA began on June 30, 1942, and the first fully operational production building was activated six months later, one year ahead of schedule (RMA 2001: 5). Besides chemical weapons, the RMA also produced other types of munitions, including incendiary bombs. In that same year, the Union Pacific Railroad constructed a 2.2-mile-long railroad spur from the Roydale station, five miles east of Denver, to the boundary of the RMA, thereby connecting the mainline to an extensive system of government-owned tracks within the RMA (Wilkins 1974: 240). This spur line was moved to its present location near Havana Street sometime between August 11, 1962 and May 5, 1963 in response to the construction of the north-south runway at Stapleton.

After the war, the RMA remained on stand-by status until June 25, 1950, when it was reactivated due to Cold War tensions. Throughout the 1950s, the RMA operated at full capacity in response to "the Soviet threat to world peace." (RMA 2001: 7). By the end of the 1950s, however, the RMA accelerated its efforts "to lease Arsenal facilities for production in private industry," as the military shifted its focus to manufacturing rocket propellants (RMA 2001: 8-10). From 1952 until 1982, Shell Chemical Company produced agricultural pesticides at the RMA. In the 1970s, the Army began to destroy its stockpile of chemical weapons and, along with Shell, to clean up areas of contamination on the RMA. The cleanup efforts lasted through the 1980s and 1990s and continue today. The railroad spur line has been upgraded and relocated since its construction in 1942 and now principally services several industrial establishments, many of which have recently been constructed within the former boundaries of Stapleton Airport.

2.5 Previous Research in Project Area

A search of the files on COMPASS: Colorado's On-line Cultural Resource Database was conducted on March 15, 2007. The results of the records search produced several surveys that were conducted in areas overlapping the current project area sections (Table 2.5-1). Two previously recorded sites were found to be located within portions of the current project area sections. The Rocky Mountain Arsenal (5AM983), which has not been evaluated for NRHP eligibility, is located north of 56th Avenue. The former Stapleton International Airport (5DV711), which has been field evaluated as not eligible for the NRHP and subsequently destroyed, is located south of 56th Avenue between Quebec and Havana Streets.

According to the Rocky Mountain Arsenal and Rocky Mountain Arsenal National Wildlife Refuge Integrated Cultural Resource Management Plan (Remediation Venture Office 2007), more than 200 cultural resources locations have been recorded at the RMA. The sites included 23 prehistoric sites, 14 sites with historic and prehistoric components, 30 prehistoric isolated finds (an IF is 10 artifacts or less), 1 paleontological site, 103 historic sites, 9 irrigation features, and 135 historic isolated finds. Of the 265 sites total, two prehistoric sites and



seven historic sites are considered officially eligible for nomination to the National Register of Historic Places (NRHP). Sites considered eligible for nomination to the NRHP include two prehistoric sites (5AM185 and 5AM718), the Egli farmstead (5AM1145), Sand Creek Lateral irrigation canal (5AM261.3), Lateral A of the Highline Extension Canal (5AM261.1), Building 111 (Post Headquarters), a former railroad bridge (5AM464.8), a Cold War buried vault complex (5AM1463), and munitions storage Building 884 (5AM1208). In addition, four historic districts have been established at Rocky Mountain Arsenal. The following four districts have officially been determined eligible for nomination to the NRHP: North Plants (5AM694), South Plants (5AM693), Logistics (5AM1228), and Munitions Storage (5AM1229). None of these previously recorded sites or districts are located within the study corridor for the 56th Avenue project.

**Table 2.5-1
Summary of Previous Cultural Resources Surveys
Located in Portions of the Project Area Sections**

Report ID	Project Name	Date(s)	Location
AM.NP.R1	Historic Properties Report: Rocky Mountain Arsenal	08/02/1984	T3S, R67W, Section 9
DV.FA.S	Stapleton International Airport Runway and Taxiway	10/01/1985	T3S, R67W, Sections 9 & 16
DV.CH.NR13	Quebec Street Improvements Environmental Review	07/01/2003	T3S, R67W, Section 16
MC.CH.R96	Interstates 25, 70, 225, and 270, U.S. Highways 13 and 470 for the Proposed Adesta Communications Fiber Optic System	03/01/2000	T3S, R67W, Section 16
MC.FA.R3	Stapleton International Airport – Runway and Taxiway (1985)	10/01/1985	T3S, R67W, Sections 9 & 16
MC.CH.NR61	Archaeological Survey of Highway Project I-70-4(72)	11/01/1986	T3S, R67W, Section 16

Table 2.5-2 summarizes the previous cultural resources projects that have been performed within the boundaries of the Rocky Mountain Arsenal.



Table 2.5-2
Previous Cultural Resources Projects
Located in the Rocky Mountain Arsenal

Author(s)	Year	Project	Company
MacDonald and Mack	1984	Rocky Mountain Arsenal Historic Properties Report.# Rocky Mountain Arsenal, Colorado.	Not available
Burchett, Timothy, Marcia Tate, and Paul Friedman	1985	A Cultural Resources Survey of the Proposed Stapleton Expansion Area.	Powers Elevation, Denver.
Friedman, Paul	1989	Historical Studies at the Proposed New Denver International Airport, Denver County, Colorado.	Dames & Moore, Inc., Denver.
Harrison, Cheryl A.	1993	Cultural Resource Inventory of 10 Proposed Planting Areas, Rocky Mountain Arsenal, Adams County, Colorado.	Powers Elevation, Inc., Aurora.
Clark, Bonnie J.	1997	Archaeological Investigations and Cultural Resources Management Plan for the Archaeological Resources of the Rocky Mountain Arsenal, Adams County, Colorado.	SWCA, Inc., Denver.
National Park Service	1998	Historic American Engineering Record High Line Canal, Sand Creek Lateral, Adams County, Colorado. HAER No. CO-43-A.	Not available
National Park Service	1997	Historic American Engineering Record: Rocky Mountain Arsenal. HAER No. CO-21.	Not available
Hoffecker, John F.	2001	Twenty-seven Square Miles: Landscape and History at Rocky Mountain Arsenal National Wildlife Refuge.	Denver: U.S. Fish and Wildlife Service, Denver.



3.0 STATEMENT OF OBJECTIVES

The purposes of this historic resources inventory is to identify and document all historic cultural resources along the proposed roadway corridor, and to evaluate each property for listing in the NRHP, according to the criteria listed at 36 CFR 60.4:

The quality of significance in American history, architecture, archeology, engineering and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and

- (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or*
- (b) that are associated with the lives of persons significant in our past; or*
- (c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or*
- (d) that has yielded, or may be likely to yield, information important in prehistory or history.*

The sites that lack integrity and/or are not associated with any of the above criteria are considered not eligible for the NRHP. Historic use of the area is related to farming/ranching and associated activities. Site density is expected to be low.



4.0 METHODS

Two historians performed a reconnaissance survey of the 56th Avenue corridor from Quebec Street to 1,000-feet east of Havana Street on April 4, 2007. As they drove, the historians carefully watched for evidence of past, patterned human activity, 50 years or older.

Historic sites were recorded using standard measurements. Historic features and structures were described in detail and photographed. The location of each occurrence was recorded in Universal Transverse Mercator (UTM) North American Datum (NAD) 1983 using a hand held Global Positioning System unit.

All field data were returned to the URS laboratory in Denver, Colorado. Site forms were completed, sketch maps and drawings were prepared in final form, and photographs were developed and printed. The data were compiled in a report that complies with the guidelines issued by the Colorado Historical Society, Office of Archaeology and Historic Preservation (CHS-OAHP 2007). All data including field notes and photographic negatives are on file at the URS office.



5.0 RESULTS

The historic resources survey of the proposed roadway corridor resulted in the identification of no sites that were demonstrably over 50 years old. However, a number of features were noted that were nearly 50 years. While these features were not formally recorded, they are described below.

A guard shack that once served the RMA and continues to serve the RMA National Wildlife Refuge is located at Havana Street and 56th Avenue. According to records held at the RMA National Wildlife Refuge, the guard shack was built in 1961. The shack is a brick structure that measures 30 ft by 30 ft with a wooden roof and cement footings. The shack has been updated with a heating/air conditioning system, and new plumbing. Several alterations have been made to this structure, and it served only in a support role to the primary mission of the RMA. Therefore, it is considered not eligible for the NRHP. It is located about 400 ft north of the current centerline of 56th Avenue, which is outside of the APE for this project. As such, it will not be affected by the proposed expansion.

A concrete-lined drainage ditch runs along the west side of Havana Street. This ditch is crossed by 56th Avenue and a short segment of abandoned road just south of the current alignment of 56th Avenue. Both of the bridges that cross this ditch have been given the same structure number (D-20-MB-785). According to the City records, this bridge was constructed in 1995, which would correspond to the construction of the current alignment of 56th Avenue through the former RMA/Stapleton property. Based upon a review of historic topographic maps, the abandoned bridge and the drainage ditch were constructed sometime between 1965 and 1994.

During the course of these investigations, the bridge abutments for a haul road traveling beneath 56th Avenue were thought to be historic. These abutments appear to have been constructed with old concrete, possibly as a reclamation project related to the closing and demolition of the Stapleton runways and are, therefore, not historic.



6.0 SUMMARY AND CONCLUSIONS

A two-mile-long linear corridor along 56th Avenue between Quebec and Havana Streets that would be affected by widening of the road was inventoried for historic resources. The inventory did not discover or record any historic sites. Four features that are not yet 50 years old were noted but not recorded. These include a guard shack at the Havana Street entrance to the Rocky Mountain Arsenal/Rocky Mountain Arsenal Wildlife Refuge, a concrete-lined ditch, and two abandoned roadway bridges, and a pair of riprap bridge abutments.



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