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National Park Service

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# National Register of Historic Places Inventory—Nomination Form

See instructions in *How to Complete National Register Forms*  
Type all entries—complete applicable sections

## 1. Name

historic Western Clay Manufacturing Company

and or common Archie Bray Foundation/Kessler Brickworks

## 2. Location

street & number 2915 Country Club Road n/a not for publication

city, town Helena n/a vicinity of

state Montana code 030 county Lewis and Clark code 049

## 3. Classification

Category	Ownership	Status	Present Use
<input checked="" type="checkbox"/> district	<input type="checkbox"/> public	<input checked="" type="checkbox"/> occupied	<input checked="" type="checkbox"/> agriculture
<input type="checkbox"/> building(s)	<input checked="" type="checkbox"/> private	<input type="checkbox"/> unoccupied	<input checked="" type="checkbox"/> commercial
<input type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> work in progress	<input checked="" type="checkbox"/> educational
<input type="checkbox"/> site	<b>Public Acquisition</b>	<b>Accessible</b>	<input type="checkbox"/> entertainment
<input type="checkbox"/> object	<input type="checkbox"/> in process	<input checked="" type="checkbox"/> yes: restricted	<input type="checkbox"/> government
	<input type="checkbox"/> being considered	<input type="checkbox"/> yes: unrestricted	<input checked="" type="checkbox"/> industrial
	n/a	<input type="checkbox"/> no	<input type="checkbox"/> military
			<input checked="" type="checkbox"/> museum
			<input type="checkbox"/> park
			<input checked="" type="checkbox"/> private residence
			<input type="checkbox"/> religious
			<input type="checkbox"/> scientific
			<input type="checkbox"/> transportation
			<input type="checkbox"/> other:

## 4. Owner of Property

name Multiple Ownership (see Continuation Sheets)

street & number

city, town vicinity of state

## 5. Location of Legal Description

courthouse, registry of deeds, etc. City - County Building

street & number Park Avenue

city, town Helena state Montana

## 6. Representation in Existing Surveys

title Kessler Brickyard Historic Resource has this property been determined eligible? yes  no

date January 1985 Survey federal state county  local

depository for survey records Montana State Historic Preservation Office

city, town Helena

state Montana

## 7. Description

Condition		Check one	Check one
<input type="checkbox"/> excellent	<input checked="" type="checkbox"/> deteriorated	<input type="checkbox"/> unaltered	<input checked="" type="checkbox"/> original site
<input checked="" type="checkbox"/> good	<input type="checkbox"/> ruins	<input checked="" type="checkbox"/> altered	moved      date
<input type="checkbox"/> fair	<input type="checkbox"/> unexposed		

### Describe the present and original (if known) physical appearance

The Western Clay Manufacturing Company Historic District is comprised of the brick and tile manufacturing buildings, kilns, ancillary buildings to the manufacturing business, pottery buildings, and residences. The buildings associated with the manufacture of clay products were abandoned in 1960 when the business closed and are basically unaltered but somewhat deteriorated since that time. The residences and buildings associated with the pottery have been continuously occupied and are in good condition.

The largest buildings in the district are those associated with the manufacture of clay products. They include the tile manufacturing building, the brick manufacturing building, and the newer (mid-1950s) tunnel kiln building. The first two named were built during the last decade of the 19th century and the first decade of the 20th and other than some modifications made during the 1920's and '30's, they are close to their original condition. Changes represent the evolution of the clay manufacturing industry in Montana. These original buildings are accompanied by three generations of kiln technology.

The tile manufacturing building is of brick bearing wall construction with corrugated metal, gable roofs and is comprised of three distinct sections: the boiler room/engine room/machine shop,<sup>21</sup> the tile and pipe shops,<sup>22</sup> and the drying shop.<sup>23</sup> Prominent features include the tower for elevating clay and the twin smokestacks of the boiler room. The boiler room and engine room were built in the 1890's, and the machine shop added between 1908 and 1916. The tile shop was originally built in the 1890's of wood frame and was converted to brick in the late 1920s. The drying shop was built about 1905 and expanded to its present configuration in the 1920's. This building contains most of its early, if not original equipment, including dry pan and wet pan, the sewer pipe press, pug mill and tile extruding machine, elevator and conveying equipment, machine tools, overhead line shafts, and boilers. The original steam engine which drove all the equipment was removed and replaced by an electric motor in about 1953.

The brick manufacturing building (built 1905-1908) is also of brick bearing wall construction with corrugated metal, gable roofs. It is comprised of two sections: the brick shop<sup>24</sup> and the drying tunnels.<sup>25</sup> Like the tile building, it has a tower for elevating clay and most of its early equipment is in place including dry pan, pug mill and brick extruder, brick cutter, brick press, and cars for moving brick to the drying areas. However, unlike the tile building, which has a two story open drying shop, the brick building has nine steam drying tunnels.

North of the brick manufacturing building are several brick warehouses. Two of these were originally scoves kilns (built in the 1890's) and were converted to warehouses with the addition of gable roofs in about 1935.<sup>13,20</sup> These kilns were simply four walls within which brick would be stacked for burning. The walls feature arched firebox openings along their bases, through which fires could be tended during burning, and vertical brick buttress-like elements, to

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which straps could be attached to resist the outward thrust of the brick when the kiln was loaded. Brick would be stacked within the walls and arched over the fire boxes for each firing. Hot gasses passed through the gaps between bricks and eventually leaked out the tops of the mass of brick. Scove kilns were less efficient than later kilns because about 20% of each batch would be wasted as either over- or underfired.

North and east of the tile manufacturing building are five brick beehive kilns built between 1905 and 1916.<sup>15-18,20</sup> They are circular at the base and with domed tops. The floors of the kilns are a lattice-work of brick which allowed gasses to be drawn out the bottom of the kilns by means of the draft-induced by adjacent brick chimneys. Two such stacks survive on the grounds. The beehive kilns also have arched fire box openings around their bases. Because the hot combustion gasses would circulate up the sides of the kiln then back down through the mass of brick and out the floor, these downdraft beehive kilns were much more efficient than the scoves, wasting less brick. The beehive kilns were converted to gas in 1931 with little change in the structure.

West of the brick manufacturing building is the third generation of kilns at the site.<sup>33</sup> A 1957 gable roofed metal building houses two tunnel kilns: a drying kiln, which replaced the steam tunnels, and the firing tunnel. Drying and firing became a continuous process with brick transported through the two tunnels on cars on tracks.

On the north and south sides of the main buildings are several ancillary buildings including a wood-frame bunkhouse,<sup>8</sup> a wood-frame flower pot storage shop,<sup>9</sup> two hollow clay tile warehouses,<sup>10,12</sup> a wood-frame blacksmith shop,<sup>22</sup> a hollow clay tile garage,<sup>29</sup> a wood-frame cookhouse,<sup>28</sup> a log barn sheathed in board and batten,<sup>30</sup> and a wood-frame house.<sup>31</sup> The hollow clay tile structures were built in the late 1940's and early 1950's. The others were built in the 1890's. Running along the south side of the main buildings are several brick piers which supported the trestle which carried railroad cars delivering clay to the brickyard. The west end of the trestle was housed in a clay shed which no longer stands.<sup>26</sup> At the east end of the clay shed are the brick remains of a building which housed a crusher and the conveyor for transporting clay into the dry pan.

North of the manufacturing complex are the buildings of the Archie Bray Foundation. These include several buildings which pre-date the Foundation and several built after the Foundation was created in 1951. Earlier buildings include the old Western Clay Manufacturing Co. office (brick), which has since been converted to a residence;<sup>2</sup> the historic owner's residence,<sup>1</sup> which is presently a two story, brick veneer, hipped roof house but which still encompasses the original and smaller one story log residence; two brick and tile garages which have been linked with additional brick garage bays;<sup>3</sup> and a brick and tile chicken coop which has been altered and converted to a residence.<sup>7</sup> The two

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buildings constructed after the creation of the Foundation are the Pottery and the Annex,<sup>5,6</sup> both of brick and tile, which house the office, gallery, studios, kilns, and storage of the Archie Bray Foundation.

The grounds of the manufacturing complex and the Foundation are native grasses and a few cottonwoods and Russian olive trees. The grounds of the manufacturing complex are also strewn with piles of defective bricks and tiles. West of the Foundation and north of the tunnel kiln building is a large depression in the ground lined with willow which is one the local pits from which clay for common brick was dug.

NOTE: Buildings as numbered on the accompanying site maps are identified in this description by superscript.

## 8. Significance

Period	Areas of Significance—Check and justify below				
prehistoric	archeology-prehistoric	community planning	landscape architecture	religion	
1400-1499	archeology-historic	conservation	law	science	
1500-1599	agriculture	economics	literature	x sculpture	
1600-1699	x architecture	education	military	social	
1700-1799	x art	x engineering	music	humanitarian	
x 1800-1899	x commerce	exploration settlement	philosophy	theater	
x 1900-	communications	x industry invention	politics government	transportation other (specify)	

Specific dates 1890-1957 Builder Architect Multiple

### Statement of Significance (in one paragraph)

The Western Clay Manufacturing Co. Historic District is significant as a relatively intact complex which manufactured brick for many of the most architecturally and historically significant buildings in Montana and which manufactured other clay products important to Montana's development such as paving brick and sewer tile. The complex still houses an excellent collection of late-19th and early 20th century brick and tile manufacturing machinery and apparatus. The district is significant for its associations with Nicholas Kessler and Charles and Archie Bray, individuals important to the development of commerce and industry in Helena. Finally, the district is significant because it contains the facilities of the Archie Bray Foundation, a ceramics school which grew out of the clay manufacturing business and which enjoys a national reputation in pottery and the ceramic arts.

Nicholas Kessler was born in Luxemburg in 1832 and emigrated to the United States in 1854. He worked in Chicago for a few years before heading west to the gold fields of Colorado and then Montana. In 1865 he bought a brewery in Helena which he operated until his death in 1901. Although best known as the owner of one of Montana's largest and longest operating breweries, the Kessler Brewery, Kessler was also well known as a brickmaker. He began producing brick in 1866 and continued to expand that business as well. His brickyard was located near his brewery, not at the location of the Western Clay Manufacturing Co. The brickyard on the site of the present works was started by C.C. Thurston in 1883 and bought by Kessler in 1885.

Thurston began producing bricks in Butte in the 1870s before moving to Helena and establishing his Helena business in 1883. One of his employees was Charles Bray who was born in England in 1864 to a man employed in brick manufacturing. Before moving to the United States in 1880, young Bray was apprenticed in the business of making bricks. He worked for brickyards in Minnesota and North Dakota before arriving in the employ of Thurston in 1884. When Kessler bought Thurston's works in 1885, he placed Bray in charge of the operation. Bray was responsible for updating and enlarging the plant. Bray also served in the third (1893) and eighth (1903) sessions of the Montana legislature.

When Bray took charge, the plant was operated with horse and oxen power and the bricks were hand molded from mud clay. Bray introduced steam-powered equipment for producing bricks from stiff clay, improved the kilns for firing clay products, and added equipment for producing sewer pipe and tile, flower pots, and decorative brick. Some of the existing buildings were built during the 1890's. Most of the surviving buildings were built by 1908, although they continued to be updated through the 1920's and 1930's.

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Around the turn of the 20th century, the Kessler Brick and Sewer Pipe Works was one of the leading clay manufacturers in Montana. Statewide production records show that the Kessler works consistently held ten percent of Montana's common brick production during those years. Brick manufacturers in Butte, Anaconda, and Great Falls sometimes produced more brick than the Kessler works, but their production levels varied wildly from year to year depending on the demands of the mines and smelters. The Kessler works, on the other hand, was meeting a general commercial demand and therefore was able to maintain more consistent production levels. Furthermore, those same statewide production figures show that the Kessler works was the major consistent producer of sewer pipe, paving brick, and other clay products such as flower pots.

Another major Helena brickmaker was Jacob Switzer who owned and operated a manufacturing facility near his clay pits at Blossburg, just over Mullan Pass about 15 miles west of Helena. In 1905, the Switzer and the Kessler works merged with the incorporation of the Western Clay Manufacturing Co. The two stockholders in the new company were Switzer and Nick Kessler's son, Frederick. Charles Bray was secretary and general manager. All brick, tile, and pipe making activity was centered at the old Kessler works while the Switzer pits at Blossburg became the major clay supply for the new company. By 1915, Western Clay was clearly Montana's largest clay manufacturing plant.

Bray wanted to stay abreast of the latest in brickmaking techniques and traveled to annual conventions of such organizations as the National Clay Workers. Towards that end, he also sent his oldest son, Archie, to Ohio State University, which was thought to have the best ceramics program in the country at the time, for a degree in ceramics engineering. Upon his graduation in 1911, Archie returned to Helena to assume his duties as assistant manager and shop foreman. Charles' other son, Raymond, was the bookkeeper of the company. Upon his father's death in 1931, Archie became president and manager of the Western Clay Manufacturing Co.

While at the university, Archie developed an interest in the arts. He helped organize Helena's Community Concert Association. In 1951, he achieved a long-time ambition with the establishment of the Archie Bray Foundation which would foster education in pottery and the ceramic arts. He died in 1953. His son, Archie, Jr., assumed control of Western Clay until it went out of business in 1960. The Archie Bray Foundation has continued to operate in the buildings constructed for it by Archie Bray, Sr., to the present time, attracting artists and students from around the country to its year round residency programs. When Western Clay went out of business, its facilities were purchased by a Canadian brick manufacturer and left dormant. The Archie Bray Foundation purchased the old Western Clay Manufacturing Co. facilities in 1984.

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The Western Clay Manufacturing Co. produced some of the highest quality brick in Montana. Brick from this plant were specified by architects for some of the most prominent public buildings around the state and can be seen today in such buildings as Fort Harrison in Helena, the Federal Courthouses at Butte and Helena, the Civic Center and the First National Trust Co. in Helena, the state hospital at Galen, the campuses of the state university system at Missoula, Bozeman, Butte, Havre, and Dillon, and other buildings as far away as Kalispel and Billings.

Item Number 10

Zone	Easting	Northing
I	1 2  4 1 7 1 2 5	5 1 6 2 4 5 0
J	1 2  4 1 7 0 7 5	5 1 6 2 4 7 5
K	1 2  4 1 7 1 0 0	5 1 6 2 5 7 5
L	1 2  4 1 7 0 5 0	5 1 6 2 6 0 0

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The boundary of the Western Clay Manufacturing Company Historic District commences at the northwest corner of Section 23, T.10N., R.4W.; then south along the west boundary of Section 23, 1295.8 feet to a point; then S.77°21'E. 144 feet to a point; then S.14°9'W. 77.3 feet to a point; then S.77°21'E. 130 feet to a point; then north 14°51' 243.5 feet to a point; then S.79°6'E. 540.1 feet to a point; then N.33'E. 726.5 feet to a point; then N.36°51'E. 362.4 feet to the south boundary of the county road; then along the county road 170 feet to a point; then S.32°20'W. 95 feet to a point; then N.58°10'W. to the north boundary line of Section 23 to a point; then west along the north boundary line to the point of beginning.

## 9. Major Bibliographical References

See attached.

## 10. Geographical Data

Acreage of nominated property 20 acres

Quadrangle name Helena, Montana

Quadrangle scale 1:62,500

UTM References

A 

1	2	4	1	7	0	5	0	5	1	6	2	9	5	0
Zone			Easting				Northing							

B 

1	2	4	1	7	1	7	5	5	1	6	2	9	5	0
Zone			Easting				Northing							

C 

1	2	4	1	7	2	7	5	5	1	6	2	8	5	0
Zone			Easting				Northing							

D 

1	2	4	1	7	3	2	5	5	1	6	2	8	7	5
Zone			Easting				Northing							

E 

1	2	4	1	7	4	0	0	5	1	6	2	8	5	0
Zone			Easting				Northing							

F 

1	2	4	1	7	2	7	5	5	1	6	2	4	2	5
Zone			Easting				Northing							

G 

1	2	4	1	7	2	7	5	5	1	6	2	5	0	0
Zone			Easting				Northing							

H 

1	2	4	1	7	1	5	0	5	1	6	2	5	0	0
Zone			Easting				Northing							

### Verbal boundary description and justification

The boundaries of the district are those of the Western Clay Manufacturing Co., the Archie Bray Foundation, and a small portion of the Armstrong property which encompasses the house only (see attached).

### List all states and counties for properties overlapping state or county boundaries

state	n/a	code	county	code
-------	-----	------	--------	------

state	code	county	code
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## 11. Form Prepared By

name/title Fredric L. Quivik, Architectural Historian

organization Renewable Technologies, Inc. (under contract to the Archie Bray Foundation)  
date

street & number P. O. Box 4113 telephone (406) 782-2386

city or town Butte state Montana

## 12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

national  state  local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

State Historic Preservation Officer signature

title \_\_\_\_\_ date \_\_\_\_\_

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I hereby certify that this property is included in the National Register

date \_\_\_\_\_

Keeper of the National Register

Attest:

date \_\_\_\_\_

Chief of Registration

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Western Clay Manufacturing Bibliography

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